



FACT SHEET

CHANGES TO THE NATIONAL VISITOR SURVEY IN 2019

WHAT IS THE NATIONAL VISITOR SURVEY?

The National Visitor Survey (NVS) has been run continuously since 1998 and gives an official measure of Australian residents day, overnight and outbound travel. Interviews are conducted with 120,000 Australians aged 15 years and over each year through a Computer Assisted Telephone Interviewing (CATI) approach.

WHAT CHANGES HAVE BEEN MADE TO THE NVS INTERVIEWING APPROACH SINCE 1998?

Over time, the NVS CATI approach has evolved in response to changes in telecommunications and their use.

- Up until 2013, all interviews were made through calls to household landlines.
- Between 2014 and 2018, interviews were evenly split across calls made to household landlines (50%) and mobile phones (50%) using a dual-frame sample design.
- From 2019, interviews will be made through calls to mobile phones.

THE MOVE TO 100% MOBILE SAMPLING

WHY HAS THE NVS MOVED TO 100% MOBILE INTERVIEWING?

The move has been driven by rapid take up of mobile phone technology by the Australian population over the past decade and the decline in landline phone ownership and use. Reflecting this, the 100% mobile sample frame now provides better coverage of the population and improved benchmarking characteristics.

Any perceived benefits of retaining a dual-frame survey design are outweighed by the reduction in NVS sample errors that comes with the move to 100% mobile interviewing. It is anticipated that the relative standard errors (RSEs) for domestic overnight trip estimates will be reduced by more than 10% at a national level and for a majority of states and territories in 2019 (Table 1).

Table 1: Change in RSEs – 100% mobile interviewing relative to dual frame

State / territory	Dual frame RSE (%)	100% mobile RSE (%)	Relative reduction in RSE (%)
New South Wales	0.6	0.5	12%
Victoria	0.7	0.6	11%
Queensland	0.8	0.7	17%
South Australia	1.7	1.3	24%
Western Australia	1.4	1.0	31%
Tasmania	2.5	1.8	25%
Northern Territory	4.5	3.0	34%
Australian Capital Territory	2.1	1.9	10%
AUSTRALIA	0.38	0.31	18%

The move also makes the NVS weighting process simpler and more efficient as there is no longer the need to merge separate landline and mobile phone sample.

HOW DOES THE NEW METHODOLOGY WORK?

The NVS continues to have an annual sample of 120,000 with all calls made to mobile phones. The approach retains the same respondent selection process applied to mobile phone interviewing used on the NVS since 2014. This means:

- a random digit dialling (RDD) mobile frame is used to cover all mobile phones
- the selected respondent is the person answering the phone (so long as they are aged 15 years and over and has been or intends living in Australia for one year or more).

While there is currently no geographic information attached to RDD mobile phone sample, the 120,000 mobile interviews will fall out naturally in the same way the mobile component of the NVS previously did. Due to the large sample size, this method provides sample distribution that aligns proportionally to the population.

HOW DOES TOURISM RESEARCH AUSTRALIA KNOW THE NEW METHODOLOGY WORKS?

Mobile phone interviewing has been used successfully on the NVS since 2014. The accompanying weighting regime is also proven as it aligns very closely to the approach used effectively for 100% landline interviewing on the NVS for 15 years up until 2013.

REVISIONS TO POPULATION PROJECTIONS

HOW ARE POPULATION PROJECTIONS USED IN THE NVS?

ABS population projections for those aged 15 years and over are used as an input to NVS weighting. Recent changes to population projections will therefore impact NVS estimates from 2019 onwards.

WHAT DO THE ABS POPULATION PROJECTIONS DO?

They give a picture of the growth and change in resident population.

WHY HAVE THE ABS POPULATION PROJECTIONS CHANGED?

The ABS publishes new population projections after every Australian Census. The last Census was held in 2016.

WHEN WERE THE LATEST PROJECTIONS RELEASED?

November 2018.

HOW MUCH HAVE THE POPULATION PROJECTIONS CHANGED?

For Australia, the latest series projections are around 0.6% lower than those previously published for June 2018. At a state level, there has been a mix of upward and downward adjustments in the latest projections. Table 2 indicates the largest changes have been for Victoria (up 4%), Western Australia (down 11%) and the Northern Territory (down 4%).

Table 2: Population projections by state for June 2018^(a)

State / Territory	Previous	Latest	Change	
	'000	'000	'000	%
New South Wales	6,413	6,505	92	1
Victoria	5,093	5,273	180	4
Queensland	4,130	4,032	-99	-2
South Australia	1,447	1,427	-20	-1
Western Australia	2,351	2,089	-262	-11
Tasmania	432	433	1	0
Northern Territory	203	195	-8	-4

Australian Capital Territory	342	340	-1	0
AUSTRALIA	20,411	20,294	-117	-0.6

(a) For those aged 15 years and over.

WHEN WILL TRA START USING THE NEW POPULATION PROJECTIONS?

From the March quarter 2019 NVS release.

IMPACTS OF THE METHODOLOGY CHANGES

WILL THE CHANGES HAVE AN IMPACT ON NVS ESTIMATES?

Yes. NVS estimates at the national, state, territory and regional levels will be affected from the March quarter 2019 onwards. Quarterly survey estimates will be affected immediately. The full impact on year ending estimates will flow through by the December 2019 NVS release. Typically, the mobile phone sample produces higher trip rates. It is anticipated that the change in methodology will see an increase in the baseline trip population.

WHAT OVERALL IMPACT WILL THE CHANGES HAVE ON NVS ESTIMATES?

The changes can be expected to increase NVS estimates in 2019. When applied to the year ending December 2018, TRA analysis indicates that the changes would have brought an increase in estimates of around 4 percentage points for overnight trips, 2 percentage points for visitor nights and 3 percentage points for overnight spend at the national level. Similarly, day trips would have increased by around 2 percentage points and day spend 3 percentage points (Table 3).

Table 3: Indicative net impact of changes on published NVS key metrics, year ending December 2018

Metric	Published	Indicative	Difference	
	Number		Number	%
Overnight trips (million)	105.6	109.6	4.0	4
Visitor nights (million)	376.1	383.4	7.3	2
Overnight spend (\$ billion)	72.7	75.2	2.5	3
Day trips (million)	206.1	209.6	3.6	2
Day spend (\$ billion)	22.5	23.1	0.6	3

WHAT IMPACT WILL THE MOVE TO 100% MOBILE INTERVIEWING HAVE ON NVS ESTIMATES?

The move can be expected to have an upward influence on NVS estimates in 2019. Using calculations derived for the year ending December 2018 as an indicator, the increases attributable to this change would vary between 2% and 5% for key NVS metrics at the national level (Table 4).

Table 4: Indicative impact of 100% mobile interviewing on published NVS key metrics, year ending December 2018

Metric	Published	Indicative 100% mobile ^(a)	Difference	
	Number		Number	%
Overnight trips (million)	105.6	110.5	4.9	5
Visitor nights (million)	376.1	388.0	11.9	3
Overnight spend (\$ billion)	72.7	76.2	3.4	5
Day trips (million)	206.1	211.0	4.9	2
Day spend (\$ billion)	22.5	23.4	0.8	4

(a) The indicative 100% mobile estimates have been calculated by weighting trips taken in 2018 by those interviewed on mobile phones (i.e. half of all those interviewed under the dual-frame methodology).

WHAT IMPACT WILL THE USE OF NEW POPULATION PROJECTIONS HAVE ON NVS ESTIMATES?

At the national level, they can be expected to have a slight downward influence on NVS estimates in 2019. Revised estimates for the year ending December 2018 are between 0.3% and 1.2% lower than originally published for key NVS metrics (Table 5).

Table 5: Impact of new population projections on published NVS key metrics, year ending December 2018

Metric	Originally Published	Revised	Difference	
	Number		Number	%
Overnight trips (million)	105.6	104.9	-0.7	-1
Visitor nights (million)	376.1	371.6	-4.4	-1
Overnight spend (\$ billion)	72.7	71.8	-0.9	-1
Day trips (million)	206.1	205.5	-0.6	-0
Day spend (\$ billion)	22.5	22.4	-0.1	0

OTHER FACTS

HAS PREVIOUSLY PUBLISHED NVS DATA BEEN REVISED?

Yes. TRA has revised NVS estimates for the March quarter 2017 through to the December quarter 2018 using the new ABS population projections. This means:

- any NVS estimates published from March 2019 onwards for the March quarter 2017 to the December quarter 2018 will differ from those originally published
- NVS estimates for the March quarter 2017 to the December quarter 2018 and March 2019 onwards have been calculated using the same population projection series
- any impact from the move to 100% mobile interviewing is not captured in the revisions.

WHY HAVE REVISIONS BEEN APPLIED TO 2017 AND 2018 ONLY?

The ABS population projections were updated from 2017 onwards. For consistency, TRA has revised NVS data over the same period.

CAN 2019 NVS ESTIMATES BE COMPARED WITH PREVIOUS DATA?

Yes, with caution. When comparing 2019 NVS estimates with those from earlier years, the influence from moving to 100% mobile interviewing should be considered. In general, this typically produces higher NVS estimates thus having an upward influence on growth rates.

IS THERE A BREAK IN THE NVS TIME SERIES?

Yes, a break in series has been unavoidable. A clearer picture around the extent of this break is likely once data for all quarters in 2019 have been processed.

WILL OTHER TOURISM OUTPUTS BE AFFECTED?

Yes. Data from the NVS is an input to the Australian Tourism Satellite Account (ATSA), the State Tourism Satellite Account (STSA), Tourism Forecasts, the State of the Industry Report and Regional Expenditure estimates, so there will be flow-on effects to these tourism outputs from the changes to the NVS in 2019.