Freight Preferences

Golden Triangle Route Preference Study 2013 to 2015

Ministry of Transport, February 2016

The purpose of this study is to identify the route preference of commercial/freight vehicles travelling between Auckland and Tauranga. The study has been undertaken using commercial vehicle GPS data hosted and interrogated using Beca TeamView Clarity bespoke software. The software makes it possible to identify aggregate statistical information on the use of the road network, however, it is not possible to provide information linking this data back to specific vehicle operators. The study was undertaken from a sample of 124,000 observed commercial vehicle trip movements, captured at the various screen lines. These movements were identified from March 2013, 2014, and 2015.


Contributed by: Andrew de Montalk

Funding and charging

Road user charges highlights from the 2015/16 financial year

Ministry of Transport, July 2016

Revenue from road user charges (RUC) totalled $1.6 billion (up from $1.48 billion) in the 2015/16 financial year. This reflected an increase in RUC rates on 1 July 2015 and a 6.6 percent increase in light RUC volume (vehicles with a gross vehicle mass of 3,500kgs or less). Light diesel vehicles now account for 36 percent of total RUC revenue.

While heavy RUC revenue increased by 5 percent (due to increased RUC rates), overall volume of heavy vehicle kilometres travelled was flat compared to the previous year (-0.19 percent). One
interesting point is there was a 57 percent increase in use of 5-axle trailers, while there was a decline in use of 2 and 4-axle trailers. This suggests that the heavy freight industry is re-configuring their vehicle fleet to take advantage of the productivity benefits of High Productivity Motor Vehicles such as the 50MAX (pictured below).


Contributed by: Jonathon Luo

Evaluation of the new road user charges system – cycle 3

Ministry of Transport, October 2016

In 2012, the Road User Charges Act 2012 came into effect, replacing the Road User Charges Act 1977. The new system saw a move from operator-nominated road user charges (RUC) weights to fixed RUC weights determined by vehicle type.

At the time of the changes, the Government agreed to evaluate the new RUC system in three cycles. Cycle one took place shortly after the new system had been implemented, focusing on the development and implementation of the RUC changes, and, in particular, the early and immediate impacts on both the users of the system and those who administer and enforce the system. The second cycle built on the findings from cycle one and took place at a time when the new RUC system had been operating for approximately 22 months. Cycle two focused on the changes at a systemic level and examined the emerging outcomes achieved through the system changes.

Cycle three of the evaluation has just been completed, three and a half years after the implementation of the new system. The final cycle of evaluation took a summative approach, aiming to make definitive judgments on the success (or otherwise) of the new RUC system. The cycle three evaluation report should be available on the Ministry's website in the coming month.

Contributed by: Jonathon Luo

Revenue, Finance, Pricing and Economics

Transportation Research Record Volume 2597, October 2016

TRB's Transportation Research Record: Journal of the Transportation Research Board, No. 2597 consists of 16 papers that explore revenue, financing, pricing, and economics, including:

- Updating State and Local Highway Cost Allocation and Revenue Attribution: A Case Study for Indiana
- Development of a Fuel Consumption and Mileage Allocation Model to Support Mileage-Based User Fee Research in Washington State
- Integrating Automated Toll Discounts into a Real-Time Ridesharing Program
- Impact of New Tolls on Existing Roadway Facilities: Hampton Roads, Virginia, Experience
- Governance of Public–Private Partnerships and Infrastructure Delivery: Case of the Milan, Italy, Metro Line M4
- Illustration of a Framework for Benefit–Cost Evaluation of Highway Concession Proposals
- Economic Analysis of 65 mph Speed Limits on Rural Highways
- Market Penetration Model for Autonomous Vehicles on the Basis of Earlier Technology Adoption Experience
- Importance of Recognizing Locational Differences in Assessing the Impact of a Road User Charge: Oregon Case Study
- Value of Travel Time: To Differentiate or Not to Differentiate?
- Price Elasticity of Demand on the High-Speed Rail Lines of Spain: Impact of the New Pricing Scheme
- Integrating Multiple Economic Analysis Methods for More Effective Decision Making: Three-Dimensional Framework
- Economic Analysis of Freeway Speed Limit Policy Alternatives
- Activity-Based Computation of Marginal Noise Exposure Costs: Implications for Traffic Management
- Renewing Trucking's Infrastructure for the 21st Century

http://trrjournalonline.trb.org/toc/trr/2597/

Contributed by: Joanne Leung

Road Engineering

Human cut-outs with painted-on hi-vis colouring at Transmission Gully

Dominion Post, 15 July 2016

Recently just north of Paekakariki, my attention (from the passenger seat!) was attracted by person-shaped cut-outs standing in a Transmission Gully construction site. The Dominion Post and the Transmission Gully construction team have articles showing the cut-outs and the same concept has been used in Brisbane. The cut-outs have been positioned over sensitive monitoring equipment which will be in place for extended periods and machine operators must continuously be aware of and avoid. Being shaped like people, the cut-outs apparently attract attention more effectively than other shapes. There are many studies of how our brains particularly respond to seeing human faces. There seem to be fewer studies of our response to human bodies but there is evidence our brains also have a special system for response to seeing human bodies compared with seeing other shapes and objects – such as road cones or posts which the Transmission Gully contractors might otherwise have used.

Contributed by: Tiffany Lester

Road Safety

America’s road-safety record is the worst in the rich world

The Economist, September 5, 2016

“By most counts America has the worst road-safety record in the rich world. Its rate of 10.9 deaths per 100,000 people per year is almost twice as high as Belgium’s, the next-worst well-off country, and roughly level with that of Mexico. One of the main reasons that the United States sits atop this grim ranking is because Americans drive far more often than the rich-world average. When miles travelled are taken into account, America was actually a bit safer than Japan, Slovenia and Belgium in 2013 (the most recent year with comparable data). In addition, the United States also has a relatively high share of rural roads, which often have poor lighting, road markings and safety barriers.”
for more information please see USA traffic fatalities up sharply in 2015

Contributed by: Stephen Evans

Medication use and the risk of motor vehicle collisions among licensed drivers: A systematic review

Accident Analysis & Prevention Volume 96, November 2016, Pages 255–270

With our aging population, understanding the effect of medications on road crash risk may become more important. This review concludes that, while the majority of the 53 medications investigated did not significantly raise crash risk, several commonly prescribed medications were associated with a decreased driving ability and an increased risk of crashing. The associations between specific medication use and increased risk are complex with issues such as tolerance with long-term use. Check your medication instructions/advice before driving.

Contributed by: Wayne Jones

Motorcycle helmet use and the risk of head, neck, and fatal injury: Revisiting the Hurt Study

Accident Analysis & Prevention Volume 91 June 2016, Pages 200–207

Most studies find strong evidence that motorcycle helmets protect against head injury, but a small number of controversial studies have reported that helmet use may increase neck injuries. This study reanalyses the data from the most commonly cited paper and concludes “any reasonable analysis of these data would have concluded that helmet use was strongly protective against fatal injury, strongly protective against head injury, and weakly to moderately protective against neck injury”. Strong words for a scientist. The analysis indicates that helmets reduce the occurrence of neck injury by an estimated 37%, head injury by 60%, and fatal injury by 56%.

Contributed by: Wayne Jones

Smartphone apps

Transport as a service; It starts with a single app

The Economist, 01 October 2016

This article discusses new privately-developed services that are using smartphone apps to integrate all modes of transport. The app can show the user a range of ways to get where they want to go, which may involve using two or more modes, including vehicle sharing, traditional PT, bicycle sharing,
and on-demand bus/van services. The apps can provide real time schedules, reflecting any congestion and service disruptions. Eventually, the apps are hoping to also offer integrating ticketing and billing. The article argues that this type of service should be able to provide users with a high-level of convenience, while relieving traffic congestion and allowing cities with less space devoted to parking and more space devoted to green space and housing.


Contributed by: Ralph Samuelson

Transport Spending

Does the average Australian family spend up to $22,000 every year on transport?

It is really important to know how much people spend on travel and hence, the scale of any regulatory (or other) interventions which may affect this. But calculating how much is spent is a complicated exercise and people can get different answers depending on what is chosen. This article looks at this from an Australian context, fact checking a claim that the average Australian family spends up to $22,000 (AU) per year on transport. A clear difference is noted between average and typical, and the effects of location are discussed.


Note: New Zealand statistics on household transport spending are available via the New Zealand Household Economic Survey


Contributed by: Jennifer McSaveney

Around the world: research and statistical releases

Research Releases

NZ Transport Agency Research Newsletter – issue 33, September 2016

The NZTA research newsletter is published quarterly by the NZ Transport Agency. Its purpose is to profile research funded through the Transport Agency’s Research Programme, to act as a forum for passing on national and international information, and to aid collaboration between all those involved. In this edition - Making smart use of real time information through crowd sourcing; How passengers value public transport attributes and improvements; Developing a Regional Land Transport Demand Model; and Improving cyclist safety on rural roads.


Contributed by: Wayne Jones
Shared Mobility and the Transformation of Public Transit

*Transport Research Board: Transit Cooperative Research Program (TCRP) Report 188*

“Shared Mobility and the Transformation of Public Transit examines the relationship of public transportation (including paratransit and demand-responsive services) to shared modes, including bike-sharing, car-sharing, micro-transit, and ride-sourcing services provided by companies such as Uber and Lyft. The report also explores issues and opportunities and challenges as they relate to technology-enabled mobility services, including suggesting ways that transit can learn from, build upon, and interface with these new modes.”

[See link here](internal file)

Contributed by: Joanne Leung

**Toll roads in Australia**

*Bureau of Infrastructure, Transport and Regional Economics (BITRE), September 2016*

This paper provides an overview of toll roads in Australia based on available information. It covers a range of subjects including information on traffic performance, industry structure and benefits of toll roads and future challenges.


Contributed by: Stephen Evans

**Statistical Releases**

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**Great Britain:**

**Great Britain vehicle licensing statistics: April to June 2016**

A record number of new ultra low emissions vehicles (ULEVs) were registered in the second quarter of 2016.


**2015 National Travel Survey: Department for Transport, Great Britain**

*Department for Transport, Great Britain – 20 September 2016*

The 2015 annual data release for the Great Britain National Travel Survey (NTS).


**Reported road casualties in Great Britain: Estimates for accidents involving illegal alcohol levels: 2014 (final) and 2015 (provisional)**
The figures confirm that around 13% of all road deaths in 2014 were drink drive related, again unchanged from a year earlier.


**Australia**

**Australian road freight estimates: 2016 update**

*Bureau of Infrastructure, Transport and Regional Economics (BITRE), September 2016*

The Information Sheet provides revised estimates of road freight by State, capital city and rest-of-state.


**International Road Safety Comparisons—Annual**

*Bureau of Infrastructure, Transport and Regional Economics (BITRE), September 2016*

This report presents tabulations of road deaths and road death rates for Organisation for Economic Co-operation and Development (OECD) nations and Australian states and territories.


**Road Trauma Australia—Annual Summaries**

*Bureau of Infrastructure, Transport and Regional Economics (BITRE), August 2016*

This annual bulletin contains information on fatal road crashes, deaths and death rates per population, registered vehicle and vehicle kilometre travelled.


**USA**

**USA traffic fatalities up sharply in 2015**

*National Highway Traffic Safety Administration, USA - 29 August 2016*

The United States lost 35,092 people in traffic crashes in 2015, ending a 5-decade trend of declining fatalities with a 7.2% increase in deaths from 2014. The final data released today by the U.S. Department of Transportation’s National Highway Traffic Safety Administration showed traffic deaths rising across nearly every segment of the population.
Events and News

Upcoming Events

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<thead>
<tr>
<th>Transport Knowledge Conference 2016</th>
<th>Customer Focussed Transport</th>
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<tr>
<td>Thursday 10 November 2016</td>
<td>This full day conference (9am – 3pm) will take a customer perspective to look into transport issues and solutions.</td>
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<tr>
<td>James Cook Hotel, Wellington</td>
<td>Do we understand the transport choices and preferences of users, communities and society? How do we establish evidence and manage uncertainties around changing behaviours and needs?</td>
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<tr>
<td>To register: <a href="mailto:conference@transport.govt.nz">conference@transport.govt.nz</a></td>
<td>The four knowledge themes as outlined in the Transport Research Strategy and Transport Domain Plan will guide our session themes, to help tie presentations with the knowledge needs, gaps and priorities into the future.</td>
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<tr>
<td>By Friday 04 November</td>
<td>More information: Website link</td>
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