Te Kura Kāwanatanga – School of Government, Te Herenga Waka – Victoria University of Wellington

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Explaining the Influence of Zombie and Ghost Ideas on Public Policy

Governments often persist in implementing grossly sub-optimal policies based on flawed ideas and assumptions. Perhaps worse, they sometimes resurrect such policies after they have been terminated. At the same time, governments often resist implementing sensible policies based on good ideas and sound evidence. Why is this the case and what, if anything, can be done about it?

Such questions were explored briefly in an article in the February issue of *Policy Quarterly* by Guy Peters and Maximilian Nagel, based on their book, *Zombie Ideas – Why do failed ideas persist?* (Cambridge University Press, 2021).

Peters and Nagel refer to policy ideas that don't work well in practice – or at least for which there is no convincing evidence – as 'zombie ideas'. By contrast, they use 'ghost ideas' to refer to those for which there is reliable evidence – or at least convincing arguments – but which linger in 'policymaking limbo', rarely if ever to see the light of day. In some situations the reason why ghost ideas remain politically unattractive is the persistence of zombie ideas.

Some people may find the language of 'zombies' and 'ghosts' in the policy arena to be unhelpful or unwarranted, even ghoulish. After all, such words can readily be applied as terms of abuse. But there are good precedents for using colourful language and vivid descriptions in policy discourse. Talk of 'wicked' problems, 'super-wicked' problems, 'creeping' problems and the like is common. Such terminology can be evocative and arresting. It can capture people's attention and prompt lively debate. It can also illuminate, revealing something significant about the human condition and the world of policymaking and politics.

The existence of zombie and ghost ideas, as defined by Peters and Nagel, is hard to dispute. Admittedly, reasonable people may differ about which policy ideas best fit such categories. But some policies are introduced based on ideas, claims or assumptions for which there is little, if any, reliable evidence or persuasive arguments. And sometimes they persist for lengthy periods, notwithstanding their evident failure to achieve their intended objectives. Compounding matters, previously failed policies are sometimes reintroduced following a change of government.

Readers can decide which, if any, policies of recent governments in Aotearoa New Zealand might fall into the zombie category. But globally one can think of many, not least the continuing support for extensive fossil fuel subsidies in many countries despite multiple significant negative impacts and in the United States the ongoing widespread availability of dangerous assault weapons and ammunition, notwithstanding record gun violence and multiple mass shootings.

Identifying ghost ideas and their related policies may be more difficult than their zombie counterparts. After all, some ghost ideas have never been implemented anywhere in the policy world. Hence, claims regarding their effectiveness must rest on various behavioural and other assumptions, along with the results of modelling and other policy tools, rather than hard empirical data.

Nevertheless, there are many effective policies elsewhere in the world which could readily be introduced here but which have yet to see the light of day. Examples might include a comprehensive capital gains tax (or wealth or land taxes) and congestion charging. Also, there are instances where sensible policies, such as water metering, have been introduced by some local authorities but not others.

Why do zombie ideas frequently survive – and even get resurrected? Peters and Nagel suggest reasons. Here are some: the role of path dependence and historical legacies; the power of vested interests; bureaucratic and institutional resistance; the perceived electoral costs in challenging policies which reflect widely-held societal values; the influence of cognitive biases, selective amnesia, and blame avoidance; the impact of political polarization, division, and stalemate; and the absence of better alternatives.

Of these, the role of policy and regulatory 'capture' by powerful organized interests must never be underestimated. Democracy may be founded on the principle of political equality (e.g. one person one vote), but in practice citizens do not exert equal power. Hence, many demonstrably sub-optimal policies survive because they benefit those who exercise disproportionate influence in the political system (e.g. by funding political parties, their close association with key decision-makers or their capacity to sway public opinion through adept use of advertising and social media).

Aside from this, policymaking is invariably influenced by the 'mobilization of bias', as highlighted by the American political scientists Peter Bachrach and Morton Baratz in 1963. In all societies, they argued, the prevailing culture and institutional arrangements – including the full range of norms, values, myths, rituals, rules, and procedures – tend to favour some groups over others. And those who are favoured habitually enjoy an unfair allocation of benefits and privileges – often through the persistence of zombie ideas and their effective opposition to ghost ideas.

Countering such outcomes is inherently difficult. Reform proposals have been advanced, such as amending the rules surrounding campaign finance to limit the size of donations and enhance transparency. But realistically such reforms will only marginally affect the mobilization of bias. More profound and widespread cultural change is required. Yet transforming a culture is no simple undertaking.

In the meantime, it is worth reflecting on which groups benefit and suffer most from our current range of zombie policies and, correspondingly, which groups gain and lose most from our failure to embrace ghost ideas. I suspect the answers will reveal much about where political power truly lies in our democracy and the reasons why this is so.

Jonathan Boston
Editor

Simon Wright, Tatjana Buklijas
and Max Rashbrooke

The Rise, Fall and Re-Rise Of Deliberative Democracy In New Zealand

Abstract

In New Zealand the last few years have seen a re-emergence of interest in processes that build on the theory of deliberative democracy. Commentary on this trend, which typically positions deliberative democracy as a novel development in New Zealand politics, ignores several decades of public agencies' democratic experimentation. In this article we describe three of the 15 identified processes displaying the critical elements of deliberative democracy: the Capital Power citizens' jury (1996); Toi te Taiao: the Bioethics Council's public deliberation on pre-birth testing (2007–08), and the citizens' advisory panel on the Newtown–Berhampore cycleway (2014). We analyse the reasons for their ostensible failure and identify lessons that current policymakers interested in deliberative democracy should draw from these historical cases.

Keywords deliberative democracy, citizens' jury, participatory democracy, participation, consultation, engagement

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In New Zealand the last few years have seen a re-emergence of interest in processes that build on the theory of deliberative democracy. This theory replaces the 'vote-centric' idea of democracy: an arena where (fixed) interests and preferences are competing via mechanisms of aggregation, with a 'talk-centric' view where interests and preferences are formed and reshaped through public deliberation (Chambers, 2003). In these processes, high-quality public discussion, among demographically representative groups of citizens, is enabled to influence decision making (Fishkin, 1991; Gastil and Levine, 2005; Elstub and Escobar, 2019).

This local upswing in interest follows what has been described as a global 'deliberative wave': a large increase in organised processes, advocacy groups and related discussions (OECD, 2020). In New Zealand, the 2022 long-term insights briefings by the Public Service Commission (2022) and the Department of Internal Affairs (2022), the Review into the Future for Local Government (2023) and Deloitte's *State of the State 2023* have all endorsed deliberative democracy as a means to both alleviate a perceived democratic 'malaise' and to inject into decision-making processes public input that is well-considered, diverse, and free from party partisanship and broader polarisation.

Table 1. Identified deliberation processes in New Zealand

Year(s)	Organisation	Topic	Process
1996	Wellington City Council	Whether to sell the city's electricity utility	Citizens' jury
2007-08	Toi te Taiao: the Bioethics Council	Pre-birth testing policy	Nationwide face-to-face and online deliberation
c.2007	Auckland City Council	Eastern Busway design as part of the Auckland Manukau Eastern Transport Initiative	Deliberative workshops
2009	Wellington City Council	A residents' panel convened to help develop the Long-Term Council Community Plan 2009-19	Residents' panel
2009-10	Otago University	The use of medical information for the post-marketing surveillance of medicine safety	Citizens' jury
2011	Wellington City Council	Decision-making principles for the Town Belt Management Plan and a new piece of legislation, the Wellington Town Belt Act 2016	Deliberative workshops
2012	Wellington City Council	A new governance model for Zealandia and other WCC eco-attractions	Deliberative workshop
2014	Wellington City Council	A Berhampore-Newtown cycle route	Citizens' advisory panel *(see below)*
2016	Otago University	To help develop a healthy eating resource for pregnant women	Citizens' jury
2018	Otago University	Assisted dying	Citizens' jury
c.2020-22	Ministry of Transport	The future of the land transport revenue system	Online deliberation using Pol.is and a series of deliberative workshops
2022	Watercare	The 'next source of water' for Auckland	Citizens' assembly
c.2022-23	Reserve Bank	The future of cash	Deliberative workshops
2023	Auckland Council	Safe, equitable and sustainable transport	Deliberative forum
2023	Wellington City Council	To inform the Long-Term Plan 2024-34	Citizens' assembly

Concurrently, three major deliberative mini-publics (small groups of demographically representative citizens) have taken place: one in Auckland in 2022, and one each in Auckland and Wellington in 2023 (see Buklijas et al., 2023).

Commentary on this trend, which typically positions deliberative democracy as a novel development in New Zealand politics, ignores several decades of public agencies' democratic experimentation. This experimentation came on the heels of the introduction of participatory democracy into New Zealand legislation – a variety of statutory mechanisms and institutions, such as written and oral submissions and public meetings, through which ordinary citizens could provide formal input on central and local government decisions, outside the narrow boundaries of representative democracy (elections) or the infrequently used direct democracy (referenda).[1] These deliberative democratic experiments were understood as a subset of participatory processes and usually regarded as unsuccessful: many were one-off processes with weak institutional grounding and ignored by the very bodies whose policymaking they were meant to influence. Yet there is much to learn, especially concerning the obstacles to and opportunities for democratic innovation in New Zealand, when we examine why these processes were attempted, the kind of policy problems they were supposed to solve, and the outcomes they produced.[2]

For the purpose of this review, we focus on processes displaying the critical elements of deliberative democracy: active recruitment of diverse 'everyday' participants (rather than advocates); an explicit intention to allow learning, deliberation and shared decision making by the group; and an expectation for the group to produce a report or set of recommendations that influence public policy. Our research has uncovered 15 processes broadly fulfilling the above criteria, although there may well be more, and we would welcome these being drawn to our attention. Our examples all operated within the Crown's ambit; while we acknowledge the diversity of Māori processes akin to deliberative democracy, we feel they are best considered separately. We also note that the consideration of Tiriti issues was variable throughout the processes we examined. We list those processes above (see Table 1), before discussing in more depth three examples from the past three decades: the 1996 citizens' jury on Capital Power; the national deliberation on pre-birth testing carried out by Toi te Taiao: the Bioethics Council in 2007–08; and the 2014 Wellington cycleways deliberative process.

The citizens' jury on Capital Power

In February 1996, in the wake of market-based reforms to the New Zealand economy, the Wellington City Council (WCC) decided to consider fully privatising its electricity company, Capital Power, and/or merging it with the Hutt Valley electricity company, Energy Direct (Bertram, 2006).[3] Capital Power, itself established in 1993 from the former Municipal Electricity Department, had had 49% of its shares sold in 1994 to the New Zealand subsidiary of the Canadian electricity company TransAlta. The WCC was now considering

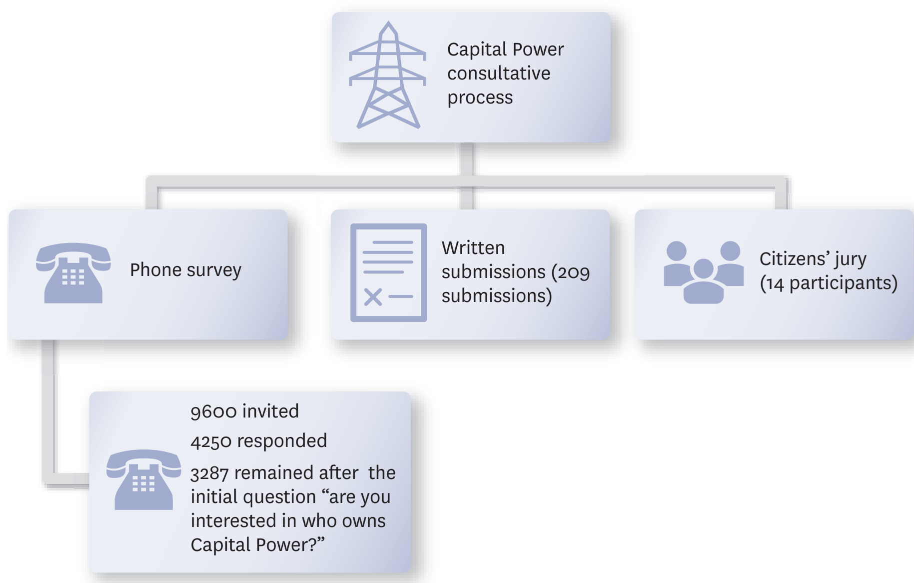
selling the remainder. In addition to written and oral submissions and a phone survey, consultation on the potential sale was to include, for the first time in New Zealand, a citizens' jury (Figure 1).

Archival records do not explain why the WCC decided to run a citizens' jury, although former prime minister Geoffrey Palmer speculated that the idea came from a report by a British think tank, the Institute for Public Policy Research (Steward, Kendell and Coote, 1994; Coote, 1997).[4] However, a local newspaper article, setting the Wellington jury in the context of overseas deliberative processes, argued that it was first proposed by a Wellington city councillor, Stephen Rainbow, to demonstrate to the public 'what a difficult balancing act political decision making can be' (Murphy, 1996). The same article quoted the then mayor of Wellington, Mark Blumsky, saying that a review of a mooted Lambton Harbour project 'would have been a more appropriate subject to trial a citizens' jury locally than a commercially complex issue like Capital Power'. However, the chair of the WCC's new Communication and Consultation Committee, Sue Kedgley, noted that jury members would be deliberating on their own power bills, arguing, 'It is not some esoteric subject that they might or might not have interest in.'

The jury, comprising 14 Wellingtonians, deliberated over two full days in March 1996. Broken down by occupation, its membership was as follows: one official, one professional/service worker, two self-employed business owners, two business executives, one skilled worker, two clerical workers, one student, one beneficiary/unemployed, and three retired people. In demographic terms, half were men, half women, and all were aged 18-plus. The jury members had been selected by MRL Research Group from a pool of several hundred people who had been previously randomly selected for research projects and had agreed to participate further. The independent chair, former Auditor-General Brian Tyler, was selected by the council.

On the first day the jury heard from people advocating for the merger, the sale or both. Most represented the corporate world: the involved companies, Capital Power and Energy Direct, TransAlta, and KPMG. But the jury also heard from the CEO of the Taupo District Council, which had sold its electricity company. These witnesses argued that the WCC did not have the capacity to look after and expand the electricity infrastructure; that a large electricity company would enjoy 'efficiencies of scale' when purchasing power from generators; and that the WCC could invest sale funds in more profitable and 'easier' to manage ventures.

Figure 1: Capital Power consultative process



On the second day the jury heard from opponents of the sale: economists, members of community groups and environmentalists. Their view was that the merger and private ownership would not necessarily provide a better service to citizens; nor would the WCC definitely find a better use for its funds. Some recalled local opposition to the sale of the first tranche of shares in 1994.

The citizens' jury decided 12–2 against the sale. Mayor Blumsky attempted to paint the jury as out of step with the wider public, citing the phone survey's finding that 62% of respondents advised the WCC to 'get the best financial return on your investment'. However, 96% of people in that same survey had said that energy efficiency, conservation and social issues were as important as financial considerations, while 68% had said that electrical utilities should be publicly owned.[5]

Furthermore, the jury's 26-page report showed that it had not only understood the presented material but also diagnosed a focus on short-term financial outcomes that was biasing the council's decisions. The jury advised the council to concentrate on protecting people, including domestic customers but also current Capital Power staff, as a light-handed regulatory framework would not do so unaided. The jury argued that social objectives must be part of any future arrangements and contracts.

Jury members rejected the notion that voting against a merger was tantamount to voting for the status quo, and, similarly, rejected the idea that a council which had managed electricity supply for decades could no longer do so. Instead, they suggested exploring other avenues, such as co-operation with Energy Direct and investing in energy efficiency, and strongly underlined that a sale or merger was neither necessary nor urgent.[6] Nonetheless, Blumsky and the WCC chose to ignore the jury's recommendation and proceed with the sale (Sinclair, 1996).

In the following years, New Zealand scholars wrote about the Capital Power case, but mostly used it as a 'hook' to interrogate problems in representative democracy, promote deliberative democracy, criticise public sector reforms, or query the models of public participation used in decision making post-1980s (e.g., Bostwick, 1999; Cheyne, 1999; Cousins, 1999). As time went on, the citizens' jury was mentioned less and less frequently, and by the 2020s had largely been forgotten.

Toi te Taio: the Bioethics Council

In the late 1990s, global public concern mounted over the use of genetic

Figure 2. Examples of pre-birth testing

Pre-birth testing
Includes:
Before Pregnancy Pre-implantation genetic diagnosis (PGD
During Pregnancy Pregnancy test Blood pressure Urine test Foetal heartbeat Blood tests Triple screening test Ultrasound Amniocentesis Chorionic villus sampling

technologies in agriculture and food production (Wynne, 2001). In New Zealand, a royal commission on the subject was established in 1999 by the newly elected Labour/Alliance government (Rogers-Hayden and Hindmarsh, 2002; Eichelbaum et al., 2001; McGuinness, White and Versteeg, 2008). The royal commission concluded that existing agencies could not adequately deal with the 'big picture' issues raised by biotechnology, and recommended the government establish Toi te Taiao: the Bioethics Council to ensure that cultural, ethical and spiritual issues were properly considered, and to reduce the likelihood of public opposition to biotechnology.

Toi te Taiao's membership and its focus on dialogue were, however, significant departures from the royal commission's call for an expert, consultative body (Eichelbaum et al., 2001). Its membership included figures from the humanities and social sciences, experts in tikanga and mātauranga Māori, medical experts and members of civil society. Appointed as a non-statutory advisory body in December 2002, and reporting to the minister for the environment, Toi te Taiao was nonetheless independent and free to set its own work programme. It had a $1.5m annual budget and a full-time secretariat of two to five people (McGuinness, White and Versteeg, 2008). It had a significant Māori membership, starting with its first chair, Sir Paul Reeves, and a standing Māori working group. Tikanga and mātauranga Māori were explicitly considered, there were tailored Māori engagement processes and Māori-specific recommendations developed by the Māori working group, and research was commissioned for and by Māori – for instance, on tikanga and biotechnology.

Toi te Taiao saw dialogue as an 'opportunity to explore new ways of holding conversations about cultural, ethical and spiritual aspects of biotechnologies, and to move beyond the adversarial approach that came to dominate much of the public debate around genetic modification' (Toi te Taiao, 2004, p.36). Between 2002 and 2009 it organised two national dialogues as well as a national deliberation.

Initial dialogues (2003–05)

Toi te Taiao's first two national dialogues were on the use of genetic technologies to put human genes into other organisms (2003–04) and animal-to-human (xeno) transplantation (2005) (Toi te Taiao, 2004, 2005). For the human genes project, 28 face-to-face facilitated dialogue groups were convened around the country, including several for people from specific communities (e.g., Māori, Pacific, youth and rural areas). Toi te Taiao also ran a public submissions process and convened some of New Zealand's first moderated online spaces for open policy dialogues.

Toi te Taiao reports noted that the use of 'dialogue' had deepened participants' understanding of their own and others' views and, in some cases, improved relationships between parties that had been strongly antagonistic during the royal commission process. However, policymakers felt that Toi te Taiao's nuanced reports did not help them understand the trade-offs or actions people might support. Toi te Taiao's response was to use 'deliberative dialogue' for its next major project. [7]

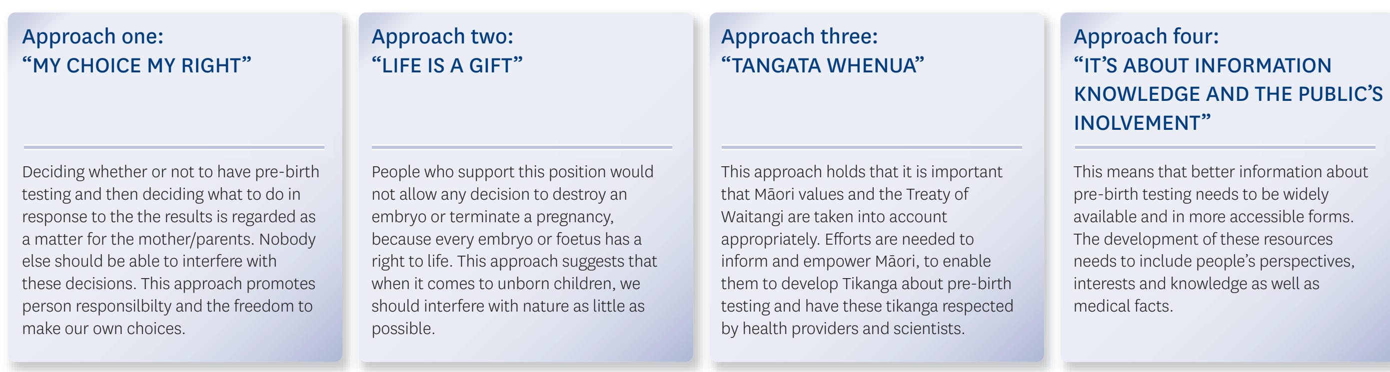
Deliberation on pre-birth testing technologies, 2007–08[8]

The pre-birth testing project was a response to concerns about the use of pre-implantation genetic diagnosis (PGD), which could be used to create 'designer babies' and 'saviour siblings' and had become a major issue internationally. However, rather than focusing only on PGD and its regulation, Toi te Taiao decided to broaden the scope to include all pre-birth testing – that is, all embryo, foetal and maternal testing (see Figure 2) – increasing its relevance to a wide range of New Zealanders. This framing also allowed many long-standing issues to be considered, including biases against people with disabilities and concerns about abortion.

In a three-stage process (see Table 2), key issues were first identified through 11 semi-structured interviews with experts and summarised in a short booklet. This booklet informed the second stage: six one-day framing workshops held in Auckland, Wellington, Christchurch and two regional centres. The combined outputs from stages one and two were used to create a 'choicebook' that informed and structured the facilitated public deliberations of stage three. The choicebook was designed to ensure all participants had a baseline of subject knowledge before joining their facilitated deliberation group.

Stage three involved three-hour face-to-face workshops, including four for Māori and one for Pacific peoples, held in 18 locations across the country. Toi te Taiao also ran three asynchronous three-week online deliberative forums for up to 20 people each. Various strategies were used to ensure diverse participation, including recruiting through partner organisations such as kindergartens, a kōhanga reo[9] and

Figure 3: The four pre-birth testing approaches set out in the choicebook



a women's refuge, and advertising the online deliberations on TradeMe. The outputs of all three stages fed into the final report. Across the three stages of the process, roughly 700 citizens had participated.

In both the face-to-face and online deliberations, participants explored the four approaches to pre-birth testing set out in the choicebook (see Figure 3), before searching for areas of common ground and developing their policy recommendations. Contrary to received wisdom, Toi te Taiao found that the quality of the online deliberations was at least as good as that of the face-to-face workshops.[10] The extended time frame for the online deliberations may have helped, as it allowed participants to develop relationships based on reciprocal sharing of experience, knowledge and reasoning, to conduct their own research, and to reflect more deeply on what they were learning.

The process resulted in 11 recommendations to government. Most of them were practical suggestions – such as the publishing of improved public information, and the recruiting and training of more genetic counsellors and geneticists – that could be, and in some cases were, implemented without legislative change. An independent process evaluation found that participants rated the deliberative events highly, and that approximately 30% had changed their thinking and become more tolerant of people with opposing views. The process was also highly rated by stakeholders such as the New Zealand Catholic Bioethics Centre (Nathaniel Centre, 2008) and by the International Association for Public Participation and the OECD.[11]

Nonetheless, a new, National-led government, elected in 2008, disestablished

Table 2. Summary of the process for the pre-birth testing project

Stage	Method	Output
1. Issue identification	11 semi-structured interviews with diverse experts	Issue booklet
2. Framing	Six 1-day framing workshops	Choicebook Online choicebook Printable version of online choicebook
3. Deliberation	18 3-hour workshops 3 20-person, 3-week online groups	Report Personalised participant report

Toi te Taiao the next year, claiming that 'other government agencies were doing the same work' (Smith, 2009), although this was refuted by multiple church groups which then mounted a campaign to have Toi te Taiao reinstated (McCabe, 2009; Interchurch Bioethics Council, 2009). Similar calls have been made sporadically over the years; in 2022, GE-Free New Zealand pushed for a new Toi te Taiao to be established to consider biotechnology and related issues (GE-Free New Zealand, 2022).

Wellington City Council's 2014 citizens' advisory panel for the Berhampore–Newtown cycleway

In 2014, the Wellington City Council used a representative deliberative mini-public process to help identify a cycleway route through the suburbs of Berhampore and Newtown. This was to be the second stage of the Island Bay to city centre route, following the Island Bay section itself.

In 2014, councillor Andy Foster, the chair of the council's Transport and Urban Development Committee, argued that work would be relatively straightforward in Island Bay 'where the road is wide and good improvements can be made fairly easily'. However, the next stage, through Berhampore and Newtown, was 'a lot more complicated ... [with] many possible routes and different ways improvements could be made, all with different pros and cons'.

Although the Island Bay section would be publicly consulted on before construction, the WCC considered that it could be constructed relatively quickly. For the Berhampore–Newtown stage, however, a representative citizens' advisory panel would 'look in depth at all the options and hear a wide range of perspectives' before 'help[ing to] narrow those options down to a more manageable number for wider consultation' (Wellington City Council, 2014b). Issues needing consideration included the loss of parking, encroachment on the Town Belt reserve, and impacts on businesses and on walking and bus infrastructure.

While there was support for the cycleway as a whole (see, for example, Generation Zero, 2015), by December 2014 significant opposition to the Island Bay section had mobilised, as debate polarised city councillors and parts of the local community.[12] Construction on the Island Bay section finally commenced in September 2015, although opposition to the cycleway has continued into the 2020s (Campbell, 2021).

Figure 4: The panel's recommended routes

Source: Citizens' Advisory Panel (2014) and Wellington City Council (2014a, 2014c)

The panel process[13]

The citizens' advisory panel's 18 members were originally supposed to demographically match the Wellington population, with people from the area in question and neighbouring suburbs over-represented. The panel was to hear presentations from interested parties, to deliberate, and to make recommendations on a staged cycling network plan, using a package of routes, measures and mitigations that fitted the WCC's criteria and a generally agreed matrix of the acceptable trade-offs. Panel members would receive a modest koha and expenses would be reimbursed. It was decided to use the terms 'advisory' and 'panel' (rather than a verdict-rendering 'jury') because neither councillors nor officers thought the process could be decisive: its recommendations would be further developed by officers and later rounds of public consultation.

The initial design was changed, however, when various interest groups demanded representation on the panel. Despite concerns that such representatives might exert undue influence in favour of their particular interests, and would normally have presented to the panel rather than being on it, the membership was changed to include two people representing Island Bay, Newtown and Berhampore residents, two representatives of Newtown and Berhampore business owners, one Town Belt user and one person who cycled. The remaining 12 'public' members were randomly selected to make the overall panel broadly representative in terms of age, gender, ethnicity, place of residence and attitudes towards cycling.

The six representative members were determined through discussions between the various stakeholder groups and the WCC. Stratified random selection was used to select the 12 public members from a pool of people who had indicated interest via a council survey. Even though candidates did not initially know details such as the number of panel sessions or dates, one in two agreed to participate; a significant number noted the Island Bay situation and said they wanted to help solve the cycling issue.

The panel met nine times; city councillors were invited to attend all sessions but only attended the first and the final one. Six of the representative and ten of the 12 public members attended all the sessions.

Significant efforts were made to ensure panellists were well-informed. The first Saturday session comprised a field trip around Berhampore and Newtown. The panel also had access to 40 reports on route options, road design and international practice. It received briefings from WCC experts and presentations from 25 stakeholders. Additionally, three panel members investigated potential routes by cycling around Newtown and Berhampore.

The panel's recommendations were well received by the WCC; one senior transport expert said he could not have done better. The panel proposed two main route options, both of which would provide a spine from which a more comprehensive cycle network could later be developed. The panel envisaged that both would eventually be built, along with a third, lower priority, route (see Figure 4). The panel argued that cycleways on these routes would encourage city commutes as well as cycle trips within and between suburbs, including by children and their families.

Panel members were mostly positive about the experience, and while some of their recommendations were criticised, little opposition was publicly voiced, even as the conflict in Island Bay was intensifying. However, despite public assurances that the panel's work would be further developed and publicly consulted on, it took until 13 December 2023 – some seven years later – for the WCC to approve a Berhampore–Newtown cycle route for construction.[14] The approved route is one that the panel considered and would have recommended but for bus-related safety concerns. At the time of writing, it is unclear whether construction will proceed under the new government.

Conclusions

There are many ways to measure the effectiveness of a deliberative process, but one of the most commonly used is its policy impact. In all of the three examined cases, the direct impact was at best limited. In the case of Capital Power, the WCC sold the shares against the jury's recommendation. With respect to Toi te Taiao, the government failed to formally

respond to any of its recommendations, and public-focused methods of dialogue and deliberation were not used again by a central government agency for 13 years. Senior public servants either ignored Toi te Taiao's work or, in private meetings with its members and secretariat, occasionally dismissed it as 'not real policymaking' and unnecessary. And while the Berhampore–Newtown cycleway panel recommendations were ostensibly well received by the WCC, progress to develop the cycleway stalled for many years. These are cautionary tales deserving consideration by all who embark on trialling deliberative processes today.

In our view, one major reason for these ostensible failures is the lack of clarity regarding the relationship between representative, deliberative and participatory democracy, and, indeed, the lack of understanding of the difference between these forms. When the WCC trialled a citizens' jury, it did so as part of a new wave of participatory democracy underpinned by the amendments to the Local Government Act 1989 and the Resource Management Act 1991. This 'participatory' thinking, however, was influenced by new public management theory, which emphasised consumer responsiveness and the involvement of users ('customers') in the design and delivery of public services. Public 'participation' was regarded as a way to enhance the legitimacy of decisions but, seen through this market-oriented lens, did not necessarily guarantee actual participation in democratic decision making, as it is understood by theorists of participatory democracy (Cheyne, 2015; Innes and Booher, 2004).

Moreover, dissatisfaction over the new statutory framework arose among both elected representatives and citizens (Cheyne, 1999). The latter, when they had been invited to participate in deliberative processes, expected their views to carry weight, and were critical of the lack of transparency regarding the use of their input. Yet for many elected representatives, such processes were akin to 'consultation', and the resulting input was little more than they got informally from their constituents. As Mayor Blumsky reportedly said, when rejecting the Capital Power jury's decision, 'Consultation is not the decision-making process. It's the council that sits down and considers a complex issue. Isn't that the purpose of having a council?' (Sinclair, 1996). A similar viewpoint is reflected in the use of the terms 'advisory' and 'panel' for the cycleways mini-public.

Blumsky's use of the term 'consultation' to describe the citizens' jury was emblematic of a wider confusion. It was not clear then, and indeed is still far from resolved now, whether deliberative processes should have decision-making rights (delegated, in essence, from the relevant public body), or whether their input should be regarded as merely a superior way to deliver 'the public consensus' to elected representatives, so that the latter can continue to make decisions themselves. This tension will need to be resolved if deliberative processes are to make headway in New Zealand; in particular, attention will need to be paid to the fact that elected representatives can often be hostile to processes that they see as impinging on their decision-making rights and legitimacy, an issue that has hampered countless deliberative processes globally. Although it has been claimed that local government cannot legally delegate decision-making authority to a group of citizens, the recent Future for Local Government report argued that nothing in legislation prevents the use of deliberative or participatory mechanisms (Review into the Future for Local Government 2023).

Indeed, the failure of political elites to support deliberative democracy in New Zealand is probably the main reason why the brief – and weak – rise was followed by a protracted fall. The country's two main political parties have been either indifferent or openly critical (Büdler, 2022). There was, in addition, little support from public officials, a dearth of academics with relevant expertise and interests, and no equivalent of, say, the influential Australian not-for-profit newDemocracy Foundation. In Australia, by contrast, deliberative democracy was championed by influential politicians such as Prime Minister Julia Gillard and South Australia Premier Jay Weatherill (Boswell, Niemeyer and Hendriks, 2013; Ryan, 2023).

On a more positive note, our case studies reinforce some of the key arguments for making greater use of deliberative processes. Notably, the citizens participating in our case studies produced recommendations that were at least as good as those made by elected politicians. As time has shown, 'economies of scale' and private ownership have not delivered cheaper electricity, just as the Capital Power citizens' jury predicted. The quality of the advice in the cycleways case, meanwhile, was confirmed by transport experts. This should not surprise us: deliberative democracy combines, by design, the positive features of representative democracy (e.g., deliberative spaces, dedicated time for deliberation and access to experts) with a freedom from party political (and indeed lobbying-related) ties. Deliberation and learning are further enhanced by a diverse mix of lived experiences, something seldom found either in local and central government or in the 'traditional' participatory spaces

> The failure to support deliberative democracy in New Zealand, … will therefore have had opportunity costs, notably the failure to develop capabilities and processes able to address complex and potentially divisive issues.

(public meetings and consultations), often dominated by advocates and highly resourced and confident citizens. In short, our three case studies confirm what has been shown many times in the international literature: that so-called ordinary citizens are both willing and able to take on the burden of solving society's most complex problems.

The failure to support deliberative democracy in New Zealand, beyond the few experiments noted above, will therefore have had opportunity costs, notably the failure to develop capabilities and processes able to address complex and potentially divisive issues. Under different circumstances, such processes could, in the last decade or so, have been used to address many challenging issues seen by politicians as 'too hot to handle'. These issues range widely across fields such as climate mitigation and adaptation, gene-editing technologies, and assisted dying, where the use of a citizens' assembly or other such deliberative mechanisms might have led to a significantly better debate than the highly polarised one that actually occurred.

Beyond simply providing better quality advice or decisions, citizens' juries and assemblies, and other deliberative processes, could also have contributed to reducing polarisation and (re)building trust between the public, experts and institutions. This promise remains open: deliberative processes, we believe, would be a good fit for still-live issues such as hate speech reform or the funding of political parties. Such issues, which involve complex trade-offs with no scientifically 'correct' answer, and which in the latter case invoke the 'rules of the game' that bind parliamentarians, would benefit immensely from the considered input and, potentially, decision making that deliberative processes can provide.

As noted above, we are at the beginning of a new 'deliberative wave' in New Zealand. The early signs are promising. Deliberative processes are understood as qualitatively different from participatory ones, and at least in one case so far, the Watercare citizens' assembly on the future of Auckland water, the citizens' recommendations have been implemented. Whether the wider potential of deliberative democracy will be fully realised, however, is another question.

1 On the theory of participatory democracy, see Pateman, 1970; on the introduction of participatory democracy in New Zealand, see, e.g., Cheyne, 2015.
2 We agree with Spada and Ryan (2017) that the focus of political scientists on 'successes' is a major barrier to understanding democratic improvement.
3 This section largely relies on the archival records on the consultation on the sale of 51% of Capital Power in 1996, Record identifier 55, 1996, Wellington City Council Archives.
4 Kim Hill interview with Geoffrey Palmer on RNZ, 1996, record identifier 55, 1996, Wellington City Council Archives.
5 In 1996 Capital Power was merged with Energy Direct and its 51% of shares were sold to TransAlta, which then acquired full ownership of this company. A few years later it exited New Zealand, selling the power company to United Networks, which then sold it to Vector. Wellington Electricity is currently owned by an international company.
6 The two dissenting jurors voted for the merger. They agreed that the social objectives must be protected, but they did not think that the council holding onto the controlling interest was the best guarantee of this goal.
7 Toi te Taiao secretariat members completed the postgraduate diploma course entitled 'Dialogue, deliberation and public engagement' in 2006/7 and 2007/8. The course provided a theoretical and practical basis for moving from dialogue to deliberation and was jointly offered by the University of Sydney and the US Fielding Graduate University with support from the Kettering Foundation.
8 Key references for this section are Toi te Taiao, 2007 and 2008.
9 Toi te Taiao had developed a relationship with a kōhanga reo in Auckland before the pre-birth testing project and facilitated a number of dialogues with that community.
10 See sections 2.3 and 3 of the *Who Gets Born* report (Toi te Taiao, 2008). Most of the participant quotes and examples of deliberation were from the online deliberations.
11 The pre-birth testing project received special recognition in the 2008 IAP2 (International) Core Values Awards for Project of the Year (https://www.iap2.org/page/32) and was noted by the OECD in its report *Focus on Citizens: public engagement for better policy and services* (2009).
12 See report 2 and minutes for the WCC Transport and Urban Development Committee meeting of 3 December 2014.
13 Key references for this section are Citizens' Advisory Panel (2014) and Wellington City Council (2014a, 2014c).
14 See the agenda, papers and minutes of the WCC Regulatory Processes Committee, 13 December 2023.

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References

Bertram, G. (2006) 'Restructuring the New Zealand electricity sector 1984–2005', in F.P. Sioshansi and W. Pfaffenberger (eds), *International Experience in Restructured Electricity Markets: what works, what does not, and why?*, Elsevier

Bostwick, M. (1999) 'Twelve angry citizens: can citizens' juries improve local democracy in New Zealand', *Political Science*, 50 (2), pp.236–46

Boswell, J., S. Niemeyer and C.M. Hendriks (2013) 'Julia Gillard's citizens' assembly proposal for Australia: a deliberative democratic analysis', *Australian Journal of Political Science*, 48 (2), pp.164–78

Büdler, J. (2022) 'Power to the people? Investigating how New Zealand political elites view deliberative democracy', MA dissertation, University of Auckland

Buklijas, T., A. Bardsley, K. Allen, C. Guy, J. Campbell, J. Wigley and L. Ryan (2023) *Citizens' Assembly on the Next Source of Water for Tāmaki Makaurau Auckland: a case study of deliberative democracy in Aotearoa*, Koi Tū Centre for Informed Studies, University of Auckland, https://doi.org/10.17608/k6.auckland.22308901.v1

Campbell, G. (2021) 'Two options to fix Wellington's controversial Island Bay cycleway revealed', *New Zealand Herald*, 11 March

Chambers, S. (2003) 'Deliberative democratic theory', *Annual Review of Political Science*, 6, pp.307–26

Cheyne, C. (1999) 'After consultation: the challenge facing democratic governance', *Political Science*, 50 (2), pp.209–24

Cheyne, C. (2015) 'Changing urban governance in New Zealand: public participation and democratic legitimacy in local authority planning and decision-making 1989–2014', *Urban Policy and Research*, 33 (4), pp.416–32

Citizens' Advisory Panel (2014) ''Newtown-Berhampore Cycle Route', 28 July, https://www.transportprojects.org.nz/assets/Modules/DocumentGrid/advisory-panel-report.pdf

Coote, A. (1997) *Citizens' Juries: theory into practice*, London: Institute for Public Policy Research

Cousins, M. (1999) 'Democratisation by stealth: changing processes in New Zealand government 1989–1997', *Political Science*, 50 (2), pp.225–35

Deloitte New Zealand (2023) *State of the State 2023: into the wind: capabilities to navigate uncertainty*, https://www.deloitte.com/nz/en/Industries/government-public/case-studies/state-of-the-state-2023.html

Department of Internal Affairs (2022) 'How can community participation and decision-making be better enabled by technology? Long-term insights briefing', https://www.dia.govt.nz/diawebsite.nsf/Files/Long-term-insights-briefing/$file/Long-Term-Insight-Briefing-Nov-2022.pdf

Eichelbaum, T., J. Allan, J. Fleming and R. Randerson (2001) *Report of the Royal Commission on Genetic Modification: reports and recommendations*, Wellington: Department of Internal Affairs

Elstub, S. and O. Escobar (eds) (2019) *Handbook of Democratic Innovation and Governance*, London: Edward Elgar

Fishkin, J.S. (1991) *Democracy and Deliberation: new directions for democratic reform*, New Haven: Yale University Press

Gastil J. and P. Levine (eds) (2005) *The Deliberative Democracy Handbook: strategies for effective civic engagement in the twenty-first century,* Hoboken, NJ: Jossey-Bass

GE-Free New Zealand (2022) 'Greens call to reinstate Toi te Taiao – the Bioethics Council', press release, 22 July, https://www.gefree.org.nz/press-releases-2019-2023/20220722/

Generation Zero (2015) 'Body-painted bike ride in support of Island Bay cycleway', media release, a February, https://www.scoop.co.nz/stories/AK1502/S00002/body-painted-bike-ride-in-support-of-island-bay-cycleway.htm

Innes J.E. and D.E. Booher (2004) 'Reframing public participation: strategies for the 21st century', *Planning Theory and Practice*, 5, pp.419–36

Interchurch Bioethics Council (2009) Letter to minister for the environment, https://www.interchurchbioethics.org.nz/wp-content/uploads/2017/04/ICBC-2009-LetterToGovt-ToiTeTaiao.pdf

McCabe, M. (2009) 'Editorial: Bioethics and Politics: The Axing of the Bioethics Council, Toi te Taiao', The Nathaniel Centre: The New Zealand Catholic Bioethics Centre, http://www.nathaniel.org.nz/component/content/article/17-bioethical-issues/bioethics-and-the-environment/183-editorial-bioethics-and-politics-the-axing-of-the-bioethics-council-toi-te-taiao

McGuinness, W., M. White and S. Versteeg (2008) *The History of Genetic Modification in New Zealand*, Wellington: Sustainable Future, https://www.mcguinnessinstitute.org/wp-content/uploads/2016/08/Project-2058-The-History-of-Genetic-Modification-in-New-Zealand.pdf

Murphy, L. (1996) 'Hands-on task for citizens', *Evening Post*, 6 March

OECD (2020) *Innovative Citizen Participation and New Democratic Institutions: catching the deliberative wave*, OECD

Nathaniel Centre (2008) 'Toi te Taiao: the Bioethics Council report – Who Gets Born?', media release, 19 June, http://www.nathaniel.org.nz/press-releases/34-toi-te-taio-the-bioethics-council-report-who-gets-born

Pateman, C. (1970) *Participation and Democratic Theory*, Cambridge: Cambridge University Press

Public Service Commission (2022) 'Enabling Active Citizenship: public participation in government into the future, https://www.publicservice.govt.nz/publications/our-long-term-insights-briefing

Review into the Future for Local Government (2023) *He piki tūranga, he piki kōtuku: the future for local government*, Wellington, https://www.dia.govt.nz/diawebsite.nsf/Files/Future-for-Local-Government/$file/Te-Arotake_Final-report.pdf

Rogers-Hayden, T. and R. Hindmarsh (2002) 'Modernity contextualises New Zealand's Royal Commission on Genetic Modification: a discourse analysis', *Journal of New Zealand Studies*, 1 (1), pp.41–61

Ryan, M. (2023) 'Debate and decide: innovative participatory governance in South Australia 2010–2018', *Australian Journal of Politics and History*, 69 (4), pp.667–86

Sinclair, J. (1996) 'Blumsky rejects poll, jury results', *Evening Post*, 19 April

Smith, N. (2009) 'Government committed to real solutions not slogans', media release, 12 March, https://www.beehive.govt.nz/release/government-committed-real-solutions-not-slogans

Spada, P. and M. Ryan (2017) 'The failure to examine failures in democratic innovation', *Political Science and Politics*, 50 (3), pp.772–8

Steward, J., E. Kendell and A. Coote (1994) *Citizens' Juries*, London: IPPR

Toi te Taiao: the Bioethics Council (2004) *The Cultural, Ethical and Spiritual Dimensions of the Use of Human Genes in Other organisms*, Wellington: Bioethics Council

Toi te Taiao: the Bioethics Council (2005) *The Cultural, Ethical and Spiritual Aspects of Animal-to-Human Transplantation: a report on xenotransplantation*, Wellington: Bioethics Council

Toi te Taiao: the Bioethics Council (2007) *Who Gets Born? Pre-birth testing choicebook*, Wellington, Bioethics Council

Toi te Taiao: the Bioethics Council (2008) *Who Gets Born? A report on the cultural, ethical and spiritual aspects of pre-birth testing*, Wellington: Bioethics Council

Wellington City Council (2014a) 'Citizens' panel cycle hearings get under way', media release, 24 June, https://www.scoop.co.nz/stories/AK1406/S00529/citizens-panel-cycle-hearings-get-under-way.htm

Wellington City Council (2014b) 'Feedback sought on Island cycle improvements', media release, 8 April, https://www.scoop.co.nz/stories/AK1404/S00162/feedback-sought-on-island-bay-cycle-improvements.htm

Wellington City Council (2014c) 'Panel favours two southern cycle routes', media release, 30 July, https://www.scoop.co.nz/stories/AK1407/S00602/panel-favours-two-southern-cycle-routes.htm

Wynne, B. (2001) 'Creating public alienation: expert cultures of risk and ethics on GMOs', *Science as Culture*, 10 (4), pp.445–81

Len Cook

Can We Have the Population Statistics We Need Without a Regular Census?

Time to engage with statisticians

Abstract

As the New Zealand government is progressing plans for substituting the census as we know it for information held in state agency records, the huge gap between what we need population statistics for, and the scope and quality of existing statistics stays under the radar. The scale and volatility of migration, the impact of increased longevity and the different demographic dynamics of fast-growing ethnic communities must be continually measured in ways we can trust. Confidence that the statistical qualities of the census would be replicated requires transparency, validation and independent peer review if trust is to be maintained.

Keywords census, migration, longevity, investment, trust

What we need a census and population statistics for

This short article was stimulated by the publication of advice by the government statistician that the five-yearly census of population and dwellings for 2028 will be replaced by the administrative records long held by the Crown.[1] The census night enumeration we have become used to would cease. More recently, it was announced that the Living in Aotearoa Survey would no longer be implemented. There was no opportunity provided for expert consideration of the implications of this decision. Our population statistics are too important, in so many ways, for this to happen to the population census. In the current climate, where the balance between expert advice and political expediency is not transparent, the downstream implications may not be fully recognised, and risks protected against.

As with many other items of public expenditure, the prospect of cutting statistical activity, however well embedded, is not new in times of fiscal stress. Indeed, it was the norm for some 25 years after the 1974 oil crisis. However, there are two serious limitations to informed decision making when urgent budget cuts to statistics are required. First, neither Statistics New Zealand nor the Treasury are likely to be aware of the majority of the uses to which official statistics are put. Second, those who use official statistics do not invest enough in influencing how statistics can be developed to provide further value. Expert users themselves may be unaware of the scale of decisions in their sector which depend on the scope, frequency and quality of population statistics. It may well be that the loss in recent years of long-standing engagement mechanisms have distanced official statisticians from the emerging needs of users.

There is a need for all users to be provoked into acting as the proper investors in the statistical system. A need for users

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to think deeply was signalled by the advice in 2023 that the 2028 population census could take a different form. Raising concerns after decisions are made will be of little value to Statistics New Zealand. As far back as 2017 Statistics New Zealand had identified some of the foundation stones of such a change, including a national population register.

I cannot recall any time over the past 50 years when the scope and quality of population statistics have been of such importance in public life. The long-term insights briefings of government departments and the strategic documents of agencies highlight the broad range of uses to which population statistics are put in New Zealand. Although collectively weak in how population issues are considered, a few documents are excellent, and enable a spotlight to be put on long-term limitations of population statistics.

- First, and most significant, is the rigidity with which place is acknowledged and supported in population statistics.
- Second, the integration of population statistics with other information about place needs to be systematised and to influence the population statistics infrastructure, rather than requiring ad hoc analysis for each application.
- Third, the age structures of places across New Zealand are diverging in such a way that an increasing share of local authorities have fewer people of the age when people usually enter the labour force compared to the number exiting through retirement. The increased need for migrant workers varies place by place.
- Fourth, the huge shift in the contribution of migration to population change has not influenced the frequency, timeliness or measures of reliability of population estimates and projections; without this information they are out of date when released.
- Fifth, increased longevity is set to challenge how far monetised measures of employment, productivity, and fiscal costs and benefits can inform policy, particularly in the areas of retirement provision, health, education, housing and care.
- Sixth, the huge shift in the share of the population from ethnic communities with very different demographic dynamics challenges the evidence used to develop universal responses.

The population statistics and projections based on the information obtained from the regular censuses of population and dwellings were developed to measure and predict population change of a different kind than we now face.

There are many other issues of comparable importance, and these need to be transparent to those who will be reshaping New Zealand's system of population statistics, both those with appropriate statistical expertise, and those charged with the unenviable task of advising on difficult fiscal trade-offs with limited information and time. Some statistical measures bring legal obligations, as will the population statistics that will be used by local bodies in the new 30-year time frame for planning for housing needs.

Pressure points in population statistics

Population statistics are a critical part of our national infrastructure. In different ways, the greater variability and volatility of demographic, social, economic and environmental change in each place in New Zealand, and their collective impact, have increased the difficulty of planning for whatever mix of people will live there in the future, and monitoring their quality of life. The public reports by the parliamentary commissioner for the environment, the New Zealand Infrastructure Commission, the Ministry of Housing and Urban Development, the Ministry for Pacific Peoples and the auditor-general highlight deep concerns about the current quality of population statistics.

The population statistics and projections based on the information obtained from the regular censuses of population and dwellings were developed to measure and predict population change of a different kind than we now face. Before the 1990s, population growth could be crudely characterised by, first, a significant period of high fertility, building up to a steady flow of births at a level that continues to this day. Where people lived was influenced by urbanisation, and where significant industries were placed. International migration flows during much of that period tended to cancel out, except for a net loss of people in their twenties. This crude characterisation is no longer the case.

Ways of regaining universal public support for population statistics

Just as the field enumeration of a census requires public acceptance, so will the proposed alternative of linking of records obtained by government for taxation, justice, social welfare and other statutory processes. The census enumeration failure of 2018 undoubtedly damaged public trust, and the confidence of population experts, in future censuses. Before 2018, the census enumeration was managed and conducted locally by local people, and nationwide promotion focused on local resources, in health, education and security. This focus could be regained. Census forms could be shortened. Statistics New Zealand has always had very limited ways of enabling the ordinary citizen to come into contact with official statistics, except by media releases, which are less well publicised than previously. However, without significant pilot testing, we will not know if such actions will increase response rates and reverse a decline.

The United Kingdom, Australia and Canada have not experienced response rate declines in their most recent censuses, but all are examining how far administrative records can substitute for a full enumeration. The UK is the most aggressive in this, and has published methodological studies that enable the statistical and

analytical limitations of substituting administrative records for a field enumeration to be evaluated. Such studies have yet to be undertaken in New Zealand.

The absence of such studies for a statistically complex change that affects so many and so much resource allocation, along with limited user consultation, evades the degree of transparency which is essential given the scale of investment risk from population statistics of unknown quality. The degree of informed endorsement by users of population statistics will underpin the extent of public support and implicit endorsement of the linking of administrative records, and the quality of the resulting statistical measures. Civil society organisations and those who act as guardians of the public interest will need to have confidence in those statistical practices, which they will not have the expertise to evaluate themselves.

How the quality of public policy and investment is vulnerable to population change

There has been weak interest in and understanding of how change in population structures and population dynamics are measured and reported in New Zealand. By 2040 the population of New Zealand is likely to have trebled in size since 1960, while the number of births will probably continue to vary by around 60,000 per year over that whole 80-year period. The potential number of new entrants to the workforce will be fewer than those who exit from the workforce through retirement. There are parts of New Zealand where this has already occurred. The available population statistics have signalled such change for several decades. Public policy has been blind to the growing training needs of doctors and nurses, and in many trades the passing on of skills by the training of a share of each generation has slipped by. Similarly, the massive infrastructure needs for a growing and ageing population have not been made visible. Population projections for local authorities have become unreliable because of the huge local volatility in international and interregional migration flows, now common in many places for the last three decades.

Over the past 30 years, the scale, volatility and composition of migration flows has dominated population change enough for existing methods to bring too much uncertainty for planning population-based investment in public housing, infrastructure, health, education or the environment. As the scale of immigration and emigration has increased, the heterogeneity of these population groups cannot be ignored, as migrant communities are homogeneous neither in age distribution, fertility, their propensity to join existing communities, nor the nature and likely end point of their migration journeys.

> New Zealand is poorly served by the reporting of population issues, by official statisticians, government departments, universities and independent agencies.

Of local significance, the shifts in age structure from increased longevity have led to the ageing of the population at a national level being amplified or offset in places by migration, often in response to the local needs of the economic base for people of working age. The variability in historical birth trends adds later complexity to the relationships between cohorts, as it too influences shifts in the age structure of the population. The demographic dynamics of Māori, the different Pasifika populations and other ethnic groups all differ from those of Europeans.

The long-standing approach of preparing a set of population projections provides users with a set of alternative scenarios for fertility, mortality and migration every five years. But more intensive use is now possible of an expanded knowledge base about any place from both government and other records, of varying granularity and frequency. This has become vital since, along with the increased longevity of the retired, international immigration and emigration and migration within New Zealand have displaced births as the most critical cause of population change.

Bringing together such a range of information for places, regions and New Zealand as a whole requires a statistical structure which is strongly integrated, and determined by knowledge of what the key uses of official statistics will be in the future. Major users are not sufficiently attached to priority setting by Statistics New Zealand, and they must be prepared to invest in consultation when it occurs. We need assurance that we can have the population statistics about people, places, communities and their demographic dynamics that are up to the task. The opportunity cost from potential investment failures far exceeds the statistics budget. Governments do not have endless resources for producing statistics; nor is public trust in statistical enquiries a bottomless well. The statistical and administrative data gathered by governments not only need to have a purpose; they must be fit for purpose.

Beyond the precipice: where could we be making decisions soon with inadequate information?

Governments need to determine now where to place some $200 billion of infrastructure investment planned for the next decade. Central and local government policies need to set the context for where and what type of house building is to be undertaken, given the huge needs of individuals, government, communities and business investors. The adjustment of human settlements for climate change appears to be potentially massive, involving huge losses by individuals and businesses, and large financial commitments by central and local government. Furthermore, under the current fiscal policy settings, population ageing is likely to reduce the economic potential of New Zealand's population by over 25% within 20 years.

When population statistics are used in public policy, there are policy and implementation decisions that are vital for how future governments serve society. New Zealand is poorly served by the reporting of

population issues, by official statisticians, government departments, universities and independent agencies. This limits the extent to which discourse on long-term issues can be well informed. The false starts in the enumeration of the population censuses of 2018 and 2023 must lead to greater consultation and an enriched understanding of user needs. The information obtained uniquely in population censuses provides the knowledge about family and household structures and housing quality that have informed the development of the taxation system, the form of welfare benefits, housing, transportation and infrastructure investment.

Given the little interest of users of statistics in how they are prepared, engaging users may require a structured consultation process, perhaps supported by independent reviewers. Without this, the changes already signalled by Statistics New Zealand could well escape the broad-based scrutiny that all public investments need. Whatever is to happen in the future must be informed in advance by those with the needed expertise. This would span public sector organisations, local government, universities and non-government bodies.

Birth, death, emigration and immigration, along with family, whānau, ethnicity, ancestry, generational and community connection and urbanisation can be critical demographic elements of population change, depending on the place. People are also connected by occupation, employment and education. The combined impact of the increasing life expectancy of older New Zealanders coinciding with declining fertility means that without major policy change, the financial flexibility in public spending by future governments is now on a steady and significant decline. Embedded ethnic disparities, retirement provision needs, access to universal health services and access to tertiary education will all be affected by the same demographic forces. These are now exemplified in a series of policy reversals and failures which have resulted from poorly informed, quickfire attempts at housing the population and in reducing child poverty. What remains unknown, despite its political significance, is the extent to which the inequalities in

Birth, death, emigration and immigration, along with family, whānau, ethnicity, ancestry, generational and community connection and urbanisation can be critical demographic elements of population change, depending on the place.

service delivery that are inherent across many sectors, including education and health, are predominant in the places of highest economic disadvantage. These may be where user-pays services have replaced previously universal services.

A statistical agenda for revitalising the population statistics infrastructure

A major rethink and redirection of population statistics, and the associated information sources and infrastructure is required. This needs to be comparable to that which took place with macroeconomic statistics during the 1990s after the major restructuring of the New Zealand economy. Such a rethink and redirection of population statistics must have several focal points.

Developing the capability to expand scope of information to be integrated

- The official infrastructure for population statistics needs to be able to include climate, topographic and biosystem information about place, with diverse approaches to areal mapping supporting the current area classifications. This will involve information of varied granularity, frequency and quality about ecosystems, climate, hazards and habitation for any places where communities have formed.
- An investment in demographic analysis is needed to understand the complexity of New Zealand's distinctive population dynamics. Without this, the nature of the variability over time in age structures could lead to unnecessary policy volatility, and planning and investment decisions cannot be adequately informed (Pool, 1999). The current housing bottlenecks signal the future risks when failing to anticipate migration effects that have now become such a large and highly variable contributor to population change.
- The official statistics infrastructure needs to be able to adapt to the existence of statistics about place that are not universally relevant in all places, and which may be determined locally rather than centrally, as at present. There must be capacity to recognise the great variety of localised impacts of greatly different age structures that result from fertility, mortality, emigration and immigration. The information from each census of population has long been a key element of the population statistics infrastructure, without which the integration of other statistical sources and administrative records would be less likely.
- There is a need to be able to use available information-rich sources to not only inform projections and predictions, but indicate their reliability. The timeliness and accuracy of population estimates of places should be given primacy in extending the use of this information.
- The immigrant population has a very different age structure from the New Zealand resident population, and both its contributions to the economy and demands on public services are not only different, but vary over time and among the different ethnic migrant communities. The very different demographic dynamics, location and social structures of both migrant and ethnic communities compared to the European population need to be understood. We have weak understanding of the medium- to long-term implications of this for investment

in public services in education, health, social services and public safety.

Recognising the statistical limitations of administrative records as sources for official statistics

- Administrative records have an important part to play, given the need to radically expand the capability to integrate place-based information from many sources with population statistics, to remedy the existing serious issues with population estimates and projections. Whereas the coherence and compatibility of the information from a census of population or other statistical sources are anchored in the rich global infrastructure of population statistics, the qualities of each administrative record are unique and unrelated. They lack the adaptability, collective coherence, comparability and consistency that comes from information sources designed with the infrastructure of official statistics. It is quite rare for the information contained in administrative records to be designed to meet even a few of the long-standing standards and definitions on which official statistics are based; this means that the quality of the information created by their integration not only with official statistics but with other administrative records cannot be assured. This narrows their use for multivariate measures, while their ever-expanding accessibility lifts our understanding of where and how change is occurring in a way that statistical sources usually cannot do. This is especially important for integrating information about place.
- The statistical information gathered in the enumeration of the five-yearly census of population is fundamental to the Integrated Data Infrastructure (IDI), given the large share of valued analyses that need variables found only in the population census (e.g., housing quality), and which no administrative agency is likely to see a need to collect.
- The capacity of the government to survey local or national populations at short notice needs to be reinforced. Both of these needs can take advantage of technological innovations which will most likely challenge received wisdom.

Protecting the integrity of the information regularly obtained from the five-yearly programme of population censuses

- Ministers must have independent expert endorsement that the information found in five-yearly censuses can be obtained in the future. The failures in the censuses of population and dwellings for 2018 and 2023 leave little room for untested initiatives at this time of continued massive disruption to historic patterns of demographic change.
- Independent expert confirmation must leave no doubt about the statutory obligations for the setting of electoral boundaries and determining Māori electorates as defined in the Electoral Act 1993, section 35 (division of New Zealand into general electoral districts) and section 45 (Māori representation).
- To ensure the continued relevance of population statistics, the producers and users must engage vigorously at a time of any change, to enable the benefits of such transformation to be realised.
- A radical uplift in the scope and frequency of independent reporting and analysing of population trends is essential.

A call for a population policy and more strategic thinking about population statistics

Recognition of the critical population transitions that we are experiencing is at a low ebb. The broad scope of the last report on population policy in New Zealand (Department of Statistics, 1990) has yet to be repeated. Pool (1999) outlined why it would be important when considering demographic pressures over the coming decades not to ignore the continuing shifts in the age structure of those below retirement age when responding to population ageing. Jackson (2015) added arguments about regional impacts, calling for clarity in population goals. The Royal Society of New Zealand continued the analysis and reflections in *Our Futures Te Pae Tāwhiti* (2014).

The lack of response to any of these documents may not be surprising in view of the advice of the public service commissioner to the Governance and Administration Committee in April 2023 that there has been a loss of strategic capability across the public service. There is now a need to increase and broaden the quantitative and qualitative analytical competence among public officials, particularly about population trends and dynamics, with less managerial and political indifference to the sources of 'facts' that support policy. The capacity for intergenerational analysis must be designed into statistical sources. It may be that the public sector overall is poorly equipped to advise ministers of the consequences of substituting administrative records long held by the Crown for the five-yearly census of population and dwellings for 2028. Clearly, ministers would be grossly unwise to act without good independent advice that is informed by both statistical expertise, and a proper appreciation of the reasons for which population statistics will be needed.

1 For a more detailed analysis, see Cook, 2024.

References

Cook, L. (2024) 'Mind the gap! What are the statistics of national significance that we must have?', unpublished paper

Department of Statistics (1990) *The Human Face of New Zealand*, report of the Inter-Departmental Committee on Population Policy Guidelines, Wellington: Department of Statistics

Jackson, N. (2015) 'Ageing populations and regional decline', *Briefing Papers*, 10 December, https://briefingpapers.co.nz/ageing-populations-and-regional-decline/

Pool, I. (1999) 'People (= population) and public policy in New Zealand', *New Zealand Population Review*, 25 (1&2), pp.57–80

Royal Society of New Zealand Te Apārangi (2014) *Our Futures Te Pae Tāwhiti: the 2013 census and New Zealand's changing population*, Wellington: Royal Society of New Zealand Te Apārangi

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Towards a Regionally Responsive Network

implementation challenges in New Zealand's reforms to vocational education

Abstract

New Zealand has been undertaking major reform of its vocational education sector since 2019. Changes have been extensive, including the establishment of a national delivery body (Te Pūkenga), and the formation of workforce development councils, regional skills leadership groups, centres of vocational excellence, and a coalition of expert Māori advisors (Te Taumata Aronui). While a new government is reconsidering these structures, including stating a commitment to disestablish Te Pūkenga, it is timely to explore the key policy issues facing the vocational education sector. Accordingly, this case study considers how best to balance local and national interests. We suggest changes to ensure that the sector is well structured, governed and funded, and meets the needs of the communities it serves.

Keywords vocational education, educational reform, centralisation, decentralisation, regional programmes, equity

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Reform of vocational education

Reforms to New Zealand's vocational education and training sector were first announced by the minister of education in August 2019. The planned changes were extensive, covering funding and delivery models, and included seven large initiatives, outlined in Table 1 (Huntington and Chan, 2022; Ministry of Education, 2019a, 2020). The nation's 16 ITPs (institutes of technology and polytechnics) and 11 ITOs (industry training organisations)[1] would be merged into a single national entity.[2] Industry, labour market, regional and cultural intelligence would be provided by workforce development councils, regional skills leadership groups, centres of vocational excellence, and Te Taumata Aronui (an expert group commissioned to provide advice on how best to respond to the needs of Māori). Also included in reforms was the establishment of a unified funding system, applicable across all provider-based and work-integrated education (Huntington, 2022; Ministry of Education, 2019a, 2020; Tertiary Education

Table 1: Seven key changes to drive improvement in vocational education

1. Create a New Zealand Institute of Skills and Technology	The institute, named Te Pūkenga, was to bring together the existing 16 institutes of technology and polytechnics (ITPs) into a sustainable vocational education and training network
2. Create workforce development councils	Four to seven industry-governed bodies with leadership and greater industry control across the entire vocational education and training system
3. Shift workplace learning roles from Industry Training Organizations (ITOs) to providers	Te Pūkenga and other providers would deliver both work-based and provider-based learning to ensure better integration and connection with industry
4. Establish regional development councils NB: later referred to as regional skills leadership groups	To provide independent advice to the Tertiary Education Commission via the Ministry of Business, Innovation and Employment about the skills needs of regions – advice would guide investment decisions
5. Establish centres of vocational excellence	To drive excellence and innovation in learning and teaching and strengthen links with industry
6. Establish Te Taumata Aronui	An expert group of advisors to help ensure that the system reflects the government's commitment to Māori–Crown partnerships
7. Unify the vocational education funding system	A unified funding system covering all work-based and provider-based delivery from certificate level 3 to diploma level 7 (excepting degree qualifications)

Source: Ministry of Education, 2019a

Commission, 2019b; Tertiary Education Union, 2019).

These policy changes sought to address several longstanding challenges associated with the sector. The sector – with 16 regionally based, stand-alone ITPs and 11 ITOs – was administratively top heavy, duplicative and arguably unaffordable (Ministry of Education, 2019b). A history of financial difficulties (Smyth, 2012; Tertiary Education Advisory Commission, 2001), compounded by growing and projected deficits, illustrated that the sector was operating on financially shaky ground. Further drivers for change were competitive tensions between provider-based vocational education and work-based training; poor skills matching; deficits in systems integration; disconnection from industry; and access inequities (Huntington, 2022; Ministry of Education, 2019b; Treasury, 2019; Piercy and Cochrane, 2015; Smyth, 2012; Williams, 2020). The reforms were expected to achieve financial sustainability and provide significant benefits for learners, employers, industry, communities, regions, staff in the sector and the Crown (Treasury, 2019):

> The Government's vision is for a strong, unified, sustainable vocational education system that delivers the skills that learners, employers, regions, and communities need to flourish. This includes addressing the financial instability in the current vocational education model – the status quo is no longer sustainable. (Ministry of Education, 2019b, p.14)

Addressing equity issues and improving learner outcomes were also cited as drivers for change, with the reform programme positioned as a vehicle by which to create an integrated and networked system, more easily engaged with by employers and learners and providing better work-integrated learning opportunities (Ministry of Education, 2020; Piercy and Cochrane, 2015). Systems integration was envisaged as the mechanism by which to ensure increased equity of access for 'underserved learners', particularly Māori, Pasifika learners, people with disabilities and those lacking qualifications (Maurice-Takerei and Anderson, 2022; Ministry of Education, 2020; Tertiary Education Commission, 2019b; Tertiary Education Union, 2019):

> At the heart of the Government's reform of vocational education is a goal to ensure that the needs of learners, employers and communities drive the system, to help us raise living standards for everyone in New Zealand. We want a system that truly delivers to the regions of New Zealand, and our proposals will help to ensure that there is greater availability of provision throughout New Zealand. (Ministry of Education, 2023)

Passage of the Education (Vocational Education and Training Reform) Amendment Act 2020 formalised the reforms. Effective from 1 April 2020, it amended the Education Act and repealed the Industry Training and Apprenticeships Act 1992. The Education and Training Act 2020 subsequently replaced the Education Act 1989 and further formalised the reforms.

The Acts established Te Pūkenga, the New Zealand Institute of Skills and Technology, as a national vocational education provider, combining the 16 ITPs and the educational provision functions of nine of 11 ITOs (Huntington, 2022; Te Pūkenga, 2023b). At face value, a single national body combining both provider-based and work-based delivery functions suggests a move to centralised control, but its policy framework did contain provisions to retain regional participation in delivery. Te Pūkenga's founding charter enshrined the right of regional voice within schedule 13, sections 3a and 3b of the Education and Training Act 2020:

> To meet the needs of regions throughout New Zealand, Te Pūkenga–New Zealand Institute of Skills and Technology must –
>
> (a) offer in each region a mix of education and training, including on-the-job, face-to-face, and distance delivery that is accessible to the learners of that region and meets the needs of its learners, industries, and communities; and
>
> (b) operate in a manner that ensures its regional representatives are empowered to make decisions about delivery and operations that are informed by local relationships and to make decisions that meet the needs of their communities

Establishment business case

A detailed business case analysis was completed as a precursor to the reforms (Ministry of Education, 2019b). Four system design models provided options for implementation: A) regional, B) regional plus, C) regional and some national, and D) more national (see Table 2).

Options were provided to address existing problems, particularly poor provider skills matching to industry need, counterproductive provider-based versus work-based delivery competition, non-resolution of longstanding issues of equity and access, particularly for Māori, and unstainable fiscal deterioration across the sector (Ministry of Education, 2019b; Treasury, 2019). Within the four options, the business case recommended a cautious transition programme progressing from the 'thin and small' head office option A towards option C, noting that this would require major consultation and careful implementation. Option D was seen to involve high-risk change management and systems complexities/cost, and unlikely to deliver value to regions.

Despite being explicitly not recommended, option D was arguably the approach ultimately adopted by Te Pūkenga as implemented, despite the aspects of the reforms seeking to mitigate risks associated with over-centralisation. Given the clear importance of these factors in reform processes – i.e., centralisation and decentralisation – it is worth considering these terms in further detail.

Table 2: Reform of vocational education and training system design options

Option	Approach	Description
A	Regional	A 'thin' and 'small' head office primarily focused on performance monitoring and management of the subsidiary providers, including establishment of 11 workforce development councils
B	Regional Plus	Like option A but with fewer regional operations and centralisation of functions such as programme design
C	Regional & Some National	A central head with strong degree of control over operations but still having substantial regional delegations and presence
D	More National	Heavily consolidated central agency with most activities centrally performed

Defining the concepts

Centralisation and decentralisation signify fundamentally differing approaches towards organisational structure and accountability in larger government and private sector entities. Fundamentally, they relate to points of power in both administrative and decision-making responsibilities (Ryan and Woods, 2015). In more centralised structures, the location of power and decision making rests almost exclusively at the entity's highest level. By contrast, decentralised approaches are characterised by devolved authority and dissemination of power – at middle and lower levels of management, in public entities typically subnationally (Surbhi, 2023). Definitions vary, but the following are consistent themes:

- Centralisation involves consistent and systematic concentration of power and centrally controlled decision-making authority (ibid.). Centralisation is characterised by centralised points of power and decision making characterised by bureaucratic rules, standardised processes and unified systems (Jong and Faerman, 2020).
- Decentralisation refers to the dissemination or devolution of powers by top managers to local or lower-level management within an organisation and to relevant stakeholders in the community. It typically involves delegation of authority across all levels of an organisation and management (Surbhi, 2023). Decentralisation involves power sharing and provides opportunity for those closest to a community and closest to the work to contribute information and expertise (Jong and Faerman, 2020).

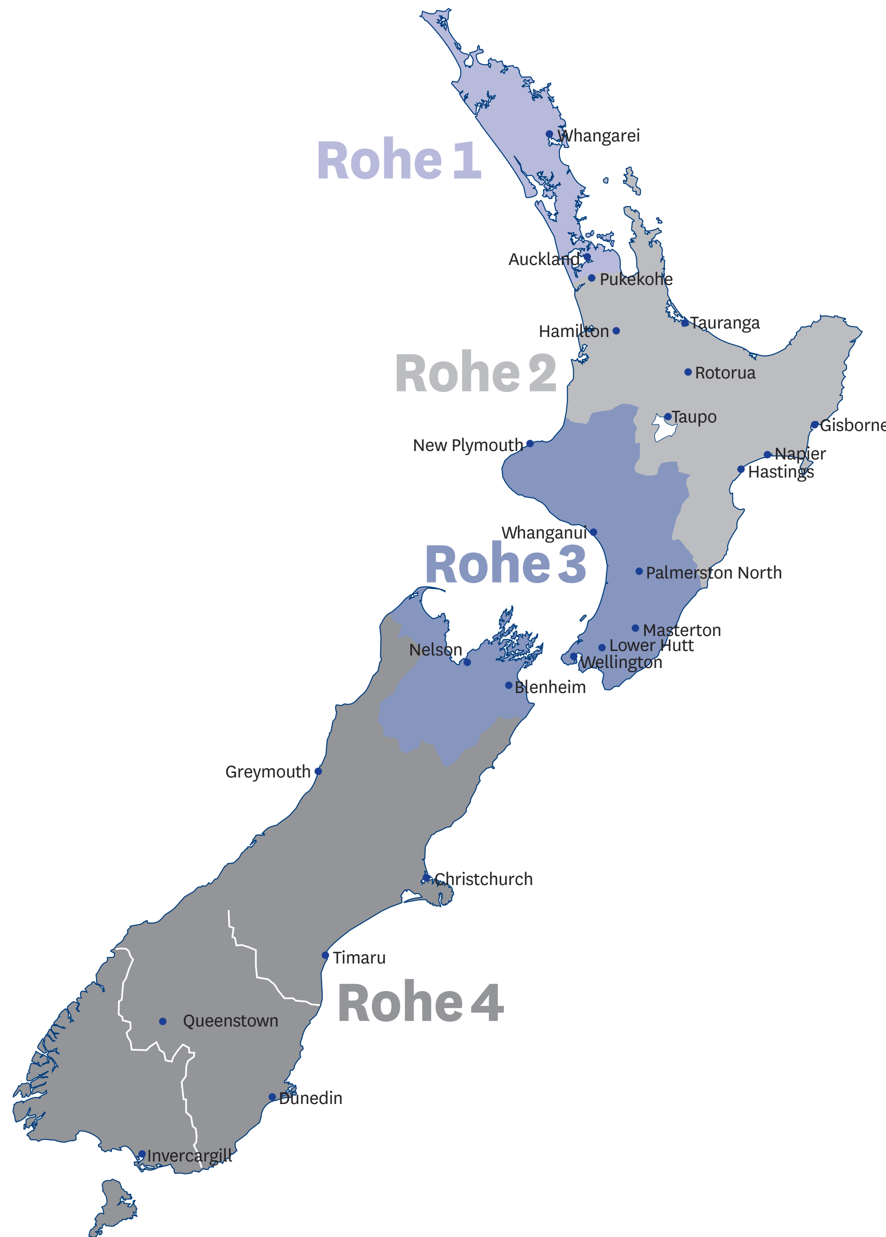
The relative merits of centralisation and decentralisation in public service delivery is a perennial policy debate, with a surprisingly sparse and contradictory evidence base (Brothaler and Getzner, 2010; Mok, 2004; Ryan and Woods, 2015). Both approaches have prima facie benefits: centralisation is often regarded as a means to achieve efficiencies via economies of scale (Acemoglu et al., 2016; Hernes, 2021), although criticisms are often articulated in respect of (over) centralised 'one-size-fits-all' systems as not being able to meet local aspirations and need (Duranton, 2018). Arguably, decentralised 'place-based' decision making more appropriately addresses local needs (Brownie et al., 2023; Duranton, 2018; Kline, 2010), enabling those with better knowledge of users and the community to make timely and appropriate decisions (Brady, 2002). Of note, consequences of errors and failures in completely centralised systems are potentially catastrophic, as they have an impact on the entire system (Arcuri and Dari-Mattiacci, 2010) – an over-centralised system could lead to the entity becoming a 'single point of failure' … 'if it fails, the system fails' (Treasury, 2019).

Centralisation and decentralisation in education

Rodríguez-Pose has built a convincing case against overly centralised services, arguing that they have led to 'territorial neglect' and a 'geography of discontent', a malady which arises when resources, decision making and power are centralised in large cities (Rodríguez-Pose, 2022). He highlights rising cultural and political discontent among those 'left behind' outside major cities and inadequately supported (Rodríguez-Pose, 2018, 2022). Proponents of decentralisation in education argue the benefits of empowering local stakeholders, particularly for marginalised communities (Arcuri and Dari-Mattiacci, 2010; Kline, 2010).[3]

Early literature regarding global moves towards decentralisation in education described moves to achieve balance as 'decentred centralism' or 'decentralised centralism', wherein attempts were made to achieve equilibrium between central and regional activities (Bray, 1991; Karlsen, 1999). More recently published literature concludes that combining both decentralised and centralised decision-making approaches is 'indispensable for enhancing and leading education' and actively encourages activity to ensure

Figure 1: Four mega regions within the Te Pūkenga operating structure



balance within centralised-decentralised educational structures (Cornito, 2021). A balanced model example is the multi-level governance arrangements within the California community college system, which provides space for both national and regional and local input. Within this system, a central governing board articulates state-wide priorities and provides tools for effective local-level leadership, management and accountability. Boards at the local institutional level set strategic direction in line with state-wide priorities while ensuring that local needs are met (Community College League of California, 1998, 2022). OECD and European Training Foundation publications reflect the benefits of such a model in vocational education and training, wherein multi-level governance brings key stakeholders together in priority setting, implementation, monitoring, evaluation and review while facilitating and supporting regional distinctiveness and decision making (Arribas and Papadakis, 2019; Charbit, 2011, 2020; European Training Foundation, 2013, 2018; Ryan and Woods, 2015).

These debates are clear in the policy development of the reform of vocational education in New Zealand. A 'roadmap' provided by the Tertiary Education Commission to the minister of education (Tertiary Education Commission, 2018) highlighted the importance of empowered regional and local perspectives, suggesting that ITPs are not and should not be the same because regions, industries and labour markets are different. Advice provided under the following key headings emphasised caution in respect to centralisation of regional provider functions:

- First, do not harm;
- One size does not fit all;
- Do not embark lightly on mergers;
- The benefits of change must be compelling;
- In respect to regions, there should be 'Nothing about us, without us'. (Tertiary Education Commission, 2018)

Policy documents show that a key goal of reform was to achieve an optimal balance between centralised efficiencies, quality and control, while effectively serving the needs of unique communities and learners. Equally clear was the caution issued in respect to the risk of over-centralisation in the change process (Tertiary Education Commission, 2019b). Certainly, a system of 16 autonomous ITPs and separate, part government-funded ITOs across a small nation of around 5 million people, yielding increasingly large deficits, was unsustainable (Ministry of Education, 2019b; Sherwin, Davenport and Scott, 2017). Additional reform was required, noting that ITPs and ITOs had been merging periodically for much of the previous two decades (Williams, 2022). However, achieving the correct balance in these trade-offs was recognised as complex. Treasury's 2019 regulatory impact assessment of the proposed creation of Te Pūkenga warned that: 'the Institute could be overly centralised and less responsive to local and regional skills needs due to a remote, centralised national leadership; or, alternatively, too "devolved", failing to achieve greater national consistency and scale economies' (Treasury, 2019, p.5).

Examining progress

The intent to disestablish Te Pūkenga and reset vocational education and training policy and return to a regionally empowered network was signalled within the 100-day plan of the newly elected National-led government (New Zealand National Party, 2023a). What had gone wrong for this to be necessary? A significant aspect of the problem might be attributed to Covid-19. Established in

early 2020, Te Pūkenga fielded the brunt of pandemic responses and needed to rapidly divert attention to maintaining delivery during long periods of border closure and stay at home orders (Smart, 2021). That factor aside, the expected benefits and efficiencies associated with moving to a single provider with remodelled industry engagement and regional advisory functions have simply not yet emerged. Given the 'rise and demise' of Te Pūkenga, evidence-based consideration of a broad range of perspectives and diversity of voice is now needed in the 'reset' process (Russell, 2024). Reflection on a sample of publicly available data provides some pointers as to what may have gone awry.

Centralised systems design

The reform business case had advised against over-centralisation of the proposed national entity, giving clear warnings about the risks of progressing this option (Ministry of Education, 2019b). However, by mid-2023 a significantly centralised model had been implemented, combining 16 regional providers within four mega regions, the rationale for which remains unclear (see Figure 1). Regional stakeholders perceived that they had lost voice and agency in the new structures, driving much of the resulting political pushback (Te Pūkenga, 2022). Discontent was also evident among staff. The fourth employee survey undertaken by Te Pūkenga in late 2022 indicated that a third of the entity's staff could see no future in the organisation, and half indicated that they would not recommend it to friends and whānau as a place of work (Kenny, 2023b).

Establishing the network

A large literature outlines adverse stakeholder and staff responses to complex system change (Hudson, Hunter and Peckham, 2019; Mueller, 2020; Newman, 2022). The reform of vocational education was both ambitious and complex, involving seven key change elements (see Table 1). Elements of perhaps unnecessary complexity included establishing workforce development councils and regional skills leadership groups on a similar timescale to a combined Te Pūkenga, some established and funded via the Tertiary Education Commission and others by the Ministry of Business, Innovation and Employment. Establishment of two centres of vocational excellence added to the mix (Ministry of Business, Innovation and Employment, 2022a; Tertiary Education Commission, 2019a). Analysis of the roles and responsibilities of the workforce development councils, regional skills leadership groups, centres of vocational excellence and Te Pūkenga highlights a high level of complexity and overlap of roles, a well-known risk to successful public policy implementation (Hudson, Hunter and Peckham, 2019).

Māori participation and potential

For more than four decades, New Zealand policymakers have placed considerable focus on closing the gap between Māori and non-Māori (Māori Tertiary Reference Group, 2003; Ministry of Education, 2022; New Zealand Government, 2014). Despite these efforts, inequities have persisted, with significant educational and labour market disparities (Huntington, 2022; Ryan, 2022; Sherwin, Davenport and Scott, 2017; Wikaire et al., 2016). Although access has improved in some areas (Ryan, 2022), 'patterns of privilege' remain (Wikaire et al., 2016). 'Educational deserts', characterised by limited access and low participation, compound existing cultural and socio-economic inequalities (Hillman, 2016; Hillman and Weichman, 2016). This is particularly concerning given that Māori and Pasifika will be key contributors to the future workforce and play an increasingly pivotal role in the future wellbeing of the nation (Blaire, 2023; Cochrane and Pool, 2017; Jackson, 2017; Wikaire et al., 2016).

Te Pūkenga was required to place the highest possible priority on increasing access and participation for Māori (Ministry of Education, 2019b), but it is far from clear that its highly centralised model was capable of delivering the structure and decision-making access necessary to effectively engage Māori. In discussing decisions regarding which powers should be either centralised or devolved with a decentralised-centralised system, Bray (1991) explains the difference between administrative functions and political functions. While the centralisation of administrative functions (such as finance or IT) may be readily accepted, tensions exist in respect to the centralisation of decision-making powers, which are influenced by the political and cultural mores of the context in question. In the New Zealand context, Māori are not a homogeneous group: connection to rohe, iwi, whānau and hapū matters; therefore, local and regional-level 'voice' is an unarguable expectation (Ryks, 2019: Durie, 1999). This point is reinforced by Brady (2002), who argues that improved outcomes for Māori require more participatory models of decision making, inclusive of te ao Māori perspectives. We would emphasise that achieving equity in access and educational outcomes for Māori requires decision making with meaningful influence from, and accountability to, iwi and hapū Māori. Māori success is a key goal for which rhetoric no longer suffices. Eastern Institute of Technology's connection with community and reach into regions provides an example of how this may be achieved (Brownie et al., 2024).

Māori are not a homogeneous group: connection to rohe, iwi, whānau and hapū matters; therefore, local and regional-level 'voice' is an unarguable expectation ...

Implementation delays

Timeliness of implementation, with missed deadlines, was a recurring theme in the establishment of Te Pūkenga. Auditor-

general reports from 2022 and 2023 on progress and issues in the tertiary sector make startling reading (Ryan, 2022, 2023). The 2023 report reiterated the continued lack of a full operating structure at Te Pūkenga detailing what the entity would do and how it would do it. This report noted that '[c]urrent plans suggest that the operating model will not be fully implemented until sometime between 2027 and 2033', and '[a]lthough we acknowledge the scale and complexity of change required, we remain concerned by the time frame for this work' (Ryan, 2023).

Successful outcomes for learners and employers and a 'relentless focus on equity' and 'participation' were identified as the highest priority for Te Pūkenga and the vocational education and training sector ...

After more than three years of operation, growing deficits, adverse media attention (Davis, 2023; Simmonds, 2022), a replaced CEO and restructured senior executive, and the loss of talented staff, the entity was still in the midst of the final stages of the industry and structural changes required when the October 2023 general election saw a change of government. The incoming government, with the former ITP chief executive and Te Pūkenga critic Penny Simmonds as minister for tertiary education, moved quickly to disestablish Te Pūkenga, with signals of an increase in the number of regions from the current four to eight or more, restoring local decision making, and reducing decision-making power at the centre (New Zealand National Party, 2023a; Schwanecke, 2023). The new model is yet to emerge.

Unification of curricula

In highlighting the risk and complexity involved in large-scale centralisation of services, it is useful to examine the proposed programme roadmap within the establishment business case, which gave a three-year timespan to harmonise (unify) all curricula gathered from the pre-existing ITPs and ITOs (Ministry of Education, 2019b). The scale of work is large across a network with more than 2,000 programmes and 200,000 learners. Unification aimed to standardise programme content and quality, removing variability, duplication and competition (Te Pūkenga, 2021). It was to provide easier credit and transfer pathways for learners and reduce costs. While the concept is laudable, challenges lie in implementation, particularly achieving the national buy-in, cooperation and consensus needed across the diverse range of existing providers.

Te Pūkenga took two approaches to the unification process. Unification by transition involves selection of an existing programme and updating it as a new unified programme into which all other programmes would be transitioned. The process for selecting the chosen/preferred programme from the options available was unstated; the degree of centralisation of decision making unknown. Unification by programme transformation involves full redesign and redevelopment of a programme of study. Programmes identified for full transformational redesign included Bachelors of Nursing and the Bachelor of Social Work degree (Te Pūkenga, 2021). In both cases, the extent to which the newly standardised programmes could be adapted to specific place-based industry, community and cultural needs remained unclear. However, the 2022 annual report signalled that the ground work had been laid for standardisation of over 300 programmes to fewer than 50 in 2023 (Te Pūkenga, 2022).

Unification of nursing curricula – an example

Efforts to unify curricula in nursing provide an example of the complexities involved in a single professional area. Thirteen ITPs previously held approval and accreditation to offer a Bachelor of Nursing programme, each with a unique curriculum, approval, accreditation and approval dates (New Zealand Nursing Council, 2023). Despite lack of support from academics and the broader profession, a decision was taken to unify the Bachelor of Nursing first. Documents were submitted for accreditation in mid-2023, but withdrawn from consideration during approval visits (Kenny, 2023a). Parliamentary questions have revealed that the New Zealand Qualifications Authority had identified weakness and gaps in the proposed programmes, including in content and structure, delivery and governance arrangements, and inadequate consultation with relevant stakeholders (Tinetti, 2023). The Tertiary Education Union described the proposed changes as 'rushed and disrespectful' (New Zealand National Party, 2023b; Tertiary Education Union, 2023). Slippage continued, with the original rescheduled accreditation date of November 2023 subsequently proposed for either March or April 2024 (although subject to further change following new policy directions).

Precedent exists in respect to a unified nursing curriculum in enrolled nursing, and the rationale for Te Pūkenga's decision to unify degree-level curricula is not without merit. Thirteen different institutions separately developing core units within different learning management systems is wasteful and inefficient, as is the time, effort and cost of accrediting 13 unique programmes. However, the benefits are unlikely to be realised without sufficient consultation with and buy-in of nursing leaders and other key stakeholders. Risks were exacerbated by centrally based, non-nursing staff being empowered to make key decisions regarding curriculum structure and direction. Unification of nursing curricula aligned to national health objectives is possible and has been achieved in other contexts – for example, in Hawaii and Brazil. Crucially, in both cases changes were nursing driven and led (Tse et al.,

2014; Winters, Prado and Heidemann, 2016). In contrast, the Te Pūkenga scenario had the appearance of a battle involving a management drive for efficiency at the expense of professionally owned buy-in for improving programme and learner outcomes (Tertiary Education Union, 2023; Tinetti, 2023).

Learner and employer outcomes

Successful outcomes for learners and employers and a 'relentless focus on equity' and 'participation' were identified as the highest priority for Te Pūkenga and the vocational education and training sector (Te Pūkenga, 2023c). The 2022 annual report was the first to capture learner outcomes across all 25 entities brought together in the reforms – a sizeable scale, with 270,993 learners (on-the-job, online and on-campus) and 48,037 graduates (Te Pūkenga, 2022). A snapshot of published outcomes reported overall course completions maintaining 2021 levels, but not meeting 2022 targets. While credit achievement for Māori and Pasifika was generally improved in comparison with 2021 results, neither group met priority targets for 2022. Work-based learning credit achievement for industry apprentices was behind schedule in 2022, primarily due to the inability to increase teaching and other resources fast enough to match growth flowing from the Targeted Training and Apprenticeship Fund, with construction sector trainees particularly affected. Progression rates for NZQF level 1–4 learners experienced a significant drop to 32.8%, with lags also evident across higher-level qualifications. Learners without NCEA level 2 or higher are noted as being much more likely to need additional support in numeracy, literacy and pastoral care (Te Pūkenga, 2022). Additional analysis is clearly needed to better understand non-completion causality and support requirements as part of the policy reset process – particularly for Māori, Pasifika, regional learners, and early school leavers entering work-based learning.

Financial performance

Increasing debt year on year was a key driver of the reforms, with high expectation that the proposed changes and a new, unified funding model would establish a pathway to financial sustainability (Ministry of Education, 2019b). Four years into the implementation process, the pathway to financial sustainability was no clearer, with Te Pūkenga's briefing to the incoming minister in February 2023 projecting a continuing deficit of more than $60 million, despite the forecasts reflecting the January 2023 introduction of the new unified funding system (Te Pūkenga, 2023a).

Going forward – what matters?

The need for the vocational education and training reforms was inarguable, as the locally dispersed, internally competitive system, with 16 regionally based, stand-alone ITPs and 11 ITOs, a broken funding model and the slow uptake on capitalising on technological advantages meant the vocational education sector was fundamentally unsustainable (Ministry of Education, 2019b, 2023). The reform model contained options based on well-founded evidence in vocational education delivery; however, implementation failures and lack of support for the overly centralised model resulted in Te Pūkenga facing hostility from those who felt their local identity and voice were lost. Public policy failure is common; so common that it has been described as ubiquitous (Mueller, 2020). The question that now remains is how a national network of vocational education and training provision might be structured, governed and funded to sensibly balance scale, quality, relevance, access, learner mobility, regional distinctiveness and local 'ownership'. Informed and thoughtful consideration must be given to what functions and decisions should be centralised and what should be decentralised across a carefully balanced and appropriately funded network. Figure 2 provides a visual illustration of areas critical to the policy 'reset' process, specifically: learners; regions; funding and national support provisions; and governance and leadership across the network.

The learner

Importantly, what is available to be learned should be aligned with job opportunities, including those within the unique geography and economic profile of New Zealand's regions. A difficulty for learners and prospective employers is that training opportunities do not always meet the needs of employers (Ministry of Business, Innovation and Employment, 2022b). Further, mobility, rurality and marginality intersect with education, affecting the lives and prospects of learners (Gibson et al., 2022). Learner location influences and limits study choices and greater distance to education provision has an impact on academic achievement and course completion (Brownie et al., 2023). It is critical that a future model appropriately acknowledges the importance of place of learning, connects learners with regionally based labour market opportunity, and provides localised support for variances in learning style support needs.

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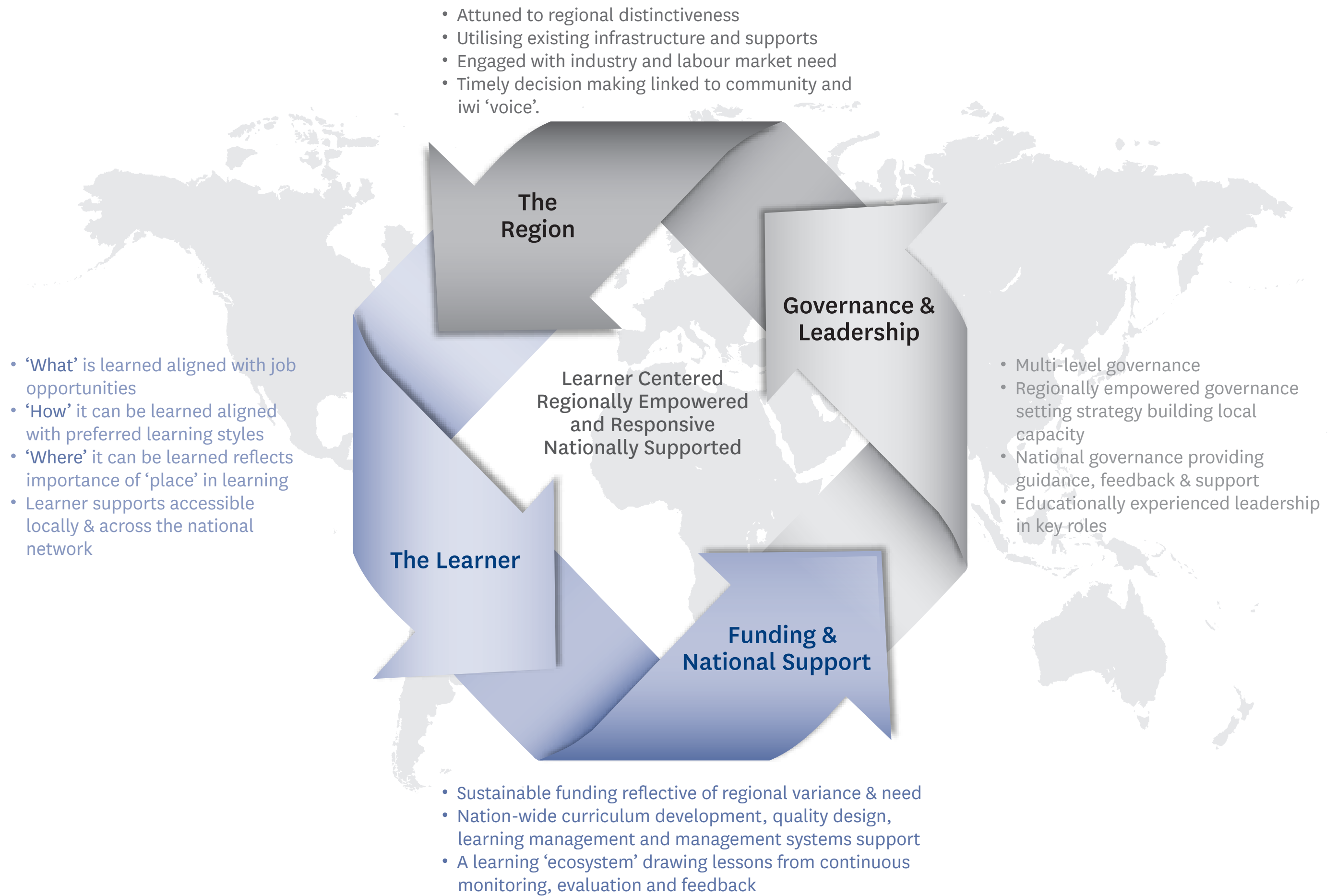
Figure 2: Essential factors in the reset of vocational education and training in New Zealand



The regions

Regions and the place of learning matter in respect to their capacity to support equity of higher education access and outcome (ibid.). A place-sensitive approach considering the differing needs of different regions is essential. To improve educational outcomes, regions should be appropriately resourced and supported with local decision-making power in respect to what programmes should be offered, how and where (Lamb et al., 2018). Anything less risks a rising geography of discontent such as that which has negatively affected the political landscape across many industrialised nations (Barca, McCann and Rodríguez-Pose, 2012; McCann and Rodríguez-Pose, 2011; Rodríguez-Pose, 2022), and which appears to be central to the 'rise and demise' of Te Pūkenga. Expert local governance and leadership capacity with autonomy to connect with industry, iwi and the community provides the responsiveness needed to reflect regional diversity and collaborate in the best use of existing infrastructure and services. An example of how resources can be shared rather than duplicated is the Australian model of regional study hubs. These hubs are a tertiary sector innovation to address equity issues and improve higher education access and support. Learners from any higher education institution can attend a local study hub, which are equipped with full learning facilities, administrative and academic support, and on-site pastoral care. Benefits include greatly enhanced access and support than would be possible with unilateral initiatives (Australian Government, 2023).

Multi-level governance and leadership

Federalism, with separate, regionally based entities operating within a collective structure, is an operating structure with potential promise going forward. Such an approach offers the 'best of both worlds' (Walker, 2023; Ryan and Woods, 2015), allowing for functions to be retained at the centre where this makes sense, but empowering regional entities to adapt and innovate at the local level with clear lines of decision-making authority and accountability. A structure based on federalism allows for shifts in responsibilities between the centre and the regions in response to changing circumstances, thus ensuring a system where the fundamental tensions between centralisation and decentralisation can be managed (Ryan and Woods, 2015). Determining the precise delineation of powers requires engaging regions and key stakeholders in authentic discussions about what may be selected for centralisation and what should be retained within regional and local control. In an instructive Treasury working paper, Brady argued that when considering matters of decision making, local staff do not seek centralisation and reduction in autonomy as the solution to issues of concern; they seek strategic guidance, transparent communication, and access to the resources, expertise, functional systems and tools to do their job (Brady, 2002). And they seek the autonomy of local-level governance and leadership to respond appropriately to regional diversity

and give voice to local industry, iwi and communities.

A high level of governance expertise and leadership is needed across a multi-level network. Government concern regarding Te Pūkenga's performance and lack of progress saw the commissioning of an external review of Te Pūkenga's governance capacity. Reviewers noted the need for greater sector experience, particularly experience in organisational transformation of a large organisation, along with a critical need for specific expertise and capability in education IT and finance (Te Pūkenga, 2022) A simple return to the previous, regionally structured model is not the solution for improved sector performance. Rather, the quality of governance and leadership is key to success. The recently published 'tale of three regions' (Brownie et al., 2024) provides detailed insights into the impact of governance decisions on educational participation and outcomes within the regions served by three former ITPs, namely Wintec, Toi Ohomai and Eastern Institute of Technology. The study illustrates how purposely focused strategic governance decisions are needed to address equity issues.

Funding and national support

Undoubtedly, opportunities for efficiencies exist, such as unifying systems like programmes development, learning management platforms, programmes accreditation, quality control, reporting, finance, human resources and marketing (Ministry of Education, 2019b). However, such activities will not address the underlying long-standing deficits. Within multi-level governance models such as the California community college system, centralisation of administrative supports such as educational resources, learning management systems, finance and IT provides financially prudent solutions, and decentralisation of a range of decision-making functions supports responsiveness toward local need, equity and access issues (Nguyen et al., 2017). In New Zealand, with a funding system primarily focused on student numbers, the sector has had no choice but to rely on alternative funding streams. Thus, the focus in the recent past was on expanding international education to cross-subsidise domestic revenue. Maybe it is not surprising that in the absence of an adequate funding system, with the lack of international students while borders were closed during the Covid-19 pandemic, and with the pressure on leaders to improve performance against long-standing deficits, the 2020–23 reform implementation decisions swung too far in the pursuit of financial efficiency versus regionally dispersed and socially inclusive educational delivery.

Given that the unified funding system aspects of the reforms were only introduced from 1 January 2023, it is difficult to provide an indication of their success vis-à-vis previous models. However, one might question whether the learner component (approximately 7% of funds) that the system allocates to support underserved learners is sufficient, or whether the mode-of-delivery allocations sufficiently account for differences in delivery costs between cities and regions. The newly proposed Australian model which compensates for the additional costs of delivery into regions is worthy of exploration (Department of Education, 2024). Ultimately, funding must be at a level that is sustainable, fit-for-purpose and recognises the true cost of delivery.

Conclusion

If public policy and government investment is skewed centrally, major risks associated with regional disempowerment will continue to give rise to increased dissatisfaction, and unresolved inequality. Over-centralisation also holds the risk of excessive complexity in change management, with major disruption to the nation's future workforce pipeline, stalled programmes, missed deadlines, disenfranchised staff and educational deserts stifling economic development. Collectively, greater focus is needed on understanding and responding to specific learner needs within regions and enabling learners to continue learning over their lifetime. As the government resets vocational education and training policy, the appropriate balance of regional 'voice' must be re-established. Without doubt, New Zealand's higher education sector is financially constrained, but if the desired labour market and equity outcomes are to be achieved, a sustainable funding model must be implemented to ensure the correct balance between centralisation and decentralisation, efficiency and social inclusion.

1 Industry training organisations, established under the Industry Training Act 1992, were mandated to set national skills standards for their specific industry, provide advice and information to employers and trainees, arrange training delivery in on and off-job contexts, arrange trainee assessment and monitor training quality (see New Zealand Qualifications Authority, 2022).

2 For background papers to the reforms, see the hub for Education Conversation | Kōrero Mātauranga: https://conversation.education.govt.nz/conversations/reform-ofvocational-education/about-the-reform-of-vocational-education/background-papers/.

3 Of course, it is worth noting that the Tomorrow's Schools reforms which saw New Zealand schools become largely autonomous from 1989 (largely in response to criticisms that the previous system was over-centralised) ultimately resulted in a highly disconnected system, with 'winner' and 'loser' schools (Barker, 2023).

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References

Acemoglu, D., J.A. Robinson, R. Torvik and National Bureau of Economic Research (2016) 'The political agenda effect and state centralization', Cambridge, Mass: National Bureau of Economic Research, http://papers.nber.org/papers/w22250

Arcuri, A. and G. Dari-Mattiacci (2010) 'Centralization versus decentralization as a risk-return trade-off', *Journal of Law and Economics*, 2010 (53), pp.359–78

Arribas, J.M.G. and N. Papadakis (2019) *Governance Arrangements for Vocational Education and Training in ETF Partner Countries: analytical overview 2012–17*, European Training Foundation, https://www.etf.europa.eu/en/publications-and-resources/publications/governance-arrangements-vocational-education-and-training

Australian Government (2023) 'Regional university study hubs', https://www.education.gov.au/regional-university-study-hubs

Barca, F., P. McCann and A. Rodríguez-Pose (2012) 'The case for regional development intervention: place-based versus place-neutral approaches', *Journal of Regional Science*, 52 (1), pp.134–52, https://doi.org/https://doi.org/10.1111/j.1467-9787.2011.00756.x

Barker, M. (2023) 'When tomorrow comes: contextualising the independent review of Tomorrow's Schools', *Policy Quarterly*, 19 (3), pp.11–18

Blaire, N. (2023) 'For Māori there is good cause to fear change as this has led to catostrophic consequences', *New Zealand Herald*, 7 November, https://www.nzherald.co.nz/kahu/ngarimu-blair-for-maori-there-is-good-cause-to-fear-change-as-this-has-led-to-catastrophic-consequences/3KEWKROCZNDT5NOOCBZEZBVKIM/

Brady, N. (2002) *Striking a Balance: centralised and decentralised decisions in government*, working paper 02/15, https://www.treasury.govt.nz/sites/default/files/2007-09/twp02-15.pdf

Bray, M. (1991) 'Centralization versus decentralization in educational administration: regional issues', *Educational Policy*, 5 (4), pp.371–85, https://doi.org/10.1177/0895904891005004003

Brothaler, J. and M. Getzner (2010) 'Effects of fiscal decentralization on public sector growth in Austria', *Public Finance and Management*, 10 (1), pp.169–206

Brownie, S., P. Broman, C. Cooney and L. Comer (2024) 'Equity of access and participation in higher education in Aotearoa New Zealand: the tale of three regions', *Kōtuitui: New Zealand Journal of Social Sciences*, https://www.tandfonline.com/doi/full/10.1080/1177083X.2024.2319118

Brownie, S., A.-R. Yan, P. Broman, L. Comer and D. Blanchard (2023) 'Geographic location of students and course choice, completion, and achievement in higher education: a scoping review', *Equity in Education and Society*, https://doi.org/10.1177/27526461231200280

Charbit, C. (2011) *Governance of Public Policies in Decentralised Contexts: the multi-level approach*, regional development working paper 2011/04, Paris: OECD Publishing

Charbit, C. (2020) 'From "de jure" to "de facto" decentralised public policies: the multi-level governance approach', *British Journal of Politics and International Relations*, 22 (4), pp.809–19, https://doi.org/10.1177/1369148120937624

Cochrane, W. and I. Pool (2017) 'Māori in New Zealand's contemporary development', *Policy Quarterly*, 13 (Supplementary Issue), pp.47–54

Community College League of California (1998) *Towards a State of Learning: community college governance – an effective bilateral structure for a diverse system*, Community College League of California, https://ccleague.org/resources/papers-and-reports

Community College League of California (2022) 'The California community college system', in *California Community Colleges: trustee handbook*, Community College League of California, https://www.gavilan.edu/about/trustees_orientation/docs/pres_office/CCCSystem_TrustHdbk.pdf

Cornito, C. (2021) 'Striking a balance between centralized and decentralized decision making: a school-based management practice for optimum performance', *International Journal on Social and Education Sciences*, 3, pp.656–69, https://doi.org/10.46328/ijonses.217

Davis, M. (2023) 'Te Pūkenga is unproven and untrusted, so why is it wanting to scrap polytech brands?', *Stuff*, 25 January, https://www.stuff.co.nz/opinion/131044023/te-pkenga-is-unproven-and-untrusted-so-why-is-it-wanting-to-scrap-polytech-brands

Department of Education (2024) *Australian Universities Accord Final Report*, https://www.education.gov.au/accord-final-report

Duranton, G. (2018) Place-*based Policies for Development*, National Bureau of Economic Research

Durie, M. (1999) 'Te Pai Mahutonga: A model for Māori health promotion. Paper presented at Health Promotion Forum of New Zealand (Newsletter

European Training Foundation (2013) *Good Multilevel Governance for Vocational Education and Training*

European Training Foundation (2018) 'Good multilevel governance for vocational education and training', *Inform*, 24 (September)

Gibson, S., S. Patfield, J.M. Gore and L. Fray (2022) 'Aspiring to higher education in regional and remote Australia: the diverse emotional and material realities shaping young people's futures', *Australian Educational Researcher*, 49 (5), pp.1105–24, https://doi.org/10.1007/s13384-021-00463-7

Hernes, V. (2021) 'The case for increased centralization in integration governance: the neglected perspective', *Comparative Migration Studies*, 9 (1), 32, https://doi.org/10.1186/s40878-021-00247-z

Hillman, N. (2016) 'Geography of college opportunity: the case of education deserts', *American Educational Research Journal*, 53 (4), pp.987–1021, http://www.jstor.org/stable/24751621

Hillman, N. and T. Weichman (2016) *Education Deserts: the continued significant of 'place' in the twenty-first century*, Washington, DC: American Council on Education

Hudson, B., D. Hunter and S. Peckham (2019) 'Policy failure and the policy-implementation gap: can policy support programs help?', *Policy Design and Practice*, 2 (1), https://doi.org/10.1080/25741292.2018.1540378

Huntington, N. (2022) 'The reform of vocational education 2: looking to the future', in S. Chan and N. Huntington (eds), *Reshaping Vocational Education and Training in Aotearoa New Zealand*, Springer

Huntington, N. and S. Chan (2022) 'Reshaping for the future: challenges and innovations', in S. Chan and N. Huntingon (eds), *Reshaping Vocational Education in Aotearoa New Zealand*, Springer

Jackson, N. (2017) 'Introduction and overview: the ebbing of the human tide: what will it mean?', *Policy Quarterly*, 13 (Supplementary Issue), pp.3–9

Jong, J. and S.R. Faerman (2020) 'Centralization and decentralization: balancing organizational and employee expectations', in A. Farazmand (ed.), *Global Encyclopedia of Public Administration, Public Policy, and Governance*, Springer International, https://doi.org/10.1007/978-3-319-31816-5_4179-1

Karlsen, G.E. (1999) '"Decentralized-centralism" governance in education: evidence from Norway and British Columbia, Canada', *Canadian Journal of Educational Administration and Policy*, 13

Kenny, L. (2023a) 'Delay in roll-out of new nursing degrees "incredibly disappointing"', *Press*, 30 May, https://www.thepress.co.nz/nz-news/350016089/delay-roll-out-new-nursing-degrees-incredibly-disappointing

Kenny, L. (2023b) 'A third of staff see no future at mega polytech Te Pūkenga, survey finds', *Stuff*, 30 March, https://www.stuff.co.nz/

national/education/131638342/a-third-of-staff-see-no-future-at-mega-polytech-te-pkenga-survey-finds
Kline, P. (2010) 'Place based policies, heterogeneity, and agglomeration', *American Economic Review*, 100 (2), pp.383–87, https://doi.org/10.1257/aer.100.2.383
Lamb, S., Q. Maire, A. Walstab, G. Newman, E. Doecke and M. Davies (2018) *Improving Participation and Success in VET for Disadvantaged Learners*, NCVER research report, https://files.eric.ed.gov/fulltext/ED581698.pdf
Māori Tertiary Reference Group (2003) *Māori Tertiary Education Framework: a report by the Māori Tertiary Reference Group*, Wellington: Ministry of Education, https://www.beehive.govt.nz/sites/default/files/Maori%20Tertiary%20Education%20Framework.pdf
Maurice-Takerei, L. and H. Anderson (2022) 'Vocational education and training reform in Aotearoa New Zealand: the value of educators and education in a new VET environment', *New Zealand Annual Review of Education*, 27, pp.116–30, https://doi.org/10.26686/nzaroe.v27.8034
McCann, P. and A. Rodríguez-Pose (2011) *Why and When Development Policy Should Be Place-Based*, https://doi.org/doi:https://doi.org/10.1787/9789264120983-16-en
Ministry of Business, Innovation and Employment (2022a) 'Regional skills leadership groups', https://www.mbie.govt.nz/business-and-employment/employment-and-skills/regional-skills-leadership-groups/
Ministry of Business, Innovation and Employment (2022b) 'A summary: the challenges: employers are experiencing widespread and significant shortages of staff', https://www.mbie.govt.nz/business-and-employment/employment-and-skills/regional-skills-leadership-groups/wellington/regional-workforce-plans/regional-workforce-plan/part-1-a-workforce-plan-for-the-wellington-region/a-summary-the-challenges/
Ministry of Education (2019a) 'Aide memoire: reform of vocation education – suite of Cabinet papers', 25 June, Ministry of Education, https://conversation.education.govt.nz/conversations/reform-of-vocational-education/about-the-reform-of-vocational-education/background-papers/
Ministry of Education (2019b) 'Reform of vocational education programme: programme business case', 20 June, https://conversation-space.s3-ap-southeast-2.amazonaws.com/R+27+CP1+short+1+business+case.pdf
Ministry of Education (2020) 'Reform of vocational education', https://conversation.education.govt.nz/conversations/reform-of-vocational-education/
Ministry of Education (2022) 'Impacting Māori success', *Education Counts*, https://www.educationcounts.govt.nz/topics/bes/rongohia-te-hau-effective-support-for-culturally-responsive-teaching/6.-impacting-maori-success
Ministry of Education (2023) 'Reform of vocational education; what the government's proposals would mean for iwi and Māori stakeholders', https://conversation.education.govt.nz/assets/RoVE/Iwi-and-Maori-factsheet-Reform-of-Vocational-Education-V2.pdf
Mok, K.H. (2004) 'Centralization and decentralization: changing governance in education', in M. Ka-Ho (ed.), *Centralization and Decentralization: educational reforms and changing governance in Chinese societies*, Springer Netherlands, https://doi.org/10.1007/978-94-007-0956-0_1
Mueller, B. (2020) 'Why public policies fail: policymaking under complexity', *EconomiA*, 21 (2), pp.311–23, https://doi.org/10.1016/j.econ.2019.11.002
New Zealand Government (2014) *Tertiary Education Strategy 2014–2019*, https://assets.education.govt.nz/public/Documents/Ministry/Strategies-and-policies/Tertiary-Education-Strategy.pdf
New Zealand National Party (2023a) '100 day action plan', https://www.national.org.nz/100dayplan
New Zealand National Party (2023b) 'Curriculum backdown in more trouble at Te Pūkenga', https://www.national.org.nz/curriculum_backdown_is_more_trouble_at_te_p_kenga
New Zealand Nursing Council (2023) '*Institutions and programmes: nursing education programmes by provider*', http://nurseducation.org.nz/Nursing-Education-in-NZ/Institutions-and-Programmes
New Zealand Qualificaitons Authority (2022) 'Accredited industry training organisations', https://www.nzqa.govt.nz/providers/results.do?regionCode=0andtypeCode=ITOandnameQuery
Newman, M. (2022) 'Policy failure', 18 July, https://www.nzcpr.com/policy-failure/
Nguyen, T.T., J. Skeen, R. Mize, L. Navarett and R. McElhinney (2017) *It Begins With Us: the case for student equity*, https://ccleague.org/resources/papers-and-reports
Piercy, G. and B. Cochrane (2015) 'The skills productivity disconnect: Aotearoa New Zealand industry training policy post 2008 election', *New Zealand Journal of Economic Research*, 40 (1), pp.53–69, http://natlib.govt.nz/records/36064136
Rodríguez-Pose, A. (2018) 'The revenge of the places that don't matter (and what to do about it)', *Cambridge Journal of Regions, Economy and Society*, 11 (1), pp.189–209, https://doi.org/10.1093/cjres/rsx024
Rodríguez-Pose, A. (2022) 'The geography of discontent: helping fallen behind places', Das Progressive Zentrum, https://www.progressives-zentrum.org/en/the-geography-of-discontent-helping-fallen-behind-places/
Russell, D. (2024) 'No sooner than it arrived Te Pūkenga is gone for good', BERL economic insights, 12 February, https://berl.co.nz/economic-insights/no-sooner-it-arrived-te-pukenga-gone-good
Ryan, J. (2022) *Tertiary Education Sector: what we saw in 2021*, https://oag.parliament.nz/2022/tei-2021-audits/docs/tei-2021-audit-results.pdf
Ryan, J. (2023) *Summary: tertiary education institutions: 2021 audit results and what we saw in 2022*, https://oag.parliament.nz/2023/tei-audit-results/docs/summary-tei-audit-results.pdf
Ryan, R. and R. Woods (2015) *Decentralisation and Subsidiarity: concepts and frameworks for emerging economies*, occasional paper 15, https://www.uts.edu.au/sites/default/files/Decentralisation_Subsidiarity.pdf
Ryks, J. (2019) *Māori Heterogeneity in Regional Aotearoa New Zealand: an exploratory study*, National Institute of Demographic and Economic Analysis, University of Waikato
Schwanecke, G. (2023) 'Te Pūkenga break-up confirmed', *Post*, December, https://www.thepost.co.nz/nz-news/350126997/te-pukenga-disestablishment-confirmed
Sherwin, M., S. Davenport and G. Scott (2017) *New Models of Tertiary Education*, Wellington: New Zealand Productivity Commission,

https://www.productivity.govt.nz/assets/Documents/2d561fce14/Final-report-Tertiary-Education.pdf

Simmonds, P. (2022) 'Te Pūkenga: how it all went wrong', *Southland Times*, 3 August, https://www.stuff.co.nz/southland-times/southland-top-stories/129459032/te-pkenga--how-it-all-went-wrong

Smart, W. (2021) *The Impact of COVID-19 on Tertiary Education in New Zealand: initial impact on participation*, Wellington: Ministry of Education, https://www.educationcounts.govt.nz/publications/tertiary_education/education-learners/the-impact-of-covid-19-on-tertiary-education-in-new-zealand-initial-impact-on-participation

Smyth, R. (2012) '20 years in the life of a small tertiary education system: analysis and advice on tertiary education in New Zealand', paper presented at the general conference of the OECD Unit Institutional Management in Higher Education, Paris

Surbhi, S. (2023) 'Difference between centralization and decentralization', https://keydifferences.com/difference-between-centralization-and-decentralization.html#Definition

Te Pūkenga (2021) 'Programme redevelopments and unification', https://www.xn--tepkenga-szb.ac.nz/our-work/our-pathway/academic-delivery-and-innovation/programme-redevelopments-and-unification/

Te Pūkenga (2022) *2022 Te Pūrongo ā-Tau Annual Report*, https://www.xn--tepkenga-szb.ac.nz/assets/Publications/Te-Pukenga-Annual-Report-2022.pdf

Te Pūkenga (2023a) 'Briefing to the incoming minister', https://www.beehive.govt.nz/sites/default/files/2023-03/BIM%20-%20Minister%20of%20Education%20-%20Te%20Pūkenga.pdf

Te Pūkenga (2023b) 'A new kind of organisation', https://www.xn--tepkenga-szb.ac.nz/our-work

Te Pūkenga (2023c) *Tauākī Whāinga Mahi Statement of Performance Expectations 2023*, https://www.xn--tepkenga-szb.ac.nz/assets/Publications/2023-Statement-of-Performance-Expectations.pdf

Tertiary Education Advisory Commission (2001) *Shaping the Funding Framework: fourth report of the Tertiary Education Advisory Commission*, https://www.beehive.govt.nz/feature/tertiary-education-advisory-commission-shaping-funding-framework-117

Tertiary Education Commission (2018) 'ITP roadmap 2020 advice: tū kahikatea, the strength of a network', 2 October, https://conversation-live-storagesta-assetstorages3bucket-jsvm6zoesodc.s3.ap-southeast-2.amazonaws.com/public/RoVE/05-B-18-00652-ITP-Roadmap-2020-Briefing-Tu-Kahikatea-the-Strength-of2....pdf

Tertiary Education Commission (2019a) 'Reform of vocational education fact sheet: workforce development councils'

Tertiary Education Commission (2019b) 'RoVE news: August 28 2019', https://www.tec.govt.nz/vocational-education/vocational-education/about-vocational-education/vocational-education-news/rove-news-august-28-2019/

Tertiary Education Union (2019) 'RoVE announcements an opportunity for all New Zealanders', https://teu.ac.nz/news/rove-announcements-an-opportunity-for-all-new-zealanders/

Tertiary Education Union (2023) 'Curriculum change process rushed and disrespectful', https://teu.ac.nz/news/curriculum-change-process-rushed-and-disrespectful/

Tinetti, J. (2023) 'Parlimentary question 18145 (2023)', https://www.parliament.nz/en/pb/order-paper-questions/written-questions/document/WQ_18145_2023/18145-2023-dr-shane-reti-to-the-minister-of-education

Treasury (2019) 'Regulatory impact assessment: reform of vocational education', https://www.treasury.govt.nz/publications/risa/regulatory-impact-assessment-reform-vocational-education

Tse, A.M., V. Niederhauser, J.J. Steffen, L. Magnussen, N. Morrisette, R. Polokoff and J. Chock (2014) 'A statewide consortium's adoption of a unified nursing curriculum: evaluation of the first two years', *Nursing Education Perspectives*, 35 (5), pp.315–23, https://doi.org/10.5480/14-1387

Walker, G. de Q. (2023) 'Rediscovering the advantages of federalism', https://www.aph.gov.au/About_Parliament/Senate/Powers_practice_n_procedures/pops/pop35/c02

Wikaire, E., E. Curtis, D. Cormack, Y. Jiang, L. McMillan, R. Loto and P. Reid (2016) 'Patterns of privilege: a total cohort analysis of admission and academic outcomes for Māori, Pacific and non-Māori non-Pacific health professional students', *BMC Medical Education*, 16, https://doi.org/10.1186/s12909-016-0782-2

Williams, J. (2020) 'Industry-led training and apprenticeships: the New Zealand model', in B. Panth and R. Maclean (eds), *Anticipating and Preparing for Emerging Skills and Jobs*, Springer, https://doi.org/10.1007/978-981-15-7018-6_15

Williams, J. (2022) 'Industry training organisations: a perspective on history, evolution, and innovation', in S. Chan and N. Huntington (eds), *Reshaping Vocational Education in Aotearoa New Zealand*, Springer Nature, https://doi.org/10.1007/978-3-031-12168-5_2

Winters, J.R.D., M. Prado and I. Heidemann (2016) 'Nursing education oriented to the principles of the unified health system: perception of graduates', *Escola Anna Nery – Revista de Enfermagem*, 20, https://doi.org/10.5935/1414-8145.20160033

Dean C. Stronge, Alison Greenaway and Nick Kirk

Addressing the Colonial Legacies of Science

a Crown research institute case study

Abstract

Science needs to address its colonial legacies. While the Te Ara Paerangi Future Pathways envisioned reforms of the research, science and innovation system has lost momentum, individuals and organisations across Aotearoa recognise, and are reaffirming, that the country's future prospects lie in embracing Tiriti-led policies and practices. In 2021 Manaaki Whenua Landcare Research (a Crown research institute mandated to ensure that the life force and vitality of the land is strong) committed to weaving the principles of te Tiriti o Waitangi into its fabric. As employees, we use social practice theory in this article to evaluate the changes our organisation is experiencing on its journey to being Tiriti-led, and assess the lessons, impacts, successes and failures. This case study highlights the values–action gaps currently evident across the science system and provides insights into the various elements required to enable transformative change and new social norms within knowledge production policies and practice.

Keywords te Tiriti o Waitangi, social practice theory, decolonisation, Crown research institute

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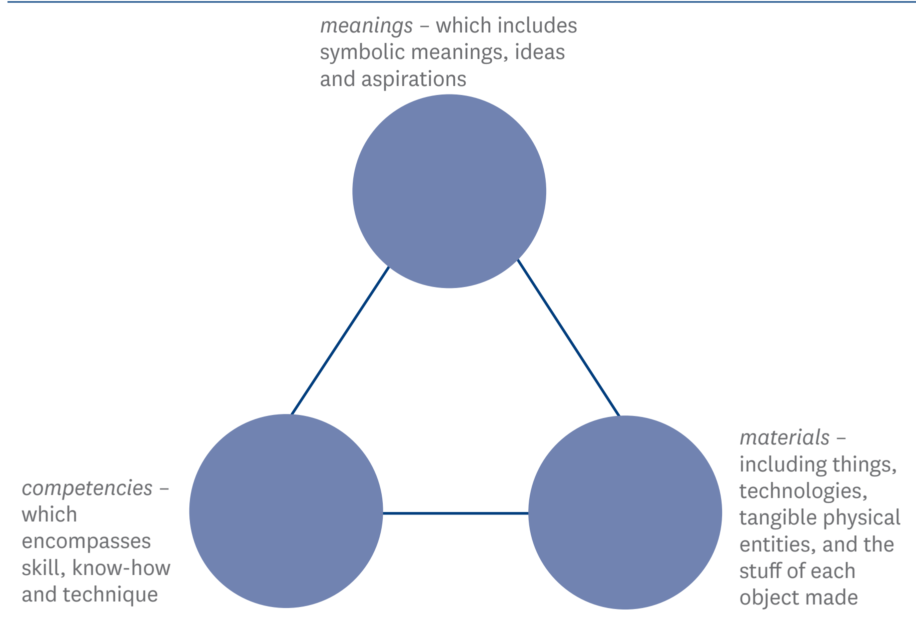
In order to advance the environmental, social, cultural and economic well-being of all of Aotearoa New Zealand, the research, science and innovation system needs to be Tiriti-led (Ministry of Business Innovation and Employment, 2022; Te Pūtahitanga, 2022). Recent research argues that for this to occur, the science system and science institutions need to first confront and address the colonial legacies of the system's cultures, norms and practices that continue to prioritise Western values, principles and processes as natural and universal (McAllister et al., 2022; Tadaki et al., 2022; Te Pūtahitanga, 2022; Hoskins and Jones, 2023; Moko-Painting et al., 2023). As Jackson (2016) reminds us, despite Western science's portrayal as such, 'there is no one superior knowledge …, there is no one superior knowledge system'. And, as Linda Tuhiwai Smith, explains, 'knowledge and the power to define what counts as real knowledge lie at the epistemic core of colonialism'. The challenge in addressing this colonial legacy 'is to simultaneously work with colonial and indigenous concepts of knowledge, decentring one while centring the other'. This, as Smith argues, requires an 'understanding [of] the complex ways in which the pursuit of knowledge is deeply embedded in the multiple layers of imperial and colonial practices' (Smith, 2021, pp.xii, 2).

Figure 1: Social practice theory elements and their links



Source: adapted from Shove et al., 2012

The Te Ara Paerangi Future Pathways reform programme envisioned a Tiriti-led research, science and innovation system (Ministry of Business Innovation and Employment, 2022); however, the new government has indicated that it plans to discontinue the reforms (Meduna, 2024). Thus, it is (currently) unresolved how – or if – the research and science system will look to address its colonial legacies. Despite the current political uncertainty, individuals and organisations across Aotearoa recognise, and are reaffirming, that the country's future prospects lie in embracing Tiriti-led policies and practices (e.g., Kingdon-Bebb, 2024; Margaret, 2024; Massey University, 2024; New Zealand Association of Scientists, 2022; Norman, 2024; Otago Daily Times, 2024; Post Primary Teachers' Association, 2024; Presbyterian Church of Aotearoa New Zealand, 2024; Public Health Association of New Zealand, 2024). Constructing a research, science and innovation system that supports Aotearoa's dual knowledge systems (mātauranga Māori and Western knowledge) remains a critical part of stimulating environmental, social, cultural and economic innovation that delivers on those prospects. Creating a system that supports both knowledges requires a focus on sustaining practices that support Tiriti-led approaches and identifying those practices that are barriers and should be removed (Amoamo and Ruckstuhl, 2023). As a Crown research institute, Manaaki Whenua Landcare Research's experiences over the last five years provides a case study of what this can look like and highlights lessons for consideration by policymakers and organisations seeking to implement Tiriti-led initiatives within their own organisations or across the system.

In recognition of the history and development of its relationship with Māori, the board and executive of Manaaki Whenua Landcare Research committed to embedding biculturalism within its science and research practice by weaving the principles of Te Tiriti[1] into its fabric (Manaaki Whenua Landcare Research, 2021). Guided by its strategy, Te Āpōpōtanga, and supported by its cultural capability development programme, Kia Māia, Manaaki Whenua is working with the waka taurua metaphor and framework (Maxwell et al., 2020; Harcourt et al., 2022); 'waka taurua' refers to two single-hulled canoes connected by a temporary woven interface to form a double-hulled canoe. Within this framework, one canoe is a waka, which reflects Māori world views, values and knowledge (mātauranga Māori); the other canoe is a rowing boat, which reflects broader societal world views, values and the Western knowledge, often represented by the principles of government agencies and practised by civil servants (Maxwell et al., 2020). While Manaaki Whenua, its Māori staff and partners will conduct assessment processes to know that both 'boats' are working in sync, as social researchers within Manaaki Whenua we have been using social practice theory to assess how the journey is progressing.

Social practice theory: indications that knowledge practices and performances are changing

Social practice theory focuses on practices (i.e., what people do, how they do it, why and with what), as opposed to the individuals who perform these practices. It is useful to think of a practice (e.g., writing a research proposal) as consisting of three connected elements: meanings, competencies and materials (see Figure 1).

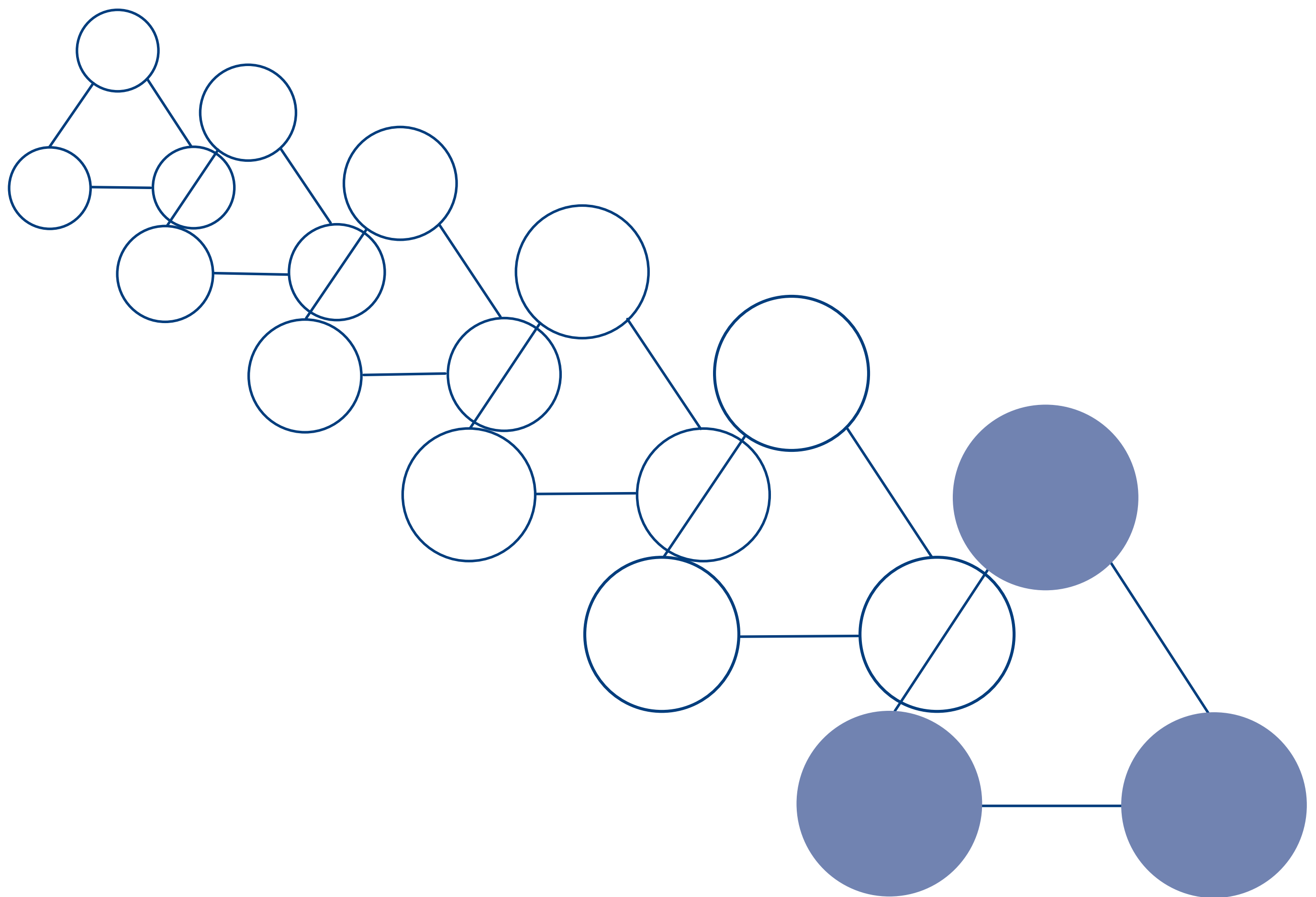
If we also think of practices as consisting of elements that are linked together in and through performance, we can see that 'practices emerge, persist and disappear as links between their defining elements are made and broken' (Shove, Pantar and Watson, 2012, p.21). Practices exist (as an entity) because they are performed over and over again (Warde, 2005; Shove, Pantar and Watson, 2012; Spurling et al., 2013) (Figure 2).

Knowledge production practices are defined by the shared meanings that are constructed and reproduced by practitioners. The repeated performance of research in the Western mode reinforces the idea of what research is. It sets the norms and boundaries of what is considered acceptable (Warde, 2005; Alkemeyer and Buschmann, 2017; Hui, 2017).

The constant reproduction of a practice through its performance creates a considerable inertia or persistence, reinforcing existing norms (Warde, 2005; Alkemeyer and Buschmann, 2017; Svennevik, 2021). This persistence or inertia has implications for shifting the science system to a 'new normal' (Spurling et al., 2013) – for example, one that supports dual knowledge systems (e.g., mātauranga Māori and Western knowledge) – as it reinforces the continued domination of the Western knowledge system over others.

Despite this, practices are not static and fixed. An important aspect of practice-as-performance is that each performance is slightly different each time. While the practice-as-entity forms a guiding structure, there is continuous internal variety within the practice-as-performance (Warde, 2005; Kuijer, 2014; Hui, 2017). Practices contain the seeds of constant change and innovation (Warde 2005), and this can 'create new

Figure 2: Practice-as-entity (solid circles) is dependent on, and is a part of, the repeated performance of practice-as-performance over time/space (open circles)



potentials for expansive action that deviates from social norms, creating dissensus and transformative change within social structures' (Svennevik, 2021, p.11). Successfully shifting to a 'new normal' requires an understanding of both the inertia and the potential for change inherent in all practices.

Study design

Methods including document reviews and observation enabled exploration of science practices and knowledge making. We have drawn conclusions primarily from interviews with staff at Manaaki Whenua, but recognise that we have also situated ourselves as participant observers (Atkinson and Hammersley, 1994).

A combination of sampling techniques was used to select interview participants. An invitation to participate in the research was sent to four offices ($n = 170$). Targeted invitations ($n = 16$) were also sent to staff in a further two offices. The targeted invitations used a combination of criterion and purposive sampling (Patton, 2015). We used the broad categories of 'research' and 'support' staff as the criteria for our targeted sampling, to ensure our data contained insights from across the different roles within Manaaki Whenua. Within these criteria, participants were selected based on the research team's knowledge of staff in research and support roles who were engaged with the organisation's aspiration of embedding biculturalism into its science and research practice.

Although some invitees declined to participate, expressing a wariness of being misinterpreted or deemed racist, 21 people agreed to be interviewed. Interviews followed a semi-structured approach and were conducted either in person or remotely via the Microsoft Teams video conferencing platform. All interviews were recorded with the consent of the participants, and the recordings transcribed by a professional transcription services company. Transcripts were managed using the computer software NVivo 12. Data was analysed using thematic coding to identify key themes (drawn from social practice theory: meanings, competencies, materials) that enabled or constrained practices relating to meeting Manaaki Whenua's aspiration.

Study findings: weaving the principles of te Tiriti into our fabric

Three broad findings emerged from our interviews with staff. These findings, discussed below, help explain some of the inertia in adopting Tiriti-led practices, but also provide insights into the variations in practice-as-performance, highlighting critical areas for intervention by Manaaki Whenua to support and guide staff towards a meaningful and transformative change.

There is a high level of support for weaving the principles of te Tiriti into Manaaki Whenua

> I think there is momentum. There is intent, … there is increased prominence of aspects of tikanga in the way we do

> things. So, I do think there's sort of a momentum in that direction, so I'm positive about that.
>
> I just think there's just more general acceptance there, that Māori are Treaty partners, that our research needs to be relevant to them – also that they're not outside it – they should be inside the tent.
>
> … a lot of people already felt that this was the right way to operate.

Although Manaaki Whenua has a long history of working with Māori, a deliberate shift is underway towards becoming a better Tiriti partner (Manaaki Whenua Landcare Research, 2021) and there is support for that shift from many Manaaki Whenua staff. For example, over 100 staff voluntarily gathered to connect to the first Tangata Tiriti Rōpū[2] hui for 2023.

Yet while there is strong support within Manaaki Whenua for change, it is increasingly recognised that the values and motivations of people alone will not necessarily lead to behavioural change (Hargreaves, 2011; Spurling et al., 2013; Svennevik, 2021). Known as the 'value–action gap', people's actions do not always match their values and beliefs because other factors can constrain, deflect or deter action (Shove, 2010; Shove et al., 2012; Spurling et al., 2013; Svennevik, 2021).

Action towards a 'new normal' involves taking account of the variations in practice-as-performance, and the trajectories of change, and working with them. Spurling et al. (2013) argue that we can only intervene in processes that are already underway. Therefore, there is a need to monitor and track shifts that are already occurring and intervene carefully, in ways that recognise history and context. Intervention requires the challenging and breaking of certain links and elements, which then need to be replaced and remade to ensure the practice is sustained (Hargreaves, 2011) and carried out in a way that supports a Tiriti-led science system. Social practice theory provides a means of identifying effective intervention strategies to help accomplish this replacing/remaking process.

Staff need to imagine what a 'new (bicultural) normal' means for their work

> I think we kind of have a general understanding of why it matters, but I don't think that we have the vision yet for what it's going to look like.
>
> I suppose in terms of bringing te Tiriti into our everyday work, I suppose I struggle with that in terms of the work that I do … How do the Tiriti principles work in practice so how could they be applied? And I guess to me, that's quite a big grey area.

Creation of spaces and learning resources for staff to engage in these discussions and with te ao Māori are ways identified in this study of challenging, breaking and remaking certain links and elements, leading towards the creation of new desired practices.

Lasting and transformative change requires imagining the future differently from existing practices and then steering those existing practices in more desirable directions (Spurling et al., 2013). Knowing the destination is important. While the 'end point' may move and evolve as you move along the journey, starting with an understanding of what being on the metaphorical waka taurua means for each person will identify which interventions will have a lasting and transformative effect.

One way of achieving transformative change is by substituting practices (Spurling et al. 2013). This entails substituting current undesirable practice with alternatives. The advantage of this intervention approach is that the different variations of the practice that currently exist across the organisation can be substituted with a single desired version or reimagined future.

However, imagining and substituting a new Tiriti-led science future requires some uncomfortable conversations across the science system. These include conversations around white privilege, colonisation, racism and white fragility (Buchanan, 2007; Bridgman, 2017; Pailey, 2019; Oxfam, 2023). 'Despite the aversion to it, discussing colonisation without talking about privilege and racism is telling half a story – the half that talks only of the victim and makes invisible the unearned benefits that Pākehā reap from colonisation' (Margaret, 2019). Being a Crown research institute means Manaaki Whenua is faced with a particular challenge of operating as and being perceived as a representative of the Crown that has dishonoured its Tiriti o Waitangi commitments as a normal part of its functioning (Scobie et al., 2023). This is one of the first points for critical reflection all those working in Crown research institutes need to give attention to.

Creation of spaces and learning resources for staff to engage in these discussions and with te ao Māori are ways identified in this study of challenging, breaking and remaking certain links and elements, leading towards the creation of new desired practices. Growing the capability of non-Māori, of tangata Tiriti, to respond appropriately to Tiriti-led initiatives is being addressed by Manaaki Whenua through its Kia Māia cultural capability development programme.[3] Through te Tiriti o Waitangi training, 'Being Manuhiri' workshops and a focus on tangata Tiriti responsibilities, Manaaki Whenua is beginning to break and remake links and elements and build capabilities for stronger relationships with te ao Māori. As part of this process, it has reflected on its relationships with tangata whenua and what

it means to be responsible manuhiri (guests and visitors). 'Manuhiri' refers to the values and etiquette associated with arrival at a marae (gathering space) or new place and conveys an encounter and relationship with tangata whenua through invitation and shared responsibility (Manaaki Whenua Landcare Research, 2023).

However, more work needs to be directed towards creating safe spaces for staff to engage in discussions and reflections about what it means to be tangata Tiriti, and the colonial legacies of the science system, as this comment indicates:

> I have a number of colleagues who, when your invite came out for this, discussed among themselves as to whether they should put themselves forward for the interview. But then decided not to, because it's a difficult space to be able to express your opinion as a Western scientist. I've heard people being called racist just for expressing their views as a scientist.

The need for a better articulation of what a Manaaki Whenua looks like with te Tiriti woven into its fabric is recognised by senior managers:

> We know we want to move this way and we think there's a better future, but none of us can very clearly articulate what that future looks like. And so, I think that's probably the next step in the process for us, is to imagine into that possibility space a bit more … and help us to see what the future model could look like.

Creating social change by substituting practices requires intervening in multiple elements (materials, competence and meanings) all at the same time. We need to think about all these elements when developing, articulating and implementing what the reimagined future looks like.

Centring mātauranga Māori without decentring Western colonial practices

> … the pervasiveness of our way of doing things is quite omnipresent. [It] … illustrates how our institutions and our systems and all the way we do things, they're so built around a Western way of thinking.
>
> And just even from an objective perspective, power relationship balance, well, of course we still hold power, we hold financial power and so forth.

… while building mātauranga Māori capability is essential in moving towards a dual knowledge base, equally essential is addressing the way colonisation has privileged, and continues to privilege, Western world views and governance structures over indigenous perspectives …

This study revealed that Manaaki Whenua's focus is on centring mātauranga Māori, and the capabilities development has not yet moved to decentring Western science. Building mātauranga Māori capability is essential as part of moving to a science system that is Tiriti-led, and Manaaki Whenua has made significant commitments towards this. For example, it has created, and resourced with funding, senior research roles (kaihautū) to lead Māori research across the organisation and to ensure that kairangahau (kaupapa Māori researchers) have adequate funding and support to develop their research. Manaaki Whenua has also been working with universities in Aotearoa to provide internships to encourage students into a kairangahau career at Manaaki Whenua. As previously mentioned, the Kia Māia programme also exists, developed to grow people's bicultural competency.

However, while building mātauranga Māori capability is essential in moving towards a dual knowledge base, equally essential is addressing the way colonisation has privileged, and continues to privilege, Western world views and governance structures over indigenous perspectives (Whyte, 2016; Smith, 2021). Confronting, challenging and deconstructing this pervasive colonial legacy is a key component of ensuring that a shift to Tiriti-led science results in meaningful and transformative change. The asymmetrical power relations inherent 'in how social institutions are structured and operationalised in ways that favour powerful and privileged populations' (Whyte, 2016, p.159) largely goes unrecognised within white society (Margaret, 2019; Oxfam, 2023). While mātauranga Māori is portrayed aspirationally in the waka taurua framework as a waka sitting equally alongside the Western knowledge rowboat (Maxwell et al., 2020), the reality is a waka connected to a supertanker, because of the pervasiveness of how institutions and systems are built around and dictated by Western ways of thinking and doing. As Parsons et al. (2021) highlight, the state favours formats that fit its needs (world views and governance structures) rather than indigenous perspectives. Organisations need to critically reflect on the supertanker role their operating procedures, polices and structures (i.e., materials) play in maintaining practices that reinforce the continued domination of the Western knowledge system over others. Shifting people's values and attitudes (meanings) and building their capability (competencies) with mātauranga Māori will, on their own, not result in meaningful practice changes.

> [This] has huge implications for the structure of the organisation and the policies it has, which means spending

> an enormous amount of time and effort on making those changes to the organisation to allow the researchers to then be able to do the research that way … There are tools that the organisation could use to help map out how big a challenge that is and the kinds of things that might need to happen … [But] if that's forgotten about, then the whole thing [fails]. And so, what can happen is the victim, which is us researchers, end up getting blamed for not doing this kind of research when our context won't let us.

Similar sentiments could be expressed for other Crown research institutes if this aspect is overlooked in any redesign of Aotearoa's science system. Unless the colonial legacies of the science system's cultures, norms and practices are addressed, Crown research institutes, despite their best intentions, will not be able to fulfil the ambitions of a Tiriti-led science system.

Disrupting current institutional and systemic racism, and the colonial legacy of the supertanker, requires simultaneously decentring Western practices that privilege this world view while building mātauranga Māori capability (Smith, 2021). One approach to this is through re-crafting practices (Shove, Pantar and Watson, 2012; Spurling et al., 2013). Re-crafting focuses intervention on phasing out or changing elements of unsustainable or undesirable practices with the aim of shifting the practice towards more desirable forms of performance. Within Manaaki Whenua, 'Being Manuhiri' resources (materials) are being developed to help re-craft settler- or colonial-centric elements and assist staff to build capability (competencies) in addressing them.

Another approach is to look at how practices interlock with one another and how interventions focused (or not) on those connections can (or cannot) cause change to ripple through those interconnected practices (Watson, 2012; Spurling et al., 2013). A key aspect of centring mātauranga Māori practices and decentring Western ones is that they occur simultaneously (Smith, 2021): each informs and enables change to ripple through to the other. Focusing on one over the other can inhibit change. For example, making Manaaki Whenua a great place for kairangahau to work is one driver of building mātauranga Māori capability within the organisation. But centring mātauranga Māori without decentring Western practices risks becoming 'inclusion', a model where the onus is largely on Māori to change and fit into existing ways (Moewaka Barnes et al., 2021; Hoskins and Jones, 2022). Not simultaneously addressing the colonial legacy of science jeopardises making Manaaki Whenua a place where kairangahau see themselves and want to belong.

Inclusion can let institutions off the hook by providing the appearance of addressing the issue without addressing the fact that they themselves are a significant part of the problem (Hoskins and Jones, 2022). In moving towards a Tiriti-led approach, organisations need to reflect critically on whether they are truly addressing the supertanker or are in fact just following the well-worn path of inclusion. Building a dual knowledge system requires as much effort being put into this side of the process as goes into building mātauranga Māori capability.

> Although central government's impetus to embed te Tiriti has lost momentum, there have been strong showings of support for te Tiriti publicly by both Māori and tangata Tiriti – for example, at Tūrangawaewae and at Waitangi Day events across the country …

Conclusion

> [In] dealing with Māori partner organisations, … nearly all of them have got a hell of a lot better institutional memory than we do. And they remember the picture in the round. They remember who was supporting them. They remember why. They remember the conflict. They remember the issues not resolved … certainly they remember the people who went the extra mile, because I think we tend to lose sight of the fact that government waxes and wanes in its commitment to Māori. We might think that we are currently in a waxing period. Whether we are in a waning period in the future, we don't know, but the one thing that Māori organisations remember, who the fair-weather friends were and who were there in the foul weather as well.

Manaaki Whenua Landcare Research's journey of moving to a 'new normal' where te Tiriti o Waitangi is woven into its fabric is a challenge all science organisations will need to grapple with, in one way or another, if Aotearoa is to move to a science system that genuinely supports dual its knowledge systems (mātauranga Māori and Western knowledge). Our research provides some insights and highlights some lessons for consideration by policymakers and organisations seeking to implement Tiriti-led initiatives within their own organisations. Within Manaaki Whenua it is not the motivations or values of staff that are constraining Tiriti-led practices. Rather, it is aspects of the competencies and material elements that have the greatest influence on the performance of practices. Intervening in these elements would provide staff with the support and guidance needed to enable them to establish the norms, behaviours and practices consistent with a Tiriti-led science system. Creation of safe spaces for conversations and reflections on tangata Tiriti responsibilities,

'Being Manuhiri' learning resources that help re-craft settler- or colonial-centric elements and assist staff with building capability, and workshops provided by Manaaki Whenua to help staff critically reflect on their positionality and the colonial legacies of their science, have all been identified as ways to address this.

Although central government's impetus to embed te Tiriti has lost momentum, there have been strong showings of support for te Tiriti publicly by both Māori and tangata Tiriti – for example, at Tūrangawaewae and at Waitangi Day events across the country (Delahunty, 2024; Margaret, 2024; McRoberts, 2024). Additionally, organisations across Aotearoa have been reaffirming their commitment to te Tiriti (e.g., Kingdon-Bebb, 2024; Massey University, 2024). Stimulating environmental, social, cultural and economic innovation is critical to the future well-being of Aotearoa. Having a research, science and innovation system that supports Aotearoa's dual knowledge systems (mātauranga Māori and Western knowledge) is a key component of this. Redesigning Aotearoa's science system to achieve this will require significant organisational and individual changes in practice. Successfully shifting to a 'new normal' requires an understanding of both the inertia and the potential for change inherent in all practices. Social practice theory can provide this understanding. It can provide a guiding policy framework to identify which combination of elements make up the practice-as-performance and where interventions are needed to overcome the status quo inertia that maintains and reinforces the continued dominance of the Western knowledge system over others.

1 Partnership, participation and active protection (Manaaki Whenua Landcare Research, 2021).
2 Tangata Tiriti Rōpū is a forum for non-Māori (tangata Tiriti) Manaaki Whenua staff to discuss and learn about what it means to be tangata Tiriti and Tiriti-based ways of working.
3 This programme has been developed to help all staff understand and develop the skills and competencies required to deliver on Manaaki Whenua's Tiriti commitment. Baseline competencies include being able to deliver a pepeha, mihi, plus several waiata and karakia; having a basic knowledge of te Tiriti o Waitangi; and for staff who do not identify as Māori, what it means to be tangata Tiriti.

References

Alkemeyer, T. and N. Buschmann (2017) 'Learning in and across practices: enablement as subjectivation', in A. Hui, T. Schatzki and E. Shove (eds), *The Nexus of Practices: connections, constellations, practitioners*, New York: Routledge

Amoamo, M. and K. Ruckstuhl (2023) 'Reforming the research and science system for Māori innovation practice theory for policy implementation', *Policy Quarterly*, 19 (4), pp.77–85

Atkinson, P. and M. Hammersley (1994) 'Ethnography and participant observation', in N.K. Denzon and Y.S. Lincoln (eds), *Handbook of Qualitative Research*, Thousand Oaks: Sage

Bridgman, G. (2017) 'Perceptions of community safety in West Auckland and white fragility', *Pacific Journal of Community Development*, 3 (2), pp.21–30

Buchanan, R. (2007) 'The dementia wing of history', *Cultural Studies Review*, 13 (1), pp.173–86

Delahunty, C. (2024) 'This moment of fresh betrayal', *E-Tangata*, 25 February, https://e-tangata.co.nz/comment-and-analysis/this-moment-of-fresh-betrayal/

Harcourt, N., S. Awatere, J. Hyslop, Y. Taura, M. Wilcox, L. Taylor, J. Rau and P. Timoti (2022) 'Kia manawaroa kia puawai: enduring Māori livelihoods', *Sustainability Science*, 17 (2), pp.391–402

Hargreaves, T. (2011) 'Practice-ing behaviour change: applying social practice theory to pro-environmental behaviour change', *Journal of Consumer Culture*, 11 (1), pp.79–99

Hoskins, T.K. and A. Jones (2022) 'Indigenous inclusion and indigenising the university', *New Zealand Journal of Educational Studies*, 57 (2), pp.305–20

Hui, A. (2017) 'Variation and the intersection of practices', in A. Hui, T. Schatzki and E. Shove (eds), *The Nexus of Practices: connections, constellations, practitioners*, New York: Routledge

Jackson, M. (2016) Keynote address, Lowitja Institute International Indigenous Health and Wellbeing conference, Melbourne, 8 November, https://www.youtube.com/watch?v=oWjewpB6UX8

Kingdon-Bebb, K. (2024) 'Our work to restore nature must also honour Te Tiriti', *Newsroom*, 5 February, https://newsroom.co.nz/2024/02/05/our-work-to-restore-nature-must-also-honour-te-tiriti/

Kuijer, S.C. (2014) 'Implications of social practice theory for sustainable design', PhD thesis, https://www.researchgate.net/profile/Lenneke-Kuijer/publication/266247132_Implications_of_Social_Practice_Theory_for_Sustainable_Design/links/55d355a008ae0a341722651e/Implications-of-Social-Practice-Theory-for-Sustainable-Design.pdf

Manaaki Whenua Landcare Research (2021) *Te Āpōpōtanga: our land, our people, our future*, Lincoln: Manaaki Whenua Landcare Research

Manaaki Whenua Landcare Research (2023) 'Being manuhiri', https://www.landcareresearch.co.nz/partner-with-us/iwi-and-maori-partners/being-manuhiri/

Margaret, J. (2019) 'Becoming "really Pākehā"', *E-Tangata*, 8 December, https://e-tangata.co.nz/reflections/becoming-really-pakeha/

Margaret, J. (2024) 'Waitangi Day 2024 solidarity hīkoi', 14 February, https://groundwork.org.nz/waitangi-day-2024-solidarity-hikoi/

Massey University (2024) 'Video on our commitment to being a Te Tiriti-led university', https://www.massey.ac.nz/about/news/watch-video-on-our-commitment-to-being-a-te-tiriti-led-university/

Maxwell K., S. Awatere, K. Ratana, K. Davies and C. Taiapa (2020) 'He waka eke noa/we are all in the same boat: a framework for co-governance from Aotearoa New Zealand', *Marine Policy*, 121, 104213, https://doi.org/10.1016/j.marpol.2020.104213

McAllister, T.G., S. Naepi, E. Wilson, D. Hikuroa and L.A. Walker (2022) 'Under-represented and overlooked: Māori and Pasifika scientists in Aotearoa New Zealand's universities and crown-research institutes', *Journal of the Royal Society of New Zealand*, 52 (1), pp.38–53

McRoberts, M. (2024) 'Thousands stream in to Tūrangawaewae Marae for Hui-ā-Iwi', *Newshub*, 20 January, https://www.newshub.co.nz/home/politics/2024/01/thousands-stream-in-to-t-rangawaewae-marae-for-hui-iwi.html

Meduna, V. (2024) 'New Zealand scraps science reform plan, prompting fears of budget cuts', 16 February, https://www.science.org/content/article/new-zealand-scraps-science-reform-plan-prompting-fears-budget-cuts

Ministry of Business, Innovation and Employment (2022) *Te Ara Paerangi: future pathways white paper 2022*, Wellington: Ministry of Business, Innovation and Employment

Moewaka Barnes, H., G. Harmsworth, G. Tipa, W. Henwood and T. McCreanor (2021) 'Indigenous-led environmental research in Aotearoa New Zealand: beyond a transdisciplinary model for best practice, empowerment and action', *AlterNative*, 17 (2), pp.306–16

Moko-Painting, T.K., L. Hamley, D. Hikuroa, J. Le Grice, T. McAllister, G. McLellan, H. Parkindon, L. Renfrew and S.T. Rewi (2023) '(Re) emergence of Pūtaiao: conceptualising kaupapa Māori science', *EPF: Philosophy, Theory, Models, Methods and Practice*, 2 (1–2), pp.11–37

New Zealand Association of Scientists (2022) 'NZAS council perspectives on mātauranga Māori and science', *New Zealand Science Review*, 78 (1–4), pp.55–7

Norman, R. (2024) 'Standing for te Tiriti o Waitangi', 7 February, https://www.greenpeace.org/aotearoa/story/standing-for-te-tiriti-o-waitangi/

Otago Daily Times (2024) 'Mayors reaffirm commitment to Tiriti', *Otago Daily Times*, 8 February

Oxfam (2023) *Inclusive Language Guide*, Oxford: Oxfam GB

Pailey, R.N. (2019) 'De-centring the "white gaze" of development', *Development and Change*, 51 (3), pp.729–45

Parsons, M., K. Fisher and R.P. Crease (2021) 'Environmental justice and indigenous environmental justice', in *Decolonising Blue Spaces in the Anthropocene: freshwater management in Aotearoa New Zealand*, Cham: Palgrave Macmillan

Patton, M.Q. (2015) *Qualitative Research and Evaluation Methods: integrating theory and practice*, 4th edn, Los Angeles: Sage

Post Primary Teachers' Association (2024) 'Te Tiriti must continue to be honoured and advanced in our secondary schools', media release, 5 February, https://www.ppta.org.nz/news-and-media/te-tiriti-must-continue-to-be-honoured-and-advanced-in-our-secondary-schools/

Presbyterian Church of Aotearoa New Zealand (2024) 'Moderator's Waitangi Day message 2024', https://www.presbyterian.org.nz/moderators-waitangi-day-message-2024

Public Health Association of New Zealand (2024) 'Upholding te Tiriti o Waitangi for health equity: PHANZ Waitangi Day statement', https://www.pha.org.nz/newsandpublications/waitangi-day-statement

Scobie, M., A. Heyes, R. Evans and P. Fukofuka (2023) 'Resourcing rangatiratanga as part of constitutional transformation: taking equity and sovereignty seriously', *Kōtuitui: New Zealand Journal of Social Sciences Online*

Shove, E. (2010). 'Beyond the ABC: climate change policy and theories of social change', *Environment and Planning A*, 42 (6), pp.1273–85

Shove, E., M. Pantzar and M. Watson (2012) *The Dynamics of Social Practice: everyday life and how it changes*, London: Sage

Smith, L.T. (2021) *Decolonizing Methodologies: research and indigenous peoples*, 3rd edn, London: Bloomsbury

Spurling, N., A. McMeekin, D. Southerton, E. Shove and D. Welch (2013) *Interventions in Practice: reframing policy approaches to consumer behaviour*, Sustainable Practices Research Group report, Manchester: University of Manchester

Svennevik, E. (2021) 'Providers and practices: how suppliers shape car-sharing practices', *Sustainability*, 13 (4), 1764, https://doi.org/10.3390/su13041764

Tadaki, M., J.R. Astwood, J. Ataria, M. Black, J. Clapcott, G. Harmsworth and J. Kitson (2022) 'Decolonising cultural environmental monitoring in Aotearoa New Zealand: emerging risks with institutionalisation and how to navigate them', *New Zealand Geographer*, 78 (1), pp.37–50

Te Pūtahitanga (2022) 'A Tiriti-based research, science and innovation (RSI) system', Te Ara Paerangi Future Pathways Green Paper submission, https://www.mbie.govt.nz/dmsdocument/20886-te-putahitanga-te-ara-paerangi-future-pathways-green-paper-submission-pdf

Warde, A. (2005) 'Consumption and theories of practice', *Journal of Consumer Culture*, 5, pp.131–53

Watson, M. (2012) 'How theories of practice can inform transition to a decarbonised transport system', *Journal of Transport Geography*, 24, pp.488–96

Whyte, K. (2016) 'Indigenous experience, environmental justice and settler colonialism', http://dx.doi.org/10.2139/ssrn.2770058

Sandhiya Gounder, Karly Burch
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Will Migrant Pacific Workers Be a Part of Aotearoa New Zealand's Farming Futures?

A call to design future agritech industry transformation plans with a reciprocal framework

Abstract

In 2020 and 2023 the New Zealand government depicted a vision for technology-enhanced farming futures in the Agritech Industry Transformation Plan. However, the plan overlooks the critical role of seasonal, migrant Pacific workers in sustaining Aotearoa New Zealand's horticulture industry. It also contains little practical planning for what a transition from a largely human to a largely robotic workforce should entail. We show how these omissions reflect an extractive framework which threatens workers' wellbeing and the sustainability of Aotearoa New Zealand's horticulture industry. We provide recommendations for how future agritech industry plans can consciously adopt a more sustainable reciprocal framework.

Keywords agricultural technology (agritech), RSE scheme, collaborative design (co-design), extractivism, ethic of reciprocity, agricultural work

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Introduction: where are the workers?

> Horticultural labour remains the most significant issue in the sector globally. In New Zealand this is felt particularly for the kiwifruit, apple and grape sectors. The need for on-farm and on-orchard automation to help address this issue is only going to grow, providing New Zealand with a multi-billion dollar commercial opportunity. (Ministry of Business, Innovation and Employment, 2020, p.33)

The New Zealand government's 2020 and updated 2023 Agritech Industry Transformation Plan (AITP)[1] depicts a vision for Aotearoa New Zealand's farming future: a 'high-skilled' agricultural[2] workforce would engage in 'high-value' work (ibid., pp.8, 10) with the support of agricultural technologies (agritech). As the introductory quote illustrates, this vision focuses specifically on Aotearoa New Zealand's horticulture industry,[3] although it extends globally: the AITP imagines that growers within and beyond Aotearoa New Zealand could benefit from locally produced agritech. The plan's vision encompasses a range of topics, from agritech's role in achieving goals of environmental sustainability, to its role in increasing productivity, increasing future

work opportunities and increasing workforce diversity. The plan also points to collaborative design (co-design) as playing a role in achieving these goals.

While the industry transformation plan programme was closed by the new coalition government in late 2023 (Ministry of Business, Innovation and Employment, 2023b), the AITP continues to provide a useful glimpse into the ways dominant visions of more automated farming futures can overlook the critical role the current agricultural workforce plays in sustaining Aotearoa New Zealand's horticulture industry – for example, how the labour of seasonal, migrant Pacific workers currently sustains Aotearoa New Zealand's horticulture industry via the recognised seasonal employer (RSE) scheme (Immigration New Zealand, 2023; McConnell and McConnell, 2023). An agritech vision which overlooks the current agricultural workforce is problematic for two reasons. First, it allows policymakers to neglect their responsibility to articulate what the social transformation from a largely human to a largely robotic workforce should look like in practice. Second, it obscures how the AITP and the RSE scheme are inherently interconnected: for example, how the AITP's future visions are influenced by the outcomes of the RSE scheme and how the RSE scheme will be influenced by any agritech industry transformation. We will address these interconnections in more detail below.

Through a literature review, document review and critical analysis, we show how the AITP's underrepresentation of RSE workers and lack of practical planning regarding their future work trajectories reflects an extractive framework which threatens workers' wellbeing and the sustainability of Aotearoa New Zealand's horticulture industry. Instead, we recommend that authors of future agritech plans consciously adopt a reciprocal framework through: 1) uncovering extractive assumptions about agricultural workers and work; 2) changing the language used to discuss work and workers; and 3) providing agricultural workers with opportunities to co-design their future work trajectories.

Extractive labour relations are intrinsic to capitalist economic systems (Koshy, Byrd and Jefferson, 2022; Marx and Engels, 1948). In this article we define an extractive framework as values and practices that prioritise the interests of employers over the fair treatment and welfare of workers. In the realm of industrial relations, capitalists are regularly looking for innovative ways to gain more capital, often at the expense of workers' livelihoods and wellbeing. Technology has long played a role in entrenching capitalist power relations (Marx and Engels, 1948). While it does not have to be the case, new technologies offer possibilities for employers to further exploit workers (Liu, 2020; Walsh, 2020).

While an extractive framework can be economically rewarding for employers in the short term, its lack of enduring reciprocal relations leads to many uncertainties around worker retainment

While an extractive framework can be economically rewarding for employers in the short term, its lack of enduring reciprocal relations leads to many uncertainties around worker retainment (Anderson and Tipples, 2014). An extractive framework is particularly risky during a time of industry transformation: if workers cannot see themselves as a part of an industry's future vision, they may be less inclined to continue working throughout the transition period. These risks are becoming more evident for Aotearoa New Zealand's horticulture industry since Pacific leaders have begun raising concerns about their countries serving as the 'outposts' which 'grow' labourers for Australia and Aotearoa New Zealand (Dziedzic, Voloder and Raela, 2023; Movono, Scheyvens and Aukram, 2023).

Alternatively, a reciprocal framework promotes economic sustainability as it more accurately represents the reality of employment relations: employers and employees are already mutually reliant upon each other, and without both productive and reproductive labour, capitalism would collapse (Federici, 2012). Reciprocity is not a new concept, particularly among indigenous peoples and scholars. Reciprocity between people and the environment is a fundamental element of many indigenous values and knowledge systems (Diver et al., 2019). An 'ethic of reciprocity' can also be found in many indigenous and anti-colonial research methodologies which directly respond to dominant modes of exploiting, dispossessing and degrading indigenous peoples, their lands and their knowledge (Liboiron, 2021; Raman, 2023; Rosiek, Snyder and Pratt, 2020, p.340; Tuck and McKenzie, 2014; Tuhiwai Smith, 2021). More specifically, reciprocity is a value grounding both kaupapa Māori and Pacific research methodologies, themselves designed to reflect everyday ways of relating for Māori and Pacific peoples (Naepi, 2019; Walker, Eketone and Gibbs, 2006). Recognising the importance of reciprocity for Māori and Pacific peoples is particularly important in the context of Aotearoa New Zealand's horticulture industry, where Māori made up approximately 17% of the horticultural workforce in 2018 and Pacific RSE workers 33% of the horticultural workforce in 2020 – with RSE quotas climbing every year (Green and Schulze, 2020; Immigration New Zealand, 2022, 2023; New Zealand Kiwifruit Growers Incorporated, 2020).

Drawing on insights from the RSE scheme and from the authors' engagement in a publicly funded agritech co-design project, MaaraTech, we develop recommendations for how future agritech industry transformation plans could consciously adopt a reciprocal framework. This reciprocal framework would acknowledge the mutual reliance already existing between employers and employees,

and nurture this into a mutual, fair and respectful exchange of benefits. As readers will notice, we view extractivism and reciprocity as existing on a spectrum. This means entities such as the RSE scheme and the AITP are neither fully extractive nor fully reciprocal. Therefore, our call for adopting a reciprocal framework is intended to encourage policymakers to become aware of this spectrum and to do their best to make decisions that foster reciprocity and limit extractivist practices: for example, through developing agritech visions and policies that promote sustainable and mutually beneficial relationships between employers and employees.

In making our argument we begin with an overview of the reciprocal and extractive frameworks currently shaping the RSE scheme. We then illustrate how the same extractive framework appears within the AITP, before introducing our recommendations for consciously adopting a reciprocal framework when drafting future agritech industry transformation plans.

The RSE scheme: reciprocal, extractive or both?

Hints of reciprocity in the RSE scheme

The RSE scheme was established in 2007 to address labour shortages in Aotearoa New Zealand's horticulture sector and to aid the development of Pacific countries. There are nine countries currently included in the scheme: Fiji, Kiribati, Nauru, Papua New Guinea, Sāmoa, Solomon Islands, Tonga, Tuvalu and Vanuatu (Immigration New Zealand, 2023). Many narratives exist around the RSE scheme which paint a complex picture. Often the scheme only makes the news when controversies arise (e.g., Chittock, 2022; Prasad, 2022). Yet many continue to refer to the RSE scheme as a 'triple win', for workers, their home countries and their employers (Gibson and McKenzie, 2014a, p.208; Wilson and Fry, 2022).

The importance of RSE workers for Aotearoa New Zealand's horticulture industry has been growing over the 17 years that the scheme has been in place. For reference, RSE quotas increased by 19% between 2021 and 2022 (Immigration New Zealand, 2022). The cap on RSE workers reached 19,000 in the 2022/23 season and increased to 19,500 in the 2023/24 season, with promises from the new coalition government that those numbers will rise to 38,000 or more (Immigration New Zealand, 2022, 2023; Luxon, 2023; McConnell and McConnell, 2023; Movono, Scheyvens and Aukram, 2023). RSE workers are also known for their productivity, dependability and enthusiasm, which greatly benefit their employers and the overall performance of the sector (Maguire and Johnson, 2016, 2017).

While Aotearoa New Zealand benefits greatly from RSE workers, RSE workers also experience some benefits in exchange for their labour. Some scholars have shown that the scheme has become a critical income source for many Pacific peoples, their families, their communities and their countries (Gibson and McKenzie, 2014b). Others have argued that, at an individual level, RSE workers are able to earn a higher income than they would in their home countries (Brickenstein and Tabucanon, 2013; Hammond and Connell, 2009; Maclellan, 2008). Journalist Patrick O'Sullivan (2018) showed that income revenue from the RSE scheme has provided workers and their families with opportunities to build and improve homes, to pay for higher education for children, and to save and invest. Others have discussed how income gained from the RSE scheme has provided opportunities for workers to fund various community projects (Gibson, McKenzie and Rohorua, 2008; Maclellan, 2008). In addition, some have noted that the skill sets workers develop through their work in Aotearoa New Zealand have helped them to create opportunities for themselves in their home countries (O'Sullivan, 2018; see Dun, Klocker and Head, 2018 for an example from Australia). All of these aspects are important, but unfortunately are not enough to immunise workers against the consequences of a predominantly extractive framework which shapes RSE policy and how many employers relate with RSE workers.

The importance of RSE workers for Aotearoa New Zealand's horticulture industry has been growing over the 17 years that the scheme has been in place.

The extractive realities of the RSE scheme

While the hints of reciprocity in the RSE scheme are all important, the scheme's potential to foster reciprocity is troubled by its underlying extractive framework. This extractive framework can appear in how people talk about workers and their expertise. For example, the same scholars touting the RSE scheme's positive dimensions of reciprocity might also refer to RSE workers as 'unskilled' (Gibson, McKenzie and Rohorua, 2008, p.187). Seventeen years into the RSE scheme's implementation, it is now possible to see how these linguistic framings contribute to real consequences for workers, their families and communities. As we will illustrate below, employers are not the only ones responsible for negative consequences experienced by RSE workers; immigration policies (such as the RSE scheme) create the conditions for extractive employment relations to thrive.

The consequences of this extractive framework are perhaps most evident in recent media articles which continue to paint a damning picture of RSE worker exploitation (see Frame, 2022; Solignac, 2022; Tuiono and Menéndez March, 2022). Yet, taking a wider historical lens, it is possible to notice that the extractive framework driving the RSE scheme was already present in Aotearoa New Zealand's horticulture industry. Local workers were driven away from agricultural jobs in the early 2000s due to factors such as low wages, requirements for domestic migration, and work being classified as low-skilled (Anderson and Tipples, 2014). These extractive processes were what sparked the

necessity to hire migrant workers in the first place. However, rather than developing policies to address the underlying extractive labour relations that drove local workers away, the same extractive frameworks continue to shape RSE policy today. For example, RSE workers often endure poor-quality accommodation, overcrowding, inadequate cooking facilities and rising accommodation costs (Maclellan, 2008; Petrou and Connell, 2018). RSE workers are expected to pay their own living expenses throughout their stay; however, there might not always be paid work opportunities available to support them with those expenses (Johnston, 2022).

Extractive frameworks can also be seen in how the work requires workers to leave their home communities, often without the social supports they need to thrive (Koshy, Byrd and Jefferson, 2022). Worker isolation is a huge issue within the RSE scheme, as the scheme does not allow workers to bring their families to Aotearoa New Zealand (Gibson, McKenzie and Rohorua, 2008). This lack of social support causes significant hardship which harms many people in a range of ways. For example, workers might need to live in an isolated rural setting away from friends and family. This isolation might lead to a loss of important cultural connections, which in turn might lead workers to resort to alcohol as a stress release mechanism (Kumar, 2012). Moreover, workers' absence from their home communities also has an impact on their family members back home. For example, children of RSE workers often experience fear and loneliness due to the absence of parents or family members (Moala-Tupou, 2016).

An extractive framework can also be seen in low levels of workplace representation and benefits for RSE workers (Brickenstein, 2015, 2017; Fonseka, 2022). Researchers have also documented how employers sometimes threaten to send workers home and blacklist them from the RSE programme if they do not comply with their demands (Bailey, 2009, p.186). This creates a situation where workers might be afraid to speak up about issues affecting their health and wellbeing. In addition, the RSE visa provides permission to work under one employer. This prevents RSE workers from changing employers, thus increasing their vulnerability to an abusive employment environment (Bedford, Nunns and Bedford, 2020). RSE policy also prevents workers from receiving unemployment benefits or pensions within Aotearoa New Zealand (Brickenstein, 2015, 2017). In short, while the RSE scheme may have hints of reciprocity, it is dominantly shaped by an extractive framework which has led to many negative consequences for workers, their families and communities.

The 2020 and 2023 versions of the Agritech Industry Transformation Plan mention labour shortages as a central driver for agritech development.

Signs of an extractive framework within the AITP

The 2020 and 2023 versions of the AITP mention labour shortages as a central driver for agritech development. However, as with the RSE scheme, the AITP fails to acknowledge a history of unexamined extractive frameworks that led to these labour shortages in the first place. Since the plan was not implemented, an extractive framework was mostly visible through: 1) the language used to describe current agricultural work and workers; and 2) a lack of practical planning for and communication about the RSE scheme which currently sustains Aotearoa New Zealand's horticulture industry.

When it comes to language, the AITP describes how future agritech developments will be 'ensuring activity is supporting better jobs', providing 'secure, high-value jobs' and creating a 'measurable increase in jobs, and in particular high-value jobs, coupled with increased skill levels' (Ministry of Business, Innovation and Employment, 2020, pp.7, 10, 27). In some cases, underlying assumptions about workers and their work are presented directly: for example, through descriptions of seasonal agricultural work being 'low-skilled' (ibid., p.47). However, in most cases the plan's assumptions about current agricultural work are only evident through inverse reasoning. For example, the idea of agritech creating opportunities for 'better jobs' implies that current work in agriculture is not that great. Through direct and inverse reasoning, the language in the AITP frames current agricultural work as not good, not meaningful, not rewarding, not high value, and unskilled. The plan offers a solution to this problem: creating agritech. However, it jumps to this solution without attending to the underlying issues leading to the poor working conditions in horticulture: an extractive framework.

Without awareness of this extractive framework and possibilities for fostering reciprocity, policymakers might decide to use the negative consequences experienced by RSE workers as evidence to prove that agricultural work in Aotearoa New Zealand is not good work. This might, in turn, lead them to the conclusion that the only answer to this problem is for agritech to replace human workers. This is a dangerous form of circular logic in which policymakers use the negative consequences of an extractive framework as evidence to promote policies that continue to encourage extractivism, which in turn produces negative outcomes which become evidence for further extractivism, and so forth. It is dangerous because policymakers basing their decisions on this evidence will be reproducing extractive frameworks under the label of evidence-based policymaking. For example, they may use the negative effects of the RSE scheme (produced through an extractive framework) as evidence that agritech needs to replace human workers. Based on this evidence, policymakers may decide to omit the current agricultural workforce from the AITP and other dominant visions about farming futures, which will reproduce the same extractive framework. If implemented, these visions could lead to the further exploitation and devaluation of agricultural workers.

A second way an extractive framework is visible within the AITP is in its lack of

practical planning for and communication about the RSE scheme: how the RSE scheme is currently sustaining Aotearoa New Zealand's horticulture industry, and how it will be transformed with the introduction of new agritech. While the AITP provides imagined scenarios about new forms of agritech that could increase productivity and lead to more sustainable farming methods, it fails to consider the practicalities around the social transformation that will be required to make these visions a reality. A lack of consideration of the social transformations required for the plan to succeed is an issue which threatens worker security and wellbeing. However, it also threatens the sustainability of Aotearoa New Zealand's horticulture industry. This is because workers might not want to continue working in an industry where they are not included in its future vision, particularly if they continue to be exploited throughout the industry's transformation. The omission of these critical social dimensions within the AITP highlights an extractive framework which uncritically assumes that workers will be available until they are no longer needed.

Towards reciprocal agritech industry transformation plans

While agritech might be on the horizon, human workers will still be required to sustain Aotearoa New Zealand's horticulture and wider agriculture industries for the foreseeable future. This section provides practical examples of how policymakers can adopt a reciprocal framework when drafting future agritech industry transformation plans.

Uncovering extractive assumptions about agricultural workers and work

To foster the transition to a reciprocal framework, it will be important for authors and advocates of future agritech industry transformation plans to discuss the underlying assumptions they have about agricultural workers and work. This will support policymakers to notice where extractive frameworks might be influencing their language and recommendations before taking action to address them – topics we will discuss in the next sections.

The following list outlines some outstanding questions that the authors of this paper have about the AITP's possible implications for agricultural workers and the sustainability of Aotearoa New Zealand's horticulture industry. We hope policymakers will consider and address these questions as they draft future agritech industry transformation plans:

- Will agricultural workers be included in the co-design of agritech and future agritech industry transformation plans?
- What should the social transformation from a largely human to a largely robotic workforce look like in practice in Aotearoa New Zealand's agriculture industry?
- Do policymakers assume that RSE workers will continue to sustain Aotearoa New Zealand's horticulture industry until agritech takes over?
- How will the agriculture industry practically balance the tensions of sustaining a human workforce as it transitions to an agritech-supported or fully automated workforce?
- Will policymakers develop a plan for responsibly terminating or transforming the RSE scheme in alignment with future agritech industry transformation plans?
- Will Pacific leaders and workers be included in the co-design of the RSE scheme's transformation?

Changing the language used to discuss agricultural work and workers

Language is a powerful tool that can have intended and unintended consequences, so choosing appropriate language to describe people and their work requires both reflection and care. As mentioned in the previous section, the AITP uses extractive language to discuss agricultural workers and work, which devalues the vital role that workers currently play in sustaining Aotearoa New Zealand's horticulture industry. Dun and colleagues argue that migrant workers in Australia, working within a similar system to the RSE scheme, should be reframed as 'knowledge holders' rather than as 'unskilled' or 'low-skilled' labourers (Dun, Klocker and Head, 2018, p.276). These authors illustrate the ways in which migrant workers transfer their own agricultural knowledge into their work in Australia and take new knowledge back to their home countries. Their analysis highlights the ways in which language describing agricultural workers as low-skilled or unskilled is not evidence-based. The study's authors illustrate how deficit language obfuscates the vital role workers play in sustaining highly profitable horticulture industries: in other words, how an extractive deficit framing of workers and their work encourages further extractivism.

The study's authors illustrate how deficit language obfuscates the vital role workers play in sustaining highly profitable horticulture industrie ...

Table 1 outlines some of the extractive language and underlying assumptions about current agricultural workers and their work included in the AITP. We present this alongside examples of reciprocal language that better reflects the value that RSE workers bring to the horticulture industry – for example, RSE workers' high ratings in terms of productivity, dependability and enthusiasm (Maguire and Johnson, 2016, 2017). As mentioned, reciprocity and extractivism exist on a spectrum, so this language is intended to support policymakers to recognise this spectrum and to consciously make decisions which promote reciprocity and deter extractivism. While language is not enough, it can help to expose and prevent the unreflexive reproduction of circular logics discussed above.

While some of the changes are obvious, such as replacing the word 'unskilled' with

Table 1: Examples of extractive versus reciprocal language that can be used to discuss agricultural workers and their work

	Extractive language	Reciprocal language
Agricultural workers	Low-skilled, unskilled	Skilled, knowledge holders (Dun, Klocker and Head, 2018)
	Not high value	Valuable, essential
Agricultural work	Insecure	Secure (This needs to be paired with an understanding that insecurities are the product of an extractive framework and that job security can be created over time through adopting a reciprocal framework.)
	Upskill	Reskill

'skilled' or 'knowledge holder', others are more subtle. For example, while the AITP may not have directly used language such as 'insecure' when discussing current agricultural work, this was implied by future work being described as 'secure'. In addition, we do not think it is appropriate to simply replace 'insecure' with 'secure' without recognising that job insecurity is a product of an extractive framework. Thus, transitioning towards a reciprocal framework would require noticing the root cause of the insecurity (extractive labour relations) and responding in a way that promotes increased reciprocity between employers and employees. We recommend using 'reskill' as opposed to 'upskill' because 'upskill' maintains a deficit framing which assumes current agricultural work is unvaluable and low-skilled.

Providing agricultural workers with opportunities to co-design their future work trajectories

Changing the language used in future agritech industry transformation plans is fundamental to promoting more reciprocal employer–employee relations. However, simply changing the language without taking action will lead to tokenism, where agricultural workers and their work are discussed in more respectful and reciprocal ways, but agricultural workers themselves are not included in decision-making processes about the future of their work (Burch and Legun, 2021). Promoting job security for agricultural workers would require more than simply using the term 'secure'. We recommend that reciprocity be practically fostered through providing agricultural workers with opportunities to co-design their future work trajectories and using that information to inform future industry transformation plans.

As noted, the AITP has mentioned co-design as a method that will be important for achieving its agritech visions. For example, the 2023 AITP update mentions the importance of co-design between the private sector and government for improving the growth and wellbeing of Aotearoa New Zealand's agritech sector (Ministry of Business, Innovation and Employment, 2023a). Additionally, both versions of the AITP include knowledge and insights from multiple groups and industries, such as the use of strategies co-designed with a Māori advisory group (Ministry of Business, Innovation and Employment, 2020, 2023a). Engaging in co-design with agricultural workers requires special care and attention, given access issues and power imbalances (Burch and Legun, 2021). Thus, we recommend including humanities and social science scholars in these processes to ensure that questions of power are adequately acknowledged and attended to when including agricultural workers in co-design processes and when considering the social dimensions of agritech innovation (Burch et al., 2022, 2023; Fielke et al., 2022).

Including agricultural workers through co-design will not only benefit workers. Closer engagement with agricultural workers would provide agritech designers with more certainty that the technologies they are designing will fulfil their intended purpose and successfully integrate into complex indoor and outdoor workplaces (Burch et al., 2022). This will also be beneficial for research funders, who would not need to worry as much about their investments going to waste. Thus, adopting a reciprocal framework could lead to a quadruple win where agricultural workers, agritech designers, employers and agritech funders benefit from the deliberate nurturing of more reciprocal relations with workers.

However, engaging in co-design with a reciprocal framework will take time, particularly when trying to include people usually marginalised from decision-making processes. This contrasts with the common expectations regarding speed and efficiency within traditional technology design practices, which is also promoted within the AITP. The AITP states that innovation should be quick in order to keep up with the global agritech market, stating, for example, that 'innovation is the engine of productivity. Fundamentally, the growth of the sector must be driven by a fast path from research idea, to new product in market' (Ministry of Business, Innovation and Employment, 2020, p.39). This kind of push for rapid growth does not leave time and space to include workers, or, more generally, to engage in responsible research and innovation practices (Bronson, 2018, 2019; Burch and Legun, 2021; Gugganig et al., 2023; O'Connor, 2022; O'Connor, Burch and Gounder, forthcoming).

Engaging in reciprocal forms of co-design would require slowing down and being more intentional regarding other aspects of future industry transformation plans: for example, adjusting the pace of agritech innovation. While reciprocal relations between employers and workers should be fostered in future plans, making a shift from an extractive towards a reciprocal framework should also lead to other changes, in areas such as social and environmental sustainability. Kono, an Aotearoa New Zealand-based company that produces food and beverages, provides a useful example of the positive outcomes that can arise from adopting a reciprocal framework in horticulture.

We first learned about Kono through our colleagues from the James Henare Research Centre working on MaaraTech's Māori engagement team. As a team, they engaged in kaupapa Māori research with Kono to learn more about how Māori-owned businesses were thinking about and engaging with agritech (Burch et al., 2022). A subsidiary of Māori-owned Wakatū Incorporation, Kono has a 500-year vision of food and farming which guides its decisions regarding

the economic, environmental and social dimensions of its horticultural practices. Reciprocity can be seen in the values that underpin Kono's operations, including whanaungatanga ('Together we are more') and manaakitanga ('We rise by uplifting others') (ibid., p.26). It can also be seen in the organisation's commitments to minimising the effects of its horticultural practices on the local environment (e.g., through reduced chemical inputs). When our project colleagues visited Kono, they were able to talk with workers, including migrant workers from the Pacific, who shared appreciation for Kono's value-based approach to leadership which aligned with many of their own cultural values. In engaging reciprocally with the workers, our colleagues were able to hear their thoughts on new agritech – often in the form of high-tech, expensive technologies proposed by outside actors. It also provided an opportunity for workers to share ideas they had for lower-tech, less expensive agritech alternatives which could greatly improve their everyday work. This example illustrates how adopting a reciprocal framework in business and agritech design has the potential to create many positive ripple effects for Aotearoa New Zealand's horticulture industry and the workers who sustain it.

Conclusion

In this article, we have drawn on examples from the RSE scheme and the AITP to illustrate how dominant visions of more automated farming futures in Aotearoa New Zealand currently reflect an extractive framework. This extractive framework can be most readily seen in the AITP through: 1) the language used to describe current agricultural work and workers, and 2) a lack of practical planning for and communication about the RSE scheme, which currently sustains Aotearoa New Zealand's horticulture industry. While the AITP is no longer active, it continues to provide insights into the challenges of and possibilities for developing agritech transformation plans that value reciprocity over extraction.

Through a literature review, document review and critical analysis, we have shown how a dominant agritech vision which overlooks the current agricultural workforce is problematic because it allows policymakers to neglect their responsibility to articulate what the social transformation from a largely human to a largely robotic workforce should look like in practice. This omission allows for the uncritical reproduction of an extractive framework. It is important to recognise this in order to avoid making policy decisions based on circular logics. For example, using the negative effects of the RSE scheme (produced through an extractive framework) as evidence that agritech needs to replace human workers. Then using this evidence to justify deficit language about agricultural workers and their work, as well as the omission of the current agricultural workforce from dominant visions about farming futures. We discussed how this deficit language and omission will, in turn, encourage the reproduction of the same extractive framework. We caution that, if implemented, these extractive framework-shaped visions could lead to the further exploitation and devaluation of agricultural workers. We also highlighted how this exploitation and devaluation of agricultural workers and their work threatens both the wellbeing of agricultural workers and the sustainability of Aotearoa New Zealand's horticulture industry.

We argue that the best way for policymakers to avoid these circular logics is through actively adopting a reciprocal framework when drafting future agritech industry transformation plans. To this end, we outlined three recommendations to support policymakers: 1) uncover extractive assumptions about agricultural workers and work; 2) change the language used to discuss work and workers; and 3) provide agricultural workers with opportunities to co-design their future work trajectories. For inspiration, we also provided an example of reciprocal employer – employee relations currently being practiced by the Māori-owned horticultural organisation, Kono.

Transitioning towards a reciprocal framework within future agritech industry transformation plans will require acknowledging the vital contributions agricultural workers, including RSE workers, make to Aotearoa New Zealand's horticulture industry. It will also require policymakers to develop a comprehensive plan for including workers in discussions about their future work trajectories, and any relevant agritech developments which might shape the direction of these trajectories. By embracing a reciprocal framework, future agitech transformation plans have the potential to harness the knowledge, perspectives and expertise of agricultural workers and to foster more sustainable farming futures for Aotearoa New Zealand.

> Transitioning towards a reciprocal framework within future agritech industry transformation plans will require acknowledging the vital contributions agricultural workers …

1 When discussing the AITP we are referring to both versions of the plan, unless otherwise stated. The 2023 version is shorter and is simply updating readers on any progress made towards the goals developed in the 2020 plan.
2 Agriculture encompasses the dairy, farming, horticulture and viticulture industries.
3 We use the term horticulture to refer to both horticulture and viticulture.

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References

Anderson, D. and R. Tipples (2014) 'Are vulnerable workers really protected in New Zealand?', *New Zealand Journal of Employment Relations*, 39 (1), pp.52–67, https://doi.org/10.3316/informit.676461205163558

Bailey, R.L. (2009) 'Unfree labour? Ni-Vanuatu workers in New Zealand's Recognised Seasonal Employer scheme', master's thesis, University of Canterbury, https://doi.org/10.20622/jltaj.12.0_toc1

Bedford, C.E. (2009) *Unfree Labour? Ni-Vanuatu workers in New Zealand's recognised seasonal employer scheme*, https://doi.org/10.20622/jltaj.12.0_toc1

Bedford, C., H. Nunns and R. Bedford (2020) 'Giving RSE workers more voice in New Zealand', *DevPolicyBlog*, 16 October, https://devpolicy.org/giving-rse-workers-more-voice-in-new-zealand-20201016-2/

Brickenstein, C. (2015) 'Impact assessment of seasonal labor migration in Australia and New Zealand: a win–win situation?', *Asian and Pacific Migration Journal*, 24 (1), pp.107–29, https://doi.org/10.1177/0117196814565228

Brickenstein, C. (2017) 'The development impact of seasonal worker schemes: a comparison of European and Pacific experiences', *Migration and Development*, 6 (1), pp.60–82, https://doi.org/10.1080/21632324.2015.1116191

Brickenstein, C. and G. Tabucanon (2013) 'Circular migration as climate change adaptation: reconceptualising New Zealand's and Australia's seasonal worker programs', *Precedente, Revista Jurídica*, 3 (7), https://doi.org/10.18046/prec.v3.1724

Bronson, K. (2018) 'Smart farming: including rights holders for responsible agricultural innovation', *Technology Innovation Management Review*, 8 (2), pp.7–14, https://doi.org/10.22215/timreview/1135

Bronson, K. (2019) 'Looking through a responsible innovation lens at uneven engagements with digital farming', *NJAS: Wageningen Journal of Life Sciences*, 90–91, 100294, https://doi.org/10.1016/j.njas.2019.03.001

Burch, K.A., J. Guthman, M. Gugganig, K. Bronson, M. Comi, K. Legun, C. Biltekoff, G. Broad, S. Brock, S. Freidberg, P. Baur and D. Mincyte (2023) 'Social science–STEM collaborations in agriculture, food and beyond: an STSFAN manifesto', *Agriculture and Human Values*, 40 (3), pp.939–49, https://doi.org/10.1007/s10460-023-10438-2

Burch, K.A. and K. Legun (2021) 'Overcoming barriers to including agricultural workers in the co-design of new agtech: lessons from a Covid-19-present world', Culture, Agriculture, Food and Environment, 43 (2), pp.147–60, https://doi.org/10.1111/cuag.12277

Burch, K.A., M. Nepia, N. Jones, M. Muru-Lanning, H. Williams and M. O'Connor (2022) 'Robots in the workplace/Ngā karehiko kei te wāhi mahi', in A. Pendergast and K. Pendergast (eds), *More Zeros and Ones: digital technology, maintenance and equity in Aotearoa New Zealand*, Wellington: Bridget Williams Books

Chittock, N. (2022) 'RSE expansion: union says employers should be shut out of scheme if they break rules', RNZ, 28 September, https://www.rnz.co.nz/news/national/475605/rse-expansion-union-says-employers-should-be-shut-out-of-scheme-if-they-break-rules

Diver, S., M. Vaughan, M. Baker-Médard and H. Lukacs (2019) 'Recognizing "reciprocal relations" to restore community access to land and water', *International Journal of the Commons*, 13 (1), pp.400–29

Dun, O., N. Klocker and L. Head (2018) 'Recognising knowledge transfers in "unskilled" and "low-skilled" international migration: insights from Pacific Island seasonal workers in rural Australia', *Asia Pacific Viewpoint*, 59 (3), pp.276–92, https://doi.org/10.1111/apv.12198

Dziedzic, S., D. Voloder and J. Raela (2023) 'Pacific countries are not "outposts" to grow labourers for Australia, Samoan PM says', ABC News, 31 August, https://www.abc.net.au/news/2023-08-31/fiame-samoa-pacific-labour-scheme-australia/102794256

Federici, S. (2012) *Revolution at Point Zero: housework, reproduction, and feminist struggle*, PM Press

Fielke, S., K. Bronson, M. Carolan, C. Eastwood, V. Higgins, E. Jakku, L. Klerkx, R. Nettle, Á. Regan, D.C. Rose, C.L. Townsend and S.A. Wolf (2022) 'A call to expand disciplinary boundaries so that social scientific imagination and practice are central to quests for "responsible" digital agri-food innovation', *Sociologia Ruralis*, 62 (2), pp.151–61, https://doi.org/10.1111/soru.12376

Fonseka, D. (2022) 'RSE workers being treated "like slaves", Equal Employment Opportunity Commissioner says', *Stuff*, 12 December, https://www.stuff.co.nz/business/130729008/rse-workers-being-treated-like-slaves-equal-employment-opportunity-commissioner-says

Frame, K. (2022) 'Major culture shift needed in treatment of RSE workers, immigration lawyer says', RNZ, 12 December, https://www.rnz.co.nz/news/national/480603/major-culture-shift-needed-in-treatment-of-rse-workers-immigration-lawyer-says

Gibson, J. and D. McKenzie (2014a) 'The development impact of a best practice seasonal worker policy', *Review of Economics and Statistics*, 96 (2), pp.229–43

Gibson, J. and D. McKenzie (2014b) 'The development impact of a best practice seasonal worker policy', *Review of Economics and Statistics*, 96 (2), pp.229–43

Gibson, J., D. Mckenzie and H. Rohorua (2008) 'How pro-poor is the selection of seasonal migrant workers from Tonga under New Zealand's Recognised Seasonal Employer (RSE) program?,' *Pacific Economic Bulletin*, 23, https://doi.org/10.1596/1813-9450-4698

Glasziou, P. and I. Chalmers (2018) 'Research waste is still a scandal: an essay by Paul Glasziou and Iain Chalmers', *BMJ*, 363, k4645, https://doi.org/10.1136/bmj.k4645

Green, S. and H. Schulze (2020) *Māori in Horticulture*, Wellington: BERL

Gugganig, M., Burch, K. A., Guthman, J., & Bronson, K. (2023). 'Contested agri-food futures: Introduction to the Special Issue', *Agriculture and Human Values*, 40(3), 787–798. https://doi.org/10.1007/s10460-023-10493-9

Hammond, J. and J. Connell (2009) 'The new blackbirds? Vanuatu guestworkers in New Zealand', *New Zealand Geographer*, 65 (3), pp.201–10, https://doi.org/10.1111/j.1745-7939.2009.01163.x

Immigration New Zealand (2022) 'Recognised Seasonal Employer Scheme cap increased to 19,000', 28 September, https://www.immigration.govt.nz/about-us/media-centre/news-notifications/recognised-seasonal-employer-scheme-cap-increased-to-19-000

Immigration New Zealand (2023) 'Recognised Seasonal Employer (RSE) scheme', 28 June, https://www.immigration.govt.nz/about-us/media-centre/common-topics/recognised-seasonal-employer-rse-scheme

Johnston, K. (2022) '"Blatant exploitation": migrant workers packed in freezing, damp rooms for $150 a week', *Stuff*, 8 August

Koshy, S., J.A. Byrd and B.J. Jefferson (2022) 'Introduction', in S. Koshy, L.M. Cacho, J.A. Byrd, B.J. Jefferson and L.M. Cacho (eds), *Colonial Racial Capitalism*, Durham: Duke University Press

Kumar, R.R. (2012) 'Migration and development: the development impacts of short-term labour migration of Ni-Vanuatu workers to New Zealand', MA thesis, University of the South Pacific

Liboiron, M. (2021) *Pollution is Colonialism*, Durham: Duke University Press

Liu, W. (2020) *Abolish Silicon Valley: how to liberate technology from capitalism*, Repeater

Luxon, C. (2023) 'National's getting back to farming', 19 April, https://www.national.org.nz/national_s_getting_back_to_farming

Maclellan, N. (2008) *Workers for All Seasons: issues from New Zealand's recognised seasonal employer (RSE) program*, Melbourne: Swinburne Institute for Social Research, https://apo.org.au/node/58386

Maguire, J. and M. Johnson (2016) *Recognised Seasonal Employers Survey 2016: working report*, Research New Zealand for Ministry of Business, Innovation and Employment, https://www.immigration.govt.nz/documents/statistics/rse-2017-sruvey-report.pdf

Maguire, J. and M. Johnson (2017) *Recognised Seasonal Employers Survey 2017: working report*, Research New Zealand for Ministry of Business, Innovation and Employment, https://www.immigration.govt.nz/documents/statistics/rse-2017-sruvey-report.pdf

Marx, K. and F. Engels (1948) 'Manifesto of the Communist Party' (transl. S. Moore and F. Engels), Progress Publishers, https://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf

McConnell, L.M. and G. McConnell (2023) 'National promises to double RSE worker cap, ban foreign investment in farm-to-forestry conversions', 19 April, *Stuff*, https://www.stuff.co.nz/national/politics/131805911/national-promises-to-double-rse-worker-cap-ban-foreign-investment-in-farmtoforestry-conversions

Ministry of Business, Innovation and Employment (2020) *Growing Innovative Industries in New Zealand: Agritech Industry Transformation Plan*, https://www.mbie.govt.nz/dmsdocument/11572-growing-innovative-industries-in-new-zealand-agritech-industry-transformation-plan-july-2020-pdf

Ministry of Business, Innovation and Employment (2023a) *Growing Innovative Industries in New Zealand: Agritech Industry Transformation Plan*, https://www.mbie.govt.nz/assets/growing-innovative-industries-in-new-zealand-agritech-industry-transformation-plan-january-2023.pdf

Ministry of Business, Innovation and Employment (2023b) 'Industry transformation plans', 21 December, https://www.mbie.govt.nz/business-and-employment/economic-development/industry-policy/industry-transformation-plans/

Moala-Tupou, L. (2016) 'The social impacts of seasonal migration on left-behind children: an exploratory study from Lifuka, Tonga', MSocSc thesis, University of Waikato, https://hdl.handle.net/10289/10614

Movono, A., R. Scheyvens and S. Auckram (2023) 'NZ wants more seasonal workers – but Pacific nations no longer want to be the "outposts" that "grow" them', *The Conversation*, 16 November, http://theconversation.com/nz-wants-more-seasonal-workers-but-pacific-nations-no-longer-want-to-be-the-outposts-that-grow-them-217790

Naepi, S. (2019) 'Pacific research methodologies', in *Oxford Research Encyclopedia of Education*, https://doi.org/10.1093/acrefore/9780190264093.013.566

New Zealand Kiwifruit Growers Incorporated (2020) *Recognised Seasonal Worker Survey* https://www.nzkgi.org.nz/wp-content/uploads/2020/07/RSE-Doc-June-2020-WEB-FINAL.pdf

O'Connor, M. (2022) 'The value of inclusive collaborative design: lessons from a virtual reality vine-pruning training tool', master's thesis, University of Otago, ttps://ourarchive.otago.ac.nz/handle/10523/16143

O'Connor, M., K.A. Burch and S. Gounder (forthcoming) 'Anticolonial co-design: a methodology for including agricultural workers in the development of new AgTech'

O'Sullivan, P. (2018) 'Local focus: orchardists' reliance on imported labour: the gardens of good or evil ?', *New Zealand Herald*, 28 July, https://www.nzherald.co.nz/business/local-focus-orchardists-reliance-on-imported-labour-the-gardens-of-good-or-evil/KPCH32YMQBRZTPGPNVOG6SMDRI/

Petrou, K. and J. Connell (2018) '"We don't feel free at all": temporary ni-Vanuatu workers in the Riverina, Australia', *Rural Society*, 27 (1), pp.66–79, https://doi.org/10.1080/10371656.2018.1443415

Prasad, A. (2022) 'Calls for "complete overhaul" of RSE scheme but business group hits back at criticism', *New Zealand Herald*, 19 December, https://www.nzherald.co.nz/business/calls-for-complete-overhaul-of-rse-scheme-business-group-hits-back-at-criticism/RUZZZ4C66BDXHKYK4WA26YJEBU/

Raman, S. (2023) 'What it means to practise values-based research', *Nature*, 7 June, https://doi.org/10.1038/d41586-023-01878-1

Rosiek, J.L., J. Snyder and S.L. Pratt (2020) 'The new materialisms and indigenous theories of non-human agency: making the case for respectful anti-colonial engagement', *Qualitative Inquiry*, 26 (3–4)

Solignac, M. (2022) 'Human rights abuses of RSE workers "a blow for everyone"', *Stuff*, 14 August, https://www.stuff.co.nz/business/xblow-for-everyone

Tuck, E. and M. McKenzie (2015) *Place in Research: theory, methodology, and methods*, Routledge

Tuhiwai Smith, P.L. (2021) *Decolonizing Methodologies: research and indigenous peoples* (3rd edn), London: Zed Books

Tuiono, T. and R. Menéndez March (2022) 'Abuse revelations leave no choice but to overhaul RSE scheme', 8 August, https://www.greens.org.nz/abuse_revelations_leave_no_choice_but_to_overhaul_rse_scheme

Walker, S., A. Eketone and A. Gibbs (2006) 'An exploration of kaupapa Maori research, its principles, processes and applications', *International Journal of Social Research Methodology*, 9 (4), pp.331–44, https://doi.org/10.1080/13645570600916049

Walsh, S. (2020) 'Productivity and the future of technology', in A.-M. Murtola and S. Walsh (eds), *Whose Futures?*, Economic and Social Research Aotearoa

Wilson, P. and P. Fry (2022) 'Righting the power imbalance at the heart of the RSE scheme', *Stuff*, 19 December, https://www.stuff.co.nz/opinion/130786015/righting-the-power-imbalance-at-the-heart-of-the-rse-scheme

Fiona Sing and Antonia Lyons

Regulating the Digital Environment
to Protect Users from Harmful Commodity Marketing

Abstract

Although the creators of the world wide web never intended it to be regulated by state intervention, the rapid evolution of the online environment has necessitated regulation of certain aspects of the digital ecosystem. Harmful commodity marketing (e.g., alcohol, vaping and unhealthy food and beverage product marketing) on social media and in digital spaces has been linked to adverse health outcomes and there have been calls for its regulation. In this commentary we explain why this is important and consider how such regulation could be achieved.

Keywords digital regulation, harmful commodities, digital marketing, alcohol, vaping, unhealthy food

Digital regulation

As the digital ecosystem has grown since its inception in the early 1990s, different New Zealand governments have introduced laws to regulate the digital sphere to protect the safety and rights of the New Zealand public. Each legal response touches on different aspects of the way the public engage with the online space, such as online safety, data protection, consumer protection law, intellectual property law and telecommunications law. Successive governments have regulated, for example, the way personal data is collected and used by online actors, the sending of harmful digital communications and unsolicited emails, and the conduct of internet service providers in relation to consumers. This reactive protective legislative framework is largely fragmented and requires comprehensive reform and realignment to adequately address the realities of the ever-developing digital ecosystem.

Regulation is playing catch-up

The world wide web was designed to allow the free flow of information as quickly as possible with freedom from indiscriminate censorship and surveillance (Kiss, 2013; World Wide Web Foundation, n.d.). However, Tim Berners Lee, credited with inventing the world wide web, has publicly argued that we now need state intervention and regulation of large technology firms to prevent it becoming 'weaponised' by a small number of dominant, and increasingly powerful, platforms (Solon, 2018). The online environment is central to so many people's lives. For many (particularly younger people), social life plays out

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within the online realm (Auxier and Anderson, 2021; Shields Dobson, Robards and Carah, 2018). There is a reliance on the digital space for many aspects of our lives, including social engagement, connection with networks, engagement with public discourse, and consumer experience. Increased engagement with an unwieldy digital ecosystem that crosses international borders raises risks and potential breaches of fundamental rights. Governments have a role to play in protecting their citizens in this space. Yet regulatory controls by the state are at odds with the underlying philosophy of much of the digital system, which is often border-less and involves big tech actors who do not neatly fall under the jurisdiction of any individual government. Importantly, this system is currently driven by profit making and does not need to have regard for the public good, or the rule of law, until certain aspects of the ecosystem are held accountable through various governance systems, including state regulation.

However, the government regulation of the online environment continues to lag well behind the fast-paced growth of the digital ecosystem. The legislative process is slow, and the political economy of lawmaking is such that the social licence and political appetite for robust, comprehensive protective laws must gather serious momentum to get an issue on the political agenda. A policy window needs to open to create an opportunity for action. Previously, policy windows for online regulation have opened following large-scale events that have threatened the safety of the public, such as the Christchurch mosque attack of March 2019, high-profile revenge porn cases, the Cambridge Analytica scandal, or large-scale data leaks from cybersecurity breaches of major public institutions, such as hospitals.

Some things are universally accepted as so abhorrent that cross-party support for a legislative response is guaranteed (e.g., child pornography). Further, risks to security are prioritised by Western democratic governments and state intervention is considered justified in the face of online risks that threaten national security. However, issues that may be considered as moving into the realm of the 'nanny state' or impinging on individual freedoms are more contentious and debated, both in political spheres and in public discourse. There is always a fine balance between protection and censorship that governments must negotiate, and navigating this fine balance requires political capital and political will, which are often lacking. Added to this reluctance to act is the perceived complexity of the digital ecosystem and the mega technology industries which wield significant power on the global stage.

As an example, the Labour-led New Zealand government of 2017–23 explored at least three areas of digital regulation in its last term: a content regulatory review (online safety) (Department of Internal Affairs, 2023); a consumer data right (Ministry of Business, Innovation and Employment, 2023); and regulating the news media practices of large platforms like Meta and Google (New Zealand Parliament, 2023). Each area grapples with contentious issues and raises numerous questions, including whether the government has a mandate to regulate online content, which would impinge on freedom of expression; whether a new legal right should be established for consumers further protecting their personal data; and whether the New Zealand government can effectively regulate immensely powerful and highly resourced digital platforms such as Google and Meta.

The Labour-led government also considered the best way to protect the public from disinformation and misinformation, although no legislation was tabled, and the work may continue under the new, National-led coalition government (Department of the Prime Minister and Cabinet, 2023). The current regulatory review of online safety is important; it encompasses many different areas of regulation in one regulatory response. The recent Department of Internal Affairs online safety discussion document articulated clearly that the current system for content regulation in New Zealand is fragmented and out of date, and that a comprehensive reform and realignment is necessary to adequately address the realities of the ever-developing digital ecosystem (Department of Internal Affairs, 2023).

The harm caused by the commercialisation and commodifying approach of the e-commerce landscape cannot be left out of this policy debate. As public health researchers, we are concerned with harmful commodity industries, which we define as industries that produce and market commodities or services that cause people harm. In this article we focus on commodities such as tobacco, alcohol and unhealthy foods and beverages, rather than services, such as those provided by the gambling industry (which are widely available online). Use of harmful commodities is a major driver of the burden of preventable non-communicable diseases (McKevitt et al., 2023). Alcohol consumption accounts for 3 million deaths globally each year and contributes to the poor health of millions of people with chronic disease and non-fatal injuries; 5% of the global burden of disease can be attributed to the harmful use of alcohol (World Health Organization, 2018). Evidence shows that alcohol is New Zealand's most harmful drug (Crossin et al.,

As public health researchers, we are concerned with harmful commodity industries, which we define as industries that produce and market commodities or services that cause people harm.

2023). The link between tobacco and multiple chronic diseases is well-established, and evidence is emerging that demonstrates the links between vaping and poor health outcomes (Sun et al., 2023). Unhealthy food and beverage consumption is linked with an increased risk of being overweight and obesity, and diet-related non-communicable diseases such as cancer, stroke, heart disease and diabetes (Afshin et al., 2017). The digital marketing of such commodities by all actors in the programmatic digital marketing supply chain – from the advertisers through to the social media platforms – is conducted in an increasingly pervasive and insidious manner and has led to increased exposure of the public to such products (Buchanan et al., 2018).

Digital marketing of harmful commodities: insidious, opaque and effective

There is robust evidence that traditional forms of marketing increase consumption of harmful products (Babor, 2010; Babor et al., 2022; Garde et al., 2018; Sing et al., 2022). But because of the nature of digital and social media marketing, this effect is exacerbated (Buchanan et al., 2018; Montgomery and Chester, 2009; Tatlow-Golden and Garde, 2020; VicHealth, 2020; World Health Organization, 2022, 2023; World Health Organization Regional Office for Europe, 2016, 2021). Digital marketing is defined as 'promotional activity, delivered through a digital medium, that seeks to maximise impact through creative and/or analytical methods'. Digital marketing is distributed to the public through digital channels, such as display on websites, apps, social media platforms, games and films, and accessible through digital devices such as desktops, laptops and mobile phones (World Health Organization, 2023). Digital marketing is pervasive due to its programmatic nature: it uses machine learning to direct the targeting of the marketing into flows of online content at particular times where it will be most effective; there is an exponential potential for reach of marketing; and there is a lack of accountability and transparency in the 'ad tech' system (Goodwin, 2022).

Social media uses subtle but persuasive forms of marketing of harmful commodities that are linked to habitual consumption. Evidence shows that young people and underage users' consumption patterns are influenced by social media marketing (Anderson et al., 2009; Carah and Angus, 2018; Carter, 2016; Cavazos-Rehg et al., 2014; Cheney-Lippold, 2011; Courtwright, 2019; Dyer, 2019; Esser and Jernigan, 2018; Jackler et al., 2019; Jernigan et al., 2017; Laestadius, Wahl and Cho, 2016; Lyons et al., 2019; McCreanor et al., 2013; Reith, 2018). In the wider online environment, research shows that exposure to harmful commodity marketing influences purchase and consumption behaviours (Backholer et al., 2021; Buchanan et al., 2018; Lobstein et al., 2017). The vast amount of digital marketing of a harmful product normalises it and makes it more acceptable, while also boosting awareness of the product as a part of everyday life (Carah and Brodmerkel, 2021). Engaging people who are online with the marketing (through likes, shares, competitions, activations, and so on) encourages consumer-driven socialising and tying products into people's identities. These processes are intensified with smartphones, where the marketing is not confined to time or place and appears on a device that is used frequently throughout the day (Lyons et al., 2023).

> According to a 2022 study, 85% of posts and videos on company Facebook pages and YouTube channels for the most popular packaged food, fast food and non-alcoholic beverage brands/ companies in New Zealand featured unhealthy food or drinks ...

Alcohol

Exposure to alcohol marketing online increases its normalisation and the acceptability of consuming alcohol (World Health Organization, 2022). The digital marketing of alcohol products is linked to starting to drink at younger ages, as well as risky patterns of drinking; for example, marketing exposure at a younger age is linked to a higher risk of experiencing alcohol-related harm (World Health Organization, 2022, 2018; World Health Organization Regional Office for Europe, 2021). A recent World Health Organization report stated: 'The digital ecosystem exposes individuals to alcohol advertising, identifies and pursues individuals who are most likely to purchase and consume alcohol, often those most at risk of developing alcohol use disorders, and transforms users into vulnerable targets' (World Health Organization, 2022, p.3). Digital alcohol marketing is intended to engage users in ways that make brands and products essential elements of their online activities and identities (Babor et al., 2022). Digital marketing of alcohol frequently allows a seamless flow from exposure and engagement with digital marketing to online purchasing, and delivery to homes, a process that was intensified by the Covid-19 pandemic (World Health Organization, 2022).

Unhealthy food

Digital marketing of unhealthy foods exacerbates the effects of 'traditional' marketing techniques, enhancing advertisement attention and recall, attitudes, brand awareness, and therefore purchase intent and product sales (Boyland et al., 2022; Murphy et al., 2020). The digital marketing of unhealthy foods targets children, who are less able to recognise its persuasive objective (Freeman et al., 2016; Garton, Mackay et al., 2022; Smith et al., 2019). The interactive nature of digital

marketing creates repeated and extended exposure to brands and food products, building brand loyalty and influencing children's purchases and purchase requests (Buchanan et al., 2018; Freeman et al., 2016; Garton, Mackay et al., 2022; Kelly et al., 2015; Smith et al., 2019; World Health Organization Regional Office for Europe, 2016).

According to a 2022 study, 85% of posts and videos on company Facebook pages and YouTube channels for the most popular packaged food, fast food and non-alcoholic beverage brands/companies in New Zealand featured unhealthy food or drinks (Garton, Gerritsen et al., 2022). The AdHealth study (Kidd et al., 2021) assessed the exposure of New Zealand Facebook users aged 16–18 to 'paid' food advertisements. It found that of advertisements containing food, 98% contained unhealthy food and drinks. On average, users were exposed to 4.8 unhealthy food or drink adverts per hour spent on Facebook.

Vaping and tobacco

Vaping and tobacco companies use social media marketing to appeal to young people and encourage vaping. This marketing includes engaging people through comments, likes, questions, competitions and sponsorships (Cochran, Robertson and Hoek, 2023; Hardie, McCool and Freeman, 2023: Lyons et al., 2024). Instagram has been used by vape product retailers to engage with and appeal to young New Zealanders, using strategies such as employing popular influencers, linking vapes to appealing lifestyles and sponsoring festivals (Hardie, McCool and Freeman, 2023). International research shows that social media has been central in publicising, normalising and marketing vape products among young people (O'Brien et al., 2020).

Harm experienced by Māori

There are at least two areas of harm caused by harmful commodity marketing practices that have a significant impact on Māori. First, e-commerce practices use consumer data to target groups and populations with digital marketing of harmful commodities. Māori scholars, especially those leading Te Mana Raraunga

> ... excessive exposure to harmful commodity marketing and the tactics used by alcohol, tobacco, vaping and food brands to target consumers has an additional layer of harm for Māori.

(the Māori Data Sovereignty Network), have highlighted the necessity for Māori data sovereignty and demonstrated that there is harm caused by collecting and using Māori data. Tahu Kukutai and colleagues articulate that Māori data is considered a taonga embodied by whakapapa that carries responsibilities of kaitiakitanga and collective concepts of privacy. Therefore, to commercialise and profit from this protected data goes against tikanga principles (Kukutai et al., 2023; Te Mana Raraunga, 2016; Kukutai and Cormack, 2021).

The Waitangi Tribunal in its March 2023 report on the CPTPP (the Comprehensive and Progressive Agreement for Trans-Pacific Partnership) defines Māori data sovereignty as 'the inherent rights and interests that Māori have in relation to the collection, ownership, and application of Māori data' and Māori data governance as 'the principles, structures, accountability mechanisms, legal instruments, and policies through which Māori exercise control over Māori data' (Waitangi Tribunal, 2023, p.xix). The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) supports the protection of indigenous data sovereignty and governance (Kelsey, 2022; Riley, 2023; Kukutai et al., 2023). Therefore, Crown engagement and consultation with Māori from the inception of the policy development is necessary to ensure that any regulatory response to increase protections online upholds the values outlined in te Tiriti and UNDRIP (Kukutai and Cormack, 2021; Kukutai et al., 2023; Te Mana Raraunga, 2016).

Further, excessive exposure to harmful commodity marketing and the tactics used by alcohol, tobacco, vaping and food brands to target consumers has an additional layer of harm for Māori. For example, Māori experience much greater harm from alcohol consumption compared to their non-Māori counterparts (Connor et al., 2017), and policy that successfully reduces consumption by the population overall will thus have a greater impact for Māori. Therefore, in order to uphold the rights and obligations in te Tiriti, regulating the e-commerce landscape, particularly the harmful commodity marketing system, must be prioritised by the government.

Regulatory responses

Some areas of harmful commodity marketing are regulated by the government, but the majority of the marketing practices are subject only to industry self-regulation. This self-regulatory approach has numerous flaws and is an ineffective way to address the issue of harmful commodity marketing online (Jackson, Cowie and Robinson, 2021; Sing et al., 2020).

Self-regulatory approach for alcohol and food

New Zealand has a voluntary self-regulatory system run by the Advertising Standards Authority (ASA) to receive complaints about alcohol and food advertisements. The Advertising Standards Authority is made up of advertisers, advertising agencies and the media. Standards for alcohol advertising are set out in the Advertising and Promotion of Alcohol Code developed by the authority. Standards for food marketing are set

out in the Children and Young People's Advertising Code. There are also relevant provisions for both areas of marketing in the Advertising Standards Code 2018.

The Advertising and Promotion of Alcohol Code states that advertisers must avoid advocacy of excessive alcohol consumption and portraying alcohol as positive or desirable; that alcohol sponsorship must be confined to the brand, name or logo, and exclude sales messages; and that alcohol-sponsored programmes must primarily promote the programme, with the sponsorship subordinate. But alcohol advertising is not required to be excluded from broadcast coverage of an event or situation where such promotion is a normal feature of that event or situation, so long as the code is adequately considered.

Jackson, Cowie and Robinson (2021) analysed 73 complaints to the ASA under the Advertising and Promotion of Alcohol Code between 2017 and 2020. Fifty-five complaints made it through to consideration by the authority's Complaints Board, and over half of the complaints related to online social and digital media. Jackson noted that this was not indicative of the level of advertising in breach of the Advertising and Promotion of Alcohol Code as the regulatory system relies on a public complaints system. This system is ineffective as it relies on the public being aware of the code, identifying breaches and submitting them to the ASA. In reality, harm reduction agencies, such as Alcohol Health Watch, often carry out this function on behalf of the public. In the case of digital marketing, this becomes particularly ineffective as digital marketing is ephemeral in nature and it is highly targeted. It is therefore harder to identify content, and also to identify who has been exposed. Jackson et al. also noted that while in the majority of cases the advertisement was removed, this was not until the ASA had processed the complaint, which could take over 60 days. By this time the marketing campaign had likely ended, having reached its targets, and the offending marketing had already disappeared as it is only shown for particular time periods (for example, 24 hours on Instagram 'reels').

Additionally, digital marketing campaigns to promote alcohol products claim that they are not influencing minors as companies use age verification and age-gating mechanisms to ensure that minors are not exposed to such marketing. However, age-gating and verification systems have been found to be ineffective, as they are easily circumvented (Babor et al., 2022; World Health Organization, 2022). Digital marketing of alcohol also appears in minors' social media feeds when it occurs in the posts of influencers they follow or is shared by friends or others in their networks.

> Legislation introduced in New Zealand to implement the [Framework Convention on Tobacco Control] demonstrates that it is within the government's jurisdiction to legislate to control the online environment, and this provides a precedent for other harmful commodities.

A study evaluating the ASA codes that restrict advertising of unhealthy food and beverages to children, and their interpretation by the ASA Complaints Board in decisions between 2017 and 2019, found that of the 16 complaints assessed, 12 were not upheld, and only one was upheld under the Children and Young People's Advertising Code (Sing et al., 2020). Three complaints were upheld under the Advertising Standards Code but not the Children and Young People's Advertising Code. The study compared the ASA system with a public health law framework that identified best practice design for marketing restrictions, and found that many facets of the framework were not met, including protecting children up to 18 years of age; the use of a comprehensive nutrient-profiling system to scientifically categorise which foods are prohibited from being marketed; transparency and accountability mechanisms; an independent body to monitor and enforce; an independent complaint-handling scheme; and incentives to encourage compliance. The study concluded that a self-regulatory system does not adequately protect children from the exposure to, and power of, unhealthy food and beverage marketing, and that government-led, comprehensive and enforceable marketing restrictions are required (Sing et al., 2020).

Legislative approach for tobacco and vaping

Under New Zealand's smokefree legislation it is illegal to market a tobacco or vaping product to anyone, including online. This includes the sponsorship of 'organised activities' by tobacco and vaping companies, including the company's trademark, or words, logos, colours, shapes, sounds or smells associated with a trademark, and all or any part of a company name included in a regulated product trademark.

While there are still loopholes in the enforcement of this law and an independent monitoring system has been called for (Cochran, Robinson and Hoek, 2023), comparatively this full ban on marketing is a far stronger regulatory approach than that for alcohol and unhealthy food. This is in part because New Zealand is a party to the World Health Organization's Framework Convention on Tobacco Control (FCTC). However, while the issue of tobacco control may have been in the public discourse for decades and the public and political acceptance of the need to reduce the harm caused by tobacco products is high, this does not discount the need for other harmful commodities to be

regulated in a similar way to tobacco. Legislation introduced in New Zealand to implement the FCTC demonstrates that it is within the government's jurisdiction to legislate to control the online environment, and this provides a precedent for other harmful commodities.

Bring harmful commodity marketing under the online protection rubric

Given the level of harm posed by harmful commodity marketing, it is important that it is considered under the current protective rubric applied to other areas of online safety/protection or online harm. The government regulates copyright, censorship, harmful communications and broadcasting standards and protects intellectual property, copyright, data, privacy and consumer rights. The current regulatory system is fragmented and outdated. Harmful commodity marketing needs to be included in considerations regarding online protection and future regulatory responses.

Figure 1: New Zealand's online protection framework

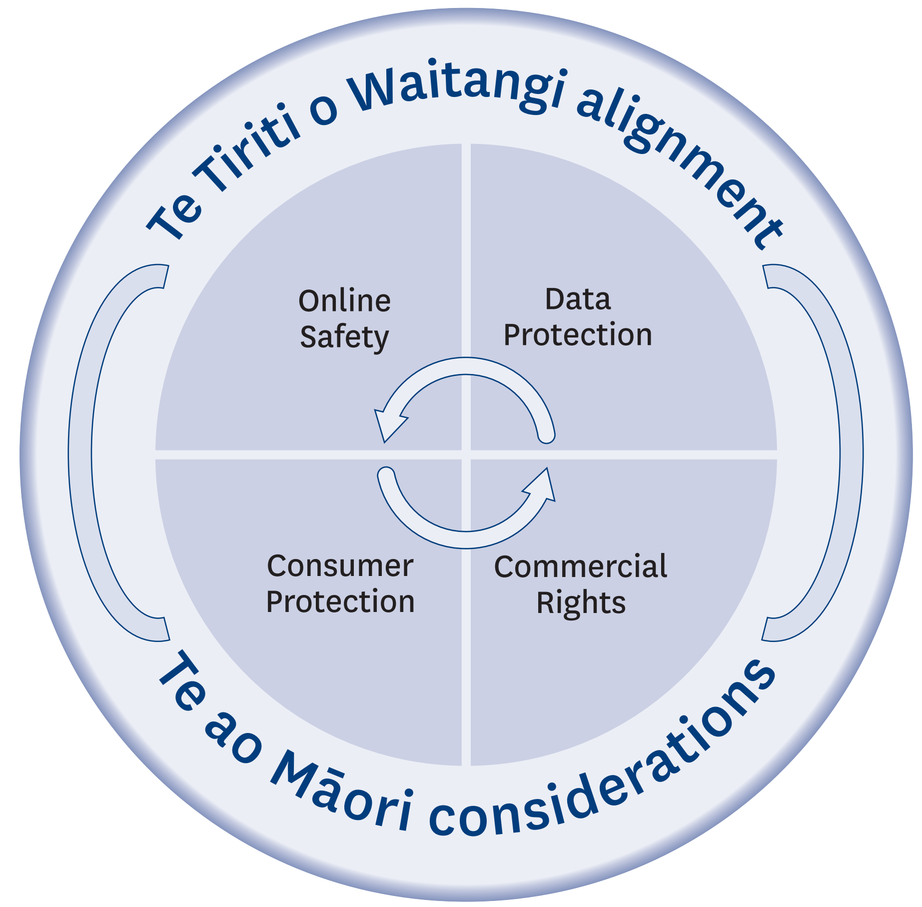


Figure 1, developed by the authors, provides a visual representation of the four overarching areas of online protection or rights that are currently regulated in New Zealand. The prolific marketing of harmful commodities online should be included in this framework. Figure 1 also highlights how any approach to protecting the New Zealand public or giving rights to the public must be consistent with te Tiriti o Waitangi and must respect and honour te ao Māori perspectives. This is not only to honour te Tiriti, but also to reduce unacceptable inequities experienced by Māori.

Digital marketing of unhealthy commodities could potentially be regulated under a mix of consumer protection, data protection or online safety law. This is due to the programmatic nature of digital marketing, its heavy reliance on collecting wide-ranging information and data from users and using this information to target potential consumers. Further legal analysis is required to determine whether the best legislative approach is to amend other areas of law (e.g., consumer protection law, privacy law, data protection or the proposed online safety law) or develop separate, fit-for-purpose legislation. Either way, a variety of definitional, ethical and technical issues will need addressing. This includes considerations around the right to freedom of expression and free speech, and how this should be weighed against protecting the public from harm. Another issue is finding technical and practical ways to ensure that marketing that originates from outside New Zealand is adequately captured under the regulation. This is an issue that is being grappled with by many governments around the world: how can they control marketing that is developed in other jurisdictions, but that appears within the feeds of their own citizens on global social media and other platforms?

There have been recent changes to legislation in other parts of the world to ensure greater protection of online users. For example, the European Union has introduced significant data protection and privacy laws, including the Digital Services Act and the General Data Protection Regulations.[1] While these regulations are leading the way, they do not yet protect users from the full extent of harmful commodity marketing. Countries such as Australia, the United Kingdom, Ireland and Canada have passed, or are attempting to pass, online harm bills that moderate illegal or harmful content such as child pornography and hate speech, and some governments are moving to regulate the dissemination of misinformation and disinformation. The United Kingdom is also proposing a legislative response to online advertising that would ban currently illegal and legal advertising, such as gambling or alcohol advertising to minors, for example (UK Government, 2023).

Although this article has focused on legal protections for the whole population, we note that there is an extensive literature base justifying the need for a legislative response to protect children from harmful marketing, particularly under the United Nations Convention on the Rights of the Child and subsequent documents (e.g., Optional Protocol 25). Any legislative response would need to aim to reduce all online marketing of harmful commodities, and not just marketing directed at children, to effectively protect children who operate in general online environments developed for adults. The challenges and issues raised

in this article about regulating harmful commodity marketing are likely to be relevant to regulating other forms of harmful industry marketing, such as of gambling, or other online harm issues such as misinformation or disinformation.

Conclusion

The harm caused by the marketing tactics of harmful commodity industries necessitates a legislative response by the government. It is time to bring such marketing under the rubric of online protection applied to other areas where the public interact with the digital ecosystem. Any regulatory response needs to embed te Tiriti principles from the outset and consider te ao Māori to ensure that the unacceptable inequities that exist are not perpetuated or exacerbated.

1 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC, General Data Protection Regulations; Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC.

References

Afshin, A. et al. (2017) 'Health effects of overweight and obesity in 195 countries over 25 years, *New England Journal of Medicine*, 377 (1), pp.13–27, https://doi.org/10.1056/NEJMoa1614362

Anderson, P., A. De Bruijn, K. Angus, R. Gordon and G. Hastings (2009) 'Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies', *Alcohol and Alcoholism*, 44 (3), pp.229–43, https://doi.org/10.1093/ALCALC/AGN115

Auxier, B. and M. Anderson (2021) 'Social media use in 2021', 7 April, https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/

Babor, T.F. (2010) 'Alcohol: No Ordinary Commodity: a summary of the second edition', *Addiction*, 105 (5), pp.769–79, https://doi.org/10.1111/J.1360-0443.2010.02945.X

Babor, T.F., S. Casswell, K. Graham, T. Huckle, M. Livingston, E. Osterberg, J. Rehm, R. Room, I. Rossow and B. Sornpaisarn (2022) *Alcohol: no ordinary commodity: research and public policy* (3rd edn), Oxford University Press

Backholer, K., A. Gupta, C. Zorbas, R. Bennett, O. Huse, A. Chung, A. Isaacs, G. Golds, B. Kelly and A. Peeters (2021) 'Differential exposure to, and potential impact of, unhealthy advertising to children by socio-economic and ethnic groups: a systematic review of the evidence', *Obesity Reviews*, 22 (3), e13144, https://doi.org/10.1111/OBR.13144

Boyland, E., L. McGale, M. Maden, J. Hounsome, A. Boland, K. Angus and A. Jones (2022) 'Association of food and nonalcoholic beverage marketing with children and adolescents' eating behaviors and health: a systematic review and meta-analysis', *JAMA Pediatrics*, 176 (7), e221037, https://doi.org/10.1001/JAMAPEDIATRICS.2022.1037

Buchanan, L., B. Kelly, H. Yeatman and K. Kariippanon (2018) 'The effects of digital marketing of unhealthy commodities on young people: a systematic review', *Nutrients*, 10 (2), https://doi.org/10.3390/NU10020148

Carah, N. and D. Angus (2018) 'Algorithmic brand culture: participatory labour, machine learning and branding on social media', *Media, Culture and Society*, 40 (2), pp.178–94, https://doi.org/10.1177/0163443718754648

Carah, N. and S. Brodmerkel (2021) 'Alcohol marketing in the era of digital media platforms', *Journal of Studies on Alcohol and Drugs*, 82 (1), pp.18–27

Carter, D. (2016) 'Hustle and brand: the sociotechnical shaping of influence', *Social Media and Society*, 2 (3), https://doi.org/10.1177/2056305116666305/ASSET/IMAGES/LARGE/10.1177_2056305116666305-FIG3.JPEG

Cavazos-Rehg, P.A., M.J. Krauss, E.L. Spitznagel, R.A. Grucza and L.J. Bierut (2014) 'Hazards of new media: youth's exposure to tobacco ads/promotions', *Nicotine and Tobacco Research*, 16 (4), pp.437–44, https://doi.org/10.1093/NTR/NTT168

Cheney-Lippold, J. (2011) 'A new algorithmic identity', *Theory, Culture and Society*, 28 (6), pp.164–81, https://doi.org/10.1177/0263276411424420

Cochran, C., L. Robertson and J. Hoek (2023) 'Online marketing activity following New Zealand's vaping legislation', *Tobacco Control*, 32 (2), pp.263–64, https://doi.org/10.1136/TOBACCOCONTROL-2021-056750

Connor, J., R. Kydd, B. Maclennan, K. Shield and J. Rehm (2017) 'Alcohol-attributable cancer deaths under 80 years of age in New Zealand', *Drug and Alcohol Review*, 36 (3), pp.415–23, https://doi.org/10.1111/dar.12443

Courtwright, D.T. (2019) *The Age of Addiction: how bad habits became big business*, Cambridge, Mass: Belknap

Crossin, R., L. Cleland, C. Wilkins, M. Rychert, S. Adamson, T. Potiki, A.C. Pomerleau, B. MacDonald, D. Faletanoai, F. Hutton, G. Noller, I. Lambie, J.L. Sheridan, J. George, K. Mercier, K. Maynard, L. Leonard, P. Walsh, R. Ponton, S. Bagshaw, S. Muthukumaraswamy, T. McIntosh, E. Poot, P. Gordon, P. Sharry, D. Nutt and J. Boden (2023) 'The New Zealand drug harms ranking study: a multi-criteria decision analysis, *Journal of Psychopharmacology*, 37 (9), pp.891–903, https://pubmed.ncbi.nlm.nih.gov/37353972/

Department of Internal Affairs (2023) *Safer Online Services and Media Platforms: discussion document*, https://www.dia.govt.nz/diawebsite.nsf/Files/online-content-regulation/$file/Safer-Online-Services-and-Media-Platforms-Discussion-Document-June-2023.pdf

Department of the Prime Minister and Cabinet (2023) 'Strengthening resilience to disinformation', 23 September, https://www.dpmc.govt.nz/our-programmes/national-security/strengthening-resilience-disinformation

Dyer, O. (2019) 'E-cigarette makers under fire for marketing to young people', *BMJ*, 365, l2261, https://doi.org/10.1136/BMJ.L2261

Esser, M.B. and D.H. Jernigan (2018) 'Policy approaches for regulating alcohol marketing in a global context: a public health perspective', *Annual Review of Public Health*, 39, pp.385–401, https://doi.org/10.1146/ANNUREV-PUBLHEALTH-040617-014711

Freeman, B., B. Kelly, S. Vandevijvere and L. Baur (2016) 'Young adults: beloved by food and drink marketers and forgotten by public health?', *Health Promotion International*, 31 (4), pp.954–61, https://doi.org/10.1093/HEAPRO/DAV081

Garde, A., S. Byrne, N. Gokani and B. Murphy (2018) *A Child Rights-based Approach to Food Marketing: a guide for policy makers*, Unicef

Garton, K., S. Gerritsen, F. Sing, K. Lin and S. Mackay (2022) 'Unhealthy food and beverage marketing to children on digital platforms in Aotearoa, New Zealand', *BMC Public Health*, 22 , https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-14790-6

Garton, K., S. Mackay, F. Sing, V. Egli and L. Signal (2022) *Unhealthy Food and Drink Marketing in Aotearoa New Zealand: evidence snapshot 2022*, University of Auckland and University of Otago

Goodwin, I. (2022). Programmatic alcohol advertising, social media and public health: algorithms, automated challenges to regulation, and the failure of public oversight. *International Journal of Drug Policy,* 109, 103826

Hardie, L., J. McCool and B. Freeman (2023) 'E-cigarette retailers' use of Instagram in New Zealand: a content analysis', *International Journal of Environmental Research and Public Health*, 20 (3), https://doi.org/10.3390/IJERPH20031897/S1

Jackler, R.K., V.Y. Li, R.A.L. Cardiff and D. Ramamurthi (2019) 'Promotion of tobacco products on Facebook: policy versus practice', *Tobacco Control*, 28 (1), pp.67–73, https://doi.org/10.1136/TOBACCOCONTROL-2017-054175

Jackson, N., N. Cowie and A. Robinson (2021) 'Ineffective, meaningless, inequitable: analysis of complaints to a voluntary alcohol advertising code', *New Zealand Medical Journal*, 134 (1530), pp.118–21

Jernigan, D., J. Noel, J. Landon, N. Thornton and T. Lobstein (2017) 'Alcohol marketing and youth alcohol consumption: a systematic review of longitudinal studies published since 2008', *Addiction*, 112 (Suppl 1), pp.7–20, https://doi.org/10.1111/ADD.13591

Kelly, B., S. Vandevijvere, B. Freeman and G. Jenkin (2015) 'New media but same old tricks: food marketing to children in the digital age', *Current Obesity Reports*, 4 (1), pp.37–45, https://doi.org/10.1007/s13679-014-0128-5

Kelsey, J. (2022) 'Waitangi Tribunal forces NZ rethink on digital trade rules', Australian and New Zealand Society of International Law, https://anzsilperspective.com/waitangi-tribunal-forces-nz-rethink-on-digital-trade-rules/

Kidd, B., S. Mackay, B. Swinburn, C. Lutteroth and S. Vandevijvere (2021) 'AdHealth: a feasibility study to measure digital food marketing to adolescents through Facebook', *Public Health Nutrition*, 24 (2), pp.215–22, https://doi.org/10.1017/S1368980020001561

Kiss, J. (2013) 'An online Magna Carta: Berners-Lee calls for bill of rights for web', *Guardian*, 12 March, https://www.theguardian.com/technology/2014/mar/12/online-magna-carta-berners-lee-web

Kukutai, T., K. Campbell-Kamariera, A. Mead, K. Mikaere, C. Moses, J. Whitehead and D. Cormack (2023) *Māori Data Governance Model*, https://www.temanararaunga.maori.nz/nga-rauemi#M%C4%81ori DataGovernanceModel

Kukutai, T. and D. Cormack (2021) '"Pushing the space": data sovereignty and self-determination in Aotearoa NZ', in M.Walter, T. Kukutai, S. Russo Carroll and D. Rodriguez-Longbear (eds), *Indigenous Data Sovereignty and Policy*, London: Routledge

Laestadius, L.I., M.W. Wahl and Y.I. Cho (2016) '#Vapelife: an exploratory study of electronic cigarette use and promotion on Instagram', *Substance Use and Misuse*, 51 (12), pp.1669–73, https://doi.org/10.1080/10826084.2016.1188958

Lobstein, T., J. Landon, N. Thornton and D. Jernigan (2017) 'The commercial use of digital media to market alcohol products: a narrative review', *Addiction*, 112, pp.21–7, https://doi.org/10.1111/ADD.13493

Lyons, A., I. Goodwin, N. Carah, J. Young, J. Moewaka Barnes and T. McCreanor (2023) 'Limbic platform capitalism: understanding the contemporary marketing of health-demoting products on social media', *Addiction Research and Theory*, 31 (3), pp.178–83

Lyons, A. C., Barnes, A. M., Goodwin, I., & Carah, N. (2024). Exposure to digital vape marketing among young people in Aotearoa New Zealand. *Toitū Te Tiriti*, 20

Lyons, A.C., T. McCreanor, I. Goodwin and H. Moewaka Barnes (2019) *Youth Drinking Cultures in a Digital World: alcohol, social media and cultures of intoxication*, London: Routledge

McCreanor, T., A. Lyons, C. Griffin, I. Goodwin, H. Moewaka and F. Hutton (2013) 'Youth drinking cultures, social networking and alcohol marketing: implications for public health', *Critical Public Health*, 23 (1), pp.110–20, https://doi.org/10.1080/09581596.2012.748883

McCreanor, T., H. Moewaka Barnes, M. Gregory, H. Kaiwai and S. Borell (2005) 'Consuming identities: alcohol marketing and the commodification of youth experience', *Addiction Research and Theory*, 13 (6), pp.579–90, https://doi.org/10.1080/16066350500338500

McKevitt, S., M. White, M. Petticrew, C. Summerbell, M. Vasiljevic, E. Boyland, S. Cummins, A.A. Laverty, C. Junghans, C. Millett, F. De Vocht, E. Hrobonova and E.P. Vamos (2023) 'Typology of how "harmful commodity industries" interact with local governments in England: a critical interpretive synthesis', *BMJ Global Health*, 8 (1), e010216, https://doi.org/10.1136/BMJGH-2022-010216

Ministry of Business, Innovation and Employment (2023) 'Consumer data right', https://www.mbie.govt.nz/business-and-employment/business/competition-regulation-and-policy/consumer-data-right

Montgomery, K.C. and J. Chester (2009) 'Interactive food and beverage marketing: targeting adolescents in the digital age', *Journal of Adolescent Health*, 45 (3), pp.S18–S29, https://doi.org/10.1016/J.JADOHEALTH.2009.04.006

Murphy, G., C. Corcoran, M. Tatlow-Golden, E. Boyland and B. Rooney (2020) 'See, like, share, remember: adolescents' responses to unhealthy-, healthy- and non-food advertising in social media', *International Journal of Environmental Research and Public Health*, 17 (7), https://doi.org/10.3390/IJERPH17072181

New Zealand Parliament (2023) 'Fair Digital News Bargaining Bill – first reading', https://www.parliament.nz/en/pb/hansard-debates/rhr/combined/HansDeb_20230830_20230831_24

O'Brien, E.K., L. Hoffman, M.A. Navarro and O. Ganz (2020) 'Social media use by leading US e-cigarette, cigarette, smokeless tobacco, cigar and hookah brands', *Tobacco Control*, 29 (e1), pp.E87–E97, https://doi.org/10.1136/TOBACCOCONTROL-2019-055406

Reith, G. (2018) *Addictive Consumption: capitalism, modernity and excess*, London: Routledge

Riley, N. (2023) 'Māori data is a taonga', *E Tangata*, 28 May, https://e-tangata.co.nz/comment-and-analysis/maori-data-is-a-taonga/

Shields Dobson, A., B. Robards and N. Carah (eds) (2018) *Digital Intimate Publics and Social Media: towards theorising public lives on private platforms*, Springer International Publishing

Sing, F., S. Mackay, A. Culpin, S. Hughes and B. Swinburn (2020) 'Food advertising to children in New Zealand: a critical review of the performance of a self-regulatory complaints system using a public health law framework', *Nutrients*, 12 (1278)

Sing, F., B. Reeve, K. Backholer, S. Mackay and B. Swinburn (2022) 'Designing legislative responses to restrict children's exposure to unhealthy food and non-alcoholic beverage marketing: a case study analysis of Chile, Canada and the United Kingdom', *Globalization and Health*, 18 (1), pp.1–19, https://doi.org/10.1186/S12992-022-00865-X/TABLES/4

Smith, R., B. Kelly, H. Yeatman and E. Boyland (2019) 'Food marketing influences children's attitudes, preferences and consumption: a systematic critical review', *Nutrients*, 11 (4), https://doi.org/10.3390/NU11040875

Solon, O. (2018) 'Tim Berners-Lee: we must regulate tech firms to prevent "weaponised" web', *Guardian*, 11 March, https://www.theguardian.com/technology/2018/mar/11/tim-berners-lee-tech-companies-regulations

Sun, T., G. Vu, C.C.W. Lim, B. Johnson, D. Stjepanović, J. Leung, J.P. Connor, C. Gartner, W.D. Hall and G.C.K. Chan (2023) 'Longitudinal association between exposure to e-cigarette advertising and youth e-cigarette use in the United States', *Addictive Behaviors*, 146, 107810, https://doi.org/10.1016/J.ADDBEH.2023.107810

Tatlow-Golden, M. and A. Garde (2020) 'Digital food marketing to children: exploitation, surveillance and rights violations', *Global Food Security*, 27, 100423, https://doi.org/10.1016/J.GFS.2020.100423

Te Mana Raraunga (2016) 'Our charter', https://www.temanararaunga.maori.nz/tutohinga

UK Government (2023) *Government Response to Online Advertising Programme Consultation*, https://www.gov.uk/government/consultations/online-advertising-programme-consultation/outcome/government-response-to-online-advertising-programme-consultation

VicHealth (2020) *Under the Radar: harmful industries' digital marketing to Australian children*, Melbourne: VicHealth, https://doi.org/10.37309/2020.CI910

Waitangi Tribunal (2023) *The Report on the Comprehensive and Progressive Agreement for Trans-Pacific Partnership*, Wai 2522, Wellington: Waitangi Tribunal

World Health Organization (2018) *Global Status Report on Alcohol and Health*, https://www.who.int/publications/i/item/9789241565639

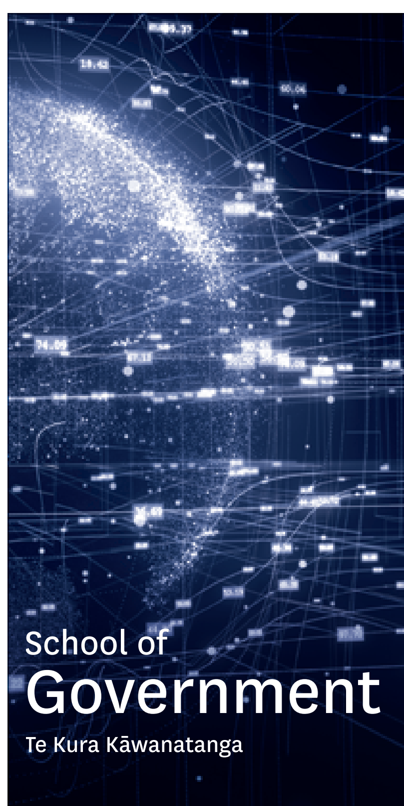
World Health Organization (2022) *Digital Marketing of Alcoholic Beverages: what has changed?*, Snapshot series on alcohol control policies and practice, Brief 6

World Health Organization (2023) *Restricting Digital Marketing in the Context of Tobacco, Alcohol, Food and Beverages, and Breast-milk Substitutes: existing approaches and policy options*, Geneva: World Health Organization

World Health Organization Regional Office for Europe (2016) *Tackling Food Marketing to Children in a Digital World: trans-disciplinary perspectives children's rights, evidence of impact, methodological challenges, regulatory options and policy implications for the WHO European region*, http://www.euro.who.int/pubrequest

World Health Organization Regional Office for Europe (2021) *Digital Marketing of Alcohol: challenges and policy options for better health in the WHO European region*

World Wide Web Foundation (n.d.) 'The history of the web'



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Deborah Stevens, John Kleinsman, Adam Stevens, Jamie Crutchley and Colin MacLeod

Wage Policy and Justice in Aotearoa New Zealand young adults' perspectives

Abstract

We analysed the responses of 995 Year 13 students from across Aotearoa New Zealand regarding the payment of minimum and living wages. In analysing their Likert scale ratings and written responses, we found the majority of these young adults to be clearly in favour of the living wage being adopted universally. Their justifications for this stance centred around themes of survival, justice, wellbeing, economic balance and reciprocity. We assert that the voices of rangatahi have been missing in the consecutive government reviews of the minimum wage, and that listening to these voices will enhance policymaking in this area.

Keywords minimum wage, living wage, economic policy, justice, wellbeing, employer, employee, reciprocity, youth

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Setting the scene

Young people are often framed as being underrepresented and/or insufficiently considered in decision-making processes, including public policy. Of the four million estimated eligible voters in last year's general election in New Zealand, over 10% (422,221 people) would be classed as 'youth', i.e., people aged 18–24 years old[1] (Electoral Commission, 2024). However, only 57% of young eligible voters actually cast a vote in that election (242,536 people) (Electoral Commission, 2023), the lowest fraction of any age bracket. Moreover, there is only a single member of Parliament in this age bracket out of a total 123 current MPs, and only 17 have been elected in history dating back to the 1850s (New Zealand Parliament, 2023). This significant level of underrepresentation is enough by itself to raise concern over whether the voices of young adults are being heard when it comes to setting and reviewing public policy in Aotearoa.

There is an absence of a purely data-driven metric for objectively quantifying the consideration of youth in public policy. However, many studies have interviewed youth on how represented they feel, and

analysed their responses (e.g., TakingITGlobal et al., 2008; OECD, 2020b; Chugdar and Chavda, 2023), or surveyed government departments on their youth policies (e.g., OECD, 2020a). As a principal example, the TakingITGlobal consultation specifically asked more than 111 youth, 'Do you feel the views of young people are sufficiently included in designing public policy?' and 'What are the barriers to participation?' (TakingITGlobal et al., 2008; Yeo, 2009). The majority of participants strongly agreed that young people were not appropriately included in designing public policy. Barriers to youth participation in policymaking were identified in government, society, and young adults themselves. That the views of children and young people in Aotearoa are not systematically considered in the formation of laws and policies that affect them has been highlighted in a number of reports, including by the United Nations Committee on the Rights of the Child (2011, paras 26–7, 2016, para 18) and the Office of the Children's Commissioner (Office of the Children's Commissioner and Oranga Tamariki, 2019).

Assertions that youth are frequently portrayed in a negative light, stereotyped as self-centred, lazy and uninvolved in political and social issues (e.g., Cunningham and Rious, 2015, p.S86), resonate with the high rates of ageism that under-25s report having experienced (European Social Survey, 2013, p.15). Young adults sense 'that governments and the rest of society do not consider them ready to contribute constructively to the design of policies' (TakingITGlobal et al., 2008). And yet, as one focus group participant of the project herein reported said, 'people are always like, oh 16-year-olds might just make a stupid decision. But what would hold back a 45-year-old from making a stupid decision? Nothing …'.

Information relevant to the design of public policies is seldom disseminated to or reaches young people; and, if it is, relevant information is frequently expressed in inaccessible language, creating further barriers to young people's voices being heard on issues they care about (ibid.). Even as social media platforms have evolved and proliferated over recent years, there remains a strongly articulated sense that government departments, local councils and organisations need to improve how they disseminate information to the general public, especially youth. This is exemplified in our results, where 70% of respondents wanted to know more. While the Make It 16 campaign and School Strikes for Climate Change counter the traditional impression of youth as disengaged and apathetic, it is incumbent upon policymakers to increase consultation, facilitate meaningful information dissemination, and overcome language access barriers if they are to take the views of young adults seriously. As Brown et al. argue, engaging young adults in decision making can contribute to a culture shift that can legitimise children and young people's participation and change the way they are viewed (Brown et al., 2020, p.7).

To help remedy the lack of youth voices in New Zealand government policy, we present the first results from the What Is Your Stand? research project. Our research gives young adults aged 17–19 the opportunity to express their voice on policies that affect them and will continue to affect them throughout their adult lives. To our knowledge, there is little literature that equates to this present study, both in a broad sense of researching the attitudes of young adults on a number of issues, and on the specific topic of fair labour, which this article focuses on (notwithstanding Coleman and Karacaoglu, 2020, and associated articles).

What Is Your Stand?

The What Is Your Stand? project is designed to gain perspective on the attitudes and views of Year 13 students in New Zealand towards four significant social issues: the environment, wages, abortion and assisted dying. This is a crucial time for these 17- to 19-year-olds, who are completing their secondary school education and preparing to enter the workforce, a trade or tertiary study. The research project began in 2019, with the chosen issues relating to policy and regulatory debates occurring at the time. In addition to general debate around the economy, New Zealand was debating end-of-life legislation and abortion law reform, students had begun to strike for climate change, and the Make It 16 voting campaign was gaining momentum.

Carrying out research into the formation of young people's attitudes and values is complex, due to an abundance of potential influences. In addition to the apparent pervasive effect of social media trends and advertising, we recognise that students are influenced by: their families of origin; identification with a particular ethnic culture; active and regular participation in community and/or church groups; the contemporary climate of

… we recognise that students are influenced by: their families of origin; identification with a particular ethnic culture; active and regular participation in community and/or church groups; the contemporary climate of individualism and materialism; and their school environment, to name some of the more obvious.

individualism and materialism; and their school environment, to name some of the more obvious. From the outset it was recognised that the research ultimately needed to compare the attitudes of students across all types of schools: state, state-integrated and private.

Utilising mixed qualitative and quantitative methods, What Is Your Stand? involves three iterative stages. The development and pilot application of our research method was undertaken in 2019. Following Covid-19 disruptions, stage-two data (presented herein) was obtained from Year 13 students attending Catholic secondary schools across Aotearoa[2] in September 2022. The 2024 stage will see the collection of data from Year 13 students from all types of secondary school.

Minimum and living wage

In this article, we present and discuss the results specifically relating to the 2022 responses on the payment of minimum and living wages.

As determined by law, an employer is legally obligated to pay the adult minimum wage to full- and part-time employees over the age of 16 who are not 'starting out' or training (Minimum Wage Act 1983). Each year the government reviews the minimum wage. The objective of this annual review is 'to keep increasing the minimum wage over time to protect the real income of low-paid workers while minimising job losses' (Ministry of Business, Innovation and Employment, 2023, p.6). While the review involves consultation with select stakeholders, it is typically only every fourth year that a 'comprehensive review' takes place which involves consultation with or allows for submissions from a broader group of associations. Even then, few – if any – of these organisations represent youth.[3] Most reviews, including the most recent one in December 2023, are 'streamlined', meaning consultation is limited to the government's social partners, the New Zealand Council of Trade Unions and BusinessNZ.

Independently calculated by the New Zealand Family Centre social policy unit, the living wage is the hourly wage 'required to sustain the essential needs' of two adults and two children on 1.5 incomes. This takes into consideration KiwiSaver contributions, subsidies and tax credits.[4] While it is an employer's legal obligation to pay the minimum wage, paying the living wage rate is voluntary.

Commentary surrounding the minimum and living wage is particularly topical at present, given the 2% increase to the minimum wage (from $22.70 to $23.15 per hour) announced by the National–ACT–New Zealand First coalition government in January, which came into effect on 1 April 2024. During the 2023 political campaign, the ACT Party advocated for a moratorium on minimum wage increases (ACT, 2023). In their paper to Cabinet, the workplace relations and safety minister had initially recommended a 1.3% rise (Minister for Workplace Relations and Safety, 2024), while the Ministry of Business, Innovation and Employment (MBIE) proposed a 4% rise (Ministry of Business, Innovation and Employment, 2023). Other commentators argued for an increase to match current inflation of 4.7%. To have set the 2024 minimum wage to the current living wage rate of $26 per hour, as argued by the Council of Trade Unions and explored by MBIE, would have required a 14.5% increase (New Zealand Council of Trade Unions, 2024; Ministry of Business, Innovation and Employment, 2023, p.6). In assessing the potential employment impacts of an increase to the minimum wage, MBIE's model did not predict any restraint on employment from an increase of up to 5% in 2024 (ibid., p.7).

The different rates (i.e., for the minimum wage and the living wage) highlight potentially different criteria being used by different policymakers and emphasise a need for an agreed set of reference points, something this discussion hopes to advance through the articulation of a youth perspective.

Young adults are significant stakeholders in any discussion about the minimum wage. In addition to their experience of living in families with wage earners receiving the minimum wage, MBIE's streamlined review of the 2024 minimum wage rate found that 59% of all minimum wage earners are young adults aged 16–24 (ibid., p.25).

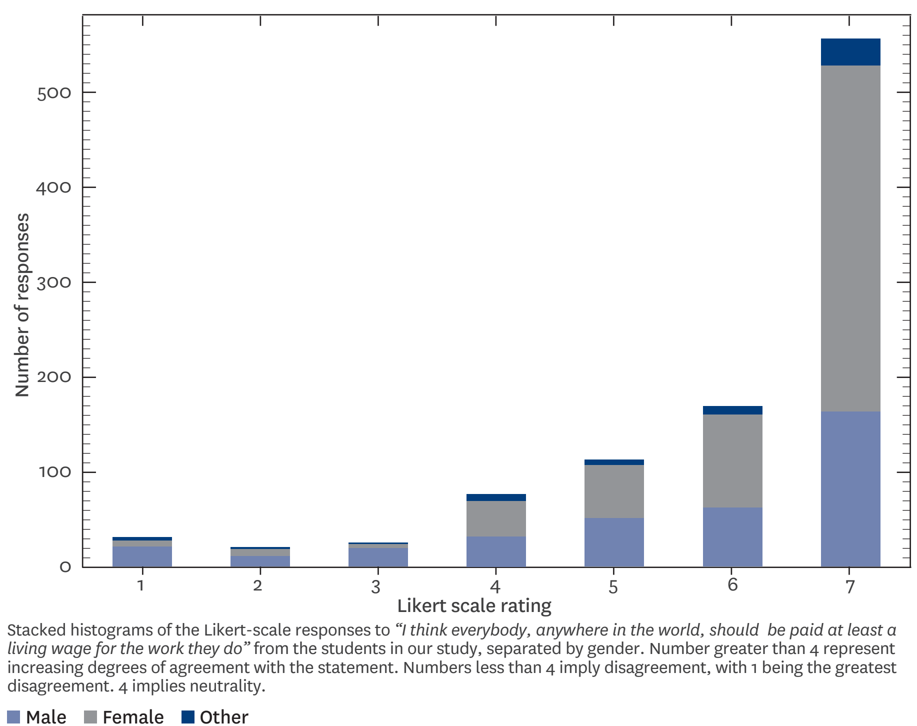
Our data was collected via an anonymous online survey which asked students to respond to a statement on each of the four aforementioned contemporary issues by recording their disagreement or agreement on a seven-point Likert scale.

Survey data

Our data was collected via an anonymous online survey which asked students to respond to a statement on each of the four aforementioned contemporary issues by recording their disagreement or agreement on a seven-point Likert scale. Participants were then asked to provide a written response outlining why they had chosen that particular Likert score. School and student participation were voluntary and anonymous. Participants completed the survey during a single classroom period, at a time approved by their teacher and school principal.

With respect to the fair labour item of the 2022 survey, participants were provided with a brief definition of 'minimum wage' and 'living wage' and their respective rates before being asked to express their

Figure 1



Stacked histograms of the Likert-scale responses to *"I think everybody, anywhere in the world, should be paid at least a living wage for the work they do"* from the students in our study, separated by gender. Number greater than 4 represent increasing degrees of agreement with the statement. Numbers less than 4 imply disagreement, with 1 being the greatest disagreement. 4 implies neutrality.

Male Female Other

disagreement/agreement with the statement, 'I think everybody, anywhere in the world, should be paid at least a living wage for the work they do'[6] on the Likert scale. While Likert responses to this question are potentially subject to acquiescence bias, the students' written responses that justified their choice helped to mitigate any impact this bias might have.

Participants were asked neither for their name nor the name of the school they attended, but were asked to indicate their preferred ethnicity and gender. Respondents were also asked to record whether they had studied fair labour in class; whether they would like to study the topic more; whether their school was co-educational or single-sex; how many years they had attended a Catholic school across their education; and to rank the importance of religion to them outside the school gates on a four-point scale of unimportant, moderately important, important and very important.[7]

In a further step of triangulation, audio recordings were made of students who had responded to the online survey and volunteered to participate in one of two focus groups, conducted in Auckland and Timaru. Discourse analysis of the recordings was undertaken, but only one excerpt (above) is included here.

A total of 1019 responses were collected from 33 schools across Aotearoa New Zealand. Twenty-four students were eliminated as disingenuous participants when a pattern of disruptive answers was established across three or more responses, resulting in a final sample size of 995.

Methodological limitations

As described above, this commentary is drawn from a cohort of Year 13 students across Aotearoa New Zealand who attended state-integrated Catholic schools. Our sample reflects the schools we had access to and who volunteered to partake in this stage of the research. One might argue that results from these respondents are not generalisable because of the partisan nature of the schools. However, enrolment in a religious college – in this instance, a Catholic one – is not of itself a determining factor in predicting a young person's views on a particular ethical issue. For example, Bernardi et al. (2011) find no significant difference in the ethical decision making of students associated with attending a public or religiously affiliated primary or secondary school. Our study appears to support this, as participants' responses to questions on assisted dying and abortion included in the wider survey (to be presented in future work) reflect views similar to those of New Zealand society as a whole. Further, our statistical testing showed no significant difference in the responses between students based on how they self-reported the importance they place on religion.[8] We therefore do not expect the views of the students in this study to be significantly biased by the partisan nature of their schools. The survey of Year 13 students across state, state-integrated and private schools, to be undertaken in July 2024, will enable a more robust test of this thesis.

We recognise that while the terms 'minimum' and 'living' wage are standard in discussion of policy and fair labour legislation, their use within the research question may 'prime' participants, which could potentially bias their responses. The 'fair labour' title has been changed to 'wages' in the 2024 survey, and the reference to pay rates outside New Zealand removed to minimise any potential biasing effect.

Trends with demographics

Figure 1 presents a summary of the Likert-scale results: overwhelmingly, students were found to be in favour of everybody being paid the living wage. Fifty-eight students (6%) were hesitant about the response they offered, adding a 'don't know enough' or an 'unsure' caveat, while 32 students (3%) made no comment. Five hundred and sixty-nine participants (57%) identified as female, 378 as male (38%), and 48 as other or 'prefer not to say'.

As illustrated in Figure 1, female students are more likely to agree with the research statement on the living wage compared to their male peers. In performing a Mann–Whitney U Test,[9] we found this to be significant at $p<0.01$ (the 99% confidence level). Interestingly, we found that males attending single-sex schools were less likely to be supportive of a living wage than males in co-education (again at the $p<0.01$ level). By contrast, there was no significant difference between the way females attending single-sex schools versus co-educational schools responded to the statement.

In our sample, 508 people (51.3%) identified as New Zealand European, 147 (14.8%) as Asian, 137 (13.8%) as Pasifika, 103 (10.4%) as Māori, 95 (9.6%) as 'other', and 5 preferred not to say. In comparing each of these ethnicities, we found all of them to respond to the living wage statement in a similar way.[10] However, when

ethnicity and gender are coupled together, New Zealand European males (n=215) appear to be more in disagreement with the living wage statement than all other ethnicity–gender groups ($p<0.01$).

While 83% of students reported that they had not studied fair labour in class, 70% expressed the desire to do so. Those who expressed this desire had a more positive attitude towards the statement ($p<0.01$ from Mann–Whitney U). No significant difference was found between the students who had and had not studied fair labour previously ($p=0.308$).

Finally, we found no statistically significant correlation between the Likert scores and either the number of years a student had spent in Catholic education[11] ($p=0.29$), nor the self-described level of importance to them of religion outside school (Spearman's test of correlation).[12]

Written response themes

Inductive qualitative analysis was used to identify the themes in the written responses recorded by participants to explain their chosen Likert score. Thoroughly familiarising themself with the written responses through repeated reading, the lead researcher tagged the apparent patterns of meaning. Tags were then grouped into themes. Themes included survival, justice, wellbeing and economics. A motif of reciprocity was woven throughout the themes. Examples of responses that capture the salient themes and the tags within them are presented below in order of the most commonly referenced. Throughout this article, participant responses are cited without any modifications and retain their original spelling and grammar choices. Responses frequently contained more than one theme, as represented in the quotes that follow. Student number and demographic information are footnoted.

A number of respondents discussed the 'many social, political, economic (etc.) factors contributing to the living and minimum wages'[13] and gave the opinion that the payment of wages is a 'complex issue that needs in depth discussion'.[14] However, the discussion of minimum versus living wage was generally considered from the microeconomic level of lived experience: 'how are we supposed to live to the fullest if we can't afford to even feed ourselves?'

> 'I have enough knowledge to say that millions of people around the world are going through financial struggle, my family is … I feel like living wage should be implemented for those working at/by the age of 18, or if those younger who have to provide, should be able to voice their struggles and be able to get the living age as well. We all have to provide for ourselves and our families, and the living wage would make that difference.'[15]

For the 995 students who participated in this research, earning a living wage is foremost about survival and justice.

Survival

Participants' articulation of the survival theme included the idea of simply being able to subsist, to survive, to earn a wage that allows a person to pay for the basic needs of food, housing, clothing, transportation and so on, for themselves and anyone they may support.

We identified 457 responses (46%) as falling under the theme of survival. In 72 instances this meant the student directly used the word 'survive' or a derivative thereof. For example: 'I believe people should be paid a living wage because the very name implies that one cannot survive under this amount. By paying people less than this, we condemn them to a life where their future is constantly at risk.'[16] In 180 instances, students wrote a variant of the living wage being needed to 'provide basic necessities'. Similarly, 146 noted the 'ability to exist' (or words similar). Fifty-nine considered the importance of not just providing for themselves, but also family. A similar strategy of identifying key phrases or meaning was used for tagging of the other themes below.

Justice

The justice theme (reflected in 401 responses) was underpinned by a view that paying full-time employees an amount they can exist on 'is what is fair and just'.[17] Students cited being paid a living wage as being what is 'right' and a 'human right': for example, 'I believe that every person should have the rights to be able to provide for themselves and be able to earn enough money to live a healthy and sustainable life.'[18] Several respondents noted that employees 'deserve' to be paid a living wage; that it would be 'inhumane' to not do so: 'Because it isn't humane to have some people struggling to live everyday because they cannot afford it. Everyone works hard in their own way and therefore deserves to make a decent living.'[19]

Students cited being paid a living wage as being what is 'right' and a 'human right': for example, 'I believe that every person should have the rights to be able to provide for themselves and be able to earn enough money to live a healthy and sustainable life.'

Justice in the form of a fair, living wage is a necessary response to inequity, respondents suggested. 'It is important for all of us to be valued equally and therefore paid for our labour regardless of the type of work', as 'no matter what job it is, it is useful and done for a reason. The person doing that job is necessary and should be paid with a living wage for it, especially if that can be their only job.'

> I think that each individual deserves a living wage for the work they do because currently wages are based off

> the social status we put on them, and those who are suffering without a living wage contribute often just as much as a high paying doctor or lawyer.[20]

Some respondents reasoned that paying an employee a liveable wage would help to alleviate exploitation and discrimination in the workplace: 'I believe that wages below living exploit people and can be based on internal bias of gender and age'; 'Employers may be discriminating against others and that is not fair since they get to choose whether they pay their workers minimum wage or living wage.' Respondents also argued that reducing the effects of deprivation for individuals and their immediate families 'would have far reaching benefits eg reduce crime, improve health and wellbeing of people, help close gap between rich and poor'.[21]

In these and other ways, student reflection on paying a living wage identifies a link between survival, justice and wellbeing.

Wellbeing

For 233 participants, the question of a fair wage cannot be discussed without specific consideration of individual, family and community wellbeing. 'We should work to live, not live to work', and paying the living wage might allow people to live 'a stable and healthy life', with less stress and toil: 'If people are not getting the living wage they are never going to be able to make a life for themselves and will always be struggling.'[22] 'A living wage is simply a way to reduce suffering and allowing people to live; this isn't even considered living comfortably, just surviving in our modern society.' 'If people are being paid below the living wage, how can we expect these people to thrive, develop themselves and be able to contribute more to society.'[23]

Respondents articulated an interconnectedness between low income and the physical and psychological wellbeing of individuals and families, identifying, as per Maslow's hierarchy of needs, that the question of fair pay is not just a matter of lower-level needs. It seemed obvious to almost all students that an inadequate level of income for people to meet their ordinary living requirements contributes to material hardship, uncertainty, struggle and burden. 'Poverty is a serious issue that may begin with unfair wages. This is a cycle that people can get stuck in, therefore fair labour can contribute to an overall better lifestyle.'[24]

Participants recognised that 'Many people have to work multiple jobs to create a living for themselves', arguing that 'families should not have to work multiple jobs per person just to make ends meet. … If everybody had a living wage, people would be able to spend time for themselves and their families.'

> This is because they literally go through stages where they would sacrifice their time with their children, only to go to work and having to work more harder in order to pay for their living, making it harder on families to have their own bonding time to spend with each other.[25]

If a family earns just enough to survive by both parents working one (or more) full-time jobs each, then a variety of other issues arise with respect to the wellbeing of both the individual and the community:

> In New Zealand, families living on minimum wage can barely afford food, let alone nutritious fresh food. This is highly unjust. Especially in the current cost of living crisis. Along with poverty and poor nutrition comes many issues such as over-flowing hospital resources and issues with education. Paying workers a living wage enables families to care for their children more.[26]

Despite 83% of respondents reporting that they had not studied fair labour, the majority of responses echoed established research on a connection between low wages and impoverishment …

Despite 83% of respondents reporting that they had not studied fair labour, the majority of responses echoed established research on a connection between low wages and impoverishment (Welfare Expert Advisory Group, 2019), and the cumulative impacts of economic hardship on people's housing, food and fuel security, and health and educational achievement (Wilkinson and Pickett, 2010; Asher and St John, 2016; Haigh, 2021; Ministry of Education, 2023; McKelvie-Sevileau and Swinburn, 2024). For youth, there are consequences for not fixing the problem at what they perceive as the root: that is, at the level of wages.

Reciprocity, including economic balance

Illustrating the complexity of the wage policy question, a number of respondents also discussed the tension between the level of wages paid and the ability for a business to survive. There must be reciprocity in the form of exchange and mutual benefit within employment. As one participant articulated, 'It is important based on the wellbeing of people, however I know there is implications economically when raising the minimum wage, so as nice as this would be it isn't as easy as just supplying more money to people.'[27]

Students variously acknowledged the situation of small businesses (and the self-employed, such as artists) that may not be able to pay the living wage. Larger companies, however, were perceived as readily able to pay the living wage:

> I think that it is important for people to be paid enough to support themselves but I also think that paying living wage

to all employees could put a strain on smaller businesses especially after covid. I think that all large companies should pay their workers a living wage.[28]

Where a small business may not be able to the pay the living wage, several students identified different ways that employers could recognise and value their employees.

> Larger companies such as Pak'N'Save should pay all full-time workers above living wage as they can afford the extra cost of staff. Smaller businesses that are struggling and cannot afford to pay their workers a living wage should be able to pay workers minimum wage but should make sure that they value their workers and they are not in financial hardship, in my experience this does work as these businesses are smaller and have more personal communication between the employee and the employer.[29]

Expressing an ethos of 'fair pay for fair work', participants distinguished a person's work ethic as an important element of the reciprocal arrangement between employer and employee: 'People who don't work hard shouldn't get payed the same as someone who does', as 'some people just muck around and don't deserve the full amount'. Employees should receive a living wage 'to the extent that they meet the requirements of the job and are doing the job to the best of their abilities'.[30]

Beyond a person's age and work ethic, types of paid work differ considerably and 'People should be paid by the amount of effort and the difficulty of the work they do'. Similar sentiments were expressed by other students: 'Wages need to depend on the quality, quantity, necessity, or hardness of the job'; 'At the end of the day you get paid for the work you are doing and the experience you have in that job'[31];

> I believe that people should be paid in correspondence to the amount of work they do and the conditions they work under. If their job is highly labour intensive and takes up a big chunk of time, they should be paid for the amount of work they do. If people work under easy conditions and their job does not demand much labour/time, they should have to work longer hours in order to make more money.[32]

Examples used to illustrate differences between occupations included the degree of physical labour and skills required and/or any element of 'danger' inherent in the work: 'For example you are more likely to be injured doing a construction job compared to working at a supermarket. Therefore the more dangerous jobs should be payed more than others.' Further, because certain occupations require formal qualifications, determination of a fair wage also 'Depends on the work – if someone has a degree then they should be paid higher for the job that they do because they are highly qualified.' Levels of need and people's circumstances also differ. 'Pay depends on age, experience and current lifestyle/circumstances. Not everyone is entitled to higher wages.'[33] In particular, teenagers still living at home were identified as an example that 'different people need different support for different reasons'.

> Any student at high school (over 16 as that is the age someone can leave home) that does not need to cater for a family can be paid minimum as they likely have expenses such as food, and living paid for by their family. However, any job that is a person's primary source of income should be at least a living wage as they need to be able to live without having to put in long hours just to get by.[34]

Fundamentally, however, 'All jobs are essential for the functioning of society and so everyone should be able to survive off of the income from their work.'[35]

Discussion

For the nearly 1,000 rangatahi in this research survey, earning a living wage is clearly articulated as an issue of survival, justice, wellbeing and reciprocity.

> I believe it doesn't make sense to be paid less than what you can live off. If countries want flourishing economics, productive workforces and individuals that feel healthy and safe, then everyone should be paid at least a living wage for the work they do. This would mean that so many people would no longer have to work multiple jobs, as well as school or caring and cooking meals for families. This puts so much unnecessary stress on people and definitely would negatively impact people's mental wellbeing.[36]

Given that it is shaped by and embedded in politics and policy, these young adults agree with Haigh ... that impoverishment and material hardship cannot be regarded as a simple economic problem.

Acknowledging the complexity of economics while expressing a desire to learn more, for these young adults it is the 'human' dimensions of wage policy that should be accorded the greatest importance and dictate decision making. Rangatahi recognise that balance is required in an employer–employee relationship, including around rates of pay. However, from their perspective, wellbeing should not be the privilege of some, but should be attainable by everyone.

Youth voices can be a powerful positive influence on how policymakers understand and serve both young people and the whole population. With respect to wage policy, the importance of young people's voices is

not just that they reflect their own first-hand experience as employees; youth are also part of families, many of whom, as in our data, will have experienced material, educational, health and social hardships resulting from an inadequate income and increasing inequality.

For the young adults in this study, refined policy setting requires awareness and knowledge of the impact that settings have on all parties involved. Every job, from café worker to King's Counsel, from cleaner to cardiac surgeon, contributes to society in its own way. Everyone needs to work in a just environment where all work is respected for the social contribution that is made, and be recompensed in a way that enables them to thrive and fulfil their dreams, potential and goals. The young adults in this study indicate that the minimum wage rate must reflect a liveable income.

> Without making a living wage, people are not achieving what working is designed to do. By that I mean you provide for the economy and the economy provides for you. But if you provide all you can for the economy (e.g 40 hour week) and the economy cannot even give you the basic needs to live, then there is a serious issue and inbalance.[37]

Respondents linked an hourly wage rate below a 'living wage' to material hardship and poverty.[38] That four in ten children in poverty in New Zealand have a parent in full-time work illustrates the gravity of the issue: 'Work doesn't pay in this country, or not at the bottom end' (Rashbrooke, 2024). Given that it is shaped by and embedded in politics and policy, these young adults agree with Haigh (2021, p.946) that impoverishment and material hardship cannot be regarded as a simple economic problem. For example, including data on food security for the first time, the Programme for International Student Assessment (PISA) 2022 results revealed that New Zealand students in food poverty were two to four years behind in mathematics, reading and science achievement compared to their food-secure peers.[39]

The 0–14.5% range of increases to the minimum wage rate suggested by different policymakers and considered by MBIE (Ministry of Business, Innovation and Employment, 2023) indicates a lack of agreed criteria for arriving at the final decision. The themes expressed by young adults in this study provide salient questions for the Cabinet and policymakers to consider, alongside equally important questions relating to the economy of New Zealand and the viability of small business, when the minimum wage level is reviewed each year:

- How can the themes of survival, justice, wellbeing and reciprocity be incorporated into the process, values and priorities used by government when reviewing the minimum wage?
- Which voices in the community might be dominating the current decision-making process surrounding the minimum wage to the exclusion of other voices, including those of rangatahi?

Conclusion

This article is grounded in the view that there is a responsibility on policymakers to hear the voices of young adults. Policy is improved when those most affected are involved in the policymaking process (Brown et al., 2020, p.4). If the voices of the rangatahi in this study were heard, we ask, 'What would policymakers have decided regarding the most recent review of the minimum wage rate?'

1 The terms 'youth' or 'young' typically include people younger than 18, but they are not eligible voters.
2 Students attending these state-integrated colleges have a timetabled opportunity to explore contemporary ethical issues and complete relevant NCEA standards. Researchers had easy access to these students.
3 A comprehensive review was undertaken in both 2021 and 2022 due to the economic impacts of the Covid-19 pandemic. Of the stakeholders listed in the annexes of those reviews, the only organisations with an obvious link to youth that we could identify were Youthline and the New Zealand Union of Students' Associations, mentioned in the 2021 review.
4 https://www.livingwage.org.nz/.
5 A disparity between the minimum wage and the living wage has existed since the living wage was first set in 2013, although the gap between the two rates has steadily declined since 2018. The living wage and minimum wage rates are set at different times of the year. The current living wage rate of $26.00/hour was set in September 2023 and will be increased to $27.80/hour in September 2024.
6 The text of the questions has been modified for the national 2024 survey. This includes removal of the phrase 'anywhere in the world'. Notably, fewer that 1% of the 2022 respondents made reference to employees outside Aotearoa New Zealand.
7 Some literature (e.g., Selebalo-Bereng and Patel, 2019) suggests a correlation between 'religiosity' and a person's views, particularly with respect to the abortion and assisted dying topics included in the full survey. Questions on the number of years in Catholic education and the importance of religion in a respondent's general life were asked to test for any such correlation.
8 Data was combined into a binary comparing an 'unimportant to moderately important' group with an 'important to very important' group and a U test performed.
9 As a Mann–Whitney U Test compares two samples, students in the 'other' gender category were removed from the data when male and female responses were compared.
10 Kruskal Wallis H Test and Dunn's Test.
11 Kruskal-Wallis H Tests were conducted to see if three groups of students – 5 years, 7 years and 13 years in Catholic education (based on secondary only, from intermediate level up, and since primary school) – were answering the four research questions differently from one another. H Tests are interpreted the same way as U Tests, and so we review the p value to determine confidence that groups tested are answering the question in the same or different ways.
12 The authors note that a limitation of using Spearman's tests on the 'importance of religion' measure is that it is ordinal data with non-equidistant intervals in its four possible responses. Spearman's tests perform better when data has a higher number of intervals with closer gaps between them. Grouping 'unimportant' and 'moderately important' together, and comparing this group to a conjoined 'important–very important' group via a U test, provided supporting evidence of the non-significant result observed in the Spearman's tests.
13 Student 47, 7, n, y, Asian (Filipino), f, ss, 13, impt. Student 47 recorded 7 on the Likert scale, has not studied the topic in class, would like to study it, identifies as a Filipino female who attends a single-sex school, has had 13 years in Catholic education, and religion is of importance to them outside the school gates.
14 804, 5, n, y, NZE, m, coed, 13, mod.
15 772, 7, n, y, Māori, m, ss, 11, unimpt; 685, 4, n, y f, NZE, ss, 13, impt.
16 93, 7, n, y, NZE, f, ss, 7, unimpt.
17 932, 7, n, y, Pasifika (Samoan), f, ss, 5, vi.
18 177, 7, n, y, NZE, f, ss, 7, mod.
19 521, 7, y, y, NZE, m, coed, 13, mod.
20 490, 6, n, n, NZE, f, coed, 11, impt; 203, 7, n, y, Māori, f, ss, 13, unimpt; 91, 7, n, y, NZE, f, ss, 4, mod.
21 459, 7, n, y, NZE, f, ss, 7, mod; 920, 7, n, y, Pasifika (Tongan), f, ss, 5, vi; 653, 7, n, y, NZE, f, coed, 7, unimpt.
22 792, 7, n, y, NZE, f, coed, 7, unimpt; 855, 5, n, y, NZE, f, ss, 13, mod; 447, 7, n, y, NZE, f, ss, 13, unimpt.
23 304, 6, n, y, NZE, f, ss, 5, unimpt; 535, 7, n, y, NZE, male, coed, 13, mod
24 751, 7, y, n, NZE, f, ss, 6, unimpt.
25 55, 6, y, n, Asian, f, ss, 5, unimpt; 831, 4, n, y, Asian, m, coed, 13, mod; 925, 6, n, n, Pasifika (Samoan), f, ss, 5, impt.
26 75, 7, n, n, NZE, f, ss, 13, unimpt.
27 487, 6, n, y, NZE, f, coed, 13, unimpt.
28 160, 5, n, y, NZE, f, ss, 7, unimpt.
29 30, 6, n,y, NZE, other, coed, 13, impt.
30 324, 7, y, n, NZE,m.coed. 5, unimpt; 245, 1, n, n, other (Latino), m, ss, 13, unimpt; 610, 1, y, y, Māori, f, coed, 6, unimpt); 11, 6, n, y, Māori, m, ss, 6, vi.
31 831, 4, n, y, Asian, m, coed, 13, mod.
32 607, 2, n, y, Other (Dutch), f, coed, 3, vi; 79, 5, n, y, NZE, f, ss, 7, unimpt; 222, 5, n, y, Pasifika (Samoan), m, ss, 2, impt.
33 14, 3, n, y, Pasifika, m, ss, 5 mod; 77, 5, n, y, NZE, f, ss, 1, mod; 58, 1, n, y, other, m, coed, 6, unimpt).
34 53, 6, n, n, Pasifika, f, coed, 12, mod; 30, 6, n, y, NZE, other, coed, 13, impt.
35 799, 7, y, y, NZE, f, coed, 13, mod).
36 199, 7, y, y, NZE, f, ss, 13, vi.
37 253, 6, n, y, NZE, m, ss, 7, unimpt.
38 The authors acknowledge that the real-life impact of the minimum wage policy on poverty levels is a complex question given its interactions with taxation and government subsidy policies. However, the general idea that more money in the hand means less financial stress for workers and their families, as survey respondents expressed, is not an unfair assumption to make, and is echoed by many commentators. Advocating for a 4% increase in the minimum wage to reflect the current rate of inflation, the 2023 Ministry of Business, Innovation and Employment review preceding the 2024 decision states that an increase below this level 'would make it difficult for minimum wage workers to keep up with the current cost of living, particularly since these workers will be less likely to have savings from previous years to support them' (Ministry of Business, Innovation and Employment, 2023, p.7).
39 https://www.oecd.org/publication/pisa-2022-results/. Of the 25 OECD countries that provided data, New Zealand was revealed to have the third highest rate of students in severe food poverty (behind only Chile and the United States).

References

ACT (2023) 'Not another minimum wage hike!', https://www.act.org.nz/not_another_minimum_wage_hike

Asher, I. and S. St John (2016) *Child Poverty and Health in New Zealand*, Auckland: Policy Observatory, Auckland University of Technology

Bernardi, R.A., C.L. Lecca, J.C. Murphy and E.M. Sturgis (2011) 'Does education influence ethical decisions? An international study', *Journal of Academic Ethics*, 9, pp.235–56, doi:10.1007/s10805-011-9134-3

Brown, K., L. Fitzmaurice, K. Miln and D. Provoost (2020) 'Engaging children and young people in the policy process: lessons from the development of the child and youth wellbeing strategy', *Policy Quarterly*, 16 (1), pp.3–9

Chudgar, A. and J. Chavda (2023) 'Listening to youth voices: text analysis of youth essays about their communities and concerns', *International Journal of Educational Research*, 119, 102176

Coleman, A. and G. Karacaoglu (2020) 'Listening to the voices of the future: contributions from people born after 1985', *Policy Quarterly*, 16 (2), pp.3–5

Cunningham, M. and J.B. Rious (2015) 'Listening to the voices of young people: implications for working in diverse communities', *American Journal of Orthopsychiatry*, 85 (6), pp.S86–S92

Electoral Commission (2023) '2023 general election: voter turnout statistics', https://elections.nz/democracy-in-nz/historical-events/2023-general-election/voter-turnout-statistics/

Electoral Commission (2024) 'Enrolment by general electorate', https://elections.nz/stats-and-research/enrolment-statistics/enrolment-by-general-electorate/

European Social Survey (2013) 'Exploring public attitudes, informing public policy: selected findings from the first five rounds, 2', https://www.europeansocialsurvey.org/sites/default/files/2023-06/ESS1_5_select_findings.pdf

Haigh, D. (2021) 'Impacts of poverty', *Whanake: Pacific Journal of Community Development*, 7 (1), pp.77–95, https://www.unitec.ac.nz/epress/wpcontent/uploads/2021/12/Whanake7.1_Haigh.pdf

Maslow, A.H. (1943) 'A theory of human motivation', *Psychological Review*, 50 (4), pp.370–96, https://psychclassics.yorku.ca/Maslow/motivation.htm

McKelvie-Sevileau, P. and B. Swinburn (2024) 'Food poverty for NZ teens creating an achievement lag of up to four years', Public Health Communication Centre Aotearoa, https://www.phcc.org.nz/briefing/food-poverty-nz-teens-creating-achievement-lag-four-years

Minister for Workplace Relations and Safety (2024) 'Minimum wage review: setting the 2024 rates', Cabinet paper, 1 February, https://www.mbie.govt.nz/dmsdocument/28018-minimum-wage-review-setting-the-2024-rates-proactiverelease-pdf

Ministry of Business, Innovation and Employment (2023) *Minimum Wage Review 2023*, https://www.mbie.govt.nz/dmsdocument/28014-minimum-wage-review-2023-proactiverelease-pdf

Ministry of Education (2023) 'The equity index', https://www.education.govt.nz/our-work/changes-in-education/equity-index/#sh-poverty

New Zealand Council of Trade Unions (2024) 'Minimum wage decision a signal of what this government really thinks about workers', 2 February, https://union.org.nz/minimum-wage-decision-a-signal-of-what-this-government-really-thinks-about-workers/.

New Zealand Parliament (2023) 'Youngest members of Parliament', 1 December, https://www.parliament.nz/en/visit-and-learn/mps-and-parliaments-1854-onwards/youngest-members-of-parliament/

OECD (2020a) *Governance for Youth, Trust and Intergenerational Justice: fit for all generations?*, Paris: OECD Publishing, https://doi.org/10.1787/c3e5cb8a-en

OECD (2020b) 'Youth and COVID-19: response, recovery and resilience', https://www.oecd.org/coronavirus/policy-responses/youth-and-covid-19-response-recovery-and-resilience-c40e61c6/

Office of the Children's Commissioner and Oranga Tamariki (2019) *What Makes A Good Life: children's and young people's views on wellbeing*, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/What-makes-a-good-life/What-makes-a-good-life-report-2019.pdf

Packham, C. (2024) 'Fighting for the wild', RNZ National, 10 February, https://www.rnz.co.nz/national/programmes/saturday/audio/2018925505/chris-packham-fighting-for-the-wild

Rashbrooke, M. (2024) 'The missed opportunities and unfinished business of solving child poverty', *Post*, 24 February, https://www.thepost.co.nz/nz-news/350190376/missed-opportunities-and-unfinished-business-solving-child-poverty

Selebalo-Bereng, L. and C.J. Patel (2019) 'Reasons for abortion: religion, religiosity/spirituality and attitudes of male secondary school youth in South Africa', *Journal of Religion and Health*, 58 (6), pp.2298–312, https://doi.org/10.1007/s10943-017-0547-1

TakingITGlobal, V. Ekehaug, P.J. Partington and N. Yeo (2008) 'TakingITGlobal e-consultations on climate change and building citizen centred policies and services', report presented at the Building Citizen Centred Policies and Services international workshop, Ljubljana, Slovenia, https://www.tigweb.org/resources/toolkits/view.html?ToolkitID=1633

United Nations Committee on the Rights of the Child (2011) 'Concluding observations on the 4th periodic report of New Zealand', https://archive.crin.org/en/library/un-regional-documentation/concluding-observations-new-zealands-3rd-and-4th-periodic-report.html?ID=24601andflag=legal

United Nations Committee on the Rights of the Child (2016) 'Concluding observations on the 5th periodic report of New Zealand', https://digitallibrary.un.org/record/856035?ln=en

Welfare Expert Advisory Group (2019) *Whakamana Tāngata: restoring dignity to social security in New Zealand*, Welfare Expert Advisory Group, http://www.weag.govt.nz/weag-report/

Wilkinson, R. and K. Pickett (2010) *The Spirit Level: why equality is better for everyone*, London: Penguin

Yeo, N. (2009) 'Are you listening? Youth voices in public policy', in *Focus on Citizens: public engagement for better policy and services*, Paris: OECD

Malcolm Menzies, Andrew Jackson
and Jonathan Boston

An Experiment in Governmental Futures Thinking: long-term insights briefings

Abstract

New Zealand's Public Service Act 2020 requires departmental chief executives to give a long-term insights briefing (LTIB) to their respective ministers at least once every three years. The LTIBs must provide 'information about medium- and long-term trends, risks, and opportunities that affect or may affect New Zealand', along with 'information and impartial analysis, including policy options' to address the matters raised. The first suite of LTIBs were prepared during 2022–23. This article assesses the first round of LTIBs, giving particular attention to how they identified future risks and opportunities and the extent to which they adopted robust foresight techniques. Based on this analysis, we suggest how the process for preparing future LTIBs might be improved.

Keywords futures thinking, foresight, long-term insights briefings, New Zealand

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Over the past few decades, governments across the OECD have been experimenting with ways to improve their capability for prudent anticipatory governance (Boston, 2017). These moves include establishing new foresight units in central government agencies, requiring the preparation of periodic reports on major long-term policy challenges, improving long-term fiscal forecasting, and reforms to enhance the accountability of governments for the quality of their long-term governance. Such moves are taking place within a wider context of international initiatives to improve futures thinking and foresight-related activities, protect the interests of future generations, and enhance sustainability (e.g., via the Paris Agreement on Climate Change, the Sustainable Development Goals, etc.). In September 2024, for instance, the United Nations will host the Summit of the Future (United Nations, n.d.).

Aotearoa New Zealand has not been isolated from these developments, having its own history of futures thinking (Menzies, 2018) and multiple efforts to protect long-term societal interests. Moreover, the ongoing Covid-19 pandemic,

climate change risks, rapid technological innovations, and growing geopolitical tensions have underscored the vital importance of prudent anticipatory governance. Indeed, both locally and globally, policymakers are currently confronted with a daunting array of challenges – or what is increasingly referred to as a 'polycrisis' (World Economic Forum, 2023). Not only are there multiple short-term economic, social and security-related problems; there are also numerous intergenerational policy challenges, not least anthropogenic climate change and biodiversity loss.

While acknowledging the wider futures context described above, a full discussion here is not possible. Instead, this article focuses on a specific policy initiative to improve the quality of long-term governance in Aotearoa New Zealand. Under the Public Service Act 2020 the chief executives of central government departments are required to provide a long-term insights briefing (LTIB) to their ministers at least once every three years. These LTIBs must provide 'information about medium- and long-term trends, risks, and opportunities that affect or may affect New Zealand', along with 'information and impartial analysis, including policy options' to address the matters raised (s8). The legislation is the latest in a long history of efforts to enhance the futures thinking and foresight capabilities of government departments and to give proper attention to nationally significant policy problems, whether currently emerging or looming on the more distant horizon. As a consequence, it is hoped that policies will be developed to better protect the nation's long-term interests.

Altogether, 18 LTIBs were completed during the first round (i.e., between mid-2022 and August 2023). One (on health) remained at the draft consultation phase at the time of writing. Of the total of 19, four were joint briefings by two or more government departments (see Table 1). By the time Parliament was dissolved at the end of August 2023 – ahead of the general election in mid-October – 17 LTIBs had been reviewed by parliamentary select committees, and the Governance and Administration Committee had published two interim reports on aspects of the new LTIB regime (Public Service Commission, 2024; McKelvie, 2022, 2023).

> [Long-term insights briefings] must be developed independently of ministers – that is to say, departmental chief executives are free to decide the nature and scope of the issues that are explored and do not require ministerial approval for the contents of the resulting publications.

This article begins by defining key terms and summarising our methods. The latter makes clear the authors' perspectives by referencing their various contributions to futures thinking and foresight processes, both in New Zealand and internationally. Following this, we explain the relationship between the requirement for periodic LTIBs and other future-focused policy initiatives. We then undertake a practical, high-level assessment of the first round of LTIBs. This is set against the backdrop of various critical long-term policy issues facing New Zealand and the wider international community. We conclude with reflections on the overall merits of LTIBs as a policy instrument for enhancing long-term governance, including suggestions for improving current policy processes.

Definitions

There is much variation in the way future-related terms are defined and applied. For the purposes of this article, we use the Government Office for Science (2021) definitions for:

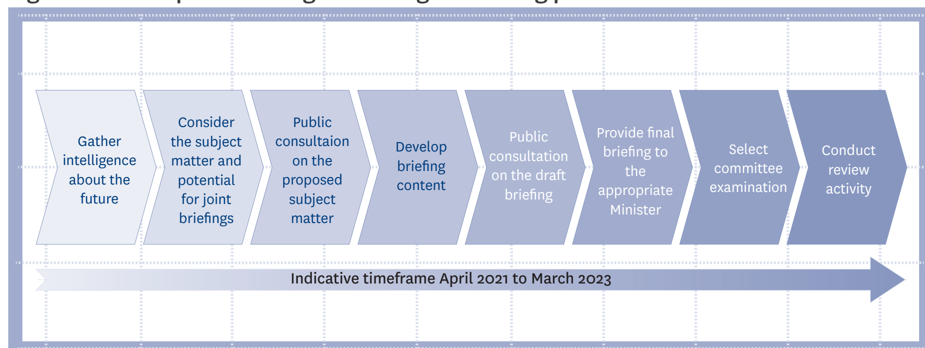
- *Futures*: refers to systematic approaches to thinking about the future and exploring factors that could give rise to possible and probable future characteristics, events, and behaviours.
- *Foresight*: refers to the application of specific tools/methods for conducting futures work, for example, horizon scanning (gathering intelligence about the future) and scenarios (describing what the future might be like).

For *strategic foresight*, we have followed the approach of the European Commission, which describes this as activity that 'seeks to embed foresight into European Union policy-making. It builds on collective intelligence in a structured and systematic way to help better develop possible transition pathways, prepare the EU to withstand shocks and shape the future we want' (European Commission, 2024). Further, we use the term *futures thinking* to denote a mindset which enables the practice of futures and foresight (after OECD, 2017).

Methods

Our article draws on a range of sources. First, all three authors contributed in various ways between 2019 and 2023 to the development, implementation and assessment of the LTIB process. This included multiple interactions with ministers, members of Parliament and departmental officials. Specifically, one of us (Boston) was involved in the initial consultations which led to the requirement for LTIBs being included in the Public Service Act 2020. All three authors attended workshops during 2020–21 on the design of the LTIB process and provided advice to the Public Service Commission and the Department of the Prime Minister and Cabinet on possible approaches. One (Jackson) completed a review of the topics chosen by departments for the first round of LTIBs and presented an analysis to the Public Sector Futures Group (a group of officials he established when employed previously within the public

Figure 1: The steps in the long-term insights briefing process



Source: adapted from Department of the Prime Minister and Cabinet, n.d.a

sector). All of us provided advice to one or more government departments on their proposed LTIB and/or participated in the associated consultation process. Next, one of us, drawing on a futures perspective, wrote a 'mid-term review' of the LTIB process (Menzies, 2022). We also made a joint submission to, and appeared before, Parliament's Governance and Administration Committee, which was charged with scrutinising the overall LTIB process, and responded in writing to the committee's subsequent questions.[1] The committee endorsed some of our suggestions in its second interim report (McKelvie, 2023).

Additionally, we undertook a systematic, rolling desktop review of all the draft and published LTIBs, along with other relevant and publicly available official documents. We then employed an evaluation framework drawn from the requirements of the Public Service Act and our involvement in policymaking and futures thinking in New Zealand and the United Kingdom.

Legislative and operational provisions

As noted, the Public Service Act (see schedule 6, ss8, 9) requires departmental chief executives to prepare a LTIB for the appropriate minister at least once every three years, reflecting the length of the parliamentary term. LTIBs must be developed independently of ministers – that is to say, departmental chief executives are free to decide the nature and scope of the issues that are explored and do not require ministerial approval for the contents of the resulting publications. Independence, of course, does not rule out ministers being informed about their department's intentions.

As specified in the Act, the purpose of LTIBs is to provide:

a) information about medium- and long-term trends, risks, and opportunities that affect or may affect New Zealand and New Zealand society; and
b) information and impartial analysis, including policy options for responding to matters in the categories referred to in paragraph (a). (s8(2))

Under the Act, a 'briefing may set out the strengths and weaknesses' of the policy options identified but must do so 'without indicating a preference for a particular policy option' (s8(3)). This latter provision was explicitly included to minimise possible tensions between departmental chief executives and their ministers by avoiding explicit policy recommendations. Significantly, too, the Act does not require ministers to respond publicly to the briefings they receive, reducing potential conflicts between chief executives and ministers. To ensure accountability, this is counterbalanced by the requirement that LTIBs must be presented to Parliament for review by a select committee.

LTIBs were meant to be policy relevant and improve policymaking processes. To quote Parliament's Governance and Administration Committee, the briefings were 'intended to enhance public debate on these issues and contribute to future decision-making by government, Māori, business, academia, not-for-profit organisations, and the wider public' (McKelvie, 2022, p.5). Whether this goal has been achieved is discussed later.

Several other matters deserve highlighting. Under section 9 of schedule 6 of the Public Service Act, departments are required to consult the public twice during the preparation of their LTIBs (see Figure 1): first, on the topic; and second, on the draft briefing. Departments are obliged to take feedback from consultative processes into account 'when finalising the briefing'.

Significantly, the legislative purpose of LTIBs is open to interpretation. As a result, there was considerable variation in the scope and approach taken in developing the 19 LTIBs, from wide-ranging strategic considerations to single topic-based analyses. Equally important, the word 'future' does not appear in the legislative purpose and there is no requirement for the adoption of a 'strategic foresight' approach. Nevertheless, the guidance of the Department of the Prime Minister and Cabinet (DPMC), which oversees the LTIB process, set best practice as:

> The Long-term Insights Briefings require the public service to look over the horizon … The LTIBs should be think pieces on the future which enhance public debate on long term issues … [We] recommend that they look ahead at least 10 years … and consider the context and implications of strategic drivers … (Department of the Prime Minister and Cabinet, n.d.b)

Additionally, DPMC provided a set of foresight techniques and tools on a webpage entitled 'Futures thinking'[2] and offered training for the officials involved in preparing briefings. But no extra funding was provided by the government to support the preparation of LTIBs, associated costs being met from existing departmental budgets.

The recommended deadline for the first round of LTIBs was June 2022, to allow the briefings to inform the election manifestos of the political parties for the October 2023 election and parliamentary scrutiny beforehand. In the event, few briefings were completed by the proposed date, with nine not submitted until 2023 and several published in mid-2023. This left little time for proper parliamentary scrutiny during the 2020–23 parliamentary term. As acknowledged by the Governance and Administration Committee, however, there were understandable reasons for slippage in the proposed timetable:

> We acknowledge the unusual context in which this first cycle of long-term insights briefings has taken place. The

Table 1: List of Long-term Insights Briefings and Parliamentary Select Committees Reports (August 2023)

Department(s) (Titles in English and Māori)*	Title of LTIB	Name of Select Committee examining LTIB
Department of Conservation (Te Papa Atawhai) and Toitū Te Whenua (Land Information New Zealand)	How can we help biodiversity thrive through the innovative use of information and emerging technologies?	Primary Production
Te Tari Taiwhenua (Department of Internal Affairs)	How can community participation and decision-making be better enabled by technology?	Economic Development, Science and Innovation
Department of the Prime Minister and Cabinet; Ministry of Foreign Affairs and Trade; Government Communications Security Bureau; Ministry of Business, Innovation and Employment; Ministry of Defence; New Zealand Customs Service; New Zealand Security Intelligence Service	Let's talk about our national security: Engaging an increasingly diverse Aotearoa New Zealand on national security risks, challenges and opportunities	Intelligence and Security
Education Review Office (Te Tari Arotake Mātauranga)	Education For All Our Children: Embracing Diverse Cultures	Education and Workforce
Inland Revenue Department (Te Tari Taake)	Tax, investment and productivity	Finance and Expenditure
Manatū Hauora – Ministry of Health	Precision health: Exploring opportunities and challenges to predict, prevent, diagnose, and treat disease more precisely in Aotearoa New Zealand	N.A. (still at consultation stage)
Ministry of Business, Innovation and Employment (MBIE)	The future of business for Aotearoa New Zealand: an exploration of two trends influencing productivity and wellbeing – purpose-led business and use of blockchain technology	Economic Development, Science and Innovation
Manatū Taonga (Ministry for Culture and Heritage)	Into the future, what are some of the key areas that will influence the vibrancy and resilience of the cultural sector ecosystem?	Social Services and Community
MBIE Ministry of Social Development; Ministry for Women Ministry of Education	Youth at risk of limited employment: Preparing all young people for satisfying and rewarding working lives	Education and Workforce
Ministry for the Environment	Where to from here? How we ensure the future wellbeing of land and people	Environment
Ministry of Justice - Ara Poutama Aotearoa Department of Corrections Crown Law Office Serious Fraud Office Inaia Tonu Nei - Climate Change Commission Oranga Tamariki – Ministry for Children	Long-term Insights on Imprisonment, 1960 to 2050	Justice
Ministry for Pacific Peoples, Te Manatū mō ngā Iwi ō te Moana-nui-ā-Kiwa	Improving Pacific Data Equity: Opportunities to Enhance the Future of Pacific Wellbeing	Social Services and Community
Ministry for Primary Industries (Manatū Ahu Matua)	The Future of Aotearoa New Zealand's Food Sector: Exploring Global Demand Opportunities in the Year 2050	Primary Production
Tatauranga Aotearoa Statistics New Zealand	Aotearoa New Zealand: empowered by data	Governance and Administration
Te Kawa Mataaho (Public Service Commission)	Enabling Active Citizenship: Public Participation in Government into the Future	Governance and Administration
Te Manatū Waka (Ministry of Transport)	The impact of autonomous vehicles operating on Aotearoa New Zealand roads	Transport and Infrastructure
Te Puni Kōkiri	Thriving whānau in 2040	TBC
Te Tūāpapa Kura Kāinga (Ministry of Housing and Urban Development)	The long-term implications of our ageing population for our housing and urban futures	Social Services and Community
Te Tai Ōhanga (The Treasury)	He Tirohanga Mokopuna 2021: The Treasury's combined Statement on the Long-term Fiscal Position and Long-term Insights Briefing	Finance and Expenditure

* Names of departments are as on the LTIB documents, some of which include Māori as well as English names.

> continual revision of completion dates can be attributed to the consequences of COVID-19 and major structural reform work, the availability of stakeholders to engage with the briefing, and the time needed to process the feedback received from public consultation. (McKelvie, 2023, p.6)

Table 1 outlines the list of LTIBs, their titles, and which parliamentary select committee scrutinised each briefing. Related select committee documents are accessible at 'Long-term insights briefings' on Parliament's website.

Several reviews of the first round of LTIBs have already been completed and/or have commenced. By August 2023, the Governance and Administration Select Committee had issued two interim reports (see McKelvie, 2022, 2023). Meanwhile, DPMC commenced a review of the first round of LTIBs, including how departments chose their topics, the tools and methods employed, and 'the initial effects on public service stewardship and policy advice' (McKelvie, 2023, p.6). Consideration will be given to the number of LTIBs prepared and the implications of this for the level of public engagement (Department of the Prime Minister and Cabinet, 2022). Additionally, departments are 'expected to conduct self-assessments to feed into the system-wide review' (McKelvie, 2023, p.6). The DPMC published a review of the first round of LTIBs in November 2023. The review focused on the process to develop LTIBs – it did not assess their quality or how they might influence longer-term policy (Department of the Prime Minister and Cabinet, 2023). These reviews are expected to inform the second round of LTIBs.

Other futures initiatives

The LTIB process is part of a broader set of governmental initiatives that have been proceeding simultaneously. This includes regular reports by various Crown entities, such as the Climate Change Commission, the Productivity Commission (now disestablished), the Infrastructure Commission, the Retirement Commission, the Parliamentary Commissioner for the Environment, and government-funded think tanks, such as Te Puna Whakaaronui, which has a role in transforming the food and fibre sector (i.e., wool and wood fibre) by 2030.[3] The External Reporting Board (XRB), which sets reporting standards for businesses, has implemented a requirement for all listed companies with an annual turnover of over $100m to assess their climate risks based on the development of sectoral climate change scenarios, which will add to this set.[4] A private initiative has produced a list of more than 50 scenarios for New Zealand on various topics (McGuinness Institute, 2023).

... a more coordinated approach with fewer LTIBs could have allowed a more structured, better resourced and more accessible consultation process, enabling engagement with a larger number and wider range of citizens.

Other recent long-term strategies and plans include:

- eight industry transformation plans (ITPS), long-term plans for key sectors to drive the transition towards a productive, sustainable and inclusive economy by 2050 (Ministry of Business, Innovation and Employment, 2020, 2023);
- a freight and supply chain strategy which looks over three time horizons in an area of crucial importance to New Zealand, given its relative isolation and dependence on two-way trade (Te Manatū Waka Ministry of Transport, 2023);
- the first national climate change risk assessment for New Zealand, identifying a set of 48 priority risks, with extreme or major consequence ratings for now, by 2050, and by 2100 (Ministry for the Environment, 2022);
- the first Emissions Reduction Plan.

There is no explicit coordination of futures activities across the public sector, and much overlap. For instance, the Ministry of Foreign Affairs and Trade's strategic paper in 2023 – *Navigating a Shifting World* – traverses much of the same ground as the LTIB led by the same ministry in partnership with the DPMC (Ministry of Foreign Affairs and Trade Manatū Aorere, 2023). Also, in August 2023 the government released national security and defence statements which between them display a significant amount of futures thinking and linkages with various LTIBs and other strategies (New Zealand Government, 2023c, 2023a, 2023b).

Assessing the first round of long-term insights briefings

Any analysis of a new or existing policy depends on the assessment criteria adopted. Our approach has been to assess each LTIB through a futures lens, together with oft-employed techniques of policy analysis.

Drawing on these considerations, our assessment of LTIBs addresses the following matters:

- the nature and adequacy of the consultative processes undertaken by departments;
- the comprehensiveness of the coverage of long-term risks and opportunities;
- the extent of the application of foresight methods;
- the adequacy of the assessments of the drivers of change;
- the importance of the topics explored;
- the likely impact on policymaking; and
- the sustainability of the current LTIB model.

Nature and adequacy of the consultation processes undertaken by departments

Departments took different approaches to consultation, on the time allowed and the form of public engagement. In most cases,

the consultation periods were brief (two to four weeks). The Ministry for Culture and Heritage was an outlier, allowing three months for each stage of the process.

Consultations were undertaken through a range of channels (e.g., online interactions, workshops, webinars, surveys and submissions). The numbers of entities engaged with (i.e., individuals, organisations and communities) ranged from eight to over 1500 individual responses to an online survey (the justice sector briefing). Direct consultations (i.e., not accounting for those represented by membership bodies) were confined to a relatively small number of people. This was inconsistent with the intentions for public debate highlighted by the Governance and Administration Committee (McKelvie, 2022). On the other hand, the secretary of the Ministry of Foreign Affairs and Trade told the Intelligence and Security Committee that his ministry 'was struck by how few other countries had sought to engage their public in this manner' (i.e., the manner of consultation used for the security LTIB) (Intelligence and Security Committee, 2023, p.3).

Furthermore, as in many democracies in recent years, public discourse has become more polarised, fractious and difficult to manage. Given these constraints and challenges, more extensive consultation on the LTIBs may not have been affordable or fruitful (Franke-Bowell, 2023). However, a more coordinated approach with fewer LTIBs could have allowed a more structured, better resourced and more accessible consultation process, enabling engagement with a larger number and wider range of citizens. The Department of Internal Affairs noted that it selected its LTIB topic largely because of prospects of using virtual reality in consultation, and this could be a way to proceed in future (Chen, 2023, p.4).

Comprehensiveness of the coverage of long-term risks and opportunities

During the 21st century, New Zealand faces many issues that are common elsewhere (e.g., an ageing population), although the scale of the challenges may differ. It must also confront some distinctive, if not unique, issues, such as establishing just and productive relationships between Māori and non-Māori.

> While all the LTIBs were well written, in many cases the relevant assumptions, mental models, and key uncertainties and risks were either inadequately specified or insufficiently tested.

In broad terms, we identified key drivers of change, including:

- increasing ethnic diversity and population ageing;
- rapid technological innovation;
- increasing levels of debt;
- greater socio-economic inequality;
- unequal educational opportunities;
- heightened pressures on healthcare systems;
- the rise of nationalist and populist movements;
- the mounting economic and social impacts of climate change, pollution and biodiversity loss;
- increasing geopolitical tensions.

Various international bodies, such as the World Economic Forum (2022, 2023), compile annual lists of global risks. Many of the issues identified in such reports were also recognised in the LTIBs.

Not unexpectedly, the Treasury LTIB focused on the country's long-term fiscal position, but in the context of demographic change (mentioned by almost every LTIB), especially an ageing population. It also highlighted the uncertainties and risks arising from the impacts of economic shocks, a major earthquake and climate change. Interestingly, the Office of the Auditor-General, which reports directly to Parliament, under section 20 of the Public Audit Act 2001 'on matters arising out of the performance and exercise of the Auditor-General's functions, duties, and powers', has published a critique of Treasury's work, and proposed (among other things) that in future it 'consider a wider and more integrated range of scenarios that could take place in different time periods within the 40-year horizon to provide more realism and relevance' (Controller and Auditor-General, 2022, p.7).

Most LTIBs adopted a time horizon of 10–20 years, although several looked out to 2050, and the Treasury's LTIB has a 40-year horizon. It could be argued that for some topics, such as sea level rise, a time frame of a century or more is needed, while 10–15 years might be seen as long term for the security LTIB.

Despite the uncertain global context, most LTIBs focused primarily on domestic policy issues. Several incorporated a literature review, but little attention was given to other relevant national and international futures assessments. Several LTIBs were narrowly topic-based to the extent that they could be considered as 'business as usual' (i.e., dealing with issues that should preferably be addressed as a matter of course, regardless of whether LTIBs are required). In such cases, it is questionable whether departments focused on the really 'big issues' or adopted the appropriate time horizon.

In some cases, the topics chosen appeared to be of second-order importance. For instance, the LTIB prepared by the Ministry for Primary Industries focused on changing food preferences rather than the potentially more significant impact of climate change and biodiversity loss on global food supplies and food security, and the implications for New Zealand's agricultural producers and consumers.

Most LTIBs played safe and avoided politically sensitive topics. No doubt this reflects the pressures on departmental chief executives to retain a good working relationship with their respective ministers and to avoid topics or advice that might cause political embarrassment. However, it is instructive that the Treasury's LTIB

Figure 2: Foresight Techniques Adopted in Long-Term Insights Briefings

Trends	Drivers	Scenarios	Visioning	Backcasting
5				
4				
	3			
1				
1				

Note: shaded cells indicate which techniques were used and the number in the row the number of departments using that combination of foresight techniques.

Table 2: Drivers of Change identified in Long-Term Insights Briefings

Driver	Number of LTIBs that considered the driver
Demographics	14
Climate Change	8
Social Values	7
Shocks	4
Inequality	3
Digital Technology	3
Geopolitical change	3
Trust in information	3
Values and preferences	2
Public management	2
Skills and work	2
Waste and pollution	2
Land use	2
Regulation	2

specifically mentioned the option of introducing a capital gains tax, a highly contentious issue.

While all the LTIBs were well written, in many cases the relevant assumptions, mental models, and key uncertainties and risks were either inadequately specified or insufficiently tested. As a result, the potential implications were not properly identified or assessed.

This approach contrasts starkly with the LTIB drawn from the New Zealand Defence Force *Future Force Design Principles*, where it is explicitly stated that assumptions are tested against future iterations of investment planning (New Zealand Government, 2023b, p.10) and guidance from the New Zealand Financial Markets Authority:

> To be challenging, assumptions should confront conventional wisdom and simplistic understandings of today's environment. When thinking about the major sources of uncertainty, scenarios should explore assumptions that will significantly alter the basis for business-as-usual thinking. (Financial Markets Authority, 2023)

Extent and use of foresight techniques

Fourteen LTIBs adopted and applied one or more foresight techniques, although the quality of the application was uneven. The foresight techniques employed included:

- trend analysis – forward project based on historic patterns;
- driver analysis – factors which will have an effect on the issue being considered: for example, changes in population size will change demands on housing;
- scenarios – plausible possible stories of what the future could be like;
- visioning – a desired future state;
- backcasting – starting from a desired future state and working out what steps and changes would be needed to deliver the desired future state.

Most LTIBs identified trends. These are an important starting point. But there is always the possibility that trends might change. Four used both trend and driver analysis to underpin their scenarios; one used both trend and driver analysis alongside visioning and backcasting. Only four developed specific scenarios.

Adequacy of assessment of drivers of change

While many LTIBs included trends and drivers (see Table 2), they did not include comprehensive lists; nor were the trends and drivers prioritised. Hence, there is the possibility of important matters being missed. Further, there was almost no consideration of the interplay between the drivers and trends, or of how they might change over time.

It would have been more efficient and effective to have conducted a coordinated identification and analysis of key drivers and trends at the beginning of the LTIB process. The results of this exercise could then have been shared across departments, with each one selecting the drivers and trends of greatest relevance to their LTIB, followed by an analysis of the possible responses. Such a process could also have included an evaluation of the relevant interrelationships and interdependencies between the various drivers and wider implications.

Our 'reverse engineering' of the process identified 41 drivers that were considered by LTIBs. Descriptions range from cursory mentions to more detailed reviews of individual drivers. Collectively, the sets of drivers represent a valuable source of information. Eleven of the drivers are covered in more than one LTIB, highlighting the advantages of a coordinated approach. Significantly, in only 11 of the 41 cases was there a reference to the interplay between drivers (e.g., the impact of climate change on migration). Most LTIBs did not discuss interdependencies, although two looked at similar issues ('Enabling active citizenship: public participation in government into the future' and 'How can community participation and decision-making be better enabled by technology?') and the economically focused LTIBs were complementary, albeit leaving some gaps.

The importance of the topics chosen

If LTIBs are to contribute to better policymaking, especially regarding important inter-temporal issues, the issues addressed must be of genuine policy relevance and importance. But this immediately raises a range of normative and methodological issues. What, for instance, are the appropriate criteria for determining 'relevance' and 'importance'? Moreover, even if agreement can be reached on such matters, how should priorities be determined? In a pluralistic democracy such as New Zealand, there are bound to be differences of view on whether particular matters are policy-relevant and which policy issues should be prioritised. Aside from this, given the inherent uncertainty surrounding issues of a long-term nature, there will always

Table 3: Topics identified in Long-Term Insights Briefings

LTIB topic summary	Critical/important	National vs sectoral	Current and future issue
Supporting biodiversity through techology	Important	National	Future
Enabling community particpation through technology	Important	National	Current
Engaging on national security issues	Critical	National	Future
Embracing diverse culrures in education	Important	Sectoral	Current
Tax investment and productivity	Important	National	Future
Precision health	Critical	National	Current
Purpose-led business and blockchain	Important	Sectoral	Future
What will influence the vibrancy of the cultural sector	Important	Sectoral	Current
Supporting youth at risk	Critical	Sectoral	Current
How to ensure the wellbeing of the land and people	Critical	National	Future
Long-term insights on imprisonment	Critical	Sectoral	Current
Improving data to improve Pacific welbeing	Important	National	Current
Opportunities for the food sector	Important	Sectoral	Future
Data to empower New Zealand	Important	National	Current
Enabling active citizenship	Important	National	Current
Impact of AVs on New Zealand's roads	Important	Sectoral	Future
Thriving Whānau in 2040	Critical	National	Current
Long-term implications of aging on housing and urban futures	Critical	National	Future
Long-term fiscal challenges	Critical	National	Future

Table 4: International risks

World economic forum top 10 risks 2023	Was it the focus of LTIBs?	Australian Treasury Intergenerational Report for 2023	Was it the focus of LTIBs?
Cost of living	No	Repairing the budget	Yes
Natural disasters and events	No	Fostering a dynamic economy	No
Geo economic confrantation	Yes	Defence capability for regional security	Yes
Failure to mitigate climate change	No	Transforming to zero temissions	No
Erosion of social cohesion	Yes	Addressing disadvantage	Some apects
Large scale environmental incidents	No	Sustainability meeting case and support needs	No
Failure to to adapt to climate change	No	Growing workforce skills	No
Widespread cybercrime	Yes		
Natural resource crisis	No		
Large scale migration	No		

be scope for debate about which topics deserve the most attention.

Accordingly, we assessed the topics covered in LTIBs against three criteria: was it critical or merely important; was it a national or sectoral issue; and was it concerned with mostly short-term risks and opportunities or longer-term ones? Topics meeting at least two of these criteria were assessed to be a critical long-term issue. When applying these criteria, half the LTIBs met the test (see Table 3).

Note that for the purposes of our analysis, 'critical' refers to issues that are vital to New Zealand's social, economic or environmental future, 'national' refers to issues that are likely to have significant impacts across the whole country, while 'current' refers to an existing capability or harm.

We also considered whether there were topics of greater long-term importance or strategic significance which could have been addressed. We drew on two risk assessments to guide this analysis: the first, the top ten risks identified by the World Economic Forum (2023); the second, the seven key areas identified in the Australian federal Treasury's *Intergenerational Report* (Australian Government, 2023). The results are summarised in Table 4. Overall, there were many topics which could have been given higher priority, at least in some LTIBs (e.g., the future challenges from large-scale migration, supply-chain disruption, and delivering a just transition to a low-carbon economy). Of course, there are many risk reports and they vary in their approaches and assessments. We chose the World Economic Forum's risk assessment because of its global perspective and the Australian Treasury's Intergenerational Report because of its long-term scope and the fact that Australia is our closest neighbour. As such our assessment isn't definitive, but it is instructive.

Impact on policymaking

It is too early to judge the long-term impact of the LTIBs on government policies and programmes. The early signs, however, are not encouraging. Neither the LTIBs nor the select committee reports generated significant media coverage. Other future-focused exercises, referred to above, have received a good deal more attention.

While almost all the briefings were reviewed by a select committee during 2022–23, most of these reviews were perfunctory. The five verbatim (i.e., Hansard) transcripts we have found range from eight to 31 pages in length, and these tend to reflect the political leanings of

committee members and/or a fixation on operational or methodological matters.

The committee reporting on the Ministry of Transport's LTIB included an explicitly written differing view from opposition party members. The MPs in question charged that the briefing pursued 'an ideological view around car use which appears to be a feature of the report' (Transport and Infrastructure Committee, 2022, p.7). This reflects a degree of political polarisation on the future direction of transport in New Zealand. Debates on such matters are not, of course, unique to New Zealand (International Travel Forum, 2021). But there is a suggestion that the LTIB was focusing on one technology (autonomous vehicles) rather than more important, broad questions about the future of the transport system.

The written select committee reports provide a good summary of the related discussions by committee members. Their contents, however, show little evidence of deep analysis of, or in-depth engagement with, the issues explored in the LTIBs. Nor was there serious scrutiny of the processes departments employed to produce their briefings. More significantly, perhaps, there is no evidence of select committees seeking independent advice on the contents of LTIBs, whether from one of the officers of Parliament (e.g., the Office of the Auditor-General) or academic experts. In four instances, committees asked follow-up questions of departments which were answered in writing. Apart from the joint briefings, these are the only instances we found of cross-checking of LTIBs. Unsurprisingly, given these limitations, the committee reports contain few recommendations, and most of these are anodyne (e.g., 'that the House take note of the committee's report').

Further, while the select committee reports were listed on Parliament's order paper in mid-2023 for debate in Parliament, no such debate took place prior to the general election, and it seems doubtful that one will occur subsequently.

Finally, there is little evidence of political parties drawing on the contents of LTIBs to guide their policy development. It is also unclear whether the preparation of LTIBs influenced departmental officials' views on the issues explored. Assessing such influence is notoriously difficult, but the Inland Revenue Department told the Finance and Expenditure Committee that it 'had found the process extremely useful and had enjoyed the opportunity to investigate long-term future issues, rather than just immediate concerns … it had been great to work on something that would help inform public discussion on tax policy for years into the future' (Finance and Expenditure Committee, 2023, p.7). And the chief executive of the Ministry of Education commented that 'one of the opportunities that this presents us with is to think quite differently about things' (Education and Workforce Committee, 2023, p.9). Despite such comments, the available evidence suggests that LTIBs have had a minimal impact on either public debate or public policy settings. Accordingly, they have yet to demonstrate their capacity to serve as a powerful 'commitment device' (Boston 2017), for instance by ensuring that significant long-term policy issues receive proper political attention.

The introduction of LTIBs was designed to help shift the inter-temporal orientation of policymakers and bring critical long-term problems into sharper short-term political focus. This goal is to be applauded.

Sustainability of the current LTIB model

It is doubtful whether the current LTIB model is sustainable. To start with, it is highly likely that public expenditure in New Zealand will be significantly constrained over the medium term, thus placing ongoing pressure on departmental budgets and staff resources. Policy processes that are not essential or deemed to be a low priority by the government of the day will likely be reviewed, with a risk of being terminated or at least downsized.

Additionally, informal feedback from officials involved in preparing their department's LTIB suggests that the process was often frustrating and difficult. In part this reflected the negative impact of the Covid-19 pandemic. Departmental resources were often stretched, creating tensions when seeking to ensure effective public engagement and wade through the normal multi-layered scrutiny of public sector processes. There are indications that many officials who contributed to the first round of briefings will not willingly participate in subsequent rounds. The workload was simply too demanding. If so, then institutional memory and futures-thinking capability will be lost. Aside from this, the current public engagement processes place substantial burdens on those being consulted: sometimes feedback was sought from the very same people by multiple departments at roughly the same time.

The sustainability of the LTIB process could be enhanced in several ways. For instance, the process could commence with a coordinated horizon scan of key risks, opportunities, drivers and trends. This could be the responsibility of DPMC or the public service. Departments could draw on this common resource in their briefings. Next, there could be better interdepartmental coordination of the topics selected. Ideally, this would contribute to more joint briefings and thus fewer LTIBs. A concerted effort could be made to build a cadre of staff with skills in futures work to support the periodic preparation of LTIBs. Many other jurisdictions (e.g., Canada, Finland, Singapore and the United Kingdom) have created specific public institutions to build this skills base, and there is no reason why New Zealand could not do the same.

Aside from this, it is questionable whether the current mode of parliamentary reviews is fit for purpose. The auditor-general, for instance, has suggested some

improvements. One of these would be for select committees to develop a standard set of questions for their scrutiny of LTIBs (McKelvie, 2023, p.7). Alternatively, an expert advisory group could be established and resourced to provide the select committees with advice on the risks and opportunities considered in the LTIBs.

Overall, it will be vital that the lessons from the first round, such as those just noted, are properly documented, and that sufficient expert advice and support is available for subsequent rounds.

Conclusions

New Zealand's short parliamentary term provides little time to address major longer-term policy challenges. The introduction of LTIBs was designed to help shift the inter-temporal orientation of policymakers and bring critical long-term problems into sharper short-term political focus. This goal is to be applauded. However, the Public Service Act does not require departments to undertake a formal piece of futures work or foresight, and nor does the DPMC guidance specify such an approach. Rather, departments were free in the first round to experiment with, and learn from, the use of foresight approaches if they chose to adopt them. This allowed for the development of pockets of foresighting/futures thinking in addition to those already existing, and some shared learning.

Notwithstanding such positive elements, the first round of LTIBs has contributed only modestly to realising the Act's goals. First, as noted, the initial round lacked appropriate central agency coordination and sufficient interdepartmental collaboration. As a result, there was no agreed methodology, no common time horizon, no overarching narrative, no agreement on the drivers of change or key trends, and an inadequate assessment of the interdependencies between the various drivers. In short, in most cases each department provided its own perspective on a defined set of issues and did so in its own way. While many of these perspectives were interesting and discerning, collectively they did not produce a comprehensive, integrated and critical strategic assessment of the country's probable and possible futures.

Second, many of the LTIBs focused on relatively narrow policy issues and/or applied mostly short- to medium-term horizons. Only a few employed multiple foresight techniques. Most lacked a systematic assessment of the options available to ameliorate, let alone resolve, the policy problems under investigation. And many LTIBs suffered long delays, with limited resources and the Covid-19 pandemic as undoubted contributing factors.

> It is difficult to escape the impression that, despite its legislated mandate, the LTIB experiment has thus far received less than full-blooded political and bureaucratic support.

Third, little effort was made by the central agencies to ensure that the published reports were readily accessible (e.g., via a common website). Nor was it easy to track the progress of LTIBs once they entered the parliamentary system. A more certain inventory and better public engagement would be enabled if the website which lists the published reports also provided progress updates and links to ensuing select committee hearings or parliamentary debates.

Fourth, the preparation of LTIBs was inadequately coordinated with the drafting of other future-focused documents. What we observe across these initiatives is a 'futures bricolage' where similar issues have been examined through different lenses and published in separate formats. This is not wholly bad. After all, multiple overlapping future-oriented policy processes can potentially contribute to a wider and deeper futures-thinking capability than that which underpins the LTIBs alone. Nevertheless, there is a risk in such circumstances of LTIBs being viewed merely as 'add-ons' to the serious business of government, rather than as first-order foresight documents. To avoid this outcome, LTIBs will need separate and adequate resourcing, better coordination, and timely delivery to their ministers and Parliament. Only then will they have a reasonable chance of improving the quality of anticipatory governance.

Even so, requiring all departments to produce (or contribute to) periodic foresight documents may not be the most efficient or effective way to encourage robust futures thinking within a nation's policy community, enhance risk management, and improve long-term outcomes. Indeed, such an approach is unusual from an international perspective. Other models are more common, such as the creation of a separate governmental agency dedicated to regular foresight activities, as, for instance, in Singapore and the United Kingdom.

Interestingly, the Australian federal government, under the leadership of the Department of the Prime Minister and Cabinet, has been trialling the use of LTIBs. It released its first report in late 2023 on the topic, 'How might AI affect the trustworthiness of the delivery of public services' (Department of the Prime Minister and Cabinet (Australia), 2023). Building on international experience, including recent developments in New Zealand, the Australian approach has deliberately eschewed the idea of requiring all departments to produce their own LTIBs on a regular basis. Instead, the aim is to produce a small number of LTIBs annually on a collaborative interdepartmental basis, with central agency leadership and dedicated staff.

For the future, New Zealand could combine the features of several overseas approaches. This might include oversight of the LTIB process by a central agency supported by a foresight unit, coupled with greater interdepartmental collaboration.

Independent reviews by parliamentary select committees could be assisted by staff in the Office of the Auditor-General and independent experts. Under such an approach, most briefings would involve two or more departments. This would reduce and spread the administrative burden, while also placing fewer demands for feedback on key stakeholders and members of the public. Potentially, briefings could be organised on a sectoral basis (e.g., economic, social, cultural, environmental, security-related, etc.). Key strategic questions could be selected for consideration via a consultative process among departmental chief executives, the departments with specific interests in each topic area pooling their resources to prepare a suitable briefing.

Aside from this, future rounds must take adequate account of, and build upon, the disciplinary knowledge base and work of other domestic and international futures initiatives, including their assessments of risks, opportunities and drivers of change. Employing a consistent set of foresight techniques and applying them rigorously (e.g., with proper sensitivity analyses where relevant) would be advantageous. Equally, there should be a concerted effort to build the foresight capability of the public sector, and avoid burning out of key staff members. Also, it will be important to continually challenge underlying assumptions and ensure that processes and findings are subjected to independent review.

It is difficult to escape the impression that, despite its legislated mandate, the LTIB experiment has thus far received less than full-blooded political and bureaucratic support. Indeed, there is a risk that LTIBs will be added to the historical roll call of short-lived attempts to encourage futures thinking in Aotearoa. This would be unfortunate. In an increasingly interdependent, complex and uncertain world, there is a pressing need locally and globally for sound futures thinking. But this requires an approach that produces high-quality outputs that are taken seriously by elected officials. Achieving such an outcome will likely require modifying the current model in one or other of the ways outlined above.

1 A recording is available here (from 29:00): https://www.facebook.com/GASCNZ/videos/5913967975315015/.
2 https://www.dpmc.govt.nz/our-programmes/policy-project/policy-methods-toolbox/futures-thinking.
3 https://fitforabetterworld.org.nz/.
4 https://www.xrb.govt.nz/standards/climate-related-disclosures/resources/.

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References

Australian Government (2023) *Intergenerational Report 2023: Australia's future to 2063*, Canberra: Australian Government

Boston, J. (2017) *Governing for the Future: designing democratic institutions for a better tomorrow*, Emerald Group

Chen, N. (2023) *Department of Internal Affairs, Long-term Insights Briefing 2022*, Wellington: New Zealand House of Representatives

Controller and Auditor-General (2022) *Commentary on* He Tirohanga Mokopuna 2021, Wellington: Office of the Auditor-General

Department of the Prime Minister and Cabinet (2022) Update from DPMC on the progress of the Long-term Insights Briefings, Wellington: DPMC

Department of the Prime Minister and Cabinet (2023) 'System-wide review of the process for the first round of long-term insights briefings', https://www.dpmc.govt.nz/publications/system-wide-review-process-first-round-long-term-insights-briefings

Department of the Prime Minister and Cabinet (n.d.a) 'Long-term insights briefings', https://www.dpmc.govt.nz/our-programmes/policy-project/long-term-insights-briefings

Department of the Prime Minister and Cabinet (n.d.b) 'Long-term insights briefings: detailed steps of the development process

Department of the Prime Minister and Cabinet (Australia) (2023) *How Might Artifical Intelligence Affect the Trustworthiness of Public Service Delivery*, https://www.pmc.gov.au/sites/default/files/resource/download/ltib-report-how-might-ai-affect-trust-ps-delivery.pdf

Education and Workforce Committee (2023) 'Ministry of Business, Innovation and Employment, Ministry of Social Development, Ministry for Women, Ministry of Education: long-term insights briefing 2023', *Hansard*, 19 July, New Zealand House of Representatives

European Commission (2024) 'Future studies and foresight', https://ec-europa-eu.libguides.com/foresight

European Union (2023) 2023 *Strategic Foresight Report*, https://commission.europa.eu/document/download/f8f67d33-194c-4c89-a4a6-795980a1dabd_en?filename=SFR-23_en.pdf

Finance and Expenditure Committee (2023) 'Inland Revenue Department, long-term insights briefing 2022', Wellington: New Zealand House of Representatives

Financial Markets Authority (2023) 'FMA publishes scenario analysis information sheet for climate related disclosures regime', media release, 18 July, https://www.fma.govt.nz/news/all-releases/media-releases/scenario-analysis-information-sheet-for-climate-related-disclosures-regime/

Franke-Bowell, J. (2023) '"I've never seen it to that extent": city leaders flee conspiracy mob', *Post*, 10 June, https://www.thepost.co.nz/a/nz-news/350019375/i-ve-never-seen-it-to-that-extent-city-leaders-flee-conspiracy-mob

González-Ricoy, I. and A. Gosseries (eds) (2016) *Institutions for Future Generations*, Oxford: Oxford University Press

Government Office for Science (2021) *A Brief Guide to Futures Thinking and Foresight: tips, advice, and guidance to help civil servants embed long-term thinking and external insight into policy making*, London

Intelligence and Security Committee (2023) 'National security long-term insights briefing', *Hansard*, 1 August, New Zealand House of Representatives

International Travel Forum (2021) *How Transport Planners and Policy Makers Can Respond to Shifting Mobility Trends*

Lineham, J. and P. Lawrence (eds) (2021) *Giving Future Generations a Voice: normative frameworks, institutions and practice*, Cheltenham: Edward Elgar

McGuiness Institute (2023) *List of Publicly-Available National and Local Scenarios*, working paper 2023/01, McGuiness Institute, https://www.mcguinnessinstitute.org/wp-content/uploads/2023/12/20231208-FINAL-WP-2023-01.pdf

McKelvie, I. (2022) 'Briefing on long-term insights briefings', Wellington: New Zealand House of Representatives, https://www.parliament.nz/en/pb/sc/reports/document/SCR_122714/briefing-on-long-term-insights-briefings

McKelvie, I. (2023) 'Briefing on long-term insights briefings: second interim report of the Governance and Administration Committee', Wellington: New Zealand House of Representatives

Menzies, M. (2018) 'A partial history of futures thinking in New Zealand', *Policy Quarterly*, 14 (1), pp.18–26

Menzies, M. (2022) 'Long-term insights briefings: a futures perspective', *Policy Quarterly*, 18 (4), pp.54–64

Ministry for the Environment (2022) 'First national climate change risk assessment for New Zealand', https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/adapting-to-climate-change/first-national-climate-change-risk-assessment-for-new-zealand/

Ministry of Business, Innovation and Employment (2020) 'Update on industry transformation plans', Cabinet paper, 21 July, https://www.mbie.govt.nz/assets/update-on-industry-transformation-plans.pdf

Ministry of Business, Innovation and Employment (2023) 'Industry transformation plans', https://www.mbie.govt.nz/business-and-employment/economic-development/industry-policy/industry-transformation-plans/

Ministry of Foreign Affairs and Trade Manatū Aorere (2023) *Navigating a Shifting World: te whakatere i tētahi ao hurihuri*, Wellington: New Zealand Government

New Zealand Government (2023a) *Defence Policy and Strategy Statement 2023*, Wellington: Manatū Kaupapa Aonga New Zealand Ministry of Defence, Te Ope Kātua o Aotearoa New Zealand Defence Force

New Zealand Government (2023b) *Future Force Design Principles 2023*, Manatū Kaupapa Aonga New Zealand Ministry of Defence, Te Ope Kātua o Aotearoa New Zealand Defence Force

New Zealand Government (2023c) *Secure Together Tō Tātou Korowai Manaaki: New Zealand's National Security Strategy, Te Rautaki Whakamaru ā-Motu o Aotearoa 2023–2028*, Wellington: Department of the Prime Minister and Cabinet

OECD (2017) *The Starter Pack: futures thinking in action*, OECD Centre for Educational Research and Innovation

Oxford Martin Commission (2013) *Now for the Long Term*, Oxford: report of the Oxford Martin Commission for Future Generations

Pubic Service Commission (2024) 'Published briefings', https://www.publicservice.govt.nz/publications/long-term-insights-briefings/published-briefings/

Te Manatū Waka Ministry of Transport (2023) *New Zealand Freight and Supply Chain Strategy*, Wellington: New Zealand Government

Transport and Infrastructure Committee (2022) 'Ministry of Transport, Long-term insights briefing 2022', Wellington: New Zealand House of Representatives

United Nations (2023) *To Think and Act for Future Generations: our common agenda policy brief 1*, https://www.un.org/sites/un2.un.org/files/our-common-agenda-policy-brief-future-generations-en.pdf

United Nations (n.d.) 'The Summit of the Future in 2024', https://www.un.org/en/common-agenda/summit-of-the-future

World Economic Forum (2023) *The Global Risks Report 2023: insight report*

World Future Council (2018) *Guarding the Future: how to include future generations in policy making*

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