

SUBMISSION TO THE PRODUCTIVITY COMMISSION

“PRODUCTIVITY INCREASES AND NET COST SAVINGS ON INFRASTRUCTURE PROJECTS THROUGH TRAINING”

December 2013

Prepared by:

Alan Sparks, AM, BEM

Program Director

[National Apprenticeships Program](#)

ABN: 43 640 474 751

www.nationalapprenticeships.com.au



Introduction

This submission draws attention to opportunities to increase productivity and gain significant Net Cash Benefits for infrastructure projects by incorporating the unique training concept known as the National Apprenticeships Program into work forces engaged in infrastructure construction. This Australian Government sponsored Program has been operating for two years and has demonstrated its strategic values, productivity gains and Net Cash Benefits as validated by Pricewaterhouse Coopers through their independent evaluation and Cost Analysis.¹

Strategic benefits include increased organisation capability, immediate productivity gains, significant Net Cash Benefits, enhancing “Social Licence” and accessing talented, skilled and experienced Australians for up-skilling into Australian jobs.

The Net Cash Benefits include increased earning capacity for participants, Net Cash Benefits for companies incorporating this program into their work force and increased government revenues.

There are a number of indirect benefits including the replacement of retiring ‘experienced workers’, multi-skilling a portion of the national workforce, capitalising on mobility, promoting local employment and up-skilling of existing workers.

National Apprenticeships Program - Background

The National Apprenticeships Program (NAP) was launched in May 2011. It was the Federal Government’s response to the National Resources Sector Employment Task Force Report recommendation 2.2:

2.2 That the Australian Government work with industry, unions, training providers, state and territory governments, industry skills councils, state skills bodies and industry associations to trial alternative apprenticeship models with a view to increasing the number of trade-qualified people in occupations and locations where a shortage is expected (e.g. electricians and welders).

NAP has achieved the goals of this recommendation. In the two years since launch, it has created and implemented a unique, viable industry driven contribution to up skill Australians to full trade qualifications. Graduates are then securing fulltime employment in the resources sector.

This achievement has been endorsed by Pricewaterhouse Coopers (PwC) who conducted an independent investigation and concluded that NAP was a successful model that offered a unique opportunity to skill Australians for Australian jobs.

The ‘pilot’ status of this Program will conclude in April 2014 and it is anticipated that the Program will move to a permanent status.

Results

The pilot NAP trialled a new competency based trade training model that could best be described as “*an advanced entry adult apprenticeship scheme.*” Over 9,500 Australians registered for the program. It has generated over 22,000 formal competencies through the *Recognition of Prior Learning* and achieved a remarkable 94% retention rate.

The very uniqueness of NAP has challenged the traditionalism of industry with an historic pattern of using traditional apprenticeship models and it can need fulsome convincing of the benefits of change. Slowly but surely industry has begun to recognise the five major NAP strategic benefits:

- Increased organisational capability
- Immediate productivity gains
- Significant savings in training costs
- Contribution and enhancement to social licence
- Places talented Australians into Australian jobs

¹ Pricewaterhouse Coopers – National Apprenticeships Program Independent Evaluation dated 30th July 2013

Increased Organisational Capability

Establishing the size and shape of a project workforce is an essential requirement. With trade numbers identified through analysis, it is then possible to allocate a percentage of those numbers for training through this Program. A major client for example has discussed 15% as an appropriate number in some cases and a higher number at other times.

Employing 'adult apprentices' through this Program, offers a 'guaranteed' element of the workforce. Apart from the increased commitment driven by the desire to gain a qualification, these workers are 'indentured' and cannot resign to go to another project for more money. A guaranteed 15% of a workforce is not insignificant.

With a retention rate of 94%, turnover is also materially improved knowing that these workers are engaged in training for 18 months and then they offer the next generation of leading hands and supervisors.

Productivity Gains

Productivity gains are realised in this element of the workforce through increased talent, skills, experience and commitment to the project. The participants are carefully selected and matched to operational needs. All participants undergo the most robust of selection processes including psychometrics such as *Situational Safety Assessment*, *Abstract Reasoning*, *Personality*, *Literacy and Numeracy* and *Mechanical Aptitude* in some cases.

Matching existing skills to project requirements allows immediate tasking upon arrival on site.²

Many participants bring considerable experience to the project.³ The maturity of adult apprentices sourced through NAP shows that they actually 'want' to be there as opposed to the levels of motivation of younger apprentices.

Net Cash Benefits

PwC identified in their report significant Net Cash Benefits. Based on an Enterprise Agreement in the Coal Sector, they identified an increased earnings capacity for participants of \$86,313 pa. Identified in the PwC Report for industry who employ these participants, they may gain a Net Cash Benefit of up to \$207,190 pp and for the Federal Government \$146,559 pp.

A small engagement of 50 participants for industry has the potential to achieve a Net Cash Benefit of \$10.3 million and a revenue increase for Government of \$7.3 million.⁴

Other financial modelling would identify overall workforce Net Cash Benefits where 15% of the trade force requirement are participants in this Program. Further substantial savings can be foreseen given these participants are paid 80-95% of tradesperson's wages, the Net Cash Benefit identified above of \$207,190pp and the higher retention rates and transition prospects to leading hand roles without further recruitment costs. Simplistic modelling for wages alone would suggest as much as 1.5-2.2% overall work force wage reductions are possible.

Contribution and Enhancement to Social Licence

Contributing to the up-skilling of Australians and leaving a lasting legacy of a project in the national workforce is important. Up-skilling existing workers or training locals has a positive impact on 'Social Licence'. In the Commissions Draft Report of Geographic Labour Mobility (Dec 2013) they underlined the economic and social positives labour mobility can deliver. NAP can also be considered a mechanism for effective labour mobility, delivering skills from geographical areas and industries where they may be in surplus to places where they are needed.

Placing talented Australians into Australian jobs

There is a critical need to train and replace the retiring element of the Australian workforce; as well as the on-going essential need to increase the size of the skilled work force.

² Within 14 days of arrival on one site in SA, seven adult apprentices were code tested and commenced welding tasks alongside tradespersons.

³ On Bechtel's LNG Project at Gladstone a Program participant actually designed and built switchboards for the Project before joining Bechtel as an adult apprentice.

⁴ PwC Report pages 132-135.

The National Apprenticeships Program offers direct and substantial benefit to industry and Project contractors while contributing to the broader National imperative.

Summary

The cost of training can often be considered a non-essential operational impost. The truth is that effective training has the potential to bring a significant positive Net Cash Benefit and lasting strategic benefit to the enterprise, the industry and the Nation.

