Independent Pricing and Regulatory Tribunal (IPART) NSW

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RE: Response to IPART NSW (Sept 2015) 'A new methodology for setting fares: public transport fares in Sydney and surrounds'[1]

1. Introduction

IPART NSW is currently reviewing its methodology for setting fares for public transport. It has released a paper on the proposed methodology [methodology paper] ahead of a final report to be released in March 2016.

The methodology paper proposes that fares should be set at 'socially optimal' levels, i.e. 'fares that maximize the overall welfare (net benefit to both the individual and society as a whole) generated by the use of public transport services'. It refers extensively to IPART (Dec 2014) 'Review of external benefits of public transport – draft report'.

This submission by Link Place has been prepared in response to both of these papers, particularly the economic benefits of active travel (ie. walking and cycling) as part of a public transport journey. It also offers feedback on specific questions posed in the methodology paper and inconsistencies in the text.

2. Assessment Criteria

On page 4 (box 1.1) the methodology paper states that IPART must consider legislative requirements of the *Passenger Transport Act 2014* including:

- The cost of providing the services
- **Social impacts**
- The need to increase the proportion of travel undertaken by sustainable modes such as public transport
- Standards of quality, reliability and safety.

On page 11 (box 2.1) the IPART methodology paper proposes a set of Assessment Criteria which includes 'encourages greater use of public transport' and 'minimises impacts on passengers'.

Comment 1: The proposed Assessment Criteria do not address the social impacts or benefits required by the legislation.

[1] IPART NSW (Sept 2015) 'A new methodology for setting fares: public transport fares in Sydney and surrounds' http://www.ipart.nsw.gov.au/Home/Industries/Transport/Reviews/Public_Transport_Fares/Public_Transport_Fares_in_Sydney_and_Surrounds with responses due 9 Oct 2015

The Moving Transport Taskforce (2014) demonstrated that 'the biggest single external benefit of urban bus services is their contribution to social inclusion. This is completely ignored in the IPART analysis, as is agglomeration benefits (largely associated with rail). The IPART approach should be broadened to include social inclusion benefits and agglomeration benefits.'[2]

Recommendation: The proposed Assessment Criteria should an additional point on social impact, i.e. 'maximises long term social benefit'.

3. Long term public health benefits

Section 3.4 of the IPART methodology paper states 'we intend to estimate the socially optimal fares for each mode over the medium run (ie, three years) and the long run (eg, 10 or more years).'

It refers extensively to IPART's draft report, *Review of external benefits of public transport,* [3] particularly chapter 7 on external health benefits. That draft report stated 'The external health benefit from active transport is related to the idea that public transport encourages greater levels of physical activity (primarily associated with walk/cycle to access or egress from public transport)…' [4]

So far, so good. But it then continued:

'We consider that most of this benefit accrues to the user of public transport and is therefore a private benefit… We consider that the external benefit is only that related to the reduction in healthcare costs that are borne by society. In addition, only the public health sector costs are external. As for accident related externalities, some portion of the nonpecuniary costs (pain and suffering for the individuals involved, their friends and families) may also be external. The rest of the benefit to health, related to people living longer and higher quality lives with reduced disability, is a direct private benefit to users of public transport.'[5]

In IPART's calculations: [6]

- the total annual cost of mortality risk from physical inactivity = $16.9 billion pa (2014/15)
- the total cost of physical inactivity to the health care system = $2.2 billion pa (2014/15).
- health sector costs as a proportion of reduced mortality risk = 13%

Using these figures, IPART estimates the reduced public health sector costs from an additional kilometre of walking is $0.18; and the reduced public health sector costs from an additional kilometre of cycling is $0.09. [7]

[2] Moving People Taskforce (2014) *Public Transport: funding growth in urban route service,* policy paper 3, Adjunct Prof John Stanley, Institute of Transport and Logistics Studies, University of Sydney, p17
[3] IPART (Dec 2014) *Review of external benefits of public transport – draft report*, chapter 7, pages 54-60
[4] IPART (Dec 2014) *Review of external benefits of public transport – draft report*, chapter 7, p55
[5] IPART (Dec 2014) *Review of external benefits of public transport – draft report*, chapter 7, p56
[6] IPART (Dec 2014) *Review of external benefits of public transport – draft report*, chapter 7, p58; and Appendix B
[7] IPART (Dec 2014) *Review of external benefits of public transport – draft report*, chapter 7, p60

Comment: IPART's calculations – on the public health benefits of walking and cycling as part of public transport journeys – are vastly underestimated. Comparable Australian and international estimates are:

- $1.68 per km (range $1.23–$2.50) for walking and a $1.12 per km (range $0.82–$1.67) for cycling that includes both mortality and morbidity.[8] **REFER to attached appendix**
- NZ$2.60 per km for walking and NZ$1.30 per km for cycling.[9] **REFER to attached appendix**

Disregarding the portion of health care costs borne through private insurance is a logical fallacy. It is irrelevant whether the public health costs of sedentary lifestyles are 'funded' through private health insurance, general taxes, Medicare levies, or in lost productivity and absenteeism.

IPART should refer to the NSW Government Walking Strategy (2013) and the paper commissioned by the NSW Premier's Council for Active Living (2011) *Estimating the Benefits of Walking: a cost benefit methodology.*[10]

Recommendation: IPART's calculation for 'reduced public health sector costs' of active travel should be in line with comparable Australian and international estimates, i.e. reduced public health sector costs from an additional kilometre of walking is $1.68; and the reduced public health sector costs from an additional kilometre of cycling is $1.12.

4. Income from parking levies

The methodology paper includes state revenue from parking levies at around $85 million per annum (from Sydney CBD, North Sydney, Bondi Junction, Chatswood etc).

Firstly, this figure is incorrect, the current income is around $105 million per annum (refer to NSW Office of State Revenue, Annual Report 2013-14).

Secondly, 'All parking space levies collected by OSR are deposited into a special account called the Public Transport Fund, and must be used for the purposes outlined in Section 11(3) of the Parking Space Levy Act'[11] 'to discourage car use in leviable districts and to develop infrastructure to encourage the use of public transport to and from, or within these districts.'

In other words, this revenue is already spent.

Recommendation: IPART's calculation for public transport fares should not include revenues collected through the Parking Space Levy.

[8] Mulley et al (2013) Valuing active travel: Including the health benefits of sustainable transport in transportation appraisal frameworks

[9] NZ Transport Agency research report 537, 2013, Improving the cost-benefit analysis of integrated public transport, walking and cycling, Sinclair Knight Merz Ltd, Wedderburn et al, p72

[10] NSW Premier's Council for Active Living (2011) Estimating the Benefits of Walking: a cost benefit methodology, prepared by PWC www.pcal.nsw.gov.au/walking/nsw_walking_strategy

[11] http://www.transport.nsw.gov.au/professional-drivers/parking-space-levy updated 7 July 2015

Regards,

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Sara Stace is the Executive Director of Link Place. She is on the board of the Australian Cycling Alliance (cycle.org.au) and Bicycle NSW. She was formerly the Australian Government representative on the Australian Bicycle Council and a Director in the Australian Government Major Cities Unit.

Appendix

5. Comparable Literature - NZ

NZ Transport Agency research report 537, Sinclair Knight Merz Ltd, Wedderburn et al (2013)
***Improving the cost-benefit analysis of integrated public transport, walking and cycling,* p72**

7.3.5 Health Benefits

The health impacts of increased physical activity potentially represent the largest single benefit of increased walking and cycling to access PT. Therefore the literature review into the benefits of increased walking and cycling included a critical review of the available methods.

Essentially, there are several methods employed as the basis of health benefits valuation, as outlined below

- *Mortality and morbidity:* The costs of mortality and morbidity from preventable illness or disability is calculated, and the influence of physical inactivity as one of a series of contributory causes is established. This can be expressed as a statistical reduction in risk of mortality for persons who meet specific physical activity thresholds. The costs included can include the following:
    - health sector resource costs – costs to the health sector associated with the treatment or prevention of preventable illness or disability
    - lost output resource costs – costs to employers through reduced productivity of employees due to preventable illness or disability
- *Disability-adjusted life years (DALYs):* 'Willingness-to-pay' research can be used to determine the benefits of improved health to citizens. The use of DALYs forces research participants to make trade-offs between longevity of life and the quality of life available to them for those years.
- *Absenteeism:* Costs to employers through lost employee working days are calculated. There is some evidence that employees who meet the recommended physical activity guidelines take fewer days of sick leave in an average year. In 2004, the World Health Organisation (WHO) suggested that this relationship was not conclusive, although absenteeism benefits have since been adopted in some countries (eg DfT 2010).

Regardless of the valuation method adopted, the following two key principles must be respected when applying the benefit:

- *The benefit is only applicable to a genuine net increase in physical activity:* For example, if secure bicycle parking at a station encourages a cyclist to switch from parking their bicycle at another station, only the net change in distance cycled is relevant. Similarly, somebody may be encouraged to start cycling to the station on a daily basis, but might reduce the number of leisure cycle trips they undertake at the weekend.
- *The benefit is not applicable to people who are already very active:* The health evidence is calculated using specific thresholds (ie comparing the health outcomes of people who do at least 30 minutes of moderate physical activity five times a week versus those who do not). Therefore when applying the values to increased physical activity from walking and cycling, it is necessary to establish in the baseline the marginal change to the population who are classed as 'inactive'. In other words, the full benefit is applied to the small proportion of users who move from just below the threshold to just above it.

The literature review conducted as part of this research identified a range of health benefit calculation studies from New Zealand, Australia, Denmark and the UK, and found values that were generally within the same ballpark. The largest meta-analysis of international physical activity studies was conducted by the WHO (2011). The results have been incorporated into an online evaluation tool that estimates the relative risk reduction for all causes of mortality for adults in the population. The evaluation method can be tailored to use nationally specific values for the 'value of a statistical life' (VSL) and the current mortality rate for the age group concerned. The findings of this comprehensive study should be used to enhance the evaluation guidance in New Zealand.

In order to ensure consistency with other business cases, the evaluation tool employs the current physical activity values contained within EEM2. Section 3.8 treats health benefits in a similar manner to accident costs. The health benefits are expressed on a per-kilometre basis, equating to NZ$1.30/km for cycling and NZ$2.60/km for walking. It is assumed for evaluation purposes that half of the benefits are internal and perceived, and therefore the resource cost corrector is equal to half the benefit.

6. Comparable Literature - Australia

Queensland Department of Transport and Main Roads, 2012, *Benefits of inclusion of active transport in infrastructure projects,* SKM/PWC

This report included both direct and indirect health benefits; and gave a larger weighting of benefit to sedentary versus insufficiently.

Table 3.2 Direct health costs of physical inactivity

Step	Description	Value	Comment
A	Direct cost of physical inactivity in Australia	$1.682 bn	Econtech (2007) adjusted to 2010 prices using CPI. Econtech use physical inactivity prevalence data for 18-75 year olds (NPAS), and health sector costs attributable to all ages. Assume herein that physical inactivity costs apply only to those age over 14
B	Australian population aged over 14	18,111,785	ABS Cat No 3101.0 (2010)
C	Insufficiently active population proportion	54.2%	AIHW NPAS survey 1999 (Armstrong et al., 2000)
D	Insufficiently active population aged over 14 18,111,785 x 54.2%	9,816,587	
E	Cost in physical inactivity per insufficiently active individual per annum $1.682 bn / 9,816,587	$171.32	2010 prices, inactive Australians aged 15 or older