



THE UNIVERSITY OF  
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## Submission to the Senate Inquiry into the administration and expenditure of funding under the Urban Congestion Fund

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### Introduction

This submission addresses point (e) of the inquiry's terms of reference:

*the impact (of the UCF) in reducing congestion, including whether the allocation of funding under the program was appropriately targeted to meet the stated objective of the UCF*

The Urban Congestion Fund was established in 2018-19. The Fund's stated objective is to:

Reduce congestion and ensure commuters get home sooner and safer by:

- reducing travel times;
- reducing vehicle operating costs;
- delivery of a more reliable road network for commuters and freight;
- addressing local bottlenecks ([Department of Infrastructure](#))

To date the UCF has supported various road improvement and commuter car park projects around Australia. The Auditor-General recently reported on the lack of any transparent procedures for the allocation of funds and argued that there appears to be little connection between the fund's stated objectives and these allocations.

This submission will demonstrate how defining transport problems in terms of congestion diverts investment from more important transport projects than stations carparks and offers suggestions for the reform of the UCF in light of the climate emergency.

### Understanding congestion and the role it plays in transport policy

Congestion is often portrayed as something that needs to be "reduced" but this negative connotation should be challenged. An absence of congestion implies an oversupply and underutilisation of the available infrastructure. Globally, congestion is linked to vibrant and growing economies – a city of empty roads and trains is more often associated with urban decay<sup>1</sup>.

Congestion can be understood as the situation that arises when the demand for transport infrastructure (roads) or services (public transport) exceeds supply<sup>2</sup>. Generally, roads and public transport are considered congested once demand exceeds 80% of nominal capacity. These situations

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<sup>1</sup> Marshall, W. E., & Dumbaugh, E. (2020). *Revisiting the relationship between traffic congestion and the economy: a longitudinal examination of US metropolitan areas*. *Transportation*, 47(1),

<sup>2</sup> More information about congestion and its casual factors can be found in Victorian Competition & Efficiency Commission's report *Making the right choices: Options for managing transport congestion (2006)*

can occur on a predictable or regular basis (at bottlenecks) or can be once-off (due to incidents or special events).

Australian transport agencies and governments have been pursuing policies of ‘congestion reduction’ for over 50 years. Congestion is a recurring theme in transport and urban infrastructure strategies - Infrastructure Australia’s most recent Infrastructure Plan<sup>3</sup> mentions congestion more than 60 times. Yet, road congestion and public transport crowding have continued to grow and this, in turn, has given rise to many inquiries, advisory reports and academic research that have examined this area of policy failure<sup>4</sup>.

The overwhelming conclusion of these investigations is that congestion reduction has failed because of the bias to ‘solutions’ based on expanding road capacity. Put simply, the experience all over the world since the 1970s confirms that that additional capacity induces new demand<sup>5</sup>. This ensures congestion returns to (or exceeds) initial levels very soon after additional capacity is added. In the case of bottlenecks (a specific focus of the UCF), when one bottleneck is removed the choke point simply moves to the next.

It is now widely accepted by transport planners that building additional road capacity is not a cost-effective means to reduce congestion. More success has been achieved through measures that address demand such as pricing reform and strategic land-use planning. The London congestion charge, for example, reduced congestion for a period while simultaneously funding improved travel options. Yet even in this example (which was perhaps politically because most travellers to the centre of London used the Tube) congestion still grew after the scheme’s initial success<sup>6</sup>.

Simplistic notions of ‘busting’ congestion are further challenged by the direct relationship that exists between traffic volumes and relative travel times by public transport. This is known as the ‘Downs-Thomson’ effect<sup>7</sup>. Put simply, it means that many people make their modal choice based on comparative travel time. So, spending on roads (as Australian governments have done for 50 years) cannot solve congestion while the quality of public transport services is left unchanged.

Recognising this, some international jurisdictions have chosen to use congestion as a tool to encourage users to consider alternative and more sustainable travel options and to support more compact forms of land-use than the suburban growth that is created by over-investment in roads<sup>8</sup>.

The key lesson is that congestion reduction is a fruitless ambition<sup>9</sup>. It should be abandoned in favour of objectives more appropriate to urban prosperity and the imperatives of the climate emergency. A sustainable transport policy, which certainly should direct spending at the scale of the UCF, would

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<sup>3</sup> Infrastructure Australia (2021), *Reforms to Australia’s future infrastructure needs*

<sup>4</sup> A recent example is Infrastructure Victoria (2020), *Good move: Fixing transport congestion*

<sup>5</sup> Mogridge, M. (1990). *Travel in Towns: jam yesterday, jam today, jam tomorrow?* London: Macmillan;  
Goodwin, P.B. (1996) “Empirical Evidence on Induced Traffic, A review and Synthesis”, *Transportation*, 23(1): 35-54;  
Khalaj, F., Pojani, D., Sipe, N., & Corcoran, J. (2020). *Why are cities removing their freeways? A systematic review of the literature*. *Transport Reviews*, 1-24.

<sup>6</sup> Givoni, M. (2012). *Re-assessing the Results of the London Congestion Charging Scheme*. *Urban Studies*, 49(5),

<sup>7</sup> Downs, Anthony (2005). *Still Stuck in Traffic: Coping with Peak-Hour Traffic Congestion*. Washington DC: Brookings Institution Press

<sup>8</sup> GVRD. (1993). *A Long-Range Transportation Plan for Greater Vancouver*. Vancouver: Greater Vancouver Regional District; Stone, J. (2014). Continuity and Change in Urban Transport Policy: Politics, Institutions and Actors in Melbourne and Vancouver since 1970. *Planning Practice & Research*, 29(4), 388-404.

<sup>9</sup> Department of Transport (UK) Standing Advisory Committee on Trunk Road Assessment. (1994). *Trunk Roads and The Generation of Traffic*. London, UK: UK Government; Mees, P. (2010). *Transport for suburbia : beyond the automobile age*. London ; Sterling, VA: Earthscan.

abandon the focus on ‘busting’ congestion and the naïve belief in unrestrained mobility, and instead focus on equitable and sustainable access to the full gamut of urban life.

An example of this shift in policy focus is recent move in many Australian metropolitan plans towards the ambition of the ‘20-minute city’<sup>10</sup>. This policy direction aims to place the essentials of urban living within an easy walking or cycling distance of home and to complement this with the development of improved public transport networks. In the short term, these policies may make congestion worse as road space is re-allocated to more desirable modes. In the longer-term, demand will adjust as congestion finds a new equilibrium.

Under this policy, the focus shifts from some arbitrary notion of performance and instead refocuses on the key task for urban transport systems: the provision of equitable and sustainable access to all the positive elements of urban life.

### **The role of station car-parking in promoting public transport**

The Commuter Car Park Fund (CCPF) is a key focus of this Enquiry. The stated purpose of the CCPF is “to invest in commuter car park upgrades that encourage greater use of public transport”. As we have argued elsewhere previously, this is not supported by the evidence<sup>11</sup>.

We estimate the CCPF would provide around 30,000 parking spaces across Australian cities. Assuming, generously, 1.5 passengers per car, the CCPF would enable access for another 45,000 passengers per day across all of Australia’s public transport networks. At the 2016 census, slightly over 1.2 million people commuted to work on public transport, so the CCPF would, at best, offer parking to 4% of Australian commuters.

Many who use these new parking spaces will be existing rail passengers who used to walk, cycle, or ride the bus but now choose to drive instead. Some will be passengers who previously drove to another station, but now drive to the station with more parking. Non-commuters working or shopping in nearby activity centres also often use park-and-ride spaces.

In any case, improving car access to stations is unlikely to increase ridership significantly, because it undermines more sustainable and cost-effective alternatives.

Large parking structures and the high-capacity, high-speed roads needed to feed them create hostile environments for walking, cycling, and public transport. There are existing examples of this in Australian cities: Tarneit Station in Melbourne’s western suburbs is nearly impossible to walk or ride a bike to and Leppington Station in Sydney’s south-west is set up similarly. Adding more cars to these and other environments will act to further discourage walking, cycling, or bus travel to the station. The land around stations would be better used in almost any other way. Instead of car parks, these places would be more valuable as homes, shops, offices, schools, or parks.

The evidence shows that parking provision operates in the same way as roads; increasing supply (particularly when unpriced) induces more demand. The decision to provide parking as a ‘solution’ to mobility issues is typically a political decision that might win votes but displaces and exacerbates the transport problem.

If the concern is improved rail access for suburban commuters, the CCPF would have been better spent on improved public transport connections. Commuters will gladly get to and from their local station on a bus if the services are of a high quality. The 99 B-Line in Vancouver, Canada, moves

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<sup>10</sup> <https://www.planning.vic.gov.au/policy-and-strategy/planning-for-melbourne/plan-melbourne/20-minute-neighbourhoods>

<sup>11</sup> Pittman, N., Legacy, C., Stone, J., & Clements, R. (2019). *\$500 m for station car parks? Other transport solutions could do much more for the money. The Conversation.*

over 56,000 passengers per day for approximately A\$15 million per year. At many railway stations in suburban Australia, bus services finish at 7pm, do not operate on weekends, are so circuitous as to be useless, or are so poorly timetabled or infrequent as to be unattractive to anyone with other choices. Many stations lack a connecting bus service entirely: Officer station in outer Melbourne is just one example.

A focus on expanded park-and-ride for urban rail networks can introduce perverse and negative impacts. When car parks reach capacity (or when drivers even perceive they may be full), rail system ridership is effectively limited to those within walk-up catchment of stations. This results in inefficient ‘peaking’ on public transport networks, where interpeak and counter peak capacity is inaccessible<sup>12</sup>.

There are equity dimensions here too: residents should not have to own a car to access public transport. Car ownership and operation is one of the biggest expenses in Australian households, and many can barely afford to operate a car. Recent examination of the early delivery of public transport to growth suburbs in Melbourne demonstrates as much, with significant economic and financial benefits flowing to households where high-quality public transport is provided<sup>13</sup>. Beyond this, many residents are physically unable to drive, many are too young, some would prefer not to.

Station access in Australian cities and regions would be better provided by improved public transport (and cycling and walking, as well).

### **Challenging the government’s support for the UCF**

To investigate the themes argued in this submission, we suggest that the Committee seek answers from the officials responsible for administering the UCF:

- What post-implementation reviews have been completed of project funded under the UCF or similar projects funded under earlier programs?
- To what extent do these reviews demonstrate an effective and lasting reduction in congestion?
- Over the last few decades, how much have Australian governments improvement funding and what has been effect on congestion?

We have argued that funding should not be allocated for the purpose of congestion reduction as this leads to the misallocation of resources. The role of the Commonwealth is to fund projects that address matters of national significance. Currently, the most pressing transport issue is climate change. There is an urgent need to decarbonise the transport as this is the second largest GHG emitting sector after energy production.

In our opinion, the current UCF objectives should be replaced with objectives to:

- Decarbonise the transport sector.
- Build resilience of the transport system to withstand adverse weather events and sea-level rise.

Other objectives could be considered such as the competitiveness between cities or transport’s contribution to health and well-being. However, given the existential threat posed by climate change this issue should be regarded as the highest priority for national transport spending.

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<sup>12</sup> Mees, P. (2010). *Transport for suburbia : beyond the automobile age*. London ; Sterling, VA: Earthscan; Vuchic, V. R. (2005). *Urban transit: operations, planning, and economics*: John Wiley & Sons.

<sup>13</sup> <https://cur.org.au/project/equitable-healthy-transport-options-new-suburbs/>