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Independent Pricing and Regulatory Tribunal
Mr Colin Reid
Director Water & Transport
IPART

Dear Mr Reid,

re **CITYRAIL FARE REVIEW**

Please accept the following as a personal professional submission, which has drawn on University of Wollongong resources.

Yours sincerely,
P.G. Laird

1 Introduction

Sydney is Australia's largest city and is experiencing strong growth. To quote from the NSW Department of Planning (1998) the Sydney Region then housed 4 million people (including 275,000 in the Central Coast) with an additional 720,000 in the Lower Hunter and Illawarra (making up a Greater Metropolitan Region of 4.7 million people). *"The Sydney Region population has been growing recently at an average of just over 1% or 42,000 each year. The Sydney Region is likely to reach 4.5 million somewhere between 2011 and 2016 while the Greater Metropolitan Region as a whole will top 5.2 million."*

Since then, Sydney is now growing at over 50,000 per year, and current projections are 5 million by 2013 (ABC Stateline, NSW, 22/2/02). A further indication of Sydney's importance is the fact that nearly one half of both regular domestic scheduled aviation services and international flight passengers involve a movement via Kingsford Smith airport.

In recent years, increases in passenger train usage have grown faster than the population. In the late 1990s, it was about 3.0 per cent per annum (from 1998-99 to 1999-00 it grew to a total of 278.7 million journeys). Some lines such as the Illawarra line feel the growth pressure more than others.

The State Rail submission notes in part *"Total patronage in 2000-01 was 302.6 million trips. After excluding the one off boost from the Olympic and Paralympic Games, total patronage was 285.7 million trips."*

Over the last 20 years, an average growth rate of 1.52% pa has been realised as indicated in Graph 2.6, with growth being particularly strong between 1985-86 to 1987-88 and 1993-94 to 2000-01. The periods of falling patronage in 1982-83 and 1991-92 correspond with periods of national economic downturn.

Based on information for the current financial year to December 2001, 2001-02 will experience below average patronage growth, with a slight reduction in the patronage forecast from that achieved during 2000-01 (excluding Olympics).

CityRail patronage is particularly sensitive to changes in white collar employment (primarily in the Sydney CBD and North Sydney) and changes in growth of residential housing near railway stations."

This raises a number questions:

- A. How accurate are these numbers ? Can projections for 2001-02 be revised using data for at least the first three quarters of 2001-02 ?
- B. Do these estimates take into account fare evasion ?
- C. How did CityRail decide the one one-off boost from the Olympic and Paralympic Games was some 17.1 million trips.
- D. If patronage is falling off, what is City Rail doing to reverse the trend at a time Sydney continues to experience strong growth?

It is noted that State Rail is only seeking a modest 2 per cent increase in fares.

2 Sydney's urban rail system

On February 25, the Sydney Morning Herald's front page started with an article ***Exposed: fast track to rail chaos***

"Sydney's rail system is perilously close to 'strangulation' because of soaring passenger numbers and recurring track and train faults, confidential reports warn.

"The findings, kept secret for more than a year, say "operational paralysis" can be avoided only by adding new lines and up to 80 stations, buying 770 carriages worth \$2.2 billion and spending at least \$20 billion in the next decade on urgent maintenance.

"The State Government has suppressed the documents, written last year by its former rail supremo Ron Christie, because of their explosive revelations about the deteriorating network, CBD congestion and safety concerns. ..."

As a former senior rail executive and NSW Roads and Traffic Authority (RTA) Chief Executive, Mr Ron Christie is well qualified to comment on Sydney's future transport needs. He was also saying what many people had been thinking for some time. However, the NSW Government is reluctant to raise fares, as shown by State Rail's application in 2001 to the NSW Independent Pricing and Regulatory Tribunal (IPART) for a nominal 3.3 per cent increase in fares. Such fare increases will not address the chronic need for upgrading the rail system to cater for growth or attract new patronage with a view to reducing high road vehicle external costs.

2.1 Extra Rolling Stock

Even in April 2002, the Millennium carriages are still awaited, and it is noted (SMH 26/03/01) that an extra 60 are to be acquired by 2004, plus a further 40 intercity carriages. The cost of the extra 100 carriages is expected to be \$170 million. As noted by the Christie report, some of the present Tulloch rolling stock goes back to the 1960s.

2.2 Greater metropolitan region rail track upgrading and expansion

Along with an Olympic Park overpass, opening of the Airport line in 2000, completion of Dapto - Kiama electrification (noted in the State Rail submission as one of five projects along with Turrella to Kingsgrove (Airport and East Hills Lines) -expansion and rebuilding of the track; Marayong to Quakers Hill (Richmond Branch of the Western Line) - additional tracks; and Signalling upgrades across the CityRail network. *should there not be a fifth projects which will improve reliability and punctuality - if so, what is it ?*), and the long awaited Millennium train, the 1998 NSW Government statement *Action for Transport 2010* lists a number of rail projects for completion by 2010. These include:

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. The 1998 document has little or nothing about the proposed Inland Route from Melbourne via Parkes to Brisbane, where a pre-feasibility study received a Federal grant of \$300,000 in mid 1998.

Clearly, it is now questionable if Stage 1 of a Newcastle to Sydney- High Speed Rail Link can be completed by 2007 - which is only five years away. Detailed planning has yet to advance to land acquisition and environmental impact assessment. At the present rate of progress, the Western Orbital will be built before construction on these rail projects are seriously started. One reason is that the May 2000 Federal Government budget gave \$10 million for planning on Sydney's Western Orbital, and in January 2001 promised \$350 million towards its construction. The same Federal Government gives little or nothing for rail and public transport within NSW. In contrast, about 20 per cent of United States Federal funding of land transport goes to mass transit.

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 Jn to Maroubra

North West line extension from Castle Hill to Rouse Hill

The need to upgrade tracks and signal systems is recognised by the NSW Government in recent statements. However, much of this track and signal work has been deferred from earlier years, with \$801 million announced by Premier Carr on 25 March 2001 (SMH 26/03/01 'Righting four years of neglect') to "...*be spent righting the wrongs of those four years*" (since 1996).

The Parramatta – Chatswood railway deferral and replacement by a 15.5km Epping – Chatswood railway at \$800 million for completion by 2008 – two years later than indicated in *Action for Transport 2010* - also raises the need for more funds to upgrade track.

The need for augmentation of track capacity within and near Sydney would appear to include; in addition to those items listed above

- 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*, detailed planning work still to start);
- E. Hornsby – Gosford track straightening.
- F. Quadruplication of the line to East Hills.

2.3 Intercity rail track upgrading

New South Wales is very much a cross roads of the nation. With the exception of freight moving between Melbourne - Adelaide and Perth, most freight starting or ending in a mainland capital city will cross NSW at one point.

There are economic imperatives to improve rail freight services between Australia's three largest cities of Melbourne, Sydney and Brisbane. As established by several Federal Government and Parliamentary inquiries (Neville, 1998 and 2001, Prime Ministers Task Force, 1999, and the Productivity Commission, 1999) significant investment in mainline interstate track is needed to remove adverse speed - weight restrictions for intermodal freight trains. As well, an inquiry conducted by the Public Works Committee of the NSW Legislative Assembly during 1998 found a case for mainline track upgrading within NSW prior to the introduction of tilt trains.

In May 2001, the Australian Rail Track Corporation (ARTC) released a detailed National Track Audit. This Track Audit includes a summary and final report with appendices by Booz.Allen & Hamilton, and a report on the Melbourne - Sydney and Sydney - Brisbane corridors by Maunsell McIntyre Pty Ltd (MMPL).

In brief, the Track Audit examined minimum freight market improvements (the S1 scenario) and significant track improvements (the S2 "stretch" target scenario). Following

economic analysis, the Track Audit recommended optimised investment of \$507 million with a combined benefit cost ratio of 3.2.

Most of the proposed optimal investment was recommended for works with NSW. This includes \$146 million for Stage 1 of a Sydney Freight Priority Project, \$73 million for Main South rail track deviations, \$63 million for crossing loops, \$30 million for a Southern Control optimisation project, and \$16 million to replace the 1880 bridge over the Murrumbidgee River near Wagga Wagga.

IT IS IN THE INTERESTS OF BOTH FREIGHT AND PASSENGER TRAIN OPERATORS THAT THERE BE IMPROVED SEPARATION OF THESE TRAINS IN THE SYDNEY AREA.

2.4 Campbelltown - Goulburn

There is a need to improve access between Sydney and the Southern Highlands for CityRail and other services. A direct Menangle to Mittagong route to run alongside the Hume Highway, was proposed by Bill Wentworth as far back as 1991. The Wentworth route will shorten point to point rail distance by nearly 20 km and cut time for all trains. The ARTC Track Audit estimated its cost at \$218 million for single track. Double track is a better option.

The Hume Highway was diverted to its present route as far back as 1980. The railway still winds around hills, instead of cutting through them. The extra distance and slow running forced by steam age alignment encourages people to look to driving cars on roads.

2.5 Short North line

Getting high speed trains between Sydney's Central Station and the Hunter region is a major challenge. Although detailed preliminary work is now underway for Hornsby-Warnervale track upgrading (with a 2001-02 \$1 million NSW budget allocation for planning), as time elapses it will be more difficult to meet the initial completion year of 2007. Failure to complete a Newcastle High Speed Line for passengers will result in increasing pressures to augment the Sydney - Newcastle freeway from 4 to 6 lanes (and, in another decade, from 6 to 8 lanes). Clearly, full Federal funding of the Sydney - Newcastle freeway with the absence of road tolls, and no Federal funding for the Sydney - Newcastle railway, has resulted over time to a major distortion in travel choice.

The nature of track upgrading between Hornsby and Hexham will have implications for improving both Sydney-Gosford-Newcastle CityTrain services and high speed intercity rail services. With increasing traffic density, it is desirable to make provision for future separation of freight and passenger trains between Hornsby and Gosford. In this case, on the Cowan bank, it would be possible to construct a passenger line with steeper ruling gradients at much less cost than a passenger line with easier gradients that is likely to require extensive tunnelling.

The construction of a Fassifern – Hexham bypass would also improve future separation of freight and passenger trains near Newcastle.

2.6 NSW Government's Freight 2010 strategy

The report *Action for Transport 2010* noted that "The NSW Government's *Freight 2010* strategy which will follow this Plan sees road and rail as complementary as well as competitive. Despite being prompted by a Legislative Council Committee report in December 2000 calling for release of this Strategy, the NSW *Freight 2010* strategy is still to be released.

3 Fares

As noted in the StateRail submission, *"In summary, CityRail has continued to charge relatively low fares and offer significant discounts that are not matched by most other operators."*

It is noted that State Rail is only seeking a modest 2 per cent increase in fares. Despite the State election in 2003, the failure to have the Millennium Trains in operation, or put into place a new timetable, this modest increase should be granted.

As per my submission of last year, City Rail should be seeking larger increases. IPART MAY CARE TO INVITE STATE RAIL TO SEEK LARGER INCREASES AND TO MAKE A MUCH BETTER CARE FOR SUCH INCREASES.

It is further submitted that the additional revenue should be used to improve the service. It is appreciated that it may be necessary to effect service improvements and increases in road pricing to allow CityRail fares to appreciably rise. However, there should also be access to Federal funds to support improved urban public transport in major cities such as Sydney, and the State Government should be prepared to contribute more as well.

4 Comment on external costs

The StateRail submission notes in part " Rail travel in Sydney provides the following external benefits:

- *Road congestion* – The Centre for International Economics (2000, The Economic Benefits and Costs of CityRail to the Community p30).estimates that CityRail operations reduce congestion costs to existing car and bus users in Sydney by at least \$188 million per annum. This cost relates to the time spent in traffic delays.
- *Road accidents* – With greater car usage there are more accidents with associated loss of life, serious and slight injuries and property damage. The Centre for International Economics estimates that if CityRail services were removed, the economic cost of accidents would increase by around \$37 million per year.
- *Air pollution* – Increased car usage would result in higher air pollution from car emissions, which in turn would impact on health, damage property and have a negative visual impact (smog). It would also damage crops and forests, and contribute to global warming. It is estimated that this impact would be nine times greater than the effect of emissions from coal generated electricity used to run CityRail trains.

· *Noise pollution* –It is estimated that without a rail system, the additional noise pollution from increased car dependence would outweigh the current noise impact of rail transport. This has been valued as delivering a net economic benefit of \$3 million pa. (Milthorpe, Hensher and Zhu (1994), “Valuing the benefits the community derives from CityRail services”)

"As rail transport produces less pollutants and fewer accidents per person journey than road travel and because it reduces congestion costs to road users, it reduces externalities that road transport imposes on the community which are not at present priced into road travel. One solution to addressing this price distortion is to price road use directly, thereby internalising the social costs of vehicle use into road use decisions. However, as noted by IPART (2001), ***“the real world experience of road pricing is of continual non implementation”***.

"Given that road use pricing does not reflect the full external cost of road use, it is appropriate that the external benefits of rail be reflected in rail pricing".

It appears that these estimates are low, and certainly the 1994 noise estimate is in need of updating. In 1999, the Federal Bureau of Transport Economics in Canberra published - (1999b) *Urban transport - looking ahead* which notes a 1995 congestion cost estimate of \$6 billion. The estimate of at least \$188 million per annum is about 3 per cent of all Sydney's congestion cost. It would appear that 3 per cent is unduly low for sustained withdrawal of all city rail services.

The estimate of the economic cost of road accidents increasing by around \$37 million per year if city rail services were withdrawn also seems low. In May 2000, the Bureau of Transport Economics published *Road crash costs in Australia*. As seen by Laird, Newman et al, 2001, *Back on Track, Rethinking transport policy in Australia and New Zealand*, UNSW Press).

"The numbers of persons killed on Australian roads, coupled with serious injuries and other injuries, plus loss of earnings, pain and suffering, and vehicle damage was estimated by the Bureau of Transport Economics (BTE - 1995b) to be costing Australia some \$6135 million in 1993. This estimate for road accidents far outweighed BTE (1995b) estimates for aviation accidents at \$75 million, rail accidents at \$69 million and maritime accidents at \$316 million. However, this very conservative estimate for the cost of road crashes was later revised by the BTE (2000a) to be \$14 980 million in 1996. The marked increase from \$6 billion reflects inclusion of an estimated cost of \$2 billion for long term care, and, a more realistic estimate of nearly \$1.5 billion of the costs of traffic delays resulting from road crashes. This is an almost daily phenomenon on freeways in any major city. "

"Even so, the new BTE estimate of the cost of road crashes of some \$15 billion is considered to be conservative by the Australian Transport Council (2000). ..."

The book *Back on Track* also discusses estimates of noise and air pollution, as does the Bus Industry Confederation (BIC) in a 2001 submission to the recent Fuel Taxation Inquiry. This BIC submission notes that *"...the main transport external costs are those of road damage, congestion, accidents and environmental damage, especially air pollution, noise and climate change (greenhouse gas emissions) and the major origin of these costs is road*

use." The submission also notes that there are external costs associated with the emissions from refining of the fuels used in transport, and, external benefits (positive externalities) from road benefit use which are best dealt with by market forces.

The BIC did not recommend a congestion charges at this stage. Instead, the BIC recommended more attention be given to congestion in road pricing, and, an annual program of \$100 million nationally over a five year period, funded by a charge of about 1c/L on fuel consumed in capital cities for measures to try and reduce road congestion.

BIC proposed that a fuel charge of 4c/L on diesel and 8c/L on petrol be imposed to recover part of the external costs of road accidents, and, that the Australian Transport Council initiate measures to increase the liability of those causing accidents for associated accident costs and to more closely align transport accident insurances with relevant risk factors. BIC further proposed that BTE extend its recent accident cost research to produce external cost estimates by vehicle type, as a precursor to specific user charges.

In regards to air pollution from motor vehicles in Australia, BIC estimated an annual cost of about \$4.3 billion. This comprises \$3.7 billion of costs imposed in capital cities, with about \$0.6 billion in other urban areas. The cost of air pollution in all urban areas due to articulated truck movements was estimated at \$342 million, and the BIC proposed that the base air pollution charge for 50 ppm sulfur diesel should be set at about 7 cents per litre, with higher charges for diesel containing a higher sulfur content, whilst rural fuel use should be rebated this charge.

For greenhouse gas emissions, after consideration, the BIC considered the value of \$A40 per tonne of carbon dioxide (CO₂) *"...to be the current optimal level for carbon taxation. It is stressed this value is only relevant for the short-term; costs will increase dramatically in future years."* The use of the value of A\$40/tCO₂ gives a relevant charge level (carbon tax) of 10.7 cents per litre of diesel.

Estimates of the cost of noise from all motor vehicles in urban areas was given in a range of \$0.7 to \$1.9 billion per annum, with the cost of articulated truck movements in a range of \$82 to \$126 million per annum. BIC considered that the average noise costs from urban road traffic are about 7c/L of fuel consumed in urban road use.

Other recent Australian work on transport externalities includes that of a National Interstate Track Audit commissioned by the Australian Rail Track Corporation (ARTC - 2001) where Booz•Allen & Hamilton (Appendix A page 24) noted '*...six external cost items of noise pollution, air pollution, greenhouse gas emissions, congestion costs, accident costs, and incremental road damage costs*' and gave a Table of road and rail freight externalities.

It is suggested that ***IPART consider recommending to State Rail that they seek updated estimates on both road and rail passenger external costs in time for the next application for fare increases.***

On 28 February 2002, the New Zealand Government announced a \$227 million Land Transport Package. The innovative package, called Moving Forward, uses funds raised from increasing petrol and diesel tax by 4.7 cents per litre. Along with generating an extra \$94 million for roads over the next 16 months, the package also includes \$66 million for alternatives to roading, such as rail and public transport.

The aim of the package is to try and replace present transport problems, by a transport system that is 'affordable, integrated, safe, responsive and sustainable.' A current National Road Fund will be replaced by a National Land Transport Fund. For more information, see <http://www.transport.govt.nz/html/15news/land-transport-package/index.shtml>

6 Australian Land Transport and Sydney

Clearly, a new approach to Australian Land Transport is needed. A ten point plan is outlined in the book Back on Track which includes improvement in competitive neutrality between road and rail for both freight and urban passengers, plus more emphasis on energy efficiency and safety with more Federal investment in transport modes that have a proven capacity to deliver cleaner air and reduction in greenhouse gases.

Many inquiries conducted during the 1990s for the Federal Government have shown the way; it is now quite clear that 'business as usual' with land transport is simply not good enough for Sydney to remain internationally competitive as a major Asia/Pacific City.

The Sydney Morning Herald editorial 'To put Sydney back on the rails' for 27 February notes, inter alia, a need for higher fares and to 'move positively in the direction of private funding'. After noting a 'dire picture' the editorial suggests that *"...the neglect that has brought the Sydney rail network to this parlous state has been grave. The urgency is to face the problems laid bare by Mr Christie's thorough and detailed reports and to deal with them. First and foremost, the cost - \$20 billion over the next decade - is not optional."*

It is hard to see such issues can be overlooked in considering rail pricing.