**Productivity Commission inquiry into Public Infrastructure**

Submission by Mary Thompson, Managing Director, McLeod Rail

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**Background**

This submission comments on factors contributing to the costs of constructing public infrastructure. It is not concerned with funding and financing matters which are included in the scope as one of the two broad themes being examined.

The author is principal of a rail maintenance and construction contractor which has operated in the eastern states since the early 1990s. This rail contractor has direct experience working in a subcontract relationship for “Tier 1” contractors on state and federally funded projects (Leighton/Lend Lease and associated construction subsidiaries), as well as for “Tier 2” and “Tier 3” contractors. This contractor also completes works contracted direct by rail operators (Metro Trains Melbourne, the Victorian passenger operator, Yarra Trams and the federally owned Australian Rail Track Corporation). The contractor also performs rail maintenance for a number of logistics companies who operate private rail sidings for general freight, grain, quarry products, cement and paper. The author also has interests in mining and mining services. The author has worked in construction and construction materials for the past ten years, and in financial services for the previous sixteen years.

**Executive Summary**

The main conclusions are:

1. The Productivity Commission could obtain more detailed information on listed contractor margins through engagement with the construction materials analysts employed by the major stockbroking houses.
2. The Productivity Commission may wish to look into whether there is a relationship between reduced appetite for equity in major infrastructure by contractors, following a period of losses, and higher project margins, again using analysts as a primary sources of data.
3. Compliance costs are excessive across all types of engineering construction including civil, rail and mining projects – but not necessarily as a result of the actions of government.
4. Significant peaks and troughs in the project pipeline inflate project costs.
5. Industrial relations policies and laws inflate project costs.
6. Adversarial contracting styles common amongst “Tier 1” contractors inflate project costs.
7. **Potential Source of ASX Listed Contractor Margin Information - Stockbroking Research**

We note that the Commission seeks information on profitability along the supply chain and its importance for the total cost of projects. All of the major stock broking houses that operate in Australia and some “boutique” investment groups conduct research into ASX listed contractors. The main listed contractors include Leighton Holdings (ASX code: LEI), Lend Lease (LLC), Downer EDI (DOW) and Watpac (WTP). Brokers who would cover the sector include:

1. UBS
2. Macquarie
3. CommSec
4. Evans and Partners

While precise divisional and project margins may not always be disclosed in company accounts, stockbroking firm’s analyst research often succeeds in extrapolating additional information and longer term trends. We believe that a consultation process with the relevant analysts would yield relevant information that could assist the Commission.

1. **Relationship between reduced equity investment by contractors and higher margins**

The Commission should also note that Tier 1 contractors bidding for major projects via PPP structures also have in the past commonly subscribed to the relevant equity raising to both increase the prospects of their bid, and generate shareholder value through an expected uplift in the value of the asset’s equity. In reality, there are many cases the value of the equity being significantly diminished or in some cases been written off entirely. The appetite for equity investment amongst contractors has presumably reduced somewhat since these well publicised asset writedowns.

It is now generally accepted in the investment community that unless a “patronage” model (with variable cashflows, say from road tolls) is replaced with an “availability” model (a fixed income stream, underwritten by government), then project equity is unlikely to be easily raised. The Commission may also wish to consult investment analysts about the relationship between current contracting margins and major equity writedowns over the past ten or so years, and whether past losses together with diminishing contractor appetite for project equity may contribute to the current high cost construction environment generally.

1. **Compliance costs**

The author has drafted an unpublished paper on compliance entitled “*The lunatics are taking over the compliance”* which is appended as Attachment A. Compliance costs are now excessive across all types of engineering construction including civil, rail and mining projects. These inflated costs are ultimately passed onto the infrastructure owner, either the mine operator, state or federal government or shareholders, all of whom ultimately pay an inflated cost for the asset.

Contractors generally blame “red tape, green tape and the government” for compliance costs. However in many cases the approach to compliance appears significantly at odds with what might be considered “reasonable” under the prevailing safety or environmental legislation. A range of examples of “excessive” compliance are provided in Attachment A.

Ultimately, more compliance means more headcount. More headcount at bid stage means more expected margin. Shortlisted bidders for major projects are all generally on a level playing field in terms of compliance, since they have no incentive to reduce compliance costs, and all bidders’ employees emanate from the same gene pool and “price in” an extraordinarily large amount of compliance activity.

Perhaps foreign contractors used to operating in lower cost / lower regulatory regimes, or Tier 2 and 3 contractors may be able to take a more pragmatic approach to compliance costs on major projects than the current Tier 1 contracting duopoly.

1. **Significant peaks and troughs in project pipeline inflate project costs**

Peaks and troughs in the infrastructure project pipeline impact:

* the size and cost of the pool of skilled labour; and
* the cost of the pool of specialist plant
1. Cost of labour

We have observed that in periods of low maintenance and construction activity, underemployed skilled rail personnel seek work in different industries and/or geographic locations, and additional training costs and lower output –and poorer safety outcomes – will generally apply to replacement labour with lower skill, training and experience.

Our organisation operates predominantly in the rail maintenance space. We have observed that increasingly, rail track maintenance is performed in “major shuts” rather than the more traditional “APLT and BPFT” (after the passage of the last train and before the passage of the first train). The rail construction market is a national market, with most contractors operating across state lines. Increasingly these “major maintenance shuts” coincide with work programs by at least one major rail project, for example Regional Rail Link in Victoria. At times in NSW and Victoria, there are numerous 24/7 shuts all targeting the same pool of labour and plant including:

Hunter Valley coal chain, NSW

Regional Rail Link, Victoria

North South corridor (ARTC, Sydney-Melbourne freight)

Regional Victoria (V/Line)

Melbourne Metropolitan Rail (Metro Trains Melbourne)

Sydney metropolitan rail works

Some hundreds if not thousands of people may be required simultaneously, and a lot of specialist rail plant as well. During the period between Christmas 2013 and early January 2014, we expect to deploy around 50 people on rail work, including many casual employees. Through January we would expect the majority of the casual employees to be unemployed or underemployed. Likewise, much of the Victorian based specialist rail equipment is likely to be underutilised by the end of January 2014.

There are admittedly benefits in coordinating all the above described Victorian rail maintenance activities, as with much of the rail network “out of action”, in theory more can be achieved. I am unable to propose a ready solution, however perhaps a better model for “major shut” coordination could be trialled in NSW and Victorian rail maintenance and construction activities over, say three years, and if successful in terms of reducing labour and plant shortages, and improving costs, this could be rolled out to the broader construction market. The same “pilot” approach for the management of a national, long term major infrastructure project pipeline, which has been talked about for years by contractors and governments alike, would also be extremely useful in smoothing the supply and demand size peaks and troughs which apply to major project delivery currently.

1. Cost of capital equipment

Capital equipment for infrastructure construction and maintenance is generally very costly. In the case of rail, large quantities of imported, highly specialised and expensive specialist mobile rail equipment including track laying equipment range from 0% utilisation for lengthy periods, to 100% utilisation for very short periods.

An associated cost inflator for capital equipment concerns compliance, with constant demands made of subcontractors to modify equipment based on the latest safety incident or safety trend. Following a number of collisions between excavators and high voltage rail power lines in Melbourne recently, modifications were demanded of operators which would cost as much to implement as a typical excavator was actually worth. When smaller contractors decide not to reengineer their plant, realising they cannot ever hope to get a return on the additional capital the pool of plant diminishes and the costs escalates. Refer to Attachment A for some examples of costly vehicle modifications demanded by mining companies of contractors. The rail industry also suffers from completely different requirements of different rail operators and Tier 1 contractors in terms of plant compliance, meaning that a major project will have a plant approval process which differs from that of say, ARTC, which in turn differs from MTM and V/Line. Rail operators and Tier 1s each tend to think their network conditions are “unique” and therefore deserving of a completely different compliance approach. As an industry organisation representative said to me recently “Everyone is in favour of standardisation – as long as we accept THEIR model”. One way government could assist is to ramp up the pressure on rail operators and rail contractors, and probably the broader civil contracting market also, to standardise systems of compliance, starting with people and plant. We are heading in the right direction, with the assistance of a strong rail industry association and rail operator forums, but the pace of change is at times glacial. Achieving common compliance approaches across the major contractors definitely has the potential to reduce costs to at least some degree when building new public infrastructure.

1. **Industrial relations policies, law and lack of enforcement is contributing to costs**

Greenfields enterprise agreements negotiated by Tier 1 contractors lead to excessive remuneration costs, reduce productivity and discriminate against sub contractors unless they either “uplift” pay and allowances to the project, or execute an enterprise agreement that permanently inflates the contractor’s labour costs, reduce their margins or both. Subcontractors may provide value-for-money, safety and quality but will be internally assessed as “high” on the IR risk scale if they don’t have an EBA, or elect to maintain their current EBA conditions, rather than pay staff according to “project conditions”.

Enormous amounts of human capital and yellow equipment are assigned to major projects like Regional Rail Link which is under construction in Victoria at a cost of $4.5 billion, utilising state and federal funding. Yet on one of the several project EBAs, there are restrictions around working past 1pm on Saturdays, or working on Sundays, with bizarre conditions such as rates of pay reverting to double time if a lunch break is not taken by 1pm.

On one major government project a subcontractor requested to recommence their activities on a particular date only to be informed that “the union” had stated that none of their works are to recommence one week later than the requested date. One wonders who was really controlling that project, evidently not the Tier 1 contractor who won the job. Anyone wanting to understand why labour productivity has reduced and project costs have inflated significantly should read some recent project EBAs, while also speaking to those at the coal face of greenfields projects.

A couple of years ago I heard a senior employee of a major contractor brag about the greenfields project agreement they executed but when I read it I could not see why any employer would think it was a proud day to get in place such an expensive and inflexible employment instrument. Contractors blame unions and unions blame contractors, but it’s possible they are similarly culpable in producing high cost / low productivity environments.

**In seeking industrial harmony “at any cost”, along with their obsession with “compliance”, Tier 1 contractors are failing to obtain “value for money”, with attendant impacts on project costs.**

The great irony is we answer questionnaires from Tier 1 contractors all the time about our compliance with the relevant codes and IR law. I would very much like to ask them the same question but I suspect I know the answer. More vigorous checking on Tier 1 contractor code compliance, enforcement activity and possibly greater investigatory powers by the relevant authorities might be a step in the right direction, together with a transparent and objective (third party?) approach to determining state and federal construction code compliance of all contractors.

1. **Adversarial contracting relationships**

The Commissions’ background paper refers to major project proponents underbidding, and poor contractual structures. In my observation, this is commonplace, but the adversarial approach of major Australian contractors is two-fold:

* Underbid the work, have opaque terms and conditions – then hit the client with as many variations as possible – one Tier 1 contractor allegedly has a whole team permanently assigned to manufacturing contractual disputes; and
* “Screw the subbies” – constantly engage the subcontractors in disputes so as to obtain additional services, or reduce the cost of the invoiced works, or both.

I am not sure the alliance approach has actually contributed much to improving this situation. As a result of the adversarial model, we do not really enjoy working for major Tier 1 contractors. We would far prefer to work for Tier 2 and smaller contractors, and for rail operators who value our service and the relationship they have with us. It is an unfortunate business necessity that we are constantly asked for vast amounts of ridiculous information, for the best equipment and most highly qualified people, then we are asked for the cheapest price, every invoice we issue is disputed and we are paid very, very late. Or we don’t “get a start” for vague reasons. Once we were short paid 10% by a Tier 1 – Tier 2 contractor. Why? Because they underbid the job, and decided to short pay every contractor to protect their margin – and they actually told us this. We were told we could either fight them, and probably lose, or “cop it”. We did the latter, but we are unlikely to work for that contractor again. We have also re-priced (upwards) our works when we expect we are entering an adversarial contacting relationship with uncertain cash flows. This entirely rational type of market response by subcontractors in turn flows through to inflating infrastructure project costs.

We have reviewed the earlier Salini submission to this enquiry, which was widely reported in the press. Like Salini, we would also welcome a new apporach to EOI shortlists that include Tier 2 and 3 contractors, as well as international players, and we look forward to working for a different pool of “major” contractors in the future, hopefully in a safe, profitable, productive and non adversarial environment.

In saying so, we would strongly encourage all new market participants to adopt a more practical approach to compliance, IR and stakeholder relationships than their current Tier 1 competitors have to date.

Mary Thompson

23.12.2013

**Attachment A**

**The lunatics have taken over the compliance**

**Mary Thompson**

Let me start by stating the obvious. Just in case you hadn’t heard, Australia is a high cost economy. High-cost manufacturing, high-cost mining. You name it, we can make it or dig it up, but it will probably be more expensive than doing it or digging it anywhere else in the world.

Australians live in the some of the world’s most expensive cities, in some of the highest cost housing and pay ourselves more than the rest of the world does to perform the same tasks.

We read about it every day. We also claim to have the safest and most environmentally responsible approach to our activities. Injury and fatality rates are in long-term decline, whether you are a car driver in a major city, an employee in the vehicle industry or working in a mine. That’s obviously a good thing. But if you are trying to make stuff in this country, or dig stuff up and ship it overseas, there is a large cost associated with our impressive “SHE” (that’s Safety, Health and Environment) credentials.

And it is a cost that is ever-increasing, and not well understood or measured.

I am old enough to remember when you could dig up coal or iron ore in this country and sell it for $10 or $20 a tonne - and I am sure those miners turned a profit. In May of this year an analyst estimated costs in BHP Billiton's Queensland coal division rose to $US183 a tonne in the first half of the financial year, up from $US85 a tonne in 2009. So, more than double. Double. Over four years. You don’t need to be a mining analyst to understand that this is a phenomenal and unsustainable increase in unit costs.

And I suggest there is probably now a significant divergence between the annual expenditure increases on specific “SHE initiatives”, versus the actual improvement in “SHE outcomes”.

Could injury and fatality rates, and “environmental incident” rates have halved in this particular coal business over that time? Unlikely. But let’s assume they had, would shareholders agree that this was a reasonable justification for the cost blowout? *“But can you put a price on safety?!”* is a rhetorical question often posed to justify whatever the latest trend requires in terms of safety measures and expenditure and additional headcount. The politically correct answer to this question seems to be “*No* price is too high to pay for safety”.

And this is what seems to be at the heart of the problem.

Middle management in miners or contractors or manufacturers or virtually any Australian company know they can get just about anything approved if they argue along the lines of “but this is a safety matter”. The next level of management is afraid to say “No” because if someone is killed or injured on their watch, and their refusal to approve “the spend” is even remotely associated with the incident, they fear both the reputational and legal consequences.

And at board level, it is doubtful that directors even understand what the true SHE costs are, or to what extent the Compliance Lunatic Fringe is contributing to margin erosion, or perhaps, the demise of the company. Most recent surveys of Australian boards would probably conclude that listed company directors are excessively focussed on ASX, ASIC, ATO and a range of other compliance and regulatory matters, at the cost of focussing on strategy and wealth creation for shareholders. And anything safety related probably scares the living bejesus out of them.

Many ASX directors lack relevant operational experience that would allow them to assess whether requests for safety-related capital expenditure and expenses are justified. I suspect boards, like management, also readily fall for the veiled threat of “But if we don’t do this/upgrade this/ recruit this/modify this/buy this, and there is an incident, the board will be held responsible”.

For a nation born out of the convicts of Britain, with a reputation as authority challengers, rule breakers and tall poppy pruners we seem to have become extraordinarily risk averse, bureaucratic and just plain timid.

I recommended to a client that a particular rail task could still be performed safely with significantly less “safety” people than had been requested. The client was reluctant to reduce the numbers, fearing that such a decision to reduce resources would be blamed on him in the event of a serious incident or fatality.

The fundamental point of the corporation seems to have been forgotten in all this.

It exists to turn a profit, to generate shareholder value. Of course, all of a company’s stakeholders are important, but without profit, there are no longer any stakeholders in the picture at all.

By contrast, the prevailing view amongst middle management in manufacturers, contractors and miners alike seems to be that the number one objective of the corporation is “to do stuff or make stuff or mine stuff in a safe and sustainable way”.

I would argue that safety and sustainability should be a mere by-product of undertaking the activity, not an end in itself.

An executive of a leading civil contractor that builds infrastructure for the major mining houses - who did not wish to be named - said that when it priced work for one major miners’ bulk commodities projects (that is, ports, rail and mines, for coal and iron ore manufacture and export) it add a “20 per cent client X margin”, because in its experience, once the project commences, this client always make additional demands regarding safety and environmental measures that inflate the contractor’s costs. In this company’s view that particular very large mining house was the worst offender, but in my experience none of the major mining houses – or contractors, or rail operators - have been particularly disciplined in regard to out-of-control compliance costs.

My company hired out a small and almost new piece of rail equipment weighing perhaps 500kg to a contractor in the Pilbara. I was told that the safety person on site decided the forklift had not lifted this type of item from a truck before, so a risk assessment and documentation had to be prepared before the item was unloaded. Cost and time: unknown.

The item was then “cleaned” over a number of days, as a result of the “weed and seed” processes in place in many remote sites, an environmental requirement from which someone is clearly making a very large amount of money. Cost and time: unknown.

The mining industry – as opposed to civil contractors and rail operators - also seems to tend towards knee jerk – and extraordinarily high cost - reactions to any safety incidents. Any visitor to rail or mine sites in the Pilbara will know that in order to be allowed to drive a four-wheel drive you need to attend a two- or three-day course. This particular initiative was a response to one or possibly more injuries and fatalities. The cumulative cost of this exercise in terms of training time, additional billable hourly costs and additional mine site accommodation costs for people to attend this course would have to total in the tens of millions by now.

“Mine spec vehicles” is another cost to miners and contractors alike, referring to a set of safety enhancements to four-wheel drives including fitting internal roll bars (that apparently cause a lot of head injuries – when passengers are getting into or out of the vehicle – and I speak from personal experience). I have heard estimates of between $5,000 and $15,000 to “mine spec” a four-wheel drive vehicle. The total cost of “mine spec vehicles” is hard to say, but again, it would have to run into tens of millions over the many years this requirement has been in place.

There also seems to be an inordinate amount of people checking on other people, who are in turn checking on other people. The central problem in terms of wage costs isn’t the poor mine electrician or haul truck driver getting $150,000 a year - it is the 20 people in the project office doing compliance, or the additional people to perform an essential role, because each person probably spends between 25 per cent and 80 per cent of their available time on compliance paperwork, checks, inspections, meetings and correspondence.

I was recently told that one miner now has teams of people with speed cameras on Pilbara rail access roads, checking speed limits. At what cost, and what benefit, who would know? I have visited plenty of mines, but not in the Pilbara, where I have only visited the rail corridor and rail camps. But I don’t imagine the Stupid Compliance Costs in the Pilbara stop outside the mine gate.

An engineering colleague, who runs an environmental consultancy working on Queensland mine sites, told me that all their vehicles had to have in-vehicle management systems (“IVMS”) installed, at a cost of $3,500 per vehicle, a cost not originally anticipated in their tender price. This system allows the mine operator to get “vital safety information” such as when someone put the vehicle into “Drive” without putting on their seatbelt, or when they exceed a speed limit. Which is followed up by a phone call or SMS to the company’s office and /or the driver. And this miner’s preferred IVMS system is now being replaced, after only a couple of years with a new IVMS, which the consulting company must upgrade to, in order to maintain their contract, at an even higher cost.

Inductions are another area that has been hijacked by the Lunatic Fringe. Inductions obviously serve an important purpose, but have become longer and longer, and now the typical length of a mine site or major project induction can be measured in days not minutes or hours. A rail colleague accompanying some large yellow track mounted rail equipment to a mine site told me he needs to complete two days of on-line inductions before leaving his office, followed by another two days of on-site inductions, for a piece of work that may take less than the time spent in inductions. My employees have completed one day inductions to perform work totalling, you guessed it, one day. The impact on the cost of such work is to practically double it.

I recently attended the induction for a major Victorian rail project. I arrived at 6.45am as requested, and was required until almost 1pm. I believe approximately 3,000 workers have already been inducted onto this project. At a very conservative cost of $75 per hour per attendee, which most contractors will invoice as a minimum, the cost of this activity is therefore already a seven figure sum. The quality of the material presented was questionable, and at times the “induction” was more like a compliance officers’ course, full of thought bubbles, with much form filling, mug shot taking, many videos, anecdotes and stories and zero content on actually working in a rail environment. Q&A sessions on the lifting weight for cranes, and examples of “excellent” traffic management officers sweeping paths with brooms to stop children falling from bikes due to stray stones were provided. The missing rail-relevant material was apparently still “under development”. No doubt when it is developed another hour will be added to the exercise, which for future attendees will mean it is almost a full day in your life you will never get back. Union-run inductions are a thing of the past, but I suspect they might have got the whole exercise done a little quicker.

I have attended many dozens of inductions over the years and I estimate ninety five per cent of the content of every induction is identical – “the toilets are over there, don’t smoke, don’t do this, don’t stand here, don’t touch this, this and that could injure or kill you, if the worst happens, make sure you tell someone”. It is not difficult stuff, it is not rocket science, it should take about 15 minutes to cover the key points, but the Induction Division of Compliance Inc certainly creates a lot of unnecessary jobs, uses a lot of meeting rooms and server space, and adds to increased costs, without generating much at all by way of actual output or outcomes.

My list of Stupid Compliance Costs is endless, as there seems to be new requirements dreamed up and advised to contractors like us and the people we work with on almost a daily basis. Much of this compliance is ludicrous. Some of it is laughable. And all of it, combined, is expensive. Very expensive, in fact, I believe, unaffordable.

**Mining, civil contractor and rail operator executives** need to show some courage and oppose new compliance measures, and compliance-related headcount increases, and obtain detailed costs of their true compliance expenditure. Perhaps company executives could ask their service suppliers how we could all actually cut compliance costs, instead of constantly requesting more from us.

**Boards** need to hold management to account and demand better information on the contribution of compliance activities to unit costs and capital expenditure.

And **governments,** state and federal, while not the worst culprits in this mess, who, I would argue are the company executives and boards, should ask industry to recommend specific legislative changes to help them clear up this mess. While Australia’s global competitiveness ranking is twentieth overall out of one hundred and forty four countries, we ranked ninety sixth when measured against our peers for the “Burden of Government Regulation”.

***Mary Thompson***

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