AUSTRALIAN CAPITAL TERRITORY

SUBMISSION TO THE
COMMONWEALTH GRANTS COMMISSION'S
STAFF DISCUSSION PAPER 2007/18-S:
ASSESSING TRANSPORT SERVICES EXPENSES

August 2007

VIEWS ON THE COMMISSION'S TRANSPORT ASSESSMENT PROPOSALS

General views on the proposed approach

The ACT supports the use of urban and non-urban populations, weighted for the relative average net subsidy paid in urban and non-urban areas. The simplified approach is supported as it would appear that reliable, fit-for-purpose data are unavailable to extend the assessment methods to adjust for concession status and size of urban centre.

Additionally, in regard to assessing disabilities related to the size of urban centre and/or density, a conceptually proven case needs to be made that these influences increase average urban transit net subsidies.

The proposed assessment method is also supported as it is consistent with the general framework and approach adopted for other categories, for example, schools education, post-compulsory education and law and order etc. That is, all categories share a broad indicator or target population (eg population over 50,000 for urban transit and population aged 15-69 for post-secondary education), and then adjustments are made for the intensity of use and cost impacts.

It is also noted that weighting urban and non-urban transport to reflect their relative contribution to the category is consistent with the approach adopted for other assessments, and is supported. For example, in schools education, a weight of 1 is given to government schools and 0.167 to non-government schools, while for urban transit the weights (which are subject to further examination of the GFS data) are 4.5 for urban transport and 1 for non-urban transport (or to compare with what is undertaken for schools education, 1 for urban transport and 0.222 for non-urban transport).

The view that the assessment should focus on transit services provided in urban areas is supported on materiality and simplicity grounds. It is noted that the current urban transit assessment is nearly five times as large as the non-urban transport category.

In this context, the continued use of the current population threshold - UCLs of 50,000 or more - should be seen as the minimum level that an assessment of urban population should be undertaken to reliably capture relative differences between jurisdictions.

Proposed urban transit and non-urban transit weights

The ACT supports the current approach, but notes that the weighting of 4.5 for urban transport relative to non-urban transport still underestimates the weighting. This is because urban transport expenses for Tasmania and the ACT, as seen in the following table developed by the Commission, are not yet included in the weights calculation as they are currently allocated to the 'road transport nec' GFS item.

Table 1 Net subsidies (less user charges) per capita 2004-05

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Urban transport	251	225	207	163	169	0	0	30	209
Non-urban transport other than freight	7	47	40	26	18	2	0	13	26
Non-urban freight	32	1	31	33	1	9	0	36	21
Actual expenses	291	273	278	222	187	12	0	78	256

Source: 2008 Update GFS data

The ACT's urban transport expenses are around $66.9m ($206.00 per capita) in 2004-05, of which $6.7m ($20.53pc) relates to student transport which we understand is to be allocated to the schools education assessment. This student transport data has recently been provided to the Commission as part of the GFS Data Working Party exercise.

Can States provide reliable data by size of urban centre?

The ACT is unable to provide this data given the urbanised capital-city nature of the ACT.

Can States provide reliable data by concession status?

At the July 2007 conference, the ACT supported making an adjustment for concession status if reliable data could be collected from all States for urban populations greater than 50,000. The ACT is able to provide data on concession numbers.

It is highly unlikely, however, given the privatisation of a significant part of the public transport task across States, that reliable data could be collected. This is particularly the case for NSW and Victoria. Given that these States 'drive the standard', the inability to provide these data would make this approach unfeasible. In this context, the data are unlikely to meet the assessment guidelines criteria and an adjustment should not be made on these grounds.

A further issue for consideration is the fact that the propensity of various concession groups is used in the current assessment to determine the concession factor. Given that this measure is judgement based, and a more reliable measure is not available, a concession based adjustment may be too complex to develop accurately.

Should a common location disability be applied in this category?

The use of a common location disability is supported in principle, particularly as it is likely to capture disabilities pertinent to the running of urban transit systems, such as differential wages input costs.

However, elements of the location disability, such as dispersion should not be applied [1] given that the main component of the transport assessment is urban transit, and rural/remote allowances are not applicable.

It is also noted that as this disability is in the early stages of development, the ACT would be keen to review this disability to ensure it reflects the actual circumstances of the States prior to giving support for its use.

Whether urban structure or urban population should be used as the basis for assessing the average level of subsidies

The use of the urban population over 50,000 as the basis for assessing the average level of subsidies, in the absence of more reliable data and conceptually demonstrated arguments, is supported.

The Commission has noted in paragraph 21 of *Staff DP 2007_18-S Transport Services* that:

[1] If the dispersion element (and other components that are not applicable to urban transit) could not be removed from the location factor, the factor could be discounted in some way to reflect this.

"…density of urban areas is said to affect the net costs of transit services and so the level of subsidies, but the direction of the effect is not clear (some States argue costs increase with density, others say costs decrease with density)".

The ACT believes this to be an accurate summary of the complexity of the issues. If urban structure (density, size or proportion of the capital city population living in dense CDs) is to be used as the basis of the urban transit assessment, the rationale for adopting such as approach needs to conceptually demonstrated. That is, it needs to be conceptually demonstrated that:

- higher net average subsidies are driven by the urban structure, noting that patronage and fares collected are higher in dense areas, thereby defraying the level of subsidies required;
- rail costs are higher than bus costs (evidence in this submission suggests otherwise); and
- that density and urban structure accurately captures the effects of bus and rail subsidies across the States – will this also accurately reflect the pricing subsidy disabilities of the less populous States?

Additionally, the data need to be reliable and accurate. It appears that data are not available to accurately assess net subsidy effects given the constraints faced by NSW and Victoria in providing average subsidy data.

The continued use of the current population threshold - UCLs of 50,000 or more - should be seen as the minimum level that an assessment of urban population density should be conducted to reliably capture relative differences between jurisdictions.

Anecdotal evidence suggests that UCLs below 50,000 are significantly less densely populated at their core given the ABS' formulation of UCLs, specifically the use of wide boundaries to contiguous Collection Districts with populations of 200 or more:

"*Wide rather than narrow boundaries are to be used to ensure inclusion of all urban or built-up areas. Some rural area can be included in an Urban Centre, if necessary, to ensure that the boundary encompasses all the urban area.*" [2]

As such, any reduction to the 50,000 UCL population threshold will lead to the inclusion of a greater number of rural areas, thereby undermining the main intent of the assessment – States' relative demand and cost of providing urban transit services. Capturing rural areas with low population densities dilutes the UCL's population density by capturing the low levels of public transport service provision available to rural populations.

A significant amount of research would need to be undertaken by the Commission, and discounting applied, to ensure that the influence of State transport and planning policies are removed from the assessment.

How should the Commission approach assessing the average subsidy paid in very large urban areas?

It is noted that a difficultly with the proposed approach is how to assess use for very large urban centres (those with 2 million people or more), given that only two cities fall into this category.

The ACT'a view is that NSW and Victoria would need to provide detailed subsidy data to show that higher net average subsidies are required for the large cities of Sydney and Melbourne.

[2] 1216.0 - Australian Standard Geographical Classification (ASGC) - Electronic Publication, 2005 – see: http://www.abs.gov.au/AUSSTATS/abs@.nsf/lookup/6DB91BD08C425487CA256F190012EEF4?opendocument

These data are required to meet the assessment guidelines, that is, they must be reliable and fit-for-purpose. Without these data, it is unlikely that a reliable assessment could be undertaken.

Irrespective of the data issues, the ACT does not believe that a conceptual case has yet been demonstrated showing that very large cities face higher net subsidies (because of rail). A 'clean slate' approach has been adopted for the 2010 Review, and as such, a conceptual case needs to be clearly demonstrated before disabilities are assessed.

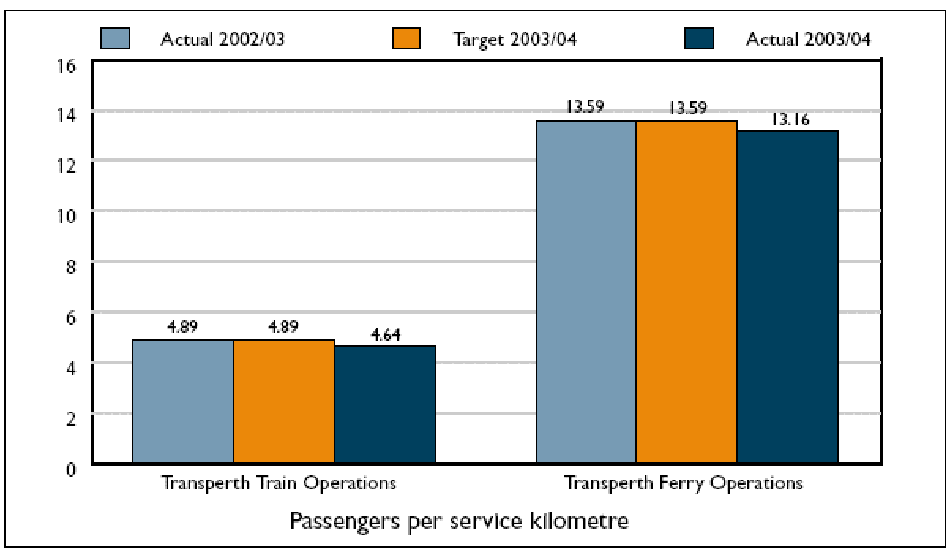
While gross subsidies may be higher in these cities, the level of patronage, and therefore revenues, are relatively higher for rail and thus **net average subsidies** are not appreciably different to bus subsidies. If this is the case, an adjustment for large capital cities is not required.

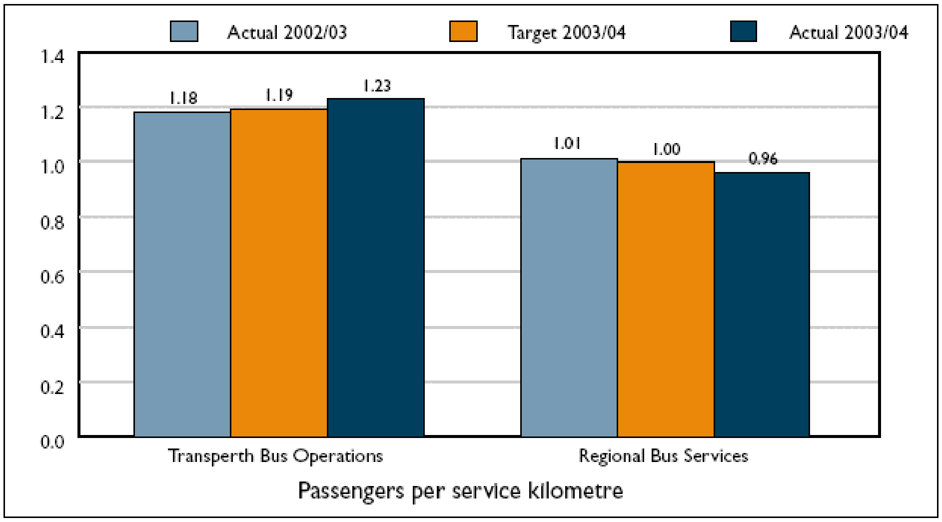
In this context, it is noted that a range of research highlights that rail costs are no more costly than bus transport, or only marginally higher. If road infrastructure costs for buses and included in the analysis, bus costs are often higher than rail costs. Such evidence refutes the need to assess disabilities related to rail services.

Audited key performance indicators developed by the WA Department of Transport shows that for Perth urban transit services (Transperth), rail costs are equivalent, or only marginally higher than bus costs.

Possible higher infrastructure costs for rail are largely offset by higher passenger numbers. As seen in the following graphs, there were 4.64 passengers per service kilometre on Perth rail services in 2003-04 compared to 1.23 for Transperth bus operations.

COMARISON OF TRANSPERTH RAIL AND TRANSPERTH BUS SERVICES - PASSENGERS PER SERVICE KILOMETRE



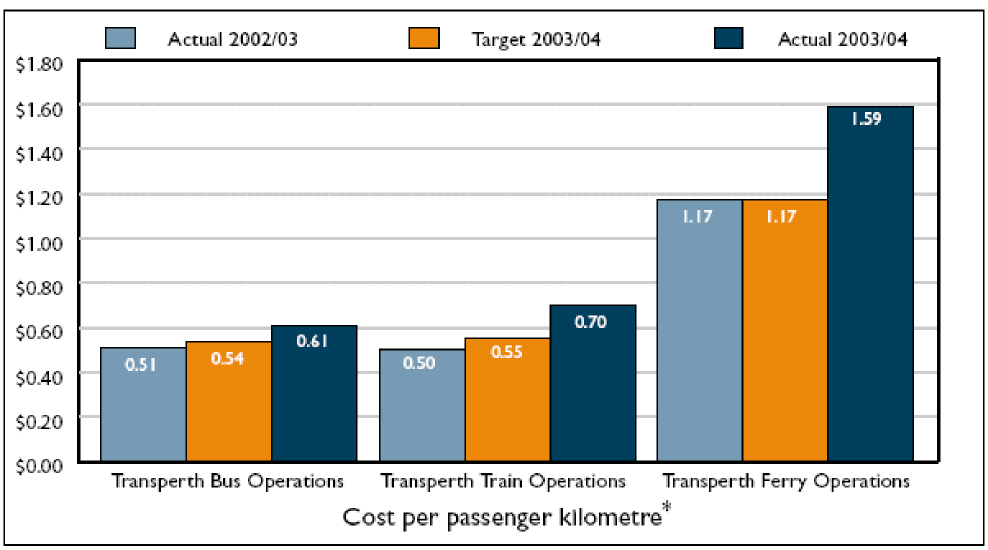


Source: Audited Key Performance Indicators, Perth Transit Authority, 2004 Annual Report.

The following chart demonstrates that Transperth Bus operation costs per passenger kilometre (0.51c) were slightly higher than the Transperth Rail operation cost per passenger kilometre in 2002-03 (0.50c), and that this had reversed slightly in 2003-04 - Transperth Bus 0.61c and Transperth Rail 0.70c (partly due to rising bus patronage and declining rail patronage between 2002-03 and 2003-04 as seen in the preceding two graphs).

This information suggests that rail costs are only marginally higher than bus costs. However, if bus costs were to include road related costs (road capital and maintenance costs for non-dedicated roads as well as dedicated bus lanes)[3], rail is effectively cheaper. This suggests that that an adjustment for large cites (rail effects) is not warranted.

COMPARISON OF TRANSPERTH RAIL AND BUS SERVICE COSTS PER PASSENGER KILOMETRE



* Passenger kilometres are a management estimate derived from the zonal distribution of ticket sales because actual average passenger trip length is not known.

Source: Audited Key Performance Indicators, Perth Transit Authority, 2004 Annual Report.

3 If the cost of the underlying infrastructure, such as railway tracks, is taken into account to derive rail costs, then the underlying road infrastructure costs for buses (whether the roads a dedicated or not dedicated) should also be reflected in any reliable comparison of costs between the two modes of transport.

Analysis undertaken by Dr Garry Glazebrook of the University of Technology Sydney [4] provides insight into the costs of rail versus bus transport in Sydney.

As shown in the following table, the total cost per passenger kilometre for Sydney Cityrail (39c) is less than for the State Transit Authority bus service (43c). Additionally, it should be noted that the Cityrail costs <u>include</u> main infrastructure costs, while the bus <u>excludes</u> these costs.

In terms of net costs, after fares are taken into account, Cityrail cost per passenger kilometre fall to approximately 29c and STA buses to 21c. However, if infrastructure costs are included for buses, the likely outcome is that rail costs per passenger kilometre are lower than for buses.

COMPARISON OF SYDNEY CITYRAIL AND SYDNEY BUS COSTS

	Cityrail	STA Bus	Priv Bus	Total Bus
Annual Patronage (mill)	273	198	142	340
Av Trip Length (km)	18.7	6.2	8.8	7.3
Total Pass- Km (billion)	5.11	1.23	1.25	2.48
Total Cost pa ($m)	$1970	$532	$517	$1049
Total Cost / pass-km	**39c**	**43c**	**41c**	**42c**
Farebox Revenue $m	$518	$275	$254	$529
Farebox Rev / pass-km	10c	22c	20c	21c
Cost of Main Infrastructure Included?	Yes	No	No	No

Source: Glazebrook (2005), NSW Ministry of Transport (2003) and NSW Transport Data Centre.

Research undertaken by Peter Newman, Professor of City Policy and Director of the Institute for Sustainability and Technology Policy at Murdoch University in Western Australia, highlights that rail can be less costly than busway transport.

His research has been important in terms of the recent decision to build and provide the Perth Northern Suburbs Rapid Transit System (rail services down the middle of the Mitchell Freeway to the northern sub-centre of Joondalup). These services are now being extended further north and a $1 billion rail service has been announced for the southern suburbs.

In challenging some of the assertions given to the public (especially those of Queensland Transport) regarding the higher costs of rail, Professor Newman notes that:

> *"Heavy rail is considered by many to be very expensive in capital costs, however the Perth Northern Suburbs line cost $230 million for a 33 km system (total costs). This is $7 million per km and is cheaper than most busway proposals."* [5]

Importantly, as a number of States have stated, once patronage is taken into account for rail services, the net subsidy for rail falls significantly, and it is not clear that net subsidies are material:

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[4] *Housing, Transport and Cities– Some Myths and Realities,* Dr Garry Glazebrook PhD, M.O.R, MURP, University of Technology, Sydney, 2006.

[5] *Ways busways fail* - edited abbreviation of a longer unpublished article entitled *Brisbane's Transport Strategy - An assessment*, The Brisbane Institute, Peter Newman, June 2001.

"The experts said it would be a high running cost option, however the Northern Suburbs line is almost breaking even in running costs. <u>The current mythology says heavy rail running costs are high and busway is low. This is wrong and is reflected in the data presented above which shows rail-based cities having much higher transit cost recovery</u>. One train driver can carry six hundred or more passengers using a very much more efficient technology in fuel use, compared to one bus driver carrying 60 people (or a maximum of 120 in an articulated bus) that is ten times less fuel efficient. If trains carry too many extra staff and don't run at capacity it is not the fault of the mode." [6]

There are also other effects and spin-offs from rail systems that lower the net cost that are generally ignored and not included in any analysis of net subsidies. As such, rail costs are overstated.

Evidence of some of the other revenue benefits are as follows:

"The better potential of rail to attract development also provides the possibility for governments to participate in joint development and value capture opportunities (eg see Keefer, 1985; Cervero, Hall and Landis, 1992). These mechanisms are capable of yielding up-front capital contributions from the private sector for stations and other infrastructure, and ongoing non-fare revenue from leasing of air rights, property rents, station connection fees and other methods, as well as returning to the public purse some of the windfall gains that can accrue to the private sector from public investment in transit, such as the rezoning of adjacent land to higher value land uses." [7]

The Institute for Sustainability and Technology Policy goes on to highlight the attractiveness of joint development and value related opportunities:

- *"The transit authority/government gains in shared capital costs of new transit projects, additional non-fare operating revenue from leased lands and a more efficient transit operation with a higher fare box recovery ratio, especially higher off-peak and reverse direction patronage in peaks through high density centres along the lines. Local governments benefit from a higher tax base and revitalisation of the local area, including more local job opportunities.*

- *The developer / land owner gets a much higher value use from the land through density bonuses and rezoning advantages, easy accessibility for the development's workforce from all over the city and a guaranteed, captive clientele for businesses located around the station.*

- *The community gains in cheaper, quicker access to a wider range of employment opportunities, services and housing, much better standards of urban and environmental design around stations and vital focal points of convenient urban facilities for the local population. Far greater choice becomes possible for those with and without cars."* [8]

It should also be noted that bus subsidies are understated given that there is a significant subsidy associated with road infrastructure costs which buses are partly responsible for, which are not reflected in bus subsidies.

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[6] Ibid.

[7] *Techniques of urban sustainability: quality transit*, Institute for Sustainability and Technology Policy, Murdoch University, Jeff Kenworthy, 2000.

[8] Ibid.

It would also appear that not assessing disabilities associated with very large urban centres is not a concern given that the net subsidies for Tasmania, the ACT and the NT arising from pricing subsidy effects are currently not captures in the assessment. These two sets of disabilities have offsetting impacts:

- larger net subsidies due to very large city effects for Sydney and Melbourne are driven by density; while
- larger net subsidies for Tasmania, the ACT and the NT arising from pricing subsidies are driven by the inverse of density.

If the Commission undertakes a disability assessment for very large city effects, disabilities should also be assessed for pricing subsidies. This is particularly the case given that in the 2007 Update assessment, 56.2% of the category related to pricing subsidies and just 30.9% was for capital subsides (very large city effects).

At this point in time, the ACT does not believe that an allowance for large cities is warranted as it has not been conceptually demonstrated that higher net average subsidies exist for Sydney and Melbourne. Information and analysis from a range on sources contradicts the need for such an adjustment.

Comment on the feasibility of using international experience to test the reasonableness of the use weights for very large urban centres relative to other urban centres

It is noted that staff propose to research international experience (where appropriate comparisons can be made) on how use is affected by the size of urban centre and that this information could be used to test the reasonableness of the use weights for these two cities relative to other urban centres.

The use of international data from other comparable very large urban areas to support and test data sourced from within Australia is supported. However, it should be noted that the use of international data by itself to determine the assessment is not supported, as it is out of context and will not accurately capture the actual circumstances faced by the Australian States.

Caution needs to be taken when assessing international data, particularly in ensuring that the exercise is not simply geared towards ‘data mining’. A broad range of data sets from countries, which are widely reflective of those circumstances faced by jurisdictions with very large urban centres, is required in order to make any meaningful comparisons. These should be based on a large sample size.

Comment on the feasibility of using urban structure as a possible indicator of assessing transport use and the average level of subsidy paid in capital cities

The use of urban structure is not supported.

The use of an adjustment for urban structure is not consistent with the urban road length assessment whereby the Commission considers the actual structure of urban areas to be heavily policy influenced. In this light the ACT does not consider there to be a case for using urban structure is the assessment methodology.