Land transport sector research programme

Research Colloquium – 26 November 2020

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WAKA KOTAHI
NZ TRANSPORT
AGENCY

New Zealand Government

Overview

- Sector Research programme overview

- Projects detail ([active](#) and [completed](#))

- Research programme products

- Summer studentship trial

Sector research portfolios

Malcolm Menzies

Jo Chang

Ernest Albuquerque

Christine Moore

Research projects (NLTP 2018-21)

Over-arching	Phase
[Transport impacts on wellbeing and liveability](#)	Completed
[The NZ public's readiness for connected- and autonomous-vehicles (including driverless), car and ridesharing schemes and the social impacts of these](#)	Completed

Economic Prosperity	Phase
Economic Evaluation Manual (EEM) parameter values study	Delivery
Accessibility and its role and impact on labour and housing markets in main metropolitan areas in New Zealand	Delivery
Capturing dynamic clustering and structural change impacts in cost-benefit analysis	Delivery
Cost-Benefit Appraisal Methods for Interrelated and Interdependent projects/schemes	Delivery

Research projects (NLTP 2018-21)

Environmental sustainability	Phase
Community exposure to unsealed road-dust emissions	Delivery
Social cost (health) of land transport noise exposure	Delivery
Determining the impact that the heavy vehicle fleet has from harmful and GHG emissions	Delivery
Understanding the national picture of supply and demand of premium aggregates	Delivery
How effective are transport-related ecological interventions	Delivery
Determining the edge effects of roads	Delivery
Analysis of recycled and alternative materials that could be used for transport infrastructure projects in New Zealand	Delivery
Evaluating the GHG emission reduction benefits from NZ and overseas land transport mode shift programmes and projects	Delivery
Development and update of the Healthy Air and Pollution in NZ (HAPiNZ) study (Co-funding agreement with MfE)	Delivery
A review of variability in environmental regulatory requirements for roading construction projects across NZ	Completed

Research projects (NLTP 2018-21)

Inclusive Access	Phase
Understanding the transport experiences of disabled people	Delivery
Impacts of a public sector e-bike scheme	Delivery
COVID-19 transport behaviour change	Delivery
Latent demand for walking and cycling	Delivery
Shift to non-traditional modes of travel	Publishing
Leveraging transport disruption to influence change – lessons for Covid-19	Completed
Developing methodologies for improving customer levels of service for walking	Completed
Social impact assessment of mode shift	Completed
Travel demand management: strategies and outcomes	Completed

Research projects (NLTP 2018-21)

Resilience and security	Phase
Framework to evaluate evacuation routes	Delivery
Developing a method for quantifying transport interdependencies	Complete
Better measurement of direct and indirect costs and benefits of resilience	Complete

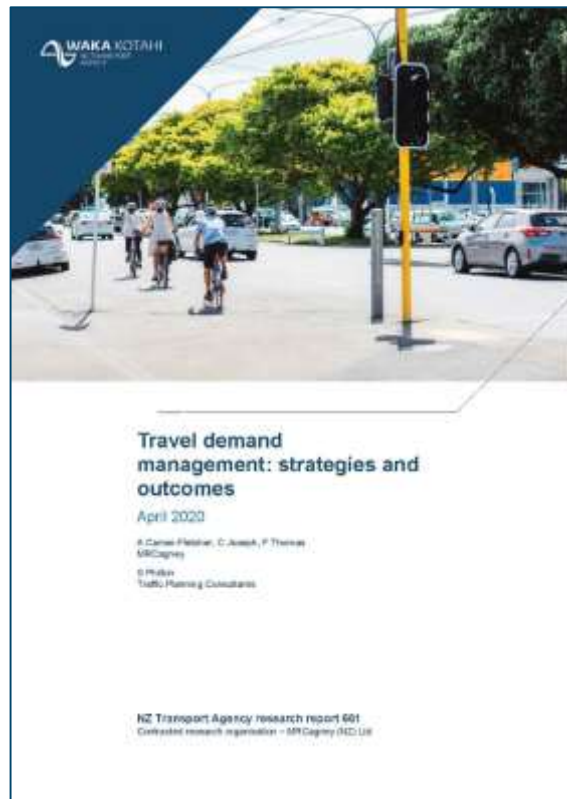| Healthy and safe people	Phase
The effectiveness of advanced driver training	Delivery
Covid-19 impact on transport - demand side (consumer)	Delivery
Relationship between transport and mental health	Delivery
A cross-portfolio consideration of interventions impacting transport safety outcomes	Completed
Risks of driving when affected by cannabis, MDMA (ecstasy) and methamphetamine and the deterrence of such behaviour: a literature review	Completed

Research products

Academic links – summer research scholarships (a pilot)

- Research Programme providing funding support for six summer research scholarships
    - Funding contribution @ $5,000 per scholarship
    - Research oversight provided by the universities
    - Technical support (briefings) from relevant Waka Kotahi staff as appropriate
    - Provision of a research report and presentation to Waka Kotahi
- Letters of Agreement signed with the University of Otago (Wellington) (2 students) and the University of Canterbury (4 students)
    - a review of transport greenhouse emissions and their effect their people (Otago)
    - comparing the capabilities of camera and Lidar data for feature extraction (Canterbury)
    - Investigate autonomous vehicle (AV) technology from a maturity, cost and risk perspective (Canterbury)
- Pilot only for the 2020/21 summer

Questions?

Contacts

- To be added to research email circulation list:

  NZTAresearch@nzta.govt.nz

- Comments on student scholarships or programme queries:

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