Council on the Cost of Government

Economies and Efficiencies in Urban Transport

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Print note: archaic Word version, incompatibilities not fixed here. CCOG does not exist any longer but I had contemporary permission to use the document as my own as it was not published.

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1. Executive Summary

- Sydney started the Twentieth Century with one of the world's best transport systems, but is finishing in the opposite position.
- The performance, planning and budgeting systems applying to transport operations in NSW cities have been deficient, and have produced benefits to agencies rather than the community. The transport administration system which survives in NSW was largely the product of a political debate between 1929 and 1932 which produced a system 'as free as it is possible ... from political control'.
- Governments have not been properly advised on the links between capital programs, Budget allocations, the achievement of outcomes, and the economies to be achieved by linking agency programs.
- Public transport usage in the major population centres in Sydney's West and South-West is critically low while motor vehicle emissions taint the whole Sydney Air Basin, with consequent economic and environmental costs.
- Early planning was based on a developmental perspective and the style of planning generated community commitment. Subsequent planning has been bureaucratically-based and has not generated community commitment.
- There is significant community support for reform in transport policies, particularly bus service improvements in Greater Western Sydney. Private bus operations have not been reformed in line with transport planning principles, or competition principles.
- Recent reforms announced by Minister for Urban Affairs and Planning Craig Knowles MP give the opportunity for the Council to contribute to a major reform process, particularly in respect of its SEAs and 'performance, planning and budgeting' projects.
- The reforms comprise the creation of:
  - ⇒ Urban Management Committee of Cabinet with eight Ministers;
  - ⇒ Ministry of Urban Infrastructure Management;
  - ⇒ five-year cycle of Urban Infrastructure Management Plans; and
  - ⇒ elimination of prescriptive regulation, emphasis on achieving planning outcomes.
- The most cost-effective way of improving urban transport performance is through busways as shown in Canada, Brazil and Brisbane, in conjunction with competition reforms and route restructuring. This has special relevance to the Olympics. Significant progress could be made by 2000.
- In addition, many governments including the USA, the UK and The Netherlands have moved to improve transport planning and budgeting through an integrated package approach (which complements the SEAs cross-portfolio approach).
- Similar directions for reform were identified in NSW over the years but not implemented. Further, the principles of government re-engineering can be applied to NSW urban transport to improve economy and efficiency.
- A linked approach between the Council and the Ministry is proposed, incorporating:
  - ⇒ a statutory planning cycle;
  - ⇒ aligning the roles of Treasury and other central and line agencies;
  - ⇒ setting of criteria and targets, partly based on SEAs;
  - ⇒ funding reform and particularly a special seminar on reform in urban finances; and
  - ⇒ annual reports by the Council on improvements in resource allocation across government, cost savings, greater accountability and improved service delivery.

2. Introduction

The Council on the Cost of Government is charged by legislation with implementing 'a cost effective and world class public sector'. The approach includes Service Efforts and Achievements (SEAs) and improved linkages between planning, budgeting and performance. In simple terms

- public transport and roads SEAs include externalities relating to air pollution as well as measure other outputs and outcomes against inputs; while
- official 'planning' determines the distribution of inputs between agencies, modes and areas.

Urban transport is a classic case study in the 'world class' public sector. Transport (including roads) is pervasive and its performance affects most economic, social and political 'systems'. It directly absorbs a major part of governmental, business and commercial and private budgets and has significant multiplier effects. Moreover, quality transport planning depends on matching demographic, infrastructure, pricing and other factors, while the same is true of the planning of hospital, school, and like services and facilities.

While Sydney started this century with one of the world's most advanced transport planning systems, it is ending the century in the opposite position. One recent analysis has pointed to system-wide and regional dysfunctions arising from the structure of the government sector, redundant financial arrangements and the supremacy of agency interests over community interests[1].

Over the sweep of history, there has been no integrated system in NSW for effectively planning, budgeting and monitoring the performance of 'transport' operations in the State's cities. There are specific 'sub-systems' but they do not mesh in an integrated way in terms of identifying and planning for economic, environmental and equity challenges, the distribution of available government and private resources, and the monitoring of performance.

The deficiency was been recognised at various times, for example high-level discussions involving Professor Peter Wilenski were held in the late 1970's regarding the formation of a 'Transport Development Co-ordination Authority' as well as proposals by the then Ministry of Transport for the integration of roads and transport funding sources into a "Transport Improvement Fund"; the development of annual professional economic, environmental and social impact analyses for the budgeting of funds; and the re-orientation of central/Treasury functions towards urban outcomes. Environment Minister Paul Landa explored the integration of planning functions at that time.

The Minister for Urban Affairs and Planning, Craig Knowles, pointed in his address to the Business Summit on 31 May to the efficiencies to be achieved if the various infrastructure systems can be brought together in an 'urban infrastructure plan'. The reforms he announced "will end the previous piecemeal planning that has seen suburbs developed without services and the failure to match resourcing with population growth".

Relevant legislative changes made in the USA, UK and Queensland, as well as cost-effective project and policy reforms identified in recent planning documents and discussions, can be an inspiration to the Council and the other agencies in the 'government sector'. The 'outcomes' that can be expected through reformed legislation and planning include:

- health and 'safety' improvements including reduced emissions and accident rates;
- infrastructure savings and higher capacity utilisation, with greater use of low- or un-subsidised public transport operations (enabled by competition reforms);
- equity benefits especially in areas with low 'transport accessibility'; and

1 NRMA, *Towards a Transport Vision for Sydney*.

- reduced private, commercial and industrial costs, and a more competitive society.

These benefits, achieved over a long term, may well dwarf direct public transport subsidies - although they are yet to be objectively measured and 'planned'.

In such matters, there is no doubt that the structure of government and the methods used to plan, budget and monitor performance, in NSW's cities do have a major impact on the achievement of outcomes. To quote John Minnery's *Urban form and development strategies*:

> *Sydney's fractured system of metropolitan government has resulted in a development strategy more concerned with the objectives of its operators than the solution of existing problems or the consideration of social objectives in selecting locations for future development. People such as (Jim) Colman see the end result as Sydney 'fouling its nest'.*[2]

This paper defines what the Council could contribute to the Government's urban infrastructure reforms and particularly to reducing the long-term demands on government funding and improving the benefits to the community in the State's cities.

3. The Current Situation

A series of adverse atmospheric circumstances in 1991 led to health scares and the establishment of the Metropolitan Air Quality Study (MAQS) as a most significant scientific investigation of air pollution. The Environment Protection Authority recently reported its results and if anything the problem is more widespread and serious than was previously thought.

The reliance on private cars in the outer areas of Sydney - containing well over one million people - has become the biggest challenge in transport planning. Motor vehicles contribute 80 per cent of Sydney's NO_x. These emissions are expected to increase by more than 40% between now and 2011 if Sydney continues as it is currently working. The particulate emissions (especially under 10 micrometres in size) of diesel-powered vehicles are thought to damage lungs and constitute the bulk of the "brown haze" that Sydney experiences in winter. It has been estimated that about 40% of the population may be vulnerable to the unhealthy effects of poor air quality, and this rate (especially asthma) is thought to be increasing.

Pollution is but one of the 'costs' of the style and pattern of post-1945 planning. Jobs moved well away from the inner city and 'isolation' resulted from husbands having to take the family car to work. Bus services could not move around the convoluted spaghetti road systems and walking distances were excessive - even if there were local shops (this was the era of shoppingtowns with massive carparks). Partly as a consequence many families experienced stress, violence, addiction and divorce; as well as congestion, accidents, high car and health insurance premiums, school conveyance costs and so on[3]. This is apart from community costs such as clinics and refuges, duplicated schools, extra hospital wards and low bus fleet efficiency (with associated higher fares).

Moreover, the metropolitan development strategy relies on the decentralisation of employment to suburban centres, most of which are poorly served by public transport.

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[2] John Minnery, *Urban form and development strategies: equity, environmental and economic implication* (1992)*, pp. 53-4.*

[3] There is a large literature, one work with a good bibliography being Minnery, *ibid.*

The transport planning challenge in 1996 is not so much focused on access to railway stations as was the thrust in earlier decades. To quote the Clean Air 2000 Campaign's *Shaping Sydney's Transport - a framework for reform*:

> *It must be recognised that only 14 per cent of all Sydney's work trips are to the Sydney CBD. The remaining work trips are made to an increasing number of suburban employment destinations. These latter journeys are often cross-suburban and poorly served by existing public transport systems....*
>
> *A new and innovative approach is required to address the travel needs of the growing and changing population of western Sydney ....*
>
> *The 1991 Travel Survey data suggest that nearly 60 per cent of trips are not the traditional journey to or from work. This fact must be recognised and actively incorporated into the planning, delivery and operation of private and public transport systems and the design of land use and other developments. The structure and linking of trips has become more complex over time* (pages 7, 8 and 28).

Experience in other cities (section 5.4) suggests that if earlier proposals for competition reform in Sydney's bus services had been implemented, by 1996 many of these problems would have been ameliorated in a cost effective manner. Sydney has had an historical record of high public transport usage, thanks to the efforts of an earlier generation. Right now, in 1996, there are many large areas of Sydney which have internationally low levels of public transport usage, such as the outer suburbs of Sydney.

The current situation with Sydney's transport planning, budgeting and monitoring will be reviewed briefly in this chapter as a prologue to discussions of reforms already proposed (section 4) and overseas precedents (section 5). The way forward is mapped in section 6.

3.1 Planning, budgeting and monitoring systems

'Transport' services and facilities in the main cities in NSW are delivered through an hierarchy of public and private bodies. The most obvious ones are government agencies and private operators; but the potential contributions of regional and local government have to be included if the transport planning and implementation sector is to be fully effective.

Indeed, the 'transport planning sector' comprises the Department of Transport, the Roads and Traffic Authority, the various public transport agencies (both public and private), central agencies like Treasury, new specialised agencies like the Ministry of Urban Infrastructure Planning and the Council on the Cost of Government, catchment management trusts and the various Regional Organisations of Councils, local councils, community groups like the Clean Air 2000 Task force, and the health, safety, industry and equity interests in our society.

'Planning' has been a disjointed activity in Sydney with major exercises in the 1940s, early 1970s, the late 1970s, 1988 and 1993-95. All but the first of these were centralised and bureaucratic, rather than community-based, although in 1990-91 the Roads and Traffic Authority conducted a *Future Directions* cycle that included technical investigations as well as extensive public consultation. 'Planning' has focused on the major infrastructure areas like railways and freeways, with very little attention to regional and local strategies. While this situation is changing, as a generalisation the planning exercises in post-1961 Sydney have excluded regional and local interests and generated very little popular enthusiasm[4].

[4] See NRMA *Towards a Transport Vision for Sydney*, chapter 3.

The institutional context in NSW was determined by the political debate between 1929 and 1932 over whether the State's transport authorities should be under ministerial direction, or be governed by commercial considerations, free from ministerial control. The proponents of the latter argument 'won' in the form of legislation that created independent agencies responsible for railways; buses, ferries and trams; traffic; and main roads. Minister Bruxner's second reading speech in 1932 included his thought that 'co-operation' was more important than 'co-ordination', and that

> *The best than one can hope to gain is to provide ... machinery whereby those placed in charge of these services shall have the fullest freedom ... the several commissioners to be appointed will be as free as it is possible to make them from political control in the actual administration of the departments.*

Legislative efforts to improve co-ordination (in 1950-52 and from 1990) were compromised. A number of advisory committees were set up and various 'strategies' released but the effect was almost always the 'status quo'. The post-1932 structure was concreted in 1990 when the Passenger Transport Act gave public transport bodies a statutory obligation to 'operate commercially', not together but separately. While there were changes to the names and functions of the various bodies from time to time, the 1932 situation still effectively applies in 1996[5].

Cabinet is the peak executive body and it has functioned continuously, especially through various committees (variously named Policies & Priorities, Transport, Natural Resources & Transport, Social Justice, Health Welfare & Planning, and so on). Currently there are separate ministries of Roads, Transport and Ports. The main committee is the Budget Committee (a combination of the former Capital Works and Expenditure Review Committees), which is directly supported by the Treasury.

The Treasury has concentrated on capital projects and operating subsidies, for public transport rather than roads and traffic management. Major new projects (including private infrastructure projects) are approved by the Budget Committee on Treasury's advice. The Treasury's methodology focuses on project description, costs, status, dates, cash flows and location; rather than comparative contributions to outcomes.

Treasury has acknowledged that the Committee has never had the information available to allow it to assess how an agency's proposed capital works expenditure will contribute to the services it delivers. The Budget Committee is not able to have direct input to the capital strategies of agencies but is instead focussed on individual projects[6]. There is no mechanism for assessing how different agencies' programs relate to each other and to overall outcomes.

Since the early 1980s and especially since 1990, operating subsidies were explicitly set, generally for uneconomic rural services and passenger fare shortfalls. Treasury analyses and negotiates the Community Service Obligations through its Social Program Policy Unit while the Department of Transport allocates transport subsidies along the lines of a funder/provider model while collecting statutory parking levies. State allocations are made via the Budget and Treasury applies a published methodology which is rigorous although confined to agency limits rather than inter-agency outcomes.

Neither Treasury nor the Department of Transport explicitly and publicly identify agreed outcomes and measure the merits of individual programs and projects in terms of achieving

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[5] The effects of specialisation are seen most clearly when State Rail and State Transit argue separately before the Independent Pricing and Regulation Tribunal (IPART) that they should get very large fare increases in order to eliminate subsidies, achieve internal rates of return and make a profit specific to their individual circumstances. Competition reforms have potential to ameliorate these effects through *contestability* for planned services.

[6] Words provided by the Office of the Minister for Urban Affairs and Planning based on Treasury documents.

outcomes. They participated (with the Department of Urban Affairs and Planning, the EPA and others) in preparing *Cities for the 21st Century* (1994) and *Integrated Transport Strategy* (draft 1994, final 1995). *ITS* was complemented by a draft *State Road Network Strategy* and draft *CityRail Strategic Plan*. Public consultation has closed on these but final versions have not been released. Subsequently the Sydney City Council has released *Accessible City* as its transport plan.

These documents agreed on basic principles without setting targets for the factors that bear on economic and environmental outcomes nor firm strategies that would produce agreed outcomes. There was no treatment of funding reforms of the type discussed below (only privatisation was discussed).

A Metropolitan Strategy Committee was created under *Cities for the 21st Century* but this has played only a nominal role in integrating planning, budgeting and monitoring. It has a number of sub-committees and has publicised the intention of moving towards an 'urban budget', but this is not reflected in official Budget papers. (The latter has presumably been superseded by the recent announcements, discussed in section 4.2.)

Very recently IPART has reviewed public transport fares in its Determinations report of 17 June 1996 and the six earlier volumes on 'Fair Fares'. The review reflected IPART's pricing charter and so focussed on agency matters rather than city-wide performance and impacts. It explicitly recognised that "Sydney's urban form and uneven access to transport hinders public transport usage. These matters are outside the control of the Tribunal" (page 9)[7]. Equity was defined in terms of impacts on consumer groups (which is reasonable) but not access to services which is a city-wide policy issue. It has to be noted that in its *Fair Fares: an Overview* (March 1996) and elsewhere, the Tribunal pointed to competition reforms (especially in the bus area) in terms of its charter - prices to consumers and levels of subsidies in particular - but not in terms of solving urban problems. (The issue of 'criteria' is taken up in section 6.1.)

Roads and traffic management operate largely under hypothecated terms in that their incomes come from fees and charges and from Commonwealth and State fuel taxes and fees. The Government has control over policies and priorities.

Private bus services operate under the Passenger Transport Act 1990 and are regulated by the Department of Transport. Private companies provide all bus services in Wollongong and in Sydney's outer and many middle suburbs. Their contract terms cover standards and levels of service, hours of operation and the like. The franchise areas are exclusive and there are predominantly based on the catchments of rail stations. There is very little attention to contemporary travel needs (this is discussed in some detail later). Ostensibly the operators are not subsidised but it is recognised that payments under the school student transport scheme underpin their capital and labour cost structures.

There are a number of Regional Organisations of Councils, most notably in Western Sydney and Southern Sydney. They are funded by their constituent councils and have taken a leading role in developing transport solutions for their areas.

The State has a number of statutory catchment management trusts, some of which have taxing powers. The most important is the Hawkesbury-Nepean Catchment which has been divided into the Cowan, Berowra, Blue Mountains, Cattai, Colo, Macdonald, Mangrove, Middle Nepean Hawkesbury, South Creek and Upper Nepean sub-catchments. Others include the

[7] This refers to the SRA/CityRail part of the Report dated 17 June 1996. The co-published report on STA noted scope for expansion of services, and that the recommendations had some potential to transfer users between public transport and other modes (page 11). It noted the sensitivity of public transport users to fare increases and the risk of their switching to private cars.

Upper Parramatta River which levies $20 per year on ratepayers to meet environmental costs[8].

There are about 50 local government bodies in the Greater Sydney area, all subject to the conditions of the reformed Local Government Act. They have prepared community profiles and housing strategies and now have a better knowledge of the real needs of their communities. Many have engaged consultants to prepare transport plans for their areas and have proposed improvements to public transport and roads arrangements, including safety. Some have started to move to raise the transport accessibility of subdivisions, implementing balanced traffic calming measures in their centres and helping their bus companies to adjust their services. They provide local roads including access to rail stations.

In 1996, in summary, the pattern of organisational responsibilities and rôles in urban transport is very similar to the historical model in that there are:

- specialised agencies covering the government-owned public transport modes, and a separate Roads and Traffic Authority;
- private public transport operators subject to contract terms;
- a Budget process that treats main roads and traffic, and the public transport agencies as separate in both operating and capital terms; and
- no integrated process bringing all planning, budgeting and monitoring functions into a consistent, outcomes-orientated direction.

This is a simple treatment as there are many details and complications that could only be fully considered in a much longer document.

3.2 Private and public sector roles

The private sector has an important role in planning urban transport in three senses:

- as **operators** of public transport services;
- as **providers** of finance and partners in infrastructure projects; and
- as **stakeholders** in policies and programs.

Private operators own and run bus, ferry and air services, and soon light rail services, in a number of contexts. They are all subject to the qualifications and licences required by the Passenger Transport Act and other relevant legislation as indeed are government operators. (In an urban context, private buses are the most significant because they dominate in Wollongong and in most of the middle and outer suburbs of Sydney.)

A most significant aspect of that Act was the grandparenting for five years of franchised areas for bus operators[9]. Those areas were predominantly based on local rail station and shopping centre catchments.

This is extremely significant in historical context. Since 1945 and especially when the Sydney Area Transportation Study reported (1974) in considerable detail, the restructuring of bus routes has been seen as a planning imperative. To quote SATS:

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[8] WSROC suggested in its *Western Sydney's Future - developing a new metropolitan planning structure* in 1994 that Eastern Sydney, Western Sydney, Newcastle and Wollongong should have their own Regional Planning Committees and should form the basis of a rationalised planning arrangement. This would accord with the catchment structures.

[9] See David Hensher, "Technology, pricing and management systems futures for urban public transport futures", in AURDR *Urban public transport futures* (1994).

"Existing private bus routes ... will have to be reoriented to service new suburban commercial centres and railway stations". (To rectify the failure to implement the 1947 rail network expansions) *"it is proposed that ... cross-country express bus routes be established, linking railway stations, shopping centres and employment areas.... The services will be guaranteed high average speeds (30-40 kph) by using busways, or exclusive bus lanes where necessary, and by having only a limited number of stops. They will provide trunk services only, connecting at their few stopping places with local feeder buses, which would collect and distribute passengers in residential areas".*

Further, to quote *Sydney into its Third Century* (released by then Planning and Environment Minister Bob Carr in 1988):

> *Buses using the road system will remain an essential public transport mode due to their flexibility in route coverage and stopping patterns, low capital costs, and their capacity to serve people living in low density areas. Traffic priority measures will be required on some routes.*
>
> *It is anticipated that the public transport needs that will arise in the outer growth areas of Sydney will be best met by a hierarchy of bus services including local feeder, trunk and cross-regional express bus services.... the public transport strategy is concerned with the need for an appropriate bus system that will progressively provide:*
>
> - ◊ *cross-regional services linking major centres*
> - ◊ *services adjusted to meet changes in passenger demand*
> - ◊ *public transport services to newly developing growth areas from the early stages of establishment*
> - ◊ *integration of government and non-government operated public transport services including co-ordination of fare structures* (pages 52-3).

The 1990 Passenger Transport Act established 'primary routes' operating 7 days and nights, and 'secondary' 6 days. The spirit of route re-structuring was lost (as it had been previously). However, the areas and conditions are re-negotiable at the end of the 5 years - which is the period from mid-1996. The differences between SATS's *functional* analysis (which it applied in a practical and professional manner to the major areas of Sydney) and the 1990 Act's superficial one are as follows:

	SATS	1990
Primary	**Trunk Large volume Fast Marketed**	**7 days Night Frequent**
Secondary	**Local Feeder Simpler Cheaper**	**6 days Peak hours Shopping hours**
"Area"	**Area Route**	**Route or region No competition**

There is a criticism often made in NSW about the lack of co-ordination between and even within the government and private bus systems and modes. Every Minister for Transport has addressed this in one way or another.

The critical importance of the review of bus licenses in the context of improving urban economic and environmental outcomes will be discussed in following sections of this paper.

The **second role** of the private sector is as partner in the provision of public infrastructure. NSW had led Australia in this respect, starting with the Earing power station in the 1970s. The usual context quoted is for providing capital for a specific project in advance of when the government could afford to fund it.

There are other reasons as seen in the Government's *Guidelines for Private Sector Participation in the Provision of Public Infrastructure* such as adding a degree of innovation, and to acquire the ideas and expertise of third parties (such as Ken Bilson's idea for a Skitube within Kosciusko National Park). Build Own Operate and Transfer (BOOT) schemes are the current predominant mode as opposed to leverage leasing, infrastructure bonds, exclusive and perpetual rights and the like.

The recent record in Sydney has been poor in that public confidence in specific private projects (including the M2, M5 and Airport Rail Link) was undermined by criticisms by the Auditor-General and leading academic analysts of the imbalance of risks and rewards between the private and public sectors and other factors. The *Guidelines* were revised in September 1995 to improve transparency and adherence to standards. Recently the Commonwealth Governments have wavered in their treatment of taxation concessions, with an indication that BOOT schemes may be promoted.

Currently the M2, New Southern Railway and Ultimo-Pyrmont Light Rail are under construction as BOOT schemes (albeit heavily subsidised), with further prospects including extensions of the UPLR into the CBD and westwards into the inner western suburbs, the Macquarie rail link between Parramatta and Hornsby, and the eastern extension of the M5.

Finally, the 'private sector' broadly defined has an intrinsic role to play in planning, budgeting and monitoring transport performance. The Treasurer and Minister for State Development, Michael Egan MP, put it in these terms in his preface to the Government's *Guidelines for Private Sector Participation in the Provision of Public Infrastructure*:

> *One of our main concerns is to ensure that the private sector receives up to date, accurate and timely information about the Government's intentions concerning the future provision of public infrastructure. The information needs of the business community as both a user and a potential provider of public infrastructure, on behalf of the Government, is acknowledged and its participation in the public consultation process is encouraged.*
>
> *Many Government agencies meet the need for community information through a variety of strategic plans. The plans aim to generate public discussion, identify community concerns and to determine issues the Government needs to address in its planning. The results from this process will also be a part of the Government's budget consideration in setting priorities within an overall infrastructure strategic plan.*

The individual elements within this quote are important in their own right. The overall theme, though, is more critical. Arguably Sydney has fallen behind world best practice in transport policy because 'planning' has been a centralised bureaucratic function since the Second War.

By contrast, the major gains in Sydney's transport were largely a consequence of a different style of 'planning' exercise. The Royal Commission on the Improvement of the City of Sydney and its Suburbs was set up in 1908, reported in 1909, and inspired parliamentary debates over the next 15 years.

The Royal Commissioners - all civic leaders, gathering expert evidence in open sessions - coalesced political and urban improvement ideas into a package that was largely adopted

despite massive expense. They 'foreshadowed' every major planning initiative taken up to 1939 and even beyond, and Bradfield and others rode the wave of enthusiasm they generated. They correctly identified transport as the core element in urban reform. The construction of the underground city railway, the Harbour Bridge (to reduce ferry pollution) and Wentworth Avenue, Martin Place, the electrification of suburban railways (to replace tram trunk services, the trams to become cross-regional feeders), reclamation of public foreshore lands and improved municipal regulations and other initiatives were based in good part on the political momentum that the Commission generated over a year of intense press coverage.

To give an idea of the commitment the rail electrification programs alone required, the Harbour Bridge cost £10 million compared with the cost of suburban electrification at £11 million and of electric rollingstock at £6 million. Even the Bridge was justified on railway grounds. (The availability of foreign investment capital was critical.) Later generations have forgotten how polluting steam engines were at the beginning of the century and how keen that generation was to improve their air quality - on the Harbour and in the suburbs. They raised the money to implement the 1909 strategy having been given the vision by the Royal Commission. Sydney is back in that situation at the close of the century.

The tram and suburban railway construction strategies had been based on a *developmental perspective* to meet economic, environmental and social needs. Subsequently, after the 1932 administrative restructuring, the agencies 'owning' public transport services protected their vested interests with the support of Treasury. They shifted to a commercial *debt and revenue management perspective*. They deferred urban technological change, route restructuring and modal competition.

This had fundamental consequences for the success of 'planning' exercises. A succession of professional planning studies and endorsed strategies over the decades produced a lot of 'lines on maps' (including railways and light railways) but *little action*. Land releases went ahead, the population shifted out, and massive areas went unserviced by public transport investment and even the acknowledged bus route adjustments.

The prospect is available of legislating for a planning cycle that gives community leaders:

- a fair role in determining planning, budgeting and monitoring priorities and methods;
- the opportunity to countervail the singular interests of operating agencies and companies;
- the opportunity to improve public confidence; and
- the chance to persuade the community to make the sort of financial and other commitments that earlier generations made once they were given the *vision* by the Improvement of Sydney Commission.

This is consistent with the SEAs philosophy and the Public Accounts Committee's views in its *Annual Reporting in the NSW Public Sector* (March 1996), as quoted in the Council's *First Report to Parliament* (page 35):

> *Ministers and customers/stakeholders of agencies are the most appropriate people to be involved in setting the performance indicators which are to be used by agencies.*

This is discussed further in section 6.

3.3 Extrapolating: health, welfare, safety, urban consolidation etc

Transport is the one infrastructure function that is capable of significantly improving population and employment distributions and economic and environmental outcomes in support of urban planning controls, over the long term.

It is possible to plan and invest in transport intelligently so as to most effectively utilise investment in other support areas (hospitals, schools and tertiary institutions, water and sewerage systems, retail and community facilities, sporting grounds, entertainment facilities and the like), and improve equity of access of various groups to essential facilities and activities.

In addition, a shift in travel behaviour towards public transport usage will reduce the direct and externality effects of transport on public sector, families and businesses. These are myriad:

- hospital, medical and pharmaceutical costs, police costs and loss of income etc when accident, asthma and other victims are hospitalised or treated;
- health, motor vehicle and workers' compensation insurance premiums;
- delays in private travel and goods distribution due to congestion;
- duplication of schools and other facilities;
- construction and maintenance costs and the land take of shopping and like centres especially associated with carparks;
- excessive reliance on cars by families for their dispersed travel needs and the need for multiple car ownership; and
- lack of choice in the residential market due to the under-provision of 'transit villages' due to the under-utilisation of the zones around rail and bus stations.

The 'social cost' of the motor vehicle in our societies can exceed 5% of GDP[10].

This paper focuses on the costs of government. Various studies have shown that if the 'costs' of supportive transport programs are matched against the 'savings' available in the other areas, the overall cost of government can be reduced. (This should be a feature of all State and metropolitan transport strategies but is not.)

The Cumberland County Council explored some such matters in its *Economics of Urban Expansion* (1958), and in 1991 a joint Department of Planning, Sydney Water and Commonwealth Department of Industry, Technology and Commerce team reported on *Urban Consolidation - Public Sector Cost Saving.*

In 1995 the Australian Urban and Regional Development Review published a study by Kinhills on *Smart planning not sprawl - the costs and benefits of alternative fringe development*. Like the previous studies, it was devoted to development patterns in new areas rather than improving the efficiency of the systems already in place. Some interesting points arising from the study were:

- doubling residential densities in fringe areas can reduce infrastructure costs by between one-third to one-quarter, but these costs are more sensitive to location than density (Sinclair Knight study);
- educational facilities are most sensitive to the pattern of urban development (Gutteridge, Haskins and Davey study);
- 'public transport sensitive development' is marginally more expensive than the highest density of conventional and inter-connective street layouts but is significantly cheaper than every other pattern of development in terms of total discounted infrastructure cost and land take;

[10] See "Off the rails", *Living with the Car Survey, The Economist* (22 June 1996), p. 7.

- savings due to density diminish as density increases (diminishing returns); and
- sequencing (matching infrastructure with population growth and development) reduces social infrastructure costs in particular, especially schools, but a wider analysis of housing, transport, environmental, social and externality costs is needed.

The Industry Commission's investigations of urban transport led them to conclude that there is a need for greater competition between modes, an increased use of user pays principles, and formal performance assessments of road authorities in particular. It was in favour of introducing competition in the bus market, with incentives to develop new routes, more efficient work practices and a more suitable range of vehicles; and cited the NSW Bus and Coach Association's views that this could reduce operational and other costs and subsidies (in the UK, by up to 70%)[11]. The Commission did not consider wider urban efficiencies.

There are ideas for developing transport systems that would shift population towards a greater utilisation of existing urban infrastructure. These include:

- the Hurstville-Riverwood-Bankstown; Bankstown-Liverpool; and Glenfield "Y" rail links - all of which would improve cross-regional capacities in the middle southern and south-western suburbs;
- the pro-active use of dedicated public transport (light rail or similar) links in middle suburbs targeted for consolidation for urban design reasons (which may include the middle western and south-western suburbs), possibly using existing local street surfaces, with a thorough re-orientation of bus feeder services to achieve a re-structure of public transport of the type thought about in the 1910s to 1930s. A possibility is the linking of the St George and Westmead hospital catchments;
- high-capacity busways in areas of chronic congestion such as Victoria Road (looping into Moore Park), Windsor Road into Parramatta and the Grand Parade around Botany Bay[12], meeting environmental goals but producing major benefits to motorists without the massively expensive alternative requirements for extra road capacity;
- the long-term opportunity to link Badgerys Creek with the Main Western Line;
- shifting road pricing towards a usage basis and towards charging access fees in congested centres which have alternative public transport access available;
- the improvement of public transport access in dispersed and "cross regional" areas, including providing private bus services at higher levels of service and reducing the constrictions of monopoly boundaries; and
- generally improving the delivery of private bus and taxi services.

There are further major opportunities to link transport planning with **Landcom**. The Government has decided to shift Landcom's development efforts from the fringe to those areas of our cities that have the capacity to absorb a higher density population, with savings in water, health and educational budgets in particular. Busway strategies have potential to 'solve' the problems associated with specific major sites, including the ADI site at Blacktown.

No such ideas were explored in the *Integrated Transport* Strategy. The situation in Sydney implied in *Cities of the 21st Century* in turn might require a different transport strategy than had been achieved in the previous fifty or so years. Very few studies have addressed this - the exceptions being Greenpeace and earlier Jacana Consulting's report on railway development for the Labor Council (1990). Also, the RTA explored such a future (in two variations) in its *Future Directions* (1991).

[11] Industry Commission, *Urban Transport Volume 1* (1994).
[12] See NRMA, *Towards a Transport Vision for Sydney,* pp. 58, 69-76 and 73-75.

The major example of a thorough review of Sydney's planning strategy was Greenpeace's s*trategy for a sustainable sydney* (1993). Its strategy for 2013 was founded on:

- a ring of sustainable 'cities' - Sydney, Parramatta, Liverpool, Penrith, Macquarie and Rouse Hill - with naturally lit, heated and cooled medium-rise buildings adaptable for offices, residences and recreation;
- greatly improved urban planning;
- all residences are within 5 minutes' cycling distance of a town centre and rail station (except for a small proportion of detached dwellings) - an average of 2,500 new dwellings around each existing rail station and 500 around light rail stations; model redevelopments of Rouse Hill, CityWest, Homebush and Eveleigh, and urban villages at Fairfield/Hoxton Park, Rouse Hill/Mt Druitt, Penrith and Campbelltown;
- employment is dispersed, well-served by arterial roads which are now used primarily for goods, tourist traffic and occasional trips across town;
- centrally-controlled light and heavy rail networks, with small extensions to the existing rail system (10 new stations) but major new networks of light rail (42 new stations);
- locally-controlled transport with a great variety of systems depending on local topography, climate and life style - tuk-tuks, small ferries, minibuses, cycle ways; and
- vigorous restraint of traffic growth through road pricing, parking controls, car pooling, bus priority, "dual mode" commuting (cycle/rail), dial-a-bus type technologies, fuel substitution and the like.

Greenpeace cited the achievements in Curitiba and Toronto (Curitiba and Ottawa are discussed in section 5.1) but based its strategy on light rail. Even though the latter has many cost disadvantages compared with busways, Greenpeace still estimated that its strategy would have net major cost and quality benefits. The NSW public sector has never released a professional critique of this major report, nor of Jacana Consulting's rail development report for the Labor Council (1990).

A full planning cycle in NSW's cities, involving transport, roads, child care, hospital, employment, medical centres, tertiary education, residential costs and other public and private costs is overdue. The main 'visions' for reform have been developed outside government and have lacked support. Fundamental change will not be easy or fast, although the reform of bus route licensing and the diversion of funds from low-yield to high-yield projects and programs can be done by 2000.

3.4 Community expectations

What do the people of Sydney think about Sydney's transport performance? Regular press stories contain specific details of grounds for dissatisfaction with cleanliness, on-time running, security staff and the like; but more importantly, the NRMA's *Monitor of Public Attitudes: air quality and the car* (June 1995) established that:

- 43% of Sydney-siders considered local air pollution to be the most significant environmental issue we need to take action on (32% in Sydney's West where water catchment degradation was significant);
- 55% considered cars to be the major cause (except in Newcastle and Wollongong where industry rated first);
- two-thirds thought Australia can no longer afford to have three-quarters of workers using cars;

- eight of ten consider individuals can affect air pollution and focused on maintaining their cars better, walking for short trips, driving more slowly and smoothly, switching to unleaded petrol, and generally use the car less;
- less than half thought that public transport was a realistic action during most days, but one third thought that occasional public transport trips to work would be feasible;
- two-thirds were prepared to pay more for cars, petrol or public transport to improve air quality; and
- about one-third were "action-ers" prepared to do something, 40% "resistors" hoping that things will turn out alright, and 27% "rejectors" (there is no problem worth action).

The Department of Transport's *Future Directions* telephone survey in 1993 on behalf of the RTA showed that the factors that community looks for (in priority order) are:

- increased service frequency;
- stops and interchanges closer to origins and destinations;
- fewer connections and changeovers;
- improved reliability;
- improved travel conditions;
- increased speed of services (reduced travelling time);
- increased parking at terminals; and
- reduced fares.

International and local thinking puts buses at the head of the list of technologies that can satisfy these needs in a cost-effective way.[13]

Major community surveys by management students at Penrith and Baulkham Hills TAFEs in 1995 both found that the most desired reform area was improved bus route and timetable improvements; and that some 30% of people are 'prepared' to use public transport if its quality is raised[14].

4. NSW Government Reforms

The NSW Government has instituted major reforms of relevance to this paper in three key area: the Treasury and the controls and systems it has in place; the administration of urban infrastructure planning and budgeting; and the Council itself with its emphasis on accountabilities, SEAs and planning, budgeting and monitoring.

The reforms will be summarised in the following.

4.1 Treasury

In the last two years the Treasurer's Budget Papers have contained the following relevant initiatives:

- contractual budgeting: linking Budget allocations to agencies with the Government's intended policy outcomes and the agencies' outputs. Started in

[13] One reference is D. Hensher, *op. cit.*
[14] NRMA, *Towards a Transport Vision for Sydney*, appendix 2.

1995-96 Budget with published information about agency output measures for 41 agencies and outcomes for 12 agencies. Statements of Financial Performance as previously applied to GTEs will be extended to all Budget Sector agencies;

- asset management: costing of capital assets and appropriate charges to programs, planned maintenance and disposal etc;
- new legislation: various accountability and like reforms as well as an input-output chain linking resources with performance and results;
- debt reduction strategies to be implemented over time; and
- use of statistical tools to better measure the technical efficiency of service providers.

Recently, the Treasury has indicated that it accepts the Council's desire to adopt a central management information system based on a common chart of accounts, and will implement it. Further, it has proposed to require agencies to prepare five-year Capital Strategic Plans which will be based on the outputs to be provided to achieve outcome objectives and the method by which they will be produced.

4.2 Ministry of Urban Infrastructure Management

At the Business Summit on 31 May 1996 Craig Knowles MP, the Minister for Urban Affairs and Planning, announced major reforms in the handling of urban infrastructure projects. In his speech he said *inter alia*:

> *In the past, the key determinant of whether a major project is given the green light has often been its budgetary impact alone .... there have been limited opportunities to comprehensively examine cost/benefit measures and community need, as well as alternatives to the obvious solutions to, say, transport, and other service needs and infrastructure requirements.*

The measures that the Minister announced were:

- formation of an Urban Management Committee of Cabinet (eight Ministers covering all relevant portfolios);
- formation of a small Ministry of Urban Infrastructure Management supporting the Cabinet Committee;
- preparation by the Ministry of an Urban Infrastructure Management Plan[15] (covering a 5-year period, updated annually) *"to ensure co-ordinated delivery of roads, water systems, open spaces, railways, housing, health and education services"* in the Sydney, Hunter and Illawarra. The specific agenda is:
  - ⇒ identification of physical and social infrastructure needs;
  - ⇒ assessing the responsibilities of individual departments and agencies;
  - ⇒ identification of alternative means of meeting infrastructure needs other than by government agencies;
  - ⇒ translation of those alternatives into actual projects, with summaries of cost-benefit studies and socio-economic analyses;
  - ⇒ cost estimates for the projects where available; and
  - ⇒ projected sources of funding including private financing;
- inclusion in the Plan of opportunities for microeconomic reform and the implementation of competition policy as well as the Green Paper proposals on Regulatory Innovation (below);
- maintenance of the responsibilities of the Department of Urban Affairs and Planning in State, regional and metropolitan planning; and
- elimination of prescriptive regulation over Development Applications and Building Applications, replaced by self-certification using accredited advisors as detailed in the Green Paper on Regulatory Innovation.

The Minister referred to the work done by the Urban Strategy Group chaired by John Mant and Bob Wilson, and his Office's own independent review of regulatory processes. Background papers made a number of points including the following:

- *"co-ordinated strategic urban management requires the overcoming of turf wars and the entrenched interests of bureaucracies rather than vesting all authority and responsibility in one department";*
- *"vesting responsibility .... in a central agency ... would not sufficiently involve all stakeholders directly in consideration of and prioritising of infrastructure provision";*
- the Plan will *"compel agencies to co-ordinate their planning efforts thus reducing the potential for duplication and the consequent waste of resources";* and

[15] This was a recommendation of the Public Accounts Committee's Report on *Infrastructure Management and Financing in NSW* (July 1993).

- *"linking the Plan to the Budget process will be integral ensuring a whole of government approach* (sic) *... (ensuring) that financial resources are allocated to achieve optimum benefit".*

The linking of the deliberations of the Budget Committee of Cabinet and the Urban Management Committee of Cabinet was explicitly proposed, ensuring co-ordination and improved financial performance.

The papers stated that Treasury had been developing an 'urban budget', but the Treasury has advised that it has been DUAP which has been attempting to do this. The papers did not provide an indication of the methodology (data collection and analysis, criteria, targets etc) to be used by the Ministry.

4.3 Council on the Cost of Government

The Council was formed by Premier Carr as a key plank in the Government's goal of reviving and improving public administration. The Council has taken a retrospective approach in terms of cost trend analysis, and a prospective approach to the key issue of 'service efforts and accomplishments', which is essentially matching inputs with outputs and outcomes, using external information sources as well as those available within agencies (referred to as 'best data' in the later discussion of planning cycles). The SEAs reports will cover outcome areas which cross portfolios where appropriate; and will define performance measures.

The Council is also fundamentally re-examining the State's financial framework to improve the matching of resources and the best means of achieving outcomes. SEAs and this project are in the same spirit as the Treasury's and Minister Knowles' moves already described. The other more specific measures also being pursued are:

- standardised 'Assumptions Statements' in which agencies are required to explicitly state the demand and supply assumptions on which their Budget bids are based and the use and impact of measures of demand and supply management;
- measuring and reporting the unit costs of specific outputs which will require agencies to use Activity Based Costing and benchmarking;
- use of contractual budgeting where funds are provided to agencies on the basis of the quantity and quality of outputs to be delivered;
- the elevation of organisational and business plans to become the main bidding documents on which resource allocation is based;
- the promotion of "systemic change", or orientating service provision to better meet the needs of the clients and reducing funding needs; and
- improved planning reviews, through better skills and knowledge within agencies.

The methodological rigour used in the Council's SEAs analyses will complement the Ministry, as will the Council's emphasis on benchmarking. The partnership potential is obvious, although as the Ministry gathers momentum, the Council might take a review role as was always intended. The Government's decisions announced on 31 May would imply that the Council's project on linking performance, budgets and monitoring In respect of urban matters will be undertaken by the Ministry, but again the Council may be able to offer assistance.

One of the recommendations of the US National Performance Review (1993) - Al Gore's *From Red Tape to Results* - was that governments prepare an annual Accountability Report. The Council might like to consider this in terms of advising the Premier and the Parliament of annual improvements in resource allocation across government, cost savings, greater

accountability of the bureaucracy and improved service delivery. If this idea is adopted, the Council will have a valuable role in the Treasury and Ministry reform process.

5. Learning from the World

5.1 Busways: Canada, South America, Brisbane, the Olympics

It was recognised in Sydney even in the early 1940s that buses would have a critical role in Sydney's outer suburbs[16]. In 1974 SATS proposed express routes running across regions, linked to centres, feeder services and railways. The landmark report released in 1988 by then Minister Bob Carr, namely *Sydney into its Third Century,* has already been quoted in terms of the cost advantages of buses in meeting the transport and related needs of people in developmental situations, away from established transport corridors. It supported the SATS principles.

Successive governments did not implement the various reports with the consequences that have been detailed elsewhere in this report. In this area of 'technology', Sydney needs to look overseas and to Brisbane for a busway strategy that is more cost-effective and practical than any other mass transit possibility at this time.

In 1974 the planners and politicians in Ottawa-Carleton (a regional municipality covering 10 area municipalities and the City of Ottawa) were faced with a spreading suburban fringe that they knew would produce adverse consequences[17]. They had just experienced a major popular rejection of a freeway proposal and the balance of opinion was 'pro-transit'. The provincial law of Ontario required the Regional Council to produce a 20-year plan covering land use and transport, resource management, housing, water supply, waste management and environmental constraints. The Regional Plan is the umbrella document for the area municipalities' plans and regulations.

The Regional Council had the same logical alternatives as Sydney, which was also going through a freeway-rejection mood in 1974. What Ottawa-Carleton did in 1974 was give precedence to public transport over road construction and widening, and set peak hour modal split targets for public transport at key points throughout the region. It adopted a railways plan, but this was amended in the late 1970s to busways. The first sections of busway were opened in 1983.

Key busway features of the successive Official Regional Plans were:

- buses were given priority where high-frequency operation was impeded by traffic conditions;
- busway stations were developed at an early stage in the development of urban centres outside the Greenbelt;
- Primary Employment Centres were designated at busway stations, located so that workers had to travel no more than 40 minutes by bus from most of the urban area;

[16] See Department of Main Roads, *Main Road Development Plan for Sydney Metropolis and County of Cumberland* (May 1946): for example "Future expressways will carry express bus services where the bus journey is long. Additional feeder bus services will be provided, as required, to bring all residential areas of designated compact development within (400 metres) of such as service" (page 46).

[17] The main source for the following paragraphs is John Bonsall, *Planning for a transit-oriented city: lessons from Ottawa-Carleton.*

- local subdivisional and other plans had to contain efficient road layouts, place higher density developments on or near transit routes, and locate nearly all new buildings within 400 metres of a transit stop;
- the busways were staged, with initial connection of stations in new areas being by priority lanes to existing roads rather than waiting for the construction of a separated busway (the intention was to encourage residents to use busways instead of buying a 2nd or 3rd car);
- fares covered 55-60% of operating and minor capital costs. Major capital costs were covered 75% by provincial taxes and 25% by municipal taxes; and
- a startup subsidy was provided by the Province to allow higher than commercially justified timetables in the early years of operation.

Brisbane's *Busway Strategy* Report (1995) pointed to the results: Ottawa-Carleton has almost double the per capita ridership than comparable cities but has spent less than half the average cost. Ridership is as high in new outer suburban areas as in the older established areas. **The public transport split to the CBD is about 60 per cent and to non-CBD centres about 30 per cent.** Annual per capita usage for the whole Region is 30% higher than it was the inner older areas alone in 1971. The buses absorbed about one-third of increased trips over the period 1975 to 1986 and almost all of the trips to the CBD. Indeed, in 1986 there were fewer peak car trips to the central area than in 1975 (partially due no doubt to the decentralisation of employment). The network now uses over 800 buses, has 95 stops, operates every 3 minutes during peak hours, 5 minutes during the day and 10-15 minutes in the evening. There are 50 express routes, 7 other trunk routes and 44 local or feeder routes. This is a large operation for a city of about 1 million people.

A sophisticated busways strategy was implemented in the Brazilian city **Curitiba**, using Volvo bi-articulated buses with 270-person capacities (Ottawa-Carleton used standard buses)[18]. Curitiba's population is about 2 million and the public transport share is over 70%. Car ownership is the highest in Brazil but fuel consumption per head is a quarter less than the national average.

The buses are matched with enclosed waiting stations where passengers pay their fares (a single rate for all journeys) when they enter the station, rather than on the bus. This allows multiple sets of doors on the vehicles so loading and unloading is fast. The floor of the station is at the same level as the bus so passengers find it easy to board and alight.

The busways run just like railways except that they are on streets, and have advantages over railways: the buses can act as collectors in residential areas, hop onto the reserved road land and travel express, then exit at programmed destinations to suit changing patronage and time-of-day profiles as well as special events and destinations. They can also be co-ordinated with local feeder services where the transfers are fast and comfortable, but generally transfers are minimised. The busway routes are fully integrated with building development.

The final example is **Brisbane**. The *Busway Strategy for Brisbane* (1995) does not downplay the role of railways; it plans to use buses for high-level operations where railways are absent. This is comparable to the situation in Western Sydney. The Brisbane strategy is based on an assessment of the environmental consequences of the 'base case' scenario:

> *.... the peak hour transit modal split across the CBD cordon screenline must rise from today's 39% to between 50% and 55% in 2011. If this does not happen, not only will increased traffic congestion lead to more urban sprawl*

[18] See "Off the rails", *Living with the Car Survey, The Economist* (22 June 1996).

but the resulting environmental, energy, safety and social costs will reduce Brisbane's future economic development.[19]

The Strategy was estimated to cost some $600 million to construct, over about 20 years. By 2011 it was estimated that annual savings to taxpayers would be $60 million with a further $50 million a year in 'avoided' costs associated with sprawl and pollution (emissions would be over 60% less than in the 'do nothing' case). Property acquisition will be significantly less than in a car-based strategy.

As a bonus, in February 1996 the former Prime Minister announced that Brisbane would receive $100 million in Federal grants for its Busways strategy.

Sydney has had bus services for a long time but has *never* had a Curitiba-type service and introducing it would be a major undertaking as explained later in this report - but the benefits of tackling the issue may be quite fundamental to Sydney's urban future.

However, the NSW Government has recognised the ability of public transport modes to service the **Olympics** site at Homebush Bay site by limiting car parking to 10,000 spaces, building a 36,000 passengers per hour rail loop and planning special bus routes. The bus routes are indicative of the potential for high-capacity bus operations elsewhere in Sydney. Taking one example, League Grand Final day in 2010, the 14 scheduled regional routes were estimated to entail:

- Manly: 25 buses
- Warringah: 33 buses
- Ku-ring-gai: 23 buses
- Hornsby: 36 buses
- Baulkham Hills: 31 buses
- Blacktown: 38 buses
- Windsor: 24 buses
- Penrith: 33 buses
- Liverpool: 31 buses
- Campbelltown: 92 buses
- Sutherland: 80 buses
- Rockdale: 32 buses
- Randwick: 27 buses
- Woollahra: 21 buses

The buses carry an average of 50 people and the services pick up extra demand when they meet common routes so the total number is greater than is shown. However on this basis a little under 30,000 people would go to the centre on fast buses, with potential for some of the routes to be full-time cross-regional services.

If the bus culture changes in the way suggested by international precedent, bi-articulated vehicles would cut the number of buses dramatically, reducing congestion and improving comfort. Moreover, the theoretical capacity of a single road lane carrying such buses exceeds 30,000 passengers per hour.

Sydneysiders 'remember' the service that trams gave the Sydney Cricket Ground and the Showground. The massive crowds that used to go the cricket and football in the 'golden age' of public transport created the legend that only trams have the capacity to handle such loads. This 'myth' was dispelled by the 1948 Sinclair expert group[20] which pointed out that tram capacity was restricted by the small number of routes available, while buses were more flexible. The bus transit time between Central Station and the Showground was about one-third that of the trams, and the differential was even greater during the biggest events.

Light rail has real potential in the Olympics precincts as has been argued by Professor Lawrence Nield on various occasions, but that technology has substantial capital cost disadvantages compared with buses without passenger capacity advantages; and in the

[19] *A Busway Strategy for Brisbane City* (June 1995), p 5.
[20] NRMA *Towards a Transport Vision for Sydney,* p. 58.

case of mishaps and accidents, bus drivers can take advantage of traffic diversions whereas trams are tied to their fixed routes. Technologically and industrially, busways can be introduced more quickly than light railways can.

The Olympics is already based on restricting private cars to perimeter parking stations and then running the passengers into the Homebush Bay site by buses. A thorough busway strategy, based on a more determined societal attitude to using public transport than was assumed by the official planners[21], developed between 1996 and 2000, would see the problems being experienced in Atlanta greatly reduced in Sydney.

5.2 Integrated planning and funding: USA, UK and The Netherlands

The lack of integration between transport and land use planning, funding and programs was common in the world and certainly not unique to NSW. Solutions were identified elsewhere at the same time as in this State - see section 5.4 below - and some administrations took action which showed the sense of reform.

In 1991 the Bush administration passed the Integrated Surface Transportation Efficiency Act (ISTEA)[22]. Daniel Patrick Moynihan got the chance after 30 years of advocacy to redress the legislative balance that had seen Interstate highways given funding primacy. The Interstates had been completed, and Moynihan was chairman of the committee which was to prepare the first post-Interstate statute.

ISTEA increased transport funding for six years by 25% over past trends but put in place conditions at implementation levels so that States and Metropolitan Planning Organisations would only be funded where:

- a 20-year plan has been developed, revised every five years; and
- projects were included in a Transportation Improvement Plan (3-5 years' perspective) consistent with the 20-year plan.

In both cases, 'engineering' criteria have to be balanced against energy, environmental, land use, equity and other criteria. The Act insists on an holistic approach in order *"to develop a National Intermodal Transportation System that is economically efficient and environmentally sound, provides the foundation for the Nation to compete in the global economy, and will move people and goods in an energy efficient manner".* The key directions were:

- emphasis on alternative solutions - modes, mobility and environmental protection, and full integration of the levels of government (federal, state and local);
- emphasis on flexibility - funding roads, public transport, pedestrians, bicycles and so on to achieve the best outcomes (holistically defined) regardless of the vested interests;
- emphasis on performance - preserving, maintaining and managing the existing and new systems;
- emphasis on safety and aesthetics; and
- emphasis on public involvement - "moving the nation towards a participatory model of decision-making, in which an informed citizenry plays a key role"[23].

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[21] *Homebush Bay Bus Infrastructure and Management Study*, Gutteridge Haskins and Davey with TEC Consulting *et al*, August 1995. This found a strong preference for bus modes through community surveys and used fleet capacity estimates based on current bus policies. A paradigm shift is arguably possible, making use of existing and planned road capacity at a much higher level than is currently estimated.

[22] The major source for the ISTEA discussion is H. Dittmar, "A Broader Context for Transportation Planning", *Journal of the American Planning Association,* Winter 1995.

[23] Ibid, p 8.

It must be emphasised that both national and state legislation is enforcing an emphasis on maintenance, in recognition of the fact that agencies have excessively favoured design and construction priorities.

In the United Kingdom, the Departments of Transport and of the Environment have issued Local Authority Circulars to assist local, regional and specialised (like British Rail) authorities to prepare funding bids in line with annual statements of Policies and Programs[24]. The new 'package approach' is intended to achieve specified Objectives, through:

- funds allocated to the authority and mode that will best achieve outcomes;
- authorities required to show how road and public transport expenditures (including a five-year forward estimate) fit with economic, environmental and road safety criteria;
- emphasis on public transport, walking and cycling; and
- emphasis on public transport and road pricing type measures before a road construction option will be approved.

Planning Policy Guidance 13 (PPG 13) issued by the two departments in 1994 provided that:

> *local authorities will help to meet the commitments in the Government's Sustainable Development Strategy to reduce the need to travel; influence the rate of traffic growth; and reduce the environmental impacts of travel overall. These policies will also make a significant contribution to the goal of improving urban quality and vitality, and to achieving a health rural economy and viable rural communities.*

The mood in Great Britain is certainly directed to effective action on a bi-partisan basis. To make London a sustainable city, the *UK Royal Commission on Environment Pollution* (1994) recommended the cessation of freeway construction and the abandonment of the traditional "predict and provide" self-fulfilling methodology used by the road builders. It set targets for public transport usage (66% increase by 2005 and a further 50% by 2020), air quality to WHO standards by 2005, quadruple bicycle use by the same year, and reduce car trips to 35% of journeys in London (currently 65%) and 50% in other urban areas in 2020.

The UK Government has moved to implement these recommendations in important respects, especially the curtailment of road capacity and freeway expenditure.

Integrated methodologies take time to establish and require a lot of commonsense and judgement because of the prevalence of sunk costs in transport and the inappropriateness of average costs in most circumstances. Many key parameters including the environmental and equity ones cannot be reliably valued in monetary terms. However, both ISTEA and PPG 13 devolve planning powers to local levels without relinquishing the central government's right to set overall policy and co-ordinating dispersed planning activities.

The Netherlands' transport and environmental strategies have set the pace in the world. It is the world's largest exporter of agricultural products and relies on 'transport' to an inordinate extent (the sector employs about 350,000 workers). Its cities are under severe environmental strain, while its government bodies are conspicuously open and honest in their strategies and reports[25].

Features of The Netherlands' arrangements are as follows:

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[24] Source for this discussion is material collected by Mr M Faber, an officer of the NSW Department of Transport, on a visit to the UK in 1993 and subsequently.

[25] This discussion relies on Second Chamber of the States-General, *Transport in a sustainable society - Second Transport Structure Plan - part d: Government decision* (n.d. but probably 1990); and discussions with John-Paul Horck, official visitor to NSW DOT in 1995.

- comprehensive consideration of mobility, accessibility, pollution, road safety factors among others, with valuation of the 'policy areas' and setting Target Scenarios over 20 years whose achievement is measurable;
- explicit steps and strategies at each level of government (European, national, metropolitan regions and country areas):
  - ⇒ tackling problems at their source;
  - ⇒ managing and restraining mobility;
  - ⇒ improving the alternatives to the private car;
  - ⇒ selective accessibility on the roads, case-by-case with consideration of alternatives; and
  - ⇒ strengthening the foundations - communications, inter-agency collaboration, finance, investment, enforcement and research;
- flexibility over time.

The Government emphasised that it could not work alone[26]:

> *As the Structure Plan is put into effect ways will be sought wherever possible of securing action outside the Ministry, challenging and enabling outside bodies and individuals to shoulder their own responsibilities; only then will the Ministry itself step in (page 114).*

5.3 South East Queensland

South East Queensland is a very fast-growing region which is experienced environmental, equity and economic pressures. The South East Queensland Transit Authority (now called 'Transport Planning South East Queensland') was set up as an independent co-ordinating body within the state Department of Transport in 1995[27].

SEQTA co-ordinates funding submissions to the State and Commonwealth governments and prepares the Integrated Regional Transport Plan. It liaises with housing, local government and planning, family and community services and other community and infrastructure agencies to ensure consistency between the regional, land use and agency plans. It is pursuing integrated timetables and fares, road capacity planning and private sector operations.

Brisbane is part of this region and the Brisbane City Council has done a lot more than the busways strategy that has already been summarised. Its **TravelSmart** strategy is a comprehensive urban reform package in terms of linking transport and land use policies. Its elements are:

- putting public transport first;
- reducing trips needed;
- reducing trip lengths;
- increasing walking and cycling; and

[26] The NRMA has also pointed to the Dutch Ministry of Housing's *The Right Business in the Right Place: towards a location policy for businesses and services in the interests of accessibility and the environment* (1995). This pointed to major savings from all levels of government working together to match the 'accessibility profiles' of different businesses with transport and other infrastructural facilities. See Appendix A of *Shaping Sydney's Transport.* The *Second transport structure plan* provided under 'managing and restraining mobility' that "Municipal cooperation will ensure that industrial development is permitted only at locations with an appropriate accessibility profile" (p. 117).

[27] South East Queensland Transit Authority Implementation Task Force, *Discussion Paper on SEQTA Implementation* (undated).

- building community awareness and support.

5.4 NSW unimplemented reforms

Transport planning in postwar Sydney 'turned the corner' in the late 1970s under the pressure of Transport Minister Peter Cox and Environment Minister Paul Landa who were attempting to reform freeway-orientated policies in Sydney.

The previous Government had started the process by releasing the **first Report** of the Urban Transport Advisory Committee (URTAC) in 1976. This had called for the dropping of 'grand plans' and an emphasis instead on cost-effective specific projects. It stated its long-term objectives as:

- the development of cross-regional routes where it is unrealistic to expect major public transport facilities other than buses to be provided, even in the long-term;
- the development of routes which redirect the growth of traffic away from the Central Business District to major regional centres; and
- the development of arterial roads to by-pass the major regional centres.

In May 1979 URTAC presented its **second Report.** This was the response of Transport, Planning, Maritime Services, Treasury, Police (Traffic) and Main Roads to the energetic reviews of policy being carried out by Ministers Cox and Landa and the decision to abandon 23 kms of inner-urban freeways with a re-orientation of others to minimise their impact.

The Report had a horizon of 1991 when the Census was due - to resolve real doubts about population growth and distribution. URTAC said it would not be bound by the tight terms of reference for its earlier Report but would take specific account of "energy conservation, environmental and social impacts, commercial vehicle movements, shopping and recreational travel and peak hour journey-to-work requirements". It proposed a definite short-term program and more flexible works schedule for 1983/84 to 1990/91 and a framework for the regular review of policies and programs. A statement of principle which was endorsed by Mr Norm Oakes, the Secretary of the Treasury, and which nominally reversed practice since 1932 was:

> ***urban transport policy objectives and social and environmental factors have been taken as paramount and these, therefore, have transcended simple economic criteria in assessing the urban programs.***

The most important practical features of that Report were:

- proposed review of the construction standards of new roads to bring them in line with local requirements rather than overseas standards;
- re-directing road funds to cross-regional and circumferential routes;
- allocating additional road funds to allow a higher maintenance effort and safety standards;
- increased flexibility in funds;
- proposed review of "the scope for rationalisation of both Government and private bus services, with priority being given to the Parramatta and Campbelltown areas", plus "low cost initiatives and improved co-ordination ... be actively pursued". Past "fragmented" approach unsatisfactory, "every effort should be made to form a cohesive regional policy for the private bus system as an integral part of Sydney's transport system"; and

- initiation of a Western Sydney transport study - approaches to be (i) completion of rail upgradings and improvement of timetables, co-ordination and fare structures (ii) continued development of cross-regional road systems, by-passes and sub-regional centres, and (iii) a review of the entire bus system.

The Ministry of Transport developed a proposal for a 'Transport Improvement Fund' at about the same time that Professor Peter Wilenski was suggesting a 'Transport Development Co-ordination Authority'[28].

The first concrete step towards a new strategy was a landmark report, *Road Problems and Priorities*, in 1980 by the Ministry of Transport's State Transport Study Group. This identified the fundamental failing of 1960's grand planning-type approaches as beginning "by assuming a particular solution (with an associated cost) rather than first considering the problem and then letting the problem determine what is an appropriate solution (with an appropriate cost".

The Study Group suggested that a cycle of problem identification and solution priority be developed, using the Group's data sources and a wider policy process to identify the areas or roads that "generate the greatest amount of benefits in the shortest time or alternatively within a fixed budget". The best available population, employment and workforce data were used to produce pictures of *road improvement needs* (against technical criteria) and *cost effectiveness to the community* - "community benefits per amount of road expenditure". The criteria included social equity as well as operating costs, travel time, accident costs and fuel consumption.

The results are shown in the table (only the first three ranks are shown, positions are equal within boxes; italics indicate demotion in priority, underscoring indicates promotion).

[28] See NRMA *Towards a Transport Vision for Sydney* page 20.

ROAD NEEDS *engineering*	**SOLUTION PRIORITY** *benefit/cost*
Auburn *Bankstown* Blacktown *City of Sydney* Leichhardt Liverpool *Ryde* *Sutherland*	Auburn Blacktown Leichhardt Liverpool Marrickville Penrith South Sydney Strathfield
Parramatta Marrickville Canterbury Fairfield Holroyd Penrith Rockdale Strathfield	City of Sydney Holroyd Fairfield Parramatta Ryde Canterbury Bankstown Rockdale
Hornsby North Sydney Campbelltown Baulkham Hills South Sydney Willoughby Ku-ring-gai Camden	Ashfield Sutherland Concord Camden Campbelltown Burwood Willoughby Lane Cove

About 65% of the road capacity 'needed' was on main and secondary roads, and 35% on local roads. The importance of Western and South Western Sydney is clear - and the benefits of a data-based approach to prioritising projects and achieving outcomes.

Very few studies have addressed the full implications of a different approach to transport planning - the exceptions being Jacana Consulting's report for the Labor Council, *A Rail Strategy for the Sydney Region* (1990) and Greenpeace's *Strategy for a Sustainable Sydney* (1993). Both claimed large savings in urban programs and externalities if heavy rail and light rail strategies were followed, with supporting land use changes in the latter case.

The reality is that the current official transport strategy, the *Integrated Transport Strategy* (1995), while recognising the need to balance economic, environmental and equity criteria:

- defined none of them in meaningful terms;
- gave no performance indicators for the projects it recommended and clearly favoured freeway projects;
- suggested no planning cycle;
- set no targets;
- suggested no financial reform except for privatisation; and
- suggested advisory structures dominated by bureaucrats[29].

Community expectations were described in section 3.4. The only mode that can deliver the key expectations, especially in cost-effective terms, is the bus. This does not mean that there is not an excellent case for specific road, rail, cycling and other facilities. The official plan for Sydney's transport, the *Integrated Transport Strategy*, omitted busways as well as meaningful criteria, so the challenge for effective planning lies ahead.

The best ways of proceeding with transport reform to achieve economic, environmental and equity benefits in NSW's cities have been discussed not just over the last four decades but more intensively through the Infrastructure and Planning Working Party of the *Clean Air 2000*

[29] See chapter 4 of NRMA *Towards a Transport Vision for Sydney.*

Task Force. Its discussion paper, *Shaping Sydney's Transport - a framework for reform* (March 1996), contained the following recommendations (summarised here):

- conduct of an immediate and urgent review of the directions and strategies for Sydney's transport, especially focusing on prioritised action plans for growing areas not served by public transport, including non-work and non-peak needs and the needs of women, aged and people with limited mobility;
- creation of a *champion* for public transport projects in the developing areas to partner the RTA but to seek early and effective public transport action as the first step towards a more integrated transport structure;
- increase in the role and involvement of local government and Regional Organisations of Councils;
- development and publication of holistic performance indicators;
- preparation of an annual *state of the system* report by an independent organisation (consultant under the supervision of the Task Force) regarding progress;
- improved community participation in policy and planning;
- commissioning of community service agreements between industry, community, environment and other groups and the providers of transport services - whether government or private, to improve accountability;
- investigation of innovative approaches; and
- investigation of improved mechanisms for the total funding of transport including existing State sources, Section 94 contributions and parking levies.

Many of these recommendations parallel the ideas discussed earlier in this report, but are not fully cognisant of the reforms proposed by the Council on the Cost of Government, Treasury and others. (They certainly inspired the announcements at the Business Summit on 31 May as the Ministers for Transport, Urban Affairs and Planning, and Environment are members of the Task Force.)

On 30 August 1995 the Minister for Transport, Brian Langton MP, wrote to Ministers Knowles, Knight and Allan supporting a review of urban transport corridors:

> *I am concerned that there are gaps in current knowledge about the potential of specific transport corridors to contribute to urban containment and environmental and community involvement strategies. The Integrated Transport Strategy identified a number of corridors, but these and the corridors omitted (especially in Western Sydney) were not "measured" against appropriate criteria. The challenge is to gain the maximum environmental and equity benefits from the available funds.*
>
> *I have asked the Department of Transport to organise a short-term "scoping" review of all corridors and supporting opportunities, using the best information and expertise currently available.*

While it is understood that this letter was not followed-up by the Department, the approach as documented in the following attachment to the Minister's letter is still a useful guide to what the Ministry for Urban Infrastructure Management could achieve in the near term:

Review of Urban Corridors

The Integrated Transport Strategy contained suggested road and rail corridors for passenger and freight traffic. General criteria were stated (economy, environment and equity) but these were not expressed as quantifiable indicators, nor were the corridors "measured" (especially not alongside the ones that were omitted). WSROC, NRMA and Liverpool City Council among others have pointed to omissions and strategic gaps.

The Government is currently assessing the best ways of implementing effective metropolitan strategies through the Urban Strategy Group, with the support of external processes such as the NRMA's *Clean Air 2000 Campaign*. Regardless of governmental structures and processes, transport is the one infrastructure function that is capable of significantly improving population and employment distributions, and economic and environmental outcomes, in support of urban planning controls. It is possible to plan transport intelligently so as to most effectively utilise investment in other support areas (health, education, water and sewerage, retail and like functions), improve general economic and environmental performance, and improve equity of access of various groups to essential facilities and activities. Transport budgets are limited, and it is **critical** that the Government have the best possible information about how to match available resources with outcomes and judge the merits of various strategies. ITS does not provide a basis for this.

The proposal is to review the non-committed corridors in the greater metropolitan area against firm economic, environmental and equity indicators (see below). This would be done in a transparent and objective manner, with one output being an initial estimate of the investment required to support public transport strategies and freight; and another, the overall levels of transport investment needed to support different levels of urban containment and environmental improvement. The framework for regional transport strategies (especially Western Sydney) would be laid.

The review would be done *quickly,* using a professional issue and dispute resolution methodology:

- appointment of facilitator
- preparation: interviews, research
- initial DELPHI session: what issues, what information is available, what more is needed - thrash out the options
- week's break - participants collect more information, deliberate
- second DELPHI session: finalise views
- draft report and submit it to Ministers.

All relevant means of addressing transport issues would be covered including integrated planning and budgeting, demand management, best-practice zoning and centres-based policies, and the introduction of competition policies in the regulated private transport areas (buses and taxis).

The various projects and schemes submitted by government agencies, community groups, the private sector and academics (for time reasons, constrained to responses to the recent submissions to the ITS and road and rail drafts) would be evaluated in terms of

- economic and financial profile
- benefit-cost evaluation of non-monetary factors
- social balance sheet approach to all factors
- environmental benefits (including CO_2, air and noise pollution, energy source and use of renewables)
- feasibility in safety, community and engineering terms
- accessibility indicators of catchment (income, car ownership, distance from public transport, single parent percentage, employment groups etc)

These factors would be established on benchmarks where firm figures were not available. The exercise would be in the nature of "scoping", looking for value for money opportunities, rather than full evaluation. More precise measurement would be done at an area or sub-regional level.

Emphasis would be given to integrating urban design and transport. Corridors would be regarded as flexible as far as possible, for example, bus priority and exclusive bus lanes might be made available on existing roads, with conversions to high capacity fixed-route services when justified, with the RTA investing in facilitative works and only providing compensating road capacity where justified.

Freight needs will be included, with an emphasis on railing where feasible, and spot works to reduce noise and exhaust impacts on the most cost-effective basis.

More detailed papers are available on the preceding aspects.

It is important to include stakeholders in this review, and to "de-bureaucratise" it along the lines of the *Clean Air 2000 Campaign*. The groups represented in the DELPHI process would be:

- Transport portfolio: Minister's nominee(s), DOT, SRA, STA, Bus & Coach Association, Taxi Council, unions
- Roads Administration
- Urban Affairs & Planning Administration
- Environment Administration
- Treasury
- Urban Strategy Group
- Regional Organisations of Councils
- NRMA
- Environment groups
- Consultants/engineers
- Economists/analysts
- Private sector (avoiding conflicts of interest)

More detailed consultant guidelines were also available.

6. Synergies and Linked Programs

The broad question of bringing NSW cities' transport performance up to 'world class' levels is a complex matter. It involves many issues, for example:

- setting ambitious yet practicable goals in line with agreed outcomes, covering all relevant criteria and integrated with land use and other infrastructure plans;
- persuading 'funders' to find the resources required;
- allocating responsibilities to the appropriate agencies and interests, including setting competitive groundrules for operators;
- monitoring progress in a timely and reliable manner; and
- building momentum towards a transit-friendly culture.

Most of these matters have been treated at some length elsewhere[30]. In addition, it was seen in section 4 that various reforms are taking place within different central agencies. Here the key issues are what the State Government's roles should be and how they should be discharged in order to achieve agreed outcomes.

There is a deal of literature on "re-engineering" government to achieve outcomes and a number of pragmatic studies on how to do it, one of the most notable being the *Report of the National Performance Review: Creating a Government that Works Better and Costs Less (From Red Tape to Results).* This was produced by Vice-President Al Gore and others in 1993.

Some key elements of that Review relevant to this paper follow. There is a difference in context in some items, we should focus on the spirit:

[30] NRMA *Towards a Transport Vision for Sydney,* and *Shaping Sydney's Transport.*

- *cross agency boundaries:* “In a rapidly changing world, the best solution is not to keep redesigning the organizational chart; it is to melt the rigid boundaries between organizations. The federal government should organize work according to customers’ needs and anticipated outcomes, not bureaucratic turf. It should learn from America’s best-run companies, in which employees no longer work in separate, isolated divisions, but in project- or product-oriented teams” (66). Among other things, develop cross-agency ecosystem, labour and other management projects across government, to break down the distortions caused by the multiplicity of agencies;
- *use market mechanisms to achieve results:* “Steer more, row less ... replace regulations with incentives” (xli). “Government cannot create a program for every problem facing the nation .... We need more than government programs to solve our problems. We need *governance.* Governance is about setting priorities, then using the federal government’s immense power to steer what happens in the private sector. Governance can take many forms: setting regulations, providing financial incentives, or ensuring that consumers have the information they need to drive the market“ (89-90);
- *target outcomes:* “Outcome-based management is new in the public sector. Some U.S. cities have developed it over the past two decades ... and foreign countries such as Great Britain, Australia and New Zealand are on their way ... (In) Sunnyvale, California ... in each policy area, the city defines sets of “goals”, “community condition indicators”, “objectives”, and “performance indicators”. ‘In a normal political process, most decision-makers never spend much time talking about the results they want from the money they spend’, says City Manager Tom Lewcock. ‘With this system, for the first time they understand what the money is actually buying, and they can say yes or no’” (114). Gives further examples e.g. Oregon’s Progress Board (*cf* SEAs);
- *measure results:* “Management isn’t about guessing, it’s about *knowing* ... Good managers have the right information at their fingertips. Poor managers don’t (123). The Government Performance and Results Act of 1993 “requires each agency pilot (to) develop annual performance plans that specify measurable goals. They then must produce annual reports showing how they are doing on those measures ... those agencies that cannot easily measure their outcomes will use qualitative rather than quantitative goals and measurements. After all, any agency can, at the vest least, survey their customers and report the rating they are given” (109-110). The Federal Government should issue an annual Accountability Report to its citizens (127-8);
- *put the customer in the driver’s seat:* “we will require that all federal agencies put customers first by regularly asking them how they view government services, what problems they encounter, and how they would like services improved. We will ensure that all customers have a voice, and that every voice is heard” (57);
- *control competition and introduce a market orientation:* “Competition between regulatory agencies is a terrible idea .... Nor should policy agencies compete. In the development of policy, cooperation between different units of government is essential. Competition creates turf wars, which get in the way of creating rational policies and programs. It is in *service delivery* that competition yields results - because competition is the one force that gives public agencies *no choice* but to improve” (77); and
- *decentralise:* “Decentralizing the power to make decisions will energize government to do everything smarter, better, faster, and cheaper ... “ (103): move the authority to spend and to decide down to the most effective level, eliminate wasteful checking and procedures, reduce regulatory interventions. Largely streamline the budget process; but also reform procurement etc.

These considerations can be wound up into a "performance, planning and budgeting cycle". There are various "models", for example several are given in the OECD's *Performance Measurement in Government: Issues and Illustrations* (Public Management Occasional Paper 1994 No. 5). The following draws on these two sources and the other references listed in the last section on References.

6.1 Planning

The first consideration is a *planning cycle*. This is a series of stages which in theory starts with setting targets (or objectives) and ends with implementation, monitoring and reiteration.

There are no official targets in NSW and no timetable for setting them (let alone all the other components). Minister Knowles' announcement of the creation of the Ministry of Urban Infrastructure Management with a five-year cycle will remedy this but as few details are available, the following suggestions are made:

- the cycle be open and participatory, involving all stakeholders (especially 'funders', see below), with public officials supporting but not leading the process;
- major planning and review sessions be held every five years with annual reviews (this will link with the Treasury's desire to adopt five-year Capital Strategic Plans), but with an overlay 20-year strategic plan to encompass culture change, infrastructure change and like long-term matters;
- the cycle be legislated and allow no loopholes for projects not meeting prescribed standards;
- the cycle be regionally based as well as centralised as the discrepancies between regions is so great[31] and the funding cycle must include regional operators, developers and ratepayers (as explained under 'funding');
- the Government decide whether the regions should be defined by catchments (which are potential revenue catchments, have democratic controls and are defined on environmental grounds), or Regional Organisations of Councils. The latter have no statutory basis, no direct democratic mandate and some of their boundaries are eccentric;
- the criteria used to define expectations and compare regional and project bids be set by the Cabinet Committee on Urban Management, on the advice of the planning stakeholders and the Ministry, and apply to agencies, catchments and councils; and
- the Ministry let contracts for 'best data' collection and analysis so that government, university and TAFE, consultant and independent and other parties have the chance to compete on the basis of quality and value for money.

'Funders' include taxpayers, ratepayers and farepayers; State and local government; operators; sponsors and promoters (including the NRMA); environment groups; engineering and other professionals; investors; and regional organisations (including catchments).

The legislation mentioned at the third bullet would include consequential changes to funding arrangements.

An illustration of the suggested cycle is set out in section 6.4.

The Ministry, with its small staff, must develop effective relationships with the operating agencies, private operators and other stakeholders. There is a real risk of the 'policy competition' referred to by Al Gore and Minister Knowles as previously quoted. History

[31] See NRMA *Shaping Sydney's Transport* p. 12

decisively shows that 'co-operation' does not work and that if change is to be successful, the Ministry and the Cabinet Committee must control the purse strings. *The roles of Treasury and the central and line agencies must change, to support the Ministry, not direct it or compete with it.*

An issue that requires specific attention is **criteria** for measuring the appropriateness and performance of plans, projects and policies. As already shown, this is regarded as a critical component of reforms in the USA and UK because appropriate criteria impose a discipline and direction for all levels of operations and planning. The Council's draft SEAs report on public transport contains a number of measures includes travel time to centres and distances from home to public transport routes, and accident rates, as well as outputs.

In the planning cycle, milestones are set for specific years and even months. The areas for target-setting would include :

- public transport, High Occupancy Vehicles and non-motorised usage rates at State, regional and local levels (including car pooling schemes, new ride-sharers and sharers leaving pooling schemes, cyclists and walkers - numbers, share of trips etc;
- implementation indicators of accessibility (kilometres of bicycle lanes and pedestrian paths, number of information stations);
- residential density in accessible areas (centres, targeted suburbs);
- employment levels in designated centres;
- agreed congestion indicators (queuing hours in traffic hotspots, average trip times and average travel speeds);
- smoky truck exhausts and like offences. Indicators such as number of pre-1986 vehicles would come into play (public transport schemes would presumably allow the disposal of such vehicles); and
- the number and severity of bad pollution days for the Sydney Air Basin and at specific regional testing stations[32].

It would not be appropriate to try to relate general indicators (such as NO_x and particulate levels) to transport authorities because too many factors bear on this including weather conditions and economic activity. However these indicators should be monitored for planning purposes as well as for health alerts and the like. Long-term improvement should be expected if reform programs are implemented effectively.

6.2 Funding

Since at least 1932 the State Government dominated funding processes but this impeded progress. Effective change, by the example of the only successful planning episode in Sydney - the 1909 Royal Commission - depends on the community committing and contributing to implementation. Take the following examples:

- there was a recent political suggestion that residents on the Warringah Peninsula pay[33] for a rail service, something they had been seeking for decades. This is how the Harbour Bridge was one-third funded in the 1930s;
- there are Catchment Management Trusts that have the ability to garner rate revenue for local environmental improvements, for example the Upper Parramatta River catchment;

[32] Based on *Ibid* p. 20.

[33] Made in the media by Mr A. Humpherson, a local MP, in the context of a levy on developments. There are equity and efficiency problems with that specific suggestion.

- private infrastructure investors are looking for opportunities to develop public transport services without the controversy that dogged previous instances[34];
- developers make Section 94 payments to councils; and
- North Sydney Council announced an access charge for cars using inner city streets.

This subject is becoming more relevant as it is realised that:

- government funding of infrastructure at a national level has fallen significantly over the last few decades, probably below sustainable levels, and this has not been compensated by private investment[35];
- important parts of the taxation system have not been designed to change behaviours or achieve outcomes, such as payroll tax;
- road pricing is a prime example of where taxes could be restructured to affect behaviours without a loss of revenue; and
- technology is making both **road usage** and, more importantly in functional terms, **area access** charges more feasible.

Without prejudging the result of political decisions, how can such diverse sources be 'brought together' and used to best effect, while broadening the funding base? The options include:

- an integrated 'Transport Improvement Fund' as proposed in the 1970s by the Ministry of Transport on the basis of a scheme then operating in Victoria;
- regional funds as proposed by the Clean Air 2000 Task Force which suggested the "regional accumulation of developer contributions and parking levies to promote targeted spending on a small number of strategic transport improvements rather than a large number of small projects"[36];
- restructuring local rates and certain State taxes and charges to shift infrastructure funding onto a betterment basis, by region, by extending the rate base of Catchment Management Trusts, with an equalisation formula to ensure equity;
- enabling regional trusts to issue 'infrastructure bonds' or the like so that private investors can contribute to infrastructure funds with a government guarantee and without the political risks of BOOT and similar schemes;
- facilitating the private sector's incentive to contribute to infrastructure within regions by allowing developers some form of tradeable rights over, say, yield limits on land (so long as other key conditions are met); and
- elimination of constraints on funding movements between areas, modes and agencies (breaking hypothecation) in line with cost-effective planning strategies, with enabling legislation if required.

It was seen in section 4 that there are at least four agencies (including IPART) looking at such issues. Direction, co-ordination and impartiality are needed. The logical agency to advise the Government on resolving these issues is the **Council on the Cost of Government**, given its comprehensive statutory role, independence and short-term nature (setting the right directions but then handing over to implementation bodies).

It is suggested that the Council convene a **special seminar on reform in urban finances** with the co-operation of the Treasury, the Ministry of Urban Infrastructure Management and other central and line agencies. Community leaders would be included, with an emphasis on

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[34] *Shaping Sydney's Transport* p. 30.
[35] See for example Vince Fitzgerald, "Sustainable growth and infrastructure investment" in AURDR, *Investing in Infrastructure*.
[36] *Shaping Sydney's Transport, loc cit*.

finding ways of raising funds that will achieve real results. The roles of the Ministry and Treasury as well as other bodies in planning, budgeting and monitoring would be defined.

6.3 Competition reform and organisational adjustments

The Department of Transport and other official agencies must have important roles to play, but the outcomes of planning since 1945 and especially since 1990 imply that a different style of decision-making is required, one that overcomes turf wars, generates genuine community support, garners adequate funding, and actually delivers what the community expects - in economic, environmental and equity terms.

At present, the following implementation agencies are in place:

- Department of Transport: regulation of transport operators, implementation of safety standards, implementation of competition principles, development of transport strategies, management of certain projects including contracting of infrastructure works, dissemination of funds for Community Service Obligations;
- Department of Urban Affairs and Planning:
- Roads and Traffic Authority: construction and maintenance of main roads, freeways and motorways (with contracting of BOOT schemes), licensing and registration of vehicles and drivers, road safety and other attitudinal campaigns;
- State Rail and associated bodies: provision of track network, provision of passenger and freight rail services, contracting of rural coach services; and
- State Transit: operation of Government-owned passenger bus and ferry services.

In addition, if an holistic approach is taken (and the Department of Transport has been pushing integrated local schemes), local councils can be seen as partners in co-ordinating transport and land use developments. In July 1996 the Government released a local government program called 'Let's clear the air' which is designed to raise this sector's contribution.

Major aspects of the implementation of the reform process would include improvements in disbursing available funds for 'transport development' projects consequent to planning decisions; and monitoring implementation. These tasks clearly fall to the Ministry and to the Cabinet Committee on Urban Management; and a reduction in the Department of Transport's policy, planning and CSO roles would be expected if policy competition is to be avoided.

DOT has a critical role in contracting 'routes' for urban passenger services. The initial franchising under the 1990 Passenger Transport Act is due to expire (see section 3.2) and it is understood that the Government will soon be asked to consider revised rules, primarily improved monitoring of compliance with licence conditions.

The style of DOT's licensing is arguably inconsistent with the principles in the Government's Green Paper on *Regulatory Innovation* and with the principles implemented in Canada, Brazil and Queensland (see section 5.1) - and of course recommended repeatedly in Sydney's history, including in then Minister Bob Carr's *Sydney into its Third Century* (see page 10 above). The Department's regulation has tended to protect the interests of operators rather than increase public transport patronage.

The Green Paper specifically pointed to the US Comprehensive Regulatory Reform Bill which requires agencies to grant an exemption or waiver to an arrangement that meets the purpose of a regulation while departing from the prescriptions of the regulation. The Green Paper discussed such arrangements under the heading of 'regulatory flexibility'. (There are other possibilities in the Green Paper, all of which should be addressed by DOT.) In bus regulation

this would mean that operators could be able to tailor their services to community needs as defined locally.

Future regulation should be based on *best meeting the needs of the community in terms of access to centres, institutions and facilities, and other destinations*. The style of regulation should support the increased flexibility and level of service of bus services and the development of a transit culture in the outer areas of the State's cities.

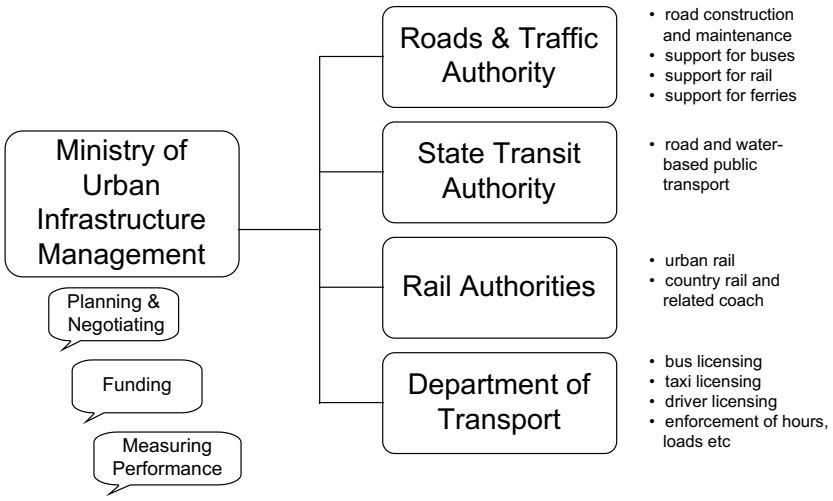
The Government should consider calling tenders for **a revised structure of feeder, trunk and cross-regional services**, progressively if not in the next year. Interim extensions of the existing franchises should be issued, if necessary, until the right basis is set.

This is an important component in realising the benefit of national competition principles. There are many issues to be considered and indeed the determination of routes should be an important part of the planning cycle discussed in section 6.1.[37] In addition, extremely strong linkages will need to be developed between busway route improvements and the road programs of local councils and the RTA.

There is a mixing of planning, operational and regulatory roles in DOT, the RTA and elsewhere, a duplication of policy and related staff, and scope for continuing policy competition. It could be anticipated that a review of policy and related functions in conjunction with the initiatives that Minister Knowles announced[38] will produce economies as well as performance improvements.

One model that has been discussed to separate 'funding' and 'providing' responsibilities is illustrated in the following chart:

SEPARATION OF 'FUNDER' & 'PROVIDERS'



Under such a model, accountabilities would be clarified: regulatory matters would be focused in DOT, the other authorities would manage infrastructure, and the matters that the Ministry would manage include:

- transport planning and reporting
  - ⇒ road services
  - ⇒ public transport services
  - ⇒ performance systems

[37] Route opportunities were reviewed in NRMA, *Towards a Transport Vision for Sydney*, chapters 4 to 7.
[38] The Government's announcement related to 'urban' matters. The same logic would apply to State-wide matters.

- ⇒ reporting
- negotiation and licensing
  - ⇒ licensing policies
  - ⇒ commercial negotiations with 'contractors' as defined below
  - ⇒ regional liaison
- urban strategies
- infrastructure development.

The changed roles of DUAP, the RTA and the transport authorities have to be determined as part of the planning cycle discussed elsewhere. The commercial interests of the public transport agencies can be accommodated: competition principles, and particularly contestability for the 'planned' routes with outcome-based regulation, would mesh the commercial aims of the 'contractors' and the outcomes expected by the Government and community.

6.4 Linkages between the Council and the Ministry

The Council has established a process for the implementation of its 'performance, planning and budgeting' project. With some modification, this could also applicable to the establishment of the Ministry of Urban Infrastructure Development's and the five-year Urban Infrastructure Management Plan. There is an opportunity for the Council and the Ministry to work together in the process, including advising the Government on appropriate roles for other central and line agencies.

The specific elements of the process are, in short:

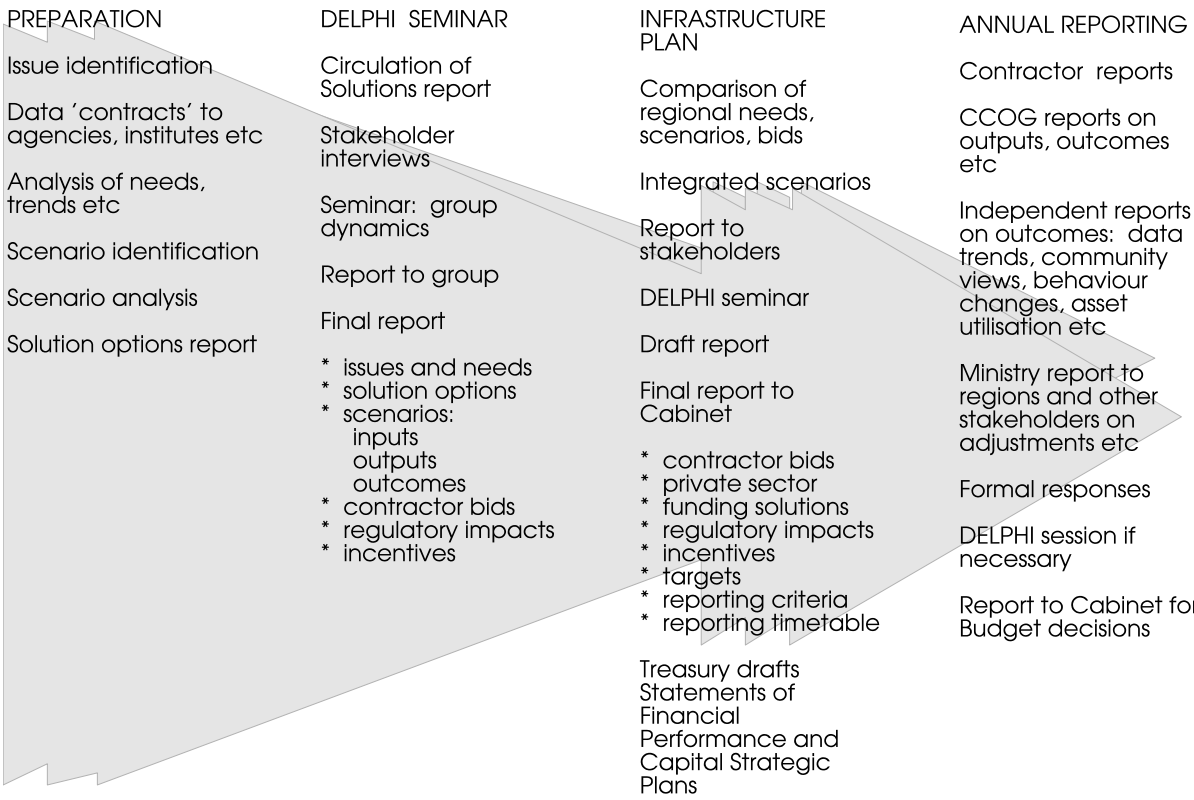
- form the nucleus of a change team to carry the critical establishment stages of the Ministry and link with the Council. A targeted recruitment campaign is suggested rather than reliance on secondments, as specialist skills and experience are required and the reform process will be challenging to 'home' agencies. This is one occasion where recruitment off a redeployment list would be inappropriate;
- prepare case studies on the linkages in practice *from* infrastructure outcomes determined initially by government *to* agency-level corporate plans *to* budget allocations *to* program and activity business plans *to* flows of funding to service delivery manager *to* community perceptions of program outcomes;
- establish an initial infrastructure planning summit, using DELPHI methodology and 'best data', to give stakeholders, providers and funders the opportunity to test scenarios, set targets, develop output and outcome performance criteria, identify program linkages between agencies, identify the most cost-effective means of achieving outcomes, and develop efficient and professional processes; and to reconcile differences (see section 5.4);
- organise a special seminar on urban finance reform to see how outcome-related programs can be funded, through conventional and less conventional methods;
- reviewing DOT's bus licensing review proposals to ensure that the potential of competition reform is achieved;
- advise Government on legislative changes needed to effect the agreed processes;
- progressive use of contractual budgeting where funds are provided to agencies on the basis of the quantity and quality of outputs to be delivered - the funder/provider model applied carefully, with the Ministry and the Cabinet Committee as 'funder' for government sources but other private and public agencies for non-government sources;

- progressive elevation of organisational and business plans to become the main bidding documents on which resource allocation is based - allowing proper comparisons between alternative and complementary programs, together with the application of “best data” (from government agencies, academic centres and independent sources) and scenario-testing to improve the quality of the bidding documents and planning cycles;
- improved planning reviews, through better skills and knowledge within agencies, business process re-engineering and the like; and
- commencement of “strategic planning cycles” within outcome areas with annual reviews and adjustments.

The following chart summarises this section and the points about ‘government re-engineering’ made in section 6.1. Key features are:

- activities in the first two columns will be conducted for each ‘region’ with a format that will facilitate comparison;
- the Ministry will manage all data collection, analysis, seminar, reporting and monitoring phases, with the aid of ‘contractors’ (that is, its small staff will manage secondments, contracts and partnerships with research institutes and others, rather than develop a large bureaucracy);
- decision-making will be based on common economic, environmental and equity criteria, so that regions and contractors will be compared objectively, scenarios will be professionally developed, and targets and monitoring will be on explicit, effective and fair grounds;
- all stakeholders will be included in issue identification, scenario analysis, prioritisation through the DELPHI methodology and the like;
- government agencies and private companies will be required to compete for resources on the basis of the most cost-effective solutions to agreed issues;
- State-wide considerations will be included (for railways, freeways and the like) so that distortions will be avoided;
- all solutions will be considered, not just vested interests: construction options, community programs, alternative modes and technologies (including an emphasis on cycling and walking), low-cost solutions to bottlenecks etc, in line with their potential contributions to the achievement of objectives;
- incentives and disincentives covering specific modes, access to congested areas that have public transport alternatives, good urban design, research into practical technological advances and the like will be given priority. Regulatory impacts will be reviewed and adjusted to help achieve outcomes;
- implementation will be an integral component: communities will be confronted with resource scarcity and asked to balance their fair allocation from State funds with their capacities to contribute, in behavioural as well as financial terms; and
- the planning cycle will integrate with the reform processes proposed by the Government, the Council and the Treasury, among others.

5-YEAR PLANNING CYCLE: REGIONS, MINISTRY, CABINET, CONTRACTORS



'Contractors' include government agencies, companies and consortia, councils and ROCs, community groups etc

In pragmatic terms, any planning cycle in NSW's cities must start with a 'critical issues' planning episode as outlined in section 5.4 due to the current situation of transport planning.

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