

Submission  
No 81

## **THE TRANSPORT NEEDS OF SYDNEY'S NORTH-WEST SECTOR**

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***Submission to the General Purpose Standing Committee No. 4  
of the New South Wales Legislative Council  
re the Transport needs of Sydney's North-West Sector.***

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**1 Introduction**

This submission will draw on research conducted at the University of Wollongong. However, it does not necessarily reflect the views the University.

It is noted that the terms of reference are:

1. The requirements and plans for an integrated transport system in the North-West Sector, including road, rail and bus links,
2. The proposed funding of an integrated transport system for the North-West Sector, including the distribution of developer and State infrastructure levies,
3. The plans and funding for the North-West Metro and the NSW Government's decision not to proceed with the North-West Rail Link, and
4. Any other related matters.

This submission updates one sent to the New South Wales Government in April 2008 when it was calling for submissions regarding the then proposed metro.

In essence, whilst recognising that expansion of the Sydney Railway System is long overdue, a 38 kilometre Metro may well not be the optimal solution. Instead, whilst recognising that there may be a place for a new Sydney Metro operating within a 10 to 20 km radius of the Central Business District, consideration should be given to expanding the existing rail system to Castle Hill and then Rouse Hill. This was envisaged in 1998 in the official New South Wales Action for Transport 2010 statement.

It is of concern that in many regards, Sydney is falling far behind Australia's three other major cities that offer electric train services of Melbourne, Brisbane and Perth. Failure to address Sydney's transport problems is costing not only people who live in the Greater Sydney Metropolitan Region (including Newcastle and Wollongong), or regional New South Wales, but the nation as a whole.

In addition, it is a matter of when rather than if oil prices will resume the peak 2008 level \$US per barrel and continue to trend upwards. When this happens, people living in North West Sydney will be disadvantaged.

## 2 The larger picture

During 1955-56, the NSW Railways moved 280.5 million passengers. Fifty years later in 2005-06, RailCorp moved 275.4 million passengers. Although nearly 2 per cent less than the mid 1950s, 2005-06 was a good year for rail passenger numbers.

There was only a modest increase of about 3 per cent to 281 million passengers in 2006-07 followed by a larger increase to 2007-08. During the five years to 2006-07, Australia's urban passenger numbers in aggregate increased some 14 per cent to 563 million. However, Sydney lagged all other cities as the following data shows.

Melbourne up 34 per cent

Brisbane up 28 per cent

Perth up 15 per cent (with a big boost due in 2007-08)

Adelaide up 9 per cent (non-electrified)

Sydney up 2 per cent

As noted by the Richmond Report (Review of Future Provision of Motorways in NSW 2005) Sydney's population has close to tripled over the last 50 years. Over this time, there has been a strong growth in car use. Since the early 1990s, no fewer than 7 tollways (starting with the M4 in 1992 and including the Lane Cove Tunnel) have been built along with the M5 East Freeway.

Despite the expansion of population and roads since the mid 1950s, there has been very limited expansion of the rail system. The City Circle loop was completed in 1956, the East Hills line reached Bondi Junction in 1979, the East Hills Glenfield link was completed in 1988 and the Airport Link in 2000 and the Epping Chatswood Rail Link is due in 2008. A light rail opened in 1997 from Central station to Wentworth Park and was extended in 2000 to Lilyfield. It could be usefully be extended further.

The amenity offered by each of these completed projects is beyond measure and add value to Sydney as a place to live and work. However, Bradfield's 1932 design to extend Sydney's rail systems was never realised. This included a railway from North Sydney to the Manly area. Later, plans for a full Eastern Suburbs railway to include a stop at the University of NSW were also found to be too hard. In addition, during the past seven decades, only 13 kilometres of railways have been built in Western Sydney. Over this time, the population of Greater Western Sydney has grown five fold to about 1.8 million people, and the area is now home to one in 11 Australians.

RailCorp remains as a system where further investment is needed to keep up with Sydney's past growth. The 1998 Action for Transport 2010 proposals should be revisited, along with the 2001-02 report of Mr Ron Christie. It is clear that Sydney's rail system needs more than Epping - Chatswood and the "Clearways" programme.

As well as a rail connection to Castle Hill there is a need for improvements from Hornsby to Warnervale. The section of track is now the most congested double track in Australia. The Australian Rail Track Corporation's \$200 + million South Sydney Freight Project (which soon will be overdue) and related work will improve separation between freight and passenger trains. However, there is a need to look to the next stage. This could well include completion of the Maldon Port Kembla railway to get some freight trains out of the inner west and off the Hurstville - Sutherland track (another congested double track section, and with steep grades).

The price of a poorly performing urban rail system is high. It includes increased road vehicle usage, with increased road congestion, air pollution, and road trauma.

### **3 The need to improve and expand the rail system**

During the 1990s, Sydney was experiencing strong growth. In 1998 an official NSW Government statement *Action for Transport 2010* listed a number of rail projects for completion by 2010. These included:

Parramatta Rail Link by 2006

East Hills line Quadruplication (to Kingsgrove by 2003)

Newcastle to Sydney- High Speed Rail Link Stage 1 Hornsby - Warnervale by 2007

High speed rail link - Thirroul tunnel prior to 2010

Completion of Maldon Port Kembla railway (subject to some Federal/private funding)

Epping to Castle Hill rail by 2010 (underground - 7 km - \$350 million)

Priority freight line from Macarthur to Chullora and to Cowan.

*Action for Transport 2010* notes studies to be undertaken for a Fassifern - Hexham rail bypass, and a rail tunnel under the Little Liverpool Ranges.

Clearly, Stage 1 of a Newcastle to Sydney- High Speed Rail Link completed by 2007 is now out of the question. However, since 1998, the Western Sydney Orbital was planned, constructed and opened in December 2005 ahead of time. Yet planning on these rail projects is yet to proceed to land acquisition and environmental impact assessment.

In addition, *Action for Transport 2010* notes plans for new rail lines between 2010 and 2020 as follows:

Complete Stage 2 Hornsby to Newcastle rail upgrade

Complete the Hurstville to Strathfield line

Northern Beaches line from Chatswood to Dee Why

Southern Beaches line from Bondi Junction to Maroubra

North West line extension from Castle Hill to Rouse Hill

The need for augmentation of track capacity within Sydney would appear to include; in addition to those items listed above and the proposed South West line:

- A. Chatswood – Wynyard quadruplication; involving taking over two lanes on the Eastern side of the Sydney Harbour Bridge.
- B. A Sydney rail freight bypass;
- C. Hurstville – Mortdale (- Sutherland) triplication;
- D. Waterfall – Thirroul new routes (need identified in 1990, reaffirmed *Action for Transport 2010*) and or Completion of the Maldon Port Kembla Railway
- E. Hornsby – Gosford track straightening.

#### **4 Is Sydney's rail system the best in Australia?**

Although it may be the largest, Sydney in some ways is falling behind Australia's three other major cities that offer electric train services. These are Brisbane, Melbourne and Perth. We start with Perth.

Following closure in 1979 of the Perth to Fremantle passenger trains, there were about 48 route kilometres of urban passenger railways in Perth. By 1981, there were less than 7 million passengers per year using the rail service, which was destined for closure and replacement by buses. However, a change in Government in 1983 led to the reinstatement of the Perth - Fremantle passenger trains and a commitment to consider electrification, extension (Northern Suburbs) and modernisation.

With the completion of the Perth - Mandurah line in December 2007, Perth's urban railways extended to 172 route kilometres. In 2006-07, there were nearly 36 million passengers and over 40 million are due in 2007-08. The boost in patronage is assisted by a world class service. During weekday peak hours, trains on the 71 km Perth Mandurah line move at speeds up to 130 km/h, and there are six trains an hour each way with some taking as few as 48 minutes. This compares favourably with a 70 minute journey time by car.

The time of 48 minutes compares very favourably with that of 70 + kilometre journeys from Sydney's Central Station. These include at least 70 minutes to Woy Woy or Blaxland, at least 79 minutes to Thirroul, and, 87 minutes to Douglas Park. These NSW times also exceed that of a 70 to 73 km train peak hour journey from Brisbane or Melbourne that takes 60 minutes.

Queensland has a State Plan that includes an investment of \$6.6 billion in the Queensland Government's South East Queensland Infrastructure Plan (SEQIPRAIL). This investment in the future of rail is already delivering real outcomes, with an impressive scope of work. By way of example, a third track was completed in February 2008 between Salisbury and Kuraby on 9.5 km of track to carry express trains to and from the Gold Coast. Following completion in October 2006 of a second track between Ormeau and Coomera, work is now underway to duplicate the line from Helensvale to Robina (16.6 km due August 2008) with a 4.1km extension from Robina to Varsity Lakes due 2010. By 2011, the Gold Coast City's population expected to grow to approximately 520,000 and it planned to extend the line to Coolangatta. To the north, Caboolture - Landsborough duplication on improved alignment is under way whilst to the west, two stage a road and rail transport corridor from Darra to Springfield with rail extension is actually being built.

Victoria's Regional Fast Rail offers services similar in distance to NSW interurban trains. With the election of the Bracks Government and after exploring the option of private sector participation, it was decided to use public funding to upgrade four lines (Bendigo, Ballarat, Geelong and Gippsland) and to procure new train sets, all at a maximum cost of \$550 million. With later widening of the scope of work to improve safeworking after the NSW Waterfall high speed derailment on 31 January 2003, the cost was some \$750 million (or enough to build some 12km of metropolitan motorway). Some 500 route km of track was upgraded to modern standards with heavier rail and concrete sleepers. Amongst the many track upgrades to allow the new V/Locity cars to run up to 160 km/h, an 8 km rail deviation was constructed east of Ballarat.

In addition, the old Spencer Street Station was replaced by an impressive new Southern Cross Station. The new station presented both engineering and financial challenges.

Throughout 2006, the new trains found their way onto the upgrade track and were progressively 'speeded up'. These services were well received by the traveling

public, and by July 2007, patronage had increased by some 30 per cent. To meet the demand, more trailing cars were under construction during 2008 for the train sets.

Melbourne's urban rail services have also been improved. This has not been without some determined effort by the present Victorian government. The Kennett's Government's franchising in 1999 urban train, tram and regional train services (plus selling V/Line freight with a track lease) was one attempt to upgrade service delivery. However, the government later had to take back one group of passenger franchises.

The patronage increase of 34 per cent of Melbourne's urban rail over five years should have been reflected to a large part in Sydney. Indeed, it is quite possible that the patronage growth of 34 per cent (as opposed to 2 per cent) would have occurred in Sydney if the Action for Transport 2010 programme had been implemented as planned in 1998.

## **5 So why not a long metro for Sydney ?**

Firstly, metros in the sense of rapid loading and unloading single decked trains do work well around in many cities throughout the world, but generally over shorter distances than the one currently proposed for Sydney.

One exception is a 'state of the art' new 58km railway between Akihabara (Tokyo) and Tsukubu in Japan that was opened in August 2005. However, this line was originally planned to be up and running by the mid 1990's, and difficulties in procuring land rights, etc. delayed the start of construction until October 1994. The costs also ballooned, with the final bill coming to 940 billion yen. It is quite probable that a long distance Sydney Metro would face the same problems.

Too many questions surround the current plans for a 38 km metro at a cost of \$12.5 million. If the new Metro is to be privately funded, issues such as road pricing and rail fares as raised by the Parry Report as far back as 2002 will need to be considered. To date, the NSW Government has not acted on these issues.

In addition, the NSW record with Public Private Partnerships for road and rail projects is not a particularly good one. By way of example, the Airport railway line, after 8 years of operation, is failing to reach expectations.

It would be probably quicker (which will be a vital consideration if oil prices continue to trend upwards) and more cost effective to extend the current RailCorp system to Castle Hill and then Rouse Hill. There would also be less risk in this strategy.

As above, there may well be scope for a shorter metro as previously proposed by the NSW Government.

## **6 A national perspective**

As recognized by many submissions to the 2002 AusLink Green Paper of the Federal government, some Federal funds will be needed to improve urban rail systems in Australia. This view was reaffirmed by the Senate Standing Committee on Transport etc in its 2005 report on AusLink, and, the House of Representatives Standing Committee on Environment and Heritage in its 2005 report 'Sustainable cities' (which had 7 recommendations on transport, and reflected the need for a new approach).

To these recommendations in the report 'Sustainable cities' must be added the complementary five transport recommendations (6 to 10 inclusive) of the Final Report of the Senate Inquiry into Australia's Oil Supplies released in February 2007. These recommendations include a need for AusLink draft corridor strategies, including the Sydney Urban Corridors strategy, to take into account oil vulnerability.

Sydney is currently Australia's largest city. It needs a better transport system. At present, the 'business as usual' approach in favouring roads at the expense of rail infrastructure is driving even more dependence on cars for transport. The costs of excess automobile dependence are widespread and include not only the cost of vehicle ownership and operation but high external costs.

Some further comment follows from Track and Signal April May June 2007 p 42 and 44.

## **Transport a challenge for the new NSW government**

The new government in New South Wales election on 24 March will have a real challenge in setting new direction for a sustainable transport future for Sydney's Greater Metropolitan Region. Regional New South Wales will also need attention.

During 1955-56, the NSW Railways moved 280.5 million passengers. Fifty years later in 2005-06, RailCorp moved 275.4 million passengers. **Although nearly 2 per cent less than the mid 1950s, 2005-06 was a good year for rail passenger numbers.**

As noted by the Richmond Report (*Review of Future Provision of Motorways in NSW* 2005) Sydney's population has close to tripled over the last 50 years.



During this time, there has been a strong growth in car use. Since the early 1990s, no fewer than 7 tollways (starting with the M4 in 1992 and including the Lane Cove Tunnel) have been built along with the M5 East Freeway.

Despite the expansion of population and roads since the mid 1950s, there has been very limited expansion of the rail system. The City Circle loop was completed in 1956, the East Hills line finally reached Bondi Junction in 1979, the East Hills Glenfield link was completed in 1988 and the Airport Link in 2000 in good time the Sydney Olympic Games.

A light rail opened in 1997 from Central station to Wentworth Park and was extended in 2000 to Lilyfield. It could be usefully be extended further.

The amenity offered by each of these schemes is beyond measure and add value to Sydney as a place to live and work.

However, we are much poorer in that Bradfield's 1932 design to extend Sydney's rail systems was never realised.

This included a railway from North Sydney to the Manly area - it did not proceed.

Later plans for a full Eastern Suburbs railway to include a stop at the University of NSW were also found to be too hard.

In addition, during the past seven decades, only 13 kilometres of railways have been built in Western Sydney. During this time, the population of Greater Western Sydney has grown five fold to about 1.8 million people, and the area is now home to one in 11 Australians.

In 1998, the Carr Government made a firm commitment to invest in a 2010 Action for Transport Plan. This included a railway from Parramatta to Chatswood railway with the Epping - Chatswood section due to open in 2008. Thus, the legacy of the Carr Government is very much 7 tollways and half a new railway.

However, the Action for Transport 2010 statement also included a long overdue Hornsby Newcastle rail upgrade with Stage I by 2007 and a Waterfall Thirroul upgrade by 2010 with a major tunnel and Epping to Castle Hill by 2010.

Yet real work is yet to start on just one of these three major rail projects. Ideally, the tunnel boring machine working the Epping – Chatswood railway would be moved on to one of these rail projects. Or even to Epping - Carlingford, leaving a direct connection to Parramatta for later.

The lack of new railways, coupled with an aggressive tollway and freeway expansion programme has seen the distance driven by people in cars each year increase - far faster than population growth.

The cost of the excessive automobile dependence in Sydney alone includes over \$1 billion of health costs due to mortality and morbidity (premature death and impaired living) each year due to motor vehicle emissions.

This external cost is exceeded by congestion costs. Along with high road trauma costs, Sydney's road vehicle use is now responsible for about 12 million tonnes of greenhouse gas emissions per year.

Transport policy is not just building infrastructure or getting the private sector to build it, but it is also about pricing. Road pricing needs to cover not only road system costs but also the external costs.

The need for improved road pricing as well as better cost recovery in public transport was recognised in the Sustainable Transport by Tom Parry commissioned in 2002 by the NSW Government. Both the Carr and Iemma Government to date have failed to adequately respond to this report.

As a result road pricing is not being used as either an effective road vehicle demand management instrument or a generator of much needed transport infrastructure funds. In addition, the Federal Government continues to encourage excessive automobile dependence through generous tax concessions and road funding.

Elsewhere the point has been made that Sydney will not remain a world class city with a second class rail system. The task of its extension and moderating road vehicle use is now beyond that of the NSW Government and a much more positive attitude is required from the Federal Government towards urban public transport.