

August 2017

BARANGAROO SKILLS EXCHANGE

SOCIAL RETURN ON INVESTMENT (SROI) ANALYSIS: SUMMARY HIGHLIGHTS



bsx

barangaroo skills exchange



TAFE NSW

lendlease



BETWEEN 2013 – 2015, THE BARANGAROO SKILLS EXCHANGE (BSX) DELIVERED TRAINING TO OVER 8,900 CONSTRUCTION WORKERS ON THE \$6B BARANGAROO SOUTH URBAN REGENERATION PROJECT, GENERATING \$78.5M IN SOCIO-ECONOMIC VALUE.

1.0 Context

The Australian construction sector contributes 8% to the national GDP¹, and comprises around 330,000 businesses employing over 1 million workers².

In NSW, some \$74B is anticipated to be invested in government infrastructure projects over the next four years. The Department of Industry also forecasts an additional 300,000 construction workers will be required nationally by 2024, to meet the skills demand for delivering infrastructure projects³.

The uptake of skilled construction trades is however, in decline. In 2010, the NSW average rates for apprentice completions in construction trades was 43.2%⁴.

For this reason, both the Australian and NSW governments focussed on addressing issues related to an anticipated skills shortage in the local NSW construction sector⁵. Some of the key challenges related to construction sector upskilling include lower literacy and numeracy levels, an ageing workforce and low apprenticeship completion rates.

Construction workers with lower literacy levels experience significant barriers to employment progression and longer term workforce participation. Furthermore, construction workers experienced elevated risks of mental health conditions⁶.

For employers, construction workers with lower training and skill levels can be less productive, take longer to train, require more supervision, incurring greater delivery cost. For activities requiring particular trade or activity based licences, work can be delayed until a worker with the appropriate licence is able to complete the task.

These were some of the key challenges faced by Lendlease when it was awarded the Barangaroo South Urban Regeneration Project (the Project) in 2008. Barangaroo South is a 7.5 ha precinct that forms an integral part of the \$6B Barangaroo development on the western foreshore of Sydney's central business district. By 2020, Barangaroo South will accommodate around 23,000 workers and 2,000 residents.

The Project bid made a response to industry concern regarding a potential skills shortage in the construction sector by committing to deliver lifelong learning at Barangaroo South. A major focus of this commitment was to deliver training to thousands of construction workers who would be involved in the Project.

1.1 Barangaroo Skills Exchange: A Partnership between Lendlease and TAFENSW

In partnership with TAFENSW, Lendlease established an on-site training and skilling facility called the Barangaroo Skills Exchange (BSX). With initial Federal Skills Connect funding, the BSX gave site workers access to:

- Workplace English language literacy and numeracy assessment, support and training
- Construction trades and skill sets
- Safety leadership training
- Basic digital literacy
- Nationally accredited training at Certificate III and above
- Skills assessment and gap training for mature aged workers to give them national qualifications
- Apprentice mentoring

BSX Training Objectives	Key Activity or Intervention
1. Reduce the barriers to participation in ongoing training for construction workers.	Mandatory onsite induction process for each worker onsite. This included: <ul style="list-style-type: none"> • Activities to identify workers with low literacy, language and numeracy skills in a discreet way. • Advertisement of availability of additional courses.
2. Improve proficiency in Workplace English language, literacy and numeracy (LLN) for site workers who require further training.	Government subsidised full-time equivalent onsite Literacy, Language and Numeracy tutor, to provide access to tailored and dedicated training to workers as required.
3. Qualify skilled and competent trades people in High Risk Work Cover licences and certifications to perform work at required skill level.	<ul style="list-style-type: none"> • Accredited trade qualifications (including Certificates III, Certificates IV, and Advanced Diplomas) • Awareness training • High Risk Work Cover Licence (HRWCL) training.
4. Support workers with mental health and safety awareness, leadership training and development of interpersonal communication skills	<ul style="list-style-type: none"> • Incident and Injury Free safety training for all site workers. • Mates in Construction Course – for mental health awareness • First Aid courses • Drug and Alcohol Awareness training • Additional Safety Leaders Course for workers in management or leadership roles.
5. Assist apprentices in completing their apprenticeship.	<ul style="list-style-type: none"> • Provide venues for fast-tracking apprenticeships through competency based assessments • Provide mentoring for site workers completing apprenticeships. • A full-time Apprentice Mentor Lead, and 4 additional apprentice mentors were appointed to provide additional support to apprentices to achieve higher completion rates.
6. Optimise productivity and reduce associated down time costs and allowances for workers, subcontractors and Lendlease.	<ul style="list-style-type: none"> • Provide onsite training facility – that is easily accessible • A full-year study timetable was adopted to match the onsite construction schedule and access a greater number of workers, which differentiates the model from traditional education approach. • Support flexibility of training courses to help sub-contractors and site managers negotiating very tight construction schedule.

1.2 A Disruptive Model



The BSX model is challenging traditional approaches to on-the-job skilling and training in the construction sector by:

- Operating as a ‘one stop shop’ as an agile, pop-up college embedded in a ‘real world’ workplace setting
- Collaborating directly with employers to ensure delivery of skill sets meet specific needs responsively
- Centralising curation and coordination of training at an accessible location on site adopting a customised solutions approach to training delivery
- Aggregating the training needs of many smaller contractors
- Integrating foundation skills into the training experience to bolster literacy and numeracy
- Using multiple training providers to deliver a “best of breed” approach
- Providing ‘just in time’, ‘fit for purpose’ training
- Ensuring flexible delivery around construction schedules, weather and shift work
- Providing a supportive work environment through individual mentoring for apprentices, Indigenous workers and others
- Accessing funding for targeted training in a consolidated, project-wide basis

1.3 Social Return on Investment

During its operation, staff at the BSX and site managers observed pass rates for courses being higher than industry averages. They also received reports of positive experiences expressed by construction workers and apprentices who had received training support through the BSX.

To investigate further, a Social Return on Investment (SROI) evaluation of the BSX was undertaken by Lendlease's Social Impact team to understand the spectrum of outcomes experienced, and the socio-economic benefits generated because of the training model and funding support invested.

The SROI methodology is a framework for measuring and accounting for the social, economic and environmental value resulting from a program. SROI enables programs to measure and value the full impact of activities, including ones that are not typically associated with a financial value.

For the BSX, the social and economic change for each key stakeholder group has been explored, measured, monetised, and recorded in this assessment. Positive, negative, intended and unintended changes have been assessed and considered.

The assessment was performed as an evaluative SROI in line with the Social Value UK's, SROI Principles and Methodology, and assessed returns for the period between 1st January 2013 to 31st December 2015.

The report was independently assured by Social Value International.

1.4 Social value created by the BSX

The SROI evaluation estimates the BSX has created over \$78.5 million in value for all stakeholders during the 3 year period.

The investment of \$6.15M, comprising Federal Government funding of \$3.7M actual spend, the BSX Partnership pooled funding from Lendlease, NSW government, subcontractors and construction workers themselves, led to the delivery of a net social value ratio of \$1: \$11.76. That is, for every \$1 invested in the program, \$11.76 additional social and economic value (benefit minus investment) is generated.



The investment comprises financial and in-kind inputs, the largest share of which came from the Federal Government's then Skills Connect Program of \$3.7M.

Other key inputs included NSW government funding, sub-contractors and principal contractor funding for high risk Work Cover Licence training. TAFENSW, BSX Staff and Lendlease, provided resources, equivalent overtime labour cost to meet construction program training demands, management oversight, and the training facility itself. Site worker and apprentice inputs included time 'in kind' for homework tasks.

“The greatest personal achievement I have gained from participating with the BSX is that I have significantly increased my skills and qualifications. As a result, I am confident that I will always in the future have greater success in gaining good employment and have opportunities and the confidence to take on jobs of higher responsibility.”

- Participating site worker

“The BSX has transitioned myself (me) from an inexperienced first year apprentice to a second year full of confidence and experience”

- Apprentice site worker

8,963 site workers attended training

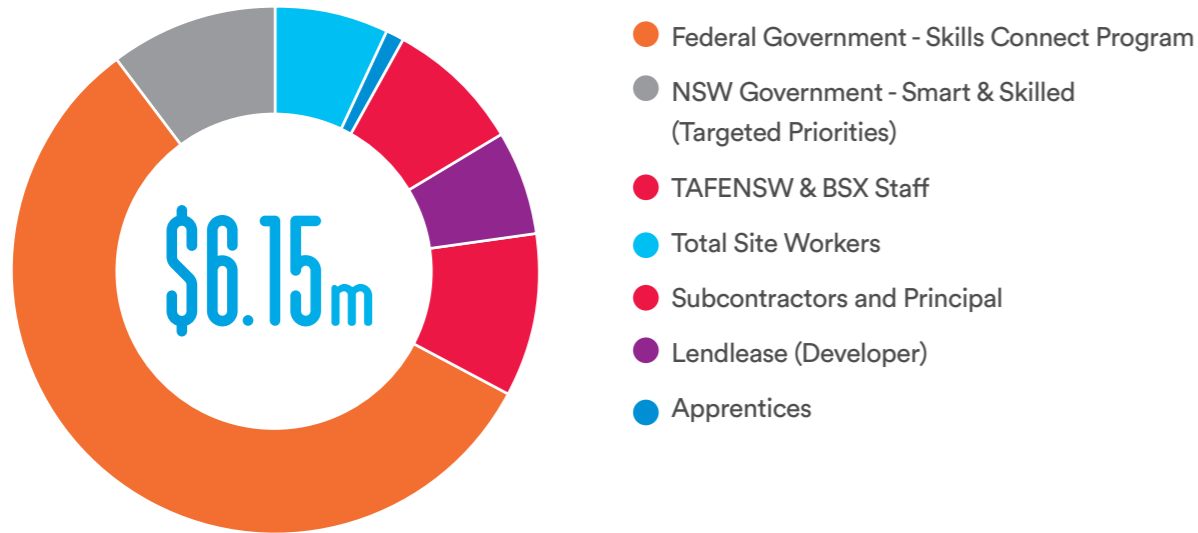
84% Apprentice completion rate

91% High risk Work Cover Licence pass rate

40% number of site workers access accredited training for the first time

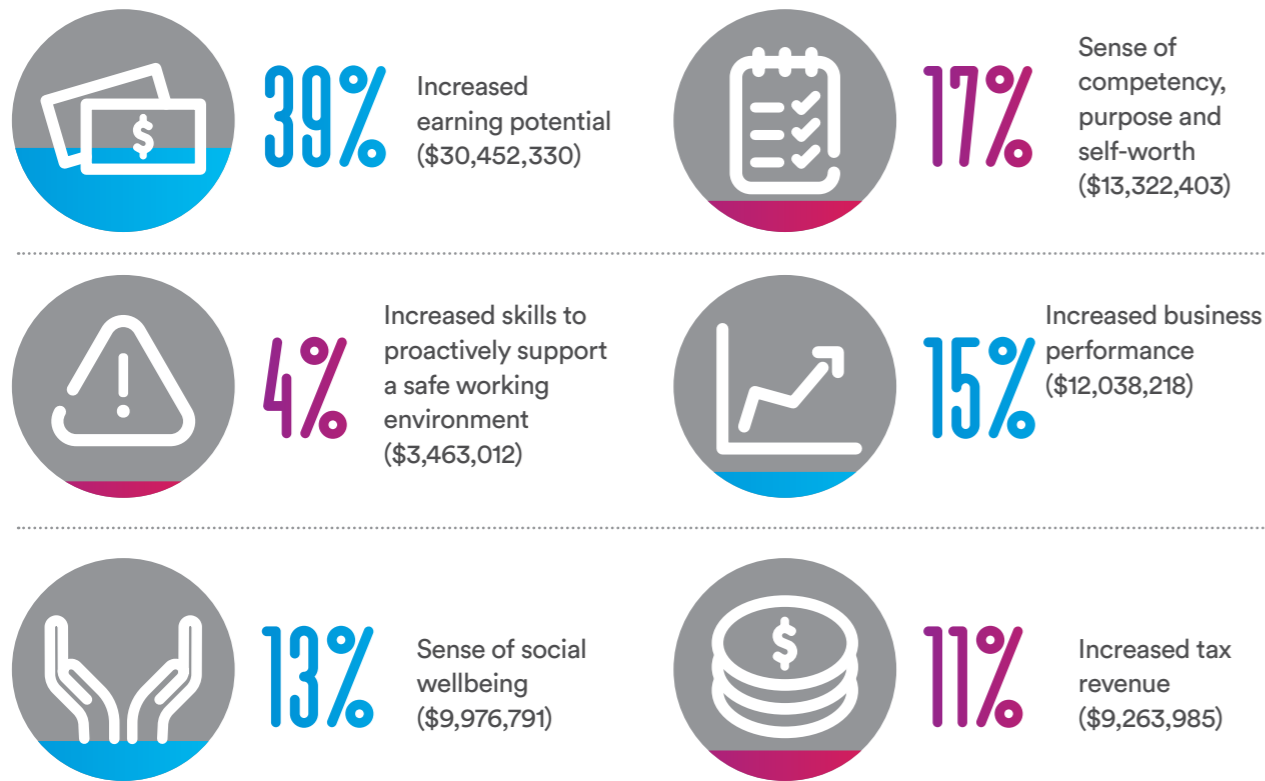
Cash and 'In-kind' Investment Inputs

The following diagram sets out the financial and 'in-kind' investment inputs by stakeholder.



Value created by outcome

Below represents the value broken down by outcome category for all BSX stakeholders.



1.5 Theory of Change: Site Workers – LLN Subgroup

Theories of change were developed for each stakeholder group.

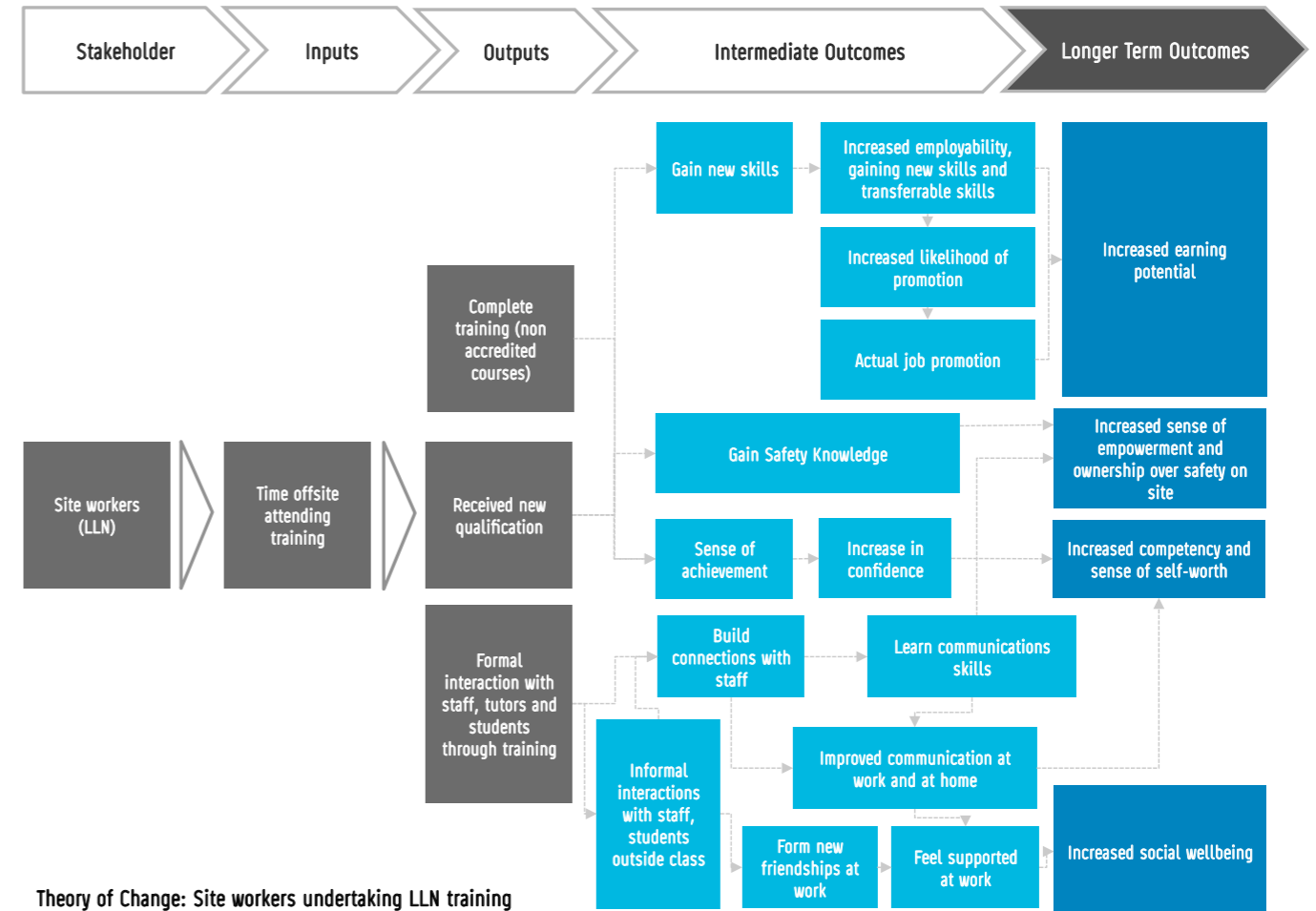
Construction workers were however the major beneficiaries of the program, with the total value of site worker outcome equating to over 75% of the net value generated. This proportion is driven by the high numbers of workers reporting benefits from the program.

Of the construction worker subgroups, workers undertaking workplace English language, literacy and numeracy (LLN) skills training experienced social outcomes which accounted for 47% of the total outcomes generated for all stakeholders.

This was due to the high level of impact the LLN training had for these individuals, and the fact that over 4,000 workers formed part of this group.

In fact, 40% of workers receiving training at the BSX had their first taste of accredited training since leaving school, with most also receiving LLN support.

As a highlight example, the following diagram shows the theory of change specifically for the LLN site worker subgroup.



On an individual basis, apprentices were the next major beneficiaries taking 20% of the total social value. Almost half of the total value generated for apprentices was a result of the significant earnings increase upon completion compared to prior to training. The value to government comprised 12%, with funding support being the catalyst for expediting a more agile upskilling pathway that improves efficacy of labour sourcing for future construction and infrastructure projects by sub-contractors.

The BSX staff were also especially crucial enablers, proactively engaging site workers and contractors on training available at the BSX, leveraging their VET expertise to ensure training quality and facilitating supportive learning experiences expeditiously for successful completions, to meet the range of accredited skilling and training needs on the project.



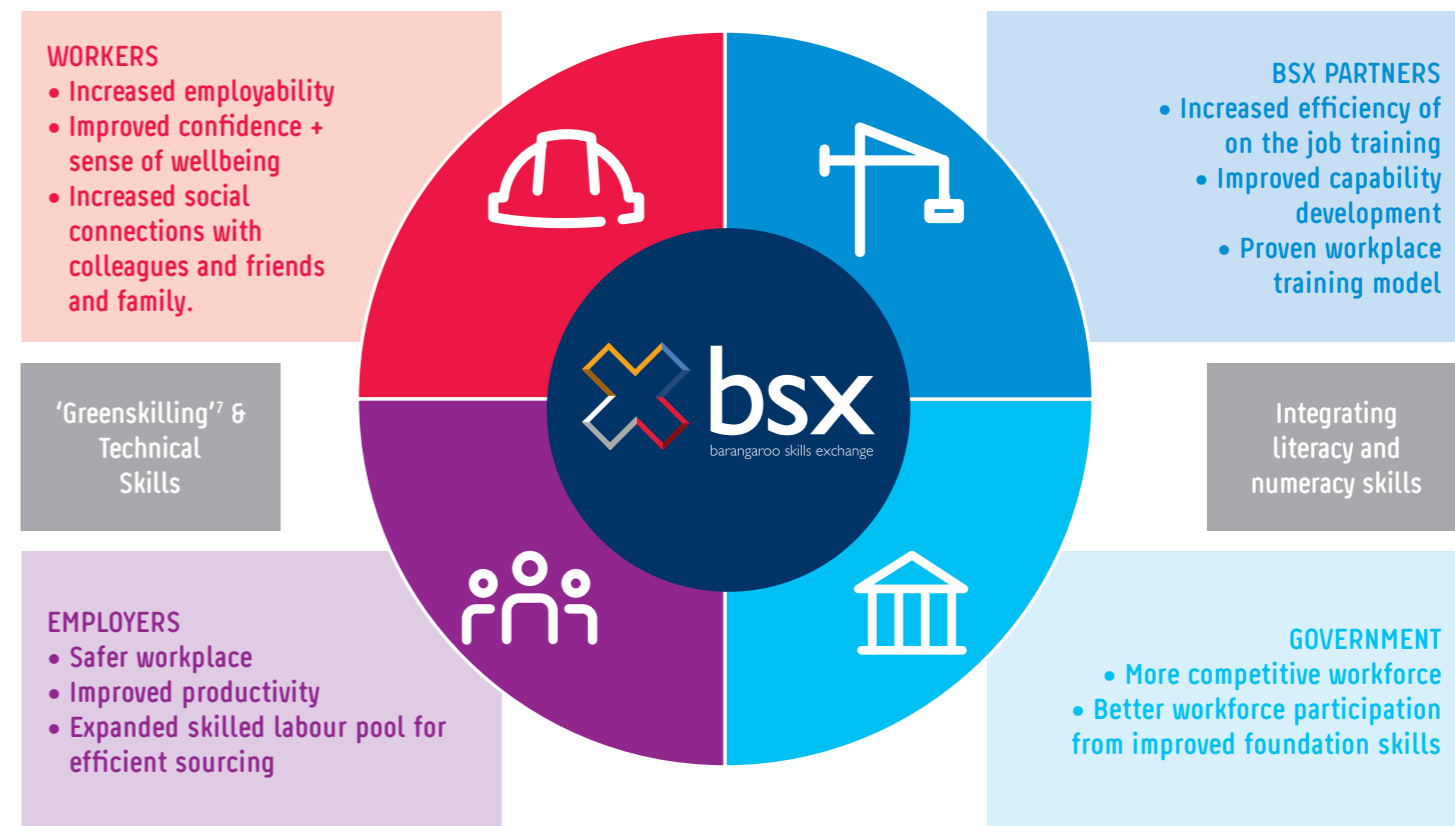
1.6 Key Outcomes

Site workers have expressed the benefits of their training experience at the BSX:

“Everything to do with safety and looking forward towards hazards has improved and I acknowledge problems before they happen now...”

“I find myself getting more and more involved with the organisation and decision making process of completing tasks on site. I enjoy the added pressure and responsibility and hope that it leads to a promotion down the line...”

Socio-Economic Outcomes through Industry Collaboration⁸



“I feel more confident in the role and have developed better communication skills when liaising with colleagues.”

1.7 Limitations

It is important to note the values calculated, although expressed in monetary terms, are an effort to monetise 'extra-financial' value of outcomes and do not correlate to a direct financial return.

The assessment information was based on an independent online survey conducted by D&M Research, of 200 respondents from a randomised sample of 3,000 site workers and analysis of anonymised training and enrolment data from the BSX. The independent survey engagement and data collection had a 95% confidence level.

Stakeholder engagement included qualitative interviews with contractor site managers who manage and support site workers daily and BSX staff. A series of roundtable focus group sessions were also convened to confirm input data, impact filters and allocation of financial proxies.

A key limitation of the assessment was the inability of the evaluators to engage face-to-face with the site workers on the Barangaroo development. This was due to transient nature of site worker rostering during an intense construction period. While the Social Impact team sought to overcome the limitations through statistically robust primary data collection and engagement with proxy stakeholders it means this assessment may have inadvertently omitted external contributing factor or material outcome; positive or negative, that arose as a result of the BSX.

For this reason, strategies were employed to mitigate this limitation, including a rigorous sensitivity analysis. The sensitivity analysis indicated that the ratio could range from between \$1: \$5.75 to \$1: \$17.99.

All the evidence collected through the independent survey, stakeholder engagement, and desktop research, supports the final ratio of \$1: \$11.76.

Social Value International has certified that the final report satisfies the requirements for their report assurance process.

1.8 About Lendlease

Founded in Sydney in 1958 by Dutch immigrant and innovator Dick Dusseldorp, Lendlease was born out of a vision to create a company that could successfully combine the disciplines of financing, development and investment.

Headquartered in Sydney, Australia, Lendlease has approximately 12,000 employees internationally. Our regional head offices are located in New York, Singapore and London. Combining our core capabilities of development, construction and investment across the property and infrastructure value chain has allowed us to offer innovative integrated solutions for our clients.

We create places that leave a positive legacy by setting world leading standards for safety, innovation and sustainability, delivered by people who are respected for who they are and what they do.

1.9 About TAFENSW

Technical education as we know it began with the founding of the Sydney Mechanics' School of Arts in 1833. The State Government assumed responsibility for Sydney Technical College in 1883, the date often quoted as the year TAFE NSW was born.

Since this beginning throughout wars, depressions, recessions and economic growth periods, TAFENSW has been skilling the workforce to ensure NSW prospers and the goals of individuals are realised.

Today, with over 500,000 enrolments and over 1200 course offerings from certificate to degree level, TAFENSW continues to strive to achieve its ambition to be the brand in global demand to build skills for success in today's and tomorrow's world.

2.0 Notes

1. GDP refers to the Australian Gross Domestic Product (GDP)
2. Australian Industry Group, – Australia's Construction Industry: Profile and Outlook 2015 [Online] http://cdn.aigroup.com.au/Economic_Indicators/Construction_Survey/2015/Construction_industry_profile_and_Outlook.pdf
3. NSW Department of Industry, Infrastructure Skills Legacy Program, 2016 <http://www.industry.nsw.gov.au/business-and-industry-innsw/assistance-and-support/infrastructure-skills-legacy-program>
4. Bednarz, A 2014, Understanding the non-completion of apprentices, NCVER, Adelaide. <https://cica.org.au/wpcontent/uploads/Understanding-non-completion-2706.pdf>
5. Department of Premier and Cabinet, 'NSW 2021 A Plan to Make NSW Number One' [Online], Australia, Crown Copyright © 2011, p. 7, <http://www.ipc.nsw.gov.au/sites/default/files/file_manager/NSW2021_WEBVERSION.pdf> accessed 16th August 2016; Australian Industry Group (AIG) 'National Workforce Literacy Project: Report on Employers Views on Workplace Literacy and Numeracy Skills', North Sydney, Australia, The Australian Industry Group 2010, p. 1 <<http://awpn.com.au/wp-content/uploads/2011/08/National-Workforce-Literacy-Project.pdf>>, accessed 31 May 2016
6. Mates in construction, The economic costs of suicide and suicide behaviour in the New South Wales Construction Industry (2015) [Online] <http://mिकास.bpnndw46jvgfycmdxu.maxcdn-edge.com/wp-content/uploads/2016/03/Cost-of-suicide-in-NSW-CI-final-V2.pdf>; British Journal of Psychiatry, Suicide by occupation: systemic review and meta-analysis (2013) <http://mिकास.bpnndw46jvgfycmdxu.maxcdn-edge.com/wp-content/uploads/2016/03/2013-BJPsych-Suicide-by-occupation.pdf>
7. 'Greenskilling' - at Barangaroo this is taken to mean the technical skills, knowledge, values and attitudes needed in the workforce to develop and support sustainable social, economic and environmental outcomes in business, industry and the community. This originated from the December 2009 Green Skills Agreement. Endorsed by COAG the Green

Skills Agreement aimed to deliver skills for sustainability in the Australian training system. The Agreement comprised a high-level statement of principles and desired outcomes for:

- national standards of sustainability practice and teaching in vocational training;
- the revision of Training Packages to include sustainability principles and competencies;
- the up-skilling of VET instructors and teachers in delivering sustainability skills; and
- implementation of a transition strategy to re-skill vulnerable workers.

This informed the basis for how the BSX provided training and skill sets to respond to building technologies employed on the Barangaroo South project for:

- Renewable energy
- Sustainable materials
- Energy efficiency
- Green buildings
- Sustainable water systems
- Waste recycling
- 'accredited training' - structured, competency-based, courses delivered by specialist skilled teachers and industry trainers for which there is a certificate, or nationally recognised accreditation to confirm that a student / trainee has achieved training outcomes, in accordance with the Australian Qualifications Framework.
- 'Non-accredited learning' – can be formal or informal, but for the purposes of the BSX, are typically characterised as awareness raising sessions which do not provide a formal certification, but do provide recognition of participation. For example, suicide awareness, hazardous materials awareness are 'non-accredited' courses at the BSX.

Refer: <http://www.coag.gov.au/meeting-outcomes/coag-meeting-communicu%C3%A9-7-december-2009>

8. Some of these outcomes were not measured due to the inability to distinguish broader change within the industry. This is a potential future area of focus for Lendlease.



HSBG

KPMG

Symbio

TAL

MAC

Professional Disclosure Statement:

Lendlease has prepared this report in good faith on the basis of our research and information available to us at the date of publication and has been obtained from and are based on sources believed by us to be reliable and up to date. No responsibility will be accepted for any error of fact or opinion based on such reliance. This report was prepared by the Lendlease Social Impact Team for the use and benefit of the Barangaroo Partnership stakeholders, for the purpose for which it was provided. Lendlease does not accept any liability if this report is used for an alternate purpose from which it was intended, nor to any third party in respect of this report.

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