



TRANSPORT INTELLIGENCE DIGEST

Issue 12

Date of issue:

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	System planning and management
	User behaviours and needs
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Introduction

Welcome to the 12th issue of the Transport Intelligence Digest.

In this edition, we have made a slight change to the format. Instead of acknowledging the person who contributed the article, we've replaced it with the author. This allows us to include journal articles that are behind a paywall, but in many instances it may be possible to acquire a copy of the research article by contacting the author.

We welcome contributions from anyone who reads this Digest. We ask you to indicate which of the knowledge themes your contribution would fall under. The contribution should be a recent release and freely available online. 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.

Happy reading ©

Stephen

Disclaimer:

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Transport impacts





Transport impacts There is a need to maximise positive impacts, mitigate negative effects ex-ante and manage impacts ex-post

Benchmarking Accessibility in Cities

International Transport Forum (May 2019)

Keywords: Accessibility; International;

This report presents a new urban accessibility framework. It identifies which destinations can be reached on foot, by bicycle, public transport or car within a certain time (accessibility). It then measures how many destinations are close by (proximity). The comparison between accessible destinations and nearby destinations shows how well each transport mode performs (transport performance). These three indicators are calculated for destinations such as schools, hospitals, food shops, restaurants, people, recreational opportunities and green spaces in 121 cities in 30 European countries.

https://www.itf-oecd.org/benchmarking-accessibility-cities

Energy Implications of Current Travel and the Adoption of Automated Vehicles

National Renewable Energy Laboratory, U.S. Department of Energy (April 2019) Author: Kelly Fleming, US Department of Energy and Mark Singer, National Renewable Energy Laboratory

Keywords: Vehicle technologies & standards;

The National Renewable Energy Laboratory at the U.S. Department of Energy has released a report that investigates how automated vehicle technology will affect driving and commuting habits. This report also identifies how different groups of people travel based on their residential area and their demographics.

https://afdc.energy.gov/files/u/publication/energy_implications_automated_vehicles.pdf

Governing Transport in the Algorithmic Age

International Transport Forum, (May 2019)

Keywords: Evaluation;

This study explores where automated decision-making systems impact transport activity, and how. More and more transport activity is influenced by algorithms. Automated decision-making is taking a hold in areas from health care and housing to media and mobility. In transport, algorithms are a core feature for services from public transport scheduling to routing apps, bicycle sharing to self-driving technology, parcel delivery to the dispatching of ride services. Algorithms are often elegant and incredibly useful tools used to accomplish tasks. They are mostly invisible aids, augmenting human lives in increasingly incredible ways. However, sometimes the application of algorithms created with good intentions leads to unintended consequences.

https://www.itf-oecd.org/sites/default/files/docs/governing_transport_algorithmic_age.pdf



International tourism demand, number of airline seats and trade triangle: Evidence from New Zealand partners

Tourism Economics, 2019, Vol. 25(1) 132–144 (May 2019) Author: Kan Tsui, Massey University

Keywords: Aviation; Economics; Evaluation

This article examines the three-way relationship between international tourism demand, airline economy seats and international trade for New Zealand together with its key trading/tourism partners. We have found that airline economy seats are the important factor for determining tourism demand among New Zealand's tourism partners except for richer economies, like the United States and Japan. Trade volume does not have strong causality relationship to tourism demand in particular for trading partners, like Japan, Korea, Singapore and the United States. However, especially after the global financial crisis, it is observed that trade volumes help to boost the number of airline economy seats available (airline seat capacity) between New Zealand and its trading partners.

https://journals.sagepub.com/doi/10.1177/1354816618801504

Justice in public transport systems: A comparative study of Auckland, Brisbane, Perth and Vancouver

University of Auckland (September 2018) Author: Subeh Chowdhury, University of Auckland

Keywords: Accessibility; Public transport;

Although the concept of social justice seems to be ubiquitous in most transportation plans, methods adopted to evaluate transit systems have little engagement with political theories to define justice. Without a proper definition, transport planners will be unable to design transit systems that achieve justice. The present study proposes a combination of sufficientarianism and egalitarianism principles to define justice in transit. Based on this framework 1) access to public transport is a right, 2) public transport should provide a minimum accessibility, 3) public transport should benefit the less well-off groups, and 4) a just distribution has to be spatially evaluated. The framework proposes a method that can be used to measure and compare justice in transit systems. The framework is applied to four case study cities, Auckland, Brisbane, Perth, and Vancouver. The results show that Auckland's transit system performs well relative to the other three case study cities by accounting for people and providing a minimum access to jobs. However, Auckland's transit services fail in the just distribution as it favours more affluent neighbourhoods. This issue is more severe in Brisbane's and Perth's transit systems. Vancouver, on the other hand, provides a better service for low-income neighbourhoods. This study contributes to the field of justice in transit by providing a clearly defined framework which can be adopted to analyse a city's transit system and compare it with other cities. It is expected to assist practitioners in obtaining insights that can inform policy decisions.

https://www.sciencedirect.com/science/article/pii/S026427511830773X



Tax Revenue Implications of Decarbonising Road Transport

International Transport Forum (May 2019)

Keywords: Funding & expenditure; Safety;

This report investigates how tax revenue from transport fuels could evolve over time as vehicles rely less on fossil fuels, with a focus on the case study of the Republic of Slovenia. Reducing the reliance on fossil fuels in the transport sector is a welcome development from the perspective of its climate and health impacts and of reduced energy dependence. However, under current settings, reduced fuel use will also lead to a loss of tax revenue, which may put stress on government budgets. Based on simulations for Slovenia, with a 2050 horizon, the report provides assessment of the taxation of road transport and investigates how tax policy could adapt to declining fossil fuel use in the long term if the objective is to maintain revenues at current levels while taking fairness and efficiency considerations into account.

https://www.itf-oecd.org/tax-revenue-decarbonising-road-transport-slovenia

Safer Roads, Safer Cities: how to improve urban road safety in the EU

European Transport Safety Council (June 2019)

Keywords: Active modes; International; Safety

This report argues that making it safer for people to travel by foot and on two wheels in urban areas must be a 'key priority' for European governments over the next decade. According to the report, pedestrians, cyclists and motorcyclists represent 70% of those killed and seriously injured on urban roads; and deaths on urban roads decreased at around half the rate of those on rural roads between 2010-2017.

The report says infrastructure changes are 'central' to improving the safety of vulnerable road users in towns and cities – and calls for the introduction of more segregated cycle lanes to reduce conflicts with motor vehicles travelling at 'lethal speeds'.

It also concludes that enforcement of speed limits and drink-driving laws are also 'crucial' – stating up to 75% vehicles exceed speed limits when travelling in free-flowing urban traffic.

https://etsc.eu/wp-content/uploads/ETSC_pin_flash_37.pdf



Seat Belts: The Forgotten Road Safety Priority

Parliamentary Advisory Council for Transport Safety, UK (May 2019)

Keywords: Evaluation; Safety; Surveys

The first legal requirement to wear a seat belt in the front seats of vehicles came into effect in the UK in 1983. By 1991, seat belt wearing was a legal requirement in all seating positions and wearing rates were higher than 90%. Amongst the road safety community there was a feeling this constituted a 'job well done.'

However, since 2013, data has been published on the percentage of people who were not wearing a seat belt when they died in cars on UK roads. In 2017, 27% of those who died in cars were not wearing a seat belt (in cases where seat belt status was known).

This is a similar situation experienced by New Zealand not so long ago (high wearing rate but a fair proportion of vehicle occupants in fatal crashes found not to be wearing their seatbelt).

This report shows who these people are, their reasons for not wearing seat belts, and the effectiveness of potential interventions at increasing seat belt wearing and reducing road deaths. The report ends with several recommendations – including that strong steps should be taken to increase seat belt wearing, better use of emerging technologies, improving analysis (both for observational surveys and in crashes)

http://www.pacts.org.uk/wp-content/uploads/sites/2/PACTS-Seat-Belts-Report-Final3.pdf

The mortality impact of bicycle paths and lanes related to physical activity, air pollution exposure and road safety

University of Leeds (Institute for Transport Studies), Great Britain (May 2019) Author: Paul Schepers, University of Leeds

Keywords: Environment; Evaluation; Safety

This paper explores the overall health impact of bicycle infrastructure provision, including not just road safety impacts, but also the population health impacts stemming from physical activity as well as cyclists' exposure to air pollution. The outcomes of the study suggest that, based on currently available research, a reduction of all-cause mortality is to be expected from building bicycle lanes and paths along busy roads with mixed traffic.

https://www.sciencedirect.com/science/article/pii/S2214140515006842



Tyre ageing: its effect on material properties and structural integrity

Department of Transport, UK (June 2019)

Keywords: Safety; Strategies

A technical study to provide scientific advice on the effect of chronological age on the performance of the elements of a tyre carcass that are critical to its mechanical integrity is now available. The aim was to develop an understanding of whether the material properties of vehicle tyres evolve, due to the passage of time, to such an extent that the integrity of the tyre, and therefore its safety, is compromised.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/808468/tyreageing-its-effect-on-material-properties-and-structural-integrity.pdf

Williams Rail Review – Barriers to travel: How to make rail more attractive to infrequent and non-users

Transportfocus, Great Britain (April 2019)

Keywords: Rail;

This report was a submission into a rail review that looked at why people do not use rail or only do so infrequently and what might make them travel more. The submission looks at why people do not use rail – or only do so infrequently, and perhaps more importantly, what might persuade them to give it a go.

Over the past 20 years rail passenger journeys in Great Britain have more than doubled. Despite this, and as stated by the Rail Review team, rail still accounts for only 2 per cent of all trips made and 8 per cent of distance travelled in England. So there is still a considerable potential market that remains untapped.

The submission concluded that for one-fifth of people, there was nothing that would persuade them to use rail. However, that still leaves the remaining four-fifths as a potential market.

http://d3cez36w5wymxj.cloudfront.net/wp-content/uploads/2019/04/29145935/Williams-Rail-Review-Barriers-to-travel-How-to-make-rail-more-attractive-to-infrequent-and-non-users.pdf



Enhancing Connectivity and Freight in Central Asia

International Transport Forum, (May 2019)

Keywords: Freight & trade;

This large report assesses freight connectivity in Central Asia, focusing on Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan and Uzbekistan. It provides recommendations for improving connectivity and the policy processes required to achieve this. The report also offers advice on how regional co-ordination can improve freight efficiency and connectivity. The analysis, both qualitative and quantitative, covers questions related to hard infrastructure, policies and regulatory frameworks. Several findings and recommendations were made.

New Zealand gets some mention in this report; There's a box on New Zealand's Road User Charges (page 75); we're also mentioned in a box on features of developed highway asset management systems (pages 111-112);

https://www.itf-oecd.org/sites/default/files/docs/connectivity-freight-central-asia_1.pdf

Evidential basis for community response to land transport noise

AECOM New Zealand Ltd (June 2019)

Author: D Humpheson and R Wareing, AECOM New Zealand Ltd

Keywords: Environment

Environmental noise caused by road and rail traffic can cause a range of disturbance and annoyance reactions amongst local communities. The threshold at which individuals will be annoyed by these sources of noise will vary depending on the expectations of the respondent and their sensitivity to noise. A community noise annoyance study was performed in Auckland, New Zealand to determine the noise dose-response relationship based on a comparison of short-term changes in noise compared with existing steady-state conditions. Due to limitations, a revised study design was implemented and three study areas were selected: 1) subject to transportation noise from an existing state highway, 2) a newly constructed but un-opened road, and 3) an existing rail line. A social survey of community response was undertaken within the three study areas. A percentage highly annoyed (%HA) analysis was undertaken for each study area and the findings compared with meta-analysis data obtained from a comprehensive literature review. Out of a list of 10 sources of environmental noise, road traffic was rated most annoying and for the rail study, trains were rated fifth most annoying noise source. The %HA analysis compared well with other studies, although in each case the onset of annoyance occurred at a marginally lower sound level. Further work is recommended to establish the relationship between short-term changes in noise compared with existing steady-state conditions.

https://www.nzta.govt.nz/resources/research/reports/656



Expanding Innovation Horizons: Learning from Transport Solutions in the Global South

International Transport Forum, (May 2019)

Keywords: Strategy;

The hot transport innovations come from the Silicon Valley and tech hubs in the Global North? Innovation is often born out of need. Many creative mobility solutions hatch in the developing and emerging nations of the Global South. They could inspire transport policy makers around the world. This report aims to open readers' eyes to innovative ideas in unexpected places – ideas that could improve mobility everywhere, for everyone.

https://www.itf-oecd.org/sites/default/files/docs/expanding-innovation-horizons.pdf

Freight Transportation Resilience in Response to Supply Chain Disruptions

Transport Research Board (TRB), USA (May 2019)

Keywords: Freight;

TRB's National Cooperative Freight Research Program (NCFRP) has released a pre-publication version of Research Report 39: Freight Transportation Resilience in Response to Supply Chain Disruptions. The report provides guidance to public and private stakeholders on mitigating and adapting to logistical disruptions to supply chains resulting from regional, multi-regional, and national adverse events, both unanticipated and anticipated.

The report, which makes a significant contribution to the body of knowledge on freight transportation and system resiliency. The report also includes a self-assessment tool that allows users to identify the current capability of their organization and institutional collaboration in preparing for and responding to supply chain disruptions.

Disruptions to the supply chain and their aftermath can have serious implications for both public agencies and companies. When significant cargo delays or diversions occur, the issues facing the public sector can be profound. Agencies must gauge the potential impact of adverse events on their transportation system, economy, community, and the resources necessary for preventive and remedial actions, even though the emergency could be thousands of miles away.

Increasing temporary or short-term cargo-handling capacity may involve a combination of regulatory, informational, and physical infrastructure actions, as well as coordination across jurisdictional boundaries and between transportation providers and their customers. For companies, concerns can include such issues as ensuring employee safety, supporting local community health, maintaining customer relationships when products and goods are delayed, and ultimately preserving the financial standing of the company.

https://www.nap.edu/catalog/25463/freight-transportation-resilience-in-response-to-supply-chain-disruptions



Gauging differences in public transport symbolism across national cultures: implications for policy development and transfer

Journal of Transport Geography, (May 2019) Author: David Ashmore, University of Auckland

Keywords: Strategy;

The use of different forms of public transport connotes different symbolic meanings across national cultures. This has relevance when encouraging the uptake of public transport. Whilst metro systems may be seen as progressive and uniting, bus-based transit is still often seen as a 'poor cousin'. This may present a significant impediment when encouraging a shift from private to public transport in cities where the national culture mandates visible differentiation between those of differing social status. The findings of the work should assist the promotion of sustainable transport in rapidly industrialising cities in the Global South, and international policy transfer across different geographies.

https://www.sciencedirect.com/science/article/pii/S0966692318302023

GFEI sets unique new vehicle decarbonisation agenda at 10-year celebration

Global Fuel Economy Initiative (GFEI), (May 2019)

Keywords: Planning;

The Global Fuel Economy Initiative (GFEI) was re-launched at a special 10 year anniversary event at the International Transport Forum's annual conference in Leipzig, Germany on 23 May 2019.

For the first time targets for fuel efficiency improvements were incorporated into a fuller agenda for road transport decarbonisation targets which include the full sweep of vehicles from light- and heavy-duty vehicles (HDV) to two and three wheelers, as well as transit buses. The targets have been developed from a careful analysis, of the existing policy landscape, a broad sweep of vehicle market projections, and scenarios for energy decarbonisation, and all within the context of the dual challenges of climate change and increasingly poor urban air pollution.

Media release: <u>https://www.globalfueleconomy.org/blog/2019/may/gfei-sets-unique-new-vehicle-decarbonisation-agenda-at-10-year-celebration</u>

GFEI targets for passenger light-duty vehicles, heavy-duty vehicles and transit buses: <u>https://www.globalfueleconomy.org/media/773391/gfei-relaunch-4.png</u>

GFEI targets for two & three wheel vehicles and decarbonising road transport to tackle climate change: <u>https://www.globalfueleconomy.org/media/773393/gfei-relaunch-5.png</u>



Investigating the barriers in a typical journey by public transport users with disabilities

Journal of Transport & Health (September 2018) Author: Subeh Chowdhury, University of Auckland

Keywords: Accessibility;

Accessibility to public transport is increasingly recognized as a critical element in the livelihoods of people with disabilities. Although there have been advancements to better cater for the needs of people with disabilities, budgetary constraints mean that every issue cannot be addressed. There are still many barriers restricting independent travel for this group of people. Social exclusion is often a result of their inability to use or access a public transport system. The present study investigates the barriers in a typical journey chain and provides the similarities and differences in the key barriers perceived by people with physical and visual impairments. Participants volunteered from cities in New Zealand. A semi-structured interview was conducted with a sample of people with disabilities. Bus driver's attitude and unawareness of disabled users' needs was a common concern for both groups. The main barriers for physically impaired users were related to the urban environment, terminals and stops, services, and quality of footpaths. In comparison, the main barriers for visually impaired users were poor presentation of information, and obstructions on footpaths. Based on the findings, the study provides recommendations for policy makers. Future research studies are encouraged to adopt the accessible journey chain when investigating barriers to riding public transport.

https://www.sciencedirect.com/science/article/pii/S2214140517309246

Management and Use of Data for Transportation Performance Management: Guide for Practitioners

Transport Research Board (TRB), USA (May 2019)

Keywords: Data & statistics

Recent federal legislation has established requirements for agencies to set performance targets and report on safety, pavement and bridge conditions, transit asset state of good repair, system performance, freight, and mobile source emissions. These requirements have resulted in increased visibility and attention to Transportation Performance Management (TPM) and increased awareness of the importance of data within that process. Transportation agencies are recognizing that the value of performance management goes far beyond meeting federal requirements; this report will assist agencies to make visible progress in meeting their objectives.

The guidance is organized around six data life-cycle stages and includes a discussion of what is involved in implementing each step and some of the critical choices to be made; a synthesis of key points in the form of "Do's and Don'ts" checklists that can be used to assess agency capabilities and identify opportunities for improvement; and illustrative examples.

While this guide draws many examples related to the federally defined TPM areas (safety, pavement, bridge, and system performance), it does not provide official guidance for MAP-21/FAST Act target setting or reporting. It provides a framework for assessing current data management practices and a source of ideas for practice improvement. Its purpose is to promote practices that will enable agencies to go beyond meeting reporting requirements, to get valuable insights from data that can be used to boost agency results.

https://www.nap.edu/catalog/25462/management-and-use-of-data-for-transportation-performance-management-guidefor-practitioners



Principles for managing mobility data

US National Association of City Transportation (June 2019)

Keywords: Data & statistics

This US National Association of City Transportation Officials report contains principles for government and the private sector to share, protect, and manage data for transportation planning and regulation. While focusing on data from shared transport services, the data management principles may be applicable more broadly.

https://nacto.org/wp-content/uploads/2019/05/NACTO_IMLA_Managing-Mobility-Data.pdf

New Directions for Data-Driven Transport Safety

International Transport Forum, (May 2019)

Keywords: Data & statistics; International

This report explores how seamless data collection, analysis and sharing can unlock innovations in transport safety. Most interventions to improve transport safety are reactions to incidents. Connected vehicles, smartphone apps, ubiquitous sensors, data sharing and machine learning make proactive transport safety interventions possible and prevent crashes before they happen. Drawing on the Safe System approach, this report examines how transport stakeholders can make better decisions by using more relevant and timely data.

https://www.itf-oecd.org/sites/default/files/docs/new_directions_data-driven_transport_safety.pdf

New road sign to improve road safety (and protect animals)

Department of Transport, UK (June 2019)

Keywords: Safety; Strategies

In the UK hundreds of people are injured every year in collisions involving animals in the road. Between 2005 and 2017 in the UK, 100 people were killed, with a further 14,173 injured in accidents where an animal was in the road.

They have unveiled a new traffic sign, featuring a hedgehog (above), which warns road users of hazards due to animals in the road ahead and could be placed in areas where accident rates are highest. The Department for Transport are calling on local authorities and animal welfare groups to identify accident and wildlife hotspots where the sign should be located. The road sign is also designed to reverse the decline in wildlife numbers, in particular, hedgehogs whose population in rural areas has halved since 2000. The new small mammal warning sign should also help to reduce the number of people killed and injured, as well as helping the UK's precious small wild mammal population to flourish

https://www.gov.uk/government/news/new-road-sign-to-improve-road-safety-and-protectanimals?utm_source=585e8b25-bfee-465b-8104-d23fab2233c8&utm_medium=email&utm_campaign=govuknotifications&utm_content=immediate



Paris to ban electric scooters

The Independent, Paris, France, (May 2019)

Keywords: Active modes; Vehicle technologies & standards

France is set to ban electric scooters from pavements following a rise in accidents and growing complaints over the number of the devices littering the streets. An estimated 15,000 scooters operated by several companies have flooded Paris since their introduction last year, with the number expected to rise to 40,000 by the end of the year. This media article backgrounds the move.

https://www.independent.co.uk/news/world/europe/france-electric-scooter-ban-paris-fine-pavement-elisabeth-bornea8900846.html?fbclid=lwAR2zaFGCpyaU-BQQ0f34-aBE30AyY5zCelg0iC90Q_x61_u1D3glP7XH1Bk

Singapore has regulated e-scooter use

Land Transport Authority, Singapore (May 2019)

Keywords: Active modes; Vehicle technologies & standards

In Singapore from 2 January 2019, owners of electric scooters (e-scooters) have to register their devices. This is aimed at deterring reckless riding and facilitating enforcement efforts against errant riders to improve public safety for all path users. Users will need to be aged 16 or older, pay a registration fee, be given a registration number and have to do so by 30 June 2019. After that date, it will be an offence to ride, or cause or permit another person to ride, an unregistered e-scooter on public paths. Additionally, only certified e-scooters can be sold.

https://www.lta.gov.sg/apps/news/page.aspx?c=2&id=5a541c51-249e-4e02-a580-dc1288bee803

The Untold Story of NotPetya, the Most Devastating Cyberattack in History

Wired Magazine, (September 2018)

This article is a cautionary tale of the risk of cyberattacks, especially in the transport sector. The article focuses on the impact that the NotPetya virus of June 2017 had on Maersk, a global ship line based in Denmark. The virus essentially shut down Maersk operations for several days, destroyed databases on many of their computers, and caused continuing chaos and damages that went on for weeks. The virus was able to penetrate Maersk's networks through just a few machines that had not been updated with the latest patches to remove vulnerabilities. One of their most essential databases was saved only because a server in Ghana was down due to a local power blackout at the time of the cyberattack.

https://www.wired.com/story/notpetya-cyberattack-ukraine-russia-code-crashed-the-world/?mbid=email_onsiteshare



Using GIS for Collaborative Land Use Compatibility Planning Near Airports

Transport Research Board (TRB), USA (May 2019)

Keywords: Aviation; Infrastructure; Strategy;

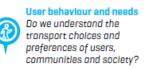
This report is designed to help airport and community planners seeking to work together to protect existing and future airport development as well as maintain safety and improve quality of life for those living and working near airports.

The report includes a description of the perspectives, goals, responsibilities, and concerns of the federal government, airports, and local communities to ensure that each has a good understanding of the others' missions and priorities. The report also examines potential benefits that GIS might have on fostering collaboration and offers guidance on initiating and maintaining collaboration, and for developing, sharing, and using data.

A key feature of the guidebook is examples of how GIS was used collaboratively to address various land use compatibility issues, including aircraft noise, obstructions, wildlife hazards, and solar glare. A set of appendices supplements the guide by summarizing the role of government, providing a brief history of FAA aeronautical surveys, case studies, and example data sharing agreements.

https://www.nap.edu/catalog/25464/using-gis-for-collaborative-land-use-compatibility-planning-near-airports





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Alcohol-related attitudes - Results from the 2018 Health and Lifestyles Survey infographic

Health Promotion Agency, New Zealand (May 2019)

Keywords: Human behaviour; Surveys;

While not transport related, The Health and Lifestyles Survey (HLS), a nationwide in-home face-to-face survey conducted every two years since 2008, can indirectly relate to alcohol-related road truama. Along with speeding, alcohol is usually the leading contributing factor in fatal crashes each year. Naturally we want to know more about why people drink alcohol in general.

The 2018 HLS sample included 2,725 New Zealand adults aged 15 years and over, who provided information about their health behaviours and attitudes relating to tobacco, sun safety, healthy eating, gambling, alcohol, exercise, immunisation, and mental health. The unweighted response rate was 75%.

This infographic highlights key insights into alcohol-related attitudes from the 2018 Health and Lifestyles Survey. People were asked their level of support for measures to reduce alcohol harm - not allowing alcohol-related sponsorship, reducing the hours when alcohol can be sold, and raising the price of cheap alcohol.

https://www.hpa.org.nz/research-library/research-publications/alcohol-related-attitudes-results-from-the-2018-healthand-lifestyles-survey-infographic

France backtracks on 80km/h speed limit despite positive results

European Transport Safety Council (ETSC) (June 2019)

Keywords: Human behaviour; Safety;

French départements will soon be able to revert to a 90km/h speed limit on roads without separation barriers, in a reversal of a decision by the government to set a lower default limit of 80km/h across France last summer. The u-turn, which followed nationwide protests by the yellow vest movement, as well as widespread vandalism of speed cameras, came despite official statistics that showed a drop in deaths linked to the new speed limit.

https://etsc.eu/france-backtracks-on-80km-h-speed-limit-despite-positive-results/



Mobility on Demand: A Smart, Sustainable, and Equitable Future

Transport Research Board (TRB), USA (May 2019)

Keywords: Data & statistics

TRB has released Transportation Research Circular E-C244: Mobility on Demand: A Smart, Sustainable, and Equitable Future is the synopsis of a January 13, 2019, workshop that explored the current state of mobility on demand (MOD), examined next steps for preparing for transition to autonomy, and discussed ways to optimize sustainability and ensure equitability. The workshop emphasized the role of public transit, share mobility, and automation shaping the future of mobility.

http://onlinepubs.trb.org/onlinepubs/circulars/ec244.pdf





Future funding and charging How do we fund and charge for transport into the future as technologies and needs are changing over time?

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Exploring local government challenges in effective road safety delivery

Australasian Journal of Road Safety, (May 2019) Author: Paul Durdin, Abley Ltd

Keywords: Funding & expenditure; Safety;

Half of all vehicle kilometres travelled and 62% of all deaths and serious injuries in New Zealand occur on local government roads. The upward trend in road trauma has revealed a growing disparity in safety performance between locally and centrally managed roads. The increasing gap, which is mirrored by differing levels of investment, was the stimulus behind a national project to understand the dynamics of local government road safety delivery and investment. Engagement workshops with local councils throughout New Zealand uncovered an array of common challenges - some of which were not anticipated when the project commenced.

https://acrs.org.au/wp-content/uploads/Exploring-Local-Government-Challenges-in-Effective-Road-Safety-Delivery1.pdf

Social and distributional impacts of time- and space-based road pricing

MRCagney Pty Ltd (June 2019) Author: Peter Nunns, MRCagney Pty Ltd

Keywords: Economics; Evaluation; Revenue & finance;

This report outlines a general framework that can be used to analyse the social and distributional impacts of road pricing in the New Zealand context and applies it to two hypothetical case studies of road pricing schemes in New Zealand cities. This framework attempts to bring together multiple dimensions of social and distributional impacts in a relatively accessible way to describe relevant impacts on households and individuals and communicate them to policymakers and the public in a way that can inform the design of pricing schemes and mitigation measures.

www.nzta.govt.nz/resources/research/reports/654



Tax Revenue Implications of Decarbonising Road Transport

International Transport Forum, (May 2019)

Keywords: Revenue & finance

This report investigates how tax revenue from transport fuels could evolve over time as vehicles rely less on fossil fuels, with a focus on the case study of the Republic of Slovenia. Reducing the reliance on fossil fuels in the transport sector is a welcome development from the perspective of its climate and health impacts and of reduced energy dependence. However, under current settings, reduced fuel use will also lead to a loss of tax revenue, which may put stress on government budgets. Based on simulations for Slovenia, with a 2050 horizon, the report provides assessment of the taxation of road transport and investigates how tax policy could adapt to declining fossil fuel use in the long term if the objective is to maintain revenues at current levels while taking fairness and efficiency considerations into account.

https://www.oecd.org/tax/tax-policy/tax-revenue-implications-of-decarbonising-road-transport-scenarios-for-slovenia-87b39a2f-en.htm



Around the world: research and statistical releases

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Europe

ITF Transport Outlook 2019

International Transport Forum, (May 2019)

Keywords: International; Modelling and forecasting

The ITF has released ITF Transport Outlook 2019.

Global demand for transport will continue to grow dramatically over the next three decades. But potential disruptions from within and without could significantly change the transport sector. Passenger transport will increase nearly three-fold to 2050, from 44 trillion to 122 trillion passenger-kilometres. Global freight demand will also triple, according to projections published today by the International Transport Forum, an intergovernmental think tank.

The impacts of eleven developments that could significantly disrupt the transport sector were also modelled for the ITF Transport Outlook 2019. The report also examines full disruption scenarios in which several disruptive developments coincide between today and 2050.

A media copy of the ITF Transport Outlook 2019 can be downloaded here: http://wx.oecdcode.org/TlidWpLC

Key Transport Statistics 2019 (2018 Data)

International Transport Forum, (June 2019)

Keywords: International;

Based on the International Transport Forum's quarterly transport statistics database this leaflet is published each year in May. It provides the reader with preliminary 2018 data for more than a dozen selected indicators on three inland transport modes, for ITF member countries. It also presents graphs and a short analysis of the transport activity in the global economic context highlighting main changes over the previous year. Some New Zealand data is given, whilst noting New Zealand is not transporting goods via inland waterways.

https://www.itf-oecd.org/key-transport-statistics-2019-2018data?ct=t(2018_Sept_Newsletter_COPY_01)&mc_cid=5c9a4b88aa&mc_eid=56f140b0e4



National Travel Attitudes Study (NTAS)

Department for Transport, Great Britain (May 2019)

Keywords: Data & statistics; Surveys;

Data on results from the latest National Travel Attitudes Study (NTAS), produced by Department for Transport in the UK, is now available. The survey asked respondents a number of questions in seven areas of interest: Cycling; Climate change; Aviation; Congestion, car driving and the environment; Road safety; Local transport; and Transport and disabilities. This is a companion product of the National Travel Survey (NTS). Whilst the NTS provides a wealth of information on the travel patterns and behaviour of individuals, the National Travel Attitudes Study (NTAS) provides information on public attitudes to travel and transport.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/804685/nationaltravel-attitudes-study-2019-wave-1.pdf

Road traffic estimates in Great Britain: 2018

Department for Transport, Great Britain (May 2019)

Keywords: Data & statistics; Safety

The Department for Transport have released road traffic estimates for Great Britain. Data is broken down by vehicle type, road type, region and time of the day, week, month and year for 2018.

Motor vehicle traffic on Great Britain roads remained similar to 2017 levels (0.3% increase) at 328.1 billion vehicle miles (bvm). When compared to the year 2017:

- car traffic remained broadly stable (increasing by 0.2%)
- the figure of 255.0 billion vehicle miles was a new all-time high
- van traffic grew slightly by 0.9%
- lorry traffic remained broadly stable (increasing by 0.3%)
- the Strategic Road Network increased slightly by 0.7%
- motorways remained broadly stable, carrying one third motorised traffic in England
- 'A' roads saw a 1.4% rise in traffic
- minor road traffic decreased by 1.3%

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/801475/road-trafficestimates-in-great-britain-2018.pdf



Licensed and registered motor vehicle statistics in Great Britain and the United Kingdom for 2018.

Department for Transport, Great Britain (May 2019)

Keywords: Data & statistics; Safety

The Department for Transport have released statistics on motor vehicles that were registered for the first time during 2018 and those that were licensed at the end of 2018.

During 2018, there were:

- 2.9 million vehicles registered for the first time in Great Britain
- 63,000 ultra low emission vehicles registered for the first time in Great Britain

At the end of 2018, there were:

• 38.2 million licensed vehicles in Great Britain.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/800502/vehiclelicensing-statistics-2018.pdf



HubKnowledge

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Sharing transport data, information, research, evidence, knowledge and ideas

There's been a number of Hub events from April through to the end of June:

The Ministry of Transport moved into their new offices on 3 Queens Wharf on 1 April. The offices include a number of rooms that can be used for the hosting of Hub events. We are investigating web conferencing options and hope to be able to broadcast future Hub events soon.

- In April, three presentations were given for "**Road safety: looking ahead for New Zealand**" including Dave Cliff, Chief Executive of the Global Road Safety Partnership (GRSP). A preview of the upcoming new road safety strategy was provided by the Ministry and an overview of the new Crash Analysis System launched in mid-February by the NZTA.
 - o Global Road Safety Dave Cliff
 - o <u>A new road safety strategy</u> James Campbell, Ministry of Transport
 - o Crash Analysis System Mel Smalley and Sandra van der Lith, NZ Transport Agency
- A new report "**Turning the Tide: from Cars to Active Transport**" was launched in late April. The report promoted a significant modal shift from cars to active transport by 2050. Two presentations were given about the report as follows:
 - o Rationale and scene setting Andrew Jackson, Consulting Jackson Ltd
 - <u>Turning the Tide report</u> Associate Prof. Sandra Mandic, Otago University (downloaded the report <u>here</u>)
- **Technology in Transport** A successful event was held on Thursday 23 May at Environment Canterbury in Christchurch. Presentations given at this event can be downloaded here:
 - Findings from the Panel Survey: Transport Sharing and You
 - <u>Autonomous Vehicles and transport outcomes</u> and accompanying think piece:

 <u>http://www.buildingbetter.nz/publications/contestable_research_projects/Autonom</u>
 ous vehicles think piece 2018.pdf
 - Acronyms and modelling in Greater Christchurch
- The **Transport Acoustics Forum** was held in May 2019 which featured a number of presentations (links provided):
 - o Emergency Public Address systems & Human Factors in Road Tunnels
 - Tyre-Road Noise Research CPX in New Zealand
 - Road noise auralisations Communicating noise
 - Korean experience with management of transport noise
 - o CPX road surface noise monitoring in Germany and Switzerland
 - Using OBSI measurements of road surface corrections to improve noise modelling predictions
 - o Tyre-Road Noise Research Validation of NZ
 - o Innovation in individual vehicle noise management
 - o Noise and community complaint SMART Trial
 - o Baypark to Bayfair Rail relocation noise and vibration assessment
 - Transport Evidence Based Strategy
 - National land transport map
 - o Evidential basis for community response to land transport noise



- In June, Dr Rebbecca Lilley from University of Otago presented on **Work-related traffic crash** fatalities in New Zealand. Her presentation can be downloaded <u>here</u>
- Also in June, Stuart Donovan from Veitch Lister Consulting LTD (based in Australia) gave a presentation on model behaviour: the evolution of strategic transport models that can be downloaded <u>here</u>.



Save the Date: The 6th **Transport Knowledge Conference** will be held at the James Cook Grand Chancellor in Wellington on Thursday 5th December.

The conference theme will be "Transport's contribution to wellbeing and liveability".

Be sure to watch for announcement about the call for abstracts that will be made in early July via a website dedicated to the conference.



General websites

Transport Knowledge Hub webpage: <u>http://www.transport.govt.nz/research/transport-knowledge-hub/</u>

Presentations from previous Hub events: <u>http://www.transport.govt.nz/research/transport-knowledge-presentations/</u>

The Transport Domain Plan: <u>http://www.transport.govt.nz/research/transport-domain-plan/</u>

The Transport Research Strategy 2016-2020: <u>http://www.transport.govt.nz/research/transport-research-strategy/</u>

The Transport Research Register: http://www.transport.govt.nz/assets/Uploads/Research/Documents/Transport-Research-Register.xls

Stocktake of Information and Data Sources:

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



Transport Knowledge Hub events

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Webpage: <u>http://www.transport.govt.nz/research/transport-knowledge-hub/</u> Email: <u>knowledgehub@transport.govt.nz</u>

Recent and upcoming events

A fuller events calendar can be found here

Conferences

Event	Registration & details	Key Dates
24th International Clean Air and Environment	Registration: Open	Early bird registrations close 3 July
conference (CASANZ19)	Webpage: https://www.casanz2019.com/	Standard registrations close 31 August
Queenstown		
16 to 18 September 2019		
Trafinz Conference 2019	Registration: Open from August 2019	Abstracts close on Monday 10 June
Claudelands, Hamilton	Webpage: https://www.trafinzconference.co.nz/	
10 to 13 November 2019		
Transport Knowledge Conference 2019	Registration: Open from early August	Abstracts open: Early July
James Cook Hotel, Wellington	Webpage: http://www.transportknowledgeconference.nz/	Registrations open: early August
5 December 2019		
Government Economics Network (GEN)	Registration: TBA	
Conference 2019	Webpage: https://gen.org.nz/gen-2019-annual-conference/	
Te Papa, Wellington		
6 December 2019		

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