NCP and urban passenger transport[1]

While Australia's economic performance over the period of, first, tariff reform, and more recently, NCP, has been outstanding, especially relative to that of European economies, one area in which Australia has lagged badly is passenger transport. Urban transport, and particularly, urban passenger transport, is a grossly under-performing sector of the Australian economy. We applaud the brief paragraphs in the report that are devoted to this issue. We deplore the abdication of responsibility in this area by the federal government and the total failure of AusLink to address the question in the slightest.

Let us first note that urban transport in Australia generates extraordinary levels of economic inefficiency flowing from failure to alleviate external costs created by transport providers and users. The burden of congestion costs alone has been measured at some $13bn/annum for Australia in 2003. The rate of increase of this burden is also extraordinary. Brisbane has experienced a rapid rise of the incidence of congestion. The Bureau of Transport and Regional Economics forecast that congestion costs in Brisbane would increase by 258% between 1995 and 2015, compared to an increase of 132% in all of Australia's capital cities combined during the same period[2]. The cost of congestion expected by 2015, on a per head basis, was $2000 for Sydney residents, and $4600 for Brisbane, without fundamental change in household behaviour. The total for Australia they estimated at more than $30bn. BTRE estimates assumed a 5 percent growth in road network capacity and included costs of delays and higher fuel consumption associated with stop-start, lower gear driving, but excluded costs of changes in air quality and greenhouse gas emissions arising from traffic congestion. More recent growth projections (Integrated Regional Transport Planning unit, Queensland Transport, 2004) for both traffic and road capacity indicate a 400% rise of the incidence of congested roads in Brisbane over the coming decade. Corroborating this analysis is data on travel times in Brisbane, collected by the RACQ[3]. This survey showed a consistent pattern of significantly increased travel times for all peak arterial routes between 1993 and 2004. Turning to air and noise quality, similar degradation due to inefficient resource use, much created by congestion, are occurring. Sydney would seem to be in a much worse situation than Brisbane, with, for example, the M5 East tunnel, which had been expected to ease congestion for many years, operating at its 60,000 vehicles/day capacity after only one year, and currently over-capacity at some 100,000/day. The consequences for the time cost of congestion and the health costs of dramatically reduced air quality in the tunnel and in the vicinity of its exhaust stacks are substantial, resulting in burdens that make gains from the final small reductions of tariffs trivial.

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[2] Gargett, David and Cosgrove, David, *Urban Transport – Looking Ahead*, Information Sheet 14, Canberra: Commonwealth of Australia, Bureau of Transport Economics, 1999.

[3] RACQ *Media Release*, June 11, 2004, Survey shows peak-hour delays getting worse.

Australian cities rely excessively on private motor vehicle transport for routine journeys, an excess that can be sheeted home to federal, state and local government policies over the past 60 years. Today, federal government subsidies to private motor vehicle ownership and usage continue in the form of FBT provisions for employer-provided motor vehicles, including novated leases, that, to throw good money after bad, reward excessive usage and penalise restricted usage, while government and private company fleets purchase large and fuel-inefficient vehicles that quickly make their way into private ownership via fleet maintenance policies that are dictated by the taxation system rather than by level playing field rationality. Adding insult to injury, the taxation system prevents employers from using the FBT system to subsidize employees' use of public transport or cycling in their journey to work, further twisting the playing field in favour of excessive, that is, economically inefficient, use of private motor vehicles.

Nor does federal government and NCP neglect end with misshapen taxation policies. NCP has ignored the interactions between the regulation of land use and its implications for both freight and passenger transport. For example, poor land use planning has resulted in household reliance on cars for routine journeys that better planning could have avoided. Similarly, journeys to work rely too much on cars due to this failure, where better planning would have allowed more choice of mode. This is especially significant in outer suburban areas characterised by lower incomes, burdening these family budgets, while the better served inner suburbs, inhabited by households who can afford the higher rents, actual and imputed, show much higher use of public transport for these journeys[4].

Failure to understand the consequences of poor land use planning for costs of access and mobility has meant less than benign neglect of issues that hamper productivity and international competitiveness while raising firms' and households' costs of using the transport system (if it can be called a system). The costs of the economic inefficiency created by appalling land use planning aided by irrational and counter-productive government policies at federal and state levels, not to mention poorly informed and resourced local government, will continue to hamper Australia's economic performance for many decades.

We argue, therefore, that federal government neglect of policy issues affecting urban roads and transport impedes rational choices by independent economic agents, be they households or firms, or government instrumentalities. Were an appropriate institutional structure in place, a well designed taxation regime and sound NCP guidelines for state and local governments, Australia's economic growth could be substantially improved and the cost to households of earning income substantially reduced.

The Productivity Commission's Review briefly adduces the external social benefits of urban public transport (mainly the costs of not using public transport), but remains sceptical of the size of subsidies that support all such services. We are not surprised that these external benefits are so briefly dealt with. It is a long tradition amongst economists

[4] See the ABS *Social Atlas* for each capital city for journey to work maps from the last census.

to include in principle, but neglect in practice, elements for which direct market measures are absent. However, in this case this neglect is significant, as the external costs of passenger transport modal choice may sometimes exceed the costs directly measured by market based mechanisms. The literature on the measurement of external costs of, in particular, private motor vehicle use, is very well developed. We do not need to draw attention to this, as you will be well aware of it.

As the Commission is well aware, transportation is the second largest segment of household expenditure after food and non-alcoholic beverages (1998-99 Household Expenditure Survey, Australia: Summary of Results, *Cat. No. 6530.0*, ABS, 2000), most of that dominated by the cost of private motor vehicle ownership and use. Residents of most European cities spend much less on transport than do Australian city dwellers, with lower costs conventionally attributed to higher densities and lower ownership and usage of private cars, or, more directly, higher use of public transport, walking and cycling, for routine daily journeys. It is remarkable that Australians accept such high transport costs, the more so as those high costs exclude the external costs of high private vehicle use, air and noise pollution, congestion and so on. Adding these costs shows that the burden actually borne by households is much greater than measured by household expenditure.

However, despite being so important in household expenditure, the share of all transport services in GDP is only about 5% (ABS, National Income Accounts, 2004). The difference between the high household expenditure and lower GDP contribution can be explained in many ways[5]. However, we are interested in only one aspect: GDP includes the total cost of operating urban public transport, while households bear only the fare-box cost. The greater the subsidy element in urban public transport, the greater would be the transport services share of GDP relative to household expenditure. The fact that the GDP share of transport services is not very large, despite Australia's geography and population density, suggests that the contribution of state government expenditures to subsidise urban public transport is not a nationally significant burden.

Whatever the size of the tax burden of public transport subsidies borne by each state government, the size of that subsidy is not calibrated to the external costs and benefits that it can be said to represent[6]. Different states and cities have differing levels of subsidy determined by factors that are entirely unrelated to these external costs and

[5] GDP does not include the services of privately owned and used motor vehicles. Offsetting that omission is the inclusion of sales of motor vehicles to households, which would have to be omitted if motor vehicle services were included.

[6] Following William Vickery's argument for road pricing, we could argue that finely calibrated road pricing, accounting for congestion costs, road maintenance costs and pollution of all kinds, would level the playing field in favour of public transport, walking and cycling, while considerations such as economies of scale in mass passenger transport might attract a subsidy. This argument may well develop as the technology of road pricing becomes more sophisticated. Vickrey, William, "Pricing in Urban and Suburban Transport", *The American Economic Review, Papers and Proceedings*, Vol. 53, No. 2, 1963, pp. 452-465.

benefits. Even the increasingly urgent need to contain greenhouse gas emissions is functionally absent from fiscal aims at state and federal levels. The reason for this disjunction is state treasuries' concern with their 'bottom lines' and consequent administrative goals of minimising these subsidies, rather than of optimising them, as would be appropriate for sound policy. The information required to allow at least a reasonable approximation to optimisation is not unavailable. The literature on the social costs of motor vehicle usage: congestion, air and noise pollution, and so on, is extensive. Similarly, literature on external benefits and costs of public transport, closely related to the motor vehicle literature, is also extensive. We, therefore, suggest that further development of NCP should include criteria for these subsidies calibrated to the circumstances of each administration and each urban environment. The subsidies would then approximate net external social benefits of public transport. While we believe it is possible to implement such a strategy, we do not think it is easy to bring together the necessary information, and so we recommend that the Productivity Commission be asked to investigate this question so that governments at all levels will be able to devise their own policies in line with the suggested NCP guideline for public transport subsidy.

A similar argument applies to spending on facilities and policies to encourage active transportation, that is, walking and cycling. Policy areas here extend more strongly to health, with a major additional benefit being reduced morbidity and premature mortality associated with healthier lifestyle. The significance of active transport modes can easily be overlooked, as walking, in particular, is not often the major mode in a journey to work, the only form of journey routinely measured in the Census. However, when the journey to work is dissected, walking can be seen as rather more significant, as these journeys usually have a walk at the employment end, and for public transport users, at both ends. A more European pattern of travel would also see cycling emerge in multi-modal journeys. There are some indications that this is beginning in some cities, with bicycles more acceptable on buses, ferries and trains, bicycle lockers at stations and increasing popularity of folding bicycles for short distance legs of commuting journeys. This is happening despite the tax and subsidy arrangements that give the private car an inefficient advantage over these modes.

Another significant urban journey is the journey to school. Considerable expenditure is now directed by local and state governments to encouraging alternatives to the private car, for reasons of health and safety of children as well as to reduce congestion costs (Brisbane congestion is measurably reduced in school holidays). Significant expenditures on infrastructure are now directed to facilitating children safely walking and cycling to and from school. However, the criteria for such spending are vague and sometimes whimsical. Different governments have wildly different policies, for no good reason.

Again, the federal government's economically inefficient taxation regime skews households towards car journeys to school. The extent of childhood obesity cannot be blamed entirely on this subsidy for car use, however, rational policy should anticipate the cost burden of childhood obesity in decades to come, a burden that might exceed the much touted burden of long-lived elderly.

NCP guidelines for both investment in active transport infrastructure and for behaviour change policies are urgently needed, so that policy makers at all levels may have a rational basis for choice, rather than these expenditures being subject merely to political whim. These guidelines should be calibrated to expected benefits. Again, the literature on external benefits of active transport is extensive and increasing rapidly, especially in the area of population health and its implications for the costs of morbidity and premature mortality. The empirical fundamentals for these guidelines exists, and merely requires systematic application, refinement and further research of a relatively routine kind.