



Submission to the NSW Review of Federal Financial Relations

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The year when COVID-19 struck has been a strange one.

The goals that the Review has articulated for roads still make sense – to use roads efficiently, to charge drivers fairly, and to raise revenue. But there's a renewed appreciation for policies that are robust to a range of future scenarios, and road taxes are no exception. As work and travel patterns change, road congestion may become a much more pressing problem in Sydney than the pressing problem it already was.

The Review should more fully reflect this changed situation and specify the congestion charging regime that Sydney needs.

People tend to prefer driving

Before the pandemic, Sydney people already tended to prefer driving; 64 per cent of journeys to work were by car.¹ In large part, people were driving because most workplaces are highly dispersed across the city; only 15 per cent of Sydney's jobs are in the CBD, and those CBD workers were the ones who were much more likely to take public transport, at 77 per cent.²

With the pandemic, the change has been dramatic. About 5 per cent of people worked from home before the pandemic.³ Now, many of those in jobs that can be done from home – estimated at 40 per cent of jobs⁴ – have moved to this new way of working, at least partly and for the time being. And people have avoided public transport in droves; at the lowest point, in mid-April, movements at suburban railway stations were less than 10 per cent of their normal levels. Even now, they remain at well below half of normal levels, according to aggregated data from

1. Terrill et al (2018, p. 31).

2. Ibid (pp. 14–16).

3. Ibid (Chapter 4).

4. Ulubasoglu and Onder (2020).

Veitch Lister Consulting on the locations of people's mobile phones in Sydney each day.⁵

It's understandable that people's fear of contagion, coupled with passenger limits on trains and buses, has increased the attractiveness of driving. If you're not in a position to cycle or walk, driving offers a mode of transport that doesn't require you to enter an environment where it may be difficult to keep your distance from other people.

And nobody knows how long this situation will go on. It may persist until a vaccine is available – if indeed a vaccine is ever discovered.

In a time of high uncertainty, the best option for government is to proceed with measures that are robust to a range of future scenarios. It makes sense to keep options open and deal with the possible futures that look more likely.

Congestion charging would be worth implementing in a range of possible futures

Excessive congestion was already a substantial problem before the pandemic, costly to the economy and annoying to drivers. The 'avoidable cost' of congestion was estimated at \$6.1 billion in 2015,⁶ and the total cost of congestion in Sydney, the Hunter, and Illawarra at \$8 billion in 2016.⁷

And now, with activity picking up around the city, but a stronger incentive to drive, there's a disaster in the making, if the state government does nothing to manage the growth in peak-period driving in busy parts of the city. The results could be slow and delayed trips,

5. Terrill (2020); see <https://explore.veitchlister.com.au/covid-19-dashboard/> for regular updates.

6. BITRE (2015).

7. IA (2019a, p. 7).

longer morning and afternoon peaks, less predictable trips times, and heightened danger for cyclists and pedestrians.

It doesn't have to be this way.

A cordon charge would significantly improve getting around Sydney

The NSW government could impose a cordon charge around the CBD, applying a peak charge of \$5 on drivers entering the cordoned area between 8am and 9.30am on weekdays, and a shoulder charge of \$3 during the 30 minutes on either side of that peak period. A peak charge of \$5 should apply to drivers leaving the cordon between 4pm and 6pm on weekdays, and \$3 for the hour before and the 30 minutes after that peak period. Higher charges should apply for trucks, because they cause more congestion. The cordon zone should cover the area south of the harbour, west of and including the Domain, north of Central Station, and east of Pyrmont. Automatic Number Plate Recognition technology should be used to give effect to the scheme, backed up with additional legal safeguards to prohibit the use of personal information for non-charging purposes.⁸

If the government imposed such a charge, the improvements would be significant. There would be at least 3,000 fewer cars on the road during the morning and afternoon peaks, with some people switching to public transport at those times. Although there would be some additional crowding on public transport in the absence of additional services, these impacts would be modest, and well below the material benefits that a cordon scheme offers.

Fewer cars on the road would of course mean better traffic flow. Across the Sydney metropolitan area, the effect would be small – an

8. This design and its impacts are explained in more detail in Chapter 1 of Terrill et al (2019a).

increase in speed of up to 1 per cent in the peaks. But this would be substantially greater than the speed improvements of 0.3 per cent across the day from the first stage of the F6 Extension, which will cost \$2.6 billion.

In particular parts of the city, traffic speeds would increase by much more. The average speed on roads in the CBD would increase by 11 per cent in the morning peak, and of course much of the benefit of this speed improvement would be felt by motorists who actually paid the charge.

Less traffic in the CBD would also be good news for tens of thousands of bus commuters, many of whom find getting through the CBD the most delayed and frustrating part of their commute.

Benefits would extend beyond the CBD too. The cordon would materially speed up a number of routes toward the city from the eastern suburbs, the airport, the inner west, and the north shore. And although the effects would be minor, the cordon would modestly improve traffic flows as far from the city as Frenchs Forest, Brighton-Le-Sands, Burwood and Macquarie Park.

It is true that some roads would slow down as traffic patterns changed in response to the cordon. These roads would typically be around the edge of the cordon, or ones that could be used to bypass the cordon. These side-effects are undesirable, but are no reason to defer. Overall, the average speed on Sydney's roads would increase as a result of the cordon, and the benefits to the community would outweigh the costs. The government might also mitigate some of these side-effects through traffic management or slight changes to the cordon design.

Clear net benefits at minimum cost and hassle

The point of a CBD cordon charge is to reduce congestion in such a way that people can get around in a timely and predictable way, while keeping the cost and inconvenience as low as possible for everyone.

There are clear net benefits to the community of a cordon scheme, to a value of \$13 million per year. Most of the value would not be monetary, but in time. The time savings to people travelling for private purposes would be by far the largest benefit, and expressed in financial terms would be worth \$41 million per year. There would also be time savings to commercial operators, to a value of around about \$6 million per year. The costs would primarily take the form of set-up and running costs, including the costs of compliance.

The net revenue to the NSW government from such a scheme would be up to \$84 million per year. It is a remarkable feature of this cordon scheme proposal that it can achieve traffic speed improvements of the order outlined above, accompanied not by a multi-billion-dollar price tag, but by a net contribution to government coffers.⁹

A congestion charge would primarily be paid by higher-income earners

A cordon charge around the CBD causes far fewer fairness concerns than other congestion charging models and other methods of reducing congestion.

Drivers to the CBD tend to be a much more advantaged group than other workers, as the Review pointed out in its draft report. People who drive to the CBD are either willing to pay substantial fees for parking or receive a parking space from their employer. They tend to command incomes that are 32 per cent higher on average than those who take public transport to the CBD. More than a third of CBD workers who

9. These results are explained in more detail in Chapter 1.4 of Terrill et al (2019a).

drive are in the highest income bracket reported in the Census, of more than \$3,000 per week.

The fact that higher-income drivers would be the main payers of a cordon-style scheme is a key reason to start with such a scheme, before charging for corridors or on a city-wide basis. Community consultation in Victoria highlights that people place high priority on the equity and fairness of any change to transport pricing.¹⁰

A trial allows the community to judge

People tend to be sceptical of change. ‘Status quo bias’ makes ambitious reform difficult for governments. It’s for this reason that the Review’s proposed trial is a powerful way to allow the public to experience congestion charging before fully committing.

As the draft report highlights, this approach was successfully adopted in Stockholm, where congestion charging was least popular in the polls immediately before it was trialled, but once the policy was introduced, support rose and remained strong.

Similarly, a cordon charge around the Sydney CBD may pave the way to a more comprehensive scheme over time. Once a CBD cordon has been established, a viable next step would be to introduce corridor charging on key arterial roads and urban freeways, which could be done within five-to-ten years. This could be done progressively, and cover sections of the A3 and A6, Military and Spit roads, the Victoria Road/Western Distributor (A4) corridor, and the M5 East/M1 corridor past the airport.

Ultimately, network-wide distance-based time-of-day charging should be introduced. This should cover not just congested times and places,

10. These results are explained in more detail in Chapter 4 of Terrill et al (2019b) and Chapter 1.5 of Terrill et al (2019a).

but potentially all parts of the road network, and more finely differentiate large vehicles from small ones.

What about the revenue?

A key rationale for the establishment of the Review is to ensure sufficient revenue for the services and infrastructure that citizens of NSW need and expect. The Review is looking to maximise the value for each dollar of tax raised, while limiting the impact that taxes have upon citizens' lives.

But the road-related charges in the draft report are not primarily about revenue raising. The proposal to charge electric vehicles a per-kilometre charge would improve fairness, since it would correct the fact that drivers of electric vehicles pay no fuel excise. But such a charge will not raise meaningful amounts of revenue for a very long time, given that electric vehicles currently constitute around 0.2 per cent of the fleet,¹¹ projected to reach 4 per cent - or 20-to-25 per cent of sales - by 2030.¹²

And the proposal to trial a cordon charge would deliver up to \$84 million net to the budget; useful, but not a high-revenue raiser.

What's most important to recognise, however, is that a congestion charge is unlike almost every other tax. Most taxes cause economic harm, or reduce efficiency, by distorting people's behaviour, and much of tax policy is directed to maximising use of the least distorting taxes and minimising use of the most distorting taxes. For instance, raising an extra dollar from stamp duty is estimated to cause economic harm of around 34 cents, as some people elect not to buy a home or not to sell up and buy a different one; and an extra dollar of payroll tax causes

economic harm of around 41 cents, as employers hire fewer staff and employees are deterred from working more.¹³

Congestion charging, by contrast, *improves* efficiency. It does this by improving the allocation of scarce road space. This means deterring people from taking the trips that are most amenable to being taken at a different time, to a different place, or by a different mode. If roads are free to use, but slow, people who are not in a rush won't mind as much as those who are in a rush; congestion in peak periods bothers retirees and shoppers less than it does commuters and tradespeople. But if there is a charge for a peak-period trip, a bigger share of the traffic at that time will be tradespeople, delivery drivers and other commercial traffic, and people who need to be at work at a particular time. People such as retirees and shoppers, who may be able to be flexible about when they drive, can save money by travelling off peak.

Conclusion

Even before the pandemic, congestion charging offered an opportunity for a significant improvement in efficiency. Grattan Institute's high-level cost-benefit analysis shows that a CBD cordon offers net benefits to the community, and a pathway towards a more comprehensive road user charging scheme. The Grattan proposal offers enough design detail to quantify those net benefits.

With the pandemic, and the highly uncertain future ahead for transport and cities, the case for a CBD cordon is even stronger.

The Review should therefore strengthen its recommendation on congestion charging, to the following.

The NSW government should commence a trial within the next two years for a congestion cordon around the Sydney CBD, that:

11. IA (2019b, p. 284).

12. Energeia (2018, p. 7).

13. KPMG Econtech (2010).

- Charges drivers entering the cordon zone on weekdays between 8am and 9.30am at a rate of \$5, and \$3 in the half-hour on either side of this period;
- Charges drivers leaving the cordon zone on weekdays between 4pm and 6pm at a rate of \$5, and \$3 in the hour before and the half-hour after this period;
- Does not impose charges at other times or on other days;
- Is implemented using Automatic Number Plate Recognition technology, with appropriate legal protections of people's privacy.

In order to share resources and lessons from the trial, it would be an advantage for NSW if the Victorian government agreed to run a similar trial in Melbourne. Accordingly, the Review should add the following recommendation.

The NSW government should encourage its Victorian counterpart to run a similar trial of a CBD congestion charge in Melbourne.

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