



REBUILD OF THE OVERSEAS ARRIVALS AND DEPARTURES SYSTEM FACTSHEET

The ABS is currently undertaking a rebuild of the Overseas Arrivals and Departures (OAD) system. The primary aim of this project is to improve the quality of OAD data, given its importance as input to a broad range of statistical collections.

Why rebuild the OAD system?

OAD data is a key economic indicator, providing important information on cross-border movements. The data feed into a number of important collections at the ABS including International Trade; National Income & Consumption; International Accounts and the Tourism Satellite Account. It is also a major input for estimating Net Overseas Migration (NOM) and therefore the Estimated Resident Population (ERP).

The data is also used extensively by other government departments, such as the Department of Immigration and Border Protection, and by business, particularly within the tourism industry.

The OAD system has not been reviewed in over 10 years and some assumptions and methodologies were in need of updating. The focus of the rebuild has been on improving the quality of OAD data through an enhanced processing methodology, with a particular emphasis on introducing more robust imputations for missing traveller data.

Improved imputations

Through the process of the rebuild, all derivations, logical edits and imputations have been re-designed based on the best information, practices and methodology available at the time. All imputations within the new OAD system will use a hot deck imputation method. There are a number of imputations undertaken that specifically improve the quality of variables. They include country of stay, duration of stay, initial category of travel, passenger card box type, reason for journey and a specific one for the country of birth of New Zealand (NZ) citizens.

The specific imputation for country of birth of NZ citizens will improve country of birth statistics in the OAD, NOM, and ERP by country of birth collections. It will be introduced in the OAD collection for the first time with the release of the January 2014 OAD data and revised back to July 2004; for the NOM collection and the Travellers' Characteristics Database it will be revised back to December quarter 2003, and for the ERP collection by country of birth it will be revised back to 2006.

What data will change?

Nearly all data will change to some degree. The main variables to change due to improved imputations include:

- Country of Birth - particularly for NZ citizens,
- Country of Embarkation/Disembarkation,
- Country of Stay/Residence,
- Reason for Journey,
- State of Stay/Residence, and
- Duration of Stay - the main categories of travel that will change are:
 - Long-Term Visitor Arrivals (LTVA) - average increase 24%;
 - Long-Term Resident Departures (LTRD) - average increase 11%;
 - Short-Term Visitor Arrivals (STVA) - average decrease 1.3%; and
 - Short-Term Resident Departures (STRD) - average decrease 0.1%.

Update to country classification

From October 2013 onwards, an excel spreadsheet outlining the country classification to be used with the improved OAD data will be available from the *Data Cubes* section under the 'Downloads' tab. This country classification is based on the latest version of the Australian Standard Classification of Countries (SACC) 2011 Version 2.2 and will be used from 11 March 2014 onwards.

Will it be a break in series?

Yes, it will be a break in series. However, the ABS is planning to release a time series based on the improved methodology, back to July 2004.

When will the changes be published?

The improved OAD data will be made available from the reference month of January 2014 in *Overseas Arrivals and Departures—Australia, January 2014* (cat. no. 3401.0), scheduled for release on 11 March 2014.

A revised time series based on the improved methodology will replace all existing data for the reference period July 2004 to December 2013. Access to the previous time series will remain available in *Overseas Arrivals and Departures—Australia, December 2013* (cat. no. 3401.0).

Will this affect other ABS data?

Yes. All data that uses OAD data as a major input to their collection will be affected to some degree. Each area of the ABS, International Trade; National Income & Consumption; International Accounts and the Tourism Satellite Account will provide additional information prior to March 2014.

Will this affect the NOM time series?

Yes. The data from the rebuilt OAD system has already been used to produce final NOM from September quarter 2006 onwards which has already been released in [Australian Demographic Statistics, December Quarter 2012](#) (cat. no 3101.0). It made minimal change to the final NOM estimate, with analysis of the change included on page 22 of the same publication.

It will also affect preliminary NOM. The testing undertaken to date, shows an improvement in accuracy for estimating preliminary NOM. Preliminary NOM data based on the improved OAD data became available from June Quarter 2013, in *Australian Demographic Statistics, June Quarter 2013* (cat. no 3101.0) released on 17 December 2013.

An *Information Paper: Further Improvements to Net Overseas Migration Estimation, Dec 2013* (cat. no. 3412.0.55.002) was also released on 17 December 2013.

Will this affect the Labour Force time series?

The impact on Final NOM time series data is only marginal (ie. generally less than 30 people), which in turn results in a similarly negligible impact on revisions to population estimates used to produce Labour Force Survey benchmarks. However, there will be some small improvements to preliminary NOM estimates, which will likely result in small improvements to the quality of Labour Force Survey benchmarks. Historical Labour Force data will not be specifically revised as final NOM will not be affected prior to 2011 and the small improvements after this time will be reflected in the regular rebenchmarking processes noted in 'Rebenchmarking in Labour Force Series' in [Labour Force, Australia, Nov 2012](#) (cat. no. 6202.0).

Where do I look for more information?

Information about the upcoming changes will be regularly updated in the Notes Section of each *Overseas Arrivals and Departures* (cat. no. 3401.0) publication until the new series are released on 11 March 2014.

Information on the improved methodology, particularly on the enhanced imputations, will be made available with the release of *Overseas Arrivals and Departures—Australia, January 2014* (cat. no. 3401.0) on 11 March 2014.