

TRANSPORT INTELLIGENCE DIGEST



Issue 16

<p>Date of issue: November 2020</p> <p>Contact: Transport Knowledge Hub E knowledgehub@transport.govt.nz</p>	<p><u>Contents</u></p> <p>Inclusive Access</p> <p>Economic Prosperity</p> <p>Resilience and security</p> <p>Environmental sustainability</p> <p>Healthy and safe people</p> <p>Around the world – statistical releases</p> <p>Hub Knowledge</p>
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Introduction

Welcome to the 16th issue of the Transport Intelligence Digest.

New Zealand have again re-entered Covid19 alert level 1. However, the rest of the world remains dramatically impacted with Covid19. We are seeing more Covid19 related material and we would expect that to be ongoing for some time.

Covid19 has meant many events are now moving to an online only status. In place of TKC2020 this year the TKH is organising a Webinar series for the week starting Monday 30 November. A wide variety of short presentations will be given across several topic Hub areas during the week. We encourage you to register for these events.

Happy reading

Transport Knowledge Hub

We welcome contributions from anyone who reads this Digest. We ask you to indicate which of the 5 transport outcomes your contribution would fall under. The contribution should be a recent release. Contributions don't have to be about research: we have a section devoted to statistical releases and we're happy to receive contributions for that area as well.

Disclaimer:

This Digest references a wide range of third party articles. Reference to these articles does not constitute endorsement by the Ministry.

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The transport system provides ways for people and products to move from one place to another. This enables people to access economic opportunities (e.g. work) and social opportunities (e.g. friends, family/whanau, and community services). Transport therefore plays an important role in social development. Access is also vital for economic activity, as recognised in the economic prosperity outcome.

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The Future of Passenger Mobility and Goods Transport in Estonia

International Transport Forum (ITF), (September 2020)

Keywords: Accessibility, Active modes

This report reviews strategic planning in Estonia's transport sector to support the development of a Transport and Mobility Master Plan 2021-30 for Estonia. It assesses ten key aspects of transport policy with recommendations for reform. The impact of selected proposed reforms are examined under different scenarios modelled for this study.

<https://www.itf-oecd.org/future-passenger-mobility-goods-transport-estonia>

The Gender Dimension of the Transport Workforce

International Transport Forum (ITF), (September 2020)

Keywords: Accessibility

Women remain underrepresented in most transport-related industries, with only 17% female employees on average across a sample of 46 countries. Both attracting and retaining them remains a challenge for governments and the private sector. This study provides an in-depth analysis of the correlation between female participation in the transport workforce and variables such as GDP per capita, education and labour laws. It also provides recommendations on how to develop policies and measures that will enable gender equality in the transport workforce.

<https://www.itf-oecd.org/sites/default/files/docs/gender-dimension-transport-workforce.pdf>

Insights into the impact of COVID-19 on household travel and activities in Australia – The early days under restrictions

Matthew Beck and David Hensher. Transport Policy, (September 2020)

Keywords: Accessibility, Covid19

When 2020 began, we had no idea what was to unfold globally as we learnt about the Novel-Coronavirus in Wuhan, in the Hubei province of China. As this virus spread rapidly, it became a matter of time before many countries began to implement measures to try and contain the spread of the disease. COVID-19 as it is referred to, resulted in two main approaches to fighting the viral pandemic, either through a progressive set of measures to slow down the number of identified cases designed to 'flatten the curve' over time (anticipated to be at least six months), or to attack it by the

severest of measures including a total lock-down and/or herding exposure to fast track 'immunisation' while we await a vaccine. The paper reports the findings from the first phase of an ongoing survey designed to identify the changing patterns in travel activity of Australian residents as a result of the stage 2 restrictions imposed by the Australian government. The main restrictions, in addition to social distancing of at least 1.5 m, are closure of entry to Australia (except residents returning), and closure of non-essential venues such as night clubs, restaurants, mass attendee sporting events, churches, weddings, and all social gatherings in any circumstance. With some employers encouraging working from home and others requiring it, in addition to job losses, and many children attending school online from home, the implications on travel activity is extreme. We identify the initial impacts associated with the first month of stricter social distancing measures introduced in Australia.

<https://www.sciencedirect.com/science/article/pii/S0967070X20304200>

Pedestrian levels of service qualitative report

Kantar TNS (November 2020)

Keywords: Accessibility, Active modes, Safety

There is currently a gap in terms of robust national models and tools that provide customer levels of service information regarding the 'walkability' of our pedestrian networks. Decision makers need better information from the perspective of people as pedestrians or public transport users. The priority factors for a positive pedestrian experience are the need to relax, and there are two overarching factors that contribute to a positive pedestrian environment and a relaxing experience - safety and amenity.

<https://www.nzta.govt.nz/resources/research/notes/003>

Social impact assessment of mode shift

University of Otago (September 2020)

Keywords: Accessibility, Active modes, Evaluation

This international literature review assesses three policy tools for shifting New Zealanders' dependence on cars to overall healthier options such as bussing, cycling and walking. The review was done between November 2019 and March 2020 and considers the impacts of transport policies on people's lives.

The research aims were to:

- explore the impacts of policies that encourage people to change to transport modes that allow fairer access to transport
- assess the impacts of these policies on people with different income levels and geographical and residential distribution and
- outline if and what new research is needed, and the most appropriate methods for this.

The report finds that a greater understanding of existing inequities in transport resources and access to opportunities can help to target mode shift policies so that they contribute to achieving optimal transport outcomes and wellbeing for all.

<https://www.nzta.govt.nz/resources/research/reports/666>



Transport supports economic activity by connecting businesses with their workers, customers, suppliers, and other businesses. This enables each community and region of New Zealand to take advantage of their unique strengths and resources.

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Do airport activities affect regional economies? Regional analysis of New Zealand's airport system

Hong Kong Polytechnic University; Massey University; Universidade Federal de Pernambuco, Brazil; University of Wollongong, Australia (October 2020)

Keywords: Aviation, Economics, Modelling and forecasting

This study investigates the impacts of airport activities on regional economies using annual data on all regions and 22 airports in New Zealand from 2001 to 2016. The data covers an extensive period that enables robust identification. We find that airport activities have significant impacts on a region's economy. This finding is robust across three different econometric models. Importantly, our study shows clear evidence that aviation activities positively affect regional economies, and that it is beneficial for New Zealand policymakers and airport owners in a region to promote aviation activities.

Please contact Associate Professor Kan Tsui: W.H.K.Tsui@massey.ac.nz

This is how we can get real value from infrastructure

World Economic Forum (September 2020)

Keywords: Covid19, Economics, Infrastructure

COVID-19 has revealed the importance of resilience. We need a new vision for infrastructure as a platform to help humans flourish. It must be people-focused – recognising the fundamental role of infrastructure in the social, economic and environmental outcomes that determine the quality of people's lives.

COVID has been a cruel teacher, yet we must heed its lessons. If we want to 'bounce forward' and build a better world post-pandemic, then we must up our game on systems-thinking in every sector, and definitely in the built environment. And if we think that COVID has been bad, then we know that climate change will be worse. Therefore, we must be ready to face global systemic challenges, like achieving net-zero carbon emissions and building climate change resilience, with systems-based solutions. But systems-thinking is not enough. It must be driven by a much stronger focus on delivering genuine improved outcomes for people and society. So the central ideas in this article are very simple and surprisingly radical: that the purpose of infrastructure is human flourishing and that infrastructure is a system of systems. We must envision and manage infrastructure accordingly.

<https://www.weforum.org/agenda/2020/09/how-we-can-get-real-value-from-infrastructure/>

Unprecedented Impact of Covid-19 on Freight Volumes in Second Quarter (April to June 2020)

International Transport Forum (ITF), (September 2020)

Keywords: Covid19, Economics, Freight & trade

The Covid-19 pandemic has major impact on air and sea trade, according to preliminary seasonally adjusted data (Figure 1). Air freight volumes (measured in tonnes of goods moved), a lead indicator for economic growth, decreased by 53% in the EU27 and by 3% in the United States in April 2020 compared to June 2008. Exports by air freight in particular dropped drastically as the health crisis took hold in Europe and United States. The impact of Covid-19 on sea freight will likely become visible in the third quarter of 2020.

[https://www.itf-oecd.org/unprecedented-impact-covid-19-freight-volumes-second-quarter?ct=t\(2018_Sept_Newsletter_COPY_02\)&mc_cid=6b639b40d7&mc_eid=56f140b0e4](https://www.itf-oecd.org/unprecedented-impact-covid-19-freight-volumes-second-quarter?ct=t(2018_Sept_Newsletter_COPY_02)&mc_cid=6b639b40d7&mc_eid=56f140b0e4)

Valuing freight transport time and reliability

Ian Wallis Associates Ltd and Murray King & Frances Small Consultancy Ltd (July 2020)

Keywords: Economics, Evaluation, Freight & trade

This research was undertaken to address a knowledge and data gap in transport economic analysis on the value of freight travel time and reliability. Values have been developed from this research and will be included in the Waka Kotahi Economic Evaluation Manual (EEM).

The information will assist the planning and development of business cases to improve the transport system, recognising the value of improvements in reliability, frequency of services and loss/damage to freight in transit. These values will support multi-model analysis of improvements to the transport system.

<https://www.nzta.govt.nz/resources/research/reports/665>



The transport system can benefit or harm people's health, depending on how it is designed, developed, and used. Minimising and managing the risks from natural and human-made hazards, anticipating and adapting to emerging threats, and recovering effectively from disruptive events.

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Developing a method for quantifying transport dependencies

Tonkin + Taylor Ltd (October 2020)

Keywords: Resilience

The value of New Zealand's road and rail network is estimated at NZ\$80 billion. Our society is increasingly reliant on transport networks and the infrastructures and technologies that interact with them. An interdependency exists when one infrastructure has a direct impact on the performance of another, making it prone to impact from external shocks or failures. For example, roads provide critical access to water and power supplies, which in turn provide essential services to hospitals (which rely on water and power to operate). This research aimed to develop a method to quantify transport networks' interdependence with other networks. This information could be used to improve both network and community resilience.

This research was conducted in New Zealand from late 2019 to mid-2020. It:

- builds on the current literature about infrastructure interdependencies
- reviews the existing assessment tools
- develops a way to assess interdependencies across three areas: physical, digital and geographic.

These approaches are related to criticality (high cost of failure) and risk management. The researchers also present pilot studies from the Queenstown-Lakes District that demonstrate the two assessment approaches. The approach generates interdependency and criticality ratings as outputs. We can use this information, along with data on natural hazards and asset vulnerabilities, to better understand and then reduce risk to transport networks, and ultimately improve wider community resilience.

<https://www.nzta.govt.nz/resources/research/reports/671>

Interim results from our government study into COVID-19 impacts on transport - wave 22

Waka Kotahi NZ Transport Agency (November 2020)

Keywords: Covid19, Resilience

Waka Kotahi NZ Transport Agency instigated a continuous monitor across New Zealand to assess the impact of COVID-19 on people's transport choices. The in-field questions started Friday, 3 April 2020 and the monitor will run a minimum of 24 waves. The nationally representative study offers insights into how people respond in their transport choices, their perceptions and attitudes to different modes of transport and how they change under the different

COVID-19 Alert Levels. Updates are provided here. High level analyses, deep dive analyses and infographics will be published as they become available.

<https://www.nzta.govt.nz/resources/covid-19-impacts-on-transport>

Waka Kotahi NZ Transport Agency National Resilience Programme Business Case

Waka Kotahi NZ Transport Agency (June 2020)

Keywords: Resilience

The Waka Kotahi NZ Transport Agency National Resilience Programme Business Case provides a national evidence base of resilience risks to land transport networks. Based from a national importance and impact perspective, this evidence base is the first time Waka Kotahi can confidently express a nationally consistent, objective and representative view of resilience risks. The evidence base identifies and rates nationally important risks from natural hazards (including climate change-related) in the New Zealand land transport system and addresses a range of system-wide resilience process issues. The Programme Business Case includes the risk prioritisation methodology and decision-making framework.

Prioritised geographic risks are those that have both a high likelihood of occurring and will result in significant consequence if they do occur. The analysis of geographic risks considers current and future hazards, the vulnerability of transport systems to these risks and the criticality of the system. Key data sets used included existing natural hazards data, network asset information and the One Network Road Classification (ONRC) system. The risks implied by the datasets were discussed and validated with Waka Kotahi transport system managers in each region. Ongoing work with the Programme Business Case's evidence base will ensure it can be kept up-to-date over the long-term. Work to present the current risk and future hazard risks in map form is underway.

www.nzta.govt.nz/national-resilience-programme-business-case



People and places will only be able to prosper long-term if the living systems that our society, economy, and wellbeing depend on are sustained in a healthy condition. Transitioning to net zero carbon emissions, and maintaining or improving biodiversity, water quality, and air quality.

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An analysis of ways to decarbonize conference travel after COVID-19

M Klöwer, D Hopkins, M Allen, J Higham, nature.com (July 2020)

Keywords: Covid19, Environment

Before the pandemic, many academics were frequent flyers. We travelled to conferences and board meetings, to conduct fieldwork, to visit collaborators and to give seminars and lectures. Many of us took multiple long-haul flights per year and have accrued thousands of air miles. Yet we are also acutely aware of the negative impacts of travel. Before the outbreak of COVID-19, the transport sector as a whole accounted for 24% of annual global emissions of carbon dioxide. Aviation was responsible for about 3%, road transport 18% and rail less than 1%. The vast majority of flights were taken by a small minority of frequent flyers. In the United Kingdom, 15% of the population was responsible for 70% of the flights. There are clear inequalities in who travels by air.

<https://www.nature.com/articles/d41586-020-02057-2>

Assessing the Environmental Performance of New Mobility

International Transport Forum (ITF), (September 2020)

Keywords: Environment, Travel & mobility

This report examines the climate impact of personal and shared electric kick-scooters, bicycles, e-bikes, electric mopeds, as well as car-based ride-sharing services. Users in cities across the globe are rapidly adopting new mobility forms, helped by digital connectivity and electrification technologies. New urban mobility services are often sold as “green” solutions. But what is their real impact on energy demand and greenhouse gas emissions? This study analyses the life-cycle performance of a range of new vehicles and services based on their technical characteristics, operation and maintenance, and compares it with that of privately owned cars and public transport. Finally, the report identifies solutions to make new mobility a useful part of the urban transport mix while helping to reduce energy use and limit climate change.

<https://www.itf-oecd.org/sites/default/files/docs/environmental-performance-new-mobility.pdf>

Assessing the Impact of Gross Emitting Vehicles

Waka Kotahi NZ Transport Agency (July 2020)

Keywords: Environment

Between 2003 and 2015, five road-side vehicle emission monitoring campaigns using remote sensing devices (RSD) were completed in Auckland, New Zealand. This assessment used data from the most recent campaign. The data set was augmented using additional data for the recorded plate details from the 2018 Motor Vehicle Register (MVR).

The objective of this project was to determine the impact that gross emitters have on emissions of pollutants harmful to human health from light duty vehicles within the vehicle fleet. The project consisted of:

- Stage 1: assessment and characterisation of the monitored fleet results, including repeatability of emissions measurements for gross emitting vehicles (GEVs), identification of GEV characteristics to create a predictive model for GEVs, and its application to the national fleet; and
- Stage 2: determination of the relative impact of emissions measurements for GEVs, including estimation of potential emission reduction benefits of GEV replacement.

The details presented in this report demonstrate that the objective of this project has been met and the investigation of targeted issues successfully completed. During this project, PDP and the external peer reviewer identified questions which, if investigated, would provide additional insight into the impacts and management of GEVs and therefore add value to the outcomes of this study. Using this experience, PDP have recommended that future work programmes consider a number of GEV related tasks.

<https://www.nzta.govt.nz/roads-and-rail/highways-information-portal/technical-disciplines/air-quality-climate/monitoring/remote-sensing/>

Good to Go? Assessing the Environmental Performance of New Mobility

International Transport Forum (ITF), (September 2020)

Keywords: Environment

This report examines the climate impact of personal and shared electric kick-scooters, bicycles, e-bikes, electric mopeds, as well as car-based ride-sharing services. Users in cities across the globe are rapidly adopting new mobility forms, helped by digital connectivity and electrification technologies. New urban mobility services are often sold as “green” solutions. But what is their real impact on energy demand and greenhouse gas emissions? This study analyses the life-cycle performance of a range of new vehicles and services based on their technical characteristics, operation and maintenance, and compares it with that of privately owned cars and public transport. Finally, the report identifies solutions to make new mobility a useful part of the urban transport mix while helping to reduce energy use and limit climate change.

<https://www.itf-oecd.org/good-to-go-environmental-performance-new-mobility>

Regulations and Standards for Clean Trucks and Buses: On the right track?

International Transport Forum (ITF), (September 2020)

Keywords: Environment

This report reviews progress on technical standards for heavy vehicles that could enable trucks and buses with zero or near-zero emissions. It focuses on plug-in and fuel cell electric vehicles that use technologies at the forefront of green and inclusive economic development. It includes information on technical standards on charging and refueling infrastructure, and identifies remaining barriers and opportunities for their future development. The report offers valuable insights for all stakeholders involved in the transition to carbon-free mobility and clean energy.

<https://www.itf-oecd.org/standards-clean-trucks-and-buses>

The shared path: people not cars at the heart of communities

Helen Clark Foundation, WSP (November 2020)

Keywords: Active modes, Covid19, Environment, Safety,

he transport sector accounts for almost a quarter of our total climate emissions, and more than half of these come from private vehicles. New Zealand has committed to reaching net zero carbon emissions by 2050, but this won't happen without a substantial reduction in private vehicle use. We've also committed to zero deaths on the road yet the more we drive, the more we crash – we simply won't achieve our goal without reducing the number of trips taken by car.

Aotearoa needs low-traffic neighbourhoods and cities to reduce emissions, improve road safety, and create the connected urban communities we need in a post-pandemic future. This report makes detailed recommendations about how to achieve this.

The Shared Path is the second report in the Post Pandemic Futures series, aimed at stimulating new ideas, new policies and new ways of doing things in a post-COVID-19 Aotearoa.

This report was produced as part of our partnership with WSP.

<https://drive.google.com/file/d/1tubgoGIDIW4iDVUOxSgzuAYGY0Tp4jgr/view>

A review of variability in environmental regulatory requirements for roading construction projects across New Zealand

Beca Ltd (November 2020)

Keywords: Environment, Infrastructure

In roading construction projects across New Zealand, treating and managing environmental aspects of the Resource Management Act (RMA) varies. To better understand this, researchers reviewed eight case studies of capital works transport projects between 2018 and 2020. They investigated the reasons why conditions vary and how this influences environmental outcomes in the resource management process. Their report identifies several steps within the business case and consenting process where inconsistencies between consent requirements are introduced. The reasons ranged from regional planning rules to public participation in the RMA process. Understanding this variability will help with future consenting processes for all stakeholders. To deliver better environmental outcomes and value for money across projects, the researchers recommend streamlining processes and improving decision-making consistency.

<https://www.nzta.govt.nz/resources/research/reports/673>



New Zealand is a geologically active country, and we often experience wild or extreme weather. We therefore face ongoing natural hazard events (e.g. earthquakes and cyclones) that can cause serious damage to infrastructure and communities. Our transport system needs to anticipate both natural and human-made risks, and be prepared to recover from disruptive events

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Best Practice for Urban Road Safety

International Transport Forum (ITF), (September 2020)

Keywords: Safety

This report presents seven case studies of cities that are implementing data-driven road safety policies. It highlights relevant experiences aimed at reducing the number of traffic casualties and protecting vulnerable road users in cities. The case studies from Barcelona, Bogota, Buenos Aires, Fortaleza, London, New York and Rotterdam illustrate the diverse approaches to better understand road crashes and to prevent road traffic deaths and serious injuries.

<https://www.itf-oecd.org/best-practice-urban-road-safety>

A cross-portfolio consideration of interventions impacting transport safety outcomes

Navigatus Consulting Ltd (October 2020)

Keywords: Evaluation, Safety

Interventions outside of the traditional transport sector can have spillover effects on transport safety. This project sought to identify, in particular, what unintended effects policies on education, crime or pollution might have on transport safety outcomes. Researchers asked how agency interventions outside of the transport sector influence road safety, and how those sectors could consider road safety in a more deliberate way. Conducted in 2019/20, the research included an international literature review, interviews with experts and New Zealand-based case studies on Tomorrow's Schools education reform, the Youth Crime Action Plan, and emissions reduction. The researchers found that road safety co-benefits are often left out of interventions in other sectors because of associated complexities, uncertainties, risks and resource pressures. They also found some inspiring examples of agencies and other groups collaborating to deliver co-benefits on multiple levels to ensure safer, better lives for more New Zealanders, including improving road safety.

<https://www.nzta.govt.nz/resources/research/reports/668>

Competing tensions: Active transport to school, school choice and policy making

Sandretto, S., Hopkins, D., Wilson, G., & Mandic, S; Journal of Transport & Health (September 2020)

Keywords: Active modes, Public transport, Safety, Surveys

In this paper, we explore the complex relationship between active transport to and/or from school (ATS), school choice and policy making. We report findings from semi-structured interviews with 12 secondary school leaders from an urban centre in Aotearoa New Zealand exploring their perceptions of ATS, the school neighbourhood environment, and school policy making. The paper delivered five highlights:

- School choice policies increase distance to school and reduce active travel rates.
- School leaders were aware of main barriers to active transport to/from school.
- Many school leaders viewed school travel as a family decision and choice.
- Active school travel policies have not been in the school leaders' 'field of view'.
- Future efforts to encourage active school travel should involve students.

<https://www.sciencedirect.com/science/article/pii/S2214367X20302052>

Kava drinking in traditional settings: Towards understanding effects on cognitive function

Aporosa, A. S., Atkins, M., & Brunton, R. Human Psychopharmacology: Clinical and Experimental (February 2020)

Keywords: Human behaviour, Safety

Kava drinking is a tradition among Pacific Island people, although growing in popularity with other ethnicities. However, drinking substantial quantities of kava has raised concerns regarding physical manifestations of slow response and lack of precision in bodily control. These impairments can have significant consequences when after consuming large volumes of kava an individual makes a choice to drive.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/hup.2725>

Implications of attending the closest school on adolescents' physical activity and car travel in Dunedin, New Zealand

Keall, M., et al .Journal of Transport & Health (September 2020)

Keywords: Active modes, Human behaviour, Public transport, Safety, Surveys

Home-to-school distances and the need for students to be driven to/from school may limit adolescents' physical activity levels. School choice and school zoning policies can influence rates of active transport to/from school, and traffic volumes during school commuting times. This study aimed to quantify the effects of adolescents' enrolment in the closest school or not, on private vehicle use and adolescents' physical activity levels in Dunedin city, New Zealand. Modest reductions in private vehicle traffic, particularly around schools, and increases in adolescents' MVPA during the school commute period would be expected if all adolescents attended the closest school.

<https://www.sciencedirect.com/science/article/abs/pii/S2214140520301043?via%3Dihub>

Pre-schoolers' transport imaginaries: Moving towards sustainable futures?

Ergler, C. R., Freeman, C., & Guiney, T. (2020). Journal of Transport Geography (April 2020)

Keywords: Human behaviour, Safety

Being on the move is part of children's everyday life in cities. However, little is known about how young children experience transport systems or their aspirations for mobility in cities. In this paper, we explore pre-schoolers'

experiences with the mobile world and show their affinity with different transport modes and hopes for their current transport system.

<https://www.sciencedirect.com/science/article/abs/pii/S0966692319305484?via%3Dihub>

2020 recreational boating survey

Ipsos (June 2020)

Keywords: Maritime, Safety

From April to May 2020 Ipsos surveyed over 2,000 New Zealanders aged 18 and over about their recreational boating habits. The 2020 survey asked new questions about recreational boat ownership and use, recreational boating information sources, and perceived recreational boating risks. A new recreational boat category was added – ‘dinghy with an engine’, to distinguish these vessels from ‘power boats less than 6m in length’. In addition, we asked non-recreational boaties safety-related questions about their close friends and family members who go boating.

<https://www.maritimenz.govt.nz/recreational/safety-campaigns/documents/Recreational-boating-survey-2020.pdf>

Infographic: http://ipsos.com.au/maritimenz_infographic/2020/

Sleep loss and change detection in simulated driving

Filtness, A. J., Beanland, V., Miller, K. A., Larue, G. S., & Hawkins, A. *Chronobiology International* (September 2020)

Keywords: Human behaviour, Safety

Driver sleepiness is a leading contributor to road crashes. Sleep-related crashes are more likely to involve collision with a stationary object than non-sleep-related crashes. The mechanism underpinning this is unknown; one potential explanation may be an increased propensity for change blindness. Paper presents results from a study of twenty-four drivers, with at least one year of independent driving experience, who completed two simulated drives: one following a normal night of sleep (7–8 hours) and one following sleep restriction (5 hours).

<https://www.tandfonline.com/doi/abs/10.1080/07420528.2020.1821043>

Taking the bus? Barriers and facilitators for adolescent use of public buses to school

Mindell, J. S., Ergler, C., Hopkins, D., & Mandic, S; *Travel Behaviour and Society* (January 2020)

Keywords: Public transport, Safety, Surveys

Transport to school can contribute significantly to adolescents' physical activity but in New Zealand – as in many other countries around the world – many adolescents are driven to school. Public transport offers an opportunity to integrate incidental active transport into school commutes. In this paper, we bring together multiple sources of data into a multi-method study to elucidate the barriers to and facilitators of public transport use by adolescents for school travel in Dunedin, New Zealand, a city with low rates of public transport use.

<https://www.sciencedirect.com/science/article/pii/S2214367X20302052>

Social cost of road crashes and injuries

Ministry of Transport, New Zealand (September 2020)

Keywords: Economics, Safety

The Ministry of Transport has published the social cost of road crashes and injuries 2019 update. The report looks at the social costs associated with road crashes and injuries in New Zealand. It provides estimates, at June 2019 prices, of:

- average social cost per injury and per crash
- total social cost of road crashes and injuries in 2018.

Social costs measures the total cost of road crashes to the nation, including loss of life and life quality, loss of productivity, medical, legal, court and vehicle damage costs. Injury costs are classified into fatal, serious and minor injuries as reported by crash investigators.

<https://www.transport.govt.nz/assets/Uploads/Report/SocialCostof-RoadCrashesandInjuries2019.pdf>

Open data – daily traffic counts

Waka Kotahi NZ Transport Agency (September 2020)

Waka Kotahi has started publishing daily-updated open data about traffic counts, by vehicle type, on State Highways. This is available as a bulk CSV download or via an API endpoint.

<https://opendata-nzta.opendata.arcgis.com/datasets/tms-daily-traffic-counts-api>

HubKnowledge

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Transport Knowledge Hub Webinar series

Monday 30 November to Friday 4 December 2020

Unfortunately we have had to cancel the Transport Knowledge Conference (TKC2020) this year due to ongoing COVID19 issues and alert level changes. Instead, we will be replacing this event with a series of short webinars hosted by the TKH Topic Hubs (Data, Economics, Environment, Health, Forecasting & Aviation, Safety, Urban and our newest Hub, Māori) during the week of Monday 30 November – Friday 4 December.

The week-long event details (with some to be confirmed), in date and time order, plus link to register for each event are:

Monday, 30 Nov 2020 10am to 11.30am

Estimating and forecasting the impacts of COVID-19 in the transport sector

Hosted by the Forecasting and Aviation Transport Knowledge Hub, three presentations will be given covering Covid19 impacts on transport.

<https://www.eventbrite.co.nz/e/estimating-and-forecasting-the-impacts-of-covid-19-in-the-transport-sector-tickets-127383458353>

Monday, 30 Nov 2020 12:30pm to 2pm

Designing streets to enable safer and more liveable neighbourhoods

Hosted by the Urban Transport Knowledge Hub, this session will cover Designing streets to enable safer and more liveable neighbourhoods.

<https://www.eventbrite.co.nz/e/designing-streets-to-enable-safer-and-more-liveable-neighbourhoods-tickets-127391620767>

Tuesday, 1 December 2020 10:00am to 11.30am

Using systems thinking to deliver healthier urban mobility

Hosted by the Health Transport Knowledge Hub, this session will show 4 presentations thinking about delivering healthier urban mobility

<https://www.eventbrite.co.nz/e/using-systems-thinking-to-deliver-healthier-urban-mobility-tickets-127392545533>

Tuesday, 1 December 2020 1:30pm to 3pm

COVID-19 Transport Sector Recovery – Effective Use of Data

Hosted by the Data Transport Knowledge Hub, there will be 5 data-related presentations showing the effect of and recovery due to COVID-19

<https://www.eventbrite.co.nz/e/covid-19-transport-sector-recovery-effective-use-of-data-tickets-127393345927>

Wednesday, 2 December 2020 10am to 11.30am

Economics Transport Hub event

Hosted by the Economics Transport Knowledge Hub – details to follow

<https://www.eventbrite.co.nz/e/economics-transport-hub-event-tickets-127396230555>

Wednesday 2 December 2020 - 1.30pm to 3pm

The trees in the forest – perspectives of young New Zealanders on driver licensing & road safety, and insights into safe system case studies

Hosted by the Safety Transport Knowledge Hub, 2 presentations will showcase driver licensing, road safety & insights into the safe system

<https://www.eventbrite.co.nz/e/the-trees-in-the-forest-safe-systems-driver-licensing-road-safety-tickets-127397040979>

Thursday 3 December - 10am to 12 noon

Infrastructure and Sustainability: Enabling Integrated Action and Outcomes

Hosted by the Environment Transport Knowledge Hub, this session will give presentations in 3 different areas plus a panel discussion

<https://www.eventbrite.co.nz/e/infrastructure-and-sustainability-enabling-integrated-action-and-outcomes-tickets-127407311699>

Thursday 3 December - 1:30pm to 3.30pm

Shifting the dial on land transport emissions and public health

Hosted by the Environment Transport Knowledge Hub, this session will give presentations in 3 different areas plus a panel discussion

<https://www.eventbrite.co.nz/e/shifting-the-dial-on-land-transport-emissions-and-public-health-tickets-127408098051>

Friday 4 December - 10am to 11am

Māori session event

Hosted by the Māori Transport Knowledge Hub this session will touch on the impacts of transport for Māori

<https://www.eventbrite.co.nz/e/maori-session-event-tickets-127409030841>

We're looking forward to the week-long events. If you have any queries, please email knowledgehub@transport.govt.nz

General websites

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On the Ministry of Transport's new website:

The Transport Evidence Base Strategy (TEBS): <https://www.transport.govt.nz/area-of-interest/strategy-and-direction/transport-evidence-base-strategy/>

The Transport Research Register:

<https://www.transport.govt.nz/assets/Uploads/Research/Transport-Research-Register.xlsx>

Events calendar

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To view a full calendar of upcoming events please go [here](#)

Webpage: <https://www.transportknowledgehub.govt.nz/> (not yet live)

Email: knowledgehub@transport.govt.nz

Upcoming conferences and events

Event	Registration & details
<p>New Energy Futures Post-COVID-19 <i>In person attendance event with online capability</i> Date: 19-20 November 2020 Venue: Dunedin</p>	<p>The Otago Energy Research Centre is pleased to announce the 14th annual OERC symposium "New Energy Futures Post-COVID-19" to be held 19-20 November 2020 in Dunedin. This symposium will be a two-day event where guest speakers and other delegates discuss what lessons we can draw from the COVID-19 pandemic that might help to accelerate a transition to a zero-carbon energy future in New Zealand. Participation will be available via Zoom in addition to in-person for all events.</p> <p>Keynote speakers The symposium will feature two exciting international keynote speakers (presenting virtually):</p> <p>Professor Frank Jotzo, <i>Director of the Centre for Climate and Energy, Crawford School of Public Policy, Australian National University</i>. Frank leads work on opportunities for low-carbon investment in energy, industry, transport and housing sectors post COVID-19.</p> <p>Dr Christophe McGlade, <i>Senior Energy Analyst at the International Energy Agency (IEA), Paris</i>. Christophe is one of the lead authors of the IEA Sustainable Recovery report 2020 that highlights the opportunities in the energy sector for boosting economic recovery while reducing GHG emissions.</p> <p>Registrations are open – you can register here</p>
<p>Christchurch Transport Innovators <i>In person attendance event</i> Date: 26 November 2020 Venue: Aurecon, Christchurch</p>	<p>Come and hear from a panel of transport innovators and innovation advisors as they share with us their vision, stories, enablers, and outlook for the future of innovation. The event will include a short keynote, followed by panel questions and discussion. Drinks and networking, from 5pm and at the completion of the panel discussion. This event is made possible by the support of the ITS NZ membership.</p> <p>Keynote:</p> <p>Liz Eden, Business Attraction Manager, Aerospace and Future Transport Supernode, ChristchurchNZ</p> <p>Panelists:</p> <p>Stefan Powell, CTO & Founder Dawn Aerospace Stephen Morgan, BDM, Greenstage Gary Freedman, Electric Air</p> <p>For more info and to register: https://itsnz.org/events/yp/new-zealand-transport-innovators-christchurch</p>
<p>Trafinz 2020 conference <i>In person attendance event</i> Date: 24 - 27 November 2020 Venue: Cordis Hotel, Auckland</p>	<p>The theme is 'New journeys in mobility for Aotearoa'. This November conference will be an opportunity for public servants, local government, politicians, researchers, transport professionals and stakeholders to exchange learnings and experiences via technology, along with challenges and celebrations that will help us continue to shape together our future urban mobility for the greater good.</p> <p>More info: https://www.trafinzconference.co.nz/</p>
<p>Transport Knowledge Hub Webinar series <i>Online only event</i> Date: Monday 30 November to Friday 4 December 2020</p>	<p>Series of webinars hosted by Transport Knowledge Hub - Topic Hubs (Forecasting & Aviation, Health, Urban, Data, Economics, Safety, Environment, and Māori):</p> <ul style="list-style-type: none"> • Monday 30 November: <ul style="list-style-type: none"> ○ 10.00am - 11.30am: Estimating and forecasting the impacts of COVID-19 in the transport sector ○ 12:30pm - 2pm: Designing streets to enable safer and more liveable neighbourhoods • Tuesday 1 December: <ul style="list-style-type: none"> ○ 10:00am - 11.30am: Using systems thinking to deliver healthier urban mobility ○ 1:30pm - 3pm: COVID-19 Transport Sector Recovery – Effective Use of Data • Wednesday 2 December: <ul style="list-style-type: none"> ○ 10am - 11.30am: Economics Transport Hub event ○ 1.30pm - 3pm: The trees in the forest – perspectives of young New Zealanders on driver licensing & road safety, and insights into safe system case studies • Thursday 3 December: <ul style="list-style-type: none"> ○ 10am – 12pm: Infrastructure and Sustainability: Enabling Integrated Action and Outcomes ○ 1:30pm - 3.30pm: Shifting the dial on land transport emissions and public health • Friday 4 December: <ul style="list-style-type: none"> ○ 10am - 11am: Māori session event
<p>Auckland Trade and Economic Policy School 2020 <i>Online only event</i> Date: 4 - 5 December 2020</p>	<p>The Auckland Trade and Economic Policy School (ATEPS) is New Zealand's leading conference on trade and economic policy. Hosted by the Public Policy Institute at the University of Auckland, in conjunction with MFAT, ATEPS is a must for policy advisers, business leaders, academics and media keen to hear the latest research and analysis on international trade.</p> <p>For more information, please visit website here. Early Bird registrations are open now: Registration Site</p>
<p>Australia's Autonomous Vehicle regulations with Marcus Burke, National Transport Commission <i>Online only event</i> Date: 5 December 2020</p>	<p>Automated vehicles don't fit into existing legal regimes for vehicles and drivers. The Australian National Transport Commission is developing end-to-end regulation for the commercial deployment of automated vehicles. The presentation will provide an overview of reforms to support the deployment of automated vehicles in Australia, including safety, control, insurance and data issues. This will include key decisions to date and next steps to ensure comprehensive regulation of automated vehicles."</p> <p>Marcus Burke is Executive Leader, Future Technologies, at the National Transport Commission (Australia).</p> <p>For more information and to register: https://itsnz.org/events/local-its-events/australia-automated-vehicles</p>

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