



## Action for Public Transport (N.S.W.) Inc.

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Dear Dr Boxall,

# A New Methodology for Setting Fares

## Introduction

This submission is in response to the Tribunal's Issues Paper dated September 2015 entitled A New Methodology for Setting Fares.

This is part of the process towards setting public transport fares to apply from 1st July 2016.

On 27th August 2015 we lodged our submission to the Tribunal's earlier Issues Paper entitled Finding the Best Fare Structure for Opal

## Who Are We?

Action for Public Transport (NSW) Inc is a transport consumer group, founded in 1974. We promote the interests of beneficiaries of public transport, including passengers.

## Executive Summary

The Paper poses a series of questions (see below) to ascertain the public's views on the various proposals, and the reasons for so saying.

The following points summarise APTNSW's view on the principal matters:

1. IPART should treat the network as a network, as passengers do. It should strive for an integrated fare regime across all modes.
2. We suggest that the model used by IPART is not appropriate for the determination of public transport fares.

## Questions from the Issues Paper

The questions posed in the Issues Paper, and our brief comments, follow. We have listed the questions in full so that readers can see the questions and responses together.

[Q1 Do you agree with our proposed approach to setting fares? \(page 17\)](#)

There are four broad steps:

- Estimate socially optimal fares – that is, fares for each mode that will encourage the most efficient use of public transport and promote the most efficient delivery of public transport.
- To assist with transitioning current fares to optimal levels, we will develop additional fare options that would allow us to consider impacts on passengers and taxpayers. In addition, we also need to consider options for more integrated fares across modes.
- Assess all these fare options against the full set of assessment criteria.
- Decide what form our fare determination should take. Our preliminary view is that we should determine set maximum fares for each individual fare.

No. The "socially optimal" approach for fares still fails to account properly for all the external benefits of public transport. Even if it could, there are larger questions about the way in which the "overall" benefit with which economists concern themselves overlooks the distribution of costs and benefits in society.

We argue for full integration of public transport fares for the public transport network. IPART's approach does not see the system as a system, and it takes us entirely in the opposite direction. Simply trying to add "consider options for more integrated fares across modes" but retaining the old approach is inadequate.

Q2 According to economic theory, a certain number of journeys will maximise the welfare (or net benefits to the wider community) generated by the service. This is known as the socially optimal level of consumption. Fares set to achieve this level of consumption are known as the 'socially optimal fares'.

Do you agree with our proposed approach to estimating socially optimal fares across modes (rail, bus, ferry and light rail) and for different times of the day (peak and off-peak), reflecting the different costs of providing these services, and the different benefits generated from their use? (page 24)

No. It is too complex and the benefits are not worthwhile. There would be too many anomalies and boundaries (time and place) to consider, and to explain to disgruntled travellers – what is peak hour? what is peak direction?

IPART's thinking, as shown in the presentations on 15th September and the papers distributed before then, is that there is a market for travel shared between public and private transport. According to economists, a trip gained by public transport is lost to the private vehicle and vice versa.

There may be some such effect in the short term. It is said on page 70 that impacts of transport on land-use and the economy more broadly are ignored. It is suggested that this is appropriate, but we disagree. One cannot ignore the real strength of public transport which is to serve the large and dense agglomerations of jobs, education and services such as Sydney's CBD, and increasingly, Parramatta and the Macquarie area. Cities are recognised worldwide as economic powerhouses and Sydney is no exception. However, large agglomerations are impossible without public transport services that meet the majority of the transport task and carry the majority of commuters from home to work in the city. The word is "impossible", not "difficult".

At the other end of the commuters' journeys, good public transport services permit denser suburbs in the area surrounding the CBD and hence reduce the distance which the average commuter needs to travel on the way to work. Thus, having good public transport not only takes passengers out of their cars, it also shortens their trips.

We therefore think that the economists' analysis in which a trip might be taken by either public or private transport is an over-simplification of the truth. A trip lost to the car might be replaced by a much shorter trip between an inner suburb and a dense agglomeration, which stands to be a cheaper trip (because it is shorter) and a more productive trip (because the denser agglomerations are where much of Australia's productivity is). Or the trip may not be taken at all. Or land uses may change in response to the provision of better public transport services. The interaction of land use and transport is far more complex and subtle than your model appreciates. Any numerical analysis based on the economists' theory of single market for travel should therefore be regarded with caution.

Q3 We also propose to estimate socially optimal fares from a medium-run perspective (ie, three years which corresponds with our determination period) and a long-run perspective (eg, 10 or more years). For this reason, we refer to:

- The medium run as when the capacity of road and public transport infrastructure is fixed, but public transport service frequency and vehicle fleets could expand or contract in response to demand changes within the determination period.
- The long run as when the capacity of road and public transport infrastructure could expand, and service frequency and vehicle fleets could expand or contract in response to long-term demand changes.

Do you agree with our proposed time frames for estimating the socially optimal fares? (page 24)

See above.

Q4 We propose to distinguish between efficient marginal financial costs for peak and off peak as follows:

$b$  in the off-peak period, and

$b + \beta$  in the peak period where:

$b$  is the efficient marginal financial usage costs per journey, and

$\beta$  is the efficient marginal financial capacity costs per peak journey.

Do you agree with this proposal? (page 31)

No. Differential fares are a demand management tool which, with due respect, should be within the responsibilities of the Department of Transport not IPART. The reason for demand management is to reduce congestion on the roads and on public transport, and that requires a different, specialist set of skills. It is true that demand management (to the extent that it works) also reduces the need for additional investment in expanding peak hour capacity. Making marginal costs per journey the starting point seems to us to be off beam.

Q5 Which types of financial costs do you consider vary depending on the distance of the journey, and which do you consider depend more on the journey simply being made? (page 31)

"Distance costs" include labour, fuel, some maintenance, cash and tickets.

"Start up" costs include some administration (rostering, supervision, some infrastructure).

Q6 Do you agree with our proposal to estimate efficient marginal capital costs for the medium run and for the long run as follows:

For the medium run, including efficient costs associated with:

- additional buses, ferries, and light-rail train sets
- wharf and station upgrades
- upgraded and additional bus priority lanes on existing roads
- upgraded and additional bus depots.

For the long run, including efficient medium-run capital costs plus efficient costs associated with:

- additional ferry wharves
- new light-rail tracks and stations (eg. The Sydney CBD and South East light rail)
- new heavy rail tracks and stations (eg, the Sydney Metro including the second harbour rail crossing)
- additional heavy rail train sets
- priority bus lanes that form part of new road projects.

As we have submitted previously, we believe the methodology currently used by IPART is deficient and has lost sight of what should be a fairly straightforward aim – to set public transport fares, on a network basis, at a level that recovers as much as possible without damaging public transport patronage and clogging the roads. If that

meant that fares were *higher* in some cases than they would be using your methodology, that would not inherently be a concern, as it would provide funds for better services. Nor should it be ruled out, a priori, that they might be lower.

**Q7 Do you agree with our proposal to consider productivity adjustments to identify efficient operating costs in the long run? How do you consider we should identify and estimate the appropriate productivity adjustments? (page 31)**

We need to consider the consequences of this approach for passengers more fully and we reserve comment at this stage.

**Q8 Do you agree with our proposed approach for estimating marginal external benefits and costs? Have we identified all the relevant costs and benefits? (Page 43)**

No. IPART's approach neglects important external benefits, and imposes a cost on public transport (the cost of borrowing money) that it does not impose on all the costs associated with road use.- like policing, traffic management, court costs, and so on.

What is being said at p.43 of your methodology report is that government provides services that would not be justified by their "external benefits" because it wants to reduce social isolation. That ought to suggest that reducing social isolation is an external benefit in the eyes of government and, we might add, reasonable people who want to live in a functioning society. The government is taking a holistic or "joined up government" view that it is better to spend money on public transport services than on social security payments, police, social workers and various remedial measures.

When you then cross to the question of fares, there is no logic to the suggestion that because an external benefits is "accounted for" in the determination of what services should be provided it ceases to be an external benefit for all other purposes.

The underlying reason for this odd approach seems to be that the inclusion of all external benefits would inexorably lead to cheaper fares, as well as what IPART asserts to be "underutilised" services. IPART does not want the people who use what it asserts to be "underutilised" services provided to keep them connected with jobs and services, and also to have the benefit of lower fares.

This looks to us to be a political decision, not a technical one. Moreover it reflects in our view a failure to understand the transport/land use interaction and the impact of low frequencies on patronage.

In any case, this anticipated impact on fares results only because IPART has taken an a priori position that fares are to recover efficient costs minus external benefits. As we said above, this loses sight of what should be the point of the exercise: to set fares at a level that recovers as much as possible without damaging patronage. As we have said in our submission to your paper on external benefits, APT NSW is not seeking a reduction in fares; we are concerned that they be set in such a way that patronage is not damaged, with an understanding that passengers use the system as a system not a collection of individual services.

As IPART's model shields it from seeing even the financial consequences of allowing a large underclass of people with low skills and poor employment prospects to develop, in part because of poor public transport to employment and education, there is something drastically wrong with the model. It cannot be a good basis for government decisions.

**Q9 Do you agree with our proposed approach to estimating scale benefits in the medium run for buses, ferries and light rail? Because the train network is currently at capacity in peak times, this benefit will only be considered in our long term analysis. Do you agree with this approach? (Page 43)**

No. As we pointed out in our submission in March 2015, we think this proposal may lead to unintended consequences.

**Q10 What is your view on how we should measure crowding costs of public transport, particularly in peak times? Options include:**

- Including an estimate of the cost equal to what that displaced passenger would have been willing to pay to make the journey.
- Measuring the amount of crowding and placing a cost to users of this crowding.

(Page 43)

We do not think you should be continuing to add levels of complication to a model that is not serving Sydney's needs. The level of "crowding" is relative. Many people on short train trips prefer to stand in the vestibules although ample seating is available.

Q11 Do you agree with our view on which externalities are likely to be materially different in peak and off peak times? (Page 44)

See above.

Q12 Is using the Bureau of Transport Statistics' Strategic Travel Model the best approach available to estimate the differences in externalities in peak and off-peak periods? (Page 44)

See above.

Q13 Do you agree with our proposed approach to determining how external costs and benefits vary with distance or result simply from the trip being taken? (Page 44)

See above.

Q14 Do you agree with our proposed approach for capturing longer term external costs and benefits? (Page 44)

See above.

Q15 Do you agree with our proposal not to measure social inclusion as a marginal social benefit for setting fares? (Page 44)

Emphatically, no. See above.

Q16 We propose to estimate the demand and price elasticities having regard to the estimates we derive from the outputs of the Bureau of Transport Statistics' Strategic Travel Model, and estimates from available literature. Do you agree with this approach? (page 50)

No comment at this stage.

Q17 How should we estimate the peak/off-peak cross-price elasticities for all public transport modes? For example, this could include:

- examining the effect of past changes to the difference between peak and off-peak rail fares on the height and width of the peaks in demand, and
- examining the impact of changes in peak pricing for the Sydney Harbour Bridge and Harbour Tunnel over time. (Page 50)

It is a good idea to start looking at empirical evidence of the actual impact of past decisions. We hope to see more of this approach and less reliance on mathematical modelling that captures only what it can easily measure.

Q18 Do you agree with our preliminary view to include an estimated marginal excess burden of taxation equal to 8% of the size of the subsidy in our fare optimisation model? (Page 53)

We oppose this move in its entirety. If it is to be done it must be balanced on the other side of the ledger with the same item applied to all the costs associated with road usage.

Q19 Once we have decided on the fares that strike the best balance between our assessment criteria, we need to translate these decisions into a legal determination. Do you agree with our preliminary view that IPART should determine individual fares for our legal determination? (Page 58)

We are doubtful about this; as noted above, the use of differential fares as a demand management measure is more appropriately a matter for Transport NSW.

## **Conclusion**

Thank you for the opportunity to comment on these proposals. We are happy to provide further comment if required.

And we repeat our fundamental tenet – Keep It Simple.