Transport Knowledge Hub

Te Rautaki Whai-Taunakitanga Waka a Aotearoa | The New Zealand Transport Evidence Base Strategy

October 2022

Implementation Plan

Te Kāwanatanga o Aotearoa
New Zealand Government

Ehara taku toa i te toa takitahi, ēngari taku toa he toa takatini ⌡ Success is not the work of one but the work of many

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TE MANATŪ WAKA MINISTRY OF TRANSPORT

WAKA KOTAHI NZ TRANSPORT AGENCY

Chief Executive's Introduction

> Transport touches everyone's lives. It connects people to family, work, education, recreation and moves goods that are critical to our economy. The decisions we make about transport now will have impact for decades.

The Transport Evidence Base Strategy (TEBS) aims to ensure that the sector has the right data and evidence to make informed policy decisions, and that we are investing in the right research to support this. It also provides an evaluation framework to monitor and evaluate how the transport system and its policies are performing.

This Implementation Plan sets out a 3-year work programme to implement the high-priority initiatives identified in the Strategy. Delivery of the Strategy is the joint responsibility of the government transport agencies including Te Manatū Waka Ministry of Transport (MoT), Waka Kotahi NZ Transport Agency (Waka Kotahi), Maritime New Zealand (MNZ), and Civil Aviation Authority (CAA). The Implementation Plan has been developed jointly by these agencies in consultation with Local Government New Zealand and other key stakeholders from the wider transport sector. It sets out the actions that the agencies need to take individually or collectively to achieve the Strategy's vision.

Taking these steps will help us harness the power of evidence to deliver a transport system that improves people's wellbeing, liveability of New Zealand's cities, towns and regions to help Aotearoa to flourish for generations to come.

Bryn Gandy
Acting Chief Executive,
Te Manatū Waka Ministry of Transport

Introduction

> The *Transport Evidence Base Strategy* identifies the key evidence activities needed to deliver an evidence-based transport system that improves wellbeing and liveability.

These activities are put in place to make sure an evidence-base with the right data and information is available. Ensuring that the evidence-base is used appropriately in both decision and policy making. The TEBS Implementation Plan is the collaborative effort between government transport agencies responsible for delivery of TEBS, local government and the wider transport sector. It sets out the actions required by the sector to deliver the key evidence activities.

Implementing the Transport Evidence Base Strategy

This Implementation Plan has been developed by the government transport agencies responsible for implementing TEBS, in consultation with LGNZ and stakeholders from the wider transport sector.

Successful implementation of the key 'evidence' activities requires development of a collaborative, co-ordinated approach as follows:

1. Develop the TEBS Action Plan

Development of an Action Plan to implement the recommended key evidence activities inclusive of the following strategic documents:

- Domain Plan – overarching initiatives and high-priority data initiatives
- Research Strategy – overarching initiatives and research priorities
- Evaluation Strategy – overarching initiatives and evaluation priorities.

The action plan will be reviewed periodically and updated as required to ensure it continues to align with Government's strategic direction for transport and future activities.

2. Incorporate into individual agency work programmes

Assign individual and collaborative responsibilities and incorporate respective actions into individual agency work programmes.

3. Review and monitor TEBS

Establish a process to measure success and monitor progress in implementing TEBS.

Key evidence generating enablers

TEBS identified 5 key evidence generating enablers that support generation and use of the transport evidence base. This implementation plan identifies a set of agreed actions for each of the enablers. These include:

1	Improve access	Ensure data, research and evaluation findings are discoverable, accessible, and reusable
2	Improve governance	Ensure sharing, integration, and governance of key data and information products
3	Invest in the right activities	Ensure we invest in the right activities and projects
4	Facilitate collaboration	Foster collaboration and relationships across agencies, local government, and the wider transport sector
5	Develop capacity and capability	Ensure the sector has access to the right skills and knowledge

The enablers have been applied to each of the plans and strategies in TEBS and used to generate a set of recommended overarching initiatives for each. These are summarised in Table 1 opposite[1]:

1 From *TEBS* page 41

Table 1: Summary of TEBs overarching initiatives

Enabler	Objective	Overarching initiatives		
		Domain Plan	Research Strategy	Evaluation Strategy
Improve access	Ensure data, research and evaluation findings are discoverable, accessible and reusable	Improve access, reuse and sharing of data and information through the open release of government data	Adopt the New Zealand Research Information System (NZRIS) for recording information about all publicly funded transport-related research	Publish Ministry of Transport's evaluation findings, and develop a common platform to host transport-related evaluation outputs
Improve governance	Ensure sharing, integration, and governance of key data and information products	Adopt common transport data standards, practices and inventories to improve collection, management, interoperability and sharing of data	Implement Transport Knowledge Hub Decision (Evidence) Board to improve coordination of research initiatives	Develop a repository of measures and indicators commonly used in transport evaluation, and data sources
Invest in the right activities	Ensure we invest in the right activities and projects	Incorporate priority data and information initiatives in government transport agency future work programmes	Establish process to prioritise and commission research initiatives	Use the 3-Step framework and the evaluation Guiding Principles to prioritise evaluation
Facilitate collaboration	Foster cross-agency collaboration and relationships with the wider transport sector	Advance cross-government and public-private data-sharing partnerships	Develop a coordinated transport research community inclusive of researchers, funders and government transport agencies	Publish Ministry of Transport's work programme and provide platforms for evaluators to share knowledge, discuss challenges, and identify solutions
Develop capacity and capability	Ensure that the sector has access to the right skills and knowledge	Develop a coordinated approach to building data capability across the transport sector agencies	Promote participation in international research programmes and provide support for post-graduate transport researchers	Incorporate evaluation concepts and processes into transport sector master classes/training ensuring templates and tools are made available to the sector

High-priority data & research initiatives

These include (1) the high priority data, information, and research initiatives that seek to fill the sectors most important knowledge gaps and (2) the key evidence-generating enablers needed to ensure evidence is collected, managed and shared in a way that is appropriate and accessible, so that it contributes to decision-making. This implementation plan identifies a set of agreed actions for data and research initiatives.

Appendix 1 identifies the high-priority data, information and research initiatives. These are derived from the list of data, information and research priorities in the TEBS Domain Plan and TEBS Research Strategy. They incorporate a number of key knowledge gaps identified in development of the Transport Outcomes Framework Indicators (Transport Indicators) and Government Policy Statement on land transport (GPS) 2018 reporting measures.

A coordinated approach is needed to ensure that collectively the government transport sector is investing in future data, information and research activities that address these gaps.

Action Plan

The following table outlines the agreed actions and activities to be undertaken by the government transport agencies, with support from consulted agencies, to deliver the overarching initiatives, high priority data and research initiatives in the TEBS Domain Plan, Research Strategy and Evaluation Strategy*.

Table 2: Overview of Actions

Domain Plan					
Enabler	**Action**	**Description**	**Lead Agency**	**Time-frame**	**Links**
Improve access	IA 1.1 Develop Transport Sector Open Data Strategy	Development of sector strategy to enhance the availability, discoverability, and reuse of transport data.	Government Transport Sector Open Data Working Group[2]	2021-2023	IA1.2
	IA 1.2 Increase availability and reuse of government transport open data	Increase number of transport statistics and datasets openly available through government digital channels.	MoT, Waka Kotahi, CAA, MNZ	2021-	IA1.1
	IA1.3 Hold an annual Transport Knowledge Conference (TKC)	The Transport Knowledge Conference brings together the transport research, data and evaluation community with government officials, decision makers and policy teams from across the wider transport sector with the objective to: 1. Enhance the use of evidence (data, information, research, and evaluation) to inform decision-making 2. Provide a forum for people working across the transport sector to share, build, and maintain their transport knowledge 3. Create a thriving transport research, data and evaluation community that delivers an evidence-based transport system that improves wellbeing and liveability. Government transport agencies actively contribute to conference organisation and presenting relevant work.	MoT with support from Waka Kotahi, CAA and MNZ	Ongoing	

2 Working group is comprised of representatives from MoT, Waka Kotahi, MNZ, CAA and other agencies.

* Note: Some initiatives are subject to seeking funding to deliver the initiative.

ACTION PLAN

Domain Plan					
Enabler	**Action**	**Description**	**Lead Agency**	**Time-frame**	**Links**
Improve access	IA1.4 Develop evidence plans for key priority programmes	Development of evidence base research plans to support priority work programmes, such as: • Emissions Reduction Plan • Transport accessibility and equity • Supply Chain Strategy.	MoT with support from Waka Kotahi, Maritime NZ and CAA	2022-2024	IR3.4
Improve governance	IG2.1 Develop national data standard for land transport infrastructure assets	The adoption of data and metadata standards ensures that we are aligned with internal practices and reflect the requirement to provide / share data in a specified and standardised format. The initial focus will be on asset management data (refer TEBS R4.14). This will be delivered through the Asset Management Data Standard (AMDS) project.	Waka Kotahi (with Road Efficiency Group (REG))	2021-	
Invest in the right activities	IR3.1 Fill high-priority data and research gaps	Develop individual and collaborative plans to implement high-priority data and research initiatives in Appendix 1. Investigate progress on Domain Plan recommended initiatives – R5.2, R10.1, R10.6, R11.10.	All	2021-2023	
	IR3.2 Re-evaluate knowledge gaps resulting from Covid-19	Review remaining knowledge gaps to identify new emerging gaps arising from COVID-19 response and recovery so these can be prioritised accordingly.	Waka Kotahi / MoT with support (as relevant) from MNZ, CAA and LGNZ	2021-2023	
	IR3.3 Prioritise Government investment in transport data	Participate in the Stats NZ Data Investment Plan (DIP) Working Group. This project aims to develop an aligned national Data Investment Plan (DIP) that provides a system view of data investment priorities over a 10-year period and prioritise investment in key datasets that demonstrate strategic importance to government.	DIP Working Group to include representatives from MoT and Waka Kotahi	2021-	
	IR3.4 Develop evidence and research plans for key priority programmes	Development of evidence base research plans to support priority work programmes, such as: • Emissions Reduction Plan • Transport accessibility and equity • Supply Chain Strategy.	MoT with support from Waka Kotahi, Maritime NZ and CAA	2022-2024	IA1.4

Domain Plan					
Enabler	**Action**	**Description**	**Lead Agency**	**Time-frame**	**Links**
Facilitate collaboration	FC4.1 Enhance data sharing between transport agencies and LGNZ	Enhanced working relationship between MoT and Waka Kotahi to facilitate coordination and collaboration on data related activities and sharing of key datasets such as the household travel survey and motor vehicle register.	MoT / Waka Kotahi	Ongoing	
	FC4.2 Increased number of public-private data sharing agreements	Enhanced relationship with the private sector to increase the availability and reuse of data collected by the private sector and number of public-private data sharing agreements.	MoT / Waka Kotahi	Ongoing	
Develop capacity and capability	DC5.1 Hold periodic Government Transport Data Forum	Event to highlight work of government transport agency data, analytics, and modelling teams.	MoT	2021-	
	DC5.2 Improve transport sector evidence-base skills and knowledge	Develop an evidence-base in-house training course for government to improve transport sector data and analytical capability and use of evidence in decision-making.	MoT	2022-	

ACTION PLAN

Research Strategy					
Enabler	**Action**	**Description**	**Lead Agency**	**Time-frame**	**Links**
Improve governance	IG2.2 Establish processes to coordinate and prioritise data, information, research and evaluation projects	Implement governance group to help coordinate and prioritise data, information, research and evaluation projects.	MoT and Waka Kotahi	2022-2023	
Invest in the right activities	IR3.5 Deliver research that aligns with the TEBS priority research initiatives	Development of research topics, procurement, delivery and publication – linking with TEBS enduring questions and priority research initiatives.	Waka Kotahi Sector Research Programme	Ongoing	
	IR3.6 Improve Transport Research Funding coordination	Enhance co-ordination between funding agencies, government researchers and research priorities for the sector. Includes reviewing research funding options for aviation and maritime sectors.	MoT (with MNZ, CAA)	Ongoing	
	IR3.7 Engage with sector to prioritise research needs	Facilitate engagement with the wider transport sector and subject matter experts to aid development and prioritisation of future research projects. This could be through the Transport Knowledge Hubs – Topic Hubs for example.	MoT and Waka Kotahi	Ongoing	
Facilitate collaboration	FC4.3 Hold a periodic transport research application event	Annual event held in conjunction with the Transport Knowledge Conference to enhance engagement with the academic and private research sector to facilitate better connection of evidence to policy.	MoT	Ongoing	
Develop capacity and capability	DC5.4 Establish post-graduate transport research scholarships	Transport research scholarships, summer programmes and/or internships to be offered by government transport sector agencies for post-graduate Masters students (subject to funding).	MoT and Waka Kotahi	2021-2023	
	DC5.5 Participate in international research opportunities	Contribute research ideas to the International Transport Forum (ITF) and participate in relevant research working groups.	MoT	Ongoing	
		Contribute research ideas to AustRoads and participate in relevant research working groups.	Waka Kotahi	Ongoing	

Evaluation Strategy				
Enabler	**Action**	**Description**	**Lead Agency**	**Time-frame**
Invest in the right activities	IR3.8 Invest in the right projects	Publish guidance on evaluation concepts and processes (e.g. the Intervention Logic Map model, the Value for Money Assessment mode, the 3-step framework, and the evaluation guiding principles).	All	2022-2023
Facilitate collaboration	FC4.4 Improve awareness of intended evaluation activities	Develop and publish Ministry of Transport's evaluation programme.	MoT	Ongoing
Develop capacity and capability	DC5.6 Develop a suite of evaluation templates	Compile or develop evaluation templates and tools for the sector to use.	MoT	2023-
	DC5.7 Establish a feasibility study for a sector-wide evaluation and capability building programme	Investigate the feasibility of having a sector-wide evaluation programme. And, dependent on the outcome of the investigation and discussions with relevant parties, subsequent actions may involve development of a sector-wide programme.	MoT	2021-2023
		Delivered in-house training exercises to cover the purpose of evaluation and the commissioning process.	MoT	Ongoing

Monitoring Progress

Reporting Progress

MoT is responsible for preparing an annual TEBS Progress Report. This will be published on the Ministry's website and provide an update on progress in implementing the TEBS against the actions in the Action Plan. Agencies responsible for implementing the TEBS are expected to provide an annual report to MoT on their progress in delivering against the actions above.

Updates to the Action Plan and TEBs

The Implementation Plan and set of actions will be reviewed periodically and updated as required to ensure it continues to align with Government's strategic direction for transport and future activities.

Early 2024

A full review of TEBS will take place periodically, starting in early 2024, in consultation with the wider transport sector. This review will evaluate progress in the availability of evidence to answer the enduring questions, confirm these are still valid, and identify and re-prioritise data, research, and evaluation initiatives where appropriate.

Appendix One: High-priority data and research initiatives

TEBS Ref.[3]	High-priority recommended initiative	Transport Outcome	Relevant TEBS Strategy			Associated Knowledge Gap	
			Domain Plan	Research Strategy	Evaluation Strategy	TOF Indicators[4]	GPS 2018 Reporting Measures[5]
R1.1E	Publish vehicle fleet profile	Environmental sustainability	✓			Vehicle fleet composition	
R1.12	Explore a data partnership with rail operators to share rail data	Economic prosperity	✓			Load efficiency	
R1.14	Develop approach for tracking people's movements	Inclusive access	✓		✓	Regional connectivity Tourist volumes and flows	
R2.3	Improve geographic data on the distribution and location of people with disabilities[6]	Inclusive access	✓	✓	✓	Access for people with disabilities and/or limited mobility	
R2.4	Establish baseline information on 'accessibility'		✓	✓	✓	Reliability of travel times for transport users	6, 7, 9
R2.8E	Gather additional information on people's attitudes, preferences and perceptions about transport (including research on why people don't (or can't) travel (R2.7))	Inclusive access	✓	✓			

3 *Refer Transport Domain Plan Full List of Recommended Initiatives – July 2016* for description of the recommended initiatives: https://www.transport.govt.nz/assets/Uploads/Report/Transport-Domain-Plan-full-list-of-recommendatioons.pdf

4 TOF Indicators – respective Indicator where there are partial or full data/knowledge gaps. The full list of TOF Indicators is available at https://www.transport.govt.nz//assets/Uploads/Report/Transport-Indicators-v2.pdf. Note – these will be updated in 2021.

5 GPS reporting measures – The number corresponds to the respective short-term result where there are partial data/knowledge gaps. The full list of GPS 2018 Measures is available at https://www.transport.govt.nz/assets/Uploads/Report/gps-2018-summary-year-1-reporting-measures.pdf

6 New addition to the list of high-priority initiatives

MONITORING PROGRESS

TEBS Ref.[4]	High-priority recommended initiative	Transport Outcome	Relevant TEBS Strategy			Associated Knowledge Gap	
			Domain Plan	Research Strategy	Evaluation Strategy	TOF Indicators[5]	GPS 2018 Reporting Measures[6]
R2.13	Gather additional information about pedestrian and active mode travel (walking and cycling)	Healthy and safe people	✓		✓	Walkability in urban centres	13, 15
R2.14	Improve information on and understanding of Māori views and needs from, use of, and involvement in transport	Inclusive access	✓	✓	✓		
R3.2	Develop an agreed approach and set of indicators for monitoring freight efficiency	Economic prosperity	✓		✓	Freight carried domestically (local and regional) Freight productivity / utilisation Freight travel time reliability Load efficiency Regional connectivity	
R3.6E	Develop geospatial capability to track freight and people movements	Inclusive access	✓		✓	Travel time reliability on priority tourist routes Utilisation of key movement corridors for people & freight Walkability in urban centres	8, 10, 12, 13
R3.9E	Repeat and enhance the National Freight Demand Study (R3.9)	Economic prosperity	✓				6
R3.10	Improve collection of and access to data on domestic air freight	Economic prosperity	✓		✓	Freight carried domestically (local and regional) Freight productivity / utilisation Regional connectivity	

APPENDIX ONE

TEBS Ref.[4]	High-priority recommended initiative	Transport Outcome	Relevant TEBS Strategy			Associated Knowledge Gap	
			Domain Plan	Research Strategy	Evaluation Strategy	TOF Indicators[5]	GPS 2018 Reporting Measures[6]
R4.1E	Research into returns on investment including both monetary (R4.1) and non-monetary (R4.18) returns	Economic prosperity	✓		✓		2, 9,11,13, 19, 24,25, 26, 27, 29, 30, 32
R4.14	Integrate RAMM data and improve access	Economic prosperity	✓				7
R4.19	Improve information on local roads capacity and utilisation	Resilience and security	✓		✓	Availability of viable alternative routes Reliability of travel times for transport users	12, 21
R5.1	Develop sector definition of resilience	Resilience and security	✓	✓	✓	Security incidents Response capability Availability of viable alternative routes Susceptibility to coastal inundation with sea level rise Outages on routes with no viable alternative Operator risk profile Perceived personal safety (maritime and aviation) Network vulnerability	
R5.2	Integrate transport system and land use data for improved land use planning	Inclusive access	✓			Integration of land use and transport planning	7

APPENDIX ONE

TEBS Ref.[4]	High-priority recommended initiative	Transport Outcome	Relevant TEBS Strategy			Associated Knowledge Gap	
			Domain Plan	Research Strategy	Evaluation Strategy	TOF Indicators[5]	GPS 2018 Reporting Measures[6]
R10.1	Develop health and safety risk profiles and exposures that lead to transport-related harm	Healthy and safe people	✓	✓		Exposure to elevated concentrations of air pollution Exposure to elevated levels of noise	4, 25, 26, 27
R10.6	Align injury classification definitions across databases	Healthy and safe people	✓				2, 3, 16
R11.10	Impacts of weather- and environment-related network outages	Environmental sustainability	✓			Network vulnerability Availability of viable alternative routes Susceptibility to coastal inundation with sea level rise	12, 21, 23
R11.1	Research into transport emissions profiles	Environmental sustainability	✓	✓		Exposure to elevated concentrations of air pollution Exposure to elevated levels of noise	24, 26
R11.2	Develop environmental impact framework for emissions and infrastructure	Environmental sustainability	✓	✓	✓	Impact of transport on biodiversity Exposure to elevated concentrations of air pollution	
R11.9	Incorporate findings from road run off research into environmental impact monitoring and evaluation	Environmental sustainability	✓		✓	Transport-related water pollution	

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AND LEADING

KAITIAKITANGA
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