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Social impact of the nbn network

FY24 insights report



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This report has been commissioned by NBN Co (“nbn”) and prepared by Ember Advisors.



In the spirit of reconciliation NBN Co acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all First Nations peoples today.

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nbn's Social Impact Measurement Approach aims to measure wellbeing effects across five domains and overall, and how the impact has changed over time

What is social impact?

For the purpose of this report, social impact is defined as the net effect of an activity on people and society, where an activity could mean an organisation, program, product or service.

Social impact (sometimes referred to as 'social value') is usually considered in terms of wellbeing, which is a state of satisfaction encompassing physical, mental and social aspects of life.

nbn's Social Impact Measurement Approach

nbn developed a Social Impact Measurement Approach to better measure and understand the social impacts enabled by the nbn network. The approach was first applied in August 2023 to measure the 'so what' of digital inclusion for nbn's customers. Measurement has been undertaken again in November 2024 to determine how the social impact of the nbn network has changed over time.

The framework measures the benefit of digital inclusion for nbn's customers, which is defined as the social impact of the nbn network on user wellbeing (life satisfaction) across **five outcome domains**:

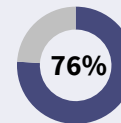
1. **Employment & income**
2. **Education & skills**
3. **Health**
4. **Social & community connection**
5. **Environment**

In both measurement years, primary data was collected from a representative survey¹ of ~1,500 nbn users to measure changes in wellbeing (both positive and negative) across the five domains. Results were statistically significant and considered for select target groups (low income, regional and remote and First Nations).²

Key results



nbn-enabled internet continues to have a positive impact on user wellbeing in FY24, with reported impacts broadly consistent with FY23.



Overall wellbeing: 76% of nbn users say that having access to the nbn network at home has resulted in a positive impact on their satisfaction with life in the last 12 months (with only 2% reporting a negative impact).



Employment & income: 78% of nbn users who worked from home or used job search platforms felt the nbn network positively impacted their employment outcomes.



Education & skills: 85% of nbn users who engaged in education from home felt the nbn network positively impacted their education outcomes.



Health: 77% of nbn users who accessed telehealth or medical information online felt the nbn network positively impacted their health outcomes.



Social & community connection: 75% of nbn users who connected with others or accessed news or information online felt the nbn network positively impacted their connectedness.



Environment: 88% of nbn users who work, study, access health or other services online felt the nbn network allowed them to reduce their carbon emissions.

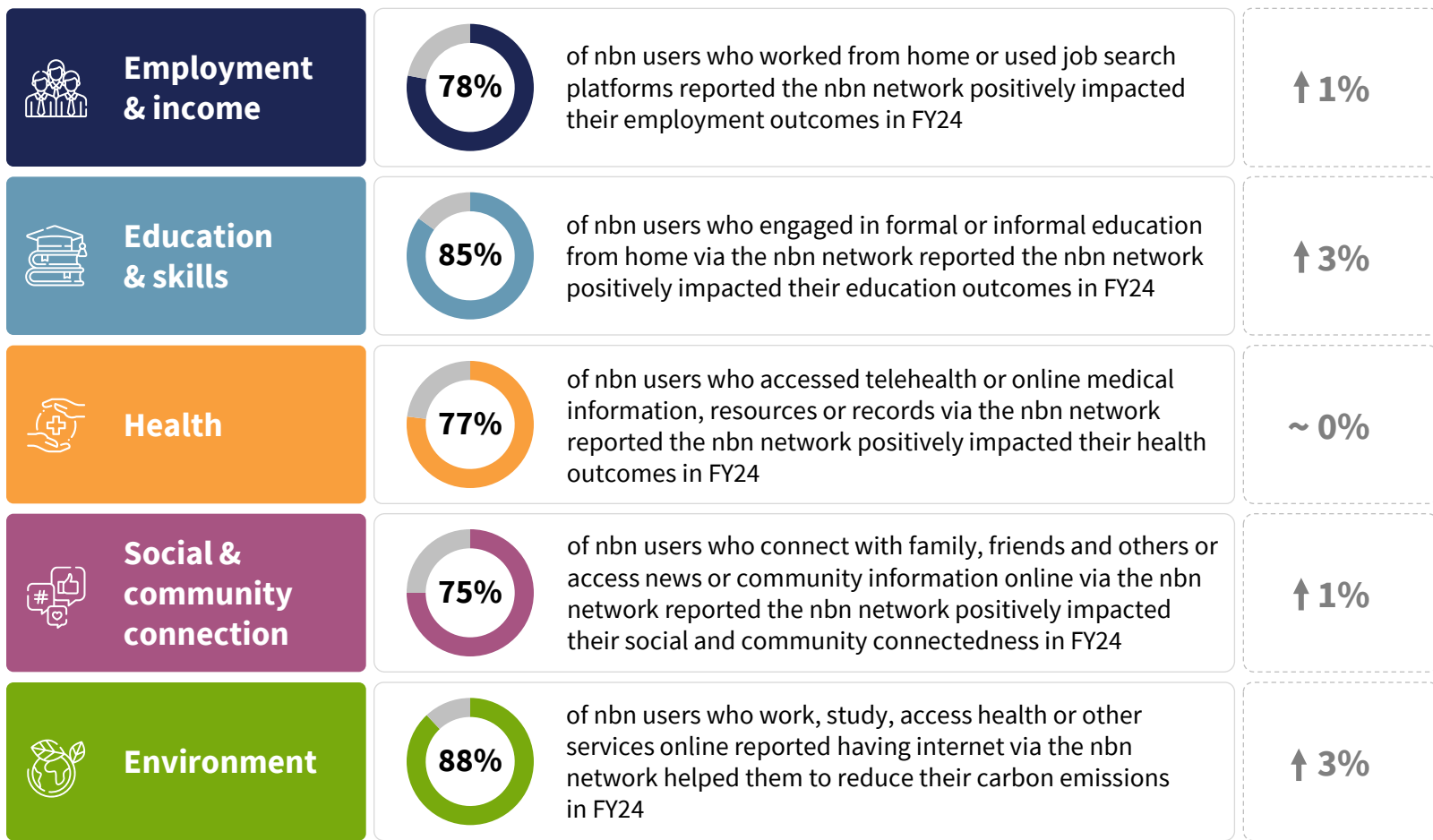
01

Key results by
social impact
domain

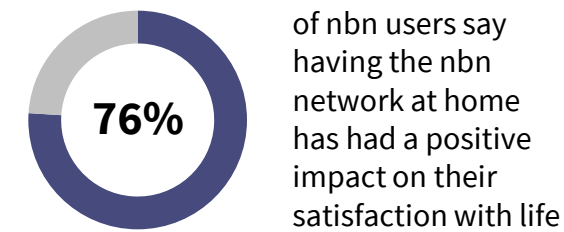


nbn-enabled internet continues to have a positive impact on user wellbeing, with reported impacts broadly consistent with FY23

Overall impact by domain in FY24¹



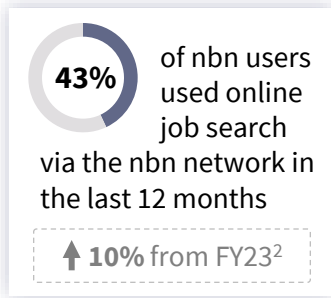
Overall wellbeing in FY24¹



↑ 1% from FY23²

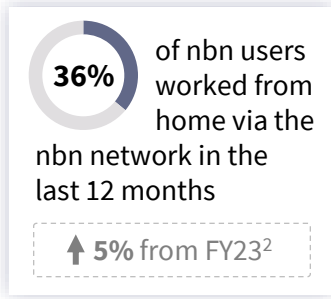
The distribution of nbn users who reported a:	FY24	Change from FY23 ²
Strong positive impact	27%	+2%
Moderate positive impact	49%	-1%
No impact	22%	-2%
Moderate negative impact	2%	+1%
Strong negative impact	0%	0%

Many nbn users worked from home (36%) or used online job search (43%) via the nbn network in FY24, with almost 8 in 10 reporting these activities improved their employment outcomes



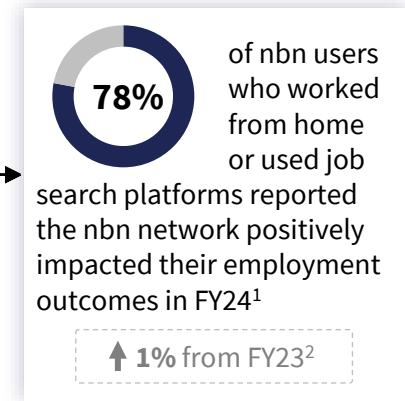
Of the 43% of nbn users...

		Change from FY23 ²
61%	reported having a better understanding of the job market and job opportunities (+)	↑ 7% ³
28%	were already employed but were able to find a better job (+)	↓ 3% ³
15%	reported no impact	↓ 2% ³
13%	were unemployed but were able to find a job (+)	↑ 5% ³



Of the 36% of nbn users...

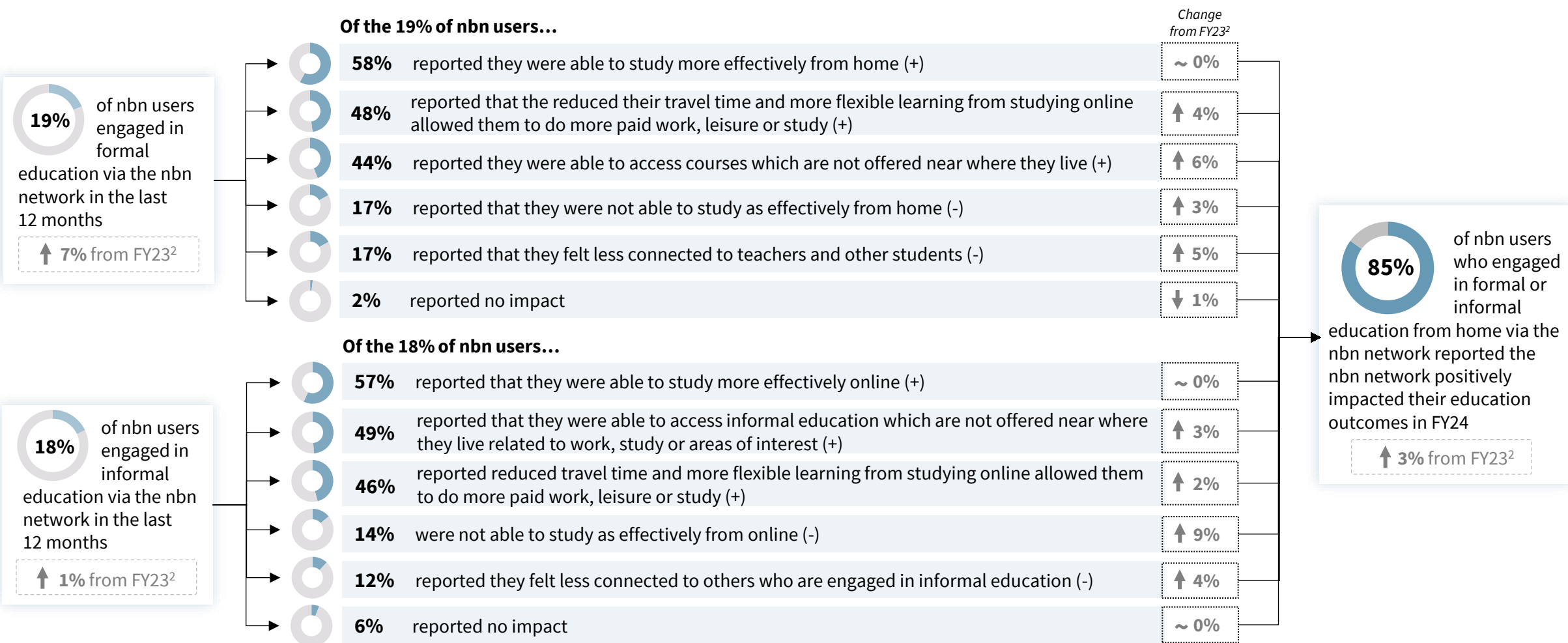
53%	reported being more productive at work and therefore more successful (+)	↑ 6%
50%	reported being better able to balance work with non-work interests and commitments (+)	↓ 3%
41%	reported being able to spend more time to spend with friends and family (+)	↓ 2%
29%	reported facing lower barriers to participating in the workforce (+)	↑ 6%
16%	reported that the boundaries between work life and home life were blurred (-)	↑ 3%
14%	reported feeling less motivated or more distracted when working from home (-)	↑ 4%
12%	reported feeling more isolated (-)	↓ 2%
8%	reported no impact	↓ 1%



(+) Indicates an impact that positively contributes to social value; (-) Indicates an impact that may erode social value.

Notes: 1. Survey was completed in Nov-24 and asked about impact over the previous twelve months, so results relate to Nov-23 to Nov-24. This period is most indicative of FY24 (Jul-23 to Jul-24).
2. Change from FY23 is rounded to the nearest % and is the percentage point increase. 3. In FY24, some of the FY23 Employment & income results have been revised based on refinements made in the impact analysis.

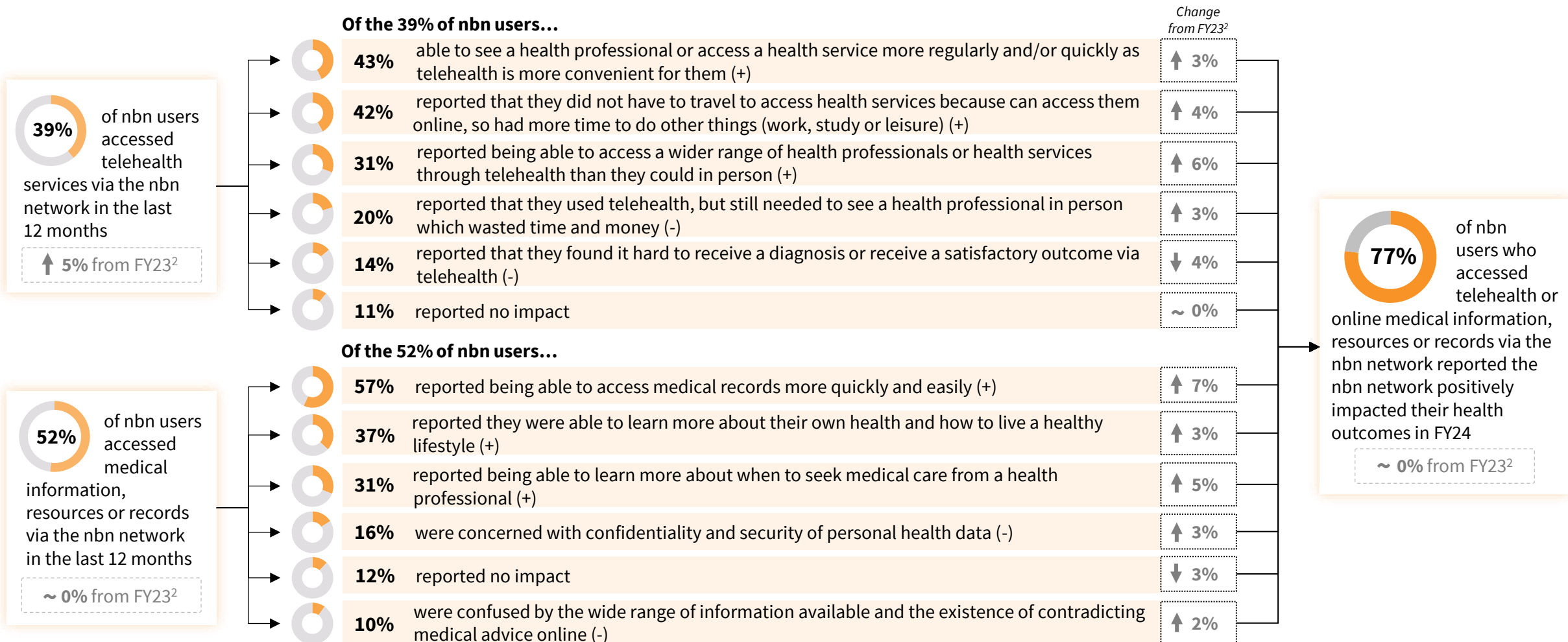
Of the nbn users engaging in formal (19%) or informal (18%) education via the nbn network in FY24, 85% reported these activities positively impacted their education outcomes



(+) Indicates an impact that positively contributes to social value; (-) Indicates an impact that may erode social value.

Notes: 1. Survey was completed in Nov-24 and asked about impact over the previous twelve months, so results relate to Nov-23 to Nov-24. This period is most indicative of FY24 (Jul-23 to Jul-24).
2. Change from FY23 is rounded to the nearest % and is the percentage point increase.

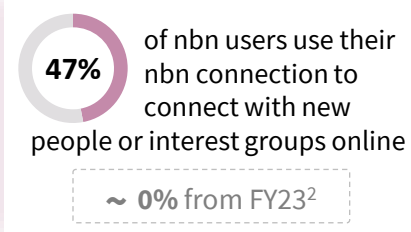
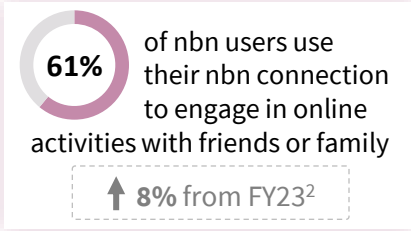
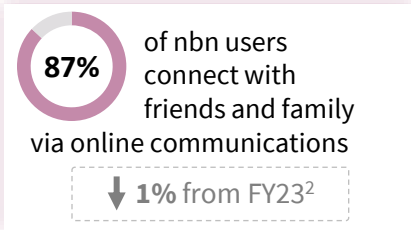
Many nbn users accessed telehealth (39%) or medical resources online (52%) via the nbn network in FY24, with 77% reporting these activities improved their health outcomes



(+) Indicates an impact that positively contributes to social value; (-) Indicates an impact that may erode social value.

Notes: 1. Survey was completed in Nov-24 and asked about impact over the previous twelve months, so results relate to Nov-23 to Nov-24. This period is most indicative of FY24 (Jul-23 to Jul-24).
 2. Change from FY23 is rounded to the nearest % and is the percentage point increase.

9 in 10 nbn users connected with friends, family, new people or interest groups online via the nbn network in FY24, with 3 in 4 reporting this improved their social and community connectedness

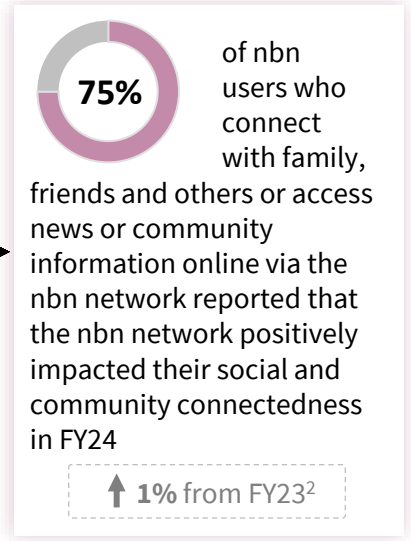


Of the 91%³ of nbn users who connected with friends, family, new people or interest groups...

Impact	Change from FY23 ²
71% felt more connected to friends or family (+)	↑ 19%
54% felt more connected to a community (+)	↑ 28%
48% felt less lonely or isolated (+)	↑ 30%
16% reported no impact	↓ 12%
15% reported experiencing online harm (-)	↑ 10%
14% reported that they felt frustrated because of the reliance on online communication to connect to friends and family (-)	↑ 11%
13% felt less connected to friends and family due to the online format of communication (-)	↑ 7%
8% reported experiencing cyberbullying (-)	↑ 6%

Of the 79% of nbn users...

68% reported feeling more informed and therefore more connected to a community (+)	↑ 16%
44% reported that they felt less lonely or isolated (+)	↑ 27%
19% reported no impact	↓ 18%
11% reported experiencing online harm (-)	↑ 6%

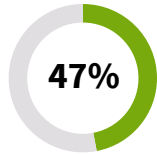


(+) Indicates an impact that positively contributes to social value; (-) Indicates an impact that may erode social value.

A larger portion of nbn users (88%) reported the nbn network helped them reduce their emissions in FY24 despite fewer nbn users reporting travelling less

Outcome

Overall impact in FY24¹



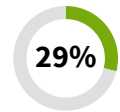
vs. FY23²
↓ 4%

of nbn users reported they travelled less in FY24 due to their ability to work, study, access healthcare or other services online via the nbn network

Insights on nbn users reporting travelling less

Whilst the percentage of nbn users reporting they study from home, work from home or access telehealth rose in FY24...

... a smaller proportion of these nbn users reported this assisted them in travelling less.



vs. FY23²
↑ 6%

of nbn users reported they study from home via the nbn network



vs. FY23²
↓ 13%

of nbn users who studied from home reported they travelled less because they were able to study from home via the nbn network (+)



vs. FY23²
↑ 5%

of nbn users reported they work from home via the nbn network



vs. FY23^{2,3}
↓ 10%

of nbn users who worked from home reported they travelled less because they were able work from home via the nbn network (+)



vs. FY23²
↑ 5%

of nbn users reported they access telehealth online via the nbn network



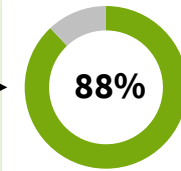
vs. FY23²
↓ 15%

of nbn users who accessed telehealth reported they travelled less because they were able to access services via the nbn network (+)



vs. FY23²
↓ 7%

of nbn users reported they were able to travel less due to access other services online via the nbn network(+)



of nbn users who work, study, access healthcare or other services online reported having internet via the nbn network helped them reduce their carbon emissions in FY24

↑ 3% from FY23²

These movements contribute to an overall **4% reduction** in nbn users travelling less in FY24.



CASE STUDY
Smart energy
appliances

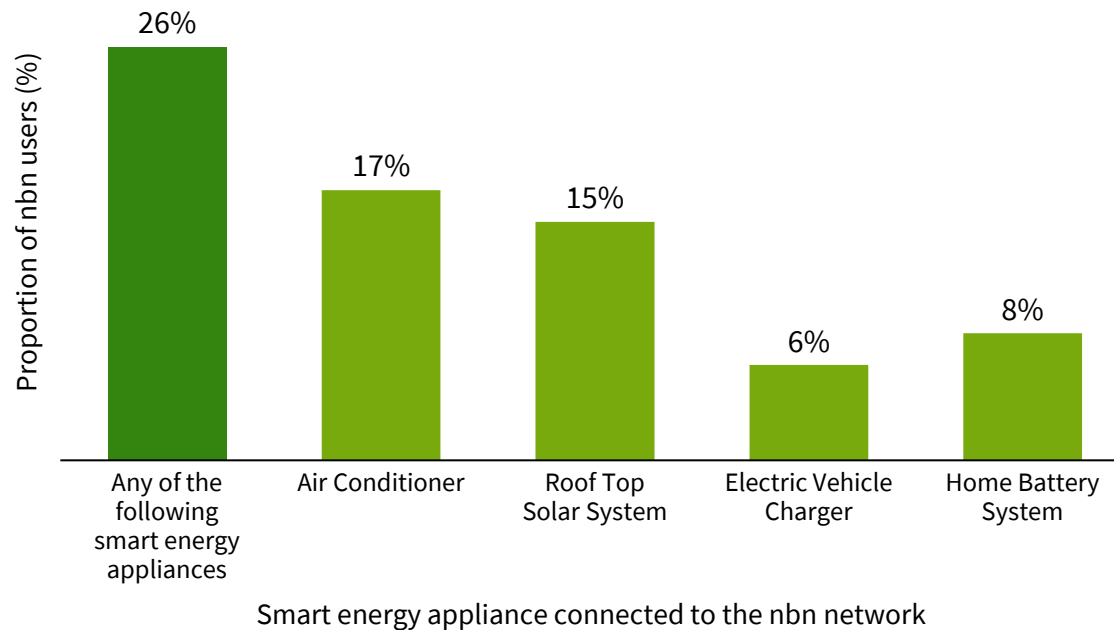
26% of nbn users reported connecting smart energy appliances to the nbn network, with air conditioner and roof top solar systems the most popular

Connection of smart energy appliances to the nbn network



In FY24, a new question was introduced to the Social Impact Measurement survey, to gather data on the proportion of nbn users who connected a smart energy appliance to the nbn network.

26% of nbn users reported that they connected a smart energy appliance (air conditioner, roof top solar system, electric vehicle charger and/or home battery system) to the nbn network.



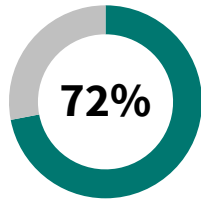
02

Key results for target groups



Low income nbn users reported a 3% increase in positive wellbeing impacts compared to FY23, with FY24 results slightly lower compared to the national average

Wellbeing (Overall)



↑ 3% from FY23¹
vs. sample average
4% lower

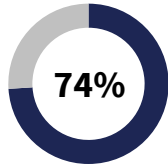
72% of low income nbn users say having the nbn network at home has had a positive impact on their satisfaction with life.

The distribution of nbn users who reported a:

	FY24	vs. FY23 ¹
Strong positive impact	24%	+1%
Moderate positive impact	48%	+1%
No impact	26%	-3%
Moderate negative impact	1%	0%
Strong negative impact	0%	0%

Overall Impact (Domain)

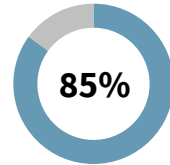
Employment & income



vs. FY23¹
↑ 2%
vs. entire sample
4% lower

74% of low income nbn users who worked from home or used job search platforms reported the nbn network positively impacted their employment outcomes in FY24.

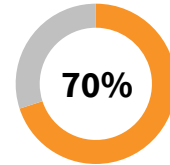
Education & skills



vs. FY23¹
↑ 11%
vs. entire sample
consistent

85% of low income nbn users who engaged in formal or informal education from home via the nbn network reported the nbn network positively impacted their education outcomes in FY24.

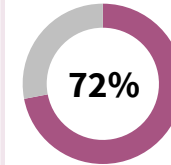
Health



vs. FY23¹
↓ 3%
vs. entire sample
7% lower

70% of low income nbn users accessed telehealth or online medical information, resources or records via the nbn network reported the nbn network positively impacted their health outcomes in FY24.

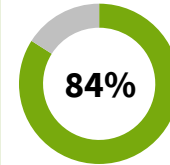
Social & community connection



vs. FY23¹
↑ 1%
vs. entire sample
3% lower

72% of low income nbn users who connect with family, friends and others or access news or community information online via the nbn network reported the nbn network positively impacted their social and community connectedness in FY24.

Environment

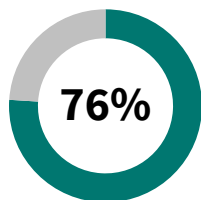


vs. FY23¹
↑ 4%
vs. entire sample
4% lower

84% of low income nbn users who work, study, access health or other services online reported having internet via the nbn network helped them to reduce their carbon emissions in FY24.

nbn users in regional and remote areas reported positive wellbeing impacts of similar magnitude to the national average

Wellbeing (Overall)



↑ 3% from FY23¹
vs. sample average
consistent

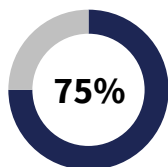
76% of regional and remote nbn users say having the nbn network at home has had a positive impact on their satisfaction with life.

The distribution of nbn users who reported a:

	FY24	vs. FY23 ¹
Strong positive impact	26%	-2%
Moderate positive impact	50%	+5%
No impact	22%	-3%
Moderate negative impact	2%	0%
Strong negative impact	0%	0%

Overall Impact (Domain)

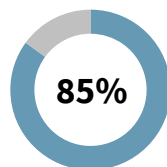
Employment & income



vs. FY23¹
↓ 3%
vs. entire sample
3% lower

75% of regional and remote nbn users who worked from home or used job search platforms reported the nbn network positively impacted their employment outcomes in FY24.

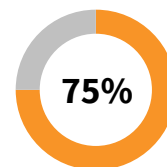
Education & skills



vs. FY23¹
↑ 5%
vs. entire sample
consistent

85% of regional and remote nbn users who engaged in formal or informal education from home via the nbn network reported the nbn network positively impacted their education outcomes in FY24.

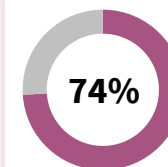
Health



vs. FY23¹
↓ 2%
vs. entire sample
2% lower

75% of regional and remote nbn users accessed telehealth or online medical information, resources or records via the nbn network reported the nbn network positively impacted their health outcomes in FY24.

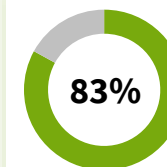
Social & community connection



vs. FY23¹
↑ 1%
vs. entire sample
1% lower

74% of regional and remote nbn users who connect with family, friends and others or access news or community information online via the nbn network reported the nbn network positively impacted their social and community connectedness in FY24.

Environment

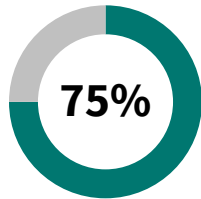


vs. FY23¹
↓ 4%
vs. entire sample
5% lower

83% of regional and remote nbn users who work, study, access health or other services online reported having internet via the nbn network helped them to reduce their carbon emissions in FY24.

First Nations nbn users reported positive wellbeing impacts of similar magnitude to the national average

Wellbeing (Overall)



↑ 1% from FY23¹
vs. sample average
1% lower

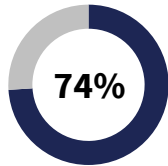
75% of First Nations nbn users say having the nbn network at home has had a positive impact on their satisfaction with life.

The distribution of nbn users who reported a:

	FY24	vs. FY23 ¹
Strong positive impact	31%	-4%
Moderate positive impact	44%	+5%
No impact	21%	+1%
Moderate negative impact	4%	-2%
Strong negative impact	0%	0%

Overall Impact (Domain)

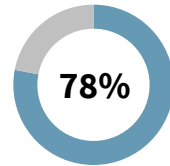
Employment & income



vs. FY23¹
↓ 18%
vs. entire sample
4% lower

74% of First Nations nbn users who worked from home or used job search platforms reported the nbn network positively impacted their employment outcomes in FY24.

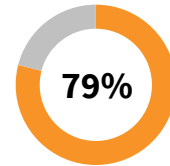
Education & skills



vs. FY23¹
↑ 3%
vs. entire sample
7% lower

78% of First Nations nbn users who engaged in formal or informal education from home via the nbn network reported the nbn network positively impacted their education outcomes in FY24.

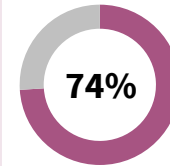
Health



vs. FY23^{1,2}
↓ 4%
vs. entire sample
2% higher

79% of First Nations nbn users accessed telehealth or online medical information, resources or records via the nbn network reported the nbn network positively impacted their health outcomes in FY24.

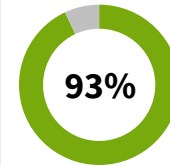
Social & community connection



vs. FY23¹
↓ 6%
vs. entire sample
1% lower

74% of First Nations nbn users who connect with family, friends and others or access news or community information online via the nbn network reported the nbn network positively impacted their social and community connectedness in FY24.

Environment



vs. FY23^{1,2}
↑ 6%
vs. entire sample
5% higher

93% of First Nations nbn users who work, study, access health or other services online reported having internet via the nbn network helped them to reduce their carbon emissions in FY24.

03

Appendix: Methodology



nbn's Social Impact Measurement surveys over 1,500 users to measure and understand the social impacts enabled by the nbn network

Methodology overview:

- nbn developed a Social Impact and Value Measurement Framework in FY24 (first applied in August 2023) to better measure and understand the social impacts enabled by the nbn network.¹
- The first survey measured a period most indicative of FY23.
- The November 2024 Social Impact Measurement is the second survey completed by nbn to measure outcomes against this framework. The five outcomes measured are Employment & income, Education & skills, Health, Social & community connection and Environment.
- In November 2024, a nationally representative group of 1,516 nbn users, aged 18 and over were surveyed. This sample size was targeted to achieve statistically significant results with a 95% confidence interval and +/- 3% margin of error.
- The survey was run over an 8 day period in November 2024. Respondents are asked to consider the way they use the internet and the impact of the use of home internet over the last 12 months (results relate to November 2023 to November 2024 and is most indicative of FY24).
- Responses were also collected for three select target groups (low income, regional and remote and First Nations). The target groups also achieve statistically significant results, with a larger margin of error, however the overall population is the focus of this work.
- The survey was fielded through a market research panel, managed by Dynata, and contained 40 questions which took around 13 minutes for respondents to complete.
- First Nations survey responses were weighted by income, with low-income respondents allocated a higher weighting to be more representative of the First Nations population. Weighting was required for the First Nations group as the survey sample had more high-income respondents than the national First Nations population.
- Dynata reviews all verbatims, straight lining, speeding and other sense checking to ensure high quality data.

Statistical significance of the survey data:

- The sample size required to achieve statistically significant results is based on two statistical measures:
 - Confidence interval:** the probability that the estimation of the location of a statistical parameter (e.g. mean) in a sample is true for a population. The survey used a confidence interval of 95%.
 - Margin of error:** the degree in which real world results may deviate from the results of the survey. The survey used a margin of error of +/- 3%.
- Based on the selected confidence level and margin of error, the minimum sample size required to ensure statistically significant results for the overall sample is 1,068 (compared to the survey sample size achieved of 1,516).

Target groups:

- Regional and remote Australians n = 467** (*margin of error of +/- 5%*). This groups is defined based on respondent's postcode. Postcodes were matched to the Australian Statistical Geography Standard (ASGS) Remoteness Structure. Within this structure, responses with postcodes classified as either Inner Regional Australia, Outer Regional Australia, Remote Australia or Very Remote Australia are regional and remote and Major Cities of Australia are classified as not regional and remote.
- Low-income Australians n = 578** (*margin of error of +/- 4%*). This group is defined as anyone with a household income of less than \$70,000.
- First Nations people n = 136** (*margin of error of +/- 8%*). This group is defined by respondents self-reporting within the survey.

Weighting of the First Nations survey sample:

- In the FY24 survey (conducted in November 2024), the First Nations sample under-represents First Nations people who are low-income (18% in surveyed sample, compared to 44% in the population as a whole). In the analysis, we correct for this by attaching a higher weight for each low-income First Nations individual. This adjustment allows estimates to achieve the same expected value as a sample with 44% low-income First Nations respondents.

Survey sample across years:

Sample	FY24	FY23
Complete Sample	100% (1,516)	100% (1,518)
Low income	38% (578)	43% (646)
Regional and remote	31% (467)	28% (422)
First Nations	9% (136)	6% (92)

Survey response criteria:

- Survey indicators are based on the impact of the nbn in a specific year and can be compared year to year to determine if a change has occurred over time. The FY24 survey was the second survey completed by nbn.
- Results do not report on improvement compared to a counterfactual, such as pre-nbn home internet.
- It is not possible to ask respondents to compare the impact of the nbn with the impact of the internet in their home prior to having the nbn. This is because many households have had the nbn for several years and respondents would not accurately be able to differentiate between impacts of the nbn and non-nbn internet.
- The survey asks respondents to assess their overall satisfaction with life. This question does not attempt to associate the nbn with life satisfaction, but it allows responses to this question to be compared to other surveys of life satisfaction.

About Ember Advisors

Ember Advisors is an Australian management consultancy that blends strategy, advanced analytics, and public policy expertise to deliver data-driven, practical solutions to complex public challenges.

We specialise in supporting public and social sector organisations, leveraging the expertise of our team of data scientists, actuaries, and public policy professionals. Our work encompasses data and AI strategy development, policy design, operational analytics, compliance and outcomes evaluation.

At every step, we are guided by our core values: serving the public good, advising with integrity, putting our clients first, and offering a great place to work for our people.

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