

Developing the New Zealand Transport Data and Research Strategy

Joanne Leung¹, Bonita Gestro² Sandy Fong³

¹Ministry of Transport, Wellington, New Zealand

²Ministry of Transport, Wellington, New Zealand

³Ministry of Transport, Wellington, New Zealand

Email for correspondence: b.gestro@transport.govt.nz

Abstract

The Transport Domain Plan (the Domain Plan) and the Transport Research Strategy (the Research Strategy) were published in July 2016 by the Ministry of Transport. Collectively, these documents, provide the strategic direction to ensure that the transport sector has the right data and information to support evidence-based decision-making. These further aim to create an environment with the capacity and capability to ensure transport research maximizes the economic, environmental and social benefits of the transport system and minimises harm.

These documents reflect the holistic, multi-modal view of the transport system in New Zealand. Prior to the release there was no overarching national plan to coordinate the collection, governance and sharing of transport-related data and statistics. There was further need to replace the previous Transport Research Strategy (2007) to account for changes in technologies, travel patterns and behaviours and to provide a framework for the coordinated prioritisation and invest in the right research.

The development of the Domain Plan and Research Strategy involved significant consultation with over 35 agencies and organisations from the wider transport sector and public sector over a 2-year period. The use of the same stakeholder engagement structures, frameworks, and governance to develop and implement the Domain Plan and the Research Strategy enables work to be conducted more efficiently, and to avoid duplication of effort going forward.

This in turn will ensure that New Zealand has the right data and information to make good evidence-based decisions for transport now and in the future.

1. Introduction

The transport system in New Zealand contributes significantly to economic, social and environmental wellbeing of New Zealanders. On its own account, this sector contributes 5 percent of New Zealand's GDP and employs 80,000 people. Transport is also an integral part of daily life and used by all New Zealanders to get to work, education and health facilities, meet with friends or family, transport goods, and connect with the rest of the world.

As the government's principal advisor on transport, the Ministry of Transport has a responsibility to take an overview of a wide range of issues across all transport modalities - land, sea, air and rail. This includes provision of day to day advice on transport issues, as well as broader and longer term strategic advice that meets government priorities and delivers a transport system that is inclusive, healthy and safe, and contributes to a sustainable, resilient

and prosperous society. To do this effectively requires good information about the transport system.

Good information about the transport system is also important to other groups. It helps our customers and stakeholders to understand the world around them; it allows businesses and transport operators to make decisions; it acts as both an input to and product of research; and it allows local government, community groups and individuals to understand the transport system and participate in local decision making. In short, information is valuable to a wide range of users, but the inherent value that information possesses is only unlocked when it is used.

The New Zealand Transport Domain Plan (the Domain Plan)¹ and the Transport Research Strategy (the Research Strategy)² were released by the Associate Minister of Transport who was also the Minister of Statistics in July 2016.

The Domain Plan details the data and information gaps identified by the wider transport sector. The accompanying Research Strategy creates a research environment to ensure investment in the right research. Collectively these aim to ensure that the sector has the right data and information to support evidence-based decision-making. The Domain Plan and Research Strategy enable the transport sector to take a more coordinated approach to identify and fill important knowledge gaps. It also promotes greater collaboration between agencies to enable more efficient use of data collection, analysis and research resources.

Developing the Domain Plan and the Research Strategy required extensive consultation with a wide range of stakeholders from the transport sector and wider public sector. The engagement activities included a series of stakeholder meetings and information sessions, formal submissions of knowledge gaps priorities, written feedback and sector-wide workshops over a 2-year period.

A third complimentary document is also still under development. The 'Transport Information Strategy and Architecture' will deliver a common framework and architecture for the management of transport data and information once completed.

2. Background

Prior to development of the Research Strategy and Domain Plan, the New Zealand transport sector adopted a decentralised approach to filling data and research gaps. Due to the lack of coordination, there were duplication of efforts in certain topic areas while significant gaps existed in others. At that time, the sector was increasingly demanding more guidance on priority and approach to determine what data, information and research are important for the sector. To address these issues and in response to the sector's need, the Ministry initiated the Domain Plan and the Research Strategy in collaboration with the transport agencies and the Statistics New Zealand.

The Domain Plan adopts the Statistics New Zealand (Stats NZ) domain planning methodology that focuses on understanding the 'big picture' policy and strategy questions to assess what information will be required by the transport sector in the future. This methodology has also been applied in other sectors such as the environment, energy and in research, science and innovation to produce domain plans specific to these sector needs.

¹ <https://www.transport.govt.nz/assets/Uploads/Research/Documents/NZ-Transport-Domain-Plan-FINAL.pdf>

² <https://www.transport.govt.nz/assets/Uploads/Research/Documents/NZ-Transport-Research-Strategy-2016-2020.pdf>

The development of the Research Strategy was initiated at a similar time. A previous strategy had been published in 2007, but it was agreed that this needed to be updated and a collaborative approach to research be established. The Research Strategy project focused on developing a collaborative environment that encourages the transport sector to share and promote the use of existing data and information, and to develop and identify research gaps of strategic importance to advance current knowledge. The Research Strategy categorises knowledge needs into knowledge themes and publishes a knowledge development and prioritisation framework to assist identification and prioritisation of work to fill data, information and research gaps.

Two steering groups were established to oversee, guide and make decisions on the progress and direction of the Domain Plan and Research Strategy projects. The core members of the two steering groups included senior representatives from key transport sector stakeholder groups, who provided a clear mandate for the project to engage widely. In addition, a Sector Advisory Group was established to provide expert technical advice on the content, quality, accuracy and completeness of each of the projects deliverables. This included advice on who to consult with on particular matters. The project team also undertook consultation with a wide range of stakeholders at each stage of the project through written communication, meeting with stakeholders, workshops and a web page on the Ministry of Transport website.

3. Developing the Domain Plan

Development of the Domain Plan was undertaken in four broad stages:

Stage 1. Identify the enduring questions

The first substantive stage in producing the domain plan required identification of ‘enduring questions’ that pose - as questions - the things that decision makers need to know about a particular subject matter. These questions represent the knowledge needs in a particular subject matter area, and these needs are met when, and to the extent that, information and statistics exist that can satisfactorily answer them. Enduring questions cover the breadth of knowledge needs that exist in relation to a subject matter area. They are the high level, big picture, questions that we know we are still likely to be asking in 10 or 20 years time.

Identification of the enduring questions was completed through extensive stakeholder engagement and consultation. This included a number of workshops with representatives from the transport sector and the wider public sector. This resulted in the development of 45 enduring questions for transport. The full list of participating organisations is provided in Appendix 1.

Stage 2. Complete a stocktake

Once the enduring questions were identified and agreed through consultation with stakeholders, the next stage was to complete a stocktake to identify the information, statistics and underlying data sets that are currently collected, held or produced about the subject matter in question. The resulting ‘Domain Plan Data Stocktake’³ includes information on 180 transport-related datasets (and metadata) collected by the transport sector.

Stage 3: Gap analysis

The third substantive stage in producing the domain plan required an assessment of any gaps in the ability of the existing official statistics to satisfactorily answer the enduring questions.

³ <http://www.transport.govt.nz/assets/Uploads/Research/Documents/Domain-Plan-Stocktake-March-2017.pdf>

A gap analysis tool was developed for subject matter experts to score the degree to which current knowledge and information were able to provide answers for the enduring questions.

Based on the ability to answer the enduring questions with current data, as the enduring questions were categorised into three categories:

- 4 with small knowledge gaps
- 26 with medium knowledge gaps; and
- 15 with large knowledge gaps

Stage 4: Identifying options

The final stage in the process involved confirming the knowledge gaps identified in Stage 3 and reviewing the possible actions to address these gaps. Through a series of further workshops, a list of 118 recommended initiatives were developed. These included both overarching and topic or knowledge theme-related recommendations. This was published as the 'Full List of Recommended Initiatives'⁴ and includes 23 high-medium priority data and information initiatives identified through the final process and with the Triple-4 knowledge development and prioritisation framework (refer next section).

4. Developing the Research Strategy

The research strategy project used the stakeholder engagement structures that had been developed for the Domain Plan. Integrating the development of the Research Strategy with the Domain Plan meant work was able to be conducted more efficiently, saving time and resources. Using the groundwork of the Domain Plan (including data stocktake and gap analysis) also avoided duplicating effort. A common structure for implementing the Domain Plan and the Research Strategy was created to ensure the links between evidence and research are reflected in the implementation action plans.

The key stages to develop the Research Strategy are:

- Stage 1: Identify the enablers that help to create a research environment to maximise the benefits from transport-related research
- Stage 2: Develop a tool (Triple-4) for the development and prioritisation of data, information and research gaps
- Stage 3: Establish knowledge themes and identify high-level research focus areas based on the enduring questions, knowledge gaps identified for the Domain Plan and the combined stakeholder engagement process
- Stage 4: Develop the necessary governance structure to ensure the transport sector work collaboratively to support development and investment in data, information and research in the transport sector over time

Stage 1. Identify the Research Strategy enablers

To develop the evidence-base required for fostering, managing and understanding ongoing changes in research gaps requires an agile research environment to ensure the sector has the right capacity and capability to conduct the research needed. The Research Strategy identified four enablers that help to create a research environment to maximise the benefits from transport-related research. They are:

⁴ <https://www.transport.govt.nz/assets/Uploads/Research/Documents/Transport-Domain-Plan-full-list-of-recommended-initiatives.pdf>

1. Investing in the right research – provide clear guidance on how to develop and identify priorities for transport research to achieve transport outcomes
2. Facilitating collaboration – develop a more systematic approach to building and maintaining interests in transport research across the wider research sector, and encourage co-creation and co-delivery of the research programme to meet the needs of the sector
3. Ensuring visibility – broaden how we share research inputs and results so they are available to the wider community
4. Accessing and investing in the right capability – provide the sector with greater certainty around capability requirements by clarifying the strategy research directions for the sector to pursue

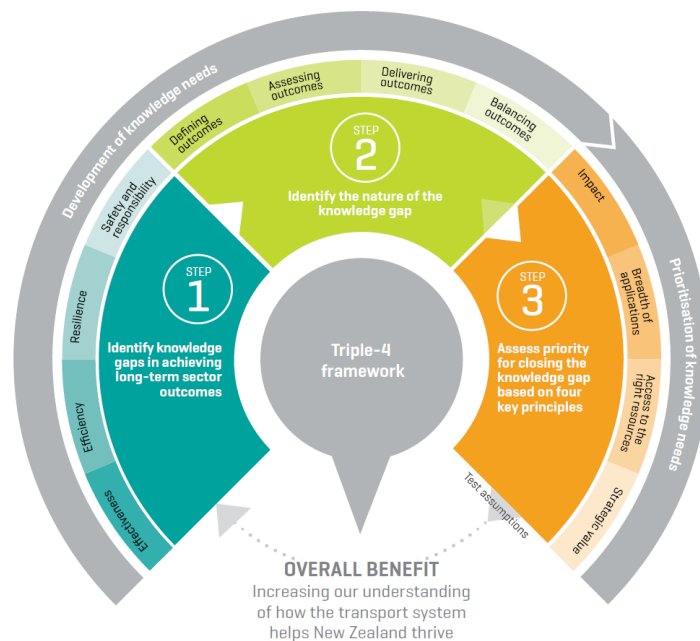
Stage 2. Develop the knowledge development and prioritisation framework

Investing in the right research in a manner to minimise duplication of efforts by different transport agencies and research community requires a clear process and a common framework.

The Triple-4 knowledge development and prioritisation framework (Triple-4) in Figure 1 provides clear guidance to researchers and research funders on how best to prioritise effort according to sector needs. This framework has been used for work related to both the Domain Plan and Research Strategy.

The framework has three components, each with four elements and is designed to be iterative.

Figure 1: Triple-4 Framework



The Triple-4 framework process includes the following steps:





- Step 1: Identifies knowledge gaps to achieving long-term sector outcomes, which include effectiveness, efficiency, resilience, safety and responsibility.
- Step 2: Identifies the nature and extent of the knowledge gaps in defining, assessing, delivering and balancing outcomes.
- Step 3: Assesses the priority of knowledge needs by testing against the four principles:

- Impact – Can we identify existing and potential end use and end users? Do we know what the benefits will be and how big they are? Do we know how necessary the research is?
- Breadth of applications – Will the knowledge gained by the research be accessible across the sector? Can the knowledge be used flexibly and applied in different situations?
- Access to right resources – Are we able to access the skills, capability, techniques, tools and systems required? Is the required data reliable and available? Do we have the capacity to do the work and is it affordable?
- Strategic value – Can the knowledge gained by doing the research help to address the strategic issues/challenges faced by the sector? Is this the right time to do this research considering the strategic issues/challenges?

Stage 3. Develop knowledge themes and identify research focus areas

The 4 knowledge themes, in Table 1, were developed through extensive engagement with stakeholders during development of the Research Strategy and incorporated into the domain planning process. These further consolidate the 11 topic areas originally developed for the Domain Plan into four knowledge themes to simplify how the Domain Plan information is communicated and integrated with the Research Strategy knowledge needs.

Table 1: Knowledge themes, needs and focus area

Knowledge themes			
			
User behaviour and needs	Transport impacts	System planning and management	Future funding and charging
Better understanding the transport choices and preferences of users, communities and society and how to manage uncertainties [such as those arising from technological advances] around changing preferences, behaviour and needs.	Better understanding the size, exposure, valuation, interactions and influences of social, economic, cultural [including transport impacts for Māori ³ as tangata whenua] and environmental impacts as well as the potential effects from mitigations.	Better understanding of how users make transport decisions by mode, location and industry and how to measure monetary and non-monetary benefits and costs of transport as well as aligning with the cultural, spiritual, social, physical economic and political dimensions of Māori well-being.	Better understanding how transport cost burdens are distributed, how users respond to changes in cost and price, and what the impact on revenue and charging is of changing technologies and user needs.

Stage 4. Develop the governance structure

To facilitate collaboration and to foster development of new ideas and research opportunities require a systematic approach to build and maintain the research and data community. As part of the development of the Research Strategy, the Transport Knowledge Hub (the Hub) and associated governance structure was established. The Hub and its governance structure aim to lead the sector to develop and meet its transport knowledge needs, considering the wider domestic and international contexts and to ensure information and knowledge-sharing to improve evidence-based decisions and capability building. A detailed discussion of the Hub and its governance structure is given in the next section.

5. Implementing the Domain Plan and the Research Strategy through the Hub

The Hub operates as a knowledge community and covers activities around the key enablers for implementing the Domain Plan and Research Strategy by:

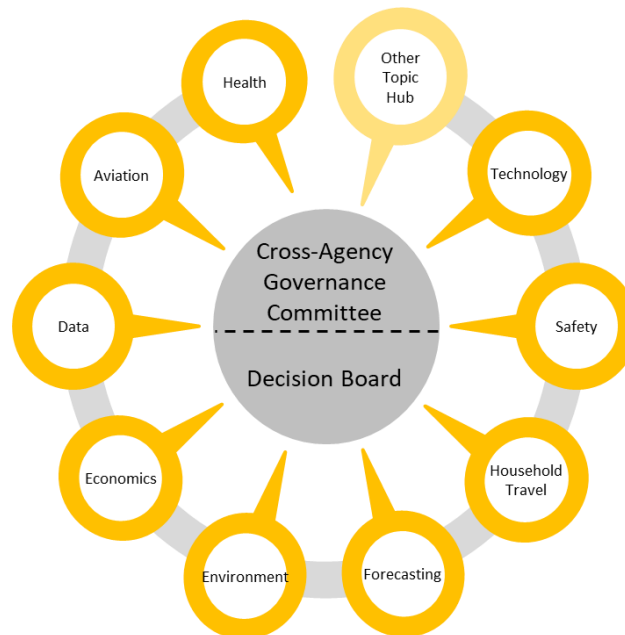
- facilitating collaboration through the Transport Knowledge Hub;
- improving awareness of data, information and research activities;
- providing Transport Sector Strategic Challenges and actions map to guide data and research programmes; and
- initiating discussions around developing and maintaining sector capability.

5.1 The Hub community of interest is growing

To help achieve the goals of the Domain Plan and Research Strategy, efforts have been made to facilitate collaboration of data and research efforts. Opportunities to create new ideas occur when there is a shared understanding of the outcomes sought and a shared commitment to achieving them. The Hub has been created to facilitate just that.

The Hub is governed by a cross agency governance committee (CAGC)⁵ of research funding organisations and involves communities of interest working through leaders of the topic hubs and their members (see Figure 2). Membership of the Hub has grown and we now have nine Topic Hubs and over 600 members across the academic, private and public sectors.

Figure 2: Transport Knowledge Hub Governance Structure



The Hub runs a range of seminars and other discussion forums that aim to advance the sector’s knowledge in a range of transport topics. It also hosts the annual Transport Knowledge Conference to provide a channel for the transport research community to connect, communicate and share transport related research and ideas. This was first held in Wellington in 2014 with 155 attendees and has grown in numbers each year.

⁵ The CAGC is made up of senior officials from the Ministry, the NZ Transport Agency, Maritime NZ, Civil Aviation Authority, the Treasury, Ministry of Business, Innovation and Employment, Local Government NZ, Auckland Transport, NZ Automobile Association, Universities New Zealand and IPENZ Transportation group.

In 2017, the fourth annual Transport Knowledge Conference was combined with the 39th Australasian Transport Research Forum. The combined event took place at the University of Auckland. The combined event was followed by an International Transport Forum (part of OECD) roundtable, held for the first time in New Zealand. The week-long events attracted over 250 domestic and international attendees to discuss a range of research topics.

5.2 Data, information and research programmes are more visible

A second key enabler to ensure the success of the Domain Plan and Research Strategy is to ensure data and research programme is visible. Since the release of the two documents, a number of initiatives, as shown in Table 2, have been undertaken to broaden how research inputs and results are shared so they are available to the wider community.

Table 2: Activities to improve visibility of data, information and research programmes

Publication/Initiative	Status
Transport Domain Plan stocktake <i>Update every 2 years</i>	<ul style="list-style-type: none"> • First issue released in March 2017
Transport Outlook <i>Updated periodically</i>	<ul style="list-style-type: none"> • Current state report and related resources released in June 2017 • Future State report released in December 2017 at the combined Transport Knowledge Conference and Australasian Transport Research Forum
Transport Research Register <i>Updated twice yearly</i>	<ul style="list-style-type: none"> • Three versions have been published so far • January 2018 update contains nearly 900 entries, many with downloadable links
Transport Intelligent Digest <i>Updated bi-monthly</i>	<ul style="list-style-type: none"> • Eight issues have been published to-date • Last issue released in June 2018

5.3 Further focus on data and research efforts on areas that matter

Following the release of the Research Strategy, the transport sector leaders (via the CAGC) worked together to provide further focus on how to identify priorities for transport data and research programmes to achieve transport outcomes. In June 2017, the CAGC released the first issue of the transport sector ‘Strategic Challenges and Related Actions Map’⁶. The list of transport sector strategic challenges helps the sector further focus towards important knowledge needs and what might be impeding progress on evidence on how the transport system can deliver on outcomes such as maximising social and economic impacts and minimising harm. This information helps funding organisations set priorities to make sure data, information and programmes are done in the right order to achieve the goals.

The strategic challenges can be broadly classified into two categories – the first category covers the threats the transport sector is facing and the second category covers the opportunities (see Table 3).

⁶ <https://www.transport.govt.nz/assets/Uploads/Research/Documents/Transport-sector-strategic-challenges-and-actions-map-2017-.pdf>

Table 3: Transport sector strategic challenges

Threats and opportunities		Key data and research question
Threats	Increasing transport demand and congestion	<i>What are the right mechanisms and technologies for managing transport demand?</i> Ever growing transport demand causes congestions, puts pressure on the existing transport system and increases the rate of wear and tear of infrastructure. We need to find better ways to manage transport demand (including implementation of demand pricing).
	Growing transport deaths, injuries and harm	<i>How best to minimise harm (safety and health)?</i> Transport can have significant safety and health impacts for users and non-users. We need to identify the best interventions to influence safe behaviour and to minimise health impacts.
	Natural events, risks and uncertainties	<i>How best to improve the agility and resilience of the transport system?</i> Social, economic and environmental events (such as increased uptake of technologies, changes in land use and location decisions, changes in global trade patterns and threats of natural events) can affect our transport system. We need to better understand what those impacts are and what we need to do to ensure we have the right level of resilience.
	Interactions between transport and the environment	<i>How best to lower transport-sector environmental impacts?</i> While delivering the transport system to help New Zealand flourish, we need to have the right tools to help balance resulting transport environmental impacts.
Opportunities	Opportunities to maximise the benefits of transport through best modal choice	<i>How best to maximise the benefits of transport through best modal choice?</i> The most effective and efficient transport or access activity considers modes as a system. We need to better understand the tools to influence behaviour.
	Opportunities arising from technological developments	<i>How best to seize the opportunities arising from technological developments?</i> As technologies emerge, the interplay between travel, infrastructure, and technology may change. We need to identify the right systems and capabilities to take advantage of the technological opportunities.
	Opportunities to maintain international connectedness to facilitate economic development	<i>How best to maintain international connectedness to facilitate economic development?</i> We need to understand the opportunities and challenges, advantages and disadvantages New Zealand has being far away from international markets and to identify ways to manage changes (eg bigger ships) through transport-related interventions.

An actions map has been produced for the seven strategic challenges. These maps, published on the Ministry of Transport’s website, provide information on current and proposed research under the challenges to make it easier for research funders, users and providers to identify knowledge gaps and to minimise duplication.

5.4 Discussion on how to develop and maintain sector capability

While provision of a clear set of strategic challenges can help the sector to focus development of capability in topics that matter, it is not sufficient to ensure that the sector develops and maintains its capability over time.

The CAGC has already started initial discussion about how best to develop and maintain personnel and system capabilities with actionable initiatives to ensure the sector develops its skills and capability effectively and efficiently. A key part of the discussion will be around how to sustain the effort over time.

The continuing series of Hub events and the combined Transport Knowledge Conference, ATRF and ITF roundtable event in 2017 provided an important capability building opportunity. Hosting the annual Transport Knowledge Conference and collaboration with national and international events in the future may help New Zealand transport research community to better connect with the international counterparts.

6. Ongoing development and periodic review

The ability to review the success of the Domain Plan and Research Strategy is essential in order to be able to assess if they have delivered the intended outcomes and benefits for the sector. This is also required in order to complete a periodic, and full, review of these documents in the future.

6.1 The Domain Plan

We will know that implementation and adoption of the Domain Plan has been successful when ‘the transport sector is increasingly able to access high-quality data and information to answer the enduring questions’⁷.

This will be measured through the development of the set of assessment metrics that will allow us to assess if:

- there is an increase in the number of enduring questions that can be answered; and
- there has been an increase in the number of private-public data and information sharing partnerships.

Performance against this set of indicators will be reviewed annually with a full review of progress taking place every 4 years starting in 2020. It’s anticipated that the Domain Plan will have a 10 year life and will be periodically reviewed every 2 years.

6.2 The Research Strategy

The Research Strategy is aligned with the Government’s four-year planning cycle and will be reviewed in 2020. Success of the Research Strategy will be carried out by evaluating the success of each of the four enablers (Table 4). The Ministry of Transport also maintains a register of transport-related research that is publically available on the Ministry’s website and is used to track current and completed transport-related research in New Zealand.

⁷ <https://www.transport.govt.nz/assets/Uploads/Research/Documents/NZ-Transport-Domain-Plan-FINAL.pdf>

Table 4: Assessing success of the enablers

Enabler	Assessment
Invest in the right research	<p>Is the research informing our understanding of how the transport system helps New Zealand to thrive?</p> <ul style="list-style-type: none"> ▶ Clarity on whether and how addressing a research gap can help us to understand and deliver the long-term sector outcomes ▶ Research efforts are appropriately spread across different types of research gaps to deliver meaningful benefits
Facilitate collaboration	<p>Is the research community working together effectively to fill key research gaps?</p> <ul style="list-style-type: none"> ▶ Sharing information and discussing research ideas with the broader research communities ▶ Collaborating and teaming up with each other across agencies and the sector ▶ Finding out what is going on and asking questions about research
Ensure visibility	<p>Is there greater visibility around the ways transport research is developed, disseminated and applied than there was previously?</p> <ul style="list-style-type: none"> ▶ Research always has a built-in communications strategy ▶ Knowledge hubs host regular seminars to share research and enable knowledge transfer ▶ Researchers increasingly use the communication channels provided, including knowledge hubs, to connect with each other effectively and efficiently
Access and invest in research capability	<p>Is there greater capacity and capability in the transport research environment than there was previously?</p> <ul style="list-style-type: none"> ▶ Improvement in the quality of evidence for decision-making ▶ Improved levels of public understanding of transport issues and quality of debates ▶ Increased numbers of capable and talented people attracted into the transport research environment

7. Lessons learnt

Prior to initiating the refresh project a meeting was held in July 2018 with senior representatives from across the wider transport sector. The purpose of this meeting was to agree the scope of the project and reconfirm the role of the Domain Plan and Research Strategy in building the transport evidence-base. There was general agreement that the current Domain Plan and Research Strategy provide a sound foundation to achieve this.

Things that have worked well include:

- early engagement with the wider sector to ensure a wide range of ideas and perspectives are captured from the beginning
- establishment of the Transport Knowledge Hub and its governance structure to encourage a joined-up approach to develop, use and share transport data, information and research
- provision of frameworks and guidance on strategic directions to ensure the sector has the tools and information to make appropriate data, information and research decisions.

To encourage the sector to put initial focus around way of working, the Domain Plan and Research Strategy did not discuss funding in any great level of details. This was a deliberate and arguably a sensible decision at that time. However, the lack of funding might have hindered the implementation of the Domain Plan and Research Strategy. Further discussion will therefore be needed to find out how best the sector work together to co-design, co-fund and co-manage sector data and research programmes.

The sector believes some simplification of the initiatives and methodologies would help to make it easier to implement. For example:

- focus on implementation on fewer but important items to ensure delivery
- better integrate and align activity around the lifecycle of the transport evidence base (from policy development, appraisal to evaluation)
- leverage various strategies in promoting and enabling open data and development of skills and capability.

Going forward, it is necessary to ensure we sustain the community of interest that has been established and further leverage both domestic and international (such as Australia and OECD) counterparts. The Domain Plan, Research Strategy, enablers and guidance also provide a sound foundation for promoting and leveraging the role of transport in the wider data, information and research communities. The challenge now is to keep the momentum going.

8. Where are we at now?

The Ministry of Transport is currently undertaking a light refresh of the Domain Plan and Research Strategy in 2018 in response to a new set of government priorities for transport (following a recent change of Government). This will ensure that the high-priority initiatives identified in Appendix 4 of the Domain Plan, and investment in Research Strategy, align with this change. The new Government’s priorities are presented in the Government Policy Statement on Land Transport⁸ that directs the medium term allocation of investment in land transport and the Transport Outcomes Framework that are detailed in the Ministry of Transport Statement of Intent 2018-2022⁹. The revised outcomes are illustrated in Figure 3.

Figure 3: Transport Outcomes Framework



Taking into account the lessons learnt, the following steps would be undertaken as part of the refresh project:

1. Conduct a ‘light refresh’ of the Domain Plan and Research Strategy, this includes:
 - alignment with the new transport outcomes framework
 - identify any missing areas under the enduring questions
 - re-prioritisation of initiatives in Domain Plan

⁸ <https://www.transport.govt.nz/assets/Uploads/Our-Work/Documents/Government-Policy-Statement-on-land-transport-2018.pdf>

⁹ <https://www.transport.govt.nz/assets/Uploads/About/Documents/Statement-of-Intent-2018-2022.pdf>

- simplify the Research Strategy ‘Triple-4’ framework
 - prioritise ‘Research Strategy Focus Areas’
2. Develop the Domain Plan and Research Strategy implementation plan, including:
- identification of 3-4 key transport sector projects

Work to complete the refresh will be carried out through a series of workshops with representatives from the wider transport sector. It is intended that these will be completed by the end of 2018 and an updated Domain Plan and Research Strategy be published shortly after.

APPENDIX A: List of contributing stakeholders

Organisations providing input to both documents:

Accident Compensation Corporation
Auckland Council
Auckland Transport
CCS Disability Action
Civil Aviation Authority
Customs New Zealand
Energy Efficiency and Conservation Authority
Greater Wellington Regional Council
Hastings District Council
Horizons District Council
Land Information New Zealand
Local Government New Zealand
Maritime New Zealand
Ministry for Primary Industries
Ministry for the Environment
Ministry of Business, Innovation and Employment
Ministry of Education
Ministry of Foreign Affairs and Trade
Ministry of Health
Ministry of Justice
Ministry of Social Development
New Zealand Police
New Zealand Transport Agency
New Zealand Treasury
Productivity Commission
Ruapehu District Council
Transport Accident Investigation Commission
Waikato Regional Council
Wellington City Council

Organisations providing input only to the Domain Plan:

Commerce Commission
Reserve Bank of New Zealand
Southland District Council
Te Puni Kokiri
Transport Information Managers Group
(representing various transport agencies)
WorkSafe New Zealand

Organisations providing input only to the Research Strategy:

AECOM
Institute of Professional Engineers of New Zealand
MWH Global
New Zealand Automobile Association
Opus Research
Sustainable Cities
University of Auckland
University of Canterbury
University of Otago
University of Waikato

References

Ministry of Transport July 2016, *Transport Domain Plan*

<https://www.transport.govt.nz/assets/Uploads/Research/Documents/NZ-Transport-Domain-Plan-FINAL.pdf>

Ministry of Transport July 2016, *Transport Research Strategy*

<https://www.transport.govt.nz/assets/Uploads/Research/Documents/NZ-Transport-Research-Strategy-2016-2020.pdf>

Ministry of Transport July 2016, *Full List of Recommendations*

<https://www.transport.govt.nz/assets/Uploads/Research/Documents/Transport-Domain-Plan-full-list-of-recommended-initiatives.pdf>

Ministry of Transport July 2016, *Domain Plan Data Stocktake*

<https://www.transport.govt.nz/assets/Uploads/Research/Documents/Domain-Plan-Stocktake-March-2017.pdf>

Ministry of Transport June 2017, *Strategic Challenges and Related Actions Map*

<https://www.transport.govt.nz/assets/Uploads/Research/Documents/Transport-sector-strategic-challenges-and-actions-map-2017-.pdf>

Ministry of Transport June 2018, *Government Policy Statement on Land Transport 2018/19 – 2027/28*

<https://www.transport.govt.nz/assets/Uploads/Our-Work/Documents/Government-Policy-Statement-on-land-transport-2018.pdf>

Ministry of Transport June 2018, *Statement of Intent 2018-2022*

<https://www.transport.govt.nz/assets/Uploads/About/Documents/Statement-of-Intent-2018-2022.pdf>