Submission No 22

INQUIRY INTO RAIL INFRASTRUCTURE PROJECT COSTING IN NSW

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The Hon. Natasha Maclaren-Jones Chair, Legislative Council General Purpose Standing Committee No. 3 State Parliament NSW

Dear Madam,

Rail Infrastructure Project Cost Inquiry

Please accept my submission to the committee as follows:

I write to you with concern about the capacity of the inquiry to adequately report on the reasons for the high cost of rail projects in NSW, and thereby make effective recommendations. My concern is based on a brief review, by myself, of the submissions and transcripts on the inquiry website, and, in particular, the submissions of key parties in the NSW rail project industry.

I write with over 40 years experience in the rail industry both within and outside NSW. My company has been providing consulting services to the industry for over 20 years. I have had significant involvement with a number of major rail projects including the airport links of Sydney and Brisbane, the Epping Chatswood Rail Line, the Southern Sydney Freight Line, the Victorian Regional Fast Rail Project and (to a smaller extent) Sydney Clearways Projects. This has included work with both public and private sector clients. In 2005 I project managed the successful implementation of the major timetable change for RailCorp and my expertise and experience generally covers the engineering and operational interfaces between delivering agencies, rail client and contractors.

The last major heavy rail project delivered in Sydney with significant achievement in complex project management, program control, technical proficiency, and efficiency in delivery was the Sydney Airport Rail Line Project. Major projects in Sydney since that time have suffered significant periods or instances of project dysfunction impacting on project costs. (Please note that my comment on the Sydney Airport Line only refers to the project delivery and not to the overall commercial framework of the line.)

While there are many reasons for the high cost of rail projects in NSW, there are three particular issues which stand out as requiring more focus by the inquiry:

1. The high overhead costs associated with the planning, design and management of these projects, including the RailCorp interface.

My understanding is that ratio of total project costs to direct project costs may be greater than three to one (3.1). *i.e* that the overhead costs and contractor profits on the projects exceeds 200% of the direct cost of labour, plant and materials. I am not in a position to support this "understanding" with evidence, partly due to Item 2 below. However, I note that the submissions by key parties do not adequately address this critical matter or provide hard data comparison between projects. In examining this issue, the committee needs to be careful that various costs including supervision, RailCorp interface and possession costs are not categorised as direct costs and that the overhead costs of the delivery agency and RailCorp are fully accounted.

2. Public accountability and transparency of project cost.

The situation of high costs in delivery of rail projects may not have developed over recent years if there had been continuous public disclosure and breakdowns of expenditure in documents such as annual reports. I note that the 2010 Annual Report of TIDC (now TCA) provides no such breakdown of project costs, forecast costs and reasons for variations, even though the whole purpose of the organisation is to deliver a small number of significant projects. The report appears to have sacrificed real accountability for the trend towards public sector communications and spin.

3. Project leadership, management and governance structures, including the interface with RailCorp

This is a difficult subject to address. In my experience it is a critical issue which must be addressed to achieve adequate cost control of major rail projects. It is also a distinguishing feature between the Sydney Airport Rail Line Project and more recent projects. The issue refers to both public and private sector organisations. I note that leadership is nominated as a key issue in the submission from Peter Martinovich. Aspects of the management issue, including the use of design consultants are referenced in other submissions. The importance of leadership in managing projects, in a complex environment, is that leadership is critical for proper and deep resolution of stakeholder issues to avoid expensive project scope variations later in the projects. It is also required align the sectional interests of the project to avoid excessive overhead costs in meetings, consultant reports and dispute resolution. Leadership is also critical for the strategic planning, decision making and assurance activities for major weekend track possessions and closedowns, which have expensive consequences when the programmed works are not carried out to plan.

The submissions of the key parties concentrate on providing theoretical background on estimating methodology. While this background needs to be explained, cost estimating is only one component in the overall requirements for project cost efficiency and control. P_{50} or P_{90} estimates mean nothing if the estimates are exceeded 100% of the time due to poor strategic planning or management of project delivery after the estimate is completed. Padding of estimates to overcome these issues is simply poor project management and distorts project investment decisions.

In proceeding with the inquiry the committee needs to get to the bottom of the reasons for apparent high overhead costs on NSW Rail Projects and address the issues of accountability, transparency, leadership and management.

In finishing I will make two notes:

- The rail project industry has processes for reviewing project performance, usually referenced as "lessons learned" exercises. Many of the issues associated with the Epping Chatswood Rail Line and Clearways projects may now have been addressed. However, such lessons are rarely transferred or appreciated when new organisations are set up or major new contractors are brought into the Sydney rail construction environment.
- 2. Between 1916 and 1932, in just 16 years, the rail project construction industry achieved the following in Sydney:
 - a. Substantial reconstruction and enhancement of the core rail public transport infrastructure between Homebush and Waverton, including a harbour bridge, city tunnels and

underground stations, additional tracks between Homebush and Central, and complex junctions such as the Central Flyovers.

- b. Electrification and resignalling of the then metropolitan system, extending to Hornsby, Parramatta, Liverpool and Sutherland.
- c. Provision of a new and converted electric rail fleet to service the metropolitan system.
- d. Provision of associated infrastructure including workshops, power supplies and stabling facilities.

All of the above was achieved by a smaller and poorer population and from a very low base of technical resources. It was also achieved without modern technologies, construction plant, modern communications or IT systems and while recovering from a major war. Much of the work was carried out under brownfield conditions, with continuity of the operating public transport system, and possibly with safety records that were considered benchmark for the time.

I can be contacted on a lif you wish to dis

if you wish to discuss the contents of this letter

Yours Sincerely,

John Terrey Director Terrey Civil and Rail Pty Ltd