



Academic Research and Policymaking for Transport: Insights from Aotearoa New Zealand

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19 November 2019

SUMMARY OF RECOMMENDATIONS

This report presents the findings of a series of workshops with New Zealand-based transport academic researchers, and policy teams at the Ministry of Transport (MoT). A summary of the report’s key recommendations is presented below. These are developed further in section vi (‘recommendations’). The recommendations are presented in five themes, and alphabetical order (not to imply importance). The themes are highly connected, as actions in one area will enable and support actions in other areas.

Recommendations	Groups involved
<i>Communication and knowledge-sharing</i>	
- Prepare written documents for non-academic audiences on topics that align with the research strategy, enduring questions, or that build from established funded research. Examples of best practice may include The University of Auckland Public Policy Institute’s ‘ policy briefing ’ documents.	Academics, MoT
- Organise workshops, seminars and other events through the Transport Knowledge Hub that allow two-way sharing of ideas, that go further than presentation of (completed) research, but allow communication, interpretation and relationship building.	MoT
- Use information communication technologies to facilitate the inclusion of non-Wellington-based researchers at Transport Knowledge Hub seminars and events as standard practice, to allow those in regional centres and other cities to participate without requiring funding and other support mechanisms.	
<i>Funding and financial mechanisms</i>	
- Provide transport-specific funding which may include contestable funding, research centre funds, scholarships and studentships.	MoT, MBIE, NZTA
- Establish mechanisms within funding to encourage translation of findings for use by non-academic communities, and greater uptake of science communication.	MoT, MBIE, NZTA
- Encourage Open Access publishing, particularly for research funded by the government, to ensure public sector access to published research.	MoT, MBIE, NZTA
- Ensure greater connectivity between the enduring research questions identified in the Transport Evidence Base Strategy, and research funding mechanisms.	MoT, MBIE, NZTA
<i>Recognition and workloads</i>	
- Work with key groups (e.g. Universities NZ – Te Pūkai Tara, Tertiary Education Commission/Te Amorangi Mātauranga Matua) to see how policy work can be accounted for in current academic workload models.	Universities NZ, MoT
	MoT, Universities NZ

- Allow for greater understanding of the types of work and commitments that academic positions entail, particularly relating to timeframes of work and peaks and troughs in the academic year.

Structure and relationship building

- Establish enduring roles/ responsibilities for academic engagement or as ‘academic liaison’, that continue in perpetuity and reduce risk of lost relationships when staff changes inevitably occur. MoT
- Develop case studies of ‘best practice’ where relationships have been successfully built across policy and academic communities. This might include a focus research teams such as the University of Otago [Centre for Sustainable Cities](#), or discrete projects where best-practice examples occur. MoT, academics

Teaching, co-supervision and work experience

- MoT to actively participate in the funding, topic definition, and supervision of undergraduate and/or graduate student research. MoT, Institutions and academics
 - Provide opportunities for work experience at the Ministry of Transport during graduate degrees. MoT, Institutions and academics
 - Identify opportunities for Ministry of Transport staff to teach on university programmes in their areas of expertise, where appropriate. MoT, Institutions and academics
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ACRONYMS

DoC	Department of Conservation
ERC	European Research Council
HRC	Health Research Council
MBIE	Ministry of Business Innovation and Employment
MoT	Ministry of Transport
MOU	Memorandum of Understanding
NERI	National Energy Research Institute
NZTA	New Zealand Transport Agency
PBRF	Performance-Based Research Fund

I. INTRODUCTION

A collaborative relationship between academic researchers and policy makers can be mutually beneficial, particularly for the enactment of ‘real-world’ change. Academics can offer important contributions to the policymaking process in terms of sharing up-to-date knowledge, best practice and international context. Policymakers can help to shape policy-relevant research agendas to ensure that the important (policy) questions are being asked and answered in academic research, where appropriate.

Yet relationships between government departments and universities or academics are often ad hoc and piecemeal. The various government departments will have different approaches for engaging with academic institutions, and as a result, generalising across all policymaking is at best unhelpful, and at worst misleading. Thus, this project worked with the New Zealand Ministry of Transport (from hereon in, ‘the Ministry’) and transport-researchers working at New Zealand’s academic institutions¹, and consultancies². The project sought to understand how ‘evidence’ is understood, and used amongst *transport* policy communities, and how *transport* researchers engage with questions of policy-relevant research and policy communities. Transport is purposefully interpreted loosely here, to include scholars working in allied fields of mobilities studies, and to incorporate the wide-ranging disciplinary perspectives that contribute to transport scholarship in New Zealand. To do this, workshops, focus groups and meetings were held with members of these communities between June and September 2018.

The aim of this research is threefold:

1. To better understand how transport policy-teams at the New Zealand Ministry of Transport go about designing policy options and learning about new topics, including the role of (academic) research, and
2. To develop awareness of the processes by which some researchers try to make their research ‘policy relevant’, and
3. To identify points of (potential) overlap and synergy that could better facilitate communication between academic/research and policy transport communities in Aotearoa New Zealand.

While this project was stimulated by an interest in harnessing greater interactions between the Ministry of Transport and New Zealand’s academic institutions including universities and polytechnics, this research attempted to engage with academic scholarship which might be emerging from within or beyond academic institutions. From here on, the term ‘academic’ is used to represent scholarly research. Given that the primary interest of the Ministry was to foster greater engagement with academic institutions, in this report there is a greater focus on universities, polytechnics and colleges, without wishing to unduly exclude other types of scholarly research, emerging beyond academic institutions, but for whom some of the findings may also be relevant. It is also acknowledged that not all voices could be included, and this research represents just some of the views of the relevant communities of interest.

¹ Including Universities, Polytechnics and Colleges

² Consultancies vary substantially in their configurations, priorities, scales and scope.

II. BACKGROUND

The transport sector is in a period of rapid change, contributing to large degrees of uncertainty both within the transport sector and allied sectors including energy, housing and beyond. These changes include, but are not limited to technological innovations (e.g. the emergence of driverless vehicles, aerial drones, alternative fuel technologies), demographic changes (e.g. aging population), and environmental pressures (e.g. responding to climate change³ and urban air pollution). These uncertainties create a challenging context for policymaking (Lyons & Davidson, 2016), especially where ‘wait and see’ responses are untenable.

It has been suggested that around the world, government departments may not be aware of the potentially large and relevant knowledge bases and expertise which may exist within domestic universities (El-Jardali et al., 2018) – particularly for interdisciplinary areas of scholarship such as transport. Moreover, like many other areas of study, transport scholarship has changed substantially over the past two decades, moving beyond its traditional home in engineering and economics, to include disciplines including sociology, geography, urban design, psychology and many others (e.g. Shaw & Hesse, 2010). This change to the academic study of transport has widened the net of potential points of engagement for public sector transport agencies, departments and ministries, but also complexifies the types of evidence that will be produced by transport researchers (e.g. with greater input from qualitative social sciences) and may contribute to the ‘lack of an agreed disciplinary framework with research, and policy-making occurring from a variety of perspectives or frames of reference’ (Mulley & Reedy, 2015: p. 215).

It is important to acknowledge that not all research is policy-focused, or intended to communicate with policy audiences. It is not the intention of this piece of research to suggest that all research should be policy-focused/informing, but rather to examine where policy-relevance exists, how this can be harnessed to reach its intended audiences. At the same time, despite increasing ‘impact agendas’ for universities, academic researchers may not always view national-scale government departments as potential partners, collaborators or users of their research (El-Jardali et al., 2018). Otten et al. (2015) also point to the structural constraints by way of promotion processes and professional cultures which favour academic outputs and do not place high value on communicating and engaging with policymakers, and argue for formal training to encourage engagement.

Research has pointed to some issues in the translation of evidence from academic research into policymaking, particularly in terms of the relevance of findings (e.g. spatial scales, specificities), and has shown a reliance on developing ‘short policy-relevant summaries’ as a tool for communicating. Academic research can sometimes be framed as lacking (policy, practical) relevance. For instance, in their New Zealand Transport Agency (NZTA) report, Roorda and Alkema (2011) find that some research is considered to be only “*sometimes relevant*” because it is “*too academic*”. Very little is known about a) how ‘evidence’ is understood (what is ‘evidence’ in academic and policy communities?), b) how it is used, and c) the ways to improve links between academic and policy communities. This report responds

³ Operationalisation of the 2019 Climate Change Response (Zero Carbon) Amendment Bill, for instance, will have significant implications for New Zealand’s transport system, and require new (types of) knowledge and evidence.

to these issues, and aims to provide practical recommendations for enhancing communication, interactions and engagements between academic researchers and policy professionals.

III. APPROACH

During the winter of 2018, workshops, meetings and focus groups were held with members of the New Zealand academic and (national) policy transport communities. Sessions were held both virtually, via online platforms and teleconferencing, and in-person, in Auckland, Wellington, Dunedin and Christchurch. The sessions undertook a conversational style, with the intention to illicit the participant's perceptions of a) how policy is made in New Zealand, b) the ways that academic insight can be better used in policy design and decision making, and c) how academic and policy communities can inform one another and build productive relationships. Seven 'academic' or 'research' sessions were held. Five of these were audio recorded, and for two, detailed notes were taken. In addition, seven 'policy' sessions were held in person. Over 60 people contributed to these sessions. The findings are presented from the two communities; research and policy, then these are drawn together to make some recommendations for pathways forward.

IV. FINDINGS: RESEARCH COMMUNITIES

New Zealand's transport research community is made up of research conducted in academic institutions or by academics, research consultancies (of various shapes and sizes), research conducted within government agencies, private sector research (conducted for and by private companies) and independent researchers, amongst other configurations. The traditional, permanent academic position at a university⁴ will be split between three key tasks; teaching, research and service, with research accounting for up to 40 percent of an academic's time. However, it is increasingly common for academics to be employed on research-only contracts, which are often of a fixed-term duration, dependent on external research contracts (so-called 'soft money') from the government (e.g. MBIE, HRC), charities or other funding sources. Consultancies are also often reliant upon external grants to fund their research, and may adopt permanent and/or fixed term contracts. This context is important for interpreting the perceptions of researchers of engagement with government agencies and the so-called 'policy relevance' of their research.

What 'counts' as transport is complex, with much debate even within research communities, but particularly for academics. Transport engineering, transport economics, and transport studies each approach the study of movement (moving people and goods) differently, based on varied assumptions about how the world works, the roles of the built-, social-, and natural environments, and the nature of knowledge. An alternative approach comes from what is known as mobilities studies, which emerged from sociology but has reached far across the social sciences (Sheller & Urry, 2006). While the differences between these traditions is of less importance here and now, suffice to say these differences impact upon the types of 'evidence' collected, and ways that researchers feel engaged – or not – by transport policy-making.

⁴ This may differ at colleges and polytechnics.

For academics, there are many different disciplinary norms around what ‘counts’ as evidence. The aforementioned disciplinary heterogeneity of transport scholarship – from engineering, economics, sociology, psychology and beyond – means that the types of data collected, methods used, and analytical approaches can be highly divergent. Methods could vary from detailed ethnographies, to modelling of traffic flows, and stress-testing materials, leading to very different types of data, knowledge, and evidence, as well as often being able to answer very different questions. For instance, ethnographies may produce a qualitative ‘thick description’ of social phenomenon such as mobile lives, while traffic modelling produces quantitative measures of traffic flows. Both will require substantial interpretation to be ‘useful’ for policymaking, but these highly different methods present important insights which help us to better understand aspects of the transport system. Interdisciplinary scholarship can offer valuable insights and processes for thinking across these divides.

Thus, there are highly varied types of research that might be conducted by transport scholars in New Zealand. But across this diversity, focus group participants questioned the point at which their research became ‘useful’ or ‘valid’ for policy work. For some, waiting until the research was published in peer-reviewed academic journals was thought to be the best approach. This approach ensures the research has gone through a rigorous, peer-review assessment, but may take up to 2 years from the point of submission to a journal – therefore creating a delay before the ‘evidence’ can be used in policymaking. An alternative approach includes writing a policy-focused report which could happen immediately upon completion of the research, but this would normally take place if the research was directly funded by the Ministry, but might not happen for research funded by other mechanisms. Furthermore, for some disciplines the production of a policy brief would only be possible after the research had been published in an academic format so not to invalidate their findings for academic publication. Thus, the understanding was firmly based on the direct relevance of specific pieces of research to policy, rather than more general expert input.

Perceptions of the Ministry of Transport, appear to be constructed in relation to other government agencies such as the New Zealand Transport Agency and regional/local government bodies, as well as other national Ministries. There is currently somewhat limited understanding of the remits of the various organisations, but more importantly, there is a perception of repetition and contradiction that further confuses potential engagements with public sector transport organisations. Participants questioned “*where does responsibility lie?*” There is an important point relating to the role(s) of the various government agencies, and the departments within them, that clouds academic’s understandings of who to (try to) contact and where engagement might be possible. Similarly, few participants were aware of strategic documents produced by the Ministry of Transport including the Transport Research Strategy, and those who were aware felt that it had little influence on their research design due to the mismatch between the different ways research is understood, designed, and framed. There was, however, great interest in producing a similar document – as a collaboration between the Ministry and academic institutions – that develops the Research Strategy in a way that can inform long-term academic transport scholarship in New Zealand⁵.

The opacity of the public sector transport organisations, including the Ministry of Transport, creates a number of challenges which ultimately leads to a system that favours a limited

⁵ See Addendum for details on current progress to this end.

number of academics, who have established networks, are more mobile (e.g. able to travel regularly to Wellington) and of a higher status (e.g. full professor) which can make it harder for junior academics, those on short term/ fixed term contracts and those with caring responsibilities to replicate. In order to engage with government ministries, efforts were thought to fall to academic researchers to reach out, travel to Wellington and sustain relationships. The burdens of this engagement, include time (which is not included in workload models), and financial costs of travel to Wellington for events, could prevent or limit engagement with the Ministry. Often more junior scholars are prevented from attending Wellington-based events and are therefore unable to develop their own collaborations and relationships. While this may not immediately appear problematic from the Ministry's perspective, in terms of long-term, enduring academic engagement and awareness of best-practice and novel methodologies, engaging with a diverse range of academics is critical (e.g. across career stages, gender, ethnicity).

Mechanisms to become engaged with appropriate people within the Ministry are not always clear. As a result, participants said they relied on personal relationships to 'get into' government departments. This can mean that only a small portion of research is 'getting through' to the Ministry, and participants questioned what would happen if their personal contact left the Ministry. Moreover, it was suggested that those academics with connections became protective of "*their connection*", which was not always helpful, nor in the best interest of transport research, policymaking and action. Established and long-term relationships can be valuable in terms of developing trust, knowledge and continuity, but reliance on established connections can be restrictive for 'new voices'. Where participants had communicated with the Ministry, they articulated a high degree of uncertainty about what the Ministry "*really wanted*" from academics, and reported inconsistent messages in their previous engagements with the Ministry. This was usually during initial meetings (formal or informal), prior to engaging in specific programmes of work. This may signal a need for the Ministry to be (more) explicit about what they want to achieve from the partnership with academic researchers, which may include: 1. A discrete piece of (paid/unpaid) research, 2. A sustained co-beneficial relationships with or without potential for future projects, 3. An advisory relationship, or something else. Clarity is required around timeframes, workloads and financing.

For those participants who had engaged with, and produced research (of varying sizes and configurations) for the Ministry, feedback is often lacking. Across the focus groups, participants spoke of completing work and never receiving (or receiving limited) feedback on how the findings or report were used, and whether and in what ways it was valuable. This was used by the participants to show how the potential for long-term relationship building was lost, but also, that this feedback – especially where this work has helped to inform policy design and decisions – can be beneficial for academics as proof of the value of engaging with government departments and ministries which they can show to their institutions. Similarly, in promotion applications and other types of employment processes (e.g. PBRF), knowledge of how research has been used by the Ministry can be highly valuable. Thus, there are potentially multiple benefits from increased feedback and communication following the submission of research to the Ministry in terms of 1) developing long-term collaborative relationships, 2) providing additional rationales for the benefit of engaging with government

ministries for universities and other academic institutions, and 3) allowing academics to better understand how and where their research is used in policy design, and policy processes.

In sum, a number of significant barriers to engagement with the Ministry of Transport were discussed in the focus groups.

1. Perceptions of their research being “*not suitable*” for policymaking, due to the topic, methods, disciplinary norms, or spatial scale (e.g. focused on regional/local scale or outside of New Zealand);
2. Uncertainty around how to reach out to the Ministry;
3. The higher education system not prioritising, recognising (e.g. as part of work-load model) or rewarding (e.g. in promotion criteria) policy engagement and work with government departments;
4. A Wellington-centred bias to the Ministry, which benefits Wellington-based academics, but limits potential opportunities for frequent, and sustained relationship building with people from the Ministry.

In reference to the fourth point, the lack of adoption of video-conferencing facilities, and tours of the regional centres meant that those working at more remote locations felt that they were prevented from participating in some events, and had limited opportunities for more casual, informal engagement. On similar lines, engagement with *local authorities* was identified across the groups as not only easier to facilitate more regular face-to-face meetings, but also more rewarding, and often more appropriate due to the scale of research particularities. For instance, participants spoke of making local contacts ‘at Saturday rugby’, with such interactions impossible with Ministry workers for those not based in Wellington. Yet still, Wellington-based academics spoke of closer engagement with the city council, as mirrored by academics based outside of Wellington.

Thus, the participants of the academic research focus groups exposed a diversity of perspectives, expectations and experiences on working with the Ministry of Transport, other public sector agencies and involvement in policy conversations. While New Zealand benefits from having a relatively ‘small pond’ of transport researchers, the first hurdle of who to contact at the Ministry was seen to be the largest – and there might be competition within the transport research community for these relationships, which does not always result in cooperation and collaboration. The appointment of the Chief Science Advisor for Transport, Professor Simon Kingham, in February 2018, will go some way to opening the Ministry to academic research. At the time of conducting the focus groups, there was still some uncertainty amongst transport academics about the Chief Science Advisor for Transport role and responsibilities, and whether this would benefit academics beyond Professor Kingham’s home institution and established networks. It is likely that Professor Kingham’s visibility and actions since this time would have allayed some of these uncertainties, and provided a conduit into the Ministry for a greater diversity of academic researchers.

V. FINDINGS: POLICY COMMUNITIES

At the time of conducting this research, the policy teams at the Ministry of Transport had undergone a recent restructure, which meant some participants had moved into new areas of focus, and the remit of the various teams had changed. In addition, the Sixth Labour Government had been in place for just nine months, with significant changes to national

transport priorities (See: Lowrie, 2018). Contrary to popular belief, the policy teams are not made up of engineers and economists alone; the participants of the policy focus groups had wide-ranging academic training, in disciplines and fields such as law, philosophy, political science management, political studies, urban planning, international relations, biomedical sciences, psychology, accountancy, public policy. Across the teams, different *modus operandi* emerged, which will be explored further below.

Work within the Ministry operates at highly varied timescales, levels of importance, and priorities. Participants spoke in terms of the ‘reactive’ side, and the ‘proactive’ side of their work, which usually (but not always) aligned with short-term reactions to the Minister’s requests, and longer-term proactive projects in response to enduring questions, themes and needs. Due to the change in government nine months’ earlier, coupled with the restructure, many participants noted that there had been a primary focus on reacting to immediate demands, and insufficient time for long-term strategic thinking in the previous year. However, this was seen to be a temporary condition that would settle over time.

When beginning a new project or working in a new thematic area (e.g. transport mode, priority or outcome), there was relative consistency across the focus groups on the steps that would be taken: first, they would try to find out if a similar project had been undertaken in the past – either in the Ministry of Transport or elsewhere in other government departments (e.g. NZTA, DoC). This step prevented ‘reinventing the wheel’, and provided a basis of knowledge and expertise on which to build. For areas that are new, engagement with user groups, industry and academics would be a starting point, as well as looking internationally at the work conducted by other national governments, particularly Australia. Conversations with diverse stakeholder groups were used to “*get the basics understood*”, and to learn the history of the topic.

It was suggested that “*within the Ministry, there are some people here who have a long history and know ‘actually we’ve looked at that before, its nothing new’, so it’s a refresh*”. These often-tacit knowledges were described as critically important for learning from past experience – participants spoke of the lineage of policy-making processes, with circulations of ideas, policies, and priorities meaning that few topics were ‘actually brand new’ but iterations on thing that had gone before. This meant that often the priority was to gain a clear idea of what had happened previously. Such a process is both logical and potentially beneficial, however, also risks the potential to miss novel and/or innovative ideas, and become locked into institutionalised ways of thinking. This was acknowledged by some participants who noted that it is important to “*go back sometimes and revisit things*”, but also to accept that landscapes shift over time. This is not to suggest that such methods sit in isolation; these are coupled with evidence from multiple other sources. Such sources include: unique Ministry data and research, private sector industry information, and academic research (which may or may not be contracted by the Ministry). The research conducted within and by academic institutions thus represents just one type of evidence that may offer some relevance to transport policymaking, often in conversation with other sources.

Starting with new topics often requires an ‘authoritative, summary overview’. For practical and pragmatic reasons, such overviews provide sufficient detail for the purpose, without demanding the time required to get to grips with often highly-detailed, in-depth information. In this context, a multi-disciplinary summary of a topic that has rigour and authority is

required, and would ideally cover topics including a scientific basis (if applicable), implementation, costs and economics. Where such syntheses of information and evidence are not available, the Ministry has to take on this role. Participants argued that often it is the *implementation* perspective which is missing from existing topical overviews, or is not relevant due to the scale and/or context.

A key question, then, remains: what counts as evidence? If evidence is understood to be information that indicates the truth and/or validity of a particular proposition, or that which allows for the confirmation or verification of a position on a topic, then sources can be wide ranging. While there was a preference for quantifiable data, other types of knowledge and information were also seen to be important for formulating policy. The various sources and types of ‘evidence’ range from formal, explicit knowledge by way of experimental research designed to answer a particular question, through to tacit knowledge held by the Ministry, other ministries or other governmental agencies. While the frequent movement of public sector workers between agencies (as policy specialists rather than topic-experts) can be a barrier to the transfer of tacit knowledge and communication, there still appeared to be a sense that “*Wellington is small enough*” for such sharing to occur across agencies and institutions, and the focus groups uncovered key individuals who hold important institutional histories (e.g. of what has been done before).

It was noted that the private sector produces research, reports and sources of ‘evidence’ that can be useful due to their operational outlook. The focus groups highlighted a range of stakeholders for specific interest areas, who produce reports for their own use which can be useful additions when developing a body of evidence. This signals the importance of diversity in the policymaking process – with diverse ranges of stakeholders, evidence, data, and disciplines. Also of importance are reviews, case studies and best-practice reports, particularly as they relate to the implementation of policies and practices in *New Zealand*. From these various sources, the policy teams saw themselves as needing to assess the validity, and account for and question the underlying assumptions and vested interests from these different sources, to find a ‘balance’ that accounts for ‘real-world’ impacts and implications. Important questions here included whether the findings had been replicated elsewhere, the reputation of the group or individual(s) who conducted the research or produced the report, and whether there are consistencies across the various sources of evidence.

Sourcing such evidence is, however, time consuming and can be tricky. Timing and timeframes of work emerged frequently as justification for particular processes and patterns of work, and from task-to-task an assessment is made of ‘how deep’ one needs to go into a specific topic. For instance, who is the piece of work for? (e.g. the Minister, or for wider consultation)? Is the topic one of short duration (e.g. two weeks) or a more substantial, enduring topic? The answers to these questions will determine the detail required, with a participant noting that “*I won’t drill down unless I need to*”, and thus it is important to figure out “*what level of knowledge you need*”. Academic research was viewed as “*highly focused, specific and detail-oriented*”, and this is not always the type of information required. When seeking a review of academic literature, a dedicated team within the Ministry produce a search and retrieval function from academic databases. This means that most policy teams have limited direct access to academic journals which often sit behind subscription-based, pay-walls. In this case, individuals may read abstracts, if they emerge from an internet search

or digests of abstracts, but are unlikely to read the whole article. The importance of abstracts, this suggests, should not be underestimated, for communicating policy-relevance and encouraging reading the full article by non-academic audiences.

Some participants referred to ‘academic advocacy’, and argued that some academic research was “*not concerned with resource allocation and everyday realities*” and as such it was not always useful for the purpose of developing policy recommendations. Nevertheless, academic research was seen to be an important part of ‘every step’ of the policy process, from problem definition to solutions and evaluations. Quantitative data was viewed as potentially ‘more impartial’ than qualitative material, with biases towards qualitative data meaning that some social science approaches are discounted as not being valid for the design of policy interventions. This may represent a challenge for insights from the social scientific and humanities-based transport and mobilities research being included as evidence for policymaking. In addition, academic research that critiques policy was viewed as somewhat detached from reality, and unhelpful if it focuses too heavily on the limitations and not sufficiently on understanding the everyday realities of policymaking (e.g. resource allocation) and/or fails to offer suggestions for improvement. It was suggested that such critiques will have limited impact on actually changing policy⁶. This may be a fruitful area of collaboration between academics and policymakers.

Published academic research (in academic journals and books) was noted as being useful, but not the most valuable form of evidence for multiple reasons: 1) it is not always possible to gain access rights to the full papers, therefore there is a reliance on abstracts which are quite often lacking in details, 2) academic journal articles are not always written in the most accessible language, 3) even policy-focused journals (e.g. Transport Policy) rarely provide policy-ready insights. Thus, for some purposes, published, written, academic research was viewed to be less useful than “*a conversation with someone with expert knowledge*”, and following direct conversation, published reports could be used for a deeper perspective, if required. In terms of the research conducted and presented in these articles, policymakers argued that: 1) the scale is not always appropriate for national-scale decision making (e.g. too locally specific, or too general), 2) academic research can be quite “*specific and focused*” which may not always be congruous with the needs of the policy problem at hand, and 3) while academic research and publication does not have the ‘baggage’ of that produced by more advocacy-based organisations. Academic research is not viewed as ‘balanced’, with some participants suggesting that academics have “*an agenda too*”.

In searching for a new topic area, Google proved to be an important search engine. This produces not only reports and other websites with information about the topic, but also might signal the individuals who work on a particular topic. Thus, ‘searchability’ may become an important issue for academics. This could include personal webpages which provide pre-publication versions of academic papers, blog posts, and other forms of communication. However, it is important to note the additional burden this may place on academics beyond their day-to-day tasks. Credibility of a particular author or research centre was argued to be an important part of assessing the research findings, with participants noting that “*it helps if you know the authors*”. To this end, some groups had proactively established relationships

⁶ The need for academic freedom is absolute, and the capacity to freely critique government is central to this. There may, however, be a place for constructive debate if policy change is an objective of the academic research.

with (groups of) academics that aligned with their scope of work. Tasks include helping with developing common sets of evidence, providing overview and synthesis, and peer review of work including “*support of findings or providing ideas*”. Such relationships may form ‘best practice’ case studies which could be replicated elsewhere in the Ministry. It was noted that there are spaces within the task of the policymaker that are most suitable for interventions with academic work, but these spaces and associated tasks need to be worked through by the various teams, and explicitly communicated with potential academic partners. In establishing relationships, however, it was suggested that “*the people who speak loudest are the people we hear*”, but also that “*some of it is luck and timing*”, where there is congruence between scholarship and policy-priorities.

Participants said that academic scholarship could be more useful to them in several ways, for instance by:

- 1) thinking through the practical implications of the research, potentially in collaboration with partners from the Ministry or other government agencies;
- 2) showing how the evidence is supported by or sits within current knowledge⁷;
- 3) making the ‘headline’ more explicit – in the abstract, highlights and the body of the article;
- 4) providing detailed context around the topic;
- 5) using alternative methods to communicate the findings, including seminars and lectures where the content can be explained in ‘real world language’ (e.g. [Motu research seminars](#)).

In addition, it was suggested that a key role for academics could be to challenge practice and ideas within and beyond the Ministry, and to ensure key knowledge bases and topics are researched beyond political interests. Thus, the freedom of academics to research topics which are not priorities for the government of-the-day, is particularly valuable in the long-term.

VI. RECOMMENDATIONS

New Zealand’s transport research community is quite fragmented - consistent with transport as an academic discipline – this can present some challenges for engagement, as there are different types of scholarship, on a diversity of topics, across scales, occurring within academic departments which might not be immediately apparent to someone seeking academic input to a particular topic. However, this diversity is an opportunity and benefit as much as a challenge, but structures need to be put in place to harness the heterogeneous knowledges, expertise and evidence that is produced for policymaking (where appropriate).

While the transport sector has a Research Strategy, this does not always align well with academic research capabilities. However, there may be a way that this document can be used to produce a researcher-focused publication with indicative research themes for the short-, medium- and long-terms. Such a document could be co-produced with academic researchers to see where different academic traditions can contribute to answering the important questions from the research strategy as set through sector input. This would allow for

⁷ While this is ‘best practice’ for academics, the policy focus group sessions articulated a need for a clearer understanding of how anything proposed by way of academic research contributed to, extended or challenged the status quo.

strategic alignment to be made, where appropriate and suitable, between the Ministry's interests and the academic community. Similarly, through this process, there may be an opportunity to discuss the data that are available from various government sources for use in academic transport research, and for academic communities to contribute to the design of surveys led by the Ministry and other government agencies.

Increased transport-specific funding, scholarships and other financial mechanisms are undoubtedly necessary, but they need to be accompanied with lasting changes to the engagements between transport research community and the Ministry. Openness, accessibility and transparency appear to be important concepts in this relationship, as well as ensuring that it is two-way. This requires resourcing and prioritisation amongst Ministry management. As this report has shown, one-off reports and other types of collaborations (e.g. MOUs) may not engender lasting relationships unless accompanied by on-going communication and a planned continuation. This could be as simple as providing the researchers with feedback on the uses to which their work has been put (e.g. where have reports gone? Have they been helpful?). This type of feedback is important not only for individual researchers, but to allow those researchers to show the 'impact' or 'value' of engagement with government ministries to university/institutional management, including on promotion boards.

The fragmentation of the transport-research community, which is likely to be replicated in other research fields, and the lack of a central 'home' for transport research means that there is no 'one-stop-shop' for Ministry people seeking advice. It could be that the establishment of such a 'National Centre for Transport Research', with an endowed Chair in Transport Studies could offer long-term stability and the potential for lasting alignment between Ministry research needs and the research priorities of academics. However, this will only capture a small amount of the scholarship that is going on, as it would be limited to one institution, and many researchers conducting transport research would not think of themselves as such (they many prefer being sat within a disciplinary department). Thus, if such an approach was taken, it would need to be done so with caution to ensure there was still capacity for research funding and partnership beyond the Centre. Alternative multi-institutional activities could take the structure of the National Science Challenges, or a national network (e.g. 'National Energy Research Institute [NERI]).

This research has shown that, as El-Jardali et al. (2018) suggested, many people within the Ministry are, on the whole, unaware of the large and relevant expertise that resides in domestic academic institutions, but also that academics do not always view national government departments as potential partners or users of their research. For many, government departments are associated with funding opportunities (e.g. MBIE), and partnerships occur by way of reference panels which vary in terms of productive two-way communication and relationship building. There are a number of recommendations emerging from this research; barriers need to be overcome and opportunities need to be exploited to enable greater engagement between the academic research communities and the Ministry. There is a general lack of awareness between these groups about the diversity of work undertaken by the other, and steps which could be responded to quickly and at low-cost. A sustained programme of awareness building (both of policy and academic processes and priorities), and collaborative development of academic research priorities could be beneficial first steps.

Key points include:

Academic reward and promotion mechanisms incentivise publishing in ‘high-impact’, international academic journals, which prioritises types of research that will suit these journals. This may not always be congruent for work with and for government ministries. The work that an academic might do for a government department may have little recognition from the institution, meaning that the academic does the work ‘in their own time’, and ‘at their own cost’.

Recommendations: 1) Work with academic institutions and Universities NZ to find mechanisms for recognising work with the Ministry, this could include (co-)publishing Ministry-funded research, 2) use formal roles (e.g. ‘secondments’) so that time with the Ministry is accounted for, 3) Provide feedback on how work has been used so that academics can use this in their promotion and/or recognition exercises (e.g. Performance Based Research Funding)

Long-term relationship building is hampered by movement of staff within government departments, and while this appears to be viewed as less of an issue internally, it is problematic for external (potential) partners for whom a consistent point of contact is particularly important.

Recommendations: 1) Create key contact points (‘academic liaise’) within the Ministry attached to a role rather than a person to allow for continued contact in perpetuity.

There is a clear need for communication experts to work at the interface of academia and policy communities, as rarely will either have the expertise to appropriately translate and communicate the meanings in ways that are useful and mutually beneficial.

Recommendations: 1) Government grant-funding agencies (e.g. MBIE, NZTA, HRC) include provision for translation in core funding mechanisms, 2) encourage knowledge exchange, communication and/or outreach as part of major funding streams, with full-time equivalent allocations for these roles, with acknowledgement of the skillsets required to perform these roles (e.g. professional expertise of science communicators), 3) funding agencies should prioritise Open Access publishing⁸, which enables a wider range of people to access the research – including ministerial policymakers who may not have access to the journals directly, as well as other public, private and third sector actors.

There is limited understanding between the two groups (broadly ‘policy’ and ‘academia’) on what the other does, how they operate, the timeframes and pressures, and what their needs are with relation to transport knowledge and evidence.

Recommendations: 1) additional activities which enable cross-fertilisation of ideas, sharing of best-practice and awareness of the needs of each group, this could be part of current mechanisms (e.g. Transport Research Colloquium and Transport Knowledge Hubs) or additional to these, 2) training ‘at both ends’ for policy-relevant research, and academic research practice.

⁸ Internationally, this is becoming an increasingly common requirement from funding agencies (e.g. ERC).

A number of examples of ‘best practice’ emerged from the focus groups; where both policy and academic participants referred to individuals and research groups who engaged with policy communities (transport or other) successful and with positive outcomes.

Recommendations: 1) Develop case studies of examples of ‘best practice’ which may help to provide an indication of the routes, approaches, and methods employed, to aid others who wish to develop such relationships.

Students may play an important role in developing closer connections between the universities, colleges and polytechnics, and the Ministry. This relationship can involve research projects, but has an additional benefit of preparing students for careers in the Ministry. If supervisory arrangements included both academics and Ministry staff, there could be potential for long-term relationship building and the development of shared understandings. Some masters programmes require applied projects, which could be designed to respond to pressing Ministry questions, topics or concerns, which would allow for timely research to be completed, and potential for long-term partnerships.

Recommendations: 1) Sponsorship and co-supervision of student projects may be a useful activity that is low cost and relatively short-term (particularly for undergraduate dissertations and summer studentships).

As the Ministry is based between Wellington (primary) and Auckland, those in other urban and regional centres can often feel excluded from events and activities, particularly if they do not have access to funding to attend in person.

Recommendations: 1) Greater uptake of technologies including video-conferencing, to allow virtual attendance, 2) offering funding for travel for some junior scholars to attend Transport Knowledge Hub events and activities.

VII. CONCLUSIONS

There are clear benefits for both academics and policymakers from closer engagement. A number of factors limit relationship building and the use of academic research in policymaking. This includes not only the focus of the research (e.g. geographical scope, practical applicability) but also how and where it is published and communicated. This piece of research has engaged with a number of people from policy and academic communities separately, to discuss the topic, but this is just a start. The recommendations made in this document present some of the opportunities for developing closer ties between the Universities and the Ministry of Transport, but these should be treated indicative starting points.

Next steps should include running similar activities with both academics and policymakers present, so that they are able to respond to one another’s questions, and start to develop a two-way dialogue, this could become a regular event, accompanying the annual [Transport Knowledge Conference](#). There was much interest from both the policy and academic communities in engaging more closely with the other, and this interest should be harnessed going forward.

VIII. ADDENDUM

Since completing this piece of work, a number of changes have taken place in New Zealand which reflects the changing context and motivation to create change and improve communication between academic and policy communities.

- In 2018, the Ministry of Transport hosted its first Transport Research Colloquium, with the aim of bring greater communication between the different communities of transport research in New Zealand. The success of this event has led to a second planned for 2019, which will build upon the momentum built by way of a variety of activities and actions taking place within and beyond the Ministry.
- During 2019, the Ministry have been reviewing the Transport Research Strategy, and making a series of changes based on feedback from the 2018 Transport Research Colloquium as well as comments from wider stakeholder groups. Such changes include, for instance, a new set of focussed research priorities based on the 5 transport outcomes (healthy and safe people, environmental sustainability, resilience and security, economic prosperity, inclusive access). This will be incorporated into a new 'Transport Evidence Base Strategy' to include an updated Domain Plan and Research Strategy and a new Evaluation Strategy. These revisions present improved opportunities for academics to feed into and learn from Ministry documentation.

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Further reading:

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