Issues facing Australia’s data collections

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An overview of today’s presentation

National visitor survey
Changes in geographical classification
Conclusion
National Visitor Survey issues
Overview of the issue – land-line interviewing

- NVS uses landline telephone sample, covering all people with landlines
- Growth in mobile phones => growth in “mobile-only”, not contactable through landline sample
- Current approach does not interview mobile-only population but their behaviour is “imputed” through weighting
  - Assumes mobile-only travel behaviour is same as "landline population"
- Non-coverage of mobile-only will bias NVS results if mobile-only people have different domestic travel
- NVS Mobile Phone pilot conducted to address this issue

National Visitor Survey issues
Reporting and possible bias

- Little information available on Australia’s mobile-only population
- Australian Communications and Media Authority (ACMA) has released report: Convergence and Communications Report, March 2009. Refers to June 2008
- Mobile use:
  - 83% of all people over 18 have mobile phone
- Mobile-only
  - 12% of people are mobile-only
  - 25% of people 18-24 mobile-only
  - 40% of young adults in shared accommodation mobile-only
National Visitor Survey issues

Overview of the issue – mobile phone interviewing

- Unable to detect disconnected numbers
- High rate of call back
- Difficulty with third party interviews
- Multiple phone ownership

National Visitor Survey issues

Phone-type usage

% users by age - mobile phone
% users by age - fixed line
National Visitor Survey issues
Phone-type usage

Figure 21 Mobile phone users without a fixed-line telephone, by age

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Jan-09</th>
<th>Jun-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>14-17</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>18-24</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>25-34</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td>35-44</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>45-54</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>55-64</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>65+</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>


National Visitor Survey issues
Pilot study objectives

- Compare domestic travel behaviour of mobile-only with current sample to determine the likely bias from their non-coverage
- Test data collection of NVS data on mobile phones
- Recommend whether or not a mobile phone component needs to be introduced to the NVS to cover mobile-only
- Identify key issues which need addressing in introducing a mobile phone component to NVS to cover mobile-only
- Recommend next steps
National Visitor Survey issues
Pilot study findings - statistical

- For daytrips and outbound
  - mean trips per person higher for mobile than for NVS

- For overnight trips
  - mean trips per person same for mobile and NVS

- Comparing mobile-only with mobile plus landline
  - means trips slightly higher for the mobile plus landline than for mobile-only

National Visitor Survey issues
Pilot study findings - statistical

- Tentative conclusions
  - Little bias in overnight trip estimates
  - Possible under-estimation of daytrips and outbound trips

- Tentative conclusions because:
  - differences not statistically significant
  - non-comparability of NVS and mobile populations
  - differences due to methodology/sample profile etc
National Visitor Survey issues
Pilot study findings - operational

- Increased costs of mobile phone sampling:
  - Issue 1: Longer interview time and more calls required
    - 1.6 cost factor (60% greater cost per achieved interview)
  - Issue 2: Screening for mobile-only (26% of mobile owners)
    - 5.0 cost factor
  - Issue 3: Screening to over-sample smaller states and territories
    - 3.1 cost factor

National Visitor Survey issues
Pilot study findings - operational

- Overall cost factor could be in the range 10-16 depending on the final design
- The high cost of mobile phone sampling means that the share of sample of mobiles must be reduced
- BUT if the mobile sample share is too low sample error will increase—there is a minimum point
- The best design takes these issues into account
- This best design would still have a mobile phone survey with an added cost of the same order of the current NVS, possibly more
Geography

Background

• Many key national tourism statistics are available at a regional level.

• The Australian Standard Geographical Classification (ASGC), is currently used for the majority of tourism statistics.

• Under ASGC, the most detailed tourism statistics are available at the Statistical Local Area (SLA) level (approximately 1400 regions across Australia).

• Many other statistics are available for ‘Tourism Regions’, which are groups of SLAs.

Geography

Background

• Improved data sources and technology has allowed the ABS the opportunity to create a better geography optimised for the release of official statistics.

• This new standard is called the Australian Standard Geography Standard (ASGS), and it will replace the ASGC as the geographic framework for Australia’s official statistics.

• Under ASGS, Tourism Regions will be made from groups of Statistical Areas Level 2 (SA2s). There are about 2,200 SA2s in Australia.
**Geography**

**Structures**

- ABS Structures
  - Statistical Area Level 2 (SA2)
  - Statistical Area Level 1 (SA1)
  - Mesh Blocks

- Non-ABS Structures
  - Tourism Regions (TR)
  - Postal Areas (POA)
  - State Suburbs (SSC)
  - Commonwealth Electoral Divisions (CED)
  - State Electoral Divisions (RED)
  - Australian Drainage Divisions (ADD)
  - Natural Resource Management Regions (NRMR)
  - Local Government Areas (LGA)

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**Geography**

**Implications**

- The implications of a new geographical system are wide reaching – not just on tourism, but economy wide
- TRA will backcast the entire IVS and NVS time series
- Matching of 3.3 million unit records required
- Automatic matching completed
- 36,000 manual matches required
Geography

Advantages

• The implementation of a new robust and stable geography means that changes over time are minimised, assisting in the maintenance of quality time-series data.

• Improved geographical system together with improved methods allows for more accurate data

• The ASGS provides more accurate correspondence to translate ABS data to non-ABS administrative and geographic regions

Conclusions

Research is critical to support future growth

• Awareness of (and changes to) national and internal standards

• Research communities and partnerships need to develop

• Methodology research required to maintain and develop collections
Questions

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