Congestion Pricing - Can it Ease Auckland's Traffic Problems?

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Anyone who has spent time on the roads of Auckland during rush hour will be familiar with one feeling: frustration. Auckland is by no means unique, as traffic congestion is endemic to many cities the world over. Unfortunately for the people of Auckland, it's not a problem likely to let up anytime soon: Statistics NZ estimates that Auckland will remain the country's fastest growing region, accounting for 60% of the country's population growth over the next 20 years. More people mean more traffic, and more traffic will mean more frustration and delays unless there is a commensurate expansion in the capacity of the road network.

More roads and better public transport are the two general responses to traffic congestion but if these aren't working, what else can we do? Ask any restaurateur how much food they would need if they were giving it away for free. They'd probably tell you something along the lines of, "A lot. More than

we could handle". But if you ask any restaurateur about trying to run their business, you'll hear that not quite so many people come through the door when they charge for the food. So if our roads have more traffic than they can handle, how about we charge people a little bit extra to use them?

Swedish economist Jonas Eliasson holds up Stockholm as a prime example of how congestion pricing may well be a solution: charge people for using the roads when the roads are busy. Stockholm is a city surrounded by water with a lot of bridges perfect for bottlenecks and congestion when things get busy. In an attempt to solve this problem the Swedish government levied a tax on most motorists entering and exiting the city to encourage a more even traffic flow. Travel remains free overnight from 6.30pm to 6.30am and on weekends and public holidays but a small fee equivalent to around NZ\$1.50 to \$3.50 is charged during the day depending on the time. The congestion charge seems to have achieved its objectives with traffic during rush hours reducing by about 20% after implementation (see Figure 1 below).

The fee was introduced in 2006 and immediate results are clearly evident with the number of cars on the roads falling sharply. In 2007, the congestion charge was removed and the traffic returned. However, since then the relatively small fee has been introduced permanently in Stockholm and traffic flows during rush hour have remained lower. This 20% reduction has been enough to significantly improve traffic flows in the city. Seven years on from the introduction of the initial trial in January 2006 the congestion tax is widely considered a success.

500'000 400'000 200'000 100'000 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Figure 1: Traffic count during rush hour

The Stockholm congestion tax was inspired by the success of the London congestion charge introduced in February 2003. Currently most cars entering London are charged a £10 (NZ\$19) fee between 7am and 6pm, Monday to Friday. Although much debate has surrounded this charge there is no doubt about its ability to reduce car use in central London.

Could a similar system provide a solution to our own congestion concerns? Why not? The Ministry of Transport (MoT) conducted an Auckland road pricing study in 2008 (available on the MoT website). The study did not seek to make recommendations but concluded that if a congestion scheme were introduced in Auckland fewer trips would be generated, public transport use and average speeds would increase, and there would be less congestion on the roads.

The scheme was expected to raise \$150m in year one, a significant boost to the budget available for improvements to Auckland roads and public transport. In response to concerns about affordability and social equity the report states that these were not large and notes that the majority of those affected had a viable public transport alternative available. Placing public transport on a more level playing field will only encourage its uptake. As an added bonus, reduced traffic in the city is likely to have a positive impact on air quality in city.

Eliasson explains that there was fierce opposition to the Stockholm congestion tax prior to its introduction: 70% of the local population were against the idea. Interestingly, as people experienced the benefits of the system, support has risen. In 2011 70% of the population of Stockholm were in favour of the tax. This is important to keep in mind considering a similar level of dissent with the Auckland congestion scheme. It's easy to be critical in advance, but the population of Stockholm has experienced the system's success. As Eliasson highlights, it is astounding that 70% of people are in favour of continuing to pay for something that used to be free. This is the power of introducing the right incentives. Although setting the congestion fee at an appropriate level would be difficult surely some modest fee is better than nothing, particularly when the technology exists to administer the scheme in a relatively low cost way. Could we do the same in Auckland to try to relieve that all-too-familiar rush hour congestion?

Link to video: http://www.ted.com/talks/jonas eliasson how to solve traffic jams.html

Link to MoT study:

http://www.transport.govt.nz/land/Documents/Auckland%20Road%20Pricing%20Study%202008.pdf

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