



Living Standards Framework

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VUW Commerce Teachers' Professional Development
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From speech from the throne...

New Zealand needs to measure success in new ways. We need to move beyond narrow measures and views of value and broaden the definition of progress. The economic strategy will focus on how we improve the wellbeing and living standards of all New Zealanders. As agreed between Labour and the Green Party, this government will develop a comprehensive set of environmental, social and economic sustainability indicators to better show how we are doing as a country.

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The diversity of New Zealanders



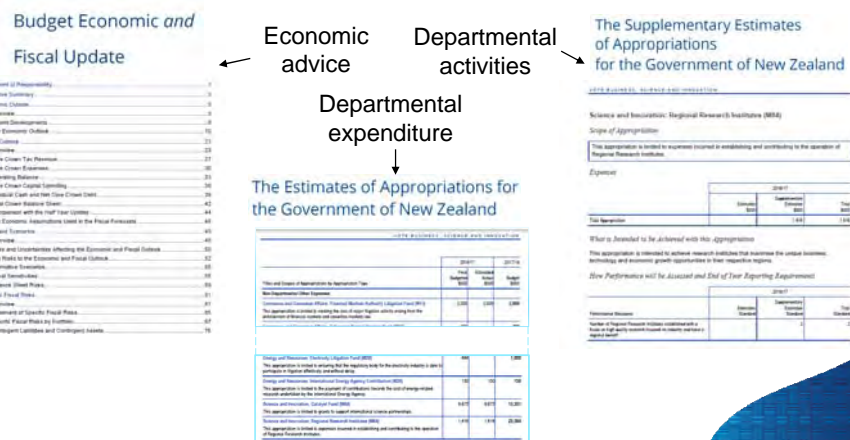
New Zealanders are diverse and this is reflected in the breadth of their interests, values and activities, and the government activity to support them.



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Treasury's role

The New Zealand Treasury has always recognised the diversity of outcomes but, like other government organisations, tends to silo its policy advice. Thus in the budget documents, economic policy advice focuses on increased incomes, and is separated from departmental expectations and expenditures that have wider wellbeing objectives. There is little or no reference to the 40 year perspective of the Long-Term Fiscal Statement.



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The four capitals framework (1)

The Treasury Living Standards Framework (LSF) draws on OECD analysis of wider indicators of wellbeing. The starting point is answering three questions:

- What are **current outcomes**?
- Will these outcomes be **sustained or improved**?
- How **resilient** is the system?

The LSF is based on four capitals that organise indicators of sustainable **intergenerational wellbeing**. There are many possible ways to organise wellbeing into domains. What matters is that the framework can find somewhere to include all the relevant indicators.



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The four capitals framework (2)

Delivering on the ambitions for the LSF means integrating it more fully into the day-to-day work that Treasury and other agencies already do. Practical implementation of the LSF would see current income-based measures like per capita GDP supplemented in economic policy analysis with indicators of current and long-term wellbeing. As the framework is developed we will be able to answer questions on:

- The health of the four capitals, and whether or not they are growing and likely to be sustained;
- Social and demographic inequalities in wellbeing;
- How the flow of current benefits impacts on long-term outcomes;
- How resource allocation decisions impact on capital to improve current or long-term wellbeing.

The key to answering these questions are indicators that are robustly evidence based so that changes in indicator values are clearly linked to changes in intergenerational wellbeing. This means that, unlike aspirational targets like the Sustainable Development Goals (SDGs), they can become foundational to the way a politically neutral public service agency like Treasury operates.

The remainder of this slide pack describes how **current** outcomes are measured in the LSF, the four capitals approach to gauging the **sustainability** of wellbeing and using the framework to understand opportunities and risk. We conclude with examples of how the LSF improves our analysis and how it can be more fully integrated into our work.

How are current and future outcomes measured in an LSF?

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Current wellbeing outcomes

New Zealand's average level of current well-being: Comparative strengths and weaknesses



Note: This chart shows New Zealand's relative strengths and weaknesses in well-being when compared with other OECD countries. For both positive and negative indicators (such as homicides, marked with an *), longer bars always indicate better outcomes (i.e. higher well-being), whereas shorter bars always indicate worse outcomes (i.e. lower well-being). If data are missing for any given indicator, the relevant segment of the circle is shaded in white.

Additional information, including the data used in this country note, can be found at:

www.oecd.org/statistics/Better-Life-Initiative-2017-country-notes-data.xlsx

Current outcomes are assessed using indices of both quality of life and material conditions. It is a snapshot measure.

Each element has a distribution in the population and may vary across subpopulations (e.g. by gender or ethnicity). It is not just income or wealth that might be unequally distributed.

It cannot be measured as a single number without making significant implicit or explicit value judgements, for example, how important is health relative to income.

We are investigating supplements to OECD measures to capture New Zealand specific issues (see next slide).

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Current wellbeing outcomes

Provisional table of current wellbeing indicators for New Zealand.

Dimension	Indicators	
Housing	• Housing expenditure	• Dwellings with basic facilities
	• Rooms per person	
Income	• Household financial wealth	• Household net adjusted disposable income
Jobs	• Job security	• Personal earnings
	• Long-term unemployment rate	• Employment rate
Community	• Quality of support network	
Education	• Years in education	• Student skills
	• Educational attainment	
Environment	• Water quality	• Air Quality
Civic Engagement	• Stakeholder engagement for developing regulations	• Voter turnout
	• Corruption	
Health	• Self-reported health	• Life expectancy
	• Suicide rate	
Life Satisfaction	• Life satisfaction	
Safety	• Homicide rate	• Feeling safe walking alone at night
Work-Life Balance	• Time devoted to leisure and personal care	• Employees working very long hours
	• Volunteering	
Cultural Identity	• Local Content on New Zealand television	• Maori language speakers
	• Language retention	

Indicators in light blue are proposed New Zealand specific measures.

Will these outcomes be sustained or improved?
The four capitals

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Financial and physical capital



What is it?

- Financial and physical capital includes the buildings, machines and equipment and other conventional investment, including capital spending by government.
- The financial assets of households provide resilience to unexpected life events and retirement. Housing is a major contributor to current wellbeing and is the highest-valued household asset.
- Government owns physical capital stock in schools, roads, and hospitals to deliver public services. Its financial assets provide a buffer through economic fluctuations.

How will we measure it?

Many elements of financial and physical capital are measured by Statistics New Zealand (SNZ) and we are using the OECD framework (see table below) to develop measures of this capital.

Indicators relevant to both current and future well-being	Indicators of the "stock" of capital	"Flow" indicators (investment in, and depletion of, capital stocks)	Other risk factors
Net wealth of households	Net fixed assets per capita	Gross fixed capital formation	Indebtedness of the private (household) sector
Net financial wealth of households	Knowledge capital per capita	Investment in R&D	Financial net worth of general government
	Financial net worth of the total economy per capita		Leverage of the banking sector

Source: Adapted from OECD (2015) *How's Life?*

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Financial and physical capital



What are the issues?

Productivity Performance

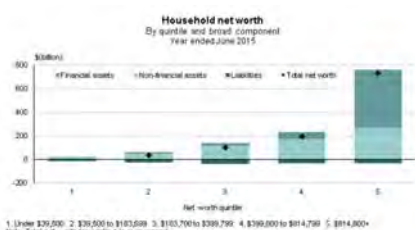
It is difficult to compare capital *stocks* across countries, but evidence suggests capital stocks are low in New Zealand by OECD standards. Investment flows continue to be weak. This is probably a contributor to New Zealand' sluggish labour productivity growth (OECD, 2017).

Distribution

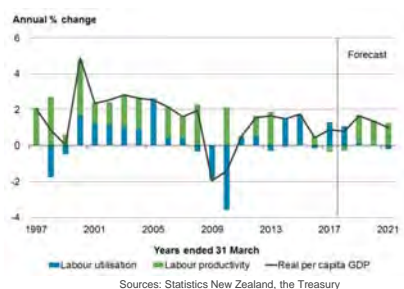
The distribution of wealth in New Zealand is largely consistent with the OECD average. SNZ has shown the top 1% of New Zealand households had 18 percent of total net worth, compared to 13% in Australia.

Applying the LSF

The LSF potentially adds new perspectives on the role of shocks to the future financial position, how climate change might affect physical assets, and the impact of digitalisation on capital and labour.



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10 Natural Capital



What is it?

Natural capital are the aspects of our environment that improve intergenerational wellbeing, including land, soil, water, biodiversity, minerals, energy resources, and ecosystem services.

How will we measure it?

There are a number of international standards for estimating natural capital stocks and flows, with no single approach obviously the best for all purposes. The Treasury is developing an approach based on drawing together different expert approaches and, as with current wellbeing measures, we are adapting this framework for the New Zealand specific context. International standards considered to date are:

- The OECD Total Economic Value (TEV) approach - the OECD Total Economic Value model (TEV) estimates value based on five sources: Actual Use, Option, Existence, Altruistic and Bequest. For instance, water has an electricity and irrigation use value, an option value where it is available in rivers, lakes and so on, but not used; and an existence value from a cultural perspective;
- The UN System of Environmental – Economic Accounting (SEEA) – This framework outlines the non-quality adjusted stock of natural resources over time and a monetary value provided for some of these resources;
- The World Bank Genuine Savings (GS) approach – is a measure of how well a country maintains its total asset base, including natural, human and physical capital, by estimating whether or not any depletion of natural resources is used for current consumption or converted into other forms of capital for future use.

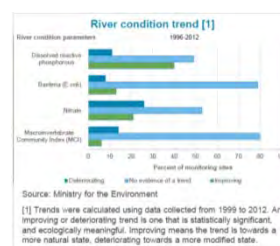
11 Natural Capital



What are the issues?

Fresh Water

Population growth, irrigation expansion and climate change are increasing pressure on freshwater quality, with the major risks being agricultural and urban storm water run-off.



Threatened Species

Presently, more than 3000 of our native species are classified as 'threatened' or 'at risk', with around 800 at risk of extinction and the remainder vulnerable to small changes in the environment. Many of these are unique to New Zealand. Threats to biodiversity have the potential to reduce social and economic capital as well as natural capital.

Climate Change

Growing the economy while meeting emission reduction ambitions requires a focus on productivity, innovation, technology uptake and better environmental management. There are particular opportunities for New Zealand to build on our current strength as a highly efficient global food producer.

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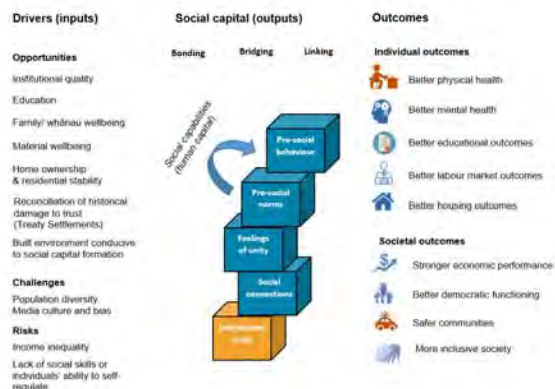
Social capital



What is it and how will we measure it?

There is no international standard for estimating social capital and its definition is highly contested. Our approach is to draw strands of work together in a working definition that supports policy. Thus social capital is:

- Networks, attitudes and norms promoting coordination and collaboration between people;
- Individuals' social connections that provide emotional, instrumental and informational support.



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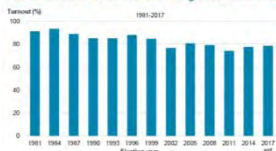
Social Capital



What are the issues?

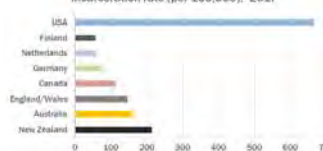
Social capital has a large and well-evidenced impact on economic performance, democratic functioning, public safety, educational outcomes, labour market outcomes, and individual health and wellbeing. The particular risk is that government agencies take it for granted because it is rarely measured. Potentially detrimental effects include increased income inequality, poverty, housing mobility and ownership rates, family and whānau wellbeing, institutional quality, educational outcomes and individual health and wellbeing.

Voter turnout of enrolled voters at general elections



Source: Electoral Commission

Incarceration rate (per 100,000), 2017



Source: Ministry of Justice

To maintain and grow social capital through public policy, agencies across government will need to understand the social capital risks they are taking when providing advice and have a cross-government approach to taking opportunities to grow social capital.

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Human Capital



What is it?

Human capital is an individual's skills, knowledge, mental and physical health. It enables people to participate fully in work, study, recreation and in society more broadly.

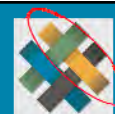
How will we measure it?

The measures are still being explored, but those under consideration include:

- students leaving school with NCEA level qualifications;
- students leaving tertiary education with an undergraduate or equivalent qualification;
- students leaving tertiary education with a post-graduate or equivalent qualification;
- the percentage of women in paid employment working part-time;
- life expectancy;
- suicide rates;
- obesity and preventable conditions.

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Human Capital



What are the issues?

Potential barriers to individuals investing in and using their human capital in the formal economy include structural disadvantage and some cultural or social norms.

Education

The human capital stock is increasing (through qualifications profile, lifetime earnings and higher relative earnings of qualified people) and is high relative to physical capital. However OECD evidence suggests this human capital advantage is decreasing, as our younger workers are less skilled than their international equivalent, and our highly skilled older workers start to leave the labour market.

Unpaid work

Unequal distribution of care and domestic responsibility between genders may cause labour market participation frictions.

Health

Overall living longer but:

- Outcomes linked to ethnicity;
- Higher morbidity;
- High suicide rates.

How resilient is the system?

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A Living Standards Frame for Resilience

The commitment in the coalition agreement to a “comprehensive set of environmental, social and economic sustainability indicators” can be supported by evidence based resilience indicators. A useful way to frame risks is what we do and do not know about their impact on living standards capitals.

Each of the capitals is subject to risks that we have some ability to mitigate. The critical challenge remains: **Do the capitals have desired levels of resilience after risk mitigations?**

Objective:	Increasing the freedoms of individuals to enjoy desired lifestyles			
Elements:	Physical Capital	Human Capital	Social Capital	Natural Capital
Risks e.g.	Earthquakes Floods Tsunamis Infrastructure disrepair Wildlife elephants	Crime Ill health Skill Deficiency Poverty	Welfare dependency Economic crises Education failure Civic society failure	Climate Change Biodiversity risks Erosion
Mitigations e.g.	Insurance	Education Policy	Welfare Reform	Emissions Trading

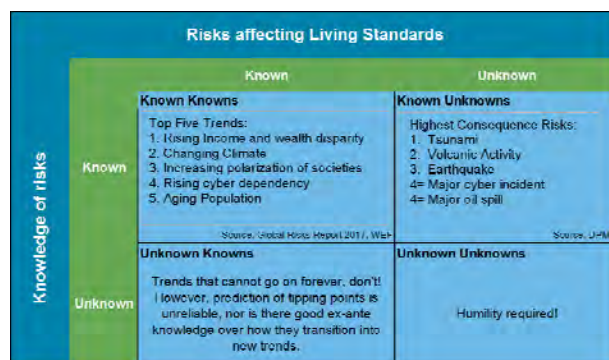
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Impact of uncertainty on living standards

Analysis does not remove uncertainty, but does help us manage it.

Current trends can be extrapolated, but we do not know how long they will last, nor what the new trends will be. **Scenario planning** helps us to be clearer about desired alternative futures and the impact of mitigation and adaptation strategies.

Some adverse events will always come as **shocks**. We know they will happen, but not when they will occur, nor the damage they will do. **Stress testing** helps us build resilience to these events. e.g. what environmental threshold is safe?



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Managing Risks and Opportunities (1)

Risk and uncertainty is managed at three levels:

Strategically the question is how well we can grasp opportunities from changes in our external environment, while managing the risks. Current work in this area include DPMC's National Risk Register and National Resilience Strategy, Treasury's stress testing analysis in developing the 2018 Investment Statement, and the work of the Ministry for the Environment on climate change adaptation.

Operationally, the critical question is whether or not our targets are challenging and achievable. Without taking some risk, government agencies will necessarily underperform, but too much risk taking may lead to unacceptable failure. Government targets, departmental strategies, sector strategies and four year plans are currently the places these targets are spelt out. Setting such strategic objectives well will require ongoing dialogue with Ministers.

Compliance management is required to manage risks that we wish simply to minimise, for example fraud. Treasury's view is that current internal control systems manage these risks reasonably well and more benefit will come from improving risk management at the strategic and operational levels.

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Managing Risks and Opportunities (2)

Types of Opportunity/Risk Management		What exists? What is happening?	Priorities for discussion?																		
Tier 1	Strategic Management Managing risks and trends For example: Partisanship, RSC, Pandemic Climate Change, Aging Can't influence likelihood but can influence impact Success measured by resilience Growing opportunities and trends For example: Virtual gains, technology, population growth Success measured by benchmarking	COESO / DPMO National Risk Unit / MCOE4 Wait on a National Risk Register and National Resilience Strategy 2016 Investment Statement work in development Implementation of Sendai Framework MRE monitoring productive sector resilience Climate Change Adaptability advice	Advice on Development of Resilience Measures? <table><tr><th>Capital</th><th>Adaptation Indicators e.g.</th><th>Resilience Indicators e.g.</th></tr><tr><td>Physical - Flooded</td><td>Liability / risk Capital Adequacy Report clarity</td><td>Capacity to finance Capacity to adapt - Infrastructure</td></tr><tr><td>Human - Skills</td><td>Building/infrastructure Complexity</td><td>Infrastructural capacity - Infrastructure</td></tr><tr><td>Financial Capital</td><td>Infrastructure allocation of resources</td><td>Regeneration capacity - Infrastructure</td></tr><tr><td>Market Capital</td><td>Risk and strength of - Infrastructure</td><td>Ability to establish - Infrastructure</td></tr><tr><td>System Capital</td><td>Market health - Infrastructure</td><td>Infrastructure capacity - Infrastructure</td></tr></table>	Capital	Adaptation Indicators e.g.	Resilience Indicators e.g.	Physical - Flooded	Liability / risk Capital Adequacy Report clarity	Capacity to finance Capacity to adapt - Infrastructure	Human - Skills	Building/infrastructure Complexity	Infrastructural capacity - Infrastructure	Financial Capital	Infrastructure allocation of resources	Regeneration capacity - Infrastructure	Market Capital	Risk and strength of - Infrastructure	Ability to establish - Infrastructure	System Capital	Market health - Infrastructure	Infrastructure capacity - Infrastructure
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System Capital	Market health - Infrastructure	Infrastructure capacity - Infrastructure																			
Tier 2	Operational Management Managing desirable endogenous risks and opportunities For example: how far do we want to go, how bold should we be? For example: Are targets sufficiently challenging and ambitious? Can influence both likelihood and consequences Success measured by quality of strategies and the quality of their implementation	Government Department/Sector Strategies Four year plans SSCs Workstreams Treasury Strategic priorities	Advice on extent of mitigation? Advice on risk tolerance / risk appetite? Strategies for best fit?																		
Tier 3	Compliance Management Managing undesirable endogenous risks For example: Fraud, Involvement of law Can influence both likelihood and consequences Success measured by effectiveness, efficiency of internal control	Currently internal controls in maintenance rather than development mode. Governance Utilities Risk, Audit Committee Increasing use of data for diagnosis in financial Functional leads increasingly expanding their assurance mandate	Assurance Advice? Quantum of compliance activity?																		

How can we improve our advice to Ministers?

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A Wellbeing Monitor

Practical implementation of the LSF requires evidence based indicators that systematically answer questions about current outcomes, their sustainability, and the resilience of the system. In 2018 we will be developing a dashboard of indicators that provide a step towards a Wellbeing Monitor:

- It will be developed from the OECD's indicators of current wellbeing and the capitals needed to support intergenerational wellbeing to include:
 - International comparisons of New Zealand outcomes and how they change over time;
 - New Zealand specific measures (e.g. indicators reflecting Treaty of Waitangi obligations);
 - Temporary priorities to support targeted action (e.g. child poverty targets);
 - Distributional indicators of intergenerational wellbeing in New Zealand, populations of concern and aspects of wellbeing where we significantly lag comparable countries.
- Ministers will need to consider options for the form of the Wellbeing Monitor. These include legislative change or integration into Treasury and statistical reports.

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Long Term Fiscal Advice (1)



The Long Term Fiscal Statements (LTFS) has been issued every 4 years since 2006;

- It provides a scenario analysis of the fiscal position over the next 40 years, primarily based on current policy settings and demographic change.
- The 2006 and 2009 long-term fiscal statements were largely focused on developing and refining the methodology for projecting "what if?" scenarios of government finances over a 40 year period. In particular, how to assess the effects of population ageing on future taxes and spending (eg, health and New Zealand Superannuation).
- In 2013, the statement assessed some of the alternative policy responses within the context of the Treasury's (then) living standards framework. The process of preparing the statement also involved an external panel of experts and a public conference.

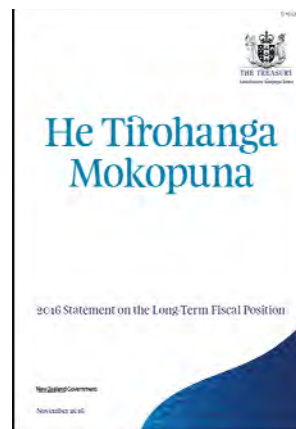
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Long Term Fiscal Advice (2)

He Tirohanga Mokopuna

The 2016 statement, *He Tirohanga Mokopuna*, acknowledges the dynamic relationship between New Zealand's long-term public finances and intergenerational well-being.

- *He Tirohanga Mokopuna* provided a qualitative assessment of each of the four capitals, and incorporated an assessment based on social capital in the financial scenarios.
- The Treasury consulted widely in the development of *He Tirohanga Mokopuna*, including Chief Executive Officers (CEOs), farmers, small business owners, social workers, academics, and students from all over New Zealand. This engagement was summarised in an accompanying paper to the statement.
- Although the statement took a wider perspective, not all elements of the capitals approach were reflected in the projections. Illustrative scenarios on the fiscal and wider effects of improved social outcomes were included, but there was no numerical analysis of natural and human capital.



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23 Effective Crown Balance Sheet Management

The 2018 Investment Statement – Investing for wellbeing

WHAT A wellbeing approach to an appraisal of the Crown balance sheet.

The Public Finance Act 1989 requires publication of a statutory document that describes and states the current value of the Crown's assets and liabilities, changes in the past four years and foreseeable changes in the coming four years - by March 2018.

It will also include a focus on natural capital.

Treasury is drafting the Statement in consultation with stakeholders. Ministers will be engaged shortly.

WHY To illustrate how to increase the effectiveness of Crown balance sheet investments, and achieve the best wellbeing outcomes for New Zealanders.

To do this we need to go beyond the traditional GAAP accounting focus to show how assets and liabilities generate wellbeing.

HOW By linking Crown Balance sheet and Crown agency performance to wellbeing outcomes, supported by a five dimension performance assessment framework.

The Statement will conclude with future areas of focus to support the progression of findings.

Challenges

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What are the Challenges? (1)

Being at the leading edge

The first attempts to develop national income accounting were in the 17th century and modern variants have been continuously developed since the 1940s. While academics and international bodies have started to develop wider wellbeing measures, as practitioners apply their work, gaps in current analysis will become increasingly apparent.

Adapting current processes

Government processes can be adapted if the rationale for change, and the implementation details are clear and jointly agreed by Ministers. The complexity of these processes means substantial amounts of Ministerial time will be necessary to achieve this.

At this stage there is a stronger case for using the Wellbeing Monitor for strategic decisions, which is closer to the intent of the work by international organisations. There may also be a case for specific impact analysis where there are material changes to large programmes with a direct link to household wellbeing (e.g. tax, housing costs).

Changes to initiative-by-initiative development by agencies and decision-making processes will require further development of the Wellbeing Monitor itself. Barriers include the quality of information we typically receive from agencies, cross agency standardisation, issues around attribution, and the sensitivity of the measurement.

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What are the Challenges? (2)

Completing the analyses

Sensitivity of the measures

The sensitivity of the measures to real policy changes is still unclear because current measures have not been properly tested in a policy environment. What do we use when they are not sensitive enough to provide a guide for advice?

Sustainability

While the Brundtland Commission's definition of "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" is widely accepted, in practice this encompasses a variety of practically different criteria that will differ by context.

Distribution

The traditional measures of inequality use the distribution of income, but where income does not properly proxy wellbeing, it will also poorly proxy its distribution. Adding other attributes of wellbeing may lead to counter-intuitive conclusions. For example, younger people tend to have lower incomes than older people, but older people tend to have poorer health. Does this mean income inequality measures should be adjusted to account for the benefits of better health?

Ownership

What is the natural, social and human capital equivalent to owning physical capital, including the individual benefits, obligations and responsibilities?