

# Connecting Australia

How the **nbn**<sup>™</sup> broadband access network is changing Australia.  
An economic study of the way we work, live and connect.





# Introduction

When the idea of a national broadband network for Australia was first raised twelve years ago, it was difficult to imagine the technological changes we would witness at work and at home.

The **nbn**<sup>™</sup> broadband access network was created to foster productivity and provide a platform for innovation in order to deliver economic and social benefits for all Australians.

With the rollout now at the halfway point, we can now measure the benefits the **nbn**<sup>™</sup> broadband access network generates for individuals, regions and the economy.

This new economic research provides the evidence that **nbn** is delivering on its original policy objectives through its impact on the way we work, learn, live and connect.

We can now see how connectivity affects Australians through every stage of their lives, no matter where they live.

Bill Morrow  
CEO  
NBN Co



# A nation in transition

When the Australian Bureau of Statistics undertook the 2016 Census, it captured a snapshot of the social and economic impact of the largest nation-building project in Australia's history.

With this comprehensive data, and other data collected from the survey, OECD, and economic modelling, we could now measure how Australia's economy and society had changed in regions connected to the **nbn™** broadband access network, and those that were not.

Economics and data analytics advisory firm AlphaBeta was able to measure the "**nbn™** effect" by analysing the behaviour of 24 million people and 10 million households.

This research establishes an important statistical baseline to measure the impending impact of Australia's digital transformation over the years and decades ahead.

Over the next six months, we will report further detailed results on the impact of the **nbn™** access network on:



**Employment**



**Health**



**Education**



**Social connection**



**Industry**

# Conducting the research

## Methodology

The fact that some households now have access to the **nbn™** broadband access network, while others are still waiting to be connected, provides a timely opportunity to measure the impact of the **nbn™** access network on people's lives.

AlphaBeta used multiple sources to gather evidence.

The analysis draws on data from both the 2016 Census and a bespoke national Ipsos survey.

The Census data is population data and represents the whole Australian population.

AlphaBeta and Ipsos ensured that the survey sample comprised a mix of people representative of the true Australian population by placing specific quotas on age, income, gender and geography, as per best practice.

Differences in the demographics of non-**nbn™** connected and **nbn™** connected regions were controlled for, such as income, education levels and regionality.

### Census data collected from:



**24million**  
Australians



**10million**  
households



**2000**  
regions

**nbn™** access network rollout data was used to cross-match and compare ABS data for regions with a strong **nbn™** presence against areas of low **nbn™** presence.

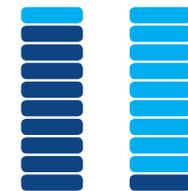
AlphaBeta compared areas where the **nbn™** access network rollout was more than 90 per cent complete with areas where the rollout was less than 10 per cent.

Using actual **nbn™** rollout data for this study significantly improves the robustness of the results and distinguishes it from other studies.

Economic impact was then estimated using a Computable General Equilibrium model, allowing AlphaBeta to detect the impact of the **nbn™** access network on how people connect, work and live.

### **nbn™** rollout completion data

**90%** completed    **10%** completed



**VS**

### Areas of economic impact as a result of the **nbn™** access network



Industry productivity



Teleworking



Online education



Economy growth



Jobs growth

# How we work

## Growth in new businesses

2x 

In nbn™ access network connected regions, business growth has accelerated at more than twice the annual pace of the national average since 2011 and at five times the pace of regions without the nbn™ access network.

**+1%**  
nbn™ areas

**+0.2%**  
non-nbn™ areas

**+0.4%**  
nationally



## Number of new businesses due to the “nbn™ effect”.



	New businesses*	Self-employed*
2021	27,400-79,700	48,600-92,600
	⤴	⤴
2017	1,900-5,400	3,400-6,400

\*estimated



## Growth in self-employed women

More women are becoming their own bosses in **nbn™** access network connected regions.

**+2.3%**  
nbn™ areas



The annual growth rate of self-employed women in **nbn™** access network connected areas is 2.3 per cent, versus 0.1 per cent in non-**nbn™** connected areas.

**+0.1%**  
non-nbn™ areas



### Self-employed Australian women thanks to the nbn™ access network, if growth rate continues.

up to  
**52,200**  
self-employed women

by  
**2021**  
end of rollout

up to  
**3,500**  
self-employed women

**2017**

Airlie Trescowthick is the founder of Farm Table, an online platform which connects modern farmers with the latest research and resources, and each other, to help them to navigate the complexities of farming.

Airlie was born and raised on a mixed farming property in the Southern Riverina. After a career in Melbourne as a business analyst and a postgraduate degree in Canada, Airlie returned to the land.

While on the farm outside Deniliquin, she put her farming passion together with her business skills to work to help farmers overcome isolation and the barriers to learning. Farm Table helps bridge the digital divide, connecting farmers across generations and across the country.

“Building the Farm Table from our farm in rural NSW has allowed me to pursue my professional, personal and farming dreams in an industry I love and owe so much,” Airlie says.

**“I hope it breaks the stereotype that to build a challenging and meaningful career you need to be located in a metropolitan centre.”**

Airlie Trescowthick  
Farm Table



# How we connect

## Shrinking the digital divide

Australia is expected to move from being one of the bottom 10 OECD countries in terms of internet equality to being in the top 10 by the time the network rollout is complete.

OECD countries rank - equality in internet access and speed



Households and internet access speed

2017  
**17th**  
↑  
2012  
**29th**

Thanks to the **nbn**<sup>TM</sup> access network, Australia currently ranks 17th (up from 29th) in developed countries, in terms of equality of internet speed and proportion of people without access.



Previously "under-served" premises currently with access to fast internet as a result of the **nbn**<sup>TM</sup> access network rollout.

2021  
**1.8 Million**  
↑  
2018  
**1 Million+**

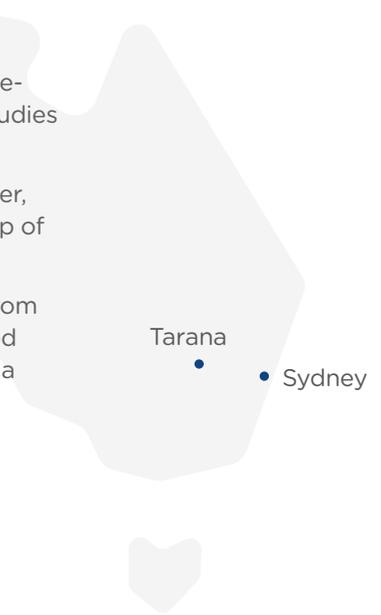
Kathleen Howarth is a 20-year-old university student, studying for a three-year Bachelor of Legal and Justice Studies at Southern Cross University.

Kath, who is also a carer for her partner, lives in the NSW central west township of Tarana, population 170.

Living hundreds of kilometres away from her university campus has not stopped Kathleen from pursuing her dream of a legal career.

By using **nbn**'s<sup>TM</sup> Sky Muster<sup>TM</sup> satellite service, Kathleen is able to download lectures and upload assignments.

Kathleen can remain in the rural community she loves and still get a world-class education.



# Economic impact

## Growth in economy and jobs

The “nbn™ effect” helped drive an estimated \$1.2 billion in additional economic activity in 2017, by helping create new jobs, new businesses and better productivity.

This excludes the economic stimulus of the nbn™ access network rollout itself, such as capital investments, financing and the workers needed to build the nbn™ access network.

# +\$1.2b

economic activity in 2017\*



New jobs



New businesses



Better productivity



### The “nbn™ effect”



Per annum additional GDP\*



Contribution to GDP growth rate\*



Additional jobs created\*

	Per annum additional GDP*	Contribution to GDP growth rate*	Additional jobs created*
2021	\$10.4b	0.07%	31,000
	⌆	⌆	⌆
2017	\$1.2b	0.04%	2,900

\*estimated



nbn's mission is to encourage productivity and help drive economic and social benefits for Australians.

The evidence from this study paints a portrait of nbn's™ access network impact when the network is just over halfway complete.

We can see the significant contribution it is already making to the Australian economy and the lives of Australians.

These benefits are expected to multiply as the nation becomes fully connected to the access network.



## April 2018

This report was published by **nbn**, the company building Australia's broadband access network. The research was performed by economics and data analytics advisory firm AlphaBeta. AlphaBeta worked with strategic communications firm 89 Degrees East, and a number of data providers including global market research company Ipsos to support the analysis. For detailed methodology, please visit [www.alphabeta.com](http://www.alphabeta.com).

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