

Are we making a difference in the lives of New Zealanders – how will we know?

November 2018

A wellbeing measurement approach for investing for social wellbeing in New Zealand



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Intended audience

This working paper is written for analysts, policy advisors and social service providers to introduce the Social Investment Agency's wellbeing measurement approach. We have adopted a plain English style of language to make it as accessible as possible.

Working paper

Working papers are intended to stimulate discussion and consideration about policy and research issues. The papers are part of developmental and on-going work, and are not presented as policy documents. The views expressed are not final, and do not necessarily reflect the views of the Social Investment Agency.

Attribution

Authors: Merrin Blight, Doug Lambert, Dr Simon Wakeman

Consulted: Professor Jonathan Boston, Denise Brown, Dr Anita King, Professor Richie Poulton, Conal Smith, Te Tihi o Ruahine Whānau Ora Alliance Trust

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Summary

» **Measuring wellbeing can help us identify whether investing for social wellbeing is making a difference**

- Investing for social wellbeing means ensuring people get the support they need to live the lives to which they aspire. But how can we tell if that support is actually making a genuine and lasting difference in the lives of New Zealanders?
- Measuring wellbeing can help do this by explicitly defining and quantifying outcomes, and allowing us to see how they have changed as a result of a social service or intervention. Wellbeing measurement is necessary if we are to look at how a social service contributes to making an individual, family or whānau healthier, happier, leads to a new job or change in earnings, improves their social connections or their sense of cultural identity for example. A clear view of the different aspects (domains) of wellbeing provides a common reference point to compare outcomes in a more robust way and can remind decision-makers to consider the full range of impacts that matter to people.
- While monitoring trends in wellbeing at the national level is important for setting strategic policy priorities, the Social Investment Agency (SIA) has a different focus. We are looking at how wellbeing changes at the level of a single person or groups of people such as families, whānau, and communities as a result of a specific social intervention. While an individual person is the basic unit of measurement, analysis is focused on groups of people. Over time we will be able to assess changes in wellbeing for family and whānau groups. We apply robust science and research, based on New Zealand data and tailored to what we understand New Zealanders' value, to identify the fiscal, economic, and broader wellbeing impacts of social policy interventions. We are developing a rich catalogue of methods, measures, indicators, and data sources that will support our analysis. This will help measure the consequences of social sector interventions and improve them.

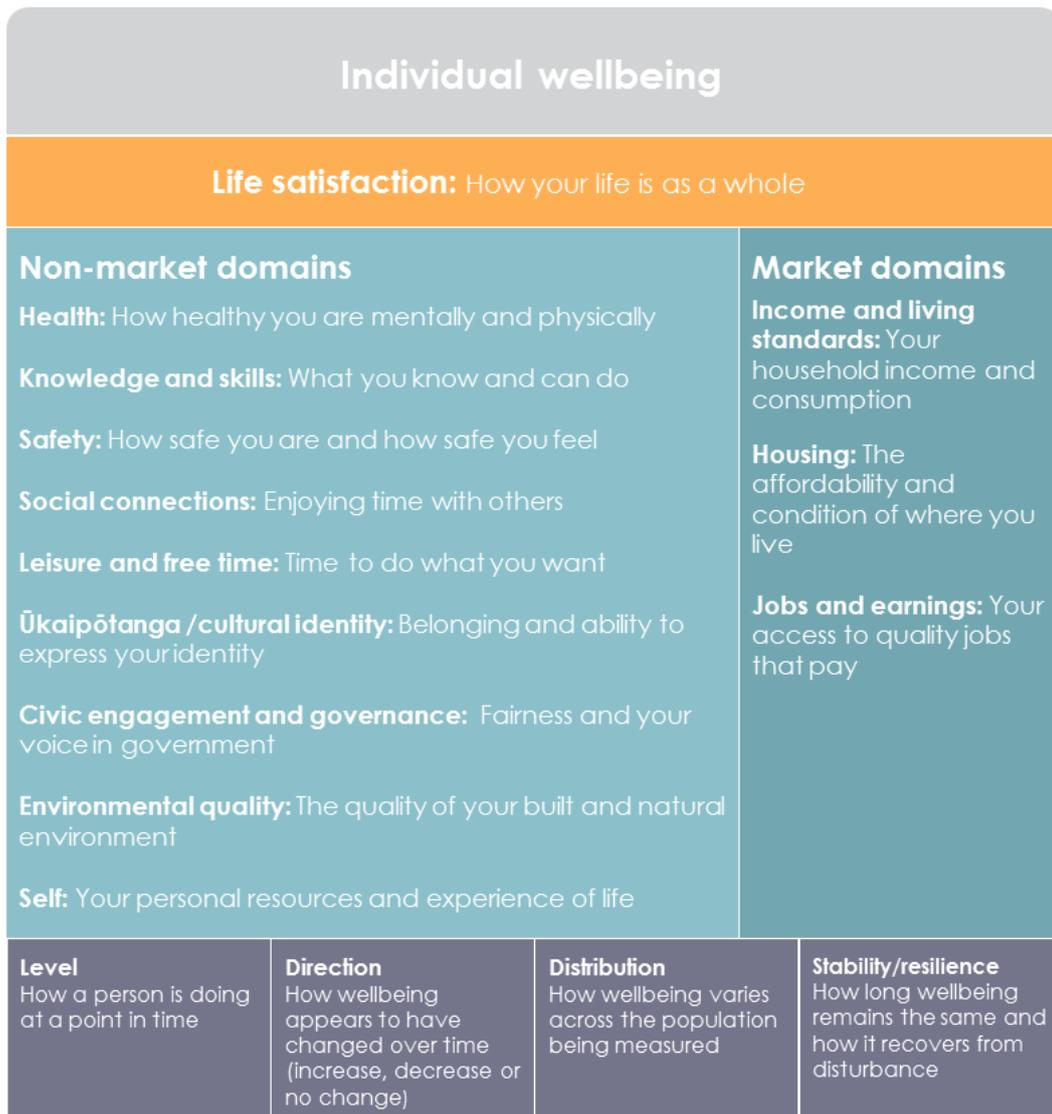
» **We have developed an approach and a model to measure wellbeing**

- We have developed an approach and a model to measure wellbeing based on the OECD's *How's Life* Framework with a number of changes to reflect New Zealand conditions. This is consistent with the model proposed by the Treasury to measure wellbeing within the Living Standards Framework.
- The model defines wellbeing and describes the different domains of wellbeing.
- The approach helps us to select valid indicators tailored to capture the right things. It helps us pick measures that are appropriate, have data available, and are comparable across individuals and over time. It is crucial that measures are chosen based on the purpose of wellbeing measurement – for example, trying to identify who might benefit from an intervention, or evaluating the effectiveness of a programme. The measures must be supported by quality data.

- Criteria are included for each aspect of wellbeing measurement and for robust wellbeing measurement as a whole.
- Wellbeing is considered across twelve domains, as shown in figure 1. Life satisfaction provides a high level check on the picture provided by the twelve domains.
- Wellbeing level, direction, distribution and stability/resilience are considered.

Figure 1. Domains of wellbeing

Domains of wellbeing



- » **Our wellbeing measurement approach is based on a highly respected model that has been adapted to New Zealand conditions, peer reviewed and we have started applying it**
 - We decided to adapt an existing framework, and make it more suitable to measure the outcomes of investing for social wellbeing in New Zealand. Basing our approach on an existing framework avoids the considerable costs associated with developing an entirely new approach. Adapting the framework makes it credible in a New Zealand context and suitable to measure the impacts of specific interventions, which would be difficult if we had selected an existing model and left it untouched.

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- We reviewed 16 wellbeing and outcomes frameworks and assessed them based on six criteria: clear, comprehensive, coherent, credible, comparable and relevant. We selected the OECD *How's Life* Framework. It is highly regarded internationally and performed well against the six quality criteria.
 - We adapted the framework to reflect what we understand New Zealanders value. The major changes we made were to add *ūkaipōtanga* /cultural identity and to expand the scope of subjective wellbeing and rename it 'self'.
 - The following terms are important to understanding the SIA wellbeing measurement approach:
 - » **Measurement concept:** individual wellbeing.
 - » **Unit of analysis:** unit will vary depending on the purpose, but the main purpose of the SIA's approach is to measure impacts at the level of an individual person. At present we can measure impacts on groups of individual people. In time we hope to be able to measure impacts on families, *whānau* and communities. The default unit is an individual.
 - » **Wellbeing conceptual model:** what we have defined as the basis of wellbeing. In this case the model is a modified version of the OECD *How's Life* Framework. The model sets out **what** we are measuring.
 - » **Measurement approach:** the way we plan to measure level, direction, distribution, and stability/resilience of wellbeing. The approach is about **how** we measure wellbeing. In this paper we summarise a worked example of this applied to social housing.
 - » **Wellbeing domains:** twelve domains of wellbeing grouped into market outcomes, and non-market outcomes. Subdomains capture key components of the domains, for example health is made up of physical and mental health. Life satisfaction isn't a domain per se, but provides a high level check over the other domains by giving an overall subjective view on people's wellbeing as a whole. Each domain is considered as to:
 - level - how a person is doing at a point in time
 - direction - how wellbeing appears to have changed over time (increase, decrease or no change)
 - distribution - how wellbeing varies across the population being measured
 - stability/resilience - how long wellbeing remains the same and how it recovers from disturbance.
 - » **Indicators:** an indicator is a measure that reflects at least some aspect of a wellbeing domain and thereby makes it possible to observe variation along that domain. Example indicators are given and guidance is offered to help select valid indicators.
 - » **Measures:** a measure is a data variable that provides information about an aspect of the world and can be used to construct indicators for a specific concept. It may have been treated or combined in some way. Guidance is offered to help select measures that are appropriate and reliable.

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- » **Data sources:** measures are based on data. Major data sources are service delivery, administrative, survey and other data. Data sources which are available in the Integrated Data Infrastructure to measure wellbeing are discussed.
 - » **Measurement methods:** the approach is underpinned by robust measurement methods and criteria that summarise what good measurement looks like, how to select indicators that capture the right things, appropriate measures and robust data sources.
 - Peer review of the approach was supportive. The approach is consistent with how the Treasury is proposing to capture current wellbeing in the Living Standards Framework.
 - We are still refining the approach, but our first application of it to social housing went well. We found the wellbeing model particularly useful in deciding which aspects of a person and their family's life to consider when researching the impact of social housing on wellbeing. We also developed a method to combine administrative and survey data to measure wellbeing impacts.
 - » **We are interested in feedback to refine the approach**
 - Please get in touch if you have feedback or would like to work with us to apply the wellbeing measurement approach to your area.

Measuring wellbeing can help us identify whether investing for social wellbeing is making a difference

Investing for social wellbeing means ensuring people get the support they need to live the lives to which they aspire

Government and non-government organisations (NGOs) fund and deliver a wide range of social services and interventions in New Zealand. But are the social services helping? How can we tell if the services and interventions are actually improving the lives of the New Zealanders they are designed to help? How do we know if we are investing in the right things? Could we invest earlier or smarter? Should we be working with a different group of people? Should we disinvest to free up resources to be used better elsewhere?

Investing for social wellbeing means ensuring people get the support they need to live the lives to which they aspire. It is about understanding people's needs and matching the appropriate support and services to meet their needs. It is about removing barriers and actively trying to maximise wellbeing. It is about supporting and resourcing people to improve theirs and others' wellbeing.

Investing for social wellbeing requires more systematic use of data, analytics, and evidence to identify populations who would benefit from interventions, to select the most effective interventions, to deliver them in a joined up way, and to measure the performance of providers in delivering those interventions. Data needs to be used in a careful, considered, consistent, transparent and ethical way that is accountable to the public and builds, rather than erodes trust in government. Work needs to be done in partnership with communities, NGOs, and government agencies as the support people need to thrive is often not confined to one patch. We also need to draw on frontline knowledge and people's lived experience, and create new evidence through testing and trialling new ideas.

Investing for social wellbeing also means treating people with dignity and respect, and understanding the diversity and complexity of people's lives. It means engaging people in decisions that impact on them, and ensuring information about these decisions is accessible and understandable. It means viewing people not only as discrete individuals, but also as part of families, whānau and communities. It means actively building on and strengthening existing relationships with Māori.

The SIA was established to support the social system to work together to achieve better outcomes, and champion an evidence-based approach. We are here to help government and NGOs to invest in what works for better lives. We use data and evidence to find out what works, and rigorous evaluation so that services and other support provided to New Zealanders is continuously improved.

We need to know if that support is making a difference in people's lives

Government has got more sophisticated in how it selects, designs, purchases, monitors and evaluates social services. We think about effectiveness, efficiency and equity. We consider outcomes, as well as the cost of programmes (inputs) or what services are being bought (outputs). We know that some outcomes are visible quite quickly, while others can take years to become evident.

But the way we think about and measure outcomes could be better. We often assume (sometimes based on a solid intervention logic) that interventions will improve broad outcomes areas for New Zealanders, based on what matters to us (such as future demand for our services), or we think matters to them (such as employment or engagement with a service). Or we use inconsistent measures that are not defined, quantified, or are difficult to measure.

But some of the services we provide are not working well for people, particularly for those in most need, and not improving their lives in ways that matter to them. The Productivity Commission found that the social system is not performing well for the people who need it most. New Zealanders with highly complex needs, but who have trouble navigating the system to get those needs met are experiencing consistently poor results across health, education, welfare dependency and crime. This is creating a cycle of disadvantage that persists across generations (New Zealand Productivity Commission, 2015).

Wellbeing measures can quantify that difference

In 2008 Professors Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi were asked by the President of France to identify the limits of Gross Domestic Product as an indicator of economic performance and social progress; and to assess the feasibility of alternative measurement tools. They found that there was a gap between standard economic measures like economic growth, inflation, unemployment; and public perceptions about progress. They suggested that those measures only matter based on what they mean for people's lives either directly or indirectly; and they were also concerned about the sustainability of progress given environmental and other concerns. They also proposed that government "*shift emphasis from measuring economic production to measuring people's well-being*". They recommended governments collect additional information about people's quality of life that measures both objective and subjective wellbeing and how it changes over time, and reflects the diversity of peoples' experiences and linkages amongst dimensions of people's lives (Stiglitz, Sen & Fitoussi, 2009).

Wellbeing captures the ability of people to live the lives to which they aspire, and spans both material conditions and quality of life (Sen, 1993). Wellbeing refers to people's welfare, quality of life, or what an economist might refer to as utility, and encapsulates the degree to which people are able to live the kind of life they have reason to value. Wellbeing is a concept that crosses cultures, for example hauroa – a Māori concept of health and wellbeing. The Māori greeting *kia ora* translates literally to "be well". Traditional Māori models of wellbeing place family and whānau at the centre.

Wellbeing measurement quantifies the outcomes of social policy. By measuring the wellbeing of the people receiving a service or intervention and comparing it to an estimate of the wellbeing they would have experienced without the intervention, we can gauge the effectiveness of the intervention in improving wellbeing outcomes. Wellbeing measurement can be used to see if a social service is making an individual, family or whānau healthier, happier, has led to a new job or change in earnings, improved their social connections or their sense of cultural identity for example.

A clear view of the different aspects (domains) of wellbeing can provide a common reference point to compare outcomes in a more coherent, robust and transparent way. It can also remind decision-makers to consider the full range of impacts that matter to people and provide them information that helps support those decisions.

Our approach is focused on identifying changes in wellbeing for people who receive social sector interventions

SIA has developed an approach to measuring wellbeing. By “measurement approach”, we mean the way we plan to measure changes in people’s wellbeing resulting from interventions. This includes the overall way we go about deciding which wellbeing domains to use, selecting valid indicators tailored to capture the right things, choosing measures, and using data that is complete and reliable. The approach is about **how** we measure wellbeing.

Identifying the impact of changes in wellbeing resulting from specific interventions on those who receive them – or others who may be directly or indirectly affected is a key application of this approach. This is focused on the impacts on those people who receive specific interventions. We begin by analysing impacts on individuals. We plan to expand our approach to analyse family, whānau and community wellbeing in future. We recognise that this is not the sum of individual wellbeing. When we talk about individuals we don’t mean that people are independent of their environments, their families or the social groups they are part of – instead this is a measurement choice that enables us to analyse impacts on people who receive services.

The approach provides a common reference point to assess specific investments in social wellbeing, and allows us to compare across individuals and over time, and examine the distribution of wellbeing across the population. The ultimate goal of this approach is to measure the consequences of social sector interventions (and thereby improve those and future interventions).

SIA’s approach recognises the prior work by others. For example, the Social Policy Evaluation and Research Unit’s (Superu’s) Family Wellbeing and Whānau Rangatiratanga Frameworks. This recognises that family and whānau mean very different things and adopts Macfarlane’s He Awa Whiria “Braided Rivers” model – meaning wellbeing is understood using separate frameworks. Superu’s Family Wellbeing Framework is built around four family functions – to care, nurture and support; to manage resources; to provide socialisation and guidance; and to provide identity and a sense of belonging. The Whānau Rangatiratanga (Empowerment) Conceptual Framework has

capability dimensions including sustainability of Te Ao Māori, social capability, economic and human resource potential, supported by principles.

We will continue to develop the approach and a rich catalogue of methods, associated measures, indicators and data sources. We will use this approach and also make it available if social sector agencies, NGOs and others wish to use it. The approach supports robust wellbeing measurement that is:

- explicitly defined, rather than implicitly assumed,
- grounded in the latest and highest quality science and research,
- based on New Zealand data, and
- tailored to what we understand New Zealanders' value.

The approach could also be used with other wellbeing models with different domains and indicators, to support high quality measurement.

Other government agencies are measuring different aspects of wellbeing

There is a growing body of science and research internationally supporting wellbeing measurement, and a number of models have been developed.

Wellbeing measurement has been considered in New Zealand for many years, for example the Ministry of Social Development's (MSD) Social Report (2001-2016) and the Treasury's 2002 working paper with an analytical framework for investing in wellbeing. In 2006 Professor Mason Durie gave a guest lecture to the Treasury on measures of Māori wellbeing. In future we plan to work with experts who have already considered aspects of wellbeing that we haven't been able to incorporate fully now – such as how to measure impacts on whānau wellbeing.

Statistics New Zealand (Stats NZ) first conducted a wellbeing survey 'Social Indicators' in the early 1980s (Department of Statistics, 1984). They have also developed a Māori statistical framework focused on Māori development and wellbeing - He Arotahi Tatauranga.

Wellbeing is being measured and used by a number of New Zealand government agencies

Tables 1 and 2 summarise how wellbeing is being measured and used by government agencies. This tends to be at two levels: national/whole population and sub population levels. For example, the Treasury's Living Standard's Dashboard monitors the wellbeing of New Zealanders as a whole and how sustainable that wellbeing is over time. The Social Report has provided a national level picture of the current wellbeing of New Zealanders since 2001. The Oranga Tamariki Model is used to form a data driven view of the wellbeing of children and young people in New Zealand. More information is included in the last chapter.

This working paper introduces SIA's approach, which is different. Our approach is focused at the level of people receiving an intervention - how individual wellbeing changes as a result of a specific

intervention. We plan to develop the approach so that family, whānau and community wellbeing can also be assessed.

Table 1: Wellbeing activity by government agencies

Wellbeing activity by government agencies: national, sub population and people receiving an intervention	
National/ whole population	<p>The Treasury <i>Living Standards Dashboard</i>*</p> <p>Stats NZ <i>Indicators Aotearoa New Zealand – Ngā Tūtohu Aotearoa</i>*</p> <p>Whole of government <i>Sustainable Development Goals</i></p> <p>Ministry of Social Development <i>Social Report</i></p>
Sub population	<p>Oranga Tamariki <i>Lifetime Wellbeing Model</i>*</p> <p>Department of the Prime Minister and Cabinet <i>Child Wellbeing Strategy</i>*</p> <p>Te Puni Kōkiri <i>Whānau Ora</i></p>
People receiving an intervention	<p>SIA <i>Wellbeing measurement approach</i>*</p> <p>Informs government policy and investment based on expected changes to the wellbeing of people as a result of a specific intervention.</p>

* Under development

Table 2: Focus of wellbeing measurement by organisations

Focus of wellbeing measurement	Approach	Organisation
National/whole population		
<p>Considering the collective impact of policies on intergenerational wellbeing</p> <p>Focus on national wellbeing and how sustainable that is over time</p> <p>Supporting current and future Budgets to have a more wellbeing focus and support cross agency bids that are grounded in strong evidence</p> <p>Supporting policy decisions more generally</p>	<p>The Living Standards Dashboard is under development and is intended to track and measure the current and future wellbeing of New Zealanders. This is based on the Living Standards Framework, which provides a coherent conceptual model for thinking about wellbeing in New Zealand</p> <p>This will be used to help prioritise initiatives to proceed in Budget, and accompany economic growth as a focus area</p>	<p>The Treasury</p>
<p>Developing wellbeing indicators to measure current wellbeing, capital stocks and New Zealand’s impact on the rest of the world</p> <p>Supporting the Living Standards</p>	<p>Indicators Aotearoa New Zealand – Ngā Tūtohu Aotearoa are under development</p> <p>Indicators will be publicly available and will support wellbeing measurement such as the Living Standards Dashboard, Sustainable Development Goals and agency</p>	<p>Stats NZ</p>

Framework and Dashboard	level wellbeing measurement Wellbeing statistics already available on website based on the New Zealand General Social Survey and other sources	
Monitoring New Zealand's progress against international Sustainable Development Goals signed up to by United Nations countries Reporting against 17 goals	Sustainable Development Goals are used to monitor New Zealand's progress against the 17 goals agreed to by United Nations countries to replace the Millennium Development Goals The Sustainable Development Goals have a strong focus on equity – 'leaving no one behind' Indicators Aotearoa New Zealand will be used for national level reporting on the Sustainable Development Goals	Whole of government
Providing a national level picture of the current wellbeing of New Zealanders since 2001 Informing thinking about outcomes achieved by social interventions	The Social Report focuses on individual wellbeing, highlights areas of progress or concern, and enables comparisons internationally, across demographic groups and over time Outcomes measured across 10 domains	MSD
Sub population		
Forming a data driven view of the wellbeing of children and young people in New Zealand Leveraging funding to intervene earlier and get better outcomes for children and young people over their lifetimes	A Lifetime Wellbeing Model is being developed Using an actuarial model to understand the wellbeing of children and young people based on administrative data and a child development lens Wellbeing domains are different from Organisation for Economic Co-operation and Development (OECD) based ones. Include safety, security, stability, wellness and development	Oranga Tamariki
Improving child wellbeing and reducing child poverty Driving cross government actions to enhance and promote child wellbeing and meet child poverty targets	The Child Wellbeing Strategy being developed as required by the Child Poverty Reduction Bill Covers all children up to age 18 and may include some young people over 18, such as those who have been in care	Department of Prime Minister and Cabinet
Developing whānau and families by responding to their diverse needs Addressing the circumstances of those who are experiencing inequity and inequality	Whānau Ora empowers whānau and families as a whole rather than focusing on individual family members Builds strong and trusting relationships alongside whānau to facilitate sustainable, transformational and long-term changes in wellbeing	Te Puni Kōkiri

People receiving an intervention

Evaluating the changes in wellbeing that occur for individual New Zealanders as a result of specific social sector interventions

Supporting social sector agencies and providers to measure and improve wellbeing and make smarter investment choices

SIA wellbeing measurement approach under development

The approach is based on the OECD *How's Life* model (OECD, 2011), adapted for New Zealand and to measure individual wellbeing changes as a result of policy. Plans to expand approach to capture family and whānau wellbeing in future

Includes 12 wellbeing domains and guidance for how to undertake quality measurement tailored to specific purposes

Have applied approach to social housing using Integrated Data Infrastructure data

Social Investment Agency

Our approach can be used to make wellbeing a cornerstone of evidence-informed policy

How wellbeing measurement can be used

The SIA wellbeing measurement approach can be used to help ensure that interventions make a positive and significant difference in people's lives. The proposed approach can assist in putting wellbeing at the centre of work and guiding the selection of meaningful measures to determine whether people's wellbeing is improving. We believe wellbeing measurement is vital for policy making and service delivery.

The starting point is to be very clear about why wellbeing measurement is being used. The main purpose will often be to **monitor and evaluate the impacts of social services and interventions on the lives of New Zealanders**. Some other possible uses (there will be others) are to:

- identify who might benefit
- design interventions most likely to improve wellbeing
- assess the investment required to achieve a certain change in wellbeing
- assess potential impacts and choose between options
- commission with clear expectations of improving wellbeing
- measure the performance of providers
- consider how much to invest now to improve wellbeing in the future, and the trade-offs that this might require.

However, we note that wellbeing measurement is not sufficient on its own to determine how worthwhile interventions are. While measures of the wellbeing impact of a policy provide information on the benefits from an intervention, the fiscal cost of the policy and considerations of equity (who benefits) are also of fundamental importance.

Wellbeing measurement may also have limitations due to data gaps, attribution problems etc. Available indicators necessarily highlight only the aspects of wellbeing that we can measure, while leaving out those aspects that might be important, but that are not easily measured.

Who might use wellbeing measurement or the insights that result

Ministers, government agencies, commissioning organisations, and service providers might all wish to use wellbeing measurement or the insights that result to support their efforts to invest for social wellbeing in a way that makes more systematic use of quantitative data and analysis. This will complement existing practices and the use of professional judgement. Different decision-makers in the social sector carry out different activities, some requiring measurement of wellbeing or change in wellbeing.

Wellbeing measurement is central to a range of activities

Measuring wellbeing is central to a range of activities, for example:

- Ministers and government agencies deciding **where to direct public resources** might compare individuals based on their wellbeing to identify those members of the population that are most likely to benefit from government support. They might also **assess the investment required to achieve a certain change in wellbeing**.
- In making decisions about **who to offer services to**, service providers apply some decision criteria at the heart of which – typically – is an implicit measure of the outcome(s) against which they prioritise need. Wellbeing measurement could assist here.
- Commissioning organisations and service providers might measure the wellbeing of the people receiving existing interventions and compare them to an estimate of the wellbeing the recipients would have achieved without the intervention to **gauge the effectiveness of existing interventions and determine what works for different people**.
- A Minister who has delegated responsibilities to a government agency, or a government agency that has commissioned services from a provider, **evaluates their performance** by measuring the extent to which they achieved the outcomes specified in their performance agreement. Wellbeing measurement can help robustly assess how well wellbeing outcomes have changed. They will still be interested in other factors such as cost-effectiveness.

We have developed an approach and model to measure wellbeing

Our approach is general enough that it can be used to measure the wellbeing of any person, at any level of wellbeing

Wellbeing is embedded in people

It is people who experience wellbeing. We can look at the wellbeing of organisations or groups, but it is not possible to meaningfully assess the wellbeing of these groups without referring to the wellbeing of the people involved. For this reason the core measurement concept we use is the wellbeing of the individual. However, we explicitly build our measurement approach to capture the social context in which people live and to enable us to paint a picture of the wellbeing of individual people, and in time families, whānau, and communities.

While our measurement concept is the individual, interventions will still be offered to whole families, whānau, community groups etc. Those interventions can be assessed using our approach by choosing appropriate indicators, measures and data sources.

The measurement approach and wellbeing model is general enough that it can be used for any person – at any level of wellbeing

It is intentionally general so that it can be applied to a wide range of different initiatives. While the individual is the basic unit of measurement, analysis is focused on groups of people. This also allows measurement of the impacts of an intervention on both the individuals who receive the intervention directly and others who may benefit indirectly. It can capture both the outcomes directly sought as well as others that may be an unintended consequence.

We have described the domains and potential indicators in a way that allows us to see a person's progression from lower levels of wellbeing to higher levels of wellbeing. The majority of administrative data available in the Integrated Data Infrastructure is a by-product of service engagement for people who have a need or have taken up a service. It doesn't capture well people who don't consume public services – either because they don't need them at that time or they don't take them up, and hence tends to disproportionately represent poor outcomes. However, the inclusion of survey responses allow us to move from what might be deficit oriented analysis to more balanced analysis by using self-reported measures (in the New Zealand General Social Survey for instance). It will also be possible to supplement these surveys captured in the Integrated Data Infrastructure with shorter, more frequent surveys to provide more up-to-date and person-specific measures. This broader range allows us to see the full range of wellbeing possibilities.

However, we note that some wellbeing benefits will not be measurable, and some will not be measurable in the time frames selected. For example, many interventions for children may show

long-term benefits in wellbeing that cannot be captured in a short or medium term wellbeing measurement exercise.

Robust wellbeing measurement that is not prescriptive

The proposed wellbeing measurement approach is not prescriptive. Instead, it gives practical guidance on how to organise thinking about how interventions are working for New Zealanders and how to measure changes in wellbeing in a way that gives high quality results. But it also allows the flexibility to tailor their application of the approach so that it uses data that is available and makes sense given what is being measured and why.

The SIA wellbeing measurement approach

Measurement concept: individual wellbeing.

Unit of analysis: unit will vary depending on the purpose, but the main purpose of the SIA's approach is to measure impacts on people. At present we can measure impacts on groups of individuals. In time we hope to be able to measure impacts on families, whānau and communities. The default unit is the individual.

Wellbeing conceptual model: what we have defined as the basis of wellbeing. In this case the model is a modified version of the OECD *How's Life* Framework. The model sets out **what** we are measuring.

Measurement approach: the way we plan to measure level, direction, distribution, and stability/resilience of wellbeing. The approach is about **how** we measure wellbeing. In this paper we summarise a worked example of this applied to social housing.

Wellbeing domains: twelve domains of wellbeing grouped into market outcomes, and non-market outcomes. Subdomains capture key components of the domains, for example health is made up of physical and mental health. Life satisfaction isn't a domain per se, but provides a high level check over the other domains by giving an overall subjective view on people's wellbeing as a whole. Each domain is considered as to:

- level – how a person is doing at a point in time
- direction – how wellbeing appears to have changed over time (increase, decrease or no change)
- distribution – how wellbeing varies across the population being measured
- stability/resilience – how long wellbeing remains the same and how it recovers from disturbance.

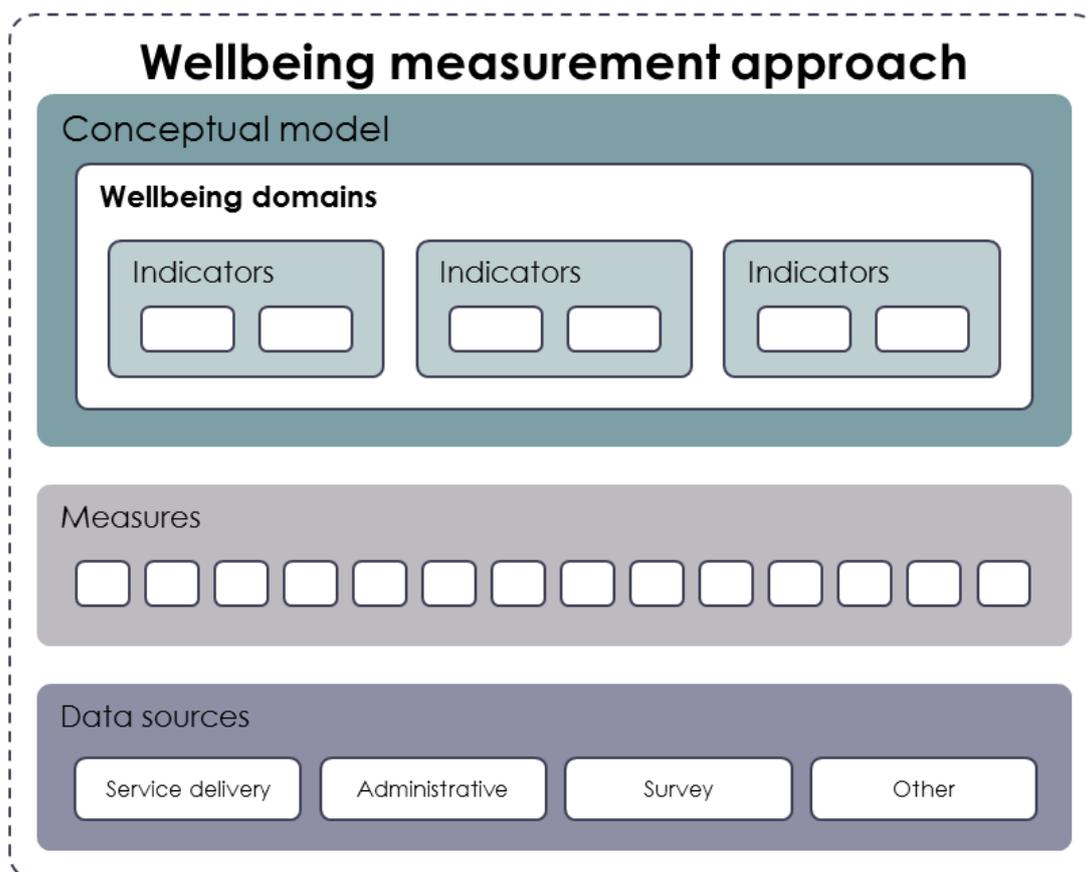
Indicators: an indicator is a measure that reflects at least some aspect of a wellbeing domain and thereby makes it possible to observe variation along that domain. Example indicators are given and guidance is offered to help select valid indicators.

Measures: a measure is a data variable that provides information about an aspect of the world and can be used to construct indicators for a specific concept. It may have been treated or combined in some way. Guidance is offered to help select measures that are appropriate and reliable.

Data sources: measures are based on data. Major data sources are service delivery, administrative, survey and other data. Data sources which are available in the Integrated Data Infrastructure to measure wellbeing are discussed.

Measurement methods: the approach is underpinned by robust measurement methods and criteria that summarise what good measurement looks like, how to select indicators that capture the right things, appropriate measures and robust data sources.

Figure 2. Wellbeing measurement approach



The approach helps us select valid indicators tailored to capture the right things

- » An **indicator** is a measure that reflects at least some aspect of a wellbeing domain and thereby makes it possible to observe variation along that domain.

The approach helps us select valid indicators tailored to capture the right things. Indicators are used to summarise, simplify and communicate relevant information in a domain. They can also be used to interpret whether a change is positive or negative.

It is very important that indicators are selected based on what is being measured and why. Indicators will not be one size fits all: they need to be tailored to the research or policy question being asked.

To select appropriate indicators tailored to what is being measured and why, we consider:

- **Why we are measuring wellbeing** - are we trying to identify who might benefit from an intervention, choosing between different options, evaluating the effectiveness of an existing intervention or measuring the performance of a provider, for example?
- **How we plan to use the wellbeing measurement** - are we trying to determine the characteristics associated with low wellbeing, compare changes in wellbeing compared to a counterfactual or compare changes in wellbeing per \$ spent, for example?
- **What reliable indicators would be in our case** - if we are evaluating the wellbeing impacts of an intervention, we don't use an indicator that is based on the intervention itself. For example, if we are evaluating the impact of a programme to increase the number of heart surgeries, an indicator of longevity would be more appropriate than using the number of heart surgeries delivered as an indicator. If we are assessing the performance of an organisation, we wouldn't use an indicator that is vulnerable to manipulation by anyone interested in the outcome, such as the organisation or their funder.
- **Which indicators would appropriately capture the underlying concept we are measuring** - for example, we could look to the Stats NZ Indicators Aotearoa New Zealand to see which indicators are recommended for each wellbeing domain (these are called topics in the Indicators Aotearoa New Zealand, and are a close but not exact match).
- **Indicators that are valid and move as expected** - whether there is scientific literature that suggests that the indicators move as theory suggests (construct validity) and/or indicators move in the same direction as other measures of the same underlying concept (convergent validity). Indicators shouldn't be sensitive to minor changes in assumptions.
- **Indicators that make common sense** - indicators should be plausible (face validity).
- **Indicators that cover the appropriate time period** - indicators should be for the correct duration.
- **Indicators that are suitable for treatment and control groups** - in order to determine the change in wellbeing associated with an intervention it is important that indicators are selected that are suitable for those receiving an intervention and those who are not, to allow us to distinguish what difference the intervention made, versus other factors.
- **Whether proxy indicators are needed** - proxy indicators may be used when there are no other suitable indicators. Proxies aren't direct indicators but move in line with what is expected. For example, voting rates may be used as a proxy for civic engagement.
- **Whether intermediate indicators are needed** - these are shorter term measures only used before longer term information becomes available.

Indicators can be selected for each domain only, or for each domain and subdomain. It will also be possible to select different indicators for different groups – for example if it is appropriate when comparing the wellbeing of Māori and non-Māori.

The approach helps us choose measures

- » A **measure** is a data variable that provides information about an aspect of the world and can be used to construct indicators for a specific concept. It may have been treated or combined in some way.

All measures should be:

- **Appropriate and reliable for the purpose for which they are to be used** - the measures should produce similar results in similar circumstances - for different people in similar circumstances or the same person in different circumstances. Measures should be unaffected by extraneous influences.
- **Not vulnerable to manipulation by interested parties** - for example when assessing the performance of providers it would be inappropriate to use a measure that could be altered by providers or funders through the way that survey questions are asked.
- **Independent of the intervention itself** - for example if the intervention is to increase engagement with primary care, enrolment with a Primary Health Organisation should not be used as a measure of a change in wellbeing, as it is based directly on the intervention itself – rather than the wellbeing outcomes that result from the intervention.
- **Supported by data** - data for the correct time period, that is collected at appropriate intervals; that covers the relevant population; and is sufficiently timely. For example, there should be data available in operational databases to support the chosen measures.
- **Comparable across individuals and over time** - measures should be suitable to compare different individuals - some measures are only suitable for people of a certain age. Interpretation should be consistent over time as society changes.
- **Able to adequately capture the range of wellbeing states from low to high** - for example, if determining causes of low wellbeing and commissioning an intervention to improve those levels.
- **Suitable for intervention recipients and control groups** - this is important to be able to compare wellbeing outcomes for those who receive interventions with those who do not, to be able to distinguish what is the result of the intervention from what might have occurred in the absence of the intervention (the counterfactual).

Quality data

Measures should be based on data of sufficient quality. If data is used to compile official statistics - particularly “Tier 1” - quality can usually be assumed. If administrative or other data not originally collected for statistical purposes are used, careful evaluation of quality is needed. Data validation checks can help ensure data is of sufficient quality. Data should be, most importantly:

- **Relevant** - the data addresses the purposes for which they are sought
- **Accurate** - the data correctly estimates or describes the quantities or characteristics they are designed to measure. Other components of accuracy are that the data is:
 - » **valid** – data corresponds accurately to the real world

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- » **reliable** – observations are trustworthy for different subjects at the same time, and for the same subject at different points in time
 - » **complete** - a sufficient number of completed records, recorded in a consistent way
 - **Coherent** - the data is mutually consistent with other similar measures and logically integrated into a system of statistics.

It should also be:

- **Credible** - users can place confidence in the statistics based on the reputation of the data producer
- **Timely** - the shortest length of time between the availability of data and the phenomenon or event that the data describe
- **Accessible** - data can be readily located and retrieved by users
- **Interpretable** - users can easily understand and properly use and analyse the data.

These guidelines are slightly modified versions of the seven dimensions of high-quality data from the Quality Framework and Guidelines for OECD Statistical Activities (OECD, 2008). In evaluating the quality of data against this framework it is important to keep in mind that the ultimate test is essentially whether the data meet the needs of the user by providing useful information. This may mean that there are situations where users may need to accept data that is not perfectly accurate provided that it is of sufficient quality that it improves rather than detracts from the quality of decision-making.

It is common to treat data to make it more usable as an indicator. For example, substituting default values in the absence of data or using algorithms to assess suitability and discard values where needed.

Organising domains, indicators, measures, and data sources by measurement purpose

Choosing which data source is most appropriate to provide a measure or indicator for a particular measurement purpose could become a daunting task and lead to incorrect measurement. To make the selection of indicators, measures, and data sources more straightforward we have developed the concept of a **measurement catalogue** which aligns to a measurement purpose.

A measurement catalogue at its simplest is a subset of indicators, measures, and data sources that are appropriate for a measurement purpose. Some indicators, measures, or data sources might be broadly usable for many measurement purposes and some might be relevant only for specific measurement purposes. The measurement catalogue guides people undertaking wellbeing measurement as they make choices.

We want to build a measurement catalogue – a tool that goes across the available data to identify measures for particular purposes.

The quality of data is important

Data from different sources have strengths and weaknesses for building indicators. For example information sourced:

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- from **the census** covers almost the entire population of New Zealand, but is only available every five years
 - as part of **normal business processes** tend to reflect response to need, and only for the population that has engaged with a service provider to meet that need
 - by **survey** can provide immediately relevant material, but are only from a sample of the population.

The context data in which data was generated matters

Data is collected or generated by:

- asking people for the data (surveys)
- as a by-product of business activity (administrative)
- from sensors (this data is not yet generally available for analysis in conjunction with other data), or
- as a product of business activity such as prior calculations or analytics (derived).

When selecting data it is important to know the context in which it came into existence and its subsequent treatment. For example, an indicator to measure whether a house is too cold could be collected in the following ways:

- » Option 1: directly from occupants by asking them the question in a survey, as the New Zealand General Social Survey does; and/or
- » Option 2: by a service provider making an assessment when visiting the house; and/or
- » Option 3: from in-house sensors which communicate when the temperature goes below a set point.

However, these are measures of different things.

- » Option 1: measures the occupants' perceptions of whether a house is too cold and takes into consideration the environment and the occupants' experience.
- » Option 2: takes into consideration a person's perception of coldness but it is not the perception of the occupants and is only at one point in time.
- » Option 3: is about environmental characteristics, whether people are in the house or not and is irrespective of any occupants' personal comfort.

Which measure is needed for the indicator? It will depend on the purpose of the wellbeing measurement and what measures are available.

Useful data sources

For now, it is useful to start with the following data sources and see what is available that aligns with the purpose of the wellbeing measurement being undertaken:

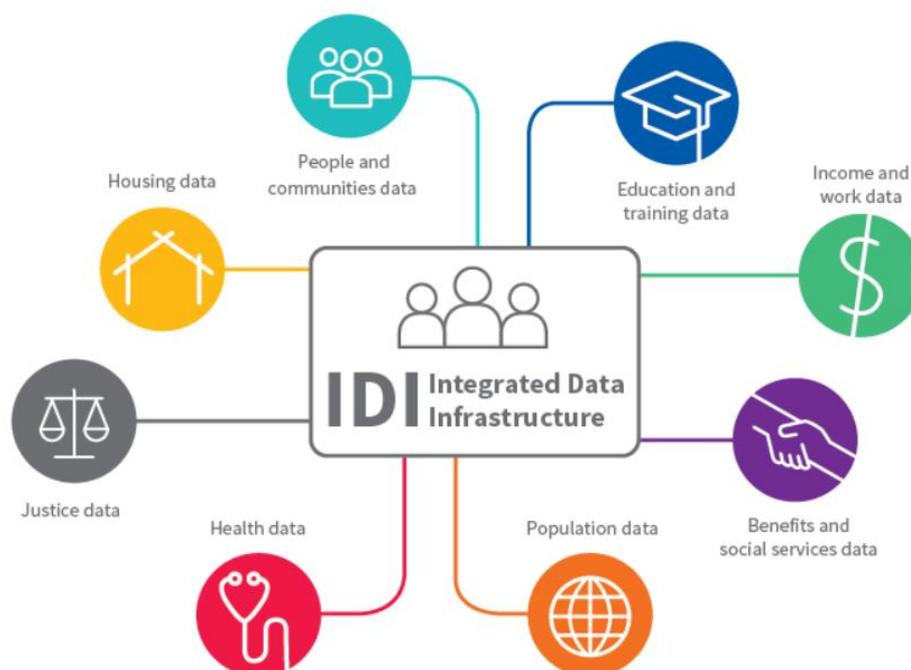
- **Government administrative data** that covers the subject matter and population of interest.
- **National survey data collected by Stats NZ** – information on this is available at <https://www.stats.govt.nz/help-with-surveys/az-of-our-surveys/>. Stats NZ's Indicators Aotearoa New Zealand aims to provide a robust list of national level aggregate indicators of

wellbeing - this may be a useful place to begin. The individual and household surveys are usually more relevant than the business surveys for most wellbeing measurement purposes, and the New Zealand General Social Survey is a good starting point as it was explicitly built around a conceptual model of wellbeing. Other surveys that may be of interest include Te Kupenga (the Māori Social Survey), the Household Economic Survey, the Disability Survey, the New Zealand Time Use Survey (which will be conducted as a New Zealand General Social Survey module in the future), and the Household Labour Force Survey. Note that the sample sizes of some surveys may constrain the pool of individuals that can be studied at any point in time.

- **Census data** – information about this is available at <http://archive.stats.govt.nz/Census.aspx>. Data from the 1996, 2001, 2006 and 2013 censuses are available online. Data from the 2018 is not available yet. Each census of populations and dwellings has similar core information, as well as additional information on particular themes, for example the 2018 census had a housing theme. As the censuses are held roughly every five years the data may not be frequent enough for some wellbeing measurement purposes.
- **An organisation’s administrative and survey data** e.g. data collected as part of service delivery, evaluations completed at the start and end of delivering a programme. Additional information can also be collected to support wellbeing measurement, for example continuous wellbeing surveying of clients.
- **What is held in the Stats NZ Integrated Data Infrastructure** – which includes both administrative and survey data. While access to this data is restricted, and can only be accessed for bona fide research purposes as agreed with Stats NZ it can be a very useful source of information. Organisations may wish to contribute data to the Integrated Data Infrastructure to benefit all of New Zealand – however this is unlikely to be able to occur before mid 2019. Stats NZ provide the following overview of Integrated Data Infrastructure data on their website and more information is available here: http://archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/integrated-data-infrastructure.aspx.

SIA’s Social Investment Measurement Map available at <https://sia.govt.nz/tools-and-guides/measurement-map/> is another useful starting point here as it shows what can be measured in the Integrated Data Infrastructure by indicator or topic, with the majority of indicators listed.

Figure 3. Integrated Data Infrastructure topics



Ongoing availability and quality of data for wellbeing measurement

It will be important to ensure the ongoing availability and quality of data for systematic wellbeing measurement. This will mean thinking about which data sources are of strategic importance. For those data sources where clear processes are not already in place, governance arrangements and quality standards may be needed to ensure that they meet the Government's needs.

Our wellbeing model is based on OECD work and is consistent with the Treasury Living Standards Framework

The conceptual model for wellbeing is based on the OECD *How's Life* Framework with a number of changes (discussed further in the next chapter). It defines what robust wellbeing measurement looks like. This is broadly the same approach adopted by the Treasury in its Living Standards Framework to measure New Zealand's wellbeing at a national level.

Figure 4. Domains of wellbeing

Domains of wellbeing



The model describes wellbeing across twelve domains and helps select aspects of a person’s life to consider

The model is built around twelve wellbeing domains grouped loosely into non-market outcomes and market outcomes. We describe each of the domains below and identify some potential subdomains which could have their own indicators.¹ In addition to the twelve domains of wellbeing, we also explicitly identify life satisfaction, which provides an overall measure of how people view their own wellbeing. This complements the more detailed picture provided by the twelve domains.

¹ The descriptions are drawn from a range of sources and then adapted for the purposes of SIA’s wellbeing model and a New Zealand audience. Sources include the Better Life Index website, the OECD How’s Life 2011 paper, the OECD Guidelines on Measuring Subjective Well-being, How’s Life in New Zealand 2017 and the New Zealand General Social Survey.

LIFE SATISFACTION – how your life is as a whole

Life satisfaction is a subjective measure of how things are going in a person's life as a whole. It is grounded in people's own preferences, rather than external judgements about what should drive wellbeing, and reflects how people evaluate their own life. If we reduced wellbeing to just a single self-reported judgement, without examining wellbeing across the twelve domains below, life satisfaction alone wouldn't provide the richness or detail required to make robust judgments about wellbeing changes. However, it provides a useful complement to the more detailed picture, enabling us to compare the relative impact of different domains on peoples' overall wellbeing and to identify if there are important factors impacting on the wellbeing of New Zealanders not being adequately captured through the indicators used to measure the twelve domains.

- Life satisfaction

NON-MARKET OUTCOMES

Non-market outcomes capture important aspects of wellbeing that market outcomes provide little information about, either because the outcome can't or shouldn't be bought (social connections for example) or is inherently a public good (such as civic engagement and governance).

Health – how healthy you are mentally and physically

The health domain incorporates both mental and physical health. This can be assessed based on self-reported health and objective measures of health status. Key aspects include length of life, presence and severity of chronic conditions, physical morbidity, and mental health conditions. Life expectancy at birth and infant mortality rates are often used as measures of national health, but are less useful for analysing individual wellbeing. Measures that capture wellness, as opposed to absence of disease, might also be suitable in a New Zealand context.

- Mental health
- Physical health

Knowledge and skills – what you know and can do

Knowledge and skills is the domain that captures a person's capacity to understand and master the world. Knowledge and skills can be gained from family, formal education, on the job training, lifelong learning etc. Skills include cognitive abilities such as literacy, numeracy and IT skills.

- Cognitive skills

Safety – how safe you are and how safe you feel

The safety domain includes both how safe a person feels and the risk and impact of being a victim. Obviously, the experience of or significant threat of being a victim has a negative impact on the wellbeing of people. Beyond the risk of actually being a victim, peoples' perception of safety also matters to their wellbeing. This can influence how they feel and whether their activities are limited as a result. Safety also includes threats from non-criminal sources including natural hazards such as earthquakes and risk of accident or injury at work.

- Victimization
- Fear of harm

-
- Injuries

Social connections – enjoying time with others

The social connections domain is about human contact or time spent with others, and the frequency and quality of those connections or relationships. Enjoying time with others is key to being a human, and valuable in its own right. Strong social connections means having positive contact with friends, family, and whānau, and not being lonely. Beyond this, supportive social networks are also an important part of wellbeing. Being able to access material and emotional support when needed and having people in your life that can be counted on are also important to social connections.

- Social contact
- Social support

Leisure and free time – time to do what you want

Leisure and free time are crucial components of a healthy lifestyle. Leisure time is when you are able to do what you want to do away from work and other commitments. Measuring leisure and free time involves knowing about the quantity of free time people have available, but also about the quality of that time. Free time that occurs while we are exhausted or have little opportunity to make use of it for other reasons contributes less to our wellbeing than it could.

- Free time

Ūkaipōtanga / cultural identity – belonging and ability to express your identity

Ūkaipōtanga captures a sense of belonging, recognition and identity and the ability to express that identity, as well as acknowledging that there are aspects of culture, such as its language, that we may wish to protect for the future. The ability to live as who you are, without feeling compelled to adopt another identity to fit in with wider society, is an important aspect of wellbeing. Having a sense of belonging and connection to a culture and place is also important for most, if not all, people. Issues of cultural identity are particularly salient in a New Zealand context given the country's bicultural origins and its diverse immigrant population. While Te Ao Māori is obviously of crucial importance here – particularly from an existence value perspective – belonging and expression are important to all cultures. Existence value recognises that something is intrinsically valuable in its own right, for example Te Reo (Māori language).

- Belonging
- Expression
- Existence / Taonga

Civic engagement and governance – fairness and your voice in government

The civic engagement and governance domain is about involvement in democracy and contribution to the political functioning of society, as well as living in an environment free from corruption or unfair or unlawful exercise of power. It captures quality of governance, satisfaction

with public institutions and the possibility for New Zealanders to express their voice and have a say in the political process. This includes the fundamental civil and political rights enjoyed by New Zealanders (including those expressed in the Treaty of Waitangi) and their actual exercise of those rights. Democratic participation is a key component, but so too is the fairness of the institutions of governance. A common theme is peoples' control over their lives both through the fair implementation of rules and processes by government and through having a voice in shaping public decisions.

- Democratic participation
- Fair process
- Protection of fundamental rights

Environmental quality – the quality of your built and natural environment

The environmental quality domain is about the physical environment in which people live. It captures the condition of the natural environment, the built environment such as roads and parks, and the direct impact that they have on peoples' lives. Environmental quality can span a large range from appreciation of the beauty of where people live, to concern about hazardous substances. The built environment, pollution and the extent of local green space are key dimensions of environmental quality that impact on people in this way.

- Pollution
- Green space
- Built environment

Self – your personal resources and experience of life

Many of the things that shape our wellbeing are internal to who we are, rather than coming from outside us. Our personality and outlook on life matter to our wellbeing and to our ability to achieve other goals important to wellbeing. Key elements of the 'self' domain include non-cognitive skills and a person's psychological resilience, as well as their experience of life. Non-cognitive skills are abilities such as self-control, while psychological resilience includes things such as meaning and purpose in life, and having an internal locus of control. Experience of life captures our actual moods and emotions such as anger, anxiety, joy, or contentment.

- Experience of life
- Non-cognitive skills and psychological resilience

MARKET OUTCOMES

Market outcomes capture wellbeing domains that primarily relate to goods and services traded in the market sector. Housing and the jobs and earnings dimension are separate from income and living standards because the labour and housing markets have their own dynamics and do not always correlate well with income.

Income and living standards – your household income and consumption

The income and living standards domain captures how much a household receives in income and the consumption possibilities that result. This consumption includes the ability to satisfy basic needs such as food, clothing and housing; the ability to choose the lives they want to live and pursue goals such as study or travel; and the ability to manage unexpected economic or personal risks such as not being able to work due to illness. From a measurement perspective it is possible to focus either on income, or on measures of actual consumption (material living standards). The distribution and inequality of income and living standards are important considerations. Services produced within the household but for which a market exists, such as meals, childcare, or vegetables grown at home, also fall within this domain.

- Income
- Material living standards

Housing – the affordability and condition of where you live

The housing domain focuses on the availability of adequate shelter. Shelter is a fundamental human need, and the availability of quality housing is the main factor affecting whether this need is met. Three main aspects of housing are covered in the housing domain. These are housing quality, crowding, and affordability. Housing quality covers the physical condition of the house: is it weather-tight; damp, or in need of repair? Crowding is another fundamental aspect of adequate housing, and reflects whether there is sufficient space for household members. Finally, the housing domain captures affordability. If house prices or rents are too high relative to income, living in a suitable house may place too high a strain on other aspects of consumption.

- Housing quality
- Crowding
- Affordability

Jobs and earnings – your access to quality jobs that pay

The jobs and earnings domain recognises that wellness is improved by having a quality job that matches a person's aspirations and competencies; with good working conditions; that pays adequately. The three main components of the jobs and earnings domain are access to employment, job quality and earnings. Job availability and employment status matter for individual wellbeing – in particular, not being excluded from being able to get a job. Job quality can cover job safety, ethics, job security, workplace relationships, job strain (stress from high demands and a low level of control) and job motivation. Earnings cover both income and other benefits. Access to a living wage is of increasing interest in New Zealand.

- Access to employment
- Job quality
- Earnings

The wellbeing domains focus on outcomes valued by people, not intermediate factors

We focus on outcomes that we understand are valued by people independently rather than things that are good only because they are believed to contribute to other valued outcomes. For example, being born to a teen mother may be a risk factor for future poor outcomes, in that it is correlated with lower expected educational attainment or income later in life, however, it is not itself an outcome measure.

This distinction between outcome measures and causal factors, correlating factors, or risk factors is fundamentally important. One of the main roles of a wellbeing measurement approach is to assess whether particular interventions work to make people better off. This means we need to distinguish between the situations that improve wellbeing and things that are believed to help people get there (risk or causal factors). In fact, it is only when we are clear about what wellbeing looks like, that it is possible to identify things that improve wellbeing. Outcomes can also be causal or risk factors (for that person or for others such as their children), but our criteria requires that they must have some final value.

The approach defines what constitutes good wellbeing outcomes but doesn't define specific measures

Measurement is a distinct activity that follows from having a clear description of the outcome that will be measured. In many cases the precise choice of measure to be used to capture a given outcome will vary depending on the purpose for which it will be used. Different measures may be appropriate, for example, if the need is to estimate the likelihood of future service usage for an individual as opposed to evaluating the impact of a particular social intervention.

The role of this working paper is to help guide the selection of high quality indicators and measures, rather than specifying that certain indicators must be used. Over time we do plan to prepare a set of headline indicators that could be useful for a number of different purposes, but again, this will still allow us the flexibility to select whichever indicators and measures are most appropriate. Table 3 gives some example indicators and data sources to act as a starting point.

Table 3. Example indicators and potential data sources

Wellbeing domains	Domain definitions	Example subdomains	Example indicators	Potential data sources
Life satisfaction*	How your life is as a whole		Overall life satisfaction	NZ General Social Survey Te Kupenga NZ Disability Survey The Quality of Life Survey
NON-MARKET OUTCOMES				
Health	How healthy you are mentally and physically	Mental health	Self-reported mental health	NZ General Social Survey (especially SF12 short form health questionnaire from 2008-2016, and WHO5 from 2018)

				Te Kupenga NZ Disability Survey New Zealand Mental Health Monitor/Mental Health and Wellbeing Survey (Health Promotion Agency) Survey of Family, Income, and Employment (up to 2009/2010)		
		Mental health	Identified/diagnosed mental health issues (including addiction)	Ministry of Health data and New Zealand Health Survey		
		Physical health	Self-reported health	NZ General Social Survey (SF12 from 2008-2016) Te Kupenga NZ Disability Survey Survey of Family, Income, and Employment (up to 2009/2010)		
		Physical health	Life expectancy	Ministry of Health data and New Zealand Health Survey Stats NZ life tables		
		Physical health	Identified/diagnosed serious health conditions	Ministry of Health data and New Zealand Health Survey Stats NZ life tables		
Knowledge and skills	What you know and can do	Cognitive skills	Educational attainment	Household Labour Force Survey Census Programme for International Student Assessment (OECD) Stats NZ Household Surveys Ministry of Education ENROL data		
				Cognitive skills	Student skills	Adult Literacy and Living Skills Surveys (Ministry of Education)
				Cognitive skills	Educational engagement	NZQA school leavers data & tertiary education data
				Cognitive skills	Drivers licence	NZ Transport Agency data
Safety	How safe you are and how safe you feel	Victimisation	Homicide rate	Police data/Ministry of Health Mortality Collection (note time lag)		

		Victimisation	Confirmed family violence notifications	Oranga Tamariki data for family violence notifications where child in household
		Victimisation	Violent crime rate	Police data on reported offenders & victims of crimes
		Victimisation	Victimisation rate	New Zealand Crime & Victims Survey
		Fear of harm	Feeling safe walking alone at night	NZ General Social Survey Te Kupenga NZ Disability Survey Victimisation Survey
		Risk of injury	Injury rate	ACC & Ministry of Health data (hospital admissions & emergency department visits for injuries) Police National Intelligence Application and 111 call data
		Risk of injury	Serious injury rate	ACC & Ministry of Health data (hospital admissions & emergency department visits for injuries) Police National Intelligence Application and 111 call data
Social connections	Enjoying time with others	Social support	Quality of support network	NZ General Social Survey Te Kupenga NZ Disability Survey NZ Health Monitor
		Social contact	Satisfaction with level of social contact	NZ General Social Survey
		Social contact	Hours of social contact	NZ Time Use Survey Census (unpaid work in the community)
		Stability of living situation	Number of address moves	Integrated Data Infrastructure address data
		Stability of living situation	Number of employment moves	Inland Revenue data
		Stability of living situation	Number of school moves (for children and	Ministry of Education data

			young people)	
Leisure and free time	Time to do what you want	Free time	Time devoted to leisure and personal care	NZ Time Use Survey
		Free time	Employees working very long hours	Household Labour Force Survey Household Economic Survey
		Free time	Time spent on hobbies, clubs & leisure	NZ Time Use Survey Census
		Free time	Time spent volunteering	NZ Time Use Survey
Ūkaipōtanga/cultural identity	Belonging and ability to express your identity	Belonging	Ability to be and express yourself	NZ General Social Survey Te Kupenga NZ Disability Survey
		Existence / Taonga	Local content programming on NZ television	NZ on Air local content data
		Existence / Taonga	Māori language speakers	Te Kupenga
		Existence / Taonga	Native language speakers	Census (fluency)
Civic engagement and governance	Fairness and your voice in government	Democratic participation	Voter turnout	Parliamentary Library - Electoral Commission data
		Fair process	Trust in government institutions	State Services Commission Kiwis Count Survey NZ General Social Survey Te Kupenga
		Fair process	Perceived discrimination	NZ General Social Survey Te Kupenga NZ Disability Survey
		Fair representation	Gender & ethnic equity in representation in local and national governance	Census Local and national government data
Environmental quality	The quality of your built and natural environment	Pollution	Air pollution	Ministry for the Environment environmental reporting

		Pollution	Water quality	Ministry for the Environment environmental reporting
		Pollution	Soil quality	Ministry for the Environment environmental reporting
		Green space	Proportion of natural space in the local environment	Ministry for the Environment environmental reporting Land Information New Zealand
		Built environment	Road quality	Ministry of Transport Land Information New Zealand
Self	Your personal resources and experience of life	Experience of life	Meaning and purpose	NZ General Social Survey Te Kupenga (e.g. sense of control over one's life) NZ Disability Survey
		Non-cognitive skills and psychological resilience	<i>[To be determined]</i>	<i>[To be determined]</i>
MARKET OUTCOMES				
Income and living standards	Your household income and consumption	Income	Household net adjusted disposable income	Household Economic Survey
		Income	Personal income	Inland Revenue data
		Material living standards	Real household consumption expenditure	Household Economic Survey
		Material living standards	Financial ability to meet everyday needs	Census
		Material living standards	Financial ability to meet unexpected/emergency expenses	Te Kupenga NZ Disability Survey
		Material living standards	Access to transport	MSD geocoded data Vehicle ownership and registration data
		Material living standards	Material wellbeing index	NZ General Social Survey Household Economic Survey

		Material living standards	Assets, liabilities & wealth	Survey of Family, Income, and Employment (up to 2009/2010) Household Economic Survey (Savings) Household Savings Survey
Housing	The affordability and condition of where you live	Housing quality	House is mouldy	NZ General Social Survey
		Housing quality	Satisfaction with housing	NZ General Social Survey Te Kupenga
		Housing quality	House state/needs repair	NZ General Social Survey NZ Disability Survey
		Crowding	House is crowded	NZ General Social Survey Te Kupenga NZ Disability Survey Census
		Affordability	Affordability of housing (mortgage & rents)	Household Economic Survey Quotable Value data MBIE rental bond data Housing NZ data (in the Integrated Data Infrastructure)
Jobs and earnings	Your access to quality jobs that pay	Access to employment	Employment status	Household Labour Force Survey Census
		Earnings	Personal earnings	Inland Revenue income data Household Labour Force Survey
		Job quality	Job security	Household Labour Force Survey
		Job quality	Job stability	Survey of Family, Income, and Employment (up to 2009/2010) Linked Employer-Employee Database
		Job quality	Work-related injury claims	Stats NZ – Injury statistics using ACC claims data

Some of the example indicators are based on the OECD Better Life Index. More detail can be found at:

<http://www.oecdbetterlifeindex.org/topics/>. Others are based on the Stats NZ NZ Social Indicators, available at:
[//archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Health.aspx](https://archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Health.aspx).

Note that there will be potential bias in the available data as some people will be under-represented in both surveys and the census, which don't have 100% completion rates, and have different collection approaches, and have questions which may have different interpretations. These sources of potential bias should be noted in any wellbeing measurement undertaken.

*Life satisfaction is not classed as a wellbeing domain, but instead provides a high level check on people's wellbeing.

Wellbeing domain measurement is considered in four ways

The model also identifies four cross-cutting ways of looking at the different domains of wellbeing measurement. These are level, direction, distribution, and stability/resilience.

Level

Level reflects the need for information on how a person is doing for each of the domains in the wellbeing model. It describes an aspect of a person's wellbeing at a specific point in time. For example, overall satisfaction with housing as measured in a survey.

Direction

Direction signals whether wellbeing appears to have increased, decreased or stayed the same over time. The indicators must have an unambiguous interpretation of what constitutes an improvement in wellbeing. This is relatively easy where the wellbeing domain in question is one dimensional, but more complex when the domain has multiple sub-dimensions that may move in different directions. For example the health domain includes sub-dimensions relating to physical health and mental health. The relative weight of different sub-dimensions will vary from person to person and in different circumstances. We also need to consider the time period over which the change is measured – too short and it won't be possible or sensible to measure change; too long and it won't accurately reflect the variation that may have occurred. For example, a person's income isn't going to change considerably over a three month period, whereas it would be expected to change significantly and more than once over a ten year period.

Distribution

Distribution highlights that we need to know how wellbeing varies across the population being measured. While the average picture gives a sense of overall progress, it does not tell us who is in need and it doesn't provide any information on how big the group of people in need is. For example, we may be able to say that on average the level of social connectedness across New Zealand is not a concern, but even if this is true there will still be New Zealanders who are lonely or socially isolated. Knowing about the overall distribution also matters: inequality in wellbeing is important both as a driver of other wellbeing outcomes and is considered undesirable by many. While the individual is the starting point of our measurement, we will measure differences between individuals and produce distributions.

Stability/resilience

Stability/resilience emphasises that the dynamic picture is important. We need to know how wellbeing is tracking over time, not just at one point, to see how long wellbeing remains the same for and how it recovers from disturbance. For example, a family with one member managing a moderate chronic health condition is in very different circumstances to a family that is normally healthy but has recurring severe health crises over time; despite the fact that, on average, the level of health need for the two families may be similar. Stability/resilience reflects how much volatility there is in the outcomes that a person, family, or whānau experiences and how robust that individual, family, or whānau is to a disruption, such as losing a job or experiencing a new disability.

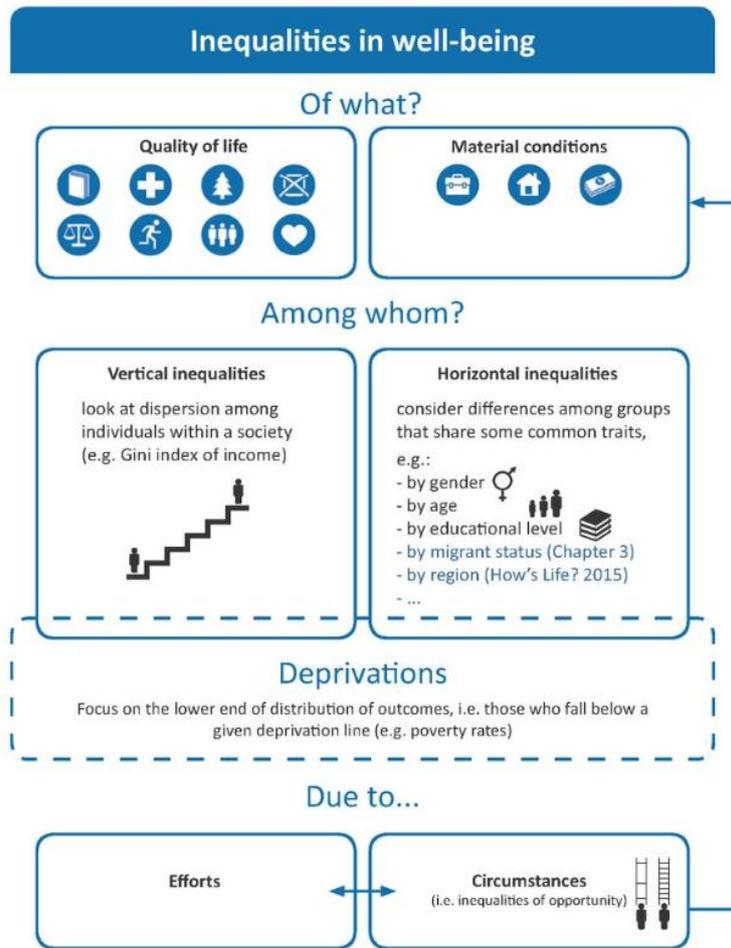
We can use the same wellbeing model to measure inequality

Considering how wellbeing outcomes are distributed or “who gets what” is an important part of wellbeing measurement. Figure 5 provides a framework that the OECD have developed for measuring inequalities in wellbeing outcomes. The framework could be easily applied to SIA’s proposed wellbeing measurement approach and domains. The key components are to identify:

- **what** inequalities relate to – for example opportunities to have a voice in government (non-market - civic engagement and governance domain) or ability to live in an affordable house (market - housing domain)
- **who** is experiencing the inequality – **vertical inequalities** for example income in the top 20% of New Zealand households vs the bottom 20% or **horizontal inequalities** which could compare leisure and free time for women and men
- **who** is facing the highest levels of **deprivation** or experiencing the **poorest outcomes** in one or more areas. This group is of particular interest to the social system
- **whether** the inequalities’ are due to **efforts** (e.g. working hard, taking risks or investing to gain better skills or experiences) or **circumstances** outside a person’s control (e.g. inequalities of opportunity for an education, quality health care or access to justice). These can be measured independently of each other.

Figure 5. Inequalities in wellbeing

A framework for measuring inequalities in wellbeing outcomes



Source: OECD 2017 p74

Criteria summarise what robust measurement looks like

The following list of criteria summarise what robust wellbeing measurement looks like. A more detailed wellbeing measurement guidance document will be prepared in future. It will have examples and ways to document processes, determine the level of quality that will be achieved and identify problems to be addressed.

The criteria are organised as five sections which correspond to the wellbeing measurement approach. The last section covers over-arching considerations which are applicable to any measurement activity.

Table 4. Criteria to undertake quality wellbeing measurement

Criteria	Explanation
The focus of measurement is on wellbeing	
Individual wellbeing	The individual person who receives the intervention is the starting point
Unit of analysis	While individual wellbeing is the starting point, results can then be grouped for different scales of populations. Other groupings of people are considered as units of analysis such as families, whānau, all service users. Spillovers to other people who aren't service users are considered
Domains complete	All wellbeing domains have been considered for inclusion
Subdomains complete	Subdomains have been considered for each domain selected
The chosen indicators capture the right things	
Validity	The indicator is a valid measure of the aspect of wellbeing it represents
Final outcomes	Only measures that focus on the outcomes valued by people, not intermediate factors, are used as wellbeing indicators
Direction	Indicators clearly show whether wellbeing has increased, decreased or stayed the same
Stability/resilience	Indicators can capture the length of time that wellbeing remains the same and how it recovers from problems
Distribution	Indicators can capture how wellbeing varies between the population being measured
Level	The indicator allows a judgement to be reached about how people are doing at a point in time for the relevant wellbeing domain(s)
The measures are appropriate	
Data available	Measures have data available e.g. survey, operational database
Comparable	Measures are comparable across individuals and over time
Range	Measures can adequately capture the range of wellbeing states from low to high
Accurate	On average, the value of the measure reflects the underlying concept to be measured
Reliable	The value of the measure does not vary too much from the true measure on a case by case basis
Independent	Measures are not based on the intervention itself and are not vulnerable to manipulation by interested parties
The data is of sufficient quality	
Relevant	The data addresses the purposes for which they are sought
Accurate	The data correctly estimates or describes the quantities or characteristics they are designed to measure. To be accurate data should also be valid, reliable and complete
Coherent	The data is mutually consistent with other similar measures and logically integrated into a

	system of statistics
Credible	Users can place confidence in the statistics based on their image of the data producer
Timely	The shortest length of time between the availability of data and the phenomenon or event that the data describe
Accessible	Data can be readily located and retrieved by users
Interpretable	Users can easily understand and properly use and analyse the data
Data collection process is known	The way in which the data was collected and the impact of this on what the data captures is understood
Data treatment appropriate	Data treatment can make it more usable as an indicator but can weaken quality - only use where appropriate
Source	The full range of data sources have been considered including administrative, survey, census and other data
Data validation checks	Data validation checks have been performed to ensure the fitness, accuracy and consistency of data
Peer reviewed and validated	
Documented	All key processes, decisions and rationale for those decisions have been documented to enable quality checking, learning and for future reference
Self-assessment and mitigation	The wellbeing measurement work has been self-assessed, any issues or risks identified, and mitigations put in place where needed
Data use is ethical	Privacy, human rights and ethical implications have been considered. Data has been appropriately confidentialised to protect people's privacy and is approved for use
Technical review	Wellbeing measurement and the way it is written up has undergone expert review, and any resulting changes made to ensure it is technically correct and credible
Peer review	Wellbeing measurement and the way it is written up has undergone peer review, and any resulting changes made to ensure that it makes sense and is useful
Descriptions and caveats	The wellbeing measurement process and results are accurately described in any outputs; and appropriate caveats and limitations are included where necessary.

Our wellbeing measurement approach is based on a highly respected model that has been adapted to New Zealand conditions, peer reviewed and we have started applying it

The proposed wellbeing measurement approach is built on a strong foundation.

The past decade has seen significant progress in the measurement of outcomes and the adoption of wellbeing outcome frameworks by a wide range of international agencies (e.g. the OECD), NGOs (e.g. Legatum) and governments (e.g. the United Kingdom, Israel, New Zealand). Building on the lessons from this there is a sufficient body of evidence and good practice to develop a robust wellbeing measurement approach for investing for social wellbeing.

The approach is built on a highly respected OECD model. The OECD model has been adapted to reflect what we understand New Zealanders value. Treasury has also done this for their Living Standards Framework. This method maps well onto other approaches used in New Zealand including the Social Report and Stats NZ's work to measure New Zealand's progress. Our approach has been peer reviewed. We have begun applying it – and while we have a lot of work to do to refine the approach and make it ready to be used independently – we think it demonstrates that there is value in proceeding. We plan to continue to develop and apply the measurement approach and wellbeing model in collaboration with other agencies and providers – and are keen to hear from you if you are interested in working with us.

The wellbeing model is based on the OECD *How's Life* model

We considered adopting an existing wellbeing or outcomes framework unchanged, developing a new outcomes framework based on existing research or adapting an existing framework to measure the outcomes of investing for social wellbeing in New Zealand.

We decided on the latter. Selecting a coherent existing model underpins the scientific credibility of our approach. Adapting it makes it credible in a New Zealand context and suitable to measure the impacts of specific interventions. And it avoids the considerable investment in time and resources that would have been needed to develop an entirely new approach.

We reviewed 16 wellbeing and outcomes frameworks

We reviewed 16 of the higher quality wellbeing and outcomes frameworks available. We grouped these into five families, which aren't mutually exclusive:

- 1. Beyond GDP approaches** – frameworks that attempt to deal with flaws in using GDP as a measure of progress

2. **United Nations approaches** – United Nations developed indexes for member states, often based on diplomatic negotiations
3. **Subjective approaches** – approaches that use measures of subjective wellbeing as the main focus
4. **The modern consensus model** – approaches that build on the work of the Sen/Stiglitz/Fitoussi commission, reflecting both a capabilities approach and including some subjective measures
5. **New Zealand approaches** – local attempts to assess the wellbeing of New Zealanders.

We assessed the frameworks based on the following criteria:

1. **Clear:** the conceptual model must be readily understood by all relevant stakeholders, including non-technical audiences.
2. **Comprehensive:** the conceptual model must capture all of the relevant outcomes for the whole population of New Zealand within its scope, and should be applicable across time.
3. **Coherent:** the conceptual model must be grounded in robust social science explaining why these elements are included and how they relate to the focal concept.
4. **Credible:** the conceptual model needs to be seen as reasonable by all key stakeholders including ministers, other government agencies, social sector NGOs, and the wider New Zealand public. It must reflect the concerns and key issues of relevance to New Zealanders.
5. **Comparable:** the conceptual model should be sufficiently similar to other frameworks in use elsewhere to support comparisons.
6. **Relevant:** the conceptual model must be able to be applied to a wide range of different uses, including policy, evaluation, commissioning, and delivery of social services.

Table 5 summarises the assessment. How the six criteria were used and a more detailed assessment are included in the last chapter (More information).

Table 5. An assessment of wellbeing and outcomes frameworks

Framework	Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Beyond GDP approaches						
Genuine Progress Indicator	Partially met	Not met	Partially met	Not met	Partially met	Not met
Adjusted Net Savings Indicator (World Bank)	Partially met	Not met	Partially met	Partially met	Met	Not met
Legatum Prosperity Index	Met	Met	Not met	Partially met	Met	Not met

Social Progress Imperative	Met	Partially met	Partially met	Partially met	Met	Partially met
United Nations approaches						
Human Development Index	Met	Partially met	Partially met	Partially met	Met	Not met
Innocenti Child Well-being Framework	Partially met	Partially met	Met	Partially met	Met	Partially met
Sustainable Development Goals (United Nations)	Partially met	Met	Not met	Partially met	Partially met	Not met
Subjective approaches						
World Happiness Report	Met	Met	Met	Partially met	Met	Not met
Happy Planet Index	Partially met	Met	Partially met	Not met	Met	Not met
The modern consensus model						
OECD <i>How's Life?</i> (selected)	Met	Met	Met	Partially met	Met	Met
UK National well-being framework	Met	Met	Met	Partially met	Partially met	Met
New Zealand approaches						
The Social Report	Met	Met	Met	Met	Partially met	Met
Big Cities Quality of Life	Partially Met	Met	Partially met	Partially met	Partially met	Met
Oranga Tamariki Well-being Framework	Partially met	Met				
Whānau Ora	Met	Partially met	Partially met	Met	Not met	Partially met
NZDep/ New Zealand Index of Multiple Deprivation	Partially met	Not met				

One prominent framework that was not formally evaluated is the Treasury's Living Standards Framework, as it was still under redevelopment at the time these frameworks were being assessed. However, the approach adopted by the Treasury for the Living Standards Framework is also based on the OECD *How's Life* Framework and is consistent with what is proposed here to define current wellbeing.

We selected the OECD framework as the starting point

As a result of the assessment, SIA decided to base the work on the OECD's *How's Life* Well-being Framework. The OECD framework was developed to compare the wellbeing of citizens in different OECD countries, but can be adapted to compare outcomes between regions, population groups,

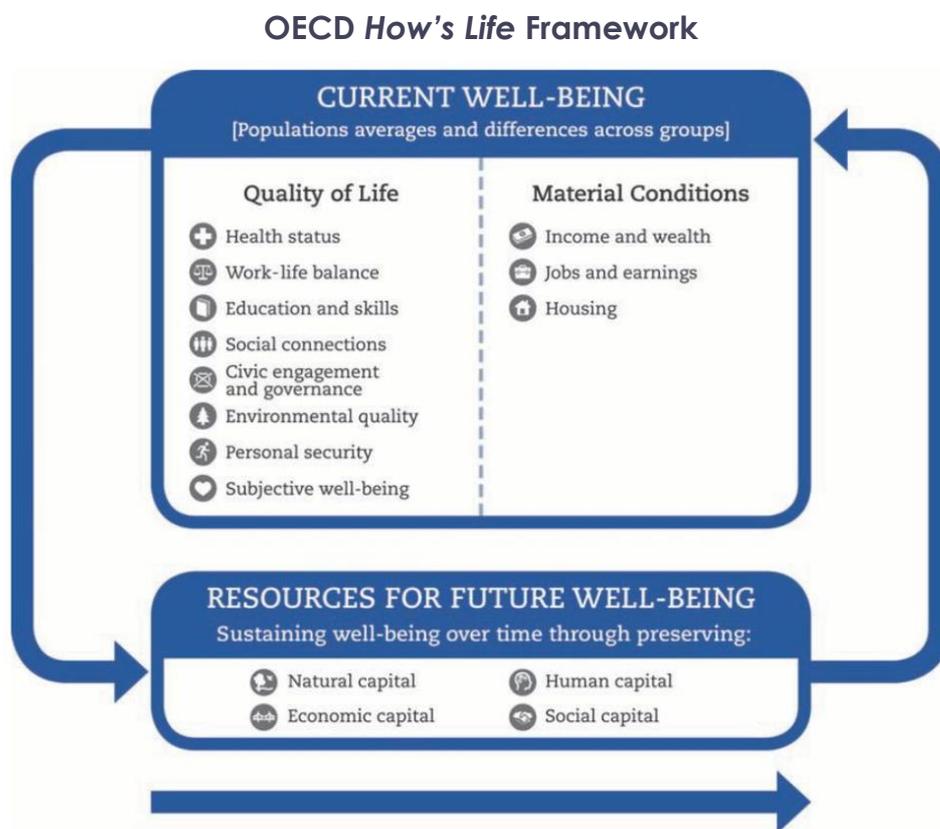
policies and individuals. It is explicitly based on individual wellbeing, which is the focus of this work, and it performed well against the six selection criteria, particularly for comparability and coherence. Many countries have chosen to use this as the basis for their wellbeing measurement, as have many government agencies in New Zealand.

The OECD framework is highly regarded internationally. It has been strongly endorsed by a wide range of prominent economists and other social scientists. The OECD model is grounded in the recommendations of the *Report by the Commission on the Measurement of Economic Performance and Social Progress*. This was authored by Professors Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi, highly regarded experts in economics and social science, who proposed alternatives to GDP to measure economic performance and social progress (discussed in the first chapter).

One other framework that was carefully considered was the Social Report, which also performed well against our criteria and was designed for New Zealand. Given the similarity with the OECD *How's Life* Framework and the Social Report, the results would likely have been very similar if we had selected the Social Report.

The OECD model considers 11 dimensions of life and the resources needed for future wellbeing, including four “capital stocks” and is summarised in Figure 6.

Figure 6. OECD How's Life Framework



Source: OECD, 2015

The wellbeing model is being adapted to reflect what we understand New Zealanders value

To determine what adaptation we might need for New Zealand we mapped the OECD framework to three prominent New Zealand frameworks: the Social Report, Oranga Tamariki’s Well-being Framework and Whānau Ora. While the OECD model mapped well against the New Zealand models in most areas, the key area of divergence was culture. The OECD framework essentially ignores culture, while the New Zealand ones explicitly focus on culture. Two elements of culture appear important. Both the Social Report and the Oranga Tamariki framework identify a sense of belonging and identity as a crucial part of culture that matters to the wellbeing of New Zealanders. Similarly, the Social Report and Whānau Ora both include a specific reference to Te Ao Māori and the New Zealand cultural context. Taken together, this suggests the need for an additional dimension within the wellbeing model relating to New Zealand culture and identity. The Treasury’s Living Standards Framework has followed a similar path.

For the SIA wellbeing model, the OECD model has been adapted as follows:

- A focus solely on current wellbeing, omitting the four capital stocks needed for future wellbeing, as this is less relevant in assessing the impact of social sector policy interventions.
- More emphasis on the level, direction, distribution, and stability/resilience of wellbeing impacts for individuals over time.
- Using life satisfaction as a proxy for overall wellbeing.
- Expanding the subjective wellbeing domain and renaming it ‘self’ to capture psychological resilience, agency, control, meaning and purpose.
- Altering the wording of five outcome domains to make them clearer.
- Adding ‘ūkaipōtanga/cultural identity’ incorporating a sense of belonging and identity and Te Ao Māori aspects of wellbeing which we understand are important to New Zealanders.

The differences are summarised in the table 6. Additional changes may be made in future as we refine the model based on feedback, incorporating what we learn from applying the model and in response to other engagement that occurs with New Zealanders about what they see as important to their wellbeing. The SIA has been on the road between May and September asking New Zealanders what they think about the Government’s proposed approach to investing for social wellbeing (and how to protect and use their personal information), which may feed into this. We understand Stats NZ is also planning engagement to inform Indicators Aotearoa New Zealand.

Table 6. Comparison of OECD How’s Life and SIA wellbeing domains

OECD How’s Life	SIA wellbeing domains	Differences
	Life satisfaction*	Included as an indicator within the OECD subjective wellbeing domain rather than as a stand-alone proxy for overall wellbeing
 Housing	Housing	None
 Income and wealth	Income and living standards	Living standards replace wealth

 Jobs and earnings	Jobs and earnings	None
 Social connections	Social connections	None
 Education and skills	Knowledge and skills	Knowledge replaces education
 Environmental quality	Environmental quality	None
 Civic engagement and governance	Civic engagement and governance	None
 Health status	Health	Health replaces health status
 Subjective well-being	Self	Expanded subjective wellbeing and renamed it 'self' to capture psychological resilience, agency, control, meaning and purpose
 Personal security	Safety	Safety replaces personal security
 Work-life balance	Leisure and free time	Leisure and free time replaces work-life balance
	Ūkaipōtanga/cultural identity	Concept absent from OECD model
Four capital stocks: Natural, human, economic, social	-	Capital stocks excluded from SIA model

*Life satisfaction not formally a domain in the SIA model.

The approach has been peer reviewed

This paper has been peer reviewed by a range of different stakeholders inside and outside government. Reviewers saw the potential value of the wellbeing measurement work and generally agreed with the assessment of the wellbeing and outcomes frameworks. A number of changes were suggested and incorporated into the paper. Other feedback included:

- what is proposed is consistent with the Treasury's Living Standards framework and Stats NZ's Indicators Aotearoa New Zealand
- family and whānau are a core part of Māori wellbeing
- ensure that an aspirational or potential based approach is used and subjective data around people's ambitions included
- consider discussing whether investment or trade-offs might be required now to improve wellbeing in future
- reiterate that wellbeing measures and indicators only tell part of the story – alone it doesn't inform us about the overall effectiveness of interventions
- think about how to find out more about what New Zealanders value

- improve the way some aspects of the approach is described e.g. “distribution”
- the wellbeing measurement model requires technical skills that many policy makers and service providers won’t have readily available.

The model has been validated to ensure that it captures the dimensions of wellbeing that appear to matter to New Zealanders

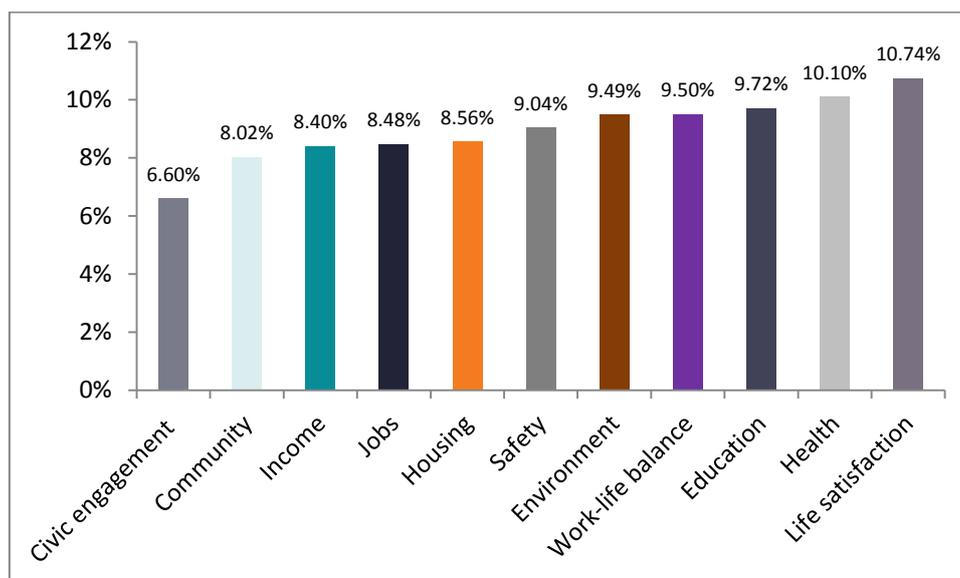
The model was validated in three ways to ensure that it captures the dimensions of wellbeing that appear to matter to New Zealanders.

- **Face validity** - the wellbeing model appears plausible based on New Zealander’s application of the OECD Better Life index to their own lives, and based on the Treasury’s National Values Survey.
- **Evidence from life satisfaction** - we looked at studies testing the validity of the OECD framework. These support the dimensions as key determinants of life satisfaction.
- **Public consultations** - existing public consultations in New Zealand on similar outcomes frameworks suggest validity with the wider public.

Face validity

The OECD Better Life Index (which presents results from the *How’s Life* Framework in an accessible way) allows users to weight different dimensions of the framework based on what matters to them at the following site: <http://www.oecdbetterlifeindex.org>. Results from New Zealand users’ priorities are included in figure 7. While this isn’t a representative sample, it suggests that the OECD dimensions are plausible in a New Zealand context. Life satisfaction, followed by health were the highest weighted factors, while civic engagement was the lowest.

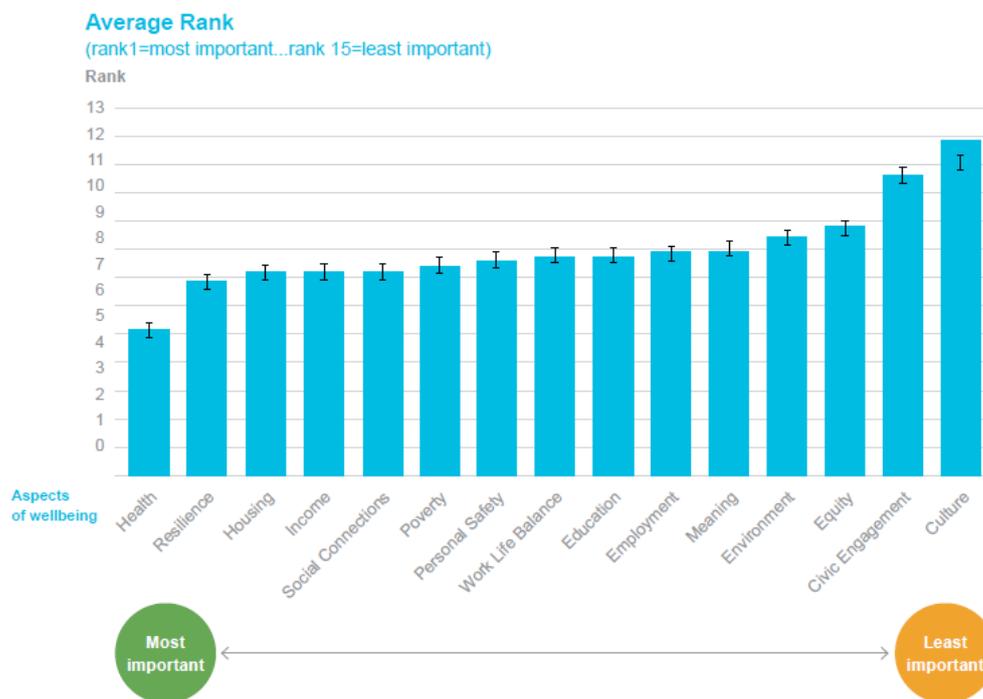
Figure 7. OECD Better Life Index weights provided by New Zealanders (2011-2016)



The National Values Survey conducted by the Treasury in 2016 took a representative sample of respondents through a series of paired choices designed to elicit the trade-offs between different dimensions. The ranking provided by the Treasury survey is similar in some respects to the OECD Better Life Index one. Health, for example, is ranked very highly in both and civic engagement very

poorly. However, there are also some important differences. The Treasury survey shows housing and income as much more important than the OECD survey and education as much less so. Given the attention to culture in the New Zealand outcomes frameworks considered earlier, it is interesting to note that culture was the lowest ranked outcome in the Treasury survey. However, this may reflect that the Treasury survey left culture undefined and the term may have led respondents to think more about the performing arts than belonging, identity, and Te Ao Māori.

Figure 8. New Zealand Treasury National Values Survey (2016)



Evidence from life satisfaction

A number of studies have explicitly tested the validity of the OECD framework and looked more broadly at the determinants of life satisfaction using cross country data. These provide strong support for the wellbeing dimensions identified in the conceptual model, in that the wellbeing dimensions are found to have statistically significant effects independent of average life satisfaction (eg, Fitoussi et al, 2009; OECD, 2011; Boarini, Comola, Smith, Manchin, & De Keulenaer, 2012).

Similar analyses have been undertaken in New Zealand, largely replicating the international findings and confirming that the wellbeing dimensions identified in the conceptual model are also the key determinants of life satisfaction within New Zealand (eg, MSD, 2003; The Treasury, 2018).

Public consultation

There have been a number of different public consultation exercises in New Zealand seeking public feedback on what constitutes a “good life”. While very old now, the highest profile of these is the 1972 Royal Commission on Social Security that informed the direction of New Zealand social policy during much of the following two decades. Although the Royal Commission did not frame its task explicitly as wellbeing, the themes of the report are very consistent with the conceptual model. This was reconfirmed by the 1988 Royal Commission on Social Policy.

MSD undertook a wide ranging consultation around the Social Report outcomes framework in 2002 that tested the Social Report's list of dimensions with different communities from all parts of New Zealand. This consultation resulted in some minor changes to the Social Report framework – specifically the addition of a leisure and recreation dimension that was missing in the 2001 Social Report – but otherwise strongly endorsed the framework. Given the overlap between the OECD framework, the Social Report framework, and the conceptual model proposed here, this can be taken as fairly strong evidence of validity with the wider public.

Stats NZ will also be consulting on wellbeing and what aspects matter most to New Zealanders over the next few months as part of the development of Indicators Aotearoa New Zealand.

We have begun applying the approach in practice

This working paper is accompanied by **Measuring the wellbeing impacts of public policy: social housing. Using linked administrative and survey data to evaluate the wellbeing impacts of receiving social housing**. This shows one specific way it is possible to look at the impact of policy interventions on peoples' wellbeing consistent with the more general approach outlined in this paper.

We looked at the impact of social housing on wellbeing

One of the main policy levers to influence housing outcomes for low income families is to provide social housing – but the impacts are not well understood. We know about some of the fiscal impacts through the Social Housing Test Case undertaken by the SIA in 2016. But we know less about how it affects the wellbeing of families, and how it compares to other less expensive forms of support such as the accommodation supplement.

The wellbeing model guided which aspects of a person's life to consider

The wellbeing model provided guidance on the aspects of a person's life to consider when evaluating the impacts of social housing on wellbeing. The wellbeing domains provided a framework for identifying the outcomes against which the impact of social housing would be assessed and was used to select the indicators used to measure that impact.

To assess the impacts of social housing interventions on recipients' wellbeing we asked:

1. What impact does being placed in social housing have on housing outcomes (i.e. the quality of accommodation for social housing recipients - household crowding, temperature of residence, dampness, and the physical state of the house)?
2. What impact does being placed in social housing have on other outcome domains important to the recipient's wellbeing (e.g. health, social contact, jobs, and safety)?
3. How should we value the gain in recipient's wellbeing for the purposes of cost-benefit analysis?

We used the following data sources:

- Housing New Zealand Social Housing Dataset in the Integrated Data Infrastructure – applications for and placement in social housing.

-
- New Zealand General Social Survey in the Integrated Data Infrastructure – information on wellbeing outcomes for individuals. Measures in the General Social Survey can serve as indicators of most of the wellbeing domains in the SIA model.
 - MSD data in the Integrated Data Infrastructure and the address register – identifies households in receipt of the accommodation supplement.
 - Customs data – identifies spells overseas.

We developed a method to integrate wellbeing measures from survey data with service usage information from administrative data

While administrative data provides detailed information on the government services people access (applying for social housing in this case), it faces real limits in providing information about wellbeing. In contrast, survey data can provide good information about the wellbeing outcomes of people, but is poor at identifying service usage. This work demonstrates that it is technically possible to combine administrative and survey data by matching Stats NZ identifications in the different data sets.

We wanted to understand what is achievable and not achievable with current Integrated Data Infrastructure data to measure individual wellbeing.

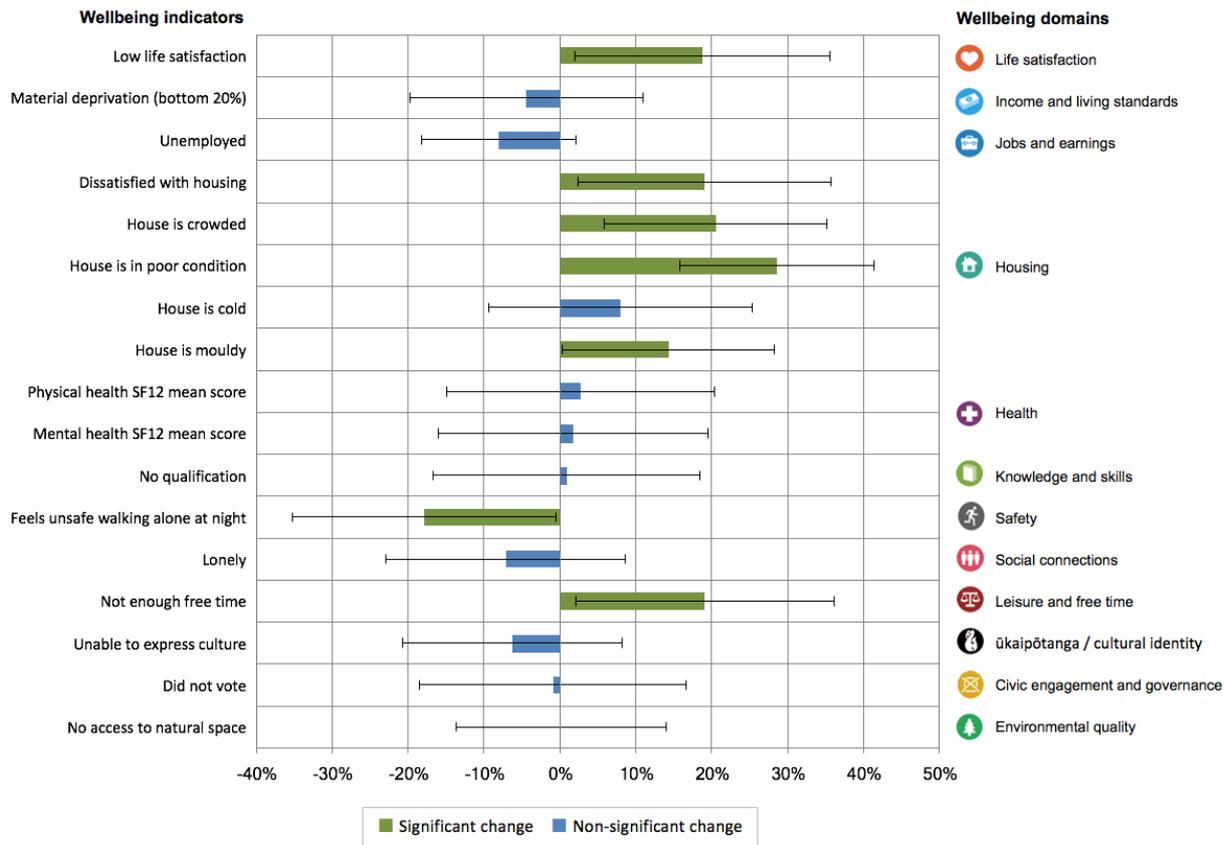
Our analysis has a number of limitations, but illustrates what is potentially possible

As a first attempt at using integrated administrative and survey data to examine the wellbeing impacts of service delivery, we faced a number of technical challenges. Some of these were able to be addressed, but there are four important limitations associated with the wellbeing analysis:

- The wellbeing impacts are for **before and after, not control and treatment** – we don't have a strong counterfactual.
- There is a **bias in the sample of people we can observe in the General Social Survey** – fewer social housing applicants are interviewed before being placed in social housing than afterwards and as a result the before and after samples differ in systematic ways.
- The **sample size is small** – the number of people placed in a Housing New Zealand house who are also interviewed in the General Social Survey in the same year is small.
- The **time frame is limited** – we do not observe long term effects.

Although we should be cautious about over-interpreting these results given the limitations outlined above, they highlight the potential value of linking survey and administrative data to look at the wellbeing impact of policy interventions. Figure 9 shows the estimated change in wellbeing before and after placement in social housing. The green bars show where wellbeing outcomes have shown a significant change (e.g. dissatisfaction with housing has decreased or people feel more unsafe walking alone at night after being placed in a Housing New Zealand house). The blue bars show outcomes that are not significant. The black lines show the 95% confidence interval.

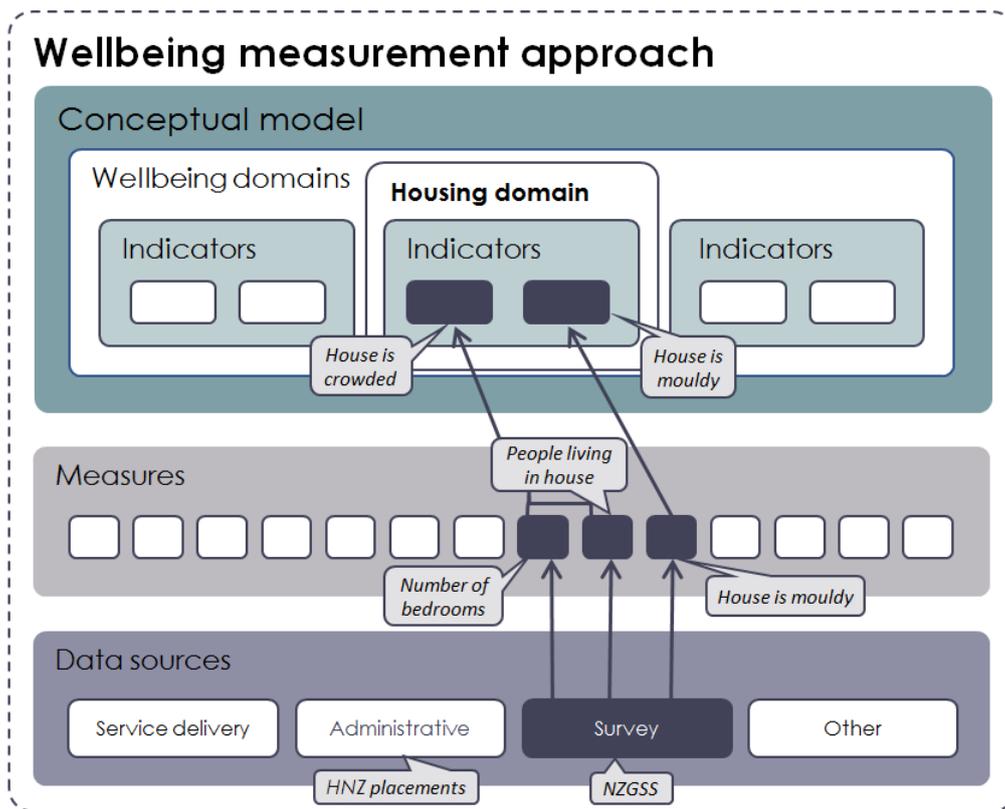
Figure 9. Change in wellbeing before and after placement in social housing: all outcomes



The dimensions shown in the graph are largely based on those included in the OECD Framework for measuring well-being and progress (OECD, 2011).

Figure 10 demonstrates how some of the social housing analysis fits into the more general wellbeing measurement approach. In this example the administrative data was used to identify the population, rather than defining indicators and measures.

Figure 10. Wellbeing measurement approach applied to social housing



We are interested in feedback

Please get in touch if you have feedback or would like to work with us

The SIA's approach to measuring wellbeing will continue to be developed as we apply it to different issues. The specific methods, indicators, and data used will vary depending on the context, and we will make all of this, along with any examples or other material, available on our website.

The SIA is applying the broad approach outlined in this paper to issues ranging from the impact of social housing through to mental health, unemployment and financial hardship. We are also keen to hear from you if you are interested in measuring the wellbeing impacts of what you do. This will help us refine our approach and build the capability to measure the wellbeing impact of services across the social system in New Zealand.

If you have undergone any wellbeing measurement or have other material that may assist us or others, or are interested in working with us, please contact us by email: info@sia.govt.nz.

Processes will be put in place to ensure that wellbeing measurement is done with high integrity

We are developing a robust end-to-end measurement process to ensure that wellbeing measurement is done with high integrity in every case; and that the approach taken and results are of high quality and scientifically valid. To make clear to others what research we are undertaking and our progress, we plan to:

- **Publish a research brief up front** - this gives public transparency, maintains scientific integrity and will be helpful for avoiding duplication and/or looking for opportunities to collaborate. This may be similar to the way that research being undertaken using the Integrated Data Infrastructure is listed on the Stats NZ website.
- **Release a working paper with initial findings** - releasing a working paper is a good way to seek feedback from technical and topic specialists and from any others with an interest.
- **Seek formal feedback from an expert advisory panel** - this involves establishing a panel of experts to consult with on wellbeing measurement. This could either be a permanent panel or put together on a case by case basis. Either way, formal feedback will be sought from technical and topic specialists, early enough that any issues identified can be dealt with.
- **Release final papers, code and other tools** – we plan to release information about the wellbeing measurement approach taken, findings, actionable insights from those findings and what was learnt during the process. Any code and new tools will also be released for transparency and to make it easier for others to access and build on these for other pieces of research.
- **Promote learning, findings and new tools** - findings will be promoted to parties with an interest in the area – for example, relevant government agencies and NGOs. There may be a need to develop a community of interest/practice to share learnings and tools with.
- **Propose developments and indicators with ongoing governance** - an expert advisory panel could be used to govern the wellbeing measurement approach development, ensuring that it becomes a trusted and credible approach and reference point for investing for social wellbeing purposes. The panel could also help inform future work so that it is kept up to date with the latest thinking, developments and linkages with other work.

We will consider how to source the data needed to support wellbeing measurement

We will also consider how best to support the ongoing sourcing of data needed to conduct wellbeing measurement. To date, data has been provided to the Integrated Data Infrastructure on a near-voluntary basis. With wellbeing indicators becoming national level measures we expect two significant changes to take place:

1. **Clarity about what data is required** - If we know the scope of what is to be measured based on wellbeing domains and indicators we will also know what data will be required for these indicators. This increased clarity about what data is required will help prioritise acquisition of data from those who are responsible for its collection or generation.

-
2. **Expectations that data will be made available** - Once required data has been identified there should be an expectation that the party responsible for collecting or generating this data will make it available in a timely and quality manner to be used for wellbeing measurement. As demand for wellbeing data grows, Government needs to consider further investment to resource the collection, storage, distribution and linking of that data.

SIA is working with Stats NZ on both these fronts to better support wellbeing measurement for New Zealand.

More information

New Zealand wellbeing and outcomes frameworks

Table 7 maps the OECD outcome dimensions onto three New Zealand frameworks: SIA's wellbeing model, the Treasury Living Standards Framework, and the Social Report. The table maps similar concepts, but in some cases there are small differences in content or emphasis. For example, 'self' is considered in different ways, and can incorporate subjective wellbeing and knowledge and skills.

Table 7. A comparison of the OECD and New Zealand outcomes frameworks

<i>How's Life?</i> (OECD)	Wellbeing model (SIA)	Living Standards Framework (Treasury, October 2018)	The Social Report (MSD, 2016)
 Income and wealth	Income and living standards	Income and consumption	Economic standard of living
 Housing	Housing	Housing	Economic standard of living
 Jobs and earnings	Jobs and earnings	Jobs	Paid work
 Work and life balance	Leisure and free time	Time use	Leisure and recreation
 Health status	Health	Health	Health
 Education and skills	Knowledge and skills	Knowledge and skills	Knowledge and skills
 Environmental quality	Environmental quality	Environment	-
 Civic engagement and governance	Civic engagement and governance	Civic engagement and governance	Civil and political rights
 Personal security	Safety	Safety and security	Safety
 Social connections	Social connections	Social connections	Social connectedness
 Subjective wellbeing	Self	Subjective wellbeing	-
-	Ūkaipōtanga/cultural identity	Cultural identity	Cultural identity
Capital stocks: natural, human, economic, social	-	Financial and physical, human, natural, social	-

NATIONAL LEVEL

The Treasury - Living Standards Framework

The Treasury is strengthening the Living Standards Framework to guide policy work and to support wellbeing focused Budgets in future. To raise living standards for New Zealanders the Treasury is working to understand how best to grow New Zealand's human, social, natural and financial/physical capital stocks. In February 2018 the Treasury released a discussion paper evaluating a number of wellbeing frameworks. The discussion paper recommended that the Treasury adopt the OECD model that underpins the *How's Life?* report and the Better Life Index as a base wellbeing framework, with minor changes, including the addition of a domain called cultural identity and measures for mental health, volunteering and corruption. An additional paper from an independent expert was released in June 2018 that reiterated support for the modified OECD model and proposed a set of outcome domains that map almost perfectly onto the approach outlined here.

SIA's proposed approach and wellbeing model are consistent with this, and there are plans to collaborate on future work. One major difference is that the Treasury is interested in the capital stocks and inter-temporal dimensions of wellbeing – how sustainable national wellbeing is over time. Whereas the SIA's work focuses on individual wellbeing, as this is the main aspect needed when assessing the impact of social-sector interventions on New Zealanders.

Budget 2019 has a focus on wellbeing, and future Budgets are expected to as well. While details aren't available until the Budget Policy Statement is released, the recent Budget at a Glance stated that:

“The Government is committed to putting people’s wellbeing and the environment at the heart of its policies, including reporting against a wider set of wellbeing indicators in future Budgets... Budget 2019: The Wellbeing Budget, will broaden the Budget’s focus beyond economic and fiscal policy by using the Treasury’s Living Standards Framework to inform the Government’s investment priorities and funding decisions. The Government will measure and report against a broader set of indicators to show a more rounded measure of success, as a country and as a Government. This will be supported by Budget processes that facilitate evidence-based decisions and deliver the Government’s objectives in a cost-effective way. The Wellbeing Budget represents an important step towards embedding wellbeing in New Zealand’s public policy”. (Treasury, 2018)

The SIA's wellbeing measurement approach is one mechanism that could be used to determine the possible wellbeing impacts of specific policy proposals and support evidence-based decision making. We plan to produce methods and tools to support policy and investment decisions, and will engage with the Treasury to explore what might be possible for this and future Budgets.

Whole of government - Sustainable Development Goals

The Stats NZ and Ministry of Foreign Affairs and Trade work to monitor New Zealand's progress against Sustainable Development Goals, which are a whole of government responsibility. These are 17 goals signed up to by the United Nations in 2015 with 169 associated targets. New Zealand will report against all 17 goals. A review by the OECD (2017c) shows that the Sustainable

Development Goals map well onto the OECD wellbeing framework that is used as the model for the SIA's wellbeing approach. In 2016 New Zealand identified a number of the Sustainable Development Goals as priority issues: growing the economy; improving living standards; health and education; creating jobs; increasing the supply of affordable housing; encouraging women in leadership; keeping our communities safe; and protecting our environment.

Stats NZ - Indicators Aotearoa New Zealand - Ngā Tūtohu Aotearoa

“Indicators Aotearoa New Zealand is being developed by Stats NZ as a source of measures for New Zealand’s wellbeing. The set of indicators will go beyond economic measures, such as gross domestic product (GDP), to include wellbeing and sustainable development. The wellbeing indicators will build on international best practice, and will be tailored to New Zealanders by incorporating cultural and te ao Māori perspectives. Stats NZ is working with Treasury to ensure Indicators Aotearoa New Zealand aligns with Treasury's Living Standards Framework. Indicators Aotearoa New Zealand will be delivered by Stats NZ, and will support the government's ambition to use a wellbeing approach to strategic decision-making.”

“The indicators will be selected in collaboration with a wide range of stakeholders, including central and local government, NGOs, te ao Māori experts, academics, and technical advisory groups. We are engaging with Māori, including at the community level, and will be inviting a group of international experts to peer review the final list of indicators. The first set of indicators will be available online from the end of 2018, with the final set available in early 2019. We will regularly test the indicators to ensure they remain enduring, robust, relevant, and flexible.”

Ministry of Social Development - The Social Report

MSD's Social Report was developed in 2001 to assess whether wellbeing in New Zealand is improving and inform thinking about the outcomes achieved by social interventions. It has been released regularly – the most recent being 2016. The Social Report has an individual wellbeing focus; highlights areas of progress or concern; and enables comparisons internationally, across demographic groups and over time. Outcomes are measured across ten domains: health; knowledge and skills; paid work; economic standard of living; civil and political rights; cultural identity; leisure and recreation; safety; social connectedness; and life satisfaction. There are a suite of indicators sitting under the domains. The Social Report was explicitly designed to assess social policy outcomes in New Zealand – making it a key influence for SIA's work.

POPULATION LEVEL

Oranga Tamariki - Lifetime Wellbeing Model

Oranga Tamariki (the Ministry for Children) has developed a Lifetime Wellbeing Model to help leverage its funding to intervene earlier and get better outcomes for children and young people over their lifetimes, and help move away from a more reactive short term focus. It is an actuarial model that can help form a data-driven view of the wellbeing of each child and young person in New Zealand and their likely lifetime wellbeing outcomes. Oranga Tamariki has established wellbeing domains; utilised available administrative data to assess the domains; identified population segments; assessed lifetime costs and provided initial insights into the population of children who appear to have lower projected wellbeing. Three core segments of children and

young people have been identified: developed need (the current care and protection, and youth justice population); developing need (those who would benefit from intensive intervention); and early need (those who would benefit from preventative activity). The wellbeing domains are:

- Safety – both being and feeling safe from harm
- Security – appropriate access to financial and social resources
- Connectedness – understanding who they are, where they belong, and their connection to culture
- Wellness – both physically and mentally healthy and free from trauma
- Development – equipped with the skills they need to be independent and meet their aspirations.

The wellbeing domains were developed with a child development lens. They are different from other models because they are hierarchical – a child must feel safe before they can feel secure; they must feel secure before they can have a sense of connectedness; they need connectedness before they can experience wellness, and so on. While the model focuses on children and young people, and their projected future wellbeing (and that of their parents) it could be applied more broadly. The model will be improved over time. It is not a standalone tool – it is designed to be used with operational knowledge, policy expertise and knowledge of other factors impacting on outcomes that are outside the influence of Oranga Tamariki (such as job opportunities, access to housing and parental and whānau support); and an understanding of the limitations of the data within the model. It is likely the investment made in the model will add value to other work underway on measuring wellbeing.

Department of the Prime Minister and Cabinet - Child Wellbeing Strategy

The Child Poverty Reduction Bill requires the preparation of a Child Wellbeing Strategy to set cross government actions to “enhance and promote the wellbeing of children in New Zealand and deliver the outcomes required to meet the child poverty targets”. It will include all children up to 18, and may include some young people over 18, such as those who have been in care.

Te Puni Kōkiri - Whānau Ora

“Whānau Ora is an inclusive, culturally-anchored approach to provide services and opportunities to whānau and families across New Zealand. It empowers whānau and families as a whole, rather than separately focusing on individual family members and their problems.”

The approach “focuses on building strong and trusting relationships alongside whānau to facilitate sustainable, transformational and long-term changes in wellbeing.” Whānau Ora is currently being reviewed to ensure that it is strengthened, “providing better outcomes in the community to respond to the diverse needs of whānau and families”.

Stats NZ - Wellbeing Statistics

Stats NZ also regularly releases wellbeing statistics based off the content of the New Zealand General Social Survey. This was originally structured around the Social Report outcome domains and aligns very closely with the SIA’s wellbeing approach.

Assessment of wellbeing and outcomes frameworks

We used the following criteria for evaluating the outcomes frameworks. Each criterion was assessed as either met, partially met, or not met based on the standards set out in table 8.

Table 8. Evaluation criteria for conceptual models

Criterion	Description	Met	Partially met	Not met
Clear	The conceptual model must be readily understood by all relevant stakeholders, including non-technical audiences	Conceptual model explicitly states what is being measured and outcome dimensions are described in non-technical terms	Conceptual model explicitly states what is being measured or outcome dimensions are described in non-technical terms but not both	Conceptual model is unclear about what is being measured and/or is highly technical in nature
Comprehensive	The conceptual model must capture all of the relevant outcomes for the whole population of New Zealand within its scope, and should be applicable across time	All the benefits of social interventions can be mapped onto the outcomes conceptual model and the conceptual model is not limited to a specific population group or culture	Only some of the benefits of social interventions can be mapped onto the outcomes conceptual model or the conceptual model is limited to a specific population group or culture but not both	The conceptual model has clear gaps with respect either to the benefits of social interventions or with respect to specific population or cultural groups
Coherent	The conceptual model must be grounded in robust social science explaining why these elements are included and how they relate to the focal concept	Focuses on individual wellbeing and is consistent with best evidence and social science on relationship to what is being measured	Focuses on individual wellbeing but is only partially consistent with best evidence and social science or the conceptual model focuses on a related but distinct concept but is consistent with best evidence and social science	Not focused on individual wellbeing and not consistent with best evidence and social science
Credible	The conceptual model needs to be seen as reasonable by all key stakeholders including ministers, other government agencies, social sector NGOs, and the wider New Zealand public. It must reflect the concerns and key issues of relevance	The conceptual model is endorsed by respected individuals/institutions and reflects New Zealand concerns	The conceptual model lacks endorsement by respected individuals/institutions or fails to reflect New Zealand concerns	Conceptual model has little support or New Zealand context

to New Zealanders

Comparable	The conceptual model should be sufficiently similar to other frameworks in use elsewhere to support comparisons	There exists a clear standard version of the conceptual model and the model is widely used	There exists a clear standard version of the conceptual model but the model is not used extensively or the model is widely used but lacks a clear standard model	The conceptual model is not used extensively and lacks a clear standard
Relevant	The conceptual model must be able to be applied to a wide range of different uses, including policy, evaluation, commissioning, and delivery of social services	The outcomes conceptual model can be used for the full range of different uses without significant amendment	The outcomes conceptual model can be used for the full range of different uses with significant amendment in some cases	There are a number of important uses for which the outcomes conceptual model is unsuitable

Beyond GDP approaches

Genuine Progress Indicator

Origin/purpose

Intended as an alternative to GDP as a measure of economic welfare.

Measurement concept

Welfare equivalent income.

Unit of measurement

Real income.

Outcome domains

The Genuine Progress Indicator includes only a very general outcomes framework with three domains: economic, social, and environmental. These domains serve primarily to group a number of measures used to adjust GDP to account for a range of factors thought to impact on economic welfare. The broad areas included in calculating the Genuine Progress Indicator are:

- economic
 - » personal consumption
 - » consumer durables
 - » under-employment
 - » public infrastructure
- social
 - » housework and parenting

-
- » higher education
 - » volunteering
 - » crime
 - » leisure time
 - » inequality
 - » accidents
 - » commuting
 - environmental
 - » pollution
 - » resource depletion/natural capital stocks.

Measurement approach

The Genuine Progress Indicator starts with personal consumption income from the system of national accounts and adjusts this for income inequality. Dollar values are added or subtracted as appropriate for each of the sub-dimensions listed above to arrive at an overall figure for the Genuine Progress Indicator (GPI). This value can be reported either as an aggregate or per capita GPI. Values for the different dimensions are obtained from systematic reviews of the relevant literature.

Assessment

The Genuine Progress Indicator generally performs relatively poorly against the evaluation criteria. While there is a clear measurement concept, the nature of the Genuine Progress Indicator is inherently technical. The list of outcome domains has clear gaps with respect to the benefits of social interventions, having no place for health, aspects of job quality other than employment, or other important outcomes. Although the framework focuses on a concept closely related to individual wellbeing, it conflates current wellbeing with changes in the capital stocks used to produce it and is, to some degree, arbitrary in its list of what dimensions are included.

On credibility, the Genuine Progress Indicator lacks both widespread endorsement and fails to reflect key concerns specific to New Zealand such as the role of Te Ao Māori. There is a clear standard framework for the model that can be used to support international comparisons, but data for the Genuine Progress Indicator is unevenly available and the model is not in widespread use. Finally, by virtue of its focus on producing a single number similar to GDP, the Genuine Progress Indicator is particularly poorly suited to informing investment for social wellbeing. In particular, it is inherently an aggregate measure and can shed little light on individual outcomes.

<i>Clear</i>	<i>Comprehensive</i>	<i>Coherent</i>	<i>Credible</i>	<i>Comparable</i>	<i>Relevant</i>
Partially met	Not met	Partially met	Not met	Partially met	Not met

Adjusted Net Savings Indicator (World Bank)

Origin/purpose

Developed by the World Bank to capture the impact of degradation of the environment on the natural capital stocks underlying wealth.

Measurement concept

Net saving defined as change in the value of a comprehensive set of capital assets including physical, human, and natural capital.

Unit of measurement

Real income.

Outcome domains

Adjusted net savings does not identify outcome domains as such. However, the calculation of adjusted net savings does require measures of the following:

- gross saving
- consumption of fixed capital
- investment in human capital
- depletion of natural capital
- pollution damages.

Measurement approach

All of the component elements of adjusted net savings are measured in dollar terms. The adjusted net savings level of a country is calculated as gross saving – consumption of fixed capital + investment in human capital – depletion of natural capital – pollution damages.

Assessment

While adjusted net savings performs relatively well against some of the criteria, overall it is a poor choice for measuring social outcomes. This reflects the fact that the measure is focused on assessing savings, not wellbeing. Adjusted net savings has a very clear measurement concept, but is comparatively technical in nature. It focuses only on savings, meaning that it performs very poorly as a tool for evaluating the outcomes of social policy. While the framework is consistent with best economic practice for measuring savings, it does not focus on individual wellbeing. Social capital is also excluded. Similarly, while the World Bank brings a lot of credibility to the measure in technical terms, the measure is not calibrated to reflect New Zealand concerns. A key strength of the adjusted net savings framework is its comparability across countries, based on both a clear standard framework and widespread use by the World Bank. However, adjusted net savings are simply not relevant or usable to assess social sector interventions.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Partially met	Not met	Partially met	Partially met	Met	Not met

Legatum Prosperity Index

Origin/purpose

Created by the Legatum Institute, a UK-based think tank focused on prosperity and development. The Prosperity Index was developed as a communications and analytical tool to underpin the Institute's work by measuring prosperity.

Measurement concept

Prosperity defined as human flourishing.

Unit of measurement

The country.

Outcome domains

The Legatum Prosperity index defines nine "pillars" of prosperity that are measured separately and that are combined to form the overall prosperity index. These are:

- economic quality
- business environment
- governance
- education
- health
- safety and security
- personal freedom
- social capital
- natural environment.

Measurement approach

The Legatum Prosperity Index is calculated based on approximately 200 variables. These are standardised based on difference to the best possible and worst possible cases and assigned a weight with respect to one of the nine pillars on the basis of expert judgement. The overall prosperity score for a country is the average of the nine sub-indices relating to the different pillars.

Assessment

The Legatum Prosperity Index performs well for clarity, with a well-defined measurement concept and a non-technical presentation. It is also comprehensive, with a multi-dimensional approach within which it is possible to fit the different objectives of social interventions. However, the index performs very poorly for coherence. It focuses on prosperity, which is defined significantly differently to wellbeing. In particular, the index includes a number of subdomains that relate to whether specific policies are in place rather than focusing on measuring the outcomes achieved by a country. While the Legatum Institute has significant endorsement from some credible sources, it reflects New Zealand priorities poorly. The Index does extremely well for comparability, with a clear standard framework and data available for all but a handful of the world's countries. However, the inclusion of policies in the framework precludes its use in policy evaluation and the

country-level of the analysis renders the index useless for the analysis of investing for social wellbeing issues.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Met	Not met	Partially met	Met	Not met

Social Progress Imperative

Origin/purpose

The Social Progress Imperative was developed as a tool for social entrepreneurs modelled on the Global Competitiveness Index to spur competition between nations to improve the environment for social innovation.

Measurement concept

Social progress is defined as the “capacity of a society to meet the basic human needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential”.

Unit of measurement

Individual.

Outcome domains

There are three dimensions in the Social Progress Initiative, each composed of four components. These are as follows:

- basic human needs
 - » nutrition and basic medical care
 - » water and sanitation
 - » shelter
 - » personal safety
- foundations of wellbeing
 - » access to basic knowledge
 - » access to information and communications
 - » health and wellness
 - » ecosystem sustainability
- opportunity
 - » personal rights
 - » personal freedom and choice
 - » tolerance and inclusion
 - » access to advanced education.

Measurement approach

Between three and six indicators are identified for each component based on three criteria (internal validity, public availability, and geographic coverage). Indicators that are open-ended are then converted to a finite ordinal variable and all of the indicators in each domain are assigned weights via factor analysis. Component indices are then standardised on a 0 to 100 scale based on worst and best possible cases defining scores of 0 and 100 respectively. Aggregate scores are then produced for both each dimension (calculated as the average of the relevant component scores) and for social progress overall (calculated as the average of the three dimension scores).

Assessment

The documentation for the Social Progress Imperative sets out clearly the concept to be measured and provides a clear account of what the different components measure and the indicators used. The framework explicitly excludes economic outcomes, limiting its role in assessing the impact of social interventions, but is otherwise relatively broad. While the methodology adopted for the Social Progress Imperative is generally consistent with best practice and has a very clear and consistent focus on outcomes rather than inputs, it drifts somewhat from the concept of individual wellbeing. With the backing of the World Economic Forum and several notable academics the Social Progress Imperative has authoritative support, but lacks a strong focus on issues of high relevance to New Zealand. Comparability is generally good, with a clear standard and data available for much of the world. As a tool designed to support social entrepreneurs, the Social Progress Imperative has some potential to be adapted to policy uses.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Partially met	Partially met	Partially met	Met	Partially met

United Nations approaches

Human Development Index

Origin/purpose

The Human Development Index was developed in 1990 as a way of assessing achievements in the basic dimensions of human development to inform the United Nations Development Programme grounded in Sen's capabilities model of development.

Measurement concept

Human development defined concerning wellbeing as freedom to pursue valued choices.

Unit of measurement

Country.

Outcome domains

While the Human Development Report that accompanies the Human Development Index identifies a range of different foundations that underlie the ability of people to make choices (e.g. range of options, social and cognitive constraints, empowerment and agency, and mechanisms to resolve competing claims), the Human Development Index itself is based around three dimensions:

- long and healthy life
- knowledge
- standard of living.

Measurement approach

The Human Development Index is calculated as the geometric mean of three indices capturing the different outcome dimensions. In each case the index is normalised based on the difference between the actual value and the maximum and minimum values observed in the data. Only four variables are used in the construction of the Human Development Index (life expectancy, mean years of schooling, expected years of schooling, and income).

Assessment

The Human Development Index is undeniably clear, being grounded in Sen’s capabilities framework and with three outcome dimensions that can be easily described in non-technical terms. The limited range of outcomes considered in the Human Development Index is a partial weakness. Although the domains are widely applicable, they cannot be credibly said to be comprehensive for the different outcomes at which social sector interventions are targeted. For similar reasons the Human Development Index cannot be said to be fully coherent. Best evidence on individual wellbeing would suggest that a wider range of capabilities matter than just the three dimensions covered by the Human Development Index. Given the United Nations Development Programme’s standing and the role of respected economists in the Human Development Index it performs well in one dimension of credibility, but it lacks any systematic reflection of issues that are of high prominence in the New Zealand discourse, such as belonging or identity. The Human Development Index is fully comparable with a clear methodological standard and widespread use, but is inherently focused at the country level, making it difficult to use the Human Development Index for investing for social wellbeing purposes.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Partially met	Partially met	Partially met	Met	Not met

Innocenti child well-being framework

Origin/purpose

The Innocenti child well-being framework was developed by the UNICEF Innocenti Research Centre to monitor child wellbeing, and formed the basis of a 2010 report card on child wellbeing in developed countries.

Measurement concept

Child wellbeing.

Unit of measurement

Child.

Outcome domains

The Innocenti child well-being framework describes wellbeing as five core dimensions. Each of these core dimensions is, in turn, described as two or three sub-dimensions. In contrast to much of the child development literature, the Innocenti framework focuses on the current wellbeing and quality of the life of the child as well as the degree to which child outcomes predict good future adult outcomes. The five core dimensions are:

- material wellbeing
 - » monetary deprivation
 - » material deprivation
- health and safety
 - » health at birth
 - » preventive health services
 - » childhood mortality
- education
 - » participation
 - » achievement
- behaviours and risks
 - » health behaviours
 - » risk behaviours
 - » exposure to violence
- housing and environment
 - » housing
 - » environmental safety.

In addition to the five core dimensions of wellbeing, the 2010 Report Card also looked at the subjective wellbeing of children measured through child self-reports.

Measurement approach

The Child Well-being Report Card provides information on child wellbeing at a relatively high level of detail. An index is developed for each subdomain based by normalising the indicators using z-scores. This uses the highest and lowest scores in the sample as bounds, and measures a country's score based on standard deviations from the group mean. Dimension scores are the simple average of sub-dimension scores. No overall wellbeing score is produced as such, but the report card does provide a ranking across countries in each of the five dimensions of child wellbeing and produces an average ranking for each country that can be used as a sort of overall wellbeing measure.

Assessment

While child wellbeing provides a relatively clear focus of measurement, the outcome dimensions used in the Innocenti framework are reported only as composite indices. The framework is fairly broad considering the outcomes covered, but is clearly focused on child wellbeing rather than the

wellbeing of the population as a whole, limiting its comprehensiveness. Within these parameters, however, the Innocenti framework is coherent both by focusing on individual wellbeing and through being based on the best available evidence and social science. As a United Nations body with a very strong research record, Innocenti is highly credible. However, the framework is designed internationally and fails to reflect a specifically New Zealand context. Designed to be highly comparable, the Innocenti framework has a clear standard model and is widely used. However, as a policy tool it would be difficult to apply the Innocenti framework in New Zealand without some modification to the sub-dimensions and indicators used.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Partially met	Partially met	Met	Partially met	Met	Partially met

Sustainable Development Goals (United Nations)

Origin/purpose

The United Nations Sustainable Development Goals set out a series of goals and targets to stimulate and guide action from 2015 to 2030 aimed at eradicating poverty in all its forms and dimensions, inclusive economic growth, peace, security and protection of the environment.

Measurement concept

Sustainable development.

Unit of measurement

The Sustainable Development Goals do not set out a clear unit of measurement, but do identify a desired direction of change for each of the targets.

Outcome domains

Because the Sustainable Development Goals are structured as a series of specific targets, they do not include a specific outcomes framework. However, a number of attempts have been made to describe the more specific Sustainable Development Goals by the areas on which each focuses. One example from the United Nations is presented below:

- no poverty
- zero hunger
- good health and well-being
- quality education
- gender equality
- clean water and sanitation
- affordable and clean energy
- decent work and economic growth
- industry, innovation and infrastructure
- reduced inequalities
- sustainable cities and communities

-
- responsible consumption and production
 - climate action
 - life below water
 - life on land
 - peace, justice, and strong institutions
 - partnerships for the goals.

An OECD assessment of the Sustainable Development Goals undertaken in June 2017 compared the Sustainable Development Goals’ goals with the OECD *How’s Life?* Well-being framework and noted that the goals map very closely onto the domains of *How’s Life?*.

Measurement approach

The Sustainable Development Goals set out general areas to focus on (the goals) and a direction for movement (e.g. improving gender equity). The task of transforming these into specific goals at a country level is left to individual member states, as is the way in which progress is measured. In particular, the agenda “encourage[s] member states to conduct regular and inclusive reviews at the national and sub-national levels” but leaves the specifics of the review process unspecified. A measurement framework has been developed and endorsed by the United Nations Statistical Commission.

Assessment

The Sustainable Development Goals were not designed as an outcomes framework and represent the result of a process of diplomatic negotiation and debate. Nonetheless, it is possible to assess the Sustainable Development Goals from the perspective of their usefulness as the basis for a wellbeing measurement approach for investing for social wellbeing. In relation to clarity the Sustainable Development Goals lack a clear statement of what the framework covers, but the focus for each of the goals is described in non-technical terms aimed at the general public. The range of goals is quite comprehensive and is explicitly intended to apply to all cultures and countries in the world. By way of contrast, the Sustainable Development Goals do not focus explicitly on individual wellbeing and lack coherence in following the best available evidence and social science. Although the United Nations process gives the Sustainable Development Goals a high degree of credibility as policy targets, they have less obvious support as a set of outcomes measures and focus at a global rather than New Zealand level. The goals are very widely used, but explicitly do not provide a standard model for assessing outcomes, which undermines comparability. Finally, it is difficult to envisage the Sustainable Development Goals being used for the full range of purposes necessary for measuring wellbeing outcomes for investing for social wellbeing.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Partially met	Met	Not met	Partially met	Partially met	Not met

Subjective approaches

World Happiness Report

Origin/purpose

The first World Happiness Report was published in 2012 in support of the United Nations High Level Meeting on Happiness and Well-Being.

Measurement concept

Life evaluation.

Unit of measurement

Individual.

Outcome domains

The World Happiness Report is uni-dimensional, recognising individual life evaluation as a metric of overall individual wellbeing.

Measurement approach

Although the World Happiness Report uses the term “happiness” to describe what is being measured, the primary measure used is the “Cantril Ladder”, a single question asking respondents about where they place their life on a ladder reaching from the worst possible life for them through to the best possible life. The Cantril ladder question is generally agreed to capture how people evaluate their life overall rather than happiness thought of as a mood or emotion. Most of the report is based off an analysis of average country scores on the Cantril ladder.

Assessment

People’s own assessment of their life is clearly identified as the measurement concept for the Happy Planet Index, and the presentation of results by the average score given by respondents is accessible and non-technical. The nature of the question, which explicitly asks for an assessment of life overall suggests that the report captures a comprehensive notion of wellbeing, and the academic literature supports the view that life evaluation is applicable to a wide range of population groups and cultures. The World Happiness Report performs particularly well for conference as it is unambiguously focused on individual wellbeing and draws on a wide range of social science evidence. For similar reasons the World Happiness Report can be considered reasonably credible, although it does lack any specifically New Zealand grounding and makes little effort to consider how data on life satisfaction could be presented for cultures that view wellbeing through a collective lens. Comparability is high given a standard framework that can be applied to almost all countries of the world through the Gallup World Poll (a tracker of important issues worldwide including wellbeing that covers over 160 countries) and to most developed countries using official statistical data. However, although measures of life evaluation can be useful for some investing for social wellbeing purposes – such as improving cost benefit analysis – there are a number of investing for social wellbeing purposes for which subjective measures alone are not suitable.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Met	Met	Partially met	Met	Not met

Happy Planet Index

Origin/purpose

The Happy Planet Index was developed by the New Economics foundation to focus attention on the trade-offs between current wellbeing and long term sustainability.

Measurement concept

Sustainable wellbeing.

Unit of measurement

Country.

Outcome domains

The Happy Planet Index does not have specific outcome domains. Instead it produces a single uni-dimensional measure of sustainable wellbeing based on life expectancy, life evaluation, and the ecological footprint of a country.

Measurement approach

To calculate the Happy Planet Index, the New Economics Foundation multiplies the average life expectancy of a country with the average level of life evaluation in that country based on the Gallup World Poll. This total (happy life years) is then adjusted downward based on inequality in life expectancy and in life satisfaction. Finally, the inequality adjusted happy life years for a country is divided by the country's ecological footprint which is the amount of land needed, per head of population, to sustain the country's consumption patterns.

Assessment

While the Happy Planet Index has a clear and relatively intuitive measurement concept, it cannot avoid being relatively technical in its calculations. The range of outcomes covered can be considered relatively comprehensive given that life evaluation captures an overall assessment of life and has good cross-cultural validity. Although the Happy Planet Index is well grounded in the social science literature on subjective wellbeing and environmental outcomes, by conflating the two in a single measure of sustainable wellbeing it drifts somewhat from being a coherent measure of individual wellbeing at a point in time. Currently the Happy Planet Index lacks widespread endorsement or use beyond the New Economics Foundation and it makes no particular allowance for reflecting specifically New Zealand concerns. There is a clear standard for producing the Happy Planet Index, and data is available for almost all countries in the World. However, as a country level measure the Happy Planet Index does not provide a suitable approach for evaluating investing for social wellbeing outcomes at the level of the individual.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Partially met	Met	Partially met	Not met	Met	Not met

The modern consensus model

OECD *How's Life?*

Origin/purpose

How's Life? was developed to compare the wellbeing of citizens in different OECD countries.

Measurement concept

Individual wellbeing.

Unit of measurement

The OECD primarily uses the *How's Life?* well-being framework for the purpose of comparisons in wellbeing between countries, but the framework is sufficiently adaptable that it has been used to look at differences in outcomes between regions, population groups, policies, and individuals.

Outcome domains

The conceptual model underpinning the *How's Life?* outcomes framework is explicitly set out in a number of reports and is grounded in the recommendations of the *Report of the Commission on the Measurement of Economic Performance and Social Progress* (the Sen/Stiglitz/Fitoussi commission). It distinguishes between individual wellbeing and the capital stocks that support the sustainable production of wellbeing over time and, within the broad heading of wellbeing, identifies 11 outcome dimensions. These 11 dimensions are grouped under two headings: material living conditions and quality of life. The OECD framework and dimensions are presented in the diagram in the third chapter.

Measurement approach

The OECD makes no attempt to produce a single “one number” index of wellbeing within *How's Life?* Instead, outcomes in each dimension of wellbeing are captured through between 2 and 6 indicators that provide information on the state of people with respect to that dimension. Indicators are selected against a formal list of criteria that set out the required quality standards. These require that indicators:

- Have face validity
- Focus on summary outcomes
- Are amenable to change and sensitive to policy interventions
- Are commonly used and accepted
- Ensure comparability across countries
- Ensure maximum country coverage
- Are collected through a recurrent instrument.

The *How's Life?* Framework and dataset are also used to support an online tool – the “Better Life Index” – that allows users to create a “one number” index of overall wellbeing if they wish by applying weights to the 11 dimensions of wellbeing in the OECD framework. However, this tool is intended more for communication purposes than substantive policy analysis.

Assessment

Based solidly on the foundations of the Sen/Stiglitz/Fitoussi report, the OECD framework explicitly sets out its measurement concept and provides a clear description of the different outcome dimensions aimed at the educated public. The framework is broad, covering a wide range of different wellbeing dimensions and has been used extensively across a wide range of different cultures and population groups. Of all the frameworks considered here, the OECD framework most clearly identifies individual wellbeing as the focus for measurement and is grounded very strongly in the best available social science. The framework is strongly endorsed by a wide range of prominent economists and other social sciences as well as the OECD itself. It is likely to cover many of the issues of concern to New Zealanders but ignores the cultural components important to New Zealanders. A clear standard model of the framework exists and there is a strong track record of usage both by the OECD (in developed and developing countries) as well as by a range of governments. Finally, because the framework is built around the individual it can be applied to specific policy uses with relatively little need for significant adaptation.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Met	Met	Partially met	Met	Met

UK National Well-being Framework

Origin/purpose

The UK project to measure national wellbeing was launched by Prime Minister David Cameron to provide a fuller understanding of 'how society is doing' and support policy-making and broader political accountability.

Measurement concept

National wellbeing.

Unit of measurement

Individual.

Outcome domains

The UK National Well-being Framework drew heavily on the recommendations of the Sen/Stiglitz/Fitoussi report and the OECD *How's Life?* Framework. However, the Office for National Statistics, which was given responsibility for developing a wellbeing framework for the UK, also undertook extensive public consultation. As a result, although the broad content of the UK framework is in line with the OECD and the Sen/Stiglitz/Fitoussi report, the specific dimensions used to group the elements of wellbeing slightly differ in places and employ different labels in some cases. The UK dimensions are:

- individual well-being
- our relationships
- health
- what we do

- where we live
- personal finance
- education and skills
- economy
- governance
- natural environment.

Measurement approach

Indicators for each of the outcome dimensions are identified by the Office for National Statistics and reported on regularly. The indicators are not combined to create a single index of wellbeing, but are reported in a number of different formats including in-depth reports on specific wellbeing dimensions and an overall summary infographic. The UK government has also established a What Works Centre for Well-being (www.whatworkswellbeing.org) to support analysis of how policy interventions affect wellbeing outcomes.

Assessment

Given its common origin in the Sen/Stiglitz/Fitoussi report and the direct role of the OECD in the development of the UK wellbeing framework, it is unsurprising that the UK framework shares many of the same strengths and weaknesses as the OECD *How's Life?* Framework. The UK national wellbeing framework sets out the measurement concept clearly and outlines the different dimensions of wellbeing in accessible and non-technical language aimed at the general public. It is a comprehensive framework intended to cover all of the important elements of wellbeing and to apply to the entire UK population. Although the focus of the UK framework is described as national wellbeing, it is clear from the supporting documentation and the diagrams of the framework that this should be interpreted from the perspective of individual wellbeing and that the framework is grounded solidly in evidence from social science and economics. The UK wellbeing framework was developed with the support of a large number of highly respected experts, but obviously does not focus on New Zealand specific issues. Further, because the framework was customised heavily for communications in the UK it is less comparable across countries. However, the UK framework is very clearly focused on being applied to a wide range of policy uses.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Met	Met	Partially met	Partially met	Met

New Zealand approaches

The Social Report

Origin/purpose

Developed by MSD in 2001 to assess whether wellbeing in New Zealand is improving and to inform thinking about the outcomes achieved by social interventions.

Measurement concept

Social wellbeing.

Unit of measurement

Individual.

Outcome domains

The Social Report framework is based on Sen's capabilities approach and identified ten outcome domains, each capturing a different broad area of wellbeing. Following the original Social Report in 2001, there was an extensive public consultation programme in 2002, following which the domains were revised to better reflect what mattered to New Zealanders. Because of the common grounding in Sen, the Social Report outcome domains are very similar to the OECD *How's Life?* domains. The most recent report was produced in 2016 and continues to use the same outcome domains.

- Health
- Knowledge and skills
- Paid work
- Economic standard of living
- Civil and political rights
- Cultural identity
- Leisure and recreation
- Safety
- Social connectedness
- Life satisfaction.

Measurement approach

Although created by MSD and built around "social" wellbeing, it is clear from the introductory text of the Social Report that social wellbeing is simply a way of referring to individual wellbeing more generally as opposed to a focus on a specific subset of outcome areas. As with the OECD *How's Life?* framework and the UK wellbeing measures, the Social Report follows a multi-dimensional approach to wellbeing. Each outcome domain is described in one or two paragraphs setting out the scope of the domain and the kind of outcomes it involves. Indicators are selected for each domain intended to capture the level and distribution of outcomes. These are sometimes supplemented by measures that are associated with future outcomes.

Assessment

A clear introduction sets out the measurement concept for the Social Report, and supporting text in each outcome domain provide a non-technical overview for users as to what each outcome domain covers. Although the term "social wellbeing" is used to describe the measurement concept, the range of outcome domains included is comprehensive, with a similar scope to the OECD framework. The intent of the framework is to cover all groups within the New Zealand population. "Social wellbeing" is defined in the Social Report as individual wellbeing, and the Social

Report’s wellbeing framework is solidly grounded in social science, building off largely the same sources as the OECD. The Social Report can be considered credible, with an advisory group of respected social scientists endorsing the content and with a clear process of testing the outcome domains with the New Zealand public to ensure that they reflect the concerns of New Zealanders. As a New Zealand framework, it includes New Zealand specific issues such as cultural identity but has lower levels of comparability than some other frameworks. Although it does set out a standard model of the framework, this is not used widely elsewhere. The Social Report framework was explicitly designed to assess social policy outcomes in New Zealand, and can still be used in this fashion without significant amendment.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Met	Met	Met	Partially met	Met

Big Cities Quality of Life

Origin/purpose

The Big Cities Quality of Life project was an initiative on the part of New Zealand’s 12 largest cities to provide a comprehensive and comparable assessment of the quality of life in New Zealand cities.

Measurement concept

Quality of life defined as the wellbeing of urban residents.

Unit of measurement

Individual.

Outcome domains

The Big Cities Quality of Life project adopts 11 outcome domains to measure quality of life. Six of these are identical to those in the Social Report, reflecting an attempt between the two initiatives to provide a harmonised framework for assessing wellbeing in New Zealand. The outcome domains used are:

- people
- knowledge and skills
- health
- safety
- housing
- social connectedness
- civil and political rights
- economic standard of living
- economic development
- natural environment

- built environment.

Measurement approach

The Big Cities Quality of Life project follows a similar methodology to the Social Report or the OECD *How's Life?* framework in approaching wellbeing in fundamentally multi-dimensional terms. The framework is implemented as a dashboard of indicators covering the different outcome dimensions, with no attempt made to produce an over-arching index of wellbeing or even scores for each dimension as a whole. The main emphasis of the report is analysis of changes over time and of differences between cities, with relatively little attention given to different population sub-groups.

Assessment

Although conceptually similar to the Social Report in many ways, the Big Cities Quality of Life report is somewhat less explicit in what is meant by quality of life and in how the different dimensions relate to the wellbeing of urban residents. For example, a demographic dimension – “people” – is included that provides important contextual information, but which does not meaningfully relate to quality of life or wellbeing. Despite this, the Quality of Life framework is quite comprehensive, covering the full range of outcomes usually identified as relevant to wellbeing and not focusing specifically on a particular population sub-group. Due to a focus on issues of immediate relevance to local government, the Big Cities framework doesn't explicitly identify individual wellbeing as the focus of measurement and considers many issues through the lens of the city. The framework is strongly grounded in New Zealand concerns, but lacks strong endorsement from respected individuals or institutions other than the local government institutions involved. Comparability is similarly limited once the point of comparison moves beyond New Zealand's 12 largest cities. This is underscored by the reliance of the framework on a bespoke survey for data. From a policy relevance perspective, however, the framework can be adapted for a wide range of different uses.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Partially met	Met	Partially met	Partially met	Partially met	Met

Oranga Tamariki Well-being Framework

Origin/purpose

The framework was developed to support taking an investment approach to policy targeted at children in New Zealand, with a particular focus on understanding how service usage, child wellbeing, and adult employment and justice sector outcomes are related to each other. This assessment was based on the framework as we understood it in early 2018, and there has been some development since then and this will continue. The Oranga Tamariki framework differs from most other frameworks considered here in that it is focused specifically on child wellbeing rather than the wellbeing of the whole population, and its continued refinement can be expected to support the development of approaches to measuring child wellbeing in New Zealand by other parties.

Measurement concept

Child wellbeing.

Unit of measurement

Individual.

Outcome domains

The Oranga Tamariki model identifies five domains of wellbeing.

- Safety
- Security
- Wellness
- Development
- Stability (now Connectedness)

Measurement approach

The Oranga Tamariki wellbeing framework is currently embodied in a lifecycle model built largely from data in the Integrated Data Infrastructure capturing the interactions of children and their families/caregivers with the state. Factor analysis is used to develop an index of child wellbeing for each domain, although no index is developed for overall wellbeing. Because of its reliance on data on service usage, the Oranga Tamariki model provides a proxy for actual outcomes. For the connectedness domain (where there are limited proxies to be found in service usage), the model currently only measures stability of placements in care.

As noted above, however, the Oranga Tamariki model (and the associated framework) are currently still in a state of rapid development, so it is not possible to provide a final assessment. It is possible – indeed likely – that significant methodological changes will be made to the model in the future (such as incorporating external, i.e. non- Integrated Data Infrastructure data into the model), which would impact on the assessment below.

Assessment

Because of its origin as a quantitative model, the Oranga Tamariki wellbeing framework doesn't include a clear statement of the measurement concept. It provides a brief non-technical description of the content of the outcome domains. The Oranga Tamariki framework is explicitly focused on child wellbeing rather than wellbeing of other population groups. For children, the dimensions of wellbeing covered are relatively narrow – with indicators that would be strengthened as additional data becomes available. The model is expected to be developed further and in time endorsed by an advisory board of recognised experts. The model is grounded strongly in New Zealand concerns. There is a standard model for the framework that is well documented, but Oranga Tamariki is currently the only user. However, as a policy tool designed explicitly to support investing for social wellbeing, the model performs well for relevance.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Partially met	Met				

Whānau Ora

Origin/purpose

The Whānau Ora outcomes framework was jointly developed by iwi and the Crown to guide work to improve outcomes for whānau.

Measurement concept

Whānau wellbeing.

Unit of measurement

Whānau.

Outcome domains

The Whānau Ora outcomes framework identifies seven outcomes that collectively define whānau ora. These are:

- whānau are self-managing and empowered leaders
- whānau are leading healthy lifestyles
- whānau are participating fully in society
- whānau and families are confidently participating in Te Ao Māori
- whānau and families are economically secure and successfully involved in wealth creation
- whānau are cohesive, resilient and nurturing
- whānau and families are responsible stewards of their living and natural environments.

Measurement approach

Whānau Ora does not have a single over-arching measurement model tied to the outcomes framework. This partly reflects the origins and nature of Whānau Ora as a way of contracting out services through regionally-based commissioning agencies. While the commissioning agencies report annually to Te Puni Kōkiri on the provider and whānau outcomes achieved as they relate to the overall outcome goals of Whānau Ora, this reporting is not a systematic evaluation of the outcomes framework.

Assessment

The concept of Whānau Ora is described clearly and the seven outcome areas within Whānau Ora are set out clearly in non-technical language. While Whānau Ora is built explicitly around Te Ao Māori, it nonetheless is quite comprehensive in the range of outcomes covered, and most social sector outcome interventions could be mapped onto it. The framework explicitly considers whānau wellbeing rather than individual wellbeing, but is consistent with the best available social science by fleshing out the outcomes associated with whānau wellbeing. Whānau Ora clearly reflects New Zealand concerns and the outcomes framework supported by a range of respected institutions and individuals. There is no standard model for measuring Whānau Ora, and the Whānau Ora framework is not used extensively outside of its original context. The Whānau Ora framework is well suited to some policy uses, but would struggle with some others – particularly where the individual is the primary unit of analysis.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Met	Partially met	Partially met	Met	Not met	Partially met

NZDep/New Zealand Index of Multiple Deprivation

Origin/purpose

The New Zealand Index of Socioeconomic Deprivation (NZDep) was developed in the early to mid 1990s by University of Otago researchers based off 1991 census data. It was designed as an index of socioeconomic conditions that could be broken down at a fine geographic scale so that pockets of deprivation could be identified. The New Zealand Index of Multiple Deprivation was developed by the University of Auckland as a set of tools to identify concentrations of deprivation in New Zealand at the neighbourhood level.

Measurement concept

Socio-economic deprivation.

Unit of measurement

Small geographical areas.

Outcome domains

Because it draws on Census data, which contains relatively few variables, the choice of domains for NZDep is partly built around available data. The domains used are:

- communication
- income
- employment
- qualifications
- owned home
- support
- living space
- transport.

The New Zealand Index of Multiple Deprivation draws on a wider range of data from the Integrated Data Infrastructure and, because of this, has a more formal domain structure. There are seven domains:

- employment
- income
- crime
- housing
- health
- education

- access.

Measurement approach

Both NZDep and the New Zealand Index of Multiple Deprivation are conceptually very similar from a measurement perspective in that they both produce a single index of socio-economic deprivation at the small area level based on a number of indicators reflecting outcomes in different domains. In the case of the New Zealand Index of Multiple Deprivation a distinct index score is created for each domain, which is then standardised and transformed to an exponential distribution before being combined into an overall index score. Because NZDep is calculated from far fewer indicators, separate domain indices are not developed.

Assessment

Both deprivation indices provide a clear account of the concept being measured (socio-economic deprivation), but place less weight on providing a non-technical description of outcomes as the distinct outcome measures are not the primary focus. The indices are broad based, in that they are not targeted at a specific population group, but focus exclusively on outcomes relating to socio-economic deprivation and thus miss some outcomes important to wellbeing more broadly. Both indices focus on socio-economic deprivation rather than individual wellbeing, but are highly credible due to widespread use and acceptance, as well as being published in reputable academic publications. There is a clear model for both indices, and this is used extensively within New Zealand. Similar indices are produced overseas, but these draw on slightly different data and vary in the details. From a policy perspective both deprivation indices are very useful for their intended purpose – providing a control variable for the effect of local area socio-economic deprivation on other outcomes – but are not suitable as an outcome measure in an investing for social wellbeing context.

Clear	Comprehensive	Coherent	Credible	Comparable	Relevant
Partially met	Not met				

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