WORKING PAPER

The Congestion Question

Could road pricing improve Auckland's traffic?

Workstream 6

Revenue

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Working draft vD













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1 Context

The objective of The Congestion Question project, as set out in the terms of reference, is to improve network performance through congestion pricing to manage demand. Raising revenue is not the purpose of the scheme; other forms of taxation are more efficient and less costly to administer if the sole objective is to raise revenue¹. If pricing is seen as a revenue generation tool, rather than an effective way of reducing congestion, there is a strong risk that it will not have a public mandate to proceed.

However, congestion pricing is by its nature a revenue source, as congestion pricing works by exposing road users to costs that are currently externalised to achieve behaviour change.

Transparency on the use of revenue generated is critical. Overseas, use of revenue has been shown to be important in getting buy-in from the public for congestion pricing².

The purpose of this paper is to raise considerations that will need to be addressed when subsequent recommendations on the use of revenue generated by any future congestion pricing scheme are being made.

1.1 How is transport currently funded?

In New Zealand, the main source of transport funding are: fuel excise duties (FED) and road user charges (RUC), which are collected by central government (plus smaller contributions from vehicle registration and licensing fees), and rates collected by local government. FED and RUC go into the National Land Transport Fund (NLTF) which funds road, rail and public transport across the country. Crown funding, public transport fares and development contributions can also be sources of funding in certain instances.

A regional fuel tax (RFT) of 10 cents per litre (plus GST) was introduced in Auckland on 1st July 2018. The RFT scheme is projected to generate approximately \$150 million of revenue per annum, or \$1.5 billion over the 10 year period it is in place.

State highways are fully funded from the NLTF. Local roads are roughly half funded from the NLTF and half from local government budgets (largely through property rates). Funding arrangements for public transport vary depending on the project.

1.2 What counts as revenue?

We expect that the revenue collected from congestion pricing would cover its operating costs, i.e. the operation of the scheme will be self-funding. This is in line with international schemes, where operating

² Review of international road pricing initiatives, previous reports and technologies for demand management purposes, D'Artagnan Consulting 2017









¹ Social Impacts of Time and Space-Based Road Pricing, International Transport Forum Roundtable report, 30 November – 1 December 2017

costs accounted for between 15 - 40% of the total revenue raised. Operating costs include those incurred from maintaining infrastructure, operating enforcement schemes, and transaction costs from the collection and processing of payments.

In terms of other costs associated with a scheme, such as the initial capital costs and depreciation/renewals, transport projects in NZ generally adopt the pay-as-you-go (PAYGO) approach, so it can be expected that any congestion pricing scheme would be treated the same. However, as congestion pricing will generate a revenue stream, capital costs could be treated differently – this would need to be agreed as part of planning for implementation.

The rest of this paper discusses considerations for the net revenue that remains once the operating costs are covered.

2 Overseas examples

Different jurisdictions have taken different approaches to how revenue is used, depending on local conditions and the objectives of the scheme. This section summarises relevant information about existing or proposed schemes as outlined in the *Review of international road pricing initiatives* that formed part of The Congestion Question (TCQ) Phase I investigation.

2.1 Singapore

The net revenues from Singapore's scheme are returned to general Government revenue. The introduction of Singapore's Electronic Road Pricing scheme in 1998 was accompanied by reductions in vehicle taxation (transferring charges from owning to using a vehicle) and short-term discounts for taxis and commercial vehicles.

Singapore's government has a long-standing set of transport policy objectives to promote public transport, manage road usage and acknowledge the social role of transport. The fact that prices are adjusted to deliver target operating speeds also helps to reinforce that the scheme is about optimising road network performance and not revenue raising.

2.2 London

Net revenues are hypothecated for transport purposes by Transport for London (the local government agency responsible for London's transport system). In the first five years of the scheme, around 80% of net revenues were applied to improving bus infrastructure and services.

2.3 Stockholm

Revenues from Stockholm's cordon scheme go into a hypothecated transport fund for road and public transport improvements.





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A change in government meant that revenue that had originally been intended for public transport was instead used to fund a series of major road projects around Stockholm, including extensions to a major orbital route (that now forms part of the cordon), and more recently a major north-south bypass. This may have helped to increase public acceptability for the scheme, as there was a clear link between the use of revenues and benefits to road users.

2.4 Gothenburg

The primary purpose of Gothenburg's scheme is to raise revenue for a package of transport investments (the West Swedish Agreement), rather than manage demand. A net revenue target of NZ\$102-118m was identified before implementation.

The major project in the West Swedish Agreement is the Västlänken (West Link) underground railway tunnel, designed to restructure Gothenburg's main railway station from a terminus to a through station. This is intended to improve travel times for regional and intercity rail services, rather than commuter services. Other projects include a new road tunnel under the River Göta and many smaller road and public transport projects.

The transport projects funded by revenues collected in Gothenburg contributed to low public acceptability, as there was little public support for the high costs of the West Swedish Agreement, and the main projects were not due to be completed until 2020 so those who were paying were not realising the benefits. In addition, the economic merits of the Västlänken project has been widely criticised by the Swedish National Audit Office.

2.5 Manchester

Manchester developed a congestion charging scheme that was not implemented after a referendum saw nearly 80% of people voting against the proposal.

Although the Manchester scheme would have significantly reduced travel times, the benefits of the scheme were not well communicated, and the focus instead became on the use of revenue. The proposal was to use net revenues to fund road and public transport improvements, but most publicity focused on the public transport aspects, meaning the benefits from those who would pay the charge were not well articulated.

2.6 Overall findings

The evidence from overseas use of revenue shows a range of approaches that could be adopted for Auckland. It will be important to take a targeted approach with a good understanding of the issues that are relevant for Auckland. However, some key takeaways are:

- It is important to be transparent on how the revenue is used, in order to gain public acceptance.
- The majority of schemes dedicate net revenues to transport projects undertaken in the location of the schemes. A smaller number use revenues to offset existing taxes or charges.



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- Investment into public transport improvements is widespread and can help to improve alternatives to paying the charge however, there is also a risk that the road users who are paying the charge do not see the benefits from reinvestment in public transport projects.
- Any transport investments funded by the revenue should have broad support and positive economic benefits to maximise the chance of congestion pricing gaining public acceptance.
- It is important to focus the public discourse on the benefits from reduced congestion and travel time savings, not just on the revenue gained.

3 Considerations for Auckland

There are a number of key questions that will need to be considered before decisions around revenue can be made.

Should revenue be reinvested or redistributed?

Broadly, there are two (non-exclusive) options for how the revenue raised from a congestion pricing scheme could be applied: Firstly, it could be reinvested by central or local government, or alternatively it could be redistributed:

- Reinvestment could be hypothecated to Auckland (which would align with most international examples) either to general transport budgets or more specifically to areas impacted by the scheme and/or specific projects.
- Redistribution could be:
 - targeted to those directly impacted by the scheme, such as payments to refund or offset parts of the charges or vouchers for public transport fares
 - indirectly redistributed through reductions in current transport charges such as fares, vehicle registration fees, or the Auckland regional fuel tax
 - blanket redistribution equally to all Aucklanders (similar to the Vector electricity dividend)
 - o general reductions in other taxes (such as income or GST).

What is the role of revenue in addressing social/distributional impacts?

No international schemes have explicitly addressed distributional impacts, but Auckland's lower public transport mode share, geography and demographics mean that this could be an important consideration. Factoring in use of revenues is crucial to understanding the equity impacts of a scheme³.

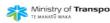
Revenue could be used to address social impacts as follows:

• reinvest in public transport or other alternatives to provide more people with an alternative to paying the charge, helping to reduce the financial impact (this was a recommendation from the

³ Is Congestion Pricing Fair? Consumer and Citizen Perspectives on Equity Effects, Jonas Eliasson, KTH Royal Institute of Technology CTS Working Paper 2016:13, pp 9



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International Transport Forum roundtable report for cities with insufficient public transport provision)

- redistribute in the form of reductions to progressive taxes (such as income or rates) this could be used to counterbalance any negative distributional impacts from pricing
- target redistributions to those identified as being negatively affected by the scheme, which could involve transfers or reimbursements to those on low incomes who incur the charge (for example through the Community Services Card or the Working for Families scheme).

Revenue redistribution is not the only means by which to address adverse social impacts, as they can also be mitigated through careful scheme design and the tariff policy, however they are likely to provide a complementary tool.

How do the options for use of revenue impact on the integrity of the scheme?

It is important that how the revenue is used does not overly undermine the effectiveness or integrity of the scheme. For example, the objective of the scheme is to reduce congestion, so using the revenue in a way that undermines that (for example, by offsetting other charges that still encourage people to drive at peak times) could be counterproductive.

What are the impacts on the national funding system?

Congestion pricing might have impacts on the national land transport funding system. In particular:

- people might travel less (either through avoiding some trips or travelling shorter distances), which would reduce the total FED and RUC collected
- additional revenue raised by a congestion pricing scheme presents potential options to supplement national land transport funding (as discussed earlier).

What is the interaction between congestion pricing and regional fuel tax?

Decision-makers will need to consider the impacts of introducing any congestion pricing scheme in Auckland on the current RFT.

Although the RFT and congestion pricing have different objectives – the former being to raise revenue for transport investment, the latter being for demand management –users who face more than one will still face cumulatively higher costs for transport. Alternatively, depending on the nature of the scheme and the net revenue that is raised, congestion pricing could potentially replace or offset the RFT in Auckland.

4 Next steps

Use of revenue, although not the primary purpose of introducing a congestion pricing scheme in Auckland, may be critical for gaining public acceptance and for addressing any social and distributional impacts.

Further considerations on the use of revenue will be supported by work including:

• transport modelling - to understand the potential revenue associated with different options









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- development of complementary measures and mitigations
- results from the social analysis of pricing options
- planning for implementation of congestion pricing.

Final decisions will be made as part of the overall decision on whether to proceed with implementing congestion pricing in Auckland by the Minister of Transport, Minister of Finance and Mayor of Auckland as per the terms of reference.





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