

Submission
No 18

INQUIRY INTO RAIL INFRASTRUCTURE PROJECT COSTING IN NSW

Organisation: TOOT Trains on our Tracks

Date received: 29/09/2011

TOOT Trains on our Tracks (Northern Rivers Trains for the Future Inc)

Submission to the NSW Legislative Council

INQUIRY INTO RAIL INFRASTRUCTURE PROJECT COSTING IN NSW

TERMS OF REFERENCE

That General Purpose Standing Committee No 3 inquire into and report on rail infrastructure project costing in New South Wales and in particular:

- (a) methodologies used by the Transport Construction Authority, NSW Treasury and other government agencies to cost rail projects
- (b) 'concept estimates' for rail project costs,
- (c) the differences between rail and road project costs methodologies,
- (d) cost estimate methodologies applied in other Australian states, by the Australian Rail Track Corporation and internationally
- (e) tendering processes, and
- (f) and any other related matter.

This submission addresses Terms of Reference (a) and (b) by examining the costs used by Rail Infrastructure Corporation (RIC) to justify ceasing services on the Casino-Murwillumbah line in 2004. We also look briefly at Terms of Reference (c) and conclude with comments that fit under (f).

**Submitted by Karin Kolbe, President,
on behalf of the committee**

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Executive Summary

The Casino to Murwillumbah line's daily XPT service was cancelled in 2004. The figures provided at the time by Rail Infrastructure Corp and the Ministry of transport stated that it was prohibitively expensive to continue.

Yet in the same year, Price WaterHouse Coopers produced a detailed assessment which was six-fold less.

Thus this line gives an excellent example of how overblown estimates can be used to justify cancelling services.

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1. Background

1.1 Who we are

Northern Rivers Trains for the Future Inc is a community-based non-partisan lobby group established in January 2003 in response to concerns over the under-utilisation of local rail infrastructure, and rumours of the impending closure of the Casino-Murwillumbah line (see map below).

Since about 2006 NRTF has campaigned under the name TOOT Trains on our tracks, and has firmly established itself as the recognised voice of the Northern Rivers community in the ongoing campaign for the restoration of rail services to the region.

We have organised numerous rallies and public meetings. We have also made submissions such as to the NSW Legislative Council's inquiry into the Closure of the line's service, Infrastructure Australia, Cross-Border Task force. These can all be found on the group's website www.toot.org.au. Numerous media releases can also be found there.

1.2 Map



The mainline, Sydney to Brisbane is shown in purple.

The Casino to Murwillumbah line is shown in red

1.3 Brief history of the line

The first sections of the line were opened in 1894, and in the early years it served as a major freight conduit for cedar harvesting and the dairy industry. Although the line carried local freight, particularly local produce for many years, it has mainly served as a passenger line.

Until 1990 a Motorail service ran during daytime hours on the line and was popular for local as well as inter-regional travel. It was especially popular with young people in Casino and Lismore, who used it to travel to the beach at Byron Bay, hence it became known as ‘the surf train’.

In 1990 the NSW Government replaced the MotorRail with the XPT. This move attracted widespread opposition throughout the Northern Rivers. The XPT’s daily service from Sydney to Murwillumbah arrived and departed from the region during the evening, making it completely unsuitable for travel between local towns. Nonetheless, this service was well patronised despite Countrylink’s poor state-wide punctuality.¹

In December 2003 the Parry Report into Sustainable Transport prepared for the Ministry of Transport recommended drastic cutbacks to regional rail services, including the axing of the service on the Casino-Murwillumbah line. The Carr Government quickly announced that the service would continue for at least a year pending a more detailed review.

In the April 2004 mini budget the daily XPT service from Casino-Murwillumbah line was replaced with buses.

1.4 Link from NSW to Qld

Since at least 1950 the idea of linking the line from Murwillumbah to Tweed Heads and/or Coolangatta and the Queensland network has been discussed and analysed, though never progressed. The NSW-QLD state border is a difficult line to cross. The political problems are much harder to resolve than merely the different gauges, which can be solved with a third rail or variable width bogies.

1.5 Current situation

The campaign for rail services on this line is very much alive and has both community and government support: the 2011 NSW state budget allocated \$2mil for a study of this line and some form of regional transport planning.²

¹ Gray, I, *A Future for regional passenger trains in New South Wales*, Charles Sturt University, October 2004. www.csu.edu.au/research/ilws/research/publications/csr/docs/Trains.pdf

² 2011 NSW Budget Estimates, Page 9-4: “\$2million to conduct a study of the north coast rail services”. From media statements (Don Page on ABC Radio 7 Sept 2011) we understand this money will also include an integrated regional transport plan.

1.6 Relevance to Terms of Reference for Current Inquiry

We believe that our line presents an excellent example of how costs have been manipulated to justify politically motivated results. A number of reports have been written about this line. Two reports in particular provide a lot of useful data to compare costs. These are:

- *Closure of the Casino to Murwillumbah rail Service*, NSW Legislative Council, General Purpose Standing Committee No. 4, November 2004. [LCInq2004]
- *Feasibility study for passenger and/or commuter services on the Murwillumbah to Casino branch line.*, PriceWaterhouse Coopers, September 2004. [PWC]³

³ Auspiced through Tweed Shire Council, the study was funded through the federal government's Sustaining Regions Program. Rail expertise was provided by Peter Hughes of Himark Consulting. The report is available from www.toot.org.au/dmdocuments/FeasStudyDr12.pdf.

2. 2004 Mini Budget and Legislative Council Inquiry

In the 2004 NSW April mini budget, the Treasurer announced that daily XPT service on the Casino-Murwillumbah line would cease from May of the same year and be replaced by buses.

The publicly stated reason was to save \$188 mil over 20 years. Due to public outcry, the NSW Legislative Council set up an Inquiry and reported in November 2004 on costs and other matters associated with the closure.⁴

The Inquiry noted that the average spending on the line 1997/98 to 2003/04 had been \$2.535mil pa.⁵

Yet in a briefing note submitted to the Minister for Transport on 5 April 2004, the estimated savings from cutting the service were well above this figure. The briefing:

“cited the cost of maintaining the Casino to Murwillumbah line over the next 5 years as \$15.6 million per annum, and proposed the introduction of two new coach services to replace the rail service, costing \$1.4 million per annum. Accordingly, the overall saving to RailCorp of the closure of the rail service was estimated at \$14.2 million per annum over the next five years.”⁶

This much higher figure was based on an estimate that stated that a massive capital expenditure was required to repair bridges. The details of this were provided by Mr Vince Graham, CEO of RailCorp, and are summarised in Table 1 below.⁷

| Year | Cost per annum, \$mil | Total, \$mil |
|---------|--|--------------|
| 1 - 5 | 13.2 | 66 |
| 6 - 10 | 12.4 | 62 |
| 11 - 15 | 7.0 | 35 |
| 16 - 20 | 4.8 | 24 |
| | Correction to make it equal the stated total | 1 |
| | | 188 |

Table 1 Estimated Costs, provided by Mr Vince Graham, CEO of RailCorp.

Chapter 4 of the Inquiry is devoted to looking at how these costs were arrived at, and options not taken.

Some points we'd like to make:

- RailCorp's figures were based on **general estimates** rather than looking at the particular requirements of the line. At the heart of this rail line are many wooden bridges, and the estimate for replacing them

4 LCInq2004, Terms of reference

5 LCInq2004, paragraph 6.4 and Table 6.1

6 LCInq2004, paragraph 3.22

7 LCInq2004, paragraph 4.7

accounted for \$92 million of the \$188 million. This was based on Railcorp's estimate for repair at \$20,000 per metre multiplied by 4000m of track, with a bit added on.⁸

- RailCorp didn't seem to investigate the possibility of using **lower cost options**, such as "low-level causeways or pre-stressed concrete box culverts similar to those use for road construction", as was mentioned by some respondents.⁹

- Even if there are no services on the line, there are still costs. One major costs is the provision of **road bridges** over the rail line - this accounted for \$4.5 of the \$188 million and is required regardless of services.¹⁰ Further funds are required for vegetation control and geotechnical repairs. We'll return to this issue shortly

- With regard to wooden bridges, the Northern Rivers also has many wooden bridges for car traffic. It would be interesting to analyse the costs that our councils incur for their repair and compare it with the RailCorp standards.

- There is no evidence that RailCorp ever considered how they might improve patronage on the line, through improved punctuality¹¹, better catering, easier ticketing options, better timetable or more frequent services.

- There is no evidence that RailCorp ever considered how lighter rolling stock could have been used on the line.¹²

- Realistic timeframe to realise investment: if RailCorp had been given \$188 million to spend on the line, then it would have been a new line, and worth a considerable amount to the community. It would have also required tiny amounts of maintenance over the next 30+ years. In other words, instead of stating it was \$188mil over 20 years, an average of \$9.4mil pa, a fairer description would have been, say, \$200mil over 50 years, giving an average of \$4mil pa.

- RailCorp did not consider any cost shifting with the use of buses on the roads. from the LCInq2004: "Tweed Shire Council estimates that the direct increase in bus traffic will increase the expenditure requirements for maintenance of roads in the Tweed Shire by approximately \$115,000 per annum, and by \$375,000 for the region as a whole."¹³ The PriceWaterHouse Coopers report details further environmental and accident cost savings of between \$15mil and \$27mil over 20 years.¹⁴

- In 2005 the government spent \$1.1 mil on a rail-bus interchange at Casino railway station.¹⁵

3. Price Waterhouse Coopers report on a commuter rail service

8 LCInq2004, Para 4.11

9 LCInq2004, Paragraph 4.17. See paragraphs 4.15 - 4.20 for further discussion

10 LCInq2004, Paragraph 4.4, fifth dot-point

11 See footnote 1

12 In 2006 Rail Infrastructure Corporation (RIC) commissioned GHD to assess the line. The report was never made public though a very short document (9 pages plus appendices) was given to TOOT. By 2006 the call for lighter frequent rail services was loud and strong in the community, yet the government never assessed this idea and clung to the single daily service to Sydney with the heavy XPT.

¹³ LCInq2004 paragraph 7.31

¹⁴ PWC, section 9.4.

¹⁵ Northern Star, 16 April 2005

In September 2004, PriceWaterhouse Coopers published a report titled *Feasibility study for passenger and/or commuter services on the Murwillumbah to Casino branch line*.¹⁶ This report looked at creating a commuter rail service on the line and a number of timetable options, with different number of services are considered.

Unlike RailCorp's general assessment, this report's costings were based on analysing the line in detail. Appendix E details the condition of 154 rail underbridges, that is, the bridges that carry rolling stock as opposed to road traffic crossing the line.

The PWC report found that \$28.8million would be required over the first 7 years, with \$2.5 mil pa for the next 13 years.¹⁷

4. Comparison of Below Rail Costs

For the purposes of this current Inquiry its useful to compare the various costs that can be drawn from the reports analysed in the two preceding sections.

We can also add a few of the other costs that have been made public.

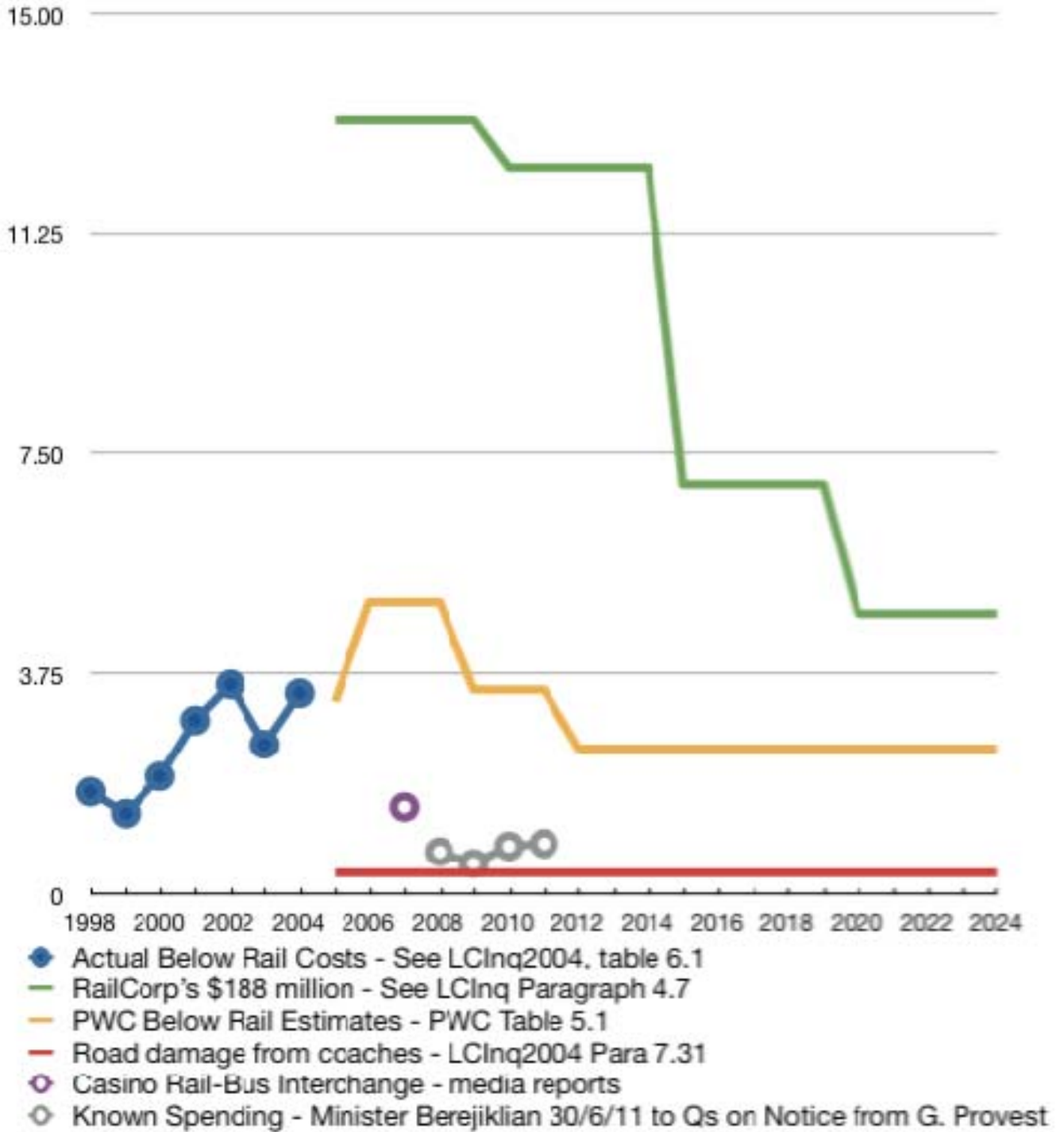
On 30 June 2011, Minister Berejiklian provided figures in an answer to a Question on Notice from Geoff Provest, MP on the amount spent on the line 2008-2011. These figures were provided without notes so its not clear what these figures cover. For example, the stations at Lismore, Byron and Murwillumbah continue to offer booking services. We do not know if these staff costs are included. These stations are maintained - again, are these costs included, or are they additional ?

The following graph compares the various actual and estimated below rail costs. (The raw figures for this graph are in Appendix A.)

¹⁶ Auspiced through Tweed Shire Council, the study was funded through the federal government's Sustaining Regions Program. Rail expertise was provided by Peter Hughes of Himark Consulting. The report is available from www.toot.org.au/dmdocuments/FeasStudyDr12.pdf. Referred to in this submission as "PWC"

¹⁷ PWC, Table 5.1, Page 53

Comparison of Actual and Estimated Below Rail Costs



From this graph it's clear that RailCorp's 2004 proposal was for a massive spend over 20 years, quite out of kilter with the previous years.

There is a six-fold discrepancy between the PWC and RailCorp estimates.

When the road damage from the coaches (red line) is added to the known actuals post 2007, it is clear that the savings have not been huge. Other externalities, such as accidents and air pollution have not been considered here.

5. Above Rail Costs

The preceding sections have discussed the below rail (infrastructure) costs. This section discusses the running costs for a service.

Railcorp said it cost \$2.4mil pa prior to 2004 to provide the XPT service Casino-Murwillumbah¹⁸. This figure includes “train running costs, sales and reservation costs and other operating costs.”¹⁹

We think it is reasonable to assume that some of these costs continue even if the rail service has been replaced by a coach. In particular, the sales and reservation is still done by Countrylink. Three of the stations (Lismore, Byron Bay and Murwillumbah) are still open Monday -Friday for bookings. Countrylink still advertises the service even though it is provided by bus instead of rail. Thus we think it is reasonable to assume

The bus service contract is Commercial in Confidence, but the figure given in the LCInq is \$1.4 mil per annum²⁰

We understand that taxis are used when the buses fail to meet the trains.

The PriceWaterhouse Coopers cite above rail costs of \$4.7mil pa²¹ to provide commuter rail services

6. Comments on 'concept estimates for rail project costs'

It can be noted that concept estimates for rail projects apply to both estimates for expenditure and revenue and that it is the relationship between the two determines whether a concept advances to development. Assumptions underpinning estimates will play a critical role in the outcome.

It is argued that network development, above and below rail costs should be able to be estimated with a reasonable degree of accuracy despite the variation discussed above.

We believe that a broad range of 'externalities' should be considered in concept cost-benefit analysis.

Savings on road network expenditure, reduced costs of road accidents and pollution (including carbon reduction) should clearly be included when quantifying benefits. However we would suggest that depending on the location of proposed rail projects, there are other quantifiable benefits that could be considered including:

- Reduced administrative and duplication costs where isolated populations are linked by accessible transport to health, education and other services.
- Benefits to healthcare outcomes from reduced car dependence.
- Improved mental health, aged care and similar as a result of reduced social isolation.

We believe that cost benefit analysis of rail projects should be considered in terms of how they integrate with transport networks with a key measure being the extent to which the transport options for commuters are maximised. That is where a rail link increases bus patronage and options for cyclists,

¹⁸ LCInq2004, paragraph 4.2

¹⁹ Mr Vince Graham, CEO of RailCorp. LCInq2004, paragraph 4.1, first dot point

²⁰ LCInq2004, paragraph 4.9

²¹ PWC, table 6.5

walkers and those without transport across local and regional networks.

Revenue is less certain when making estimates about patronage, however we would suggest that the main limitation is that the assumptions that often underpin a concept and therefore its potential revenues limit the scope of revenue sources considered. Where these assumptions are included at the outset of the concept stage they tend to exclude other revenue sources being considered at later stages. A broad example being where a concept is for public transport and in a regional area this usually means tackling transport issues at the margin so as to provide services to those without access to private transport. In taking this approach from the outset, concepts carry the burden of limited revenue generation and ultimate failure.

A specific example would be the Casino-Murwillumbah line where the proposal for commuter rail services has been stubbornly assessed through the limited prism of public transport despite the appearance of and strong advocacy for development of a substantial tourism market. In addition, major external benefits apply to this example in that a rail line lies idle with stations in the middle of Byron Bay and other towns within Byron Shire while a rate base of 14,500 people support a local transport network straining under 1.5 million annual tourists.

Similar benefits relating to tourism and dispersal of visitors across the region can be identified for the other local government areas linked by the line.

7. Questions for further analysis

Here are some questions that we think warrant further analysis.

1. Repair of wooden bridges - are different standards and costs applied to road and rail ?
2. Need for better approaches to design and costing of repairs
3. Real costs of the buses - contracts are commercial in confidence
4. Are taxis used when buses miss trains ?
5. Real costs of maintenance for line without services
6. Comparison of rail and road building in the area
 - Spending on the Pac Highway has been \$1+ billion in last 10 years
 - Spending by the councils
7. Finally, understanding the true cost of NOT having rail
 - Social benefits of a connected community
 - Access to jobs
 - Passenger journeys lost across the entire rail network due to unwillingness or inability to use the buses for the start/end of the journey
 - Access to medical services
 - And, the need for less road building and maintenance. In our case the Lismore-Bangalow road provides an interesting example as it runs parallel with the unused rail, and is being funded bit by bit for maintenance and upgrade

Appendix A - Raw figures of Below Rail Costs

These are the raw figures for the graph on page 8.

| FY ending June | Actual Below Rail Costs | RailCorp's \$188 million | PWC Report | Road damage from coaches | Known Spending | Casino Rail-Bus Inter-change |
|----------------|-------------------------|--------------------------|------------|--------------------------|----------------|------------------------------|
| 1998 | 1.76 | | | | | |
| 1999 | 1.39 | | | | | |
| 2000 | 2.02 | | | | | |
| 2001 | 2.98 | | | | | |
| 2002 | 3.59 | | | | | |
| 2003 | 2.57 | | | | | |
| 2004 | 3.44 | | | | | |
| 2005 | | 13.2 | 3.3 | 0.375 | | |
| 2006 | | 13.2 | 5 | 0.375 | | |
| 2007 | | 13.2 | 5 | 0.375 | | 1.1 |
| 2008 | | 13.2 | 5 | 0.375 | 0.739 | |
| 2009 | | 13.2 | 3.5 | 0.375 | 0.537 | |
| 2010 | | 12.4 | 3.5 | 0.375 | 0.836 | |
| 2011 | | 12.4 | 3.5 | 0.375 | 0.88 | |
| 2012 | | 12.4 | 2.5 | 0.375 | | |
| 2013 | | 12.4 | 2.5 | 0.375 | | |
| 2014 | | 12.4 | 2.5 | 0.375 | | |
| 2015 | | 7 | 2.5 | 0.375 | | |
| 2016 | | 7 | 2.5 | 0.375 | | |
| 2017 | | 7 | 2.5 | 0.375 | | |
| 2018 | | 7 | 2.5 | 0.375 | | |
| 2019 | | 7 | 2.5 | 0.375 | | |
| 2020 | | 4.8 | 2.5 | 0.375 | | |
| 2021 | | 4.8 | 2.5 | 0.375 | | |
| 2022 | | 4.8 | 2.5 | 0.375 | | |
| 2023 | | 4.8 | 2.5 | 0.375 | | |
| 2024 | | 4.8 | 2.5 | 0.375 | | |