

**To Do What, and With What, and To Whom ?**

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**Abstract:**

Public transport is enjoying its period of rediscovery, and many projects are under way around the country to expand or enhance it. The great unmentionable is the issue of who should pay for what, and why. This paper argues that no public money should be spent on public transport without a clear idea of the public return in some form. A pragmatic approach is to concentrate on achieving improvements. Using NSW as an example, it shows that most public support is preferential in nature, or in other words that some groups of people receive preferential treatment over others for not very specific reasons. On social policy grounds, it would be preferable to concentrate more on redressing disadvantage, on clarifying and quantifying transport externalities, and while encouraging the trend for operators to act solely on commercial grounds - to add to their markets by targeted social expenditure. Several issues remain foggy and suggest where further research which might produce great social benefit.

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## **Introduction**

The regeneration of urban public transport systems is now firmly entrenched as a policy direction in all major cities in Australia. There are at least two major ways in which this regeneration is being implemented : investment in infrastructure, and reform of service delivery processes especially in regard to competition between and ownership of service delivery organisations.

The reform initiatives represent a major departure from traditional practices, and for those involved the opportunities offered can be accompanied by uncomfortable degrees of change. To such people, the observation that the reforms are as notable for what they leave alone as for what they change may be a hard one to accept. That is the starting point of this paper. It suggests that the limited nature of these reforms makes it most unlikely that public transport will be able to function as a fully commercial entity, and that even if it does, then the social objectives of State Governments will ensure that the budget sector remains a significant source of revenue.

If money is to be allocated by State Governments from the budget sector to transport, then it should be related to some objectives of social policy - implicitly or explicitly

This paper offers a framework to make, over time, the implicit more explicit. If this were to be adopted, the result would be a more effective disbursement of public money.

This paper is based largely on work by the author for the NSW Ageing and Disability Department. The views expressed are those of the author alone.

**Don't manage by price, and ignore the main competitor**

The most notable omission from the reform process is pricing - both of public transport itself, and of the way in which public transport and private transport are treated differently.

The price to the user of public transport (the fare) is controlled almost everywhere by government - although there are exceptions, for instance Sydney's new private sector light rail service to Pyrmont. But in general, when the price is controlled by Government, and service levels are also specified, then service providers do not have a great deal of flexibility to vary quality. Price regulation, which is presumably favoured as a consumer protection measure, does tend to stifle innovation in delivery.

An even larger omission is comparable treatment of the main competitor to public transport, the private car. Public transport - and even more so individual modes in the public transport system - does not operate in a self-contained universe and people are free to make other arrangements. And most of them do.

So in the absence of a comprehensive pricing approach covering all modes of urban transport, it is most unlikely that any mainstream public transport system will be self-sustaining from user charges

If fees from the users are insufficient to maintain the systems, who should pay? By default in Australia, governments pick up the tab. The sums involved are not small, and there is increasing realisation that if they are to be paid, there should be a clearer idea of why they are being paid and what the returns are.

Many current initiatives do not take this view - rather they seek to minimise the payment by efficiency improvements (including the transfer of service delivery from the public sector to the private). While it is clear that government is paying too much if it could get the same product at a lower cost, this does not address the question of what is worth having in the first place. That, in turn, depends on what you want to achieve.

### **What is public transport for ?**

Public transport is often discussed as if it were a homogeneous entity. This might make sense in some contexts, for instance in some cities of continental Europe where quality public transport is seen as a prerequisite for civilised urban life and is treated accordingly. But this attitude does not prevail in Australia. Here, as in the UK and the United States, we tend to treat public transport as having specific tasks to perform, and seek the delivery of those tasks at the minimum cost to the public purse.

It has been suggested elsewhere (Sinclair Knight Merz, 1996) that there are four main market segments which urban public transport in this country serves.

- commuter movement : in larger cities at periods of peak travel demand there are broad efficiency and environmental benefits accruing from an effective urban transit system
- basic accessibility : there is a proportion of the urban population which has no other option for accessibility and mobility
- the transport of children to and from school
- competing with the car and the bicycle for optional non-work travel

These four functions, or market segments, offer one dimension of a framework for considering why public transport is supported. **Table 1** summarises the characteristics of these segments.

**Table 1 - Market Segmentation for Urban Transit**

Source : Sinclair Knight Merz 1996b

	COMMUTER MARKET	BASIC ACCESSIBILITY	SCHOOL TRANSPORT	OPTIONAL TRAVEL
users	mostly workers in higher-order activity centres especially CBDs	the carless - children, some young adults, some older people, some low income people, some people with disabilities, adults without licences, etc	school children	anybody
trip purposes	to and from work	all purposes	to and from school	varied non-work purposes
service provision	am and pm peaks five days a week some mixed-mode use	all day seven days a week	am peak, mid-afternoon five days a week forty weeks a year	mainly off-peak seven days a week some mixed-mode use
degree of user choice	medium	none	low	high
reasons for public transport use	speed and/or convenience relative to car	too far to walk or cycle and no other choice	too far to walk or cycle and no-one to drive them	convenience relative to car
type of services	regional	regional and local	local	regional and local

There are different reasons why there is (or is not) social value in supporting these functions, and these are reviewed later in the paper. There are also different ways of supporting them. Using NSW as the example, these include :

- commuters - deficit funding for operators (sometimes formalised as specific Community Service Obligations, for instance for maintaining fares at sub-commercial levels), discounts for multi-use tickets
- public transport dependents : concessions of various sorts, deficit funding, minimum service levels to ensure provision of services at low demand times (and hence cross-subsidy), funding of special services for those with particular mobility problems
- school children : free-to-user travel under the School Student Transport Scheme, and reimbursement of operators for costs of provision
- optional travel : fare discounts and concessions (for instance cheap off-peak fares on trains, pensioner excursion tickets for car-owning older people)

### Expenditure in NSW

NSW spends in the order of a billion dollars a year on its transport systems, as outlined in Table 2. This does not include the costs of providing and maintaining road and rail infrastructure.

**Figure 2 - Estimate of NSW Government Social Expenditure on Transport (excluding road and rail infrastructure costs)**

Source : Kilsby 1996

Item		\$m 1995-96 or nearest available
CityRail	excluding SSTS <sup>1</sup>	286.6
Countrylink	excluding SSTS <sup>1</sup>	75.2
STA <sup>2</sup>	excluding SSTS <sup>1</sup>	112.8
private bus	excluding SSTS <sup>1</sup>	26.3
SSTS <sup>1</sup> and DSE <sup>3</sup>	including 1993-94 estimates of Countrylink payments (\$7.5m), DSE <sup>3</sup> disabled school transport (\$21 m), car user payments (\$7.5m)	359.7
taxi operators	Taxi Transport Subsidy Scheme	7.6
community transport	Home and Community Care	8.7
community transport	other	1.2
Roads and Traffic Authority	licence/registration concessions	109.0
ambulance service	net of user charges 1993-94	95.5
<b>Total</b>		<b>1076.2</b>

<sup>1</sup> School Student Transport Scheme

<sup>2</sup> State Transit Authority : Sydney Buses, Sydney Ferries, Newcastle Buses and Ferries

<sup>3</sup> Department of School Education

### Alternative approaches

Clearly with expenditure at the sort of level shown in Table 2, the imperative to make sure you know why you are spending it and whether you are getting what you want is high. It is an issue which has exercised the minds of many people over the years. Different approaches have been followed. There is no right or wrong in this - it is quite legitimate to look at a complex problem in different ways.

There are at least three ways in which a framework of objectives could be constructed. These are :

- with an organisational approach
- with an analytical approach
- with an improvement-achieving approach

A fourth possible approach would be to largely dispense with any framework, and work instead with a bottom-up approach exploring the possibilities. (Local demonstration schemes or trials may be instigated on this basis sometimes).

#### The organisational approach

The organisational approach is embedded in current arrangements, and in initiatives such as the Social Programs Policy (NSW Treasury 1994) to change them. It is a practical approach which recognises that there is a system in place already, and that changes for the better will largely come from marginal improvements to what is already there. The characteristics are that :

- the interests of transport providers feature heavily
- reform will tend to focus on efficiency improvements, i e doing the same things better, rather than doing different things
- arrangements will reflect institutional structures and budget processes
- because some government budget processes include GTE's and exclude many other types of service, the interests of people whose travel is provided by GTE's will tend to be better served.

Without a systematic organisational approach, practical implementation of objectives is impossible, but the system should reflect the objectives and not vice versa

#### The analytical approach

The analytical approach would seek to identify a comprehensive set of social policy objectives. Existing programs could then be assessed against these objectives, and/or over time replaced by other programs more specifically targeted. There are a number of models with which general social objectives could be developed. These focus on quality of life or social well-being, and sometimes the relation of social objectives to economic and environmental ones. Social models have been developed by bodies such as the United Nations, the OECD and the United Way of America (a philanthropic organisation which provides program funding to a large number of voluntary agencies). In NSW the development of social objectives is the responsibility of the Social Justice Sub-Committee of Cabinet.

It has been suggested by others (ADD 1995) that the application of this type of thinking in NSW might identify, as the social objectives behind transport expenditure, the overcoming of travel barriers which prevent achievement of an acceptable level of any of the following :

- employment opportunities, opportunities for economic development and participation, income security
- health maintenance and treatment
- access to basic material needs, e g food
- access to education
- environmental quality
- individual and collective safety
- social, democratic, cultural and recreational functioning and participation
- self-sufficiency and freedom of choice

Producing a distinct transport program or set of programs for each of these objectives would be a heroic task. One big advantage of this approach would be that solutions would not be constrained by institutional barriers. Mainstream public transport would not necessarily be the principal recipient of funding controlled by such objectives. Access to education, for instance, could be furthered by supporting bicycle network infrastructure or bicycle purchase as well as - or instead of - paying for travel by bus. Some of the measures favoured might be based on supporting car use (e g by people with disabilities or the geographically isolated)

#### The improvement-achieving approach

The third possible approach is one which combines the practicality of the input-focussed organisational approach with the policy perspective of the outcome-oriented analytical approach. It is based on three principles :

- it recognises a number of *de facto* goals behind present arrangements, which are less specific than the objectives suggested above under the analytic approach
- it recognises that improvement in the effectiveness of expenditure will be a long process, due to limited data and the interaction with other broad policy areas
- the directions for change are different for each of these broadly defined goals, and reform programs should be tailored accordingly.

The *de facto* goals identified as being the basis, singly or in combination, for all current programs are suggested below. **Table 3** reviews current programs in terms of this framework. The goals, and the objectives stemming from them, are :

- "threshold: - the social objective of looking after groups of people with particular disadvantages to bring them up to a threshold of basic mobility and/or accessibility to key services.

- "preference" - the quasi-social objective of giving certain groups in society preferential treatment.
- "marketing" - the commercial objective of giving low-cost access to surplus resources to obtain the marginal revenue, e.g. discount fares to attract passengers.
- "externality" or "cross-sectoral" - the holistic objective of achieving non-transport benefits from supporting access to transport for certain groups of people or types of transport.

**Table 3 - Relation between social expenditure and strategy elements (first order effects only) - 1995/96 or nearest available**

Source : Sinclair Knight Merz 1996a

Expenditure	approx cost (\$m/yr)	Strategic motivation (first-order effects only)
"General Concessions" (rail)	120	<b>Preference</b> : all rail passengers are subsidised
Targetted Concessions - pensioners, students, unemployed, children, other (rail, bus, ferry, car)	352	<p><b>Preference</b> : being a member of one of the eligible groups entitles the member to a range of concessions irrespective of personal circumstances.</p> <p>The Pensioner Excursion scheme was originally based on the <b>Marketing</b> principle - it was first intended to give pensioners cheap access to unused train capacity on Sundays, but has subsequently been expanded to become a Preference scheme</p> <p>Children are included as concession beneficiaries even though the cost to government is nil. These concessions are provided at operator expense by government regulation.</p>
Capital Costs (CityRail - Countrylink excluded)	649	(Partly) <b>Externality</b> : Treasury accepts continuing subsidy of the Below-Rail costs for CityRail, in view of the environmental benefits ascribed to the rail system. There is no quantified link between the two yet. The status of other rail capital costs have not been addressed, nor has the capital costs of road infrastructure. For buses the capital costs of the



Expenditure	approx cost (\$m/yr)	Strategic motivation (first-order effects only)
		fleets are not recorded separately but are accounted for via operating costs.
Pricing CSO (bus, ferry) <sup>1</sup>	20	<b>Preference</b> : for one quarter of the NSW population (the STA catchment) the operator is paid to keep fares below a benchmark ; for other operators the benchmark is the maximum permitted fare which they can undercharge at their own expense.
Service CSO (bus, ferry) <sup>1</sup>	16	<b>Preference</b> : for one quarter of the NSW population (the STA catchment) the operator is paid to provide services above a benchmark ; for other operators the benchmark is their minimum permitted service level which they may exceed at their own expense.
School Student Transport Scheme (bus, rail, ferry, car)	331	<b>Preference</b> : the beneficiaries are families with children at school, whose travel costs to and from school are met by Government irrespective of need provided the trip length exceeds a minimum distance
Taxi Transport Subsidy Scheme (taxi)	8	<b>Threshold</b> : this is a concession scheme for the severely and permanently disabled only. However it is not a full threshold scheme because it limits benefits for what may be essential trips (i.e. over \$50 taxi fare) but provides them for what may be inessential trips : it therefore has an element of preference as well.
Home and Community Care	9	<b>Threshold</b> : this is a service specifically for the frail aged.
Community Transport Program	1	<b>Threshold</b> : community transport services provide transport accessible to all in areas otherwise without public transport
Ambulance Service	96	<b>Threshold</b> : people needing ambulances are clearly at a transport disadvantage. User charges reduce the cost of support.
Disabled School Transport (DSE)	21	<b>Threshold</b> : this scheme gives children with mobility handicaps access to education

<sup>1</sup> The State Transit Authority is the only current recipient of Pricing and Service CSO's

### **Framework for Reform**

The threshold, marketing and externality objectives are legitimate and defensible, even though the knowledge base which underpins present arrangements may be in need of improvement. With greater knowledge, resulting from better data and more research, the effectiveness of each of these could be improved :

- For threshold-based concessions and support, progress can be achieved by refining the targetting of specific disadvantage groups, so that fewer people in need of special assistance would be left without a basic level of mobility support. Therefore consideration should be given to alleviate restrictions through disability, low income, geographic isolation, unemployment and other forms of disadvantage on a statewide basis.
- For commercially-based concessions and support, progress - from a public policy viewpoint, at least - can be basing reimbursement on a more realistic and commercial basis and withdrawing it for concessions which it is in the operators' interests to give anyway
- In the longer term, the development of better knowledge of cross-sectoral benefits from transport provision will help in devising schemes in pursuit of this objective. Environmental externalities in transport (congestion costs, pollution) have perhaps had more attention to date than any other type. At present we do not know enough about other cross-sectoral relationships, including :
  - possible government savings in the delivery of health services, if better access to transport for older people meant that some services rendered at home could be replaced by more centralised services ;
  - possible reduction in the call on health services in the first place, if greater access to transport allowed older people to retain a more participative and healthy lifestyle for longer ;
  - possible safety benefits, if better access to public transport provides older drivers with a feasible alternative to driving their own car for as long as possible (although this may be offset by exposure to greater hazards as a pedestrian).

However the most problematical issues lie in the arena of preference-based support, which derives from favouring one group at the expense of others. As **Table 3** showed, most of the present expenditure is preference-based. This is perhaps less defensible, and the justification will probably lie implicitly in one of the other three areas. There is of course a long history behind the evolution of the present situation, and it is likely that rationalisation - if it is attempted - will similarly require a long period. A process which rolls back the preference element over time and which replaces existing schemes gradually with sounder bases offers a possible way forward that is also politically feasible, in a way that a total overhaul probably would not be.

For preference-based schemes, the main issue is their selectivity. Apart from personal characteristics, the preference may also be based on geography - which is perceived as highly inequitable by those who do not live in the "right" areas. Also the preference could reflect a modal bias, especially where government providers are active. Thus, people may find their travel by rail is supported but not by bus, or their travel by bus is supported but not by taxi (for instance), which is very irksome when the unsupported mode is the only one which can meet particular travel requirements. If the preference element is retained, there is no wholly defensible method of removing anomalies in schemes. The removal in anomalies in preference eligibility can be done in many ways: the most expensive option financially and the least expensive politically is to treat the highest level of preference enjoyed by one group as the standard, and vice versa. Therefore reduction of the preference element is much more effective as a long-term strategy.

Space precludes a scheme-by-scheme discussion of how the preference element can be reduced, but the general principles are now outlined.

#### From Preference to Threshold

Some preference-based support is directed towards groups which are considered to contain a high proportion of people suffering transport disadvantage, for instance older people. However not all members of the group suffer disadvantage.

Support devoted to group members without obvious need for it is difficult to justify and, indeed, can bring such schemes into disrepute. Hence better identification of disadvantage within targetted groups would preserve the implicit threshold element of the scheme but release funds currently consumed by people well above the threshold already.

Economic disadvantage, i.e. low income, is an important target. State Government has limited ability to target this, income support being a Commonwealth function. This is an issue which must be addressed.

#### From Preference to Externality

Some preference-based support is directed towards groups who not only may contain high proportions of disadvantage (as per the threshold argument) but also who may impose significant costs on society partly through current tripmaking and transport behaviour.

Changes in that behaviour may lead to a net benefit to society even though transport costs may have to increase to achieve the change.

For instance as people get older they tend to suffer reduced access to private transport and make fewer trips per capita. As a result they generate increased demand for home care services (which are also more expensive to provide than centralised facilities). A more active lifestyle could reduce health sector costs but would require transport provision.

Where such cross-sectoral benefits are implicitly sought, it is necessary to understand the relative magnitudes of the transport and non-transport costs. This would indicate whether the scale of transport support should be reduced or increased in pursuit of such benefits.

#### From Preference to Marketing

Some preference-based support is - or was originally - based on giving preferential access to something which was available at low marginal cost.

This primarily applies to government-provided services not previously required to operate under strict commercial discipline. Private operators would not, of their own accord, give such access when their commercial performance is based on average-cost pricing. They would no doubt be delighted to provide excursions if the revenue foregone was reimbursed.

To return to the original marketing objective behind excursions, it would be necessary to develop charging principles beyond present simple structures. Put crudely, if off-peak charges (and hence the true cost of off-peak excursions) are to come down, then peak charges must go up to maintain the average. However this does not imply that the cost to the user should rise: the peak surcharge could be subsidised on externality grounds if it reduces road demand.

Older people are a large group, and economical provision of excursion facilities could possibly be negotiated in bulk on their behalf on a value-for-money basis. The result would be a commercially sustainable arrangement.

#### Further Research

The above principles raise many interesting questions, and given the current state of knowledge most do not yet have robust answers. **Table 4** summarises some of the areas where a reform process could profit from further research.

Table 4 - Issues for Further Study

Issue	Articulation
Preference to threshold (all)	What is the extent of transport disadvantage among (a) the general population (b) concession users? Are concessions used by disadvantaged people more or less than by others?
Preference to externality (rail)	Are the environmental benefits ascribed to rail real or only the consequence of an inadequate pricing and regulatory regime for road users?
Preference to threshold (SIA)	How do the characteristics of SIA/non-SIA metro areas and metro/non-metro areas differ? How is support split between these areas? Is the method for setting "minimum service levels" by reference to average operator viability appropriate or should social criteria apply as well?
Preference to threshold (targetted concessions)	How much do eligible concession users suffer from frustrated demand in metro/non-metro areas?
Preference to marketing (all)	Can costs be reduced by (a) changes in operator, (b) diversification of operations, (c) replacement by services of different nature? How can innovation be encouraged and demonstrated?
Preference to threshold (targetted concessions)	What targetting options exist for assisting people with low incomes?
Preference to threshold/marketing (SSTS)	What would be the implications of school transport no longer being treated as core business for bus operators? How is support split between metro and non-metro areas? What is the rationale for basing SSTS on half fares when it requires peak resources?
Preference to externality (targetted concessions)	Can cross-sectoral benefits be quantified between transport and health (for older people), or between transport and employment (for people with disabilities)?
Threshold improvements	Are current targetting mechanisms working adequately?

### Conclusion

The directions for reform in social transport expenditure are clear, namely:

- increase transparency in reimbursement for concessions: separate out the issue of the charge to the user and the cost to the operator, by commercial negotiation and, where appropriate, introduction of specific externality-based support. If you want

commuters off the road, pay the operators what they need to supply this expensive peak facility ; do not cross-subsidise the peak from the off-peak and then support the off-peak with full concession reimbursements.

- increase the ability to detect and alleviate disadvantage. The main issue here is income-based disadvantage, which is conventionally regarded as impractical to pursue because of the division of Commonwealth and State responsibilities
- redress preference-based anomalies in eligibility where they are found, but recognise that raising every eligible person in the state to the level enjoyed by the highest beneficiaries is an option rather than a policy. This applies both to geographic areas and mode.
- redress preference-based inequities in applicability by encouraging the development of public transport facilities appropriate to the needs of non-commuters (and commuters with special needs).

If preference remains the basis for much social expenditure on transport, then those concerned will face endless hours in future

*..... arguing all night  
over who has the right  
to do what, and with what, and to whom.*

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