



The use of the Internet in future ABS collections

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Shed some light on Census night. Tuesday 9 August 2011



This session will cover:

2011 Census

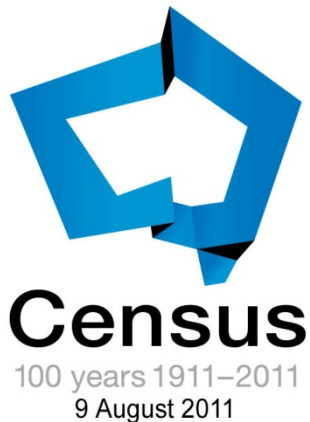
- Objectives and key goals for 2011
- Main changes from 2006

eCensus

- First introduced in 2006
- Extended in 2011
- Plans for 2016

Use of the infrastructure for other collections

- Internet applications for other collections, such as the Agricultural Census in 2011



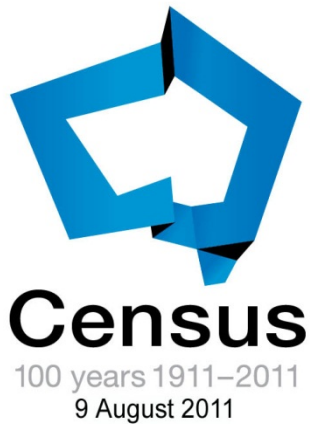
Even though the 2011 Census has no content changes from 2006, substantial improvements are expected

2011 Census objectives

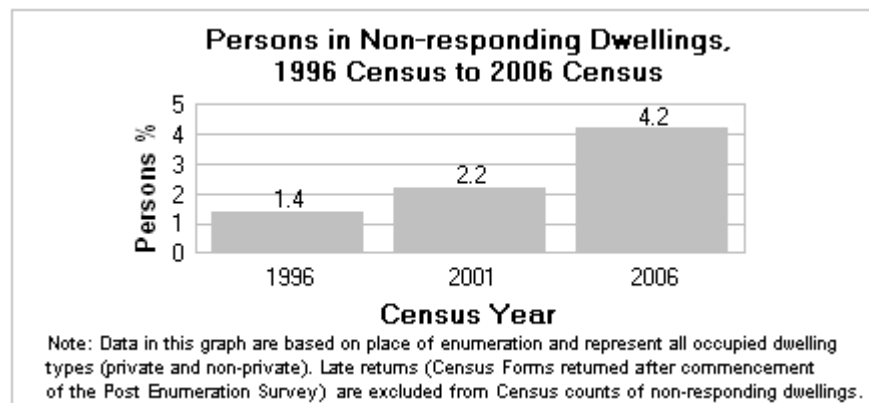
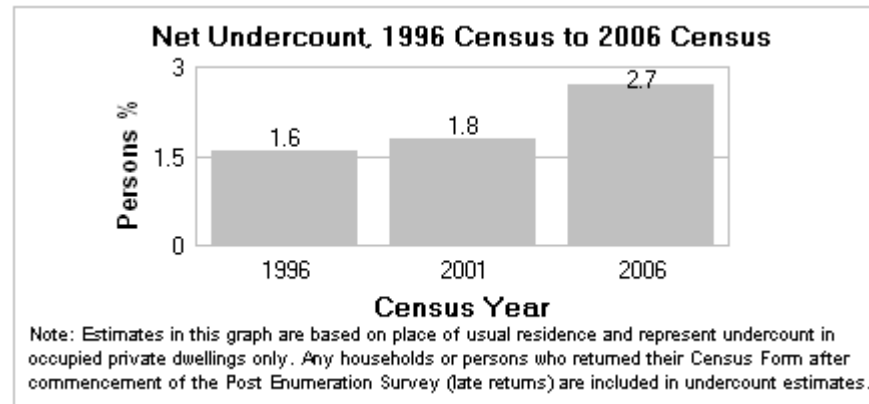
- To count all people in Australia on Census night, and the dwellings in which they reside
- To provide timely, high quality and relevant data for small geographic areas and small population groups

Key goals for 2011

- Improve the coverage of the Census
 - With emphasis on Indigenous and other key population groups
- Ensure the relevance of the Census data to users and providers
- Use resources effectively and efficiently
- Protect the privacy of providers



Coverage is a key issue - the net undercount rate and number of persons imputed into occupied dwellings increased markedly over the past decade





New strategies have been adopted and others enhanced to improve coverage

Regional Engagement Strategy

- **Earlier, concentrated engagement**

Indigenous Enumeration Strategy

- **Greater engagement, improved planning, better local recruitment**

Northern Australia Enumeration Strategy

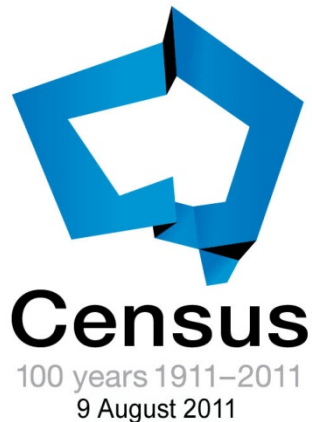
- **Changed processes in response to challenges such as vast distances, dispersed and mobile population, remote communities, high numbers of tourists, and fly in/fly out workforce**

End to end quality management

Collector workload maps online using Google Maps

Promotion of eCensus

- **Allows resources to be more effectively used to follow-up non-responding households**



There is great pressure on the Census program to become more efficient and effective and adopt new technologies

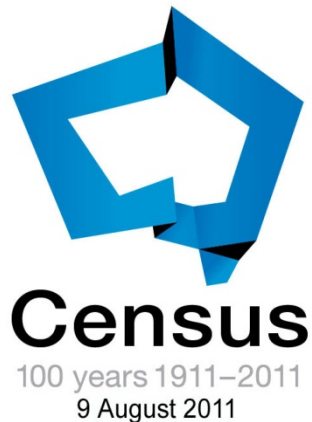
Drivers of change

- Increasing costs of censuses
- Coverage challenges
- Technology advances
- Citizen expectations about engaging with governments
- Digital-native generation increasing
- Increased Internet access
 - National Broadband Network (NBN) rollout in Australia
 - Increased household access
 - Increased access via mobile technologies
 - Increased access to community Internet facilities



The eCensus was first introduced in Australia in 2006

- Not heavily promoted
- Collectors visited all dwellings and provided households with both an eCensus code and paper form
- About 10% of households responded through the eCensus form
- Groups in the population with relatively high eCensus rates included:
 - Households with broadband Internet connection
 - High household and individual income
 - High levels of education and
 - Some birthplace groups



ABS and IBM worked in partnership to develop the eCensus

2006 eCensus system

- Developed in partnership between ABS and IBM
- Joint development of the eCensus application
- IBM hosted the application due to the high computing power needed during the short Census period

Characteristics and load

- Overall capacity could cater to around 30% take-up.
- 32% of forms were submitted during the 4 hour peak (7 pm-11 pm) on Census night



In 2011, householders will have the option to provide their census data via eCensus, paper form picked up by collector or mailed to ABS

- eCensus offered first by collector. If eCensus acceptable to household, no paper form will be left.
- Non-response follow-up by collectors to households that don't complete the eCensus or mail back their form.

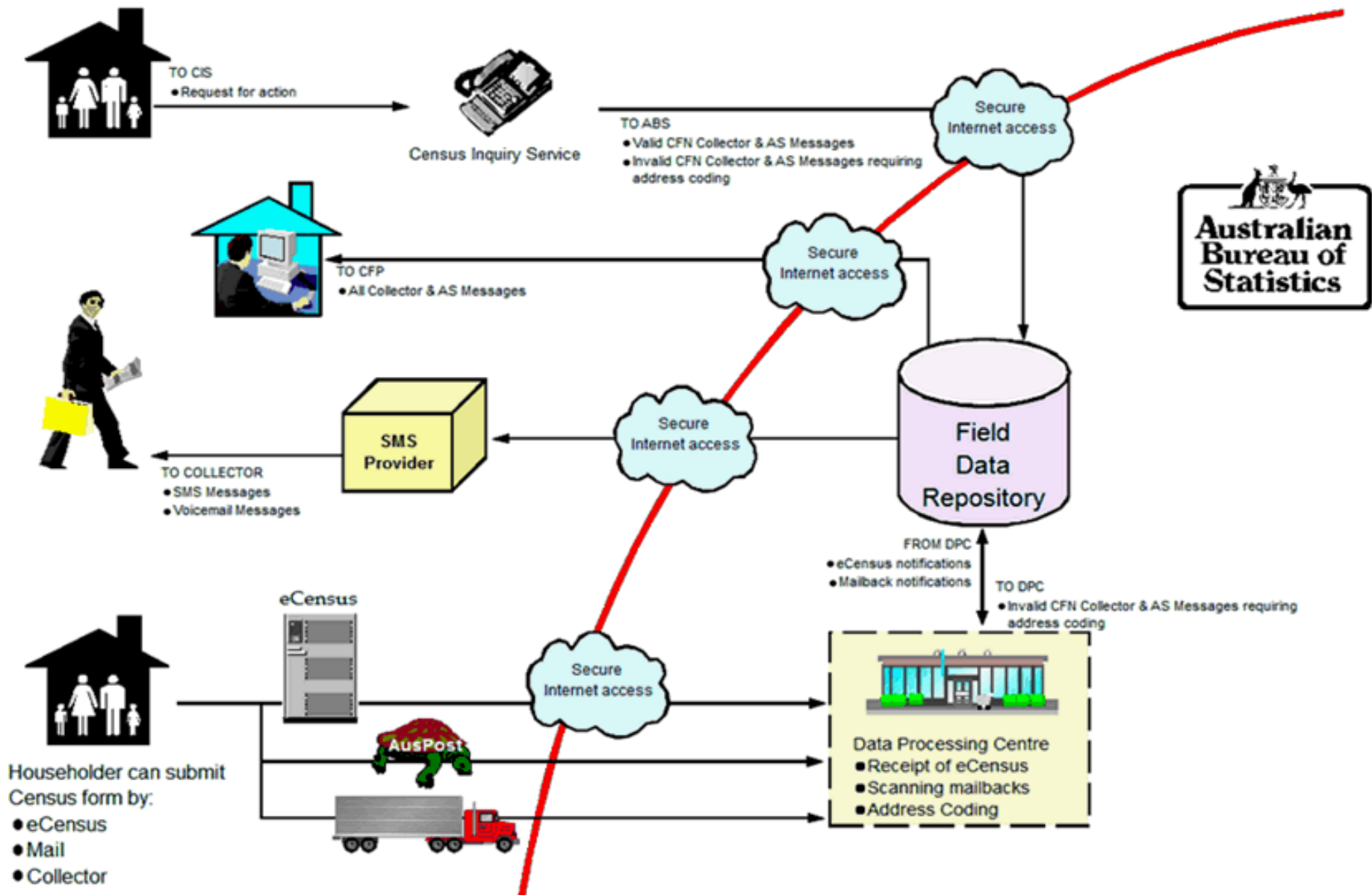


We expect a much greater take-up of the eCensus in 2011

eCensus features

- An eCensus take-up of 30% at minimum and up to 40% is expected
 - Dress Rehearsal Test (Aug 2010) take-up was 27%
- The eCensus form functionality has minimal changes from 2006
- The application will again be hosted by IBM
- System design changes have enhanced the capacity to deal with the expected peak system loads on Census night
 - Change to client side computing model
 - eCensus users download the application, so reduced connection time with server
 - Expecting peak loads of 140 form submissions per second

With increased eCensus, rapid, effective communication between the office and field to manage workloads will be critical

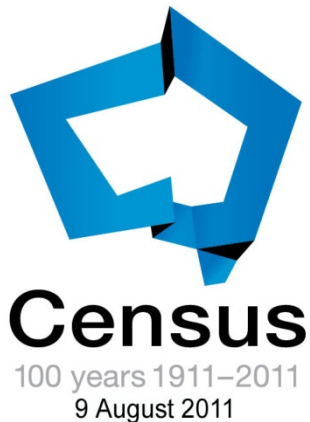




Many options and issues need to be considered now to prepare for major changes to eCensus in 2016

Key options and issues:

- Change the business model from a traditional census to a wave approach with emphasis on eCensus
- Develop a suitable Address Register
- Further integrate the eCensus with field systems and address register
- Consider in-house rather than partnership development of the eCensus application
- Consider in-house hosting of the eCensus
- More metadata driven application development



In 2016, the eCensus system will be much smarter

All forms available via eCensus

- Currently only Household and Personal forms available, not Indigenous and Special short forms
- Use collector handhelds for workload information, Collector forms and collecting Census data from households

Smarter sequencing and validation

- Query respondents to improve data quality

Point of entry coding

- Address related information
- Prompts for respondents for further information to assist coding
- Use of predictive text

Real-time assistance/support

- Move away from call centres to self help and on-line chat
- Consider live system updates about response

Applications for mobile devices



Other collections could potentially use the eCensus infrastructure - increasing efficiency

- ABS prioritising e-collection as the way forward for all surveys by 2016
- Agricultural Census application has been developed by IBM based on the eCensus application in a very short period
 - Hosted on ABS infrastructure
 - June 2011 survey to 175,000 agricultural businesses
 - Expected take up of about 30%
- ABS will evaluate the application and build on this experience to develop Internet collections for future business and household surveys

