

# Submission to IPART regarding its *Maximum Opal Fares until July 2028: Draft Report*

John Stanley, Adjunct Professor, Institute of Transport and Logistics Studies, The University of Sydney Business School

## Context

IPART determines maximum public transport fares in NSW, seeking to balance considerations of efficient cost, potential abuses of monopoly power, social impacts and government funding implications (IPART, 2024a). As recognised in several Thredbo International Conferences on Competition and Regulation in Land Passenger Transport, IPART's fare setting work is world leading, in terms of development of efficient public transport (PT) fare structures that recognize benefits and costs to service users and to the wider society, as well as service delivery costs.

This submission acknowledges the overall credibility of a fare determination that results in a small average increase to maximum fares (at 2%), given the relatively low level of fare cost recovery in international terms and complex balancing task involved in fare setting. However, it questions the fare setting outcome for bus services, particularly for shorter journeys, on grounds of potentially compounding concerns about social exclusion of transport disadvantaged people.

As noted at the Thredbo 14 Conference, a weakness in the IPART fare setting approach has been its neglect of agglomeration economies and, more particularly, of social inclusion benefits flowing from public transport services (Stanley & Levinson, 2016). The new IPART Draft Report, *Maximum Opal Fares until 2028* (IPART, 2024a) begins to rectify this weakness but has room for improvement in its treatment of social inclusion benefits, as proposed in this submission.

Both agglomeration economies and social inclusion benefits are important for improved PT fare structures and improved transport planning and evaluation more generally:

1. *agglomeration economies* because Australian cities would not be nearly as productive without their dense PT networks, particularly those mass transit services converging on the city centres, yet Australian transport planning and evaluation guidelines have been wary of counting these PT benefits, almost denying the reality that is agglomeration; and,
2. *social inclusion benefits* because the social safety net role of public transport services has been long recognised in policy but Australian transport planning and evaluation practice and guidelines, and fare setting processes, have ignored the societal benefits from reducing social exclusion. ITLS research has shown these benefits to be considerable (Stanley et al., 2022).

IPART is now proposing that agglomeration economies be handled in the fare setting process by excluding some costs of PT vehicle ownership from the efficient cost quantum to be recovered through user fares. The IPART Technical Paper says:

*We have excluded costs of ownership of public transport vehicles from the marginal cost. Our reason is that we consider the costs of fleet ownership, along with costs of owning dedicated public transport infrastructure (such as railway lines, train stations, bus stops and depots, ferry wharves and light rail track) to be costs that are incurred in order to secure agglomeration benefits. (IPART, 2024b, p. 9)*

In the draft proposal, this is clarified somewhat, with half the ownership costs being excluded. In taking this implied cost approach to reflect agglomeration benefits, IPART argues that agglomeration

benefits should (at least) equal this reduced cost quantum at the margin. This seems a useful starting point for discussion, at a time when the relative contributions of physical proximity and virtual proximity to agglomeration economics are in flux, thanks (for example) to COVID and its influence on hybrid working arrangements (Hensher, Weisbrod & Christensen 2023).

### **Treatment of social inclusion benefits of bus services in the IPART Draft fare setting process**

The IPART Technical paper (IPART 2024b) recognises the importance of buses for social inclusion and creatively proposes a cost-based (proxy) approach to recognise inclusion benefits of bus. In addition to fare concessions for selected user groups (as at present), which can support social inclusion, the Technical Paper proposes that a significant proportion of bus service costs be excluded from the cost base to be recovered from user fares, totalling around \$470m annually. The relevant costs are part of those bus costs that vary by number of bus kilometres travelled, as an estimate of the marginal costs of additional bus service provision beyond the service level that might be optimal if there were no inclusion benefits. *The reason that actual bus timetables include services that are lightly patronised is that there are social benefits to more frequent services in the urban fringe areas* (IPART 2024b, p. 9).

The IPART Technical Report (IPART 2024b) gives readers the impression that efficient bus operating costs have been discounted by this ~\$470m in the fare setting determination but the moderate scenario efficient costs, by mode and distance band, as set out in that Report's Figure 7.1, are those that result from making no such deduction. In short, social inclusion benefits from bus are initially acknowledged, with a useful methodology identified for taking these benefits into account in measuring efficient bus costs for determining optimal public transport fares, but this recognition is not carried through, for unknown reasons, to the final fare proposals. However, because of the commendably transparent way IPART approaches its work, there is sufficient information in the various IPART papers, particularly the pricing worksheets<sup>1</sup>, to explore the implications of this somewhat tentative in/out approach to inclusion.

Figures 1 and 2 show optimal fares with and without the inclusion benefit 'discount' of \$470m. Figure 1, which is important for the IPART fare proposals, shows that short (2 km) bus trips more than cover their peak and off-peak costs (estimated efficient prices are less than current prices) but longer bus trips do not, particularly the longest trips.

Figure 2 shows that recognising social inclusion benefits of ~\$470m substantially reduces estimated efficient prices, as compared with Figure 1, and results in estimated efficient prices for peak and off-peak bus trips of both 2 and 5 kms length being *less than current prices*. Prices for longer bus trips are still below efficient costs, albeit considerably less than in Figure 1. Which set of bus costs should provide the basis for efficient fare setting?

### **Social inclusion benefits**

ITLS researchers and colleagues from The University of Melbourne have shown that an additional trip is worth around A\$22.75 (2019 prices), based on the trip's contribution to reducing social exclusion, with this value increasing in inverse proportion to declining household income (Stanley et al., 2022). Similar (currently unpublished) trip values have been found in recent research by economists at the Singapore Land Transport Authority, supporting the ITLS findings.

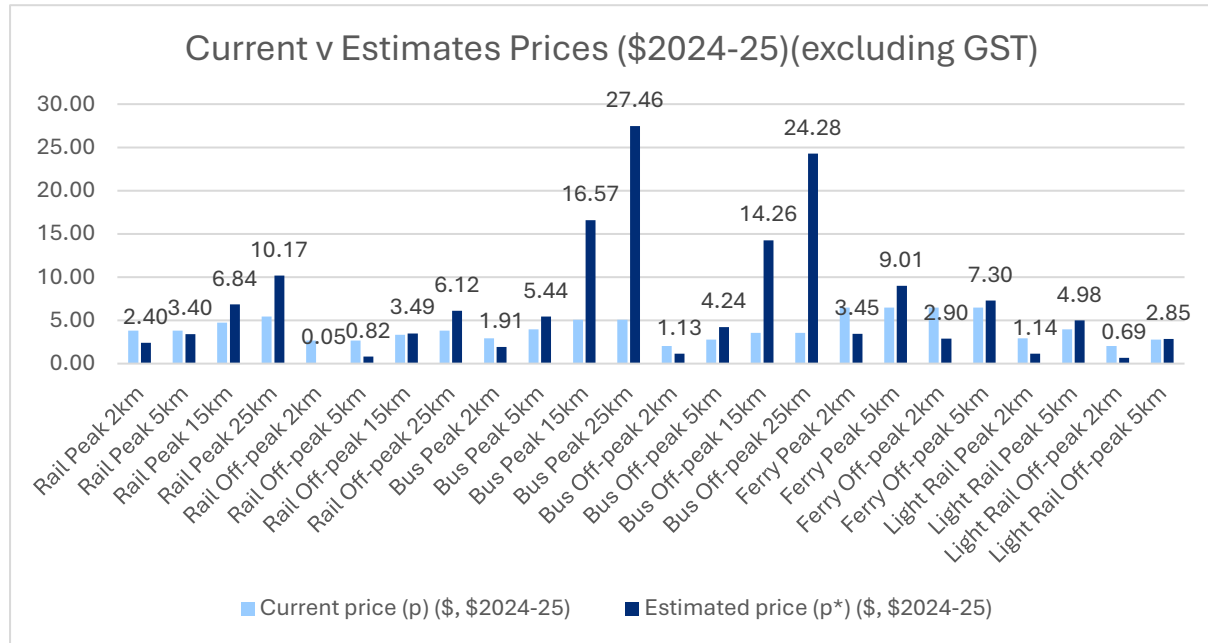
The mean trip value of A\$22.75 includes generated traffic benefits (to new trip makers) plus an inferred value for the reductions in the wider societal costs of exclusion, that follow from increased

---

<sup>1</sup> [https://www.ipart.nsw.gov.au/documents/spreadsheet-model/spreadsheet-model-fare-optimisation-model-review-opal-fares-2028?timeline\\_id=17398](https://www.ipart.nsw.gov.au/documents/spreadsheet-model/spreadsheet-model-fare-optimisation-model-review-opal-fares-2028?timeline_id=17398)

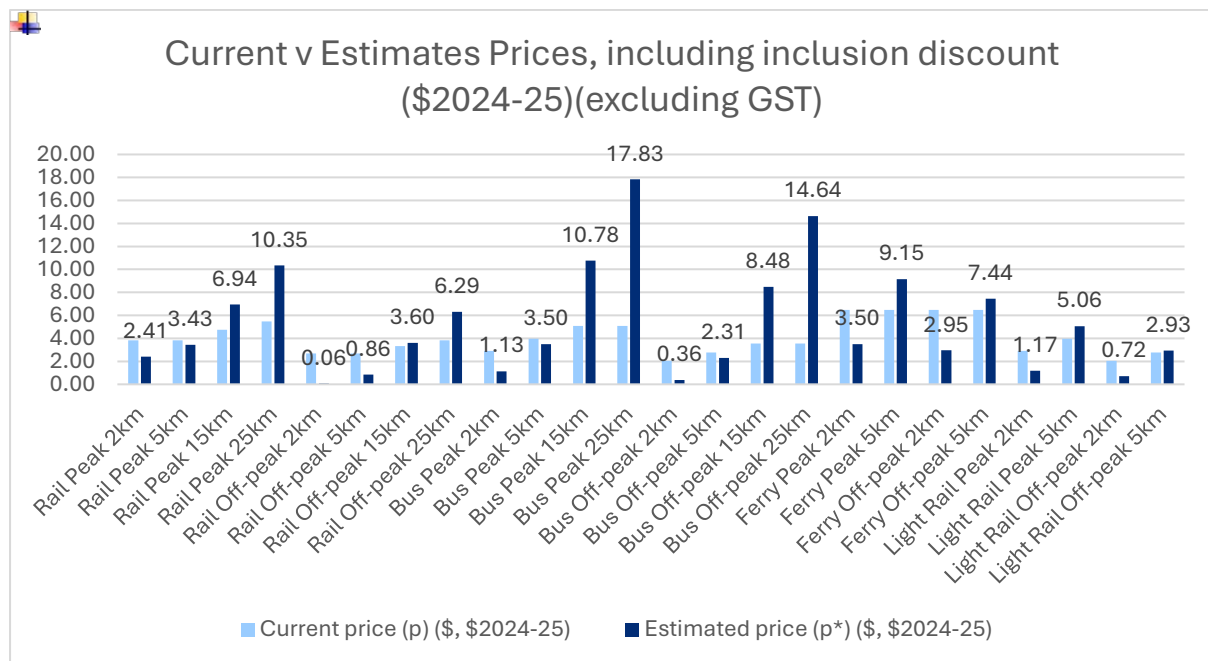
trip making by people at risk of mobility-related exclusion (e.g., lower costs of crime, lower health and justice system costs, improved productivity). These inferred societal (external) benefits account for about three quarters of the \$22.75/trip benefit.

**Figure 1: IPART efficient PT costs compared to current prices**



Source: [https://www.ipart.nsw.gov.au/documents/spreadsheet-model/spreadsheet-model-fare-optimisation-model-review-opal-fares-2028?timeline\\_id=17398](https://www.ipart.nsw.gov.au/documents/spreadsheet-model/spreadsheet-model-fare-optimisation-model-review-opal-fares-2028?timeline_id=17398)

**Figure 2: Efficient costs applying \$470m social inclusion benefit allowance for bus, compared to current prices**



Source: Author, using [https://www.ipart.nsw.gov.au/documents/spreadsheet-model/spreadsheet-model-fare-optimisation-model-review-opal-fares-2028?timeline\\_id=17398](https://www.ipart.nsw.gov.au/documents/spreadsheet-model/spreadsheet-model-fare-optimisation-model-review-opal-fares-2028?timeline_id=17398)

The IPART Technical Paper's ~\$470m provision for inclusion benefits of bus can be tested against these ITLS trip values. Using these values, around 20 million additional annual bus trips would need to be attributable to the additional bus services that result from the ~\$470m bus service support. In the absence of this support, these 20m trips would have to have either (1) not been made, or (2) required a lift-giver or (3) required an expensive modal choice (e.g. a taxi), to increase risks of transport-related social exclusion. This is only about 10% of total bus trips, which seems a conservative estimate of the proportion of bus users who will be at risk of mobility-related exclusion. Stanley & Hensher (2011), for example, estimated that around one-third of Melbourne bus trips are in this exclusion risk category, so a 10% proportion for Sydney looks very conservative. Building a \$470 cost discount into the optimal fare setting process, to recognise the reality of social inclusion benefits from short distance bus trips in particular, seems very modest on this basis. Ignoring that provision, as IPART has done in its draft proposal, seems to deny the reality of mobility-related exclusion.

Including the ~\$470m cost discount, to recognise social inclusion benefits, leads to lower efficient costs of bus trips in the 2 and 5 km range (say up to about 8 kms), with those efficient costs being below current costs. *Maximum price (fare) reductions should follow for these shorter trips*, if the bus contribution to reducing social exclusion risk is accepted.

Longer bus trips are likely to have a higher presence of work/educational journey purposes, which suggests trip making will be associated with a lower risk of social exclusion. Conversely, shorter trips are more likely to be about getting around the local neighbourhood and about social inclusion. Shorter bus trips should be getting fare reductions, following from their inclusion benefits. In this regard, it needs to be recognised that Ramsey pricing, of the kind used by IPART to develop optimal fares, often imposes higher burdens on disadvantaged groups, whose demand elasticities tend to be lower (because their choices are usually fewer). Ignoring the reduction in efficient bus costs associated with inclusion benefits produces bus fare structures that penalise those at greater exclusion risk.

Somewhat ironically, the IPART Information Paper (IPART, 2024c) notes that the biggest *increase* in fares since 2014 has been for short distance bus and light rail fares. This concern is compounded by the difference between the draft maximum fares for bus trips, including GST, and current fares, as set out in Table 2.6 of the IPART Draft Report (IPART, 2024a). These differences imply that a maximum fare increase of 11.1% could take place for bus trips of 3-8kms, around the highest rate of increase for any mode across any distance band. Yet this is just the mode/trip length where inclusion benefits are most likely to arise. Recognition of the social inclusion benefits of bus leads to a conclusion that short distance bus fares should more likely be coming down, not increasing faster than other fares!

Ignoring inclusion benefits thus risks adding to exclusion woes through fare setting, not reducing them.

## **Conclusion**

IPART has a well-deserved reputation for PT fare setting that is best practice in terms of economic efficiency. Its latest proposals reinforce this reputation by suggesting how agglomeration benefits and social inclusion benefits *might* be taken into account in fare setting. This is carried through to the draft determination for agglomeration benefits but not for social inclusion benefits. This submission shows that ignoring the efficient cost burden suggested by IPART (2024b), for bus services associated with social inclusion benefits, produces fare structures for shorter bus trips that penalise those at greater exclusion risk. *There are strong grounds for reducing maximum fares for shorter bus trips, because of their social inclusion benefits.* The neglect of inclusion benefits in the moderate scenario, on which IPART's proposals are based, adds another burden

on those facing transport disadvantage. *IPART should follow through on the discount to efficient costs for bus, associated with service levels that support inclusion, in finalising its fares determination.* This should see a reduction in maximum fares for shorter bus trips.

## References

Hensher, D., Weisbrod, G. & Christensen, I. (2023). *Value creation through physical and virtual agglomeration.* <https://www.sydney.edu.au/business/news-and-events/news/2023/09/04/value-creation-through-physical-and-virtual-agglomeration.html>

Independent Pricing and Regulatory Tribunal (2024a). *Maximum Opal fares until July 2028: Draft Report. August 2024.* [Draft-Report-Maximum-Opal-fares-until-July-2028-August-2024.PDF \(nsw.gov.au\)](#)

Independent Pricing and Regulatory Tribunal (2024b). *Maximum Opal fares until July 2028. Modelling socially optimal fares. Technical paper. August 2024.* [Technical-Paper-Modelling-socially-optimal-fares-August-2024.PDF \(nsw.gov.au\)](#)

Independent Pricing and Regulatory Tribunal (2024c) *Maximum Opal Fares until July 2028. Affordability: Information Paper.* [Information-Paper-Affordability-August-2024.PDF \(nsw.gov.au\)](#)

Stanley, J. & Hensher, D. (2011). Economic Modelling. In Graham Currie (Ed.), *New Perspectives and Methods in Transport and Social Exclusion Research*, (pp. 201-219). United Kingdom: Emerald Group Publishing.

Stanley, J. & Levinson, D. (2016). Workshop 3 report: Sustainable funding sources and related cost benefit measurements. *Research in Transportation Economics*, 59, 143-150.

Stanley, J., Hensher, D. & Stanley, J. (2022). Place-based disadvantage, social exclusion and the value of mobility. *Transportation Research Part A*, 160, 101-113.