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**NSW Government: Urban
Transport Statement: Some
Comments**

By

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ABSTRACT: This paper, a sequel to Stone (2006), comments on recent New South Wales Premiers Department's papers on transport policy matters in New South Wales. It focuses on the *Urban Transport Statement*, which is set in the context of *State Plan: A New Direction for NSW*, *State Infrastructure Strategy*, and *Sydney Metropolitan Strategy March 2006 – City of Cities*, which were all published in 2006. The comments highlight the continuing use of a number of distortions in language and concepts plus some notable absences such as the discussion of congestion pricing and planning for freight that limit the State's prospects for optimizing Sydney's transport service. Among the distortions are the continued separate discussion of demand for road and rail as if they are not related, and also the lack of appreciation of how demand expresses itself as firstly a demand for accessibility and secondly as trips. The continued use of demand forecasts without explicit recognition of the constraints on land availability, especially in the CBD is noted. The shift from project orientation to products and corridors is applauded. However this paper makes a plea to move the discussion to the supply of network service that meets the demand for accessibility. But the absence of explicit discussion of both congestion pricing and the urban freight challenge is a major omission given the ambition to set the scene for urban transport with the Statement. The discussions about a Metro draw comment for what is not said about the existing rail system, and the governance arrangements for coordination planning and operations draws comment for the continuation of an apparent ambition to spread responsibility as broadly as possible.

KEY WORDS: *Urban transport networks, corridors, accessibility, demand, institutional arrangements, freight, congestion pricing, AusLink*

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1. Background & Introduction

This Paper, a sequel to Stone (2006), comments on recent New South Wales Premier's Department's papers on transport policy matters in New South Wales. The paper that is the subject of these comments is available on www.nsw.gov.au/urban_transport.asp. The related *State Plan: A New Direction for NSW* November 2006 is available on www.nsw.gov.au/stateplan/; the May 2006 – *State Infrastructure Strategy* on www.treasury.nsw.gov.au/sis/sis/-2006.htm; and the Metropolitan Strategy March 2006 – *City of Cities* on www.metrostrategy.nsw.gov.au. The comments in this papers and Stone (2006) aim to constructively contribute to the transport discussion in the state by bringing practical theory and experience from the worlds of academia and banking to the discussion. The comments are not constrained by existing bureaucratic and political realities.

This Paper generally follows the headings and structure of the Government Statement and does so using an underlying framework of concern for: an accurate understanding of the nature of the transport service product; the costs and benefits of efficiently supplying that service through investment, operations and maintenance; the pricing of the service; and the governance or control of the institutional arrangements for supply.

2. Premier's foreword

The content of the "Premier's foreword" is of note for its statement and endorsement of community goals for urban transport as: "*increasing the peak hour patronage of a safe and reliable public transport system, increasing the efficiency of the road network and maintaining transport infrastructure as key State Plan priorities*". To highlight the first two goals immediately sets the tone for the Statement by choosing a specific class of service, public transport, and the network of a specific mode, in this case roads. While there is a strong and useful call later in the statement to shift the focus of discussion of strategy and planning to "products" away from "projects", the use of these goals to set the tone of the Statement missed a great opportunity to use the broader goal of *improving transport service* which is the "product" under discussion. I will return to the specifics of correctly defining the product in the comments on Co-ordinated planning and operations in section 8 below, but the adoption in the government statement of separate discussion of road and rail modes as if they are stand alone transport products meeting separate demand, misrepresents the nature of the demand for the transport service product which, in economic terms is primarily for access rights and secondarily for use of the service for trips for people and goods. To quote the Nobel Economic Prize winner Coase from his speech accepting his Prize: "*I explained in "The Problem of Social Cost"*ⁱ *that what are traded on the market are not, as is often supposed by economists, physical entities but the rights to perform certain actions and the rights which individuals possess are established by the legal system*". The primacy of rights of access to transport service is fundamental to discussion of urban transport policies and strategies.

3. Sydney's travel and transport challenges

Full recognition in the Statement of the constraints on transport service of the geographical setting and history of development in Sydney, initially generated an expectation that there may be a consequent recognition in the Statement of the real limits on the use of land for transport as compared with non-transport use. It follows from limits on availability of land for right-of-way (ROW) that there are limits to the transport facilities that can be placed in those ROWs, and consequently on the transport services that can be provided. The way economies and their markets work best includes signalling such limits through various broad forms of economic pricing including physical congestion, and with inspired policy, temporal financial pricing of the congestion. Over time, users respond rationally to changes in such signals by rearranging their patterns of demand which includes changing the location of their residence and place of work. When applied, such signals would ultimately ensure efficient transport service over the network and a strong economy. By contrast, the Statement continues the traditional policy view of projecting existing trip demand, which responds to existing constraints, as if there are no constraints on future supply, including of land for ROWs, and facilities within them. This is clearly not the case in Sydney (especially in the CBD) and a calculation of transport service capacity under alternative configurations of facilities and modes in existing ROWs would provide more relevant information to major policy decisions, such as the relative feasibility of investment in alternative modes, and the impact, appropriate form, and appropriate timing of introducing congestion pricing.

The shift of the discussion of transport strategy including forecasting of demand to corridors and away from individual projects is a major step towards transport realities, and has political resonance with the Federal government's terms of discussion of funding as presented by AusLink. However in urban transport strategic terms it is one step short of framing the discussion in the desirable terms of the network services that meet the demand for interconnectedness that is an important part of the efficiency of urban economies. The *City of Cities* metro strategy makes economic sense, in part because of the efficient communications linkages, including transport services, it promised and which are required for success. The corridors are an important derivative of, in transport's case, the accessibility available from different locations, with the city nodes representing the highest level of accessibility and highest economic value of location. The corridors between one city centre and another city centre or in some cases in the Statement linking several city centres in the one corridor, dictate a corridor based perception of travel when a networked city-centric pattern is what drives economic development, particularly for knowledge based economic development and employment in its broadest form in city centres in urban metropolises.

The Statement, and much of the academic literature, uses the terms "balanced" and "sustainable" when referring to the mix of public mass transport and private car services. Without definition and quantification these terms have little informational content but do appear to provide the community with comfort. The same objective together with useful information could be achieved with a statement, such as: *"Government will provide transport services using a mix of appropriate modes on a network of ROWs to meet the demands for accessibility across the metropolitan City of*

Cities". Then the discussion and decisions on investment in infrastructure, operations and maintenance would be framed rationally in terms of the object of economic development and efficiency in a transport network linking all city centres.

4. Responding to the challenges

The Statement's list of responses covering system management, roads, rail, bus, ferry, cycleways, and pedestrian movement, suggest the application of world class practice but within a strategic approach that is highly restricted. The restricted strategy is the result of thinking of transport service in terms of separate modes which results in outcomes such as the continued investment in an urban railway service that is costly and inflexible in meeting the demand for urban public transport. Existing technology allows the three main models of urban public transport, that is, heavy rail, light rail and bus rapid transit to deliver comparable quality of service, and at maximum line capacities that are now also comparable. For the doubters, the TransMilenio in Bogota has delivered 41,000 passengers per hour in one directionⁱⁱ. No urban economy can ignore the cost of supplying service and while many statistics are used to claim economic efficiency of one mode over another, the orders of magnitude differences in unit cost of the three forms can not be denied. To provide specific examples: 40 kilometres of BRT in Bogota cost US\$ 5.3 million per kilometre, 23 kilometres of light rail transit in Bordeaux cost US\$ 20.5 million per kilometre, and 38 kilometres of metro rail in Madrid cost US\$ 42.8 million per kilometre. I am confident that the unit costs of the several BRT projects in Sydney compared to the unit costs of extending the rail system to new development areas would demonstrate similar magnitudes of unit cost difference but figures were not readily available at the time of writing. The conclusion is clear that in Sydney as in Curitiba, and Taipei, and Bogota, Bus Rapid Transit (BRT) can deliver service equivalent to rail at a fraction of the cost and with greater flexibility to respond to the dynamics of economic development in the metropolitan regionⁱⁱⁱ.

The criticism of the Statement's limited vision of transport strategy should not be interpreted as including the nominated improvements to the existing network such as in the Rail Clearways Program and the rail freight strategy, and continued efforts to improve traffic flow and ticketing across all modes. It is interesting to note that given the high standards of performance being achieved in managing existing facilities there is little potential for significant improvements using these restricted set of tools within this modally defined restricted set of transport strategies.

As an aside it will be unfortunate for the discussion of transport in NSW if the word "accessibility" continues to be principally used by Government to describe physical accessibility to transport vehicles without the "physical" adjective when the word "accessibility" has long held, in the literature, a clearly defined use to cover the property right attached to a particular location to use all forms of transport service available.

5. Corridor profiles: investment in Sydney's major transport corridors

I have already commented on the emphasis on corridors rather than networks but the difference and its importance can not be overemphasized. Urban transport is

intrinsically different to the intercity corridors that drive the AusLink perspective, thinking and nomenclature. Australia's distorted public financing system has given Canberra huge power to influence discretionary transport investment including urban transport. In the current circumstances they disproportionately influence investment initiatives and even the terms of discussion. State Governments clearly dominate the total budget allocation to transport to maintain, operate and incrementally improve existing service. But Canberra dominates what can be characterised as the discretionary budget that allows new initiatives to proceed. A corridor-centric view for urban areas rather than a city and sub-city centric view as begun with Sydney's Metro Strategy takes the urban discussion outside the bounds of the rational. It is not rational for urban transport policy makers to undertake a discussion that is framed around separate discussion of different modes. It has been fashionable for some to still justify this separation under the general umbrella of the need for competition between modes to achieve the efficiencies that open markets supply. Competition does exist at some shallow level between urban transport modes but it is not a "market", and hence efficiencies in urban transport do not come from the automatic "invisible" hand variety of resource allocation when many close substitutes exist to supply demand, but from decision-making processes involving detailed expert analysis of alternatives for investment operations and maintenance. Many of the inputs to achieving the goal of efficiency will come from existing efficient markets such as for finance, design and construction, but the roles of different modes are not the direct product of anything like a competitive market. Consequently, as discussed in previous papers (Stone 2006)^{iv}, to continue to use Public Private Partnerships established after expensive and drawn out competitive tendering processes, is diminishing the efficiencies available from existing true competitive markets.

6. Central Sydney and CBD Transport

The focus in this section on congestion is appropriate and the statement on the general role and suitability of different modes to meet demand for service is well structured as far as it goes. The missing element is any discussion of differential financial pricing of different modes of access to the CBD as a necessary means of increasing the efficiency of use of the CBD by rationing the supply of transport service to those who value it most. Transport policy makers in London a few years ago, and Singapore three decades ago, recognised the connection between the growth of the economy located in the CBD and the need to ration access to the CBD location to those economic activities that most value it and its high national and international connectivity. It is time for NSW Policy makers to do the same. The step from the Metro Strategy thinking to using pricing as a necessary element of its transport policy is relatively short.

I have commented above on unconstrained projection of travel demand as if there were no limits to capacity expansion so will only repeat the suggestion that a calculation of transport service capacity under alternative configurations of facilities and modes in existing ROWs would provide more relevant information to major policy decisions such as the relative feasibility of investment in alternative modes.

The discussion of strategic impact of different modes is good, particularly that on light rail (trams or street cars) which have been experimented with by others and found to

have no place in a modern city centre transportation system. Given this conclusion in this section of the Statement, the re-emergence in the Next Steps section concluding the Statement, of a proposal to investigate light rail between Barangaroo and Wynyard, has all the hallmarks of a last minute rider responding to narrow political power.

The mention of the constraints of platform capacity in the discussion of rail capacity in the CBD is good but where is the complementary discussion of the constraint of carriage ingress and egress imposed by Sydney's famous or infamous double-decker carriages? The tacit admission of the problem with the inclusion of single level carriages with appropriate ingress and egress in the speculative Metro Lines section of the statement suggests a lack of Government candour on significant expert issues in the Statement.

On buses the proposals for expansion of CBD parking capacity again ducks the issue of the need for a major interchange for buses and other modes including pedestrian and rail. In general the proposals in Stage 1 and Stage 2 indicate an awareness of the bus terminal problem, the intra-CBD transport circulation problem beyond pedestrian trip range, and the need to exclude private vehicles from some ROWs. These are all specific issues that are desperately in need of a clear statement of strategic direction for CBD transport. The proposed establishment of the Working Group to plan and implement the proposals is a low political impact solution to the clear jurisdictional/governance/control problems which plague urban economies in Australia except in Brisbane with its metro-wide council. The proposed approach is unlikely to solve Sydney's institutional problems.

7. Metro lines: part of Sydney's transport future?

Raising the need to respond to the long term challenges of transport in Sydney is a most welcome inclusion in the Statement. As is evident in the above comments, to then rapidly go to a discussion of a metro rail based solution demonstrates a major shortcoming in the policy debate that pays lip service to coordination of the system but generally segregates discussion into separate modes.

All claimed advantages and capacity of metro rail can be achieved at much lower cost and flexibility by lighter vehicles that are rubber tyred, and track facilities that are consequently less costly. It is too simple to make this complex issue into a soft, no evidence, emotional debate between rail (heavy or light), and bus. Metro wide public transport service is a systems problem deserving of more than the simple minded bus verses rail debate. The context of the discussion of transport service's part in urban economic development should at all times be broader than public transport and include private cars. Expert analysis of alternative mixes of modes in a network of ROWs is the fundamental structure of the framework for the discussion. The Metro Strategy goes some way there and until evidence based disciplined analysis of mixes of alternative services and their associated facilities occurs, decisions such as the extension of heavy rail to the North West and South West will be seen as costly and socially and economically irresponsible. From that economic/financial perspective Treasury at both political and bureaucratic levels would be well aware of benefits to flow from alternative applications of saving of the order of hundreds of millions to other parts of the sector or to other sectors such as health and education.

If NSW is to have an informed discussion about long term challenges of urban transport service it is time to replace the emotional, power driven momentum of the current decision-making structure and process, with an evidence based, rational economic/financial decision-making process against a background of environmental impact assessment.

8. Co-ordinated planning and operations

This part of the Statement demonstrates the positive advances that have occurred in the urban transport policy discussion. Internationally the nature of the goal of expert disciplines that drive practice in many fields is moving from the simple and relatively static benchmarking against world's best practice to the complex challenges and dynamics of continued improvement. It is in the spirit of continued improvement that the following comments on co-ordination and planning are made.

As noted above, the shift in focus from transport *projects* to transport *products* is a significant move in a political environment where Ministers are continually seeking opportunities to announce concrete evidence of improvement to catch public approval. The next move in the project to product shift is to define the product as the ***availability and use of urban transport service***. Then it would be possible to relate projects to service improvements, grounding the discussion in the context of service delivery, while still providing politicians with the physical project evidence for public announcements.

In regard to the section on Government decision-making processes (DMP), the diagram on page 68 of the Statement demonstrates the many variables and issues that have to be accommodated in the DMP on urban transport services. However there is no evidence in the diagram of the DMP of institutional structure perhaps for the reason that it is complicated, with responsibility broadly distributed among many Departments and Ministries. The task of the Centre for Transport Planning and Product Development under formation in the Ministry of Transport under the guidance of an Advisory Board of the CEO's Transport Cluster Group, is an interesting design if the goal was to establish a centre of excellence to focus and drive the urban transport service discussion. The key to success of the design will be to provide the Centre with power over budget to influence both planning and implementation agencies, and political support from State Government in dealing with local government to operate in a coordinated fashion. Such a shift in power is essential if Sydney is to break out of the current compartmentalized approach to improvements in urban transport service with its thin spread of responsibility.

9. Next steps

The listings in the sections on implementation and ongoing planning paint a picture of a cohesive program to improve urban transport. The inclusion of a brief mention of the rail freight strategy highlights a gap in the Statement of appropriate discussion of the urban freight issue that should have been a focus. This issue goes well beyond the port accessibility issue and again needs to be an integral part of the discussion alongside transport service for people. It is understood that a freight strategy is under preparation,

but again its separation from this Statement demonstrates the distance yet to be travelled in making the urban transport discussion comprehensive. And the late inclusion of planning for a light rail corridor between Barangaroo and Wynyard suggests the Government is not completely convinced of its arguments against light rail as presented in the Section 4.3 titled *The reality of light rail in the City*.

10. Summary Comment

The NSW Government's Urban Transport Statement marks a significant improvement in the discussion of urban transport policy. There are several areas where changes ranging from major to minor would bring the discussion to the forefront of disciplined policy discussion comparable with those in international cities with which Sydney compares itself.

The following points summarize my comments on the Statement that would contribute to achieving this:

- The discussion should take the additional step from that in the Statement that shifted from *projects* to *products* and focus on urban transport *service* as the product. It would rationally follow that the discussion would not be defined in terms of the product in each mode but on the service and the appropriate mix of modes in each part of the network.
- In focussing on service the discussion would move from *corridors* to *networks* while still allowing for constraints in the existing networks or “pinch points” to be removed.
- The inclusion in the discussion of the appropriate allocation of land between transport use and non-transport use would help to bring to the fore the limited resource that land represents in urban areas. This would logically introduce to the discussion the dynamics of the choice of location of residences and places of work and thereby shift the discussion away from the old notions of responding to projected demand using eminent domain to secure ROW for the projected demand as if land supply was not constrained.
- A major shortcoming in the Statement is the absence of a discussion of congestion pricing as a major coordination and planning tool particularly in the CBD.
- A transport vision statement that is related to Metro Strategy is needed especially for CBD.
- In line with the recommended shift of the discussion to transport service from mode based service, investment decisions for new services should be based on expert analysis using economic/financial and environmental evidence-based information and not soft emotional analysis particularly for the North West and South West development areas. The same applies in the discussion of long term planning which should have a service focus not a mode focus.
- Institutional arrangements for urban transport services in NSW (which include the Federal Government arrangements) are the antithesis of an efficient structure with clear lines of responsibility and authority. Even the proposed arrangements in the Statement suggest a band-aid approach without seriously tackling the

underlying issues. There is the opportunity after the state election this year to make headway on this major problem. The development of a metro-wide institutional strategy in the supply and control of urban transport service for passengers and freight in Sydney should begin immediately.

ⁱ Coase, R.F.(1960) "The Problem of Social Cost"; *The Journal of Law and Economics* 3(1) 1960 pp. 1-24.

ⁱⁱ Cain A, et al (2006) US TRB Report FL-26-7104-01: Applicability of Bogota's TransMilenio System to the United States.

ⁱⁱⁱ Hensher, D.A. (2007) Sustainable Public Transport Systems: Moving towards a Value for money and network-based approach and away from blind commitment, *Transport Policy*, 14 (1), 98-102.

^{iv} Stone; A.J. (2006) Review of Future Provision of Motorways in NSW: Some Comments", ITLS working paper ITLS-WP-06-05. See also "The Future of PPPs in Motorways", ARF National Roads Summit Conference paper June 2006;