



Traditional fixes not enough to solve transport crisis

Traffic congestion: a global issue

As populations expand and national incomes increase, the number of cars on the road is steadily rising. Car ownership is no longer seen as a luxury, but a right and a necessity. Unfortunately, the rising number of cars results in a growing number of problems, including traffic congestion, pollution, higher fuel prices and increased driver stress.

During 2010, IBM conducted the Global Commuter Pain Survey, interviewing 8,192 motorists in 20 major cities around the world. What is instantly clear from looking at the findings is that chronic traffic congestion is a global issue that is worsening over time.

Traditional solutions, such as widening existing roads or building new ones, will no longer be enough to fix this transport crisis. We need more sustainable, technologically smarter solutions.

How does Australia measure up?

Complaining about traffic congestion is a national pastime in Australia's major cities. But is the situation really as bad as we think, especially compared to other countries? And what solutions can help manage traffic congestion?

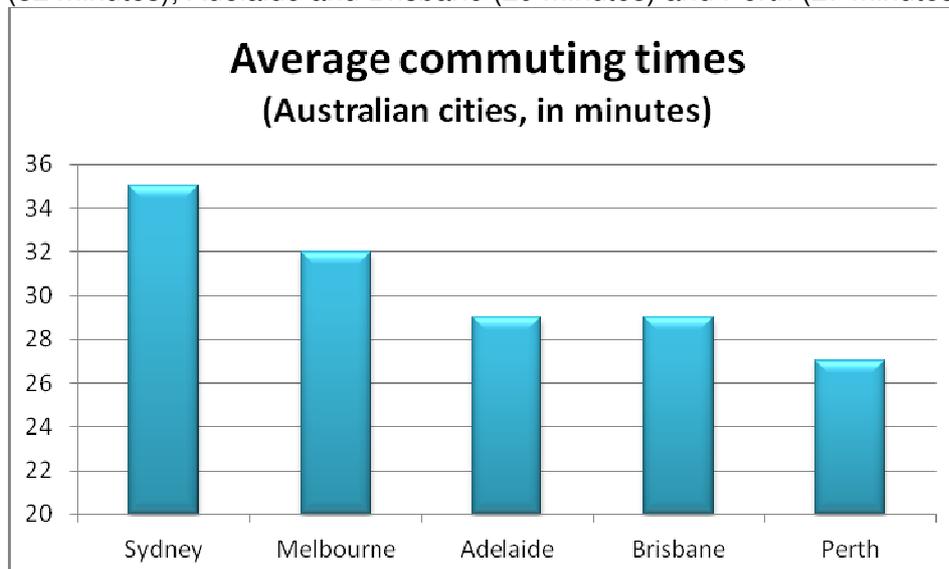
The Australian Commuter Pain Study was conducted in October 2010 and included interviews with 1,556 drivers from Adelaide, Brisbane, Melbourne, Perth and Sydney.

The findings: focus on Australia

A large proportion of Australians surveyed said driving was the main mode of transport to and from work or school – this included 70% of drivers in Perth, 69% in Brisbane, 67% in Adelaide, 62% in Sydney and 58% in Melbourne.

Around seven in ten Australian motorists surveyed said they drove every day. In Australia's larger cities, the train is also a reasonably popular way of getting to work or school – 18% of commuters in Sydney and 14% in Melbourne said they took the train.

The daily commute in Australia's biggest cities is longer and more painful than ever before. Commuters in Sydney face the longest average journey time (35 minutes), followed by Melbourne (32 minutes), Adelaide and Brisbane (29 minutes) and Perth (27 minutes).





Most Australian drivers (82%) find aspects of their commute frustrating, citing factors such as stop-start traffic (57%), low speed (36%), aggressive/rude drivers (30%) and unreliable journey time (26%). Traffic delays are a familiar experience for most Australian drivers. One in three (35%) reported having been stuck in traffic for one hour or more in the past three years.

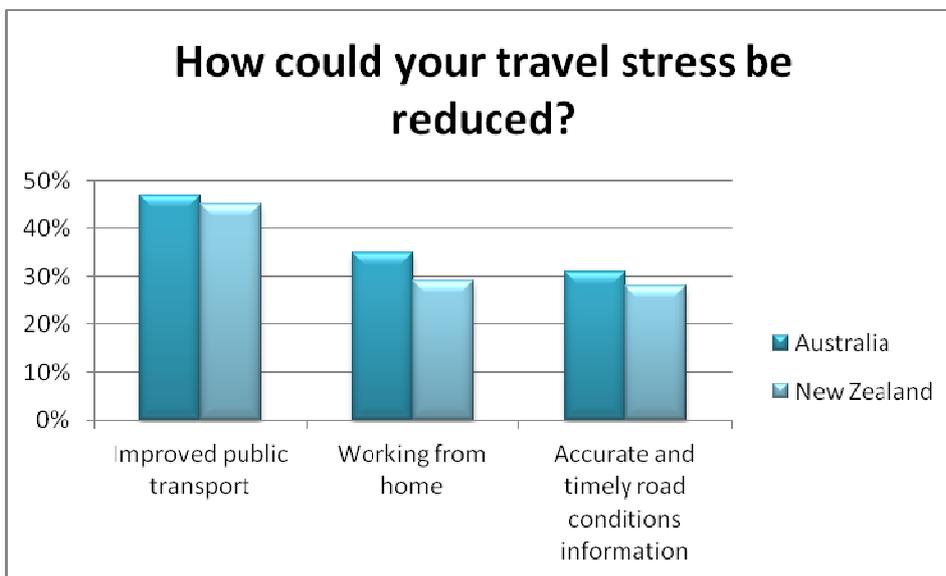
Brisbane drivers are the most stressed, with 90% of respondents reporting increased stress due to traffic, followed by Adelaide (81%), Melbourne (78%), Sydney (74%) and Perth (73%).

Around half (48%) of Australian drivers said traffic had become worse in the past three years, with 15% reporting it was a lot worse. On the other hand, as many as 36% felt it remained the same and 16% said it had improved. However, this may be due to local factors; drivers in Brisbane (55%) and Sydney (53%) were more likely to say traffic had become worse than those in Perth (37%).

What's the solution?

Our roads and public transport infrastructure have failed to keep pace with continuing economic growth. As populations expand, particularly in big cities, the number of cars on the road will continue to increase.

However, these studies paint a picture of opportunity for innovation and technology in Australia. Encouragingly, drivers in Australia believe commuter stress could be significantly reduced by improving public transport, providing accurate and timely information on road conditions and introducing greater flexibility to work from home.



As well as upgrading existing roads and public transport systems, it's time for governments and business to work together to look at how innovation and technology can help build smarter systems in Australia.

The recent proliferation of data-gathering devices on our roads, combined with advances in business analytics, mean transportation officials can now quickly collect and analyse large volumes of information on traffic conditions.



Traffic controllers can then extract useful insights to actively manage transportation networks, minimising delays and congestion. For example, they could change traffic signal timings, dynamically adjust road tolls and provide incentives to change commuters' mode or time of travel.

Innovation in action

In Australia, new ticketing systems such as Brisbane's *go* card and Melbourne's *myki* allow commuters to travel seamlessly across multiple modes of transport. These cards can be easily topped up with extra credit, and the fare automatically deducted from the card balance at the end of each journey.

With the introduction of free-flow tolling across Queensland, toll booths on motorways across the state are being progressively removed, and tolls are instead calculated through electronic tags or using video technology to capture number plate images. This innovation has already improved travel times and reduced congestion for drivers in Queensland.

Sydney Ferries' Ferry Operations and Customer Information System will use global positioning system (GPS) devices at Sydney's 43 wharves to give commuters real-time information about the location of ferry services and departure and arrival times. Commuters will also be able to register to receive SMS updates about delays or cancellations.