



Insights

Topical commentary on the Auckland economy

July
2017

Getting smarter about transport

- Road congestion costs Aucklanders \$250 m to \$1250 m a year.
- Only expanding the roading network is unlikely to solve congestion.
- A multi-pronged approach is needed including more public transport provision and uptake; increased flexibility from employers; and traffic demand management.

Congestion on our roads is increasing as the city grows rapidly. Estimates of what congestion costs Aucklanders depends on what comparator you use: either one of free flowing traffic or one of full road capacity utilisation. A New Zealand Transport Agency (NZTA) report using these two benchmarks estimates costs of congestion in Auckland at \$250 million to \$1250 million a year.¹

More time spent in congestion means less time for other things that are important to us – work, play,

shopping and spending time with family and friends. Unsurprisingly, a large number of submitters on the latest Annual Plan consultation have said they would like more to be spent on transport in Auckland in order to improve its performance.

This is a challenge we need to overcome together. Tough questions include what should we prioritise in terms of our investment in Auckland's transport system? What are the city's options to tackle these growing pains? How do we ensure that the investment we make today will best improve Auckland's transport performance, both now and in the future?

Build more and bigger roads?

International studies have shown that expanding the roading network, either by building new roads and/or widening existing roads, typically does not keep up with the increase in the number of private vehicles because of induced demand. For instance, Durant and Turner have shown a near one-to-one relationship between expansion of highway

¹ Wallis, I, and Lupton, D. 2013. "The Costs of Congestion Reappraised." NZ Transport Agency research report 489.

capacity and the kilometres of car travel in the US.²

In summary, the more roads you build, the greater the incentive there is for people to drive on them.

But there are also other challenges. In the case of Auckland, geography makes it increasingly difficult and costly to add motorway capacity. Land availability constraints mean that engineering costs are escalating as most “easy” roading projects have already been completed. And because roads are funded by both the tax payer and the rate payer, we are subject to competing demands for roading in other parts of the country as well.

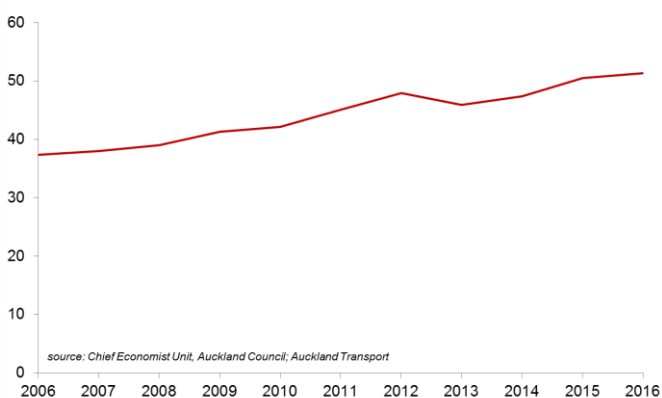
In other words, an approach focused on simply building more roads is unlikely to effectively address congestion.

Increase public transport?

A long term sustainable solution must include more public transport.

Public transport uptake in Auckland recently has been growing strongly, especially on rapid busways and trains, and even on a per-capita basis. People respond to provision of a service that is faster, more reliable and more frequent. In the longer-term, Auckland is embarking on an ambitious programme of public transport improvement that includes more busways, the City Rail Link and light rail.

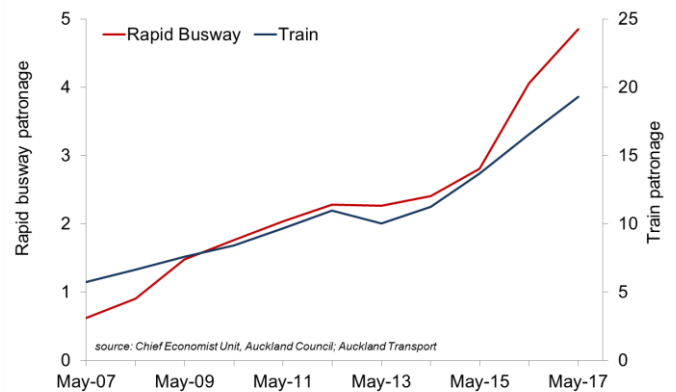
Annual public transport trips per per person, June years



Public transport normally cannot be funded by the fare box alone. The net deficit on public transport operations in Auckland for 2016-17 is expected to be \$323 million. To some extent, public transport provision and uptake is

chicken and egg – greater population densities and higher rates of use make public transport provision more financially viable, and more viable routes are more likely to be get approved for funding. This means that the more support Aucklanders show for public transport use, the more we will be able to deliver in future.

Bus and train patronage (in millions)



Make different business decisions?

Solving Auckland’s congestion is not just a challenge for individual road users, council or central government to tackle. Businesses can and should also play a role. There are at least two things businesses can consider to reduce congestion and commute times for workers.

- **Be more flexible:** Work flexibility is not a new concept. Modern technology makes more flexibility possible, but uptake has been limited. In times when skills are hard to find, employees may find employers who allow more flexible working times (and thus reduced commute times) more attractive.
- **Consider more business locations:** Businesses tend to locate in clusters to take advantage of being near suppliers, customers and skilled labour. But there may also be some businesses that could just as easily be located in other parts of the city without any loss in productivity. We could encourage such business location decisions as they could open up more employment opportunities closer to where people reside and reduce the need to travel long distances for work.

² Duranton, G, and Turner, M. 2011. "The Fundamental Law of Road Congestion: Evidence from US Cities." American Economic Review, 101(6): 2616-52.

Make better use of existing road capacity?

There are several ways to further incentivise uptake of public transport and car-pooling and to spread the use of roads across the day. These could include more T3 and rapid bus lanes on roads, with reduced lanes for other vehicles. Another approach would be to increase parking charges in the city centre – something that Auckland Transport's Parking Strategy has sought to achieve. And as we said earlier, when more people start using public transport, it gets more financially viable to provide.

A more direct way to incentivise more efficient use of our roads – especially at peak-times when congestion is at its worst – is some form of smarter transport pricing. Smarter pricing would encourage people to change their travel behaviour through using the roads at non-peak times, or through switching to public transport, while those who continue to use the roads pay for the benefit of less congested roads. The Auckland Transport Alignment Project showed that such changes could make a step change in Auckland's transport performance.

Recently Auckland Council and central government have announced a feasibility study to evaluate smarter pricing options.

Making smarter transport pricing work

However, there are at least two pre-conditions to making any policy that wants to smooth road use work:

- **Good transport alternatives:** Better public transport (frequency, speed, and coverage area) would entice more commuters out of their cars, freeing up the roads for those who continue to use them. It would also mean that road prices required to get a certain volume of traffic off the roads would be lower.
- **Impact on equity:** Any road pricing scheme must address any differential impacts it might have on different socio-economic groups, in particular those who may not have good alternatives to car travel.

In summary, tackling Auckland's congestion challenge will require a multi-pronged approach. It needs to include more public transport provision, households committing to further increase public transport use and carpooling, businesses making different choices on flexibility and location, and council and central government supporting behaviour change via demand management.

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