Submission

By

THE NEW ZEALAND INITIATIVE

To the Transport and Infrastructure Committee

on the

Inquiry into congestion pricing in Auckland

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1. INTRODUCTION AND SUMMARY

1.1 This submission on the Inquiry into congestion pricing in Auckland (**the Inquiry**) is made by The New Zealand Initiative, a think tank supported primarily by chief executives of major New Zealand businesses. The purpose of the organisation is to undertake research to contribute to the development of sound public policies in New Zealand to help create a competitive, open and dynamic economy and a free, prosperous, fair, and cohesive society.

1.2 We broadly support the analysis and recommendations provided in the "The Congestion Question: Main Findings" (**the Report**). The report canvasses the options and provides pragmatic recommendations for implementation. We have a few additional options that may be worth considering. But most important is getting a practicable and durable version of congestion charging up and running soon.

1.3 Congestion charging can be important in mitigating transport problems directly, but also in generating information about transport demand that can help in informing future transport investment decisions. It also can help in internalising one of the larger external costs of urban growth.

1.4 The building blocks and principles underlying and enabling congestion charging are well understood. Congestion results from failing to price a scarce and congestible resource at times when each road user imposes substantial costs on every other road user. Drivers are not confronted with the cost of taking up space on the road. Without prices, rationing of limited road space is done by queuing, or congestion. In principle, a congestion price can eliminate congestion.

1.4.1 Differences between peak and off-peak pricing are common in areas from electricity bills and cinema tickets to hotel rates and airline fares.

1.4.2 Road tolling is hardly new to New Zealand; the Auckland Harbour Bridge was funded by a bond paid off by toll levies on bridge users.

1.4.3 Automated tolling through licence plate recognition is not uncommon: the Auckland Northern Gateway, Tauranga Takitimu Drive, and Tauranga Eastern Link are all tolled through automated licence plate recognition.

1.4.4 Road User Charging, for diesel vehicles, is well-established. Electronic Road User Charging (e-RUC) GPS-linked systems are already available for commercial fleets that automate payment and provide tracking data for fleet management. Congestion charging differs by adding a time and place component to the levied charges, and by being paid after travel rather than in advance of travel.

1.5 The New Zealand Initiative has undertaken research into congestion charging. Our 2019 report, *The Price is Right: The Road to a Better Transport System*, surveyed the case for congestion charging, along with options and experiences abroad. Our 2020 research note, *Pricing out Congestion*, further explored experiences abroad and drew implications for New Zealand. We concluded that:

1.5.1 Congestion charges are an effective tool to manage road congestion;

1.5.2 Peak and off-peak rates are already common in other areas;

1.5.3 Congestion pricing regimes are specific to congestion issues in the places they are used;

1.5.4 Technological advances will continue to improve the case for comprehensive congestion charging regimes;

1.5.5 Managing public support is vital. Support for congestion charging can be lowest at point of implementation, but rises as people gain experience with the system;

1.5.6 Simplicity is a virtue, but over-simplification can compromise system efficacy. London's area charge was simple, but not effective;

1.5.7 Charges should be designed to ease congestion, not to raise revenue. Making congestion charging schemes revenue-neutral can help;

1.5.8 Minimising discounts and exemptions improves efficacy. Half the London fleet circulating in its congestion charging zone benefits from some discount or exemption, to the detriment of system efficacy. Here in New Zealand, emergency vehicles and buses are not exempt from charges in the Emissions Trading Scheme, and there is no low-income discount on the ETS charges embedded in petrol. Equity considerations are vitally important, but are better handled directly through other mechanisms;

1.5.9 Clear communication and focus on the system's congestion-reducing objective is critical;

1.5.10 Political leadership is essential where support for congestion charging systems reaches a nadir at time of implementation, but earns public support thereafter.

1.6 The most substantial impediment to congestion charging is public acceptance of the system. The Report argues that congestion charges should be used to mitigate congestion, not to raise revenue. We concur and worry that public concern that congestion charges might amount to just another tax could prove a stumbling block. The Report provides some options for mitigating that concern; we provide a few additional options.

2. The Congestion Question: Main Findings, and recommendations

2.1 The Report recommends:

2.1.1 access-based charging, which would impose the same charge for using a tolled road regardless of distance travelled, using automatic number plate recognition cameras rather than GPS-based technologies;

2.1.2 Time-varying pricing using relatively fixed weekday schedules that charge more during peak times, less during peak-adjacent times, and without charge during off-peak periods, as well as on weekends and holidays;

2.1.3 Higher congestion charges for large vehicles, but exemptions for buses and emergency vehicles;

2.1.4 Daily charging caps of twice the highest peak-period charge, and discounted travel for Community Services Card holders;

2.1.5 Hypothecating funds from levied congestion charges to pay for additional public transport infrastructure and services, to fund measures mitigating any equity consequences of congestion charging, and to replace Auckland's regional fuel tax;

2.1.6 Introducing the system in stages over the next decade as additional public transport and infrastructure investment is made, with the first phase potentially coinciding with the opening of the City Rail Link and rolling out to the most congested corridors over time.

2.2 The Report's recommendations make sense. We would strongly endorse the implementation of the Report's recommendations, as a suite, without modification, as being vastly superior to the status quo. We particularly commend the Report's suggestion of implementing congestion charging on key routes. But we have a few suggested areas for potential improvement.

2.3 The recommendations work to address equity concerns through several channels that may reduce the effectiveness of the congestion charging regime in mitigating congestion. Concerns about equity are certainly important, but equity can be protected in ways that do not diminish the benefits of congestion charging.

2.4 We also believe that the shift to congestion charging can provide broader benefits as the system develops over time. These benefits should be considered when deciding on appropriate technologies and systems.

3. ADDRESSING EQUITY THROUGH A CONGESTION DIVIDEND

3.1 The report recommends using collected congestion charges to replace Auckland's regional fuel tax. As petrol excise is likely regressive in practice, the shift could have some merit. But we believe equity issues can be addressed more directly. And we worry that using a congestion charge to fund roadworks can make it tempting to set congestion charges to meet revenue targets rather than to ease congestion.

3.2 The more direct mechanism for addressing equity considerations is a congestion dividend. Collected congestion charges, net of the cost of running the system, could be rebated back to users of charged roads as a Congestion Dividend. This would ensure the system could not be used for revenue-raising rather than for mitigating congestion, which would help in building public support for the system. Rebated amounts could be higher for holders of Community Services Cards.

3.3 Returning dividends to motorists does not affect the incentives provided by congestion charges provided the dividends are paid on some basis other than an individual's travel at peak times.

3.4 A dividend system would be practicable. The same system that bills users could also provide dividends.

3.5 Dividends could be sensitive to a driver's overall amount of road use, while being insensitive to time of day. The system would then maintain incentives to reduce road use at peak times while providing greater dividends to more frequent road users, if the camera system noted traffic at non-peak times without charging. For example, a vehicle using the road every day of the year could be entitled to a larger dividend than an out-of-town visitor's vehicle using the road only one day out of the year. But because a vehicle using the road every day during peak times would receive the same dividend as a vehicle using the road every day during non-peak times, incentives to avoid congested periods would be maintained.

3.6 Alternatively, all charged plates could receive an equal-share dividend, except plates associated with holders of Community Services Cards, which could receive a higher dividend.

3.7 If all levied congestion charges were rebated back to road users as Congestion Dividend, with higher dividends for Community Services Card holders, there would be no need to discount travel for Community Services Card holders. They would instead receive a higher dividend from collected funds. There would also be less cause for capping daily charges. And drivers using roads at peak times would be directly compensating those who had adjusted their travel to avoid peak times.

3.8 Set this way, congestion charging would not assist in plugging holes in infrastructure financing or road maintenance. But that should not be the job of congestion charging. Congestion charges should have one job and one job only: ensuring that the roading system can operate as efficiently as possible, by reducing the number of vehicles on the roads at peak times when they would otherwise reduce total throughput. If congestion charging instead is tasked with other jobs, like funding infrastructure improvements, it will be tempting to set the charges to increase total revenues, rather than to efficiently mitigate congestion. And it will be easier for sceptics of congestion charging to portray the charges as constituting a new tax.

3.8.1 While collected congestion charges would not directly assist in funding new infrastructure, if a congestion dividend were in place, the information provided by dynamic congestion charges could be important in informing transport investment decisions.

4. UPDATING CONGESTION CHARGES TO REFLECT CONGESTION

4.1 The Report recommends fixed charges for road access at particular times of day that correspond to congestion on the charged routes.

4.2 Within the system as presented, we urge that those charges be constantly evaluated to ensure that they remain appropriate. Singapore reviews its charges every six months.

4.2.1 If the initial set of charges does not reduce congestion to a sufficient extent on one route, charges during congested times on that route should increase. If the charges instead lead to an empty road, charges at those times should decrease.

4.2.2 The point of congestion charging is, in part, to shift travel times. It is possible that the set of charges initially levied could result in worse congestion during 'shoulder' periods around peak demand, if enough people shift from on-peak to peak-adjacent travel and if few people shift from peak-adjacent travel to off-peak travel. Relative prices between peak and peak-adjacent periods will need to be evaluated after the system beds in, as will the duration of those charged periods.

4.2.3 Weekends and holidays can bring their own substantial congestion issues. These may be worsened if some trips shift from weekday to weekend as consequence of charges that fall only on weekdays. If congestion poses problems on weekends and holidays, extension of the congestion charging regime to weekends and holidays should be considered.

5. CONGESTION CHARGES AND TRANSPORT PLANNING

5.1 Congestion charging is not just valuable in ensuring that the roading system is used efficiently. It can also provide information that would be critical for informing future investment.

5.2 Wellington has been debating the merits of a second tunnel through Mount Victoria for decades. Congestion pricing could resolve those debates very quickly. If congestion at peak times through the existing tunnel can be alleviated at a very low congestion charge, there is no case for expending large amounts of resource in building a second tunnel. But if congestion

at peak times can only be alleviated at a very high congestion charge, that would tell the transport system something vitally important: that drivers place very high value on being able to get through the tunnel quickly at particular times of day. If that demonstrated willingness to pay were very high, that would make a case for building a second tunnel and financing that tunnel's construction through future tolls on the tunnel.

5.3 Similarly, if the congestion charge needed to ease traffic on the Auckland Harbour Bridge were very high, the case for a second bridge would be evident. If the congestion charge needed to ease traffic on the Bridge were low, then the case for a second crossing would be far weaker.

5.4 A congestion charging system then could begin generating the information needed for deciding on transport investments. Cost-benefit assessment around roading investments have always seemed a bit shaky. Evidence from the congestion charges that prove necessary to ease congestion on existing routes would quickly help, either in ending political pushes for transport projects that do not really stack up, or in firming up support for projects that have merit.

6. BUILDING FOR THE FUTURE: DYNAMIC CONGESTION CHARGING

6.1 The best should not be the enemy of the good and currently practicable. Holding up the rollout and implementation of the practicable solution presented in the Report would be a mistake. But it is also worth looking forward to future potential advances in the system.

6.2 Ultimately, as technology progresses and costs of GPS-linked options like current e-RUC systems decline, fully dynamic charging regimes can become possible. Currently, Google Maps and a host of different GPS providers can tell drivers about likely travel times to their chosen destinations, and set suggested routes based on expected travel times given current traffic congestion. It would seem a simple extension of that technology to vary charges dynamically with congestion, and for drivers to be able to use either their preferred mapping system or the e-RUC system directly to choose routes based on minimising travel time, minimising congestion charges, or minimising travel time subject to accumulated charges not exceeding some fixed amount. An appropriate e-RUC system could lock-in charges at the start of a trip, to avoid uncertainty.

6.3 The same system could also automatically warn drivers if high congestion charges apply on upcoming road segments if they have not set a routing into the system. The automated billboards that currently advertise expected travel times on key routes could be used to advise of high congestion charge periods.

6.4 The Report's proposed congestion charging system will generate some valuable information that should help in informing transport investment decisions. Strengthening it to include dynamic route-and-time specific charging through a GPS-enabled e-RUC-style system would more quickly provide more accurate information for routes outside of main centres – when doing so is no longer cost-prohibitive. But the benefits of that information in land transport planning should be considered when weighing the case for more sophisticated, and more expensive, congestion charging systems in future.

6.5 Any such system would require stronger governance measures ensuring not only the privacy of collected data, but also that dynamic charges were set only to ease congestion rather than in pursuit of other ends.

6.6 As fleet electrification progresses, the National Land Transport Fund will need to rely more heavily on Road User Charges as petrol excise revenues decline. A broader opportunity may

then emerge for reconsidering transport funding. A future system could eliminate petrol excise entirely (maintaining the ETS charges embedded in both diesel and petrol prices) while shifting all vehicles to Road User Charges. Shifting heavy vehicles from hubodometers to eRUC systems would be a first step, easing compliance. GPS-enabled e-RUC systems could combine dynamic congestion charging with road-specific road user charges if particular roads warrant higher fees either due to higher maintenance and upkeep costs, or as part of financing the road's construction costs. The Auckland Harbour Bridge was financed by bonds that were paid off using collected tolls. A better land transport financing system could use this mechanism more generally, and at far lower transaction cost, through improved e-RUC options.