

Enhancing knowledge sharing between academics and policymakers in Aotearoa New Zealand

This report is the result of an internship with the Office of the Prime Minister's Chief Science Advisor, undertaken to contribute a wider context to a joint project between the Office, Universities New Zealand and the Department of Prime Minister and Cabinet to provide advice on ways to enhance knowledge sharing between university academics and policymakers.

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Executive Summary

Aotearoa New Zealand's use of evidence, research, and expertise to manage the COVID-19 pandemic has been world leading to date. At every step, public health advice and evolving evidence has guided the New Zealand Government with scientific expertise, spanning public health, infectious diseases, genomics, modelling and immunology central to successfully managing the pandemic. The success of scientific knowledge and research in combatting a global health crisis underscores the potential for research to inform responses to other major societal challenges.

Evidence informed policy relies on strong, trust-rich relationships between researchers and government. The findings of this study indicate that despite broad recognition of the importance of evidence-informed policy advice, there is considerable scope to strengthen the research policy interface. There are significant challenges associated with connecting the complex domains of academia and government. Despite considerable interest and motivation to engage on both sides, the mechanisms that enable effective engagement are often weak. Bridging the two worlds is challenging. Researchers sometimes fail to understand the constraints, competing priorities, and complexities of the policy context. On the other hand, policymakers may lack research skills and might be tempted to look for research that supports predetermined conclusions rather than adopt an open inquiry approach. In summary, a mutual lack of understanding along with a 'clash of cultures' presents significant barriers to engagement.

There is also room for optimism. On both sides there are high levels of motivation and interest in engaging and a growing appreciation of the importance of research-informed policy. Among academics and policymakers there is a strong appetite to forge productive, reciprocal relationships. In some areas, an ecosystem of policy capable academics working in tandem with policymakers already exists. There is a lot to be learned from areas where the interface is working successfully. While the role of Chief Science Advisor, for example, is considered a vital resource, it is one that has not yet achieved its full potential. Similarly, the importance of 'brokers' was emphasised, along with the opportunity to further leverage the potential of other 'boundary spanning' roles.

The COVID-19 pandemic provided New Zealanders with rare insights into the important policy work carried out by the public service. There is now an opportunity to build on high levels of trust and confidence by continuing to deliver policy that is grounded in the latest and highest quality evidence and research. This will require finding new and creative ways to build understanding and engagement between academia, and government. It will also require government and universities to support initiatives that promise to make a demonstrable difference. Notably, the Te Ara Paerangi Future Pathways Green Paper 2021 signals a commitment by Government to further improving connections between research and the formation of policy.¹ If successful, greater knowledge exchange between these two complex and disparate spheres offers many benefits, including evidence-rich policy advice ultimately leading to better outcomes for people and communities, in a manner which is consistent with and observes our Te Tiriti o Waitangi commitments.

¹ <https://www.mbie.govt.nz/dmsdocument/17637-future-pathways-green-paper>

Summary of Actions to Consider

GOVERNMENT	
Enabler	Actions to Consider
Transparency and ease of access to relevant officials	<ul style="list-style-type: none"> List key contact people or a contact email address (e.g. energy@ministry of energy.gov) in policy areas (e.g. energy, housing, family violence, etc.) Consider appointing additional CSAs or Principal Scientists across key policy areas where needed
Mitigate impact of high turnover of policymakers	<ul style="list-style-type: none"> Ensure researcher contacts/relationships are retained and shared when a policymaker moves to another role Consider offering a specialist pathway to policymakers interested in developing deep expertise in a particular policy area
Public facing research agenda	<ul style="list-style-type: none"> Encourage Ministries and agencies to publish their current strategic research priorities Support CSAs to work with relevant departmental staff on developing public facing research agendas Promote opportunities to contribute to the Long-Term Insights Briefings across the tertiary sector Continue to improve access and greater visibility of Long-Term Insights Briefings and associated consultation opportunities by locating them in a central location (e.g. DPMC website), in addition to each ministry website, for ease of access and greater visibility
Funding for research in priority areas	<ul style="list-style-type: none"> Consider allocation of contestable funding for ministries/agencies to commission their own research in priority areas where there is a demonstrated research gap. e.g. quick response grants in areas of urgent strategic priority
More opportunities for academics to connect and contribute to the policy agenda	<ul style="list-style-type: none"> Ministries could work with universities to adopt a range of in person and virtual opportunities for policymakers and researchers from across Aotearoa New Zealand to engage Consider annual departmental workshops at universities (see MoT case study)
Leadership and a strong authorising environment	<ul style="list-style-type: none"> Each ministry and agency should develop a clear position on the role of science and evidence in its decision making. e.g. Ministry for the Environment's Science Strategy. Promote and reinforce the requirement for cabinet papers to demonstrate underpinning evidence (e.g. via Regulatory Impact Statements) Consider how citations might be embedded more formally in order to monitor research and evaluation that has been influential
Greater emphasis on policy evaluation	<ul style="list-style-type: none"> Build the cost of monitoring and evaluation into policy initiatives Encourage CSAs to play a key role in policy evaluation, including drawing in relevant academic expertise Senior leadership should promote a culture that supports transparency and rigorous evaluation of policy initiatives

Secondments, internships, fellowships, and scholarships	<ul style="list-style-type: none"> Consider a range of initiatives to encourage postgraduate student/early career researcher engagement including: <ul style="list-style-type: none"> A Pump-Priming Fund for post graduate scholarships on policy related initiatives Post-doctoral fellowship scheme similar to the Australian Science Policy Fellowship program² Honorariums for postgraduate students to write up their research findings in a policy relevant manner Consider a range of initiatives to encourage greater mobility of academics and policy staff, including: <ul style="list-style-type: none"> Co-fund a Policymaker in Residence (similar to an Entrepreneur-in-Residence)³ Proportional appointments to promote two-way engagement and allow researchers to work across spheres 'named' secondments that elevate status of research-informed policy. e.g. Ministry of Justice Policy Fellow
Promote and strengthen role of advisory groups	<ul style="list-style-type: none"> Consider promoting the wider use of multidisciplinary expert advisory groups across ministries and departments to address short-medium term and longer-term policy challenges Establish clear guidelines on the establishment, management and conduct of advisory groups, noting that the UK has some good resources.
CHIEF SCIENCE ADVISORS	
Enabler	Actions to Consider
Strengthening the role of Chief Science Advisor	<ul style="list-style-type: none"> Review CSA operational model, including resourcing, reporting lines, induction and training procedures, and the role of Māori and Pacific expertise in science advice and decision-making Consider appointing CSAs in high priority areas where there is likely to be a long-term need for science advice (e.g. energy) Consider linking CSA appointments to the National Priority Areas to be identified via the Future Pathways Green Paper consultation Promote the role of CSAs in working with relevant departmental staff on developing public facing research agendas Consider the role of CSAs in policy evaluation, including drawing in relevant academic expertise Consider co-hosting annual departmental workshops with universities (see Appendix 2: Case Study: Ministry of Transport/ Waka Kotahi University Workshops)

² The Australian Science Policy Fellowship program, an initiative of the Office of the Chief Scientist, is now an ongoing program. Approximately 75% of fellows remain in the public service resulting in a strong cohort of PhD trained public servants.

³ Entrepreneur-in-Residence schemes allow successful entrepreneurs to engage directly with researchers to help advance start-up ideas. This concept could be easily adapted to policymakers. See Harvard University example <https://otd.harvard.edu/accelerators/entrepreneurs-in-residence/>

UNIVERSITIES	
Enabler	Actions to Consider
Internal and external Incentives	<ul style="list-style-type: none"> • Ensure that academic standards align with policy engagement and that these are recognised and rewarded • Encourage, reward, and facilitate two-way exchanges between academia and government (secondments, guest lectures by policymakers, Policymaker in Residence) • Elevate the importance of policy engagement via institutional prizes and awards (e.g. policy impact award) • Continue to raise awareness of policy engagement in media and communications activities (e.g. profiling researchers who have had success at the interface) • Advocate to funders and TEC for formal recognition of academic contributions to policy • Reconsider how to address the issue of overheads and their impact on universities' competitiveness when bidding for research contracts alongside consultancy firms. The Future Pathways Green Paper consultation presents an important potential opportunity to address concerns and perceptions regarding overheads
An "NZ Uni Inc" approach to policy engagement	<ul style="list-style-type: none"> • Universities could coalesce research expertise from across NZ in high priority research areas and work as a collective with policymakers • Researchers in key disciplines could work as a collective to prepare short reports on emerging, high priority areas • Researchers could prepare longer horizon scanning reports for government, flagging emerging issues that may not yet be on the government agenda. This could be done with support of relevant CSAs • Option for how such initiatives could be resourced needs to be explored (e.g. Universities New Zealand)
Early, proactive, ongoing engagement with policymakers	<p>Ensure institutional support, via research office or technology transfer/commercialisation office, to help researchers:</p> <ul style="list-style-type: none"> • Build knowledge of relevant policymakers in areas relevant to their research • Consult early with relevant agencies when preparing grant applications • Establish and sustain relationships with 'brokers' including CSAs and university government liaison specialists, and leverage their links with government • Continue to build media profiles to raise awareness of their research among policymakers • Identify relevant advisory committees, expert panels, working groups, etc. • Ensure their research is on relevant email lists relevant to policymakers • Provide policymakers with timely and rigorous evidence. Michigan University Policy Sprints is one such example of this support

JOINT INITIATIVES	
Enablers	Actions to Consider
Forums and opportunities to mingle	<ul style="list-style-type: none"> • Run regular forums for policymakers and researchers to mingle, build relationships and work together on policy challenges. These could include seminars, conferences, roundtables on government policy and other networking events • Ensure engagement opportunities also occur beyond Wellington • Provide targeted opportunities for early career researchers to engage with policymakers and build networks • Provide specific opportunities for Māori and Pacific researchers to engage with policymakers
Education and training	<p>Build on the work of DPMC's Policy Project to provide relevant training for both researchers and policymakers. This could include training in:</p> <ul style="list-style-type: none"> • Understanding the policy process - policy cycle, timelines, how and when to influence, channels for engagement, etc. • Understanding the role of mātauranga Māori in science advice • Understanding the role of Pacific knowledge in science advice • Conducting literature reviews and evidence synthesis • Translating research findings and outlining policy options • Developing targeted dissemination plans to share knowledge and influence decision makers • Joint framing of research questions using a co-design approach • Using an open inquiry approach to problem solving • Identifying and addressing bias and promoting equity and diversity • Engaging with underrepresented areas and emerging industries
Strengthening the role of 'brokers'	<ul style="list-style-type: none"> • Universities could create, recognise and resource visible institutional 'broker' roles to strengthen engagement with policymakers. These roles could sit within research office or technology transfer/commercialisation office. • Government could consider appointing a Strategic Academic Engagement Lead to strengthen engagement with researchers across the NZ tertiary system. This role has been successfully adopted in the UK Government Office for Science.

Introduction

This report summarises the findings of an investigation into ways to enhance knowledge sharing between university academics and policymakers, so that:

- a. Policymakers have quick and easy access to the right academic expertise and evidence.
- b. Policymakers use the expertise and evidence resulting in effective, evidence-informed, and timely policy advice, implementation, and evaluation methods.
- c. Researchers have the capability to direct their research and make available their research findings in a way that is useful to policymakers and policymakers actively engage with researchers.

Government responses around the world to COVID-19 and its consequences have highlighted the research-policy interface placing researchers in the spotlight, as they provide expert advice on issues, from modelling and vaccinations, to youth mental health, and misinformation. Research has informed and shaped prevention and treatment methods as well as approaches to tackling wider social and economic issues beyond the health sector.

There are positive signs at the research-policy interface. Most researchers are enthusiastic about working with policymakers to ensure policy is underpinned by robust evidence. They see the value in their research being used to inform important policy decisions that will affect the day-to-day lives of New Zealanders. The recent emphasis on impact across the university sector globally is good news for research-informed policy, with universities increasingly expected to demonstrate the ‘real world’ impact of their research on society. The complexity of COVID-19 and other major societal challenges has highlighted the potential for research to inform policy and lead the public conversation in new ways. Many in Government see the importance of strong evidence to underpin policy and there are some excellent examples of collaboration leading to stronger, evidence-based policy advice.

However, there are also significant challenges associated with connecting the complex domains of academia and government. This project acknowledges and builds on the work of the inaugural Prime Minister’s Chief Science Advisor, Professor Sir Peter Gluckman.⁴ While considerable progress has been made, the ‘chasm’ between the worlds of research and policy remain. Despite interest and motivation to engage on both sides, the mechanisms to enable effective engagement are often weak. The challenge of bridging the two worlds was a dominant theme throughout this project. Commentary among policymakers centred around the inability of researchers to understand the constraints and complexities of the policy context. Similarly, researchers spoke of the scarcity of research skills among policymakers, a lack of rigour and a tendency to look for research that supports predetermined conclusions rather than open inquiry. This mutual lack of understanding along with a ‘clash of cultures’ were considered key barriers.

⁴ <https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-The-role-of-evidence-in-policy-formation-and-implementation-report.pdf>
<https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-07-Enhancing-evidence-informed-policy-making.pdf>

So how do we bring these two worlds closer together? The results of this study's online surveys, focus groups, and in-depth qualitative interviews with experts in Aotearoa and overseas revealed a multitude of opportunities to strengthen the research-policy interface. These range from relatively simple initiatives to actions aimed at addressing broader systemic issues. This report refines these opportunities to a set of potential solutions that we believe are implementable in the Aotearoa New Zealand environment.

The proposed solutions can be loosely grouped under three themes: actions that government can take, actions that the university sector can take, and joint initiatives requiring the efforts of all stakeholders.

Government

1. Improve ease of access to relevant officials

To the outsider, the inner workings of Government can be mystifying. Researchers commented on how difficult it was to understand the roles and responsibilities within individual ministries or how to contact relevant policy officials. In an attempt to bridge the two spheres, the UK Office of Science recently appointed a Strategic Academic Engagement Manager tasked with strengthening the Office's engagement with the university sector. While it is not feasible to provide contact details of policymakers across Government, providing one point of contact for each policy area is one proposed solution. In addition, ensuring there is a Chief Science Advisor (CSA) or Principal Scientist responsible for bridging the research-policy interface across the range of policy domains would be beneficial.

Actions to Consider

- List key contact people or a contact email address (e.g. energy@ministry of energy.gov) in policy areas (e.g. energy, housing, family violence, etc.)
- Consider appointing further CSAs or Principal Scientists across key policy areas where needed

2. Manage high turnover of policymakers

Policymakers are incentivised to move around agencies with junior policymakers often changing roles after 14 months. While this movement allows policymakers to develop breadth of policy knowledge, it discourages the development of deep policy expertise. One CSA commented that knowledge and expertise in a particular area can be a game changer with policymakers becoming more valuable as their subject matter knowledge improves. The high churn among policymakers is problematic for researchers and CSAs when success at the research-policy interface hinges on trust rich relationships and depth of subject matter expertise.

Actions to Consider

- Ensure researcher contacts/relationships are retained and shared when a policymaker moves to another role
- Consider offering a specialist pathway to policymakers interested in developing deep expertise in particular policy area

3. Clear public facing research agenda

Both policymakers and researchers saw the value of explicitly stating priority research areas. Identifying priority policy areas gives researchers (including postgraduate students) the option of prioritising their research in areas aligned with Government policy. A model for this can be found in the UK where [Areas of Research Interest \(ARI\)](#) provide details about the main research questions facing government departments.

A public facing strategic research agenda demands ministries and agencies develop clearly defined priority areas and ensure research questions are well articulated. This has the potential to create greater awareness and alignment across government. Departmental CSAs could play a pivotal role in helping ministries and agencies shape their research agendas.

Under the Public Service Act 2020⁵, all Government departments are required to put together a Long-Term Insights Briefing (LTIB) for Government. The LTIBs are an opportunity to stimulate greater engagement and input from academia but they are not well understood within the university sector and would benefit from greater promotion.

Actions to Consider

- Ministries and agencies publish their strategic research priorities
- CSAs work with relevant departmental staff on developing public facing research agendas
- Promote opportunities to contribute to the Long-Term Insights Briefings across the tertiary sector
- Continue to improve access and greater visibility of Long-Term Insights Briefings and associated consultation opportunities by locating them in a central location (e.g. DPMC website), in addition to each ministry website, for ease of access and greater visibility

4. Funding for research

Lack of ability to fund strategic research to support policy in a timely fashion was highlighted as a barrier. The usual grant cycle can be an obstacle to generating research that aligns with political timeframes. In some cases, the inability to commission research leads to an overreliance on international literature, which may not be applicable to Aotearoa New Zealand, at the expense of place-based research. There is the view among some CSAs and policymakers that relatively small amounts of money could be used to pump-prime areas that are under researched but of high strategic priority.

Actions to Consider

- Consider allocation of contestable funding for ministries/agencies to commission their own research in priority areas where there is a demonstrated research gap. e.g. quick response grants in areas of urgent strategic priority

5. Opportunities for academics to connect and contribute to the policy agenda

Researchers spoke of the difficulty in finding ways to connect and feed into the policy agenda, particularly those located outside of Wellington. To overcome what some dubbed the 'Wellington advantage', CSAs, policymakers, and senior officials should schedule regular visits to universities as a way of sharing research and discussing policy priorities. The Ministry of Transport's annual

⁵ <https://www.legislation.govt.nz/act/public/2020/0040/latest/LMS207641.html>

workshops offer a useful case-study (see Appendix 2: Case Study: Ministry of Transport/ Waka Kotahi University Workshops).

Knowledge Hubs, used by the [Ministry of Transport](#), can also encourage collaboration and raise awareness of related work and future opportunities.

Actions to Consider

- Ministries adopt a range of in person and virtual opportunities for researchers from across Aotearoa New Zealand to engage with policymakers
- Consider co-hosting annual departmental workshops with universities

6. Leadership and strong authorising environment

Without the expectation of evidence informed policy at the top, initiatives at the coalface may struggle to gain traction. Senior leadership need to demand a high standard of evidence in submissions and incentivise basing policy on strong science and research. A good authorising environment within ministries is critical to promoting research informed policy. Senior leadership need to signal the contribution of research and evidence to the wider public service effort. While there are existing mechanisms in place to ensure cabinet papers demonstrate underpinning evidence, they need to be reinforced and adhered to.

Actions to Consider

- Each ministry and agency should develop a clear position on the role of science and evidence in its decision making. Ministry for the Environment's [Science Strategy](#) is a good example.
- Ensure existing mechanisms requiring cabinet papers to demonstrate underpinning evidence are reinforced and adhered to.
- Consider how citations could be embedded more formally in order to monitor research and evaluation that has been influential

7. Policy evaluation

Evaluation helps governments improve policy design, implementation, promotes greater accountability, and increases public sector effectiveness through improved decision-making. However, interviews with policymakers and senior bureaucrats suggest that policy evaluation is inconsistent and on occasion subject to bias. While recognising the need to factor in the political context, promoting transparent policy evaluation is considered integral to enhancing the quality of policy in Aotearoa. Policy evaluation is currently carried out internally or by external consultancies and think tanks (e.g. NZ Institute of Economic Research). There is scope to draw on academic expertise to ensure government policy is subject to rigorous evaluation.

Actions to Consider

- Build the cost of monitoring and evaluation into policy initiatives
- CSAs should play a key role in policy evaluation, including drawing in relevant academic expertise
- Senior leadership should promote a culture that supports transparency and rigorous evaluation of policy initiatives

8. Secondments, internships, fellowships, and scholarships

Direct partnership via secondments, internships, scholarships, and fellowships is an excellent way to increase understanding between academia and policymakers. There are a range of models, including fellowships, fractional appointments, policy postdocs, and student internships.

Fractional appointments allow researchers to work across the two spheres, maintaining active connections and bringing other researchers into government and vice versa. Well defined secondments structured around a clear objective provide broad benefits to both parties. The UK Office of Science has used secondments to great effect, notably the [Rebuilding a Resilient Britain](#) project which identified evidence and uncovered research gaps around a set of cross-cutting Areas of Research Interest (ARIs) chosen for their relevance to the pandemic recovery.

Scholarships, fellowships, and internships can boost policy awareness among post graduate students and encourage ongoing engagement. The Australian Science Policy Fellowship program, an initiative of the Office of the Chief Scientist, has created a strong cohort of PhD trained public servants with 75 per cent remaining in the Government on completion⁶.

There is also interest among policymakers in spending time in academia, providing early career policymakers with the opportunity to develop and enhance skills in scientific inquiry, literature and evidence synthesis. Senior policymakers see the value in immersing themselves in a policy area in order to develop deep specialist skills and knowledge. The opportunity to move freely between academia and policy could ultimately weave the sectors more tightly together.

Actions to Consider

- Consider a range of initiatives to encourage early career researcher and postgraduate student engagement including:
 - A Pump-Priming Fund for post graduate scholarships policy related initiatives
 - Post doctorate fellowship scheme similar to the Australian Science Policy Fellowship program
 - Honorariums for postgraduate students to write up their research findings in a policy relevant manner

⁶ The Science Policy Fellowship program, an initiative of the Office of the Chief Scientist, is now an ongoing program. Approximately 75% of fellows remain in the public service resulting in a strong cohort of PhD trained public servants. See [Australian Science Policy Fellowship Program | Chief Scientist](#)

- Consider a range of initiatives to encourage greater mobility of academics and policy staff, including:
 - Co-fund a Policymaker in Residence (similar to an Entrepreneur in Residence)⁷
 - Proportional appointments to promote engagement and allow researchers to work across spheres
 - 'Named' secondments that elevate the status of research-informed policy, e.g. Ministry of Justice Policy Fellow

9. Advisory groups

Advisory groups, expert roundtables, panels, and working groups provide government with access to the latest research and expert advice on a range of topics in both Aotearoa and elsewhere

Members hold expertise, skills, and/or experience relevant to a particular topic on which they provide advice. Expert advisory groups provide advice and insights from many disciplines including the natural sciences, technology, medicine, engineering, the social sciences, and the arts and humanities. Policymakers highlighted the value and importance of having multidisciplinary teams with expertise and a diversity of viewpoints so that areas of disagreement were apparent.

Examples of these groups include the [Welfare Expert Advisory Group \(WEAG\)](#) which was formed to advise Government on the future of Aotearoa's social security system and the [COVID-19 Technical Advisory Group](#) established as part of the Ministry's response to COVID-19. Our research revealed examples of other academic advisory groups promoting collaboration across the interface (see Appendix 1: Case study - Behavioural Science Aotearoa Academic Reference Network). In Australia, the [Rapid Research Information Forum](#) (RRIF) facilitated rapid information sharing and multidisciplinary collaboration within the research and innovation sector on COVID-19. The realisation that academics could provide current, timely advice was a game-changer and resulted in the RRIF expanding to other government priority areas.

Actions to Consider

- Consider promoting the wider use of multidisciplinary expert advisory groups across ministries and departments to address short-medium term and longer-term policy challenges
- Establish clear guidelines on the establishment, management, and conduct of advisory groups. The UK has some good [resources](#).

10. Chief Science Advisors

CSAs are viewed as a force for good by policymakers and senior bureaucrats. They bring diverse ideas, values, networks, deep knowledge their research domain and significant opportunities to connect externally to their agencies. They have a broad, roving mandate and import critical networks into Government. The role of CSA sends a strong signal from Government that science is

⁷ Entrepreneur in Residences allow successful entrepreneurs to engage directly with researchers to help advances start-up ideas. This concept could be easily adapted to policymakers. See Harvard University example <https://otd.harvard.edu/accelerators/entrepreneurs-in-residence/>

critical to robust policy making. In the words of one senior bureaucrat, CSAs have been ‘spectacularly helpful’ in bringing a degree of rigour to decision making.

Despite widespread support, there is scope to strengthen the role of CSAs and their broader network. While CSAs typically have some exposure to government prior to their appointment, there are strong arguments for more rigorous induction with the [UK CSA model](#) offering suggestions. For example, CSAs may benefit from training in areas such as ‘soft power’, communicating and influencing upward, leadership, and learning the language and mechanisms of Government. CSAs must be prepared to engage in innovative thinking, extend their networks, and take on an active ‘broker’ role between universities and policymakers. Skills in diplomacy are also critical. CSAs must learn when it is appropriate to nudge things along, and when to retreat. One of the few criticisms of CSAs was perception of reliance on too small a network of academics. This highlights the importance for CSAs making deliberate attempts to expand their networks, consider a broader range of disciplines and go beyond the ‘usual suspects’, including early career researchers.

Government hierarchy is a barrier to the success of some CSAs with reporting lines dictating the level of influence. Some advocate for CSAs to be part of the senior leadership team within their ministry or agency in order to have any upward influence. To maximise the expertise of CSAs, there needs to be more opportunities for CSAs to give free and frank advice. CSAs are not well known in some ministries, suggesting more opportunities to elevate their role and services to the wider policymaker community. Resourcing was also highlighted as an issue. The CSA in the Ministry of Health described the significant benefits of extra resources during Covid as they went from an individual to collective effort.

The lack of Māori science advice within Government was flagged as an area of concern. COVID-19 has highlighted the need for greater Māori input and the need for a Māori led response to the health crisis. The same is true for Pacific communities. While some advocate for a separate Māori CSA in each ministry and agency, others propose appointing a cluster of Māori CSAs in the social sciences and natural sciences to provide advice to relevant ministries. This model would create a purposeful space to connect Māori researchers, research, mātauranga, and policymakers, as well promote cross ministerial collaboration.

Overall, there are compelling arguments to review the CSA operating model to ensure Government is deriving maximum benefits from this highly regarded resource.

Actions to Consider

- Review CSA operational model, including:
 - Current resourcing
 - Reporting lines
 - Induction and training procedures, and
 - Role of Māori and Pacific expertise in science advice and decision-making
- Consider appointing CSAs in high priority areas where there is likely to be a long-term need for science advice (e.g. energy). These positions could be tied to the National Priority Areas as outlined in the Future Pathways Green Paper.

Universities

Academics face a number of barriers to working successfully at the research-policy interface. Working at the interface is time-consuming. Moreover, establishing and investing in relationships requires ongoing effort, as does developing policy-friendly research outputs. This is exacerbated by high staff turnover in the policy community. Often there is a tension between timeliness and rigour, with policymakers needing research findings immediately and academics needing time to collect, analyse, and consult. In general terms, the lack of formal recognition of policy related activities is a major disincentive.

Among policymakers there is the view that researchers do not have an adequate understanding of the policy context, time constraints, or the political implications of how research findings are presented. Policymakers need research that is succinct and presented in easily accessible forms. Ministers rarely have the luxury of doing nothing so need advice that charts a path forward. However, researchers can feel uncomfortable when asked to provide certainty or definite answers to policymakers. Researchers can also get lost in the details when sharing their research which can lead to frustrations and reluctance among policymakers to engage with academia. Policymakers spoke of the value of connecting with researchers who were skilled at making their research easily accessible and relatable to policy.

Importantly, consultation on Te Ara Paerangi – Future Pathways Green Paper provides a timely and valuable opportunity to highlight the value of research informed policy, address longstanding issues and strengthen the research-policy interface.

1. Incentives

For academics, the motivation to work at the interface comes from a combination of intrinsic and extrinsic factors. Intrinsic factors include the potential for policy engagement to enhance research, improve impact, and make a change in the world. These are core drivers for many university researchers. Extrinsic factors include funder requirements and the institution placing value on activities through promotion structures and other forms of recognition. There are suggestions that universities could do more to recognise and reward policy engagement which offers broad individual and institutional benefits including stronger relationships with Government, richer research, and increased impact.

Actions to Consider

- Ensure that academic standards align with policy engagement and that these are recognised and rewarded
- Encourage, reward, and facilitate two-way exchange between academia and government (secondments, guest lectures by policymakers, Policymaker in Residence)
- Advocate to funders and TEC for formal recognition of academic contributions to policy
- Elevate the importance of policy engagement via institutional prizes and awards (e.g. policy impact award)
- Continue to raise awareness of policy engagement in media and communications activities (e.g. profiling researchers who have had success at the interface)

- Advocate to funders and TEC for formal recognition of academic contributions to policy
- Reconsider how to address the issue of overheads and their impact on University's competitiveness when bidding for research contracts alongside consultancy firms. The RSI Future Pathways Green Paper consultation presents an important potential opportunity to address concerns and perceptions regarding overheads.

2. Adopt a "NZ Uni Inc." approach to policy engagement

Expertise in many fields is spread across Aotearoa New Zealand. In order to achieve critical mass and avoid duplication and unnecessary competition, researchers working in similar areas could, where appropriate, present a unified front when engaging with policymakers. By establishing a critical mass of expertise, researchers are more likely to gain the attention of policymakers. CSAs could play an important coordination and engagement role. Importantly bringing together research expertise to work on priority areas or issues will require resourcing.

Actions to Consider

- Universities could coalesce research expertise from across Aotearoa New Zealand in high priority research areas and work as a collective with policymakers
- Researchers in key areas could work as a collective to prepare short reports on emerging, high priority areas
- Researchers could prepare longer horizon scanning reports for government, flagging emerging issues that may not yet be on the government agenda.
- Explore options for resourcing such initiatives (e.g. Universities New Zealand)

3. Early, proactive, ongoing engagement

Early engagement with policymakers increases opportunities for researchers to influence policy. Often researchers are working in areas that are highly relevant to government priorities, but policymakers only find out about key research when proposals are fully formed and submitted to relevant funding bodies. There is an openness in many ministries and agencies to co-develop research projects with researchers in high priorities areas. However, this approach hinges on early engagement.

Working at the policy interface requires academics to take a long-term view and anticipate issues. Policymakers are motivated to keep up to date on emerging research in their field highlighting the importance of researchers identifying relevant government agencies and proactively seeking out and engaging with policymakers. Finding ways to profile research in the media is another way to gain the attention of policymakers. University media and communications staff and [The Science Media Centre](#) can provide support.

To successfully engage at the interface, researchers need institutional support. Universities should consider how to provide this support via their research office or technology transfer/research commercialisation office. For example, at the University of Bristol, the [Policy Bristol](#) team sits within the Research and Enterprise Division and works with academics to enhance the influence and impact of their research within policymaking.

Actions to Consider

Ensure institutional support to help researchers:

- Build knowledge of relevant policymakers in areas relevant to their research
- Consult early with relevant agencies when preparing grant applications
- Establish and sustain relationships with 'brokers' including CSAs and university government liaison specialists and leverage their links with Government
- Continue to build a media profile to raise awareness of their research among policymakers
- Identify relevant advisory committees, expert panels, working groups, etc.
- Ensure their research is on relevant email lists read by policymakers
- Provide policymakers with timely and rigorous evidence. Michigan University [Policy Sprints](#) is one such example of this support

Joint initiatives at the interface

Researchers and policymakers made frequent reference to the importance of the ‘middle space’ There was a strong view that providing more frequent opportunities for policymakers and researchers to mingle would help ‘humanise’ one another.

Working at the interface is all about building trust-rich relationships. Researchers and policymakers spoke of the value of engaging in an informal, low stakes environment to discuss the policy challenges. Strengthening the ‘middle space’ would allow both sides to learn about each other’s roles, pressures, constraints, as well as different ways of working.

The role of ‘brokers’ was a dominant theme in this project. Brokers were seen as critical to a flourishing research-policy interface, translating the language of research into the language of policy. Knowledge brokers combine knowledge and experience in academia with an understanding of policy, politics, and impact.

There is enormous value in those who sit within universities or central agencies and understand the nuances of both spheres, although there is a risk of ‘gatekeeping’ which would limit the range of advice heard. Brokers can leverage that knowledge to influence and enable, build strong relationships, and ensure the successful translation of academic knowledge into a language that can inform and enhance policy decision-making. While there has been huge growth in the knowledge mobilisation profession, their contribution is often undervalued. Knowledge brokers lack career pathways and professional recognition. There is a general lack of understanding of the importance of key evidence champions who have a foot in both camps.

The following recommendations require a joint effort between government and universities.

Actions to Consider

1. Forums and opportunities to mingle

- Regular joint forums for policymakers and researchers to mingle, build relationships, and work together on particular policy challenges. These can include seminars, conferences, roundtables on government policy, and other networking events
- Ensure engagement opportunities also occur beyond Wellington
- Provide targeted opportunities for early career researchers to engage with policymakers and build networks
- Provide specific opportunities for Māori and Pacific researchers to engage with policymakers

2. Education and training

Build on the work of DPMC’s [Policy Project](#) to provide relevant training for both researchers and policymakers. This could include training in:

- Understanding the policy process: policy cycle, timelines, how and when to influence, channels for engagement, etc.
- Understanding the role of mātauranga Māori in academic advice
- Understanding the role of Pacific knowledge in academic advice
- Conducting literature reviews and evidence synthesis
- Translating research findings and outlining policy options
- Develop targeted dissemination plans to share knowledge and influence decision makers
- Joint framing of research questions using a co-design approach
- Using an open inquiry approach to problems solving

- Identifying and overcoming bias and promoting equity and diversity
 - Engaging with underrepresented areas and emerging industries
- 3. Strengthening the role of 'brokers'**
- Universities could create, recognise and resource visible institutional 'broker' roles to strengthen engagement with policymakers. These roles could sit within the research office or technology transfer/commercialisation office.
 - Government could consider appointing a Strategic Academic Engagement Lead to strengthen engagement with researchers across the NZ tertiary system. This role has been successfully adopted in the [UK Government Office for Science](#).

Conclusion

Strengthening connections between researchers and policymakers is challenging. It requires finding new and creative ways to build understanding and engagement between two complex and disparate spheres in ways that are mutually respectful and mana enhancing. However, if successful, this merging offers many benefits, including evidence-rich policy advice ultimately leading to better outcomes for people and communities.

While there are barriers to engagement on both sides, there are also strong signs of a willingness to engage and a growing appreciation of the importance of research-informed policy. Among academics and policymakers there is a strong appetite to forge productive, reciprocal relationships. In some areas, an ecosystem of policy capable academics working in tandem with policymakers already exists. There is a lot to be learned from areas where this interface is working successfully. The role of Chief Science Advisor is considered a vital resource but one that has not yet achieved its full potential. Similarly, 'brokers' provide the opportunity to further leverage the potential in 'boundary spanning roles'.

The pandemic has brought the importance of research, data, evidence, and independent thinking to the fore. Aotearoa New Zealand's science and evidence informed response to the pandemic is widely lauded as world-leading. The speed of the COVID-19 pandemic and its impacts have accentuated the importance and necessity of the policy-research nexus in dramatic terms. It has demonstrated the power of researchers drawn from many disciplines working closely with Government, with an urgency characterised at times as a 'wartime' response. We need a similar urgency in 'peace time' to tackle the raft of challenges facing Aotearoa New Zealand now.

Appendix 1: Case Study: Behavioural Science Aotearoa Academic Reference Network

[Behavioural Science Aotearoa \(BSA\)](#) is located in the Ministry of Justice. BSA works to understand people better to make the justice system work for them. BSA uses evidence and research methods from social sciences to ensure policies and processes reflect the way people behave and make decisions. By putting a behavioural lens on policy decision making, the team creates more accessible and culturally aware systems to improve outcomes for everyone who uses justice services in Aotearoa.

The Academic Reference Network

As part of their commitment to evidence-based practice, BSA established an advisory reference network of experienced Aotearoa New Zealand and Australian based researchers and academics. The network provides guidance and advice on the theory behind interventions and the methodologies and analysis used to determine effectiveness. BSA also look for opportunities to collaborate with network members and find ways to apply research to the Justice context in Aotearoa New Zealand. The Network meets every 2 months with subgroups meeting on an ad hoc basis to work on particular issues.

Key success factors

1. Emphasis is on active participation in the justice sector via real problems and projects. Members will only get involved if they feel they are contributing to good research making demonstrable change and that this is a genuine collaborative relationship.
2. Members were asked what they wanted to gain from being a member of the Network, and this informed the way the network was run. Members are given the flexibility to contribute as much or as little time as there are able to.
3. Cross-sector governance group involving senior leaders and decision makers from the five relevant agencies
 - New Zealand Police
 - Department of Corrections
 - Oranga Tamariki - Ministry for Children
 - Crown Law Office
 - Serious Fraud Office

This ensures all relevant stakeholders have an opportunity to actively contribute.
4. The Ministry of Justice Chief Science Advisor has played a key role in helping steer the group. The CSA's understanding of both academia and policy is critical to the success of this initiative.
5. The pragmatic and creative approach of the Network has helped dispel any preconceptions about the challenges of working with academics.

Appendix 2: Case Study: Ministry of Transport/ Waka Kotahi University Workshops

Aotearoa New Zealand lacks a national centre or institute dedicated to transport research with expertise dispersed across the country. The transdisciplinary nature of transport research means that expertise is located in a wide range of departments and faculties. In response to this challenge, the Te Manatū Waka - Ministry of Transport (MoT) and the Waka Kotahi - New Zealand Transport Agency conducts annual workshops in Auckland, Hamilton, Christchurch, and Wellington.

National Transport Workshops

The national workshops are an open invitation for researchers interested in transport to connect with MoT/Waka Kotahi staff and learn about government research and policy priorities. They are also an important opportunity for MoT/ Waka Kotahi staff to learn about transport related research currently taking place in universities across Aotearoa New Zealand.

Prior to each workshop, MoT/Waka Kotahi discuss goals for the day with participating universities and tailor the agenda accordingly. The day is split between MoT/ Waka Kotahi presenting information requested by academics and MoT/ Waka Kotahi staff learning about research being carried out across the university sector. There is also dedicated time for discussion and brainstorming.

The workshops typically consist of two sessions. The first session focusses on information sharing between MoT/ Waka Kotahi and the host institutions. This could include:

1. MoT and Waka Kotahi: Who we are and what we do: research priorities, current frameworks, and an update on our research strategy.
2. Interacting with government: what policymakers require of research and how to communicate findings in a manner relevant to policy/decision-makers.
3. Funding opportunities and mechanisms for future collaboration and engagement.

Participating universities have an opportunity to profile research groups and provide updates on current research projects via 'lightning talks'. There is a strong emphasis on sharing research that is relevant to MoT and Waka Kotahi.

The second part of the day focusses on challenges facing the NZ transport system. Ideation sessions and roundtable discussions encourage researchers and policymakers to work together to identify issues, opportunities, and work towards co-designing research projects.

Key success factors

- **Ongoing, consistent engagement** builds strong links leading to beneficial two-way engagement outside of the workshops.
- **Leadership by those who have both policy and research experience.** Workshops are run by people who either have a foot in both camps (e.g. CSA) or who understand the challenges on both sides creates. This creates an atmosphere of trust during workshops and helps build bridges between academia and policy.
- **Genuine enthusiasm and commitment to engagement.** The workshops were initiated by those within MoT/Waka Kotahi with a strong interest in transport research and a genuine desire to connect with researchers.
- **Ample opportunity for discussion.** Lightning talks are useful as they avoid long presentations and save time for valuable discussion between participants.

Appendix 3: Case Study - Ministry of Health - Victoria University Wellington: Drug checking at Festivals Study

Background

Drug checking involves testing a small amount of an illegal drug such as MDMA⁸ to determine its contents, and any adulteration, and is widely regarded internationally as a valuable harm reduction intervention. Drug checking has been carried out at venues, particularly music festivals, in Aotearoa New Zealand for a number of years. However, the practice fell into a legal grey area, with the potential for festival and other event organisers to be prosecuted under *Section 12 of the New Zealand Misuse of Drugs Act (MoDA 1975)* for allowing their 'premises' to be used for drug taking.⁹

The New Zealand Government has expressed support for harm reduction policies related to illegal drugs, in particular drug checking. To this end the Government put forward a proposal to change *Section 12 of MoDA 1975* to allow drug checking legal status. Part of the proposed change involved undertaking research to provide an evidence base for discussions around changing the legal status of drug checking services. This was also intended to provide Aotearoa New Zealand based evidence to assuage the fears of the Labour government's coalition partner New Zealand First, that drug checking encouraged drug use.

The project

In December 2019, The Ministry of Health commissioned Victoria University Wellington (VUW) academic, Associate Professor Fiona Hutton, to examine the effectiveness of drug checking programmes at music festivals. This research was spearheaded by then Police Minister, Stuart Nash, and funded by the Ministry of Health.

The research combined quantitative and qualitative assessments of the current testing regime carried out by the non-government volunteer organisation [Know Your Stuff](#), and was designed to provide Ministers with rigorous evidence before considering next steps.

The [results](#) showed that drug-checking services are instrumental in changing behaviour, often resulting in people disposing of or reducing the amount of drugs they take, as well as increasing awareness of the risks of harm.

Based partly on the report's results, on December 7th, 2020 the Government introduced the *Drug and Substance Checking Legislation Bill*, a temporary piece of legislation to allow drug checking legal status for the 2020/2021 festival season. The Bill amended the *Misuse of Drugs Act 1975* and the *Psychoactive Substances Act 2013* to try to minimise drug and substance harm by allowing drug and substance checking services to operate legally in Aotearoa New Zealand. By this time, New Zealand First had changed its stance on pill testing but the idea is still opposed by the National Party.

⁸ Methylenedioxymethamphetamine (MDMA) is a chemical stimulant and the active ingredient in ecstasy.

⁹ Section 12 of the MODA 1975 criminalises those who allow their premises to be used for illicit drug use – this could apply to festival promoters who allow drug checking as they are admitting that illegal drug use happens at their festival/premises. Therefore, drug checking services operate in a grey area under the law.

In May 2021 the *Drug and Substance Checking Legislation Bill (no.2)* was introduced into parliament to make this law change permanent. It passed its first reading and is currently with the select committee.

Key success factors

Support from the top – this initiative was driven by then Policy Minister, Stuart Nash in response to the issue being raised in the public arena. Having a powerful champion within Government elevated the profile of the study and boosted the chances of the results being adopted.

Adapting to timeframes – Government wanted the project to begin promptly in order to produce the evidence required to inform key decision making. VUW's ability to produce a proposal, timeline and ethics approval within a month ensured the research could be carried out at festivals over the summer.

Building on existing relationships – VUW academics' existing relationships with Know Your Stuff and the Drug Foundation were critical. Well established trust between key stakeholders facilitated a collaborative approach and led to a successful partnership between academia, NGOs and government.

Lessons learned

What counts as evidence – Policymakers need a solid understanding of the different types of research methodologies and their strengths and limitations. While the research was criticised by some for drawing on a purposeful, focused, non-random sample rather than a random sampling, this method is entirely appropriate for a qualitative study intended to hone in on a specific focus area.

Stakeholder management – Tight Government timelines means that having effective and reliable points of contact in Government is critical to the smooth running of collaborations (contracts, approvals, etc).

Report writing and turnaround times – Often academics are working alone without administrative support which can make fast turnaround difficult, particularly if staff time is not bought out by the funding allocated. In addition, the layers of approval needed in government departments can be frustrating for academics who are not used to this level of oversight. Clear communication about processes and expectations on both sides is necessary when preparing final reports and meeting deadlines.

Flexibility in university overheads – University financial systems need some flexibility to allow important, short term 'one off' projects to get off the ground. Policymakers could also benefit from a clearer understanding of university research funding arrangements, and that funding proposals should include overheads and academic staff buyout.