

AUSTRALIAN POPULATION ASSOCIATION 17TH BIENNIAL CONFERENCE

3-5 December 2014 Hobart, Australia

AUSTRALIA'S POPULATION IN A GLOBAL WORLD



HANDBOOK

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WELCOME

On behalf of the Australian Population Association National Council and the 2014 Conference Organising Committee I welcome you to this 17th Biennial Conference of the Australian Population Association being held in Hobart Tasmania.

I would like to respectfully acknowledge that we are meeting on the traditional land of the *Muwina* people – and to pay respect to those that have passed before us and to acknowledge today's Tasmanian Aboriginal community who are the custodians of this land.

It is with great pleasure that we hold our first Conference in Tasmania with the theme 'Australia's population in a Global World'. As you will hear over the next few days, Tasmania is a microcosm of many of the same issues confronting both other areas in Australia, as well as in other countries. With a small population, some of these issues are brought into sharp focus and the need to take action becomes even more pressing as global concerns increase.

As we move through the conference program, I encourage you to take the opportunity to talk with others, exchange ideas and views about these population issues. Perhaps you will find some common ground or be exposed to a new perspective that will sharpen your own research efforts. Thus, some of the objectives of the Australian Population Association will have been achieved.

The conference program contains a broad mix of topics with something to suit everyone. I suggest you attend sessions on topics outside your main interests, ask questions and talk with others. In this way our broad field of demography and population studies will become stronger.

We find ourselves at a juncture when understanding populations, both current and future, is recognised as being critically important. Yet many of us struggle with ever smaller budgets, increasing demands, limited support and fewer skilled colleagues, particularly younger entrants to our field.

This conference provides an important opportunity to reinforce your enthusiasm for working with population issues, interact with your peers to counter the isolation that many of us work in and critically, to help guide and support younger members of our field. Don't forget to take a moment to enjoy Hobart and all it has to offer while you are here.

Finally, a huge thanks to all our sponsors, our volunteer organizing committee, the session chairs, paper and poster presenters for their contribution in making this conference a successful event.

Alison Taylor

President

Australian Population Association

ORGANIZING COMMITTEE

Mr Brendan Churchill

Ms Lisa Denny

Dr Ann Evans

Dr Edith Gray (Conference Convenor)

Dr Santosh Jatrana

Ms Amina Keygan

Mr Ian McDermid

John O'Leary (Treasurer)

ACKNOWLEDGEMENTS

The Australian Population Association would like to express their thanks to the following sponsors for their support of APA2014:

The Australian Bureau of Statistics

The Department of Planning & Environment, NSW Government

The Department of Immigration and Border Protection, Australian Government

The Australian National University

The Department of State Growth, Tasmanian Government

The Organizing Committee would also like to thank Lara Wiseman and Sue Trevenar for conference preparation, and InterLime's Andrew Sykes for assistance with the conference website.

INFORMATION ABOUT THE CONFERENCE

Conference venue

Hotel Grand Chancellor
1 Davey Street Hobart
T: +61 (3) 6235 4535

Registration Desk

The Registration Desk, where pre-registered participants or on-site registrants may pick up their conference materials, is located on the mezzanine level of the Hotel Grand Chancellor. The Conference staff will be able to assist you with inquiries about registration, conference presentations and social events. Opening hours:

Tuesday, 2 December: 4.00 - 6.00pm

Wednesday, 3 December: 8.00am - 6.00pm

Thursday, 4 December: 8.00am – 6.00pm

Friday, 5 December: 8.00am – 3.30pm

Participants will receive a lanyard and identification pouch upon registration. This personal identification pouch serves as your entrance ticket to the sessions, please make sure that you wear it at all times during all conference activities and social events.

Sponsor's stalls

The Australian Bureau of Statistics and the NSW Department of Planning & Environment will have exhibition stalls at the Conference. Opening hours:

Wednesday, 3 December: 8.30am - 5.00pm

Thursday, 4 December: 8.30am – 5.00pm

Friday, 5 December: 8.30am – 3.30pm

Instructions for oral presentations

Please check the program well in advance for the date, time and room of your presentation. The organisers will provide all necessary equipment. Should you have a special request, please contact the Conference Secretariat in advance in order to make sure the presentation can be made in the desired form. Presenters are asked to: Please bring their presentation on a USB; report to their session room 5-10 minutes prior to scheduled session time; and upload their PowerPoint presentation to the laptop computer. Presenters will have 15 minutes for their presentation, followed by up to 5 minutes for questions. Please be considerate of other presenters in your session and keep your presentation at or under the 15 minutes allocated. Chairs will hold up a flash card when there is '5 minutes' to go, '1 minute' to go, and 'Stop' time is up.

Poster session

Authors are requested to be present for discussion during the poster session, during the lunch break on Wednesday 3 December (12.45-1.30pm). Posters should be mounted by 9am and removed by 6.30pm.

Internet access

Wireless internet is available at the Conference venue.

Social media

Don't forget to Tweet your attendance! #Ozpop14 and share your location with friends on Facebook.

Some of the research being presented at the conference may be preliminary, embargoed, not peer reviewed or unpublished. We ask that delegates refrain from tweeting during presentations that are flagged as Tweet-free. Session Chairs will inform delegates whether a presentation is Tweet-free.

Meals and refreshments

Coffee and tea will be served from 8.30 to 9.00am each morning in the mezzanine area.

Morning/afternoon tea and lunch will be served in the mezzanine area. It is provided for all registered participants wearing their identification pouch.

Delegates who provided information to the conference organizers regarding special dietary requirements will be catered for, please look for the assigned special dietary requirements table in the mezzanine area.

Parking

Conference delegates are welcome to use the parking facility at the Hotel Grand Chancellor (paid parking). Alternatively there are three other pay and park options nearby: Hunter Street, Dunn Street and Market Street.

Notices and messages

Notices and messages related to conference activities and any changes in the conference program will be displayed at the Registration Desk.

Social events

Welcome reception: Wednesday 3 December 6.30pm to 8.30pm at the Tasmanian Museum and Art Gallery
Dunn Pl, Hobart (T: +61(3) 6211 4134).

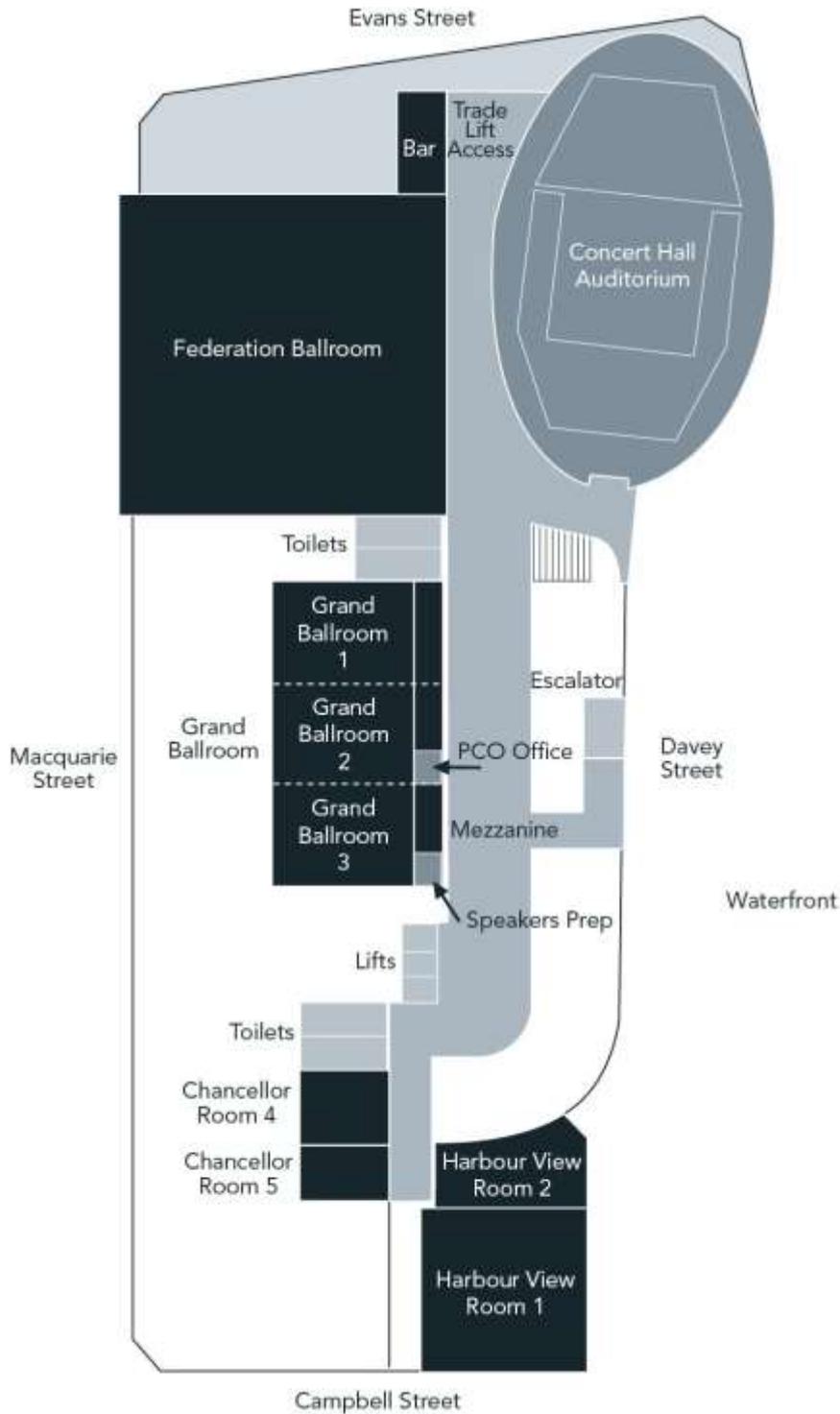
Conference dinner: Thursday 4 December 7.00pm to 11.00pm on the Elizabeth Street Pier at the Hobart Function and Conference Centre, 1 Elizabeth St, Hobart (T: +61 (3) 6230 8979).

Smoking

Smoking is not permitted inside the Conference building nor at the venues for the social functions. Smokers are kindly requested to smoke outdoors in the designated areas.

HOTEL GRAND CHANCELLOR: CONFERENCE VENUE FLOOR PLAN

Mezzanine level



A map of the local area is included in your conference satchel

PLENARY SESSIONS AND SOCIAL EVENTS

Wednesday 3 December 2014

Conference welcome

The Lord Mayor Alderman Sue Hickey

9.00am

APA Presidential Address

Dr Alison Taylor

9.15am - 9.45am

Alison Taylor - Biography

Alison is currently the Acting Executive Director Demography and Economics in the NSW Department of Planning & Environment. Previously she was the NSW Chief Demographer, a position created in 2013 to guide the critical task of producing official state government population, household and dwelling projections. In her current position she has responsibility for building a quality evidence base to underpin strategic planning and decision making in NSW. Alison is a highly skilled demographer, with broad experience in the research and application of population and other projections in an urban and regional planning policy context. This has included applying demographic and related data to support policy, planning, service delivery and infrastructure decisions. A focus of her work has involved innovation in communicating planning information to a wide range of stakeholders. Alison has previously worked in the ACT; for over a decade in Queensland and also as a Regional Demographer for NSW School Education. Alison is the current President of the Australian Population Association, the professional body for Australia's demographers.



Panel session

Engaging the media and other clients: how to get your work noticed and talked about

9.45am - 10.30am

Speakers:

Ross Copping – Social media strategist

Ryk Goddard – ABC Radio host, Hobart

Marc Moncrief – Data Editor, The Age

Patrick Corr – Statistician, Australian Bureau of Statistics

Plenary

**Professor Natalie Jackson (University of Waikato) &
Dr Rebecca Kippen (The University of Melbourne)**

Tasmania's population: Past, present and future

11.00am - 12.30pm

Tasmania's population size and growth has always attracted a level of interest above its size. This not-to-be-missed session will cover the state's entire demographic history, with historical demographer Rebecca Kippen outlining the period up to Federation, and ex-University of Tasmania regional demographer Natalie Jackson covering Federation to the present.

Natalie Jackson – Biography

Natalie is Professor of Demography at the National Institute of Demographic and Economic Analysis (NIDEA), University of Waikato. Natalie was NIDEA's foundation director (2010-2014) and recently vacated the post in favour of focusing on her research. Natalie's main research is on the subnational ending of population growth, the different demographic drivers underlying this trend, and the consequences of this situation for all levels of government, the labour market, the welfare state, education, health care, and business in general. She also undertakes research on the 'disparate impact' of one-size-fits-all policies on subpopulation groups that are significantly differentiated by age structure, such as Indigenous and non-Indigenous populations.



Rebecca Kippen - Biography

Rebecca is an Australian Research Council Future Fellow and Senior Research Fellow in the Centre for Health and Society at The University of Melbourne. Rebecca's research interests include the life courses of Tasmanian convicts and their descendants, the historical demography of Australia, fertility models, and population futures for Australia. Rebecca graduated with a PhD in Demography from the Australian National University in 2002.



W.D. Borrie Lecture 2014

In honour of W.D. (Mick) Borrie, 1913–2000

Always known as 'Mick', Wilfred David Borrie was Australia's first full-time academic researcher in population studies. Born in New Zealand in 1913 and educated at Otago and Cambridge universities, Borrie came to Sydney in 1941. After teaching social history at Sydney University, he joined the very new Australian National University (ANU) in 1948 as staff member in charge of population studies. He, and the team he built at ANU made Australia's name well known throughout the world for high-quality work on population trends and policies in Australia, the Pacific, Asia, Europe, North America and other parts of the world. He remained Professor of Demography until retirement in 1978, his being the first Chair of Demography anywhere in the world. Later, keen to extend population studies throughout Australia, he encouraged the formation of the Australian Population Association in 1980. He remained its patron until he died in 2000.

Source: APA website, adapted from Price, C.A. 2000. 'Obituary. Wilfred David (Mick) Borrie, CBE, 1913–2000', *Journal of Population Research*, 17(1): v–vi.

Professor Martin Bell (University of Queensland)

Demography, time and space

5.15pm - 6.15pm

Time, in various guises, is integral to the conceptual and methodological apparatus of demography but the significance of space has been less well articulated. I review the way each dimension has shaped our understanding of demographic processes, and explore the distinctive contribution to be derived from closer linkages between population science and spatial analysis. Methods and models are needed that link individual with aggregate analyses, bridge geographic scales, and couple space and time. These have the potential to enhance theory, inform policy, and address contemporary knowledge deficits, but they call for novel approaches to data collection and also have implications for demographic training. The case is illustrated with examples drawn from both the global and Australian contexts.

Martin Bell – Biography

Martin is Professor of Population Geography at the University of Queensland and Director of the Queensland Centre for Population Research. Martin's main research interests focus on population mobility and demographic forecasting. His early work was concerned with tracing patterns and causes of migration within Australia, but since 2000 he has concentrated on developing robust measures to understand differences in the level, patterns and causes of population mobility and internal migration in countries around the world. He is currently leading the IMAGE research project (Internal Migration Around the Globe), an international collaborative program, which has generated the first global inventory of internal migration data; established an international data repository; and computed comparative measures of internal migration. Other current projects include assembling a consistent set of small area projections for Australia, tracing patterns of graduate migration and developing indicators of wellbeing among Australia's rural aged.



Welcome reception

The Hon. Matthew Groom MP

Tasmanian Minister for State Growth, Minister for Energy, Minister for the Environment, Parks and Heritage

6.30pm - 8.30pm at the Tasmanian Museum and Art Gallery, Dunn Pl, Hobart

Refreshments and finger food will be provided. Delegates who indicated on their registration form that they will be attending the Welcome reception are asked to please wear their identification pouch for entry to this event. Sponsored by the Department of State Growth, Tasmanian Government.

Thursday 4 December 2014

Plenary

Professor Sarah Harper (University of Oxford)

Population ageing: An international perspective

9.00am - 10.30am

The challenge of global population ageing has been brought into sharper focus by the financial crisis of 2008. In particular, growing national debt has drawn government attention to two apparently conflicting priorities: the need to sustain public spending on pensions and health care versus the need to reduce budget deficits. A number of countries are consequently reconsidering their pension and health care provision, which accounts for up to 40% of all government spending in advanced economies.

Yet population ageing is a global phenomenon which will steadily impact upon all regions of the world. By the measure of more people over 60 than under 15, Europe reached maturity at the turn of the millennium. North America will become mature by 2030, Latin America and Asia by 2040. In terms of absolute numbers, the Asian/Pacific region, is already the oldest and by the middle of the century will hold two-thirds of the world's then 2 billion elders. The worldwide numbers of those aged 80 and above will show an even greater rate of increase, rising from 69 million to 379 million by 2050, when nearly 10% of the developed world will be over 80.

By 2050 there will be the same number of old as young in the world – with 2 billion of each – and each accounting for 21% of the world's population and by the end of the 21st century demographic trends will converge with declining births, stabilisation in size, and ageing populations across the globe, as median ages rise, and there is a proportionate shift from younger to older people. Of particular interest is the question of the appropriateness for the 21st century of financial and health institutions and programmes designed for the demographic structure of the 20th century and the capacity of individuals and households to make the relevant adjustments to their savings behaviour, labour productivity, family and intergenerational transfers and to invest in their own human capital.

Sarah Harper – Biography

Sarah is Professor of Gerontology at the University of Oxford, and Director of the Oxford Institute of Population Ageing. Sarah's research addresses demographic change focusing on the global and regional impact of falling fertility and increasing longevity, with a particular interest in Asia. Sarah trained as an ethnographer and her early research focused on migration and the social implications of demographic change. Her current research concerns globalization and global population ageing. In particular Sarah considers the impact at the global, societal and individual level of the age-structural shift from predominantly young to predominantly older societies, addressing such questions as the implications of the widespread falls in fertility and growth in extreme longevity. Particular research interests are the impact of these demographic shifts on intergenerational relationships, work, migration, and the environment.



Special Presentation – Australian Bureau of Statistics

Bjorn Jarvis (Australian Bureau of Statistics)

ABS Transforming People Statistics Project

5.00pm - 5.30pm

The ABS recently established a project to develop a future-focused approach to population and social statistics, in order to meet contemporary and future needs in Australia. This modernisation project has proposed a greater focus on the 'statistical solutions' required to meet key statistical requirements into the future - and the data sources, processes and methods required. The project has proposed a range of future changes that would support this, including:

1. Improving the sourcing and positioning of data sources for population and social statistics;
2. Improving the approach to collecting survey data, through the introduction of a single integrated, continuous and modular survey (the 'Australian Population Survey', which brings together existing population and social survey activities, while also supporting additional survey data utility);
3. Improving the processes and methods used to transform input data to support statistical solutions (particularly those involving multiple data sources); and
4. Improving the suite of statistical solutions that the ABS can provide.

Conference dinner

7.00pm - 11.00pm Elizabeth Street Pier, Hobart Function & Conference Centre, 1 Elizabeth St, Hobart.

A three course dinner and beverages will be provided. Delegates who purchased a dinner ticket as part of their conference registration are asked to please wear their identification pouch for entry to this event. Please note that dinner tickets will not be available for purchase on the night, all tickets to the conference dinner needed to have been prepaid at the time of registering for the conference. Sponsored by the Australian Bureau of Statistics.

Entertainment provided by Phrayta.

Friday 5 December 2014

Plenary

Professor Richard Bedford (Auckland University of Technology and University of Waikato)

Population mobility in the Pacific region in the 21st century: trends and prospects

9.00am - 10.30am

Thirty years ago at a conference in Auckland the late Epeli Hau'ofa advanced the view that "there already exists in our part of the world a single regional economy upon which has emerged a South Pacific society, the privileged groups of which share a single dominant culture with increasingly marginalized local subcultures shared by the poorer classes" (Hau'ofa, 1987: 11). He went on to argue that all of the economies of the independent and self-governing Pacific countries south of the equator, excluding the French colonies, are so tied to Australia and New Zealand that they cannot be considered separate entities.

A lot has happened in the region since Hau'ofa delivered his paper on "The new South Pacific society" in 1985. Is it appropriate as we head towards 2015 to talk of "a single regional economy" and the associated integration of Pacific societies into a world dominated by Australia and New Zealand? This paper reviews recent trends in one dimension of this integration – international migration – and reflects on prospects for population mobility in the region in the next decade or two.

The discussion draws on examples from Melanesia, Micronesia and Polynesia and suggests that it is no longer appropriate to view economic and social integration in the Pacific region in the way Hau'ofa saw it in the early 1980s. The South Pacific societies of 2015 remain heavily dependent on Australia and New Zealand but there are now other very significant players in the region that are having a major impact on the development of island societies and economies. Hau'ofa's observation that, "we must reexamine many of the assumptions we have about development in our region", remains as relevant in 2015 as it was in 1985.

Hau'ofa, E. (1985) *The new South Pacific society: integration and independence*. Paper delivered at the Conference on Pacific Studies at the University of Auckland, August 1985. Published under the same title in A. Hooper et al (ed.) (1987) *Class and Culture in the South Pacific*, Auckland: Centre for Pacific Studies, and reprinted in E. Hau'ofa (2008) *We are the Ocean. Selected Works*, Honolulu: University of Hawai'i Press, pp. 11-23.

Richard Bedford - Biography

Richard is a specialist in migration research and since the mid-1960s he has been researching processes of population movement in the Asia-Pacific region. Richard is an Emeritus Professor at the University of Waikato. He is currently working on implications for New Zealand and Australia of population developments and migration trends in the Pacific over the next 30-40 years, including the impact of climate change on migration at the Auckland University of Technology where he is a Professor of Migration Studies.



APA ANNUAL GENERAL MEETING

12.45pm - 1.30pm, Friday 5 December 2014
Hotel Grand Chancellor, Hobart, Tasmania

Agenda

1. Welcome and apologies
2. Minutes of the 2013 AGM
3. President's report
4. Treasurer's report
5. Secretary's report
6. JPR Editor's report
7. Election of office holders
8. Any other business

Apologies can be made via email to Mr Simon Massey, secretary@apa.org.au.

Nominating for Council

Every two years nominations for the APA National Council are sought for 10 Council members across the following 5 positions:

- President
- Vice-President (2 positions)
- Secretary
- Treasurer
- Ordinary member (5 positions)

Nominations for these positions closed on 24 November 2014.

APA 2014 Program at a glance

Time	Tuesday 2 December	Wednesday 3 December	Thursday 4 December	Friday 5 December	
8.00 am		Registration – 8.00am to 6.00pm	Registration – 8.00am to 6.00pm	Registration – 8.00am to 3.30pm	
9.00		Welcome The Lord Mayor Alderman Sue Hickey	Plenary Prof Sarah Harper (University of Oxford) <i>Population ageing: An international perspective</i>	Plenary Prof Richard Bedford (Auckland University of Technology and University of Waikato) <i>Population mobility in the Pacific region in the 21st century: trends and prospects</i>	
9.15		Presidential Address Dr Alison Taylor			
9.45		Panel Session <i>Engaging the media and other clients: how to get your work noticed and talked about</i>			
10.30		Morning tea	Morning tea	Book Launch - Family Formation in 21st Century Australia	Morning tea
11.00		Plenary Prof Natalie Jackson (University of Waikato) and Dr Rebecca Kippen (The University of Melbourne) <i>Tasmania's population: Past, present and future</i>	Session 3 3A Demographic data and methods 1 3B Regional population issues 1 3C Population ageing 1 3D Internal migration in China	Session 6 6A Regional population issues 3 6B Health, wellbeing and morbidity 1 6C Population and environment 6D Population-related issues	
12.30 pm		Lunch	Lunch	3-Minute Thesis Competition - 12.45 to 1.30pm	Lunch
			Poster session – 12.45 to 1.30pm		APA Annual General Meeting – 12.45 to 1.30pm
1.30		Session 1 1A Demography and policy 1B Fertility 1C Maternal and child health 1D Historical demography	Session 4 4A Indigenous demography 1 4B Regional population issues 2 4C Health and ageing 4D Labour and workforce participation	Session 7 7A Measuring Australia's population 7B Health, wellbeing and morbidity 2 7C International migration, migrant populations and ethnicity 2 7D Housing and urbanization	
3.00		Afternoon tea	Afternoon tea	Afternoon tea	
3.30	Session 2 2A Internal migration and urbanization 2B Gender 2C Mortality and population ageing 1 2D Chinese demography	Session 5 5A Population ageing 2 5B International migration, migrant populations and ethnicity 1 5C Indigenous demography 2 5D Youth	Session 8 8A Family formation and life course 8B Mortality and population ageing 2 8C International migration, migrant populations and ethnicity 3 8D Demographic data and methods 2		
4.00	Registration - 4.00 to 6.00pm		ABS Presentation – 5.00 to 5.30pm Mr Bjorn Jarvis (Australian Bureau of Statistics) <i>ABS Transforming People Statistics</i>	Conference ends	
5.00					
5.15		W. D. Borrie Lecture – 5.15 to 6.15pm Prof Martin Bell (University of Queensland) <i>Demography, time and space</i>			
6.00					
6.15					
6.30		Welcome reception – 6.30 to 8.30pm The Hon. Matthew Groom MP Tasmanian Museum and Art Gallery			
7.00			Conference dinner – 7.00 to 11.00pm Hobart Function and Conference Centre		
8.30					
11.00					

POSTER SESSION

Wednesday 3 December

12.45pm – 1.30pm

Allen, Liz (The Australian National University)

Unravelling the direct and indirect contributions to child excess weight

Browning, Phil (Australian Bureau of Statistics); Haynes, David (Australian Bureau of Statistics)

Automatic refreshing of ABS Data into your app or webpage: An overview of the new ABS population clock architecture

Charles-Edwards, Elin (The University of Queensland); Wilson Tom (The University of Queensland); Sander, Nikola (Vienna Institute for Demography)

Visualising Australian internal and international migration flows

Dugbaza, Tetteh (Formerly Chief Technical Adviser, United Nations Population Fund)

The aftermath of war: the effect of the Liberian civil war (1989-1997) on household characteristics, school attendance and the welfare of children

Houle, Brian (The Australian National University, University of Colorado & University of the Witwatersrand); Angotti, Nicole (University of Colorado, American University & University of the Witwatersrand); Clark Samuel J. (University of the Witwatersrand, University of Washington & INDEPTH Network, Ghana); Williams Jill (University of Colorado & University of the Witwatersrand); Gómez-Olivé F. Xavier (University of the Witwatersrand); Menken Jane (University of Colorado & University of the Witwatersrand); Kabudula Chodziwadziwa (University of the Witwatersrand); Klipstein-Grobusch Kerstin (University of the Witwatersrand & Utrecht University); Tollman Stephen M. (University of the Witwatersrand, Umea University & INDEPTH Network, Ghana)

Interviewers, respondents, and sexual behaviour reporting in rural South Africa

Huq, Nafisa Lira (Centre for Population and Reproductive Health, International Centre for Diarrheal Disease, Bangladesh)

Antenatal care to prevent eclampsia by providing loading dose of MgSO₄: Case study analysis

McMillan, Rachael (University of Waikato)

Anticipating depopulation – discussing solutions to regional decline

Sugiyarto, Teguh (Indonesian Central Board of Statistics and Flinders University); Dasvarma, Gouranga (Flinders University); Mwanri, Lillian (Flinders University)

Contextual and Compositional Effects on Maternal Health Inequality: Evidence from Two Districts in Indonesia

3MT: 3-Minute Thesis Competition

Thursday 4 December

12.45pm – 1.30pm

Falkiner, Alice (The Australian National University)

Dual Carers in Australia: An Examination of the Experiences of Australians with Dual Caring Responsibilities

Joshi, Suresh (Deakin University)

Does the smoking behaviour of foreign-born people converge to the native-born Australians? A longitudinal study

Keygan, Amina (The Australian National University)

Australian men's intentions for children- what determines them?

Okumura-Rougeaux, Reiko (The Australian National University)

Pathways to employment: Experiences among youth in Indonesia

Terblanche, Wilma (The University of Queensland)

Population Estimates and Projections for Australia's Very Elderly Population at State and National level

ABSTRACTS

Abalos, Jeffrey B. (The Australian National University)

Gender differences in health expectancy among older persons in the Philippines

The number of older persons in the Philippines reached 6.2 million in 2010 and is expected to increase to almost 10 million in 2020. It is expected that along with the projected increase in the number of older people there will be a corresponding increase in the number of persons with disability. However, little is known about the current health status of older persons in the Philippines. This paper aims to examine multiple indicators of health among Filipino older persons and will use these indicators to investigate gender differences in their health expectancy. Health expectancy is a widely used indicator to assess population health because it combines mortality and morbidity information into a single measure. Sullivan's method will be used to calculate health expectancy among older Filipinos. This method requires data on the age and sex-specific health status of the older population and life expectancy at ages 60 and over. Data on the health status of older persons will be drawn from the 2003 World Health Organization (WHO) Survey, while data on life expectancy will be derived from the 2000 published life table for the Philippines. Health indicators to be used include self-rated health and experience of difficulty in performing activities of daily living.

Abbasi-Shavazi, Mohammad Jalal (University of Tehran); Sadeghi, Rasoul (University of Tehran & National Institute for Population Research); Hugo, Graeme (The University of Adelaide); McDonald, Peter (The Australian National University)

Adaptation patterns of Afghan youth in Iran and Australia

The adaptation of immigrants to host societies has been a major area of immigration research, and there is now a rich and growing scholarly tradition in the study of the adaptation of second-generation immigrants. However, the integration of refugees is one of the most poorly understood and under-researched topics in forced migration studies. This paper aims to examine how Afghan youth have adapted to the host societies of Iran and Australia, and to what extent their adaptation patterns have correlated with demographic and contextual factors. The data is drawn from the 2010 Afghans Adaptation Survey which covered 520 second-generation Afghans conducted in two cities of Tehran and Mashhad in Iran, and the 2012 Survey of Afghans covering around 560 Afghans aged 18-34 residing in various states in Australia.

The size and characteristics of Afghans differ in the two host societies. Our results revealed that adaptation patterns of Afghan youths in Australia differ from their counterparts in Iran. While separation was the common pattern among Afghan youth in Iran, integration was observed as the most prevalent pattern among their counterparts in Australia. Marginalization was also higher among Afghan youth in Iran as compared to those living in Australia. Our multivariate analysis showed that such socio-demographic factors as gender, education, ethnicity, perceived discrimination, family context, neighbourhood characteristics, length and city of residence are associated with their adaptation patterns. Social context within which refugees live in has implications for their adaptation patterns.

Alexander, Simone (.id – the population experts); Hogenhout, Esther (.id – the population experts)

Introducing SAFi – a new approach to population forecasting

Population forecasting in Australia is generally undertaken using either a "top down" or "bottom up" approach. The top down approach makes assumptions about the components of demographic change at a macro level, and then applies these across smaller levels of geography. Bottom up approaches consider local factors, specifically residential land supply, as well as applying the components of demographic change at small levels of geography. .id has been producing population forecasts for local councils in Australia and New Zealand for over ten years. These employ the bottom up approach, which is different to the population forecasts produced by the ABS and various State Governments. More recently .id has developed a new approach to population forecasting which combines both approaches. SAFi (Small Area Forecast Information) is produced for micro level geographies for NSW, Victoria and Western Australia. This presentation will consider the SAFi approach and present data highlighting future aspects of population change in Western Australia.

Argent, Neil (University of New England); Griffin, Trevor (The University of Adelaide); Smailes, Peter (The University of Adelaide)

Differential ageing processes in Australia's Murray-Darling Basin

While it is increasingly well-accepted that the incidence and rate of ageing in post-industrialised societies are severest and fastest in rural compared to urban areas, less well understood are the place-to-place variability in, and local social implications of, rural ageing processes. Built on a Census-based analysis of demographic change at the rural community scale from 1981 to 2011 and taking the lower Murray/Murrumbidgee catchments of the Murray-Darling Basin as a case study, this paper provides a longitudinal examination of ageing processes, exploring how numerical and structural ageing have affected the populations of the farm, small service centre and regional city tiers of the regional urban hierarchy over 30 dramatic years. In doing so, the paper employs two measures of ageing: a relative ageing index (RAI), and a related comparative age profile measure (CAP). To better understand the degree to which the aged care services within the case study area meet the changing needs of the local elderly, the paper explores the socio-economic and demographic composition of each tier's elderly population, relative to provision of key aged care services.

Baxter, Jennifer (Australian Institute of Family Studies)

Exploring child care patterns in the context of parental employment and family characteristics

When parents are employed, children are often cared for by others for some time during the week. In Australia there is some diversity in who provides this care, with some children in formal child care, such as child care centres, family day care, or for older children, outside school hours care. Many children are cared for by informal carers, including grandparents, and friends or neighbours of parents. These care patterns vary by children's age and also by mothers' employment hours, but there is little evidence from Australia on other factors that are related to children being in different forms of care. This paper uses nationally representative survey data, the ABS Childhood Education and Care survey to analyse, for broad age groups of children, how children's participation in different types of care is related to child's age, mothers' employment, fathers' employment (where applicable) and other family characteristics. Data for three survey periods are used to examine how child care patterns have changed over recent years. Unmet demand for child care is also examined using this same approach.

Motherhood and employment transitions: new research opportunities with the Australian Longitudinal Census Data

Becoming a mother is the point at which women very often undergo significant changes to their attachment to paid work. Some new mothers withdraw from employment for a lengthy time, some change occupations, some remain in the same type of work, but reduce work hours, while a minority return to full-time work in their pre-birth job after a period of leave. Women's pre-birth work characteristics are likely to be strong predictors of these different (or other) pathways taken, but such information is rarely available in cross-sectional studies, limiting our understanding of the precursors of mothers' return to work pathways. This paper uses a new Australian data source, the Australian Longitudinal Census Data (ACLCD) to examine new mothers' employment transitions across two census years, from 2006 to 2011. This dataset allows us to examine new mothers' employment characteristics in 2011, from mothers with a one-year-old child, and to examine how such characteristics vary with their employment characteristics five years previously. Other characteristics of mothers and families are taken into account in these analyses, to identify factors that are related to new mothers exhibiting different patterns of employment participation. Being based on a 5% sample of the Australian census, these data offer opportunities to explore maternal employment transitions for a range of subgroups of mothers.

Bell, Martin (The University of Queensland); Charles-Edwards, Elin (The University of Queensland); Ueffing, Philipp (The University of Queensland); Bernard, Aude (The University of Queensland); Rowe, Francisco (The University of Queensland); Wilson, Tom (The University of Queensland); Cooper, Jim (The University of Queensland); Sander, Nikola (Vienna Institute of Demography)

Inter-regional migration in Australia: Thirty years of change

Despite wide-ranging recognition of the importance in internal migration in shaping national settlement systems, analysis of patterns and trends is commonly inhibited by changes in the zonal systems and spatial boundaries used to record population movement. Such changes are of particular significance in a country such as Australia, where two in five people change residence every five years, and statistical boundaries are regularly in flux. This paper utilises data from the Australian Internal Migration (AIM) database which holds migration transitions between a set of 69 regions of Australia that are temporally consistent over seven five-year intercensal periods. We couple a suite of migration metrics with advanced visualisation techniques to track changes in the intensity, spatial patterns and age composition of inter-regional migration from 1976 to 2011. Results show a sustained decline in inter-regional intensities and marked shifts in spatial orientation linked to progressive population ageing.

Bernard, Aude (The University of Queensland); Rowe, Francisco (The University of Queensland); Vidal Torre, Sergi (The University of Queensland)

Life-course transition sequencing and internal migration in Australia

Life-course transitions often trigger a change of residence. Higher education entry, access to first employment, union formation and childbirth have all been shown to affect the likelihood and timing of migration. Life-course theory emphasises interdependencies between educational, professional and familial lives, which lead individuals to follow distinct life-course pathways. Migration studies, however, have rarely taken into account the extent to which transition sequencing influences migration behaviour. To address this gap, this paper examines how the sequencing of key transitions to adulthood impacts the number of times and age at which young Australians move. Using the Household, Income and Labour Dynamics in Australia (HILDA) Survey, this paper follows over a decade three cohorts of young adults aged 15 to 18, 19 to 21, and 22 to 25 in 2001. It uses event-based sequence analysis to establish a typology of transition sequencing and assesses the prevalence of each sequence. It then estimates the number of times individuals moved over both short and long distances depending on their pathway to adult roles. The results offer new insights into mobility dynamics by showing how transition sequencing shapes migration behaviour and how long-term changes in overall migration intensity may be linked to increasing variability in life-course pathways.

Biddle, Nicholas (The Australian National University); Campbell, Paul (The Australian National University); Paradies, Yin (Deakin University)

A behavioural model of Indigenous identification: Evidence from new data and implications for policy and planning

Between 2006 and 2011 the Aboriginal and Torres Strait Islander or Indigenous population count grew by 20.5 per cent. Not only is this growth much higher than for the rest of the Australian population, it is also greater than predicted by the excess of births over deaths during the period (including births of Indigenous children to non-Indigenous mothers). A major factor in this growth, therefore, is a significant number of people who were not identified as being Indigenous in 2006 but who were in 2011. There are a number of potential reasons for this identification change. Individuals themselves may have had a different view of their own Indigenous status. Perhaps more likely though is a greater comfort and propensity to reveal their status or a lower probability of being missed from the census entirely. Until now, researchers have been reliant on qualitative data and ex-post analysis to try and understand such identification change as most quantitative data collects Indigenous status at only one point in time. However, the advent of the Australian Census Longitudinal Data (ACLTD) gives demographers a new source of data with Indigenous status collected at two intervals (2006 and 2011) as well as other predictive information like age, gender, location, household context, and socioeconomic status. These data are available for a very large sample - around 5% of the Australian population. In this paper, we use population-level and individual-level data to analyse the factors associated with identification change. In the process, we develop insights for future projection models and begin to build a behavioural model of Indigenous identification.

Bladen, Catherine (Australian Bureau of Statistics); Scott, Neil (Australian Bureau of Statistics)

Who said Kiwis don't fly?

Australia and New Zealand share a special relationship, nurtured by their close geographic proximity, cultural similarities and shared histories as members of the British Commonwealth. Since 1973 the Trans-Tasman Travel Arrangement has enabled citizens to flow freely between the two countries. As a result of all these factors, New Zealanders make up a significant proportion of migrants living in Australia. New Zealand also continues to be the largest source country for travellers visiting Australia and conversely the main destination for Australians heading overseas. Likewise, the flow between the two countries provides a constant supply of migrants (those that stay one year or more) in both directions. This presentation by the Australian Bureau of Statistics (ABS), will utilise data from both the traveller's characteristic database and the overseas arrivals and departures collection. Both these databases are sourced from a combination of passenger card data, passport information and visas. Analyses of the migration and travel flows between Australia and New Zealand will examine various demographic variables. It will explore the temporary and permanent nature of migration across the Tasman. In addition, the ABS will present some mirror statistics comparing the migration data from both the ABS and Stats New Zealand to see if they align.

Bond, Kate (Australian Bureau of Statistics); Chester, Tracey (Australian Bureau of Statistics); Young, Duncan (Australian Bureau of Statistics)*

Plans for the 2016 Census of Population and Housing

The 17th Australian Census of Population and Housing will be conducted in August 2016. A new approach will involve a mail-out to the majority of Australians, rather than a field collector knocking on the door. On-line participation will be encouraged. The ABS will still use the traditional methods of approaching households in areas where mail-out has been identified as impractical or another method will deliver better results. The new Census approach is being tested carefully. Field tests were conducted in August of 2012, 2013 and 2014, and a dress rehearsal is planned in August 2015. A key element of the testing program is ensuring that the Census continues to provide the best counts of all people in Australia on Census night and the dwellings which they occupy. Dwelling coverage checks have been incorporated in the 2013 and 2014 tests. Over the next year, ABS will be developing a number of strategies to ensure coverage of particular areas and populations (e.g., homeless people, Aboriginal and Torres Strait Islander peoples, and people from a culturally and linguistically diverse background).

Planning for the 2016 Census has also included a content review. This has involved public submissions, stakeholder consultation, cognitive testing, focus groups and field testing. A wide range of potential new topics were suggested by members of the public on a variety of subjects such as long-term health conditions, second address, pet ownership and food habits. The final decision on Census content will be made by the Australian Government.

*Please note this paper will be presented by Sue Taylor

Brokensha, Huw (Charles Darwin University)

When can Indigenous Australians retire? How the proposed increase to the age pension qualifying age affects Aboriginal and Torres Strait Islander persons.

Increasing the age pension qualifying age is one mechanism by which governments are attempting to manage increasing costs associated with population ageing. The 2014 Australian Federal Budget outlined a graduated increase of the pension eligibility age from 65 years to 70 years by 2035. However, a number of groups within the Australian population will be affected differently by this decision, including Indigenous Australians who have a shorter life expectancy, by around 10 years, when compared to non-Indigenous Australians. We have used scenario analysis to explore the population, rather than individual, effects of changes to the

minimum age for possible access to the age pension. We investigate the effects of these changes to the age pension for older Indigenous Australians across a range of life expectancy assumptions and model the effects of linking the pension age to 77% of average life expectancy at 65 years, as outlined in the National Commission of Audit (NCOA) report, to determine when Indigenous Australians might experience the same average number of years in 'retirement' as the non-Indigenous population. Our results profile the people currently at the age affected by the policy as well as those who will be the first to be affected and project forward to determine the size and income effects.

Brown, Laurie (University of Canberra); Miranti, Riyana (University of Canberra); Jackson, Natalie (University of Waikato); Bartlett, Helen (Monash University, Malaysia)

Ageing, health and life satisfaction: A case study of older Australians in the 'Fourth Age'

There has been a consensus in the demographic and social gerontological literature for some time that people aged 65 years and over cannot be seen as a homogenous group - health has improved, life expectancy has increased remarkably, and many more people are living many more years beyond age 65. Consequently, older persons have been categorised into three groups: the young-old (65 to 74 years), the old-old (75 to 84 years) and the oldest-old (85 years and over). The oldest-old age has been termed the 'Fourth Age' not only to acknowledge this particular age group (cohort) but also to recognise the unique characteristics and needs of individuals aged 85+ years that distinguish them from the two younger older segments of the population. The Fourth Age is seen to embody vulnerability and unpredictability - the oldest old being at the limits of their functional capacity with associated prevalence of frailty and loss of identity, psychological autonomy and sense of control. To contribute to the little that is known about the Fourth Age in Australia, this paper examines the self-perception by Australia's oldest-old of their health status, patterns of life satisfaction, autonomy and social participation, and the factors affecting these. These perceptions will be contrasted with those of the young-old and old-old, and where the data are available, to (more) objective measures. The study draws on data from the HILDA (Household, Income and Labour Dynamics in Australia) survey as well as the ABS 2011-12 National Health Survey.

Browning, Phil (Australian Bureau of Statistics)

Rebasing and recasting of State and Territory population estimates

After each Census, the Australian Bureau of Statistics (ABS) undertakes a 5-yearly exercise using the new information obtained from the Census to 'rebase' the estimated resident population (ERP) of Australia and its states and territories. For the 2011 cycle, a methodological improvement to the ERP series caused an unusually high 'intercensal error' (i.e. the difference between unrebased estimates and the preliminary Census-based estimate). The conventional 5-yearly rebasing treatment could not credibly account for this large intercensal error between 2006 and 2011, and the resulting ERP series showed implausible growth for this period. A decision was made to implement a one-off revision to historical ERP data from September 1991 to June 2006. The process used to implement these historical revisions is called recasting. This presentation will: summarise the need for recasting and the decision process involved; outline the methods used in the recasting; explain the impact of recasting on historical data; and advise on the future use of ERP and related data

Bryant, John (Statistics New Zealand); Nissen, Kirsten (Statistics New Zealand)

Stochastic multiregional population forecasts

National statistical offices prepare regular population forecasts for areas within the country. Traditional deterministic methods have integrated assumptions about future fertility, mortality and net migration patterns in a cohort component model based on a selection of variants of the components. Statistics NZ is preparing a first release of stochastic subnational forecasts for all standard geographic areas. We briefly describe the limitations of existing methods and motivation for developing a statistical and multi-regional modelled approach to subnational forecasting. Hierarchical Bayesian models are used to produce age-sex-region specific rates for fertility, mortality, in- and out-migration (internal and international migration, separately) using historic data from 1991. Estimated rates and associated credible intervals are compared with observed historic rates. Attention is given to the ability of the model to estimate demographic rates for small population domains. Demographic rates are forecasted using a Bayesian approach and these are supplied to a demographic accounting framework. We provide an overview of the computation steps of the demographic accounting framework used to produce forecasted population series. Selected forecasted population series for cities and districts are examined including comparisons with results from the validation process. We conclude with a discussion of the challenges and limitations of the data and models, and directions for future developments.

Caldwell, Bruce (Australian Bureau of Statistics)

PIAAC: How literate (and numerate) are Australian adults and what are the implications?

In 2011-12 the Australian Bureau of Statistics conducted the Australian survey for the OECD coordinated Programme for the International Assessment of Adult Competencies (PIAAC). The survey provides information for the population 15 to 74 years on skills in literacy, numeracy and problem solving in technology-rich environments. Comparable surveys were conducted in many OECD countries. The survey included a background questionnaire and a self-enumerated exercise to assess literacy and numeracy skills. The exercise was based on activities adults do in their daily lives. PIAAC was designed to provide reliable estimates at the national level for 5 year age groups and for each state and territory. Of 11,532 households surveyed 8,446 (73%) were fully responding or provided sufficient detail for scores to be determined.

By international comparison Australia performed above average in literacy and close to average in numeracy. Scores rose initially with age but then declined even when controlling for other factors. Male and female scores were similar for literacy and problem solving but female scores were lower at older ages, perhaps reflecting lower educational attainment for older women. Numeracy scores were higher for males at older ages but there were no significant differences by sex at younger ages. Education attainment had a strong association with scores. Overseas born performed quite well, but poor proficiency in English and lower socio-economic background were associated with poorer skills. Scores were strongly associated with labour force status and incomes.

Canterford, Shelby (Geoscience Australia); Juskevics, Valdis (Geoscience Australia)

Housing recovery in South East Queensland following the January 2011 floods

Housing recovery is an important part of disaster recovery. However, this aspect of community recovery is not precisely defined with a scarcity of Australian studies. This study investigates the length of time it took householders in Brisbane and Ipswich to return to their flooded dwelling or a new dwelling after the January 2011 floods. Additional data on reconstruction and housing is also presented. The data were collected by Geoscience Australia via a postal survey and the Cox proportional hazards models was used to evaluate predictors of time to return. The analysis found that having building insurance played a significant role in delaying the time to return. Households that included children under five experienced significantly longer times to return to the dwelling, whereas volunteering by the household in the community in general decreased the time. Initial analysis showed that some households without insurance moved back into their dwellings while still damaged, though this was not significant in the model. The implications of the findings are highlighted, and potential future research directions are discussed.

Carmichael, Gordon (The Australian National University)

Estimating paternity in Australia, 1976-2010

Demographers have historically studied fertility with reference to female populations. As bearers and prime nurturers of children, women have been more reliable sources of data, and their lives are more strongly impacted by parenthood. Greater concern with men's role in fertility decision-making and child socialization has, however, lately focused more attention on measuring male fertility. This paper estimates age-specific and total paternity rates for Australia during 1976-2010. Australia has long published ages of fathers for marital births, but from 1976, with cohabitation proliferating, also began publishing them for non-marital births where paternity was acknowledged. The methodology developed here estimates annual paternal age distributions for non-marital births where paternity was not acknowledged, enabling age-specific and total paternity rates to be estimated and compared with female fertility rates.

Charles-Edwards, Elin (The University of Queensland)

A framework for understanding temporary populations in Australia

Almost two decades since the Australian Bureau of Statistics produced a number of scoping papers on the estimation of temporary populations (Cook 1996, Lee 1999), standard methodologies for their estimation have yet to emerge. Temporary populations generate significant demand for goods and services within localities and regions, with implications for planning and service provision, fiscal allocation and emergency preparedness. Recognition of the importance of temporary populations continues to grow, with questions on second residences slated for inclusion in the 2016 Australian Census of Population and Housing. Moreover, the past decade has seen significant advances in substantive knowledge, methods, and data for temporary population estimation, including the emergence of mobile phone datasets which track the location of individuals in real time, allowing dynamic estimates of non-resident populations to be made. This paper reviews the state of the art in methods for the estimation of temporary populations and illustrates their relative utility via a series of Australian case studies. The evidence suggests that no single method will prove a panacea for the estimation of temporary populations across widely varying contexts. Rather, methods will need to be targeted based on population characteristics, geographic location, and the space-time dynamics of mobility underpinning short-term population flux. This paper concludes by setting out a conceptual framework integrating these dimensions for use by scholars and practitioners working in the field of temporary population estimation.

Chen, Wei (Renmin University of China); Liu, Jinju (Beijing City University)

Recent fertility trends in China

China's 2010 census reported a TFR of 1.19 births per woman, similar to the TFR (1.23) from the 2000 census. While the 2010 census data were assessed to be of much better quality than the 2000 census data by the National Bureau of Statistics of China (NBS), estimates of recent TFR by various scholars range from a low of 1.22 to a high of 1.75. In this paper, we have reviewed and re-estimated recent fertility trends in China by reconstructing the 2010 census child population at ages 0-10. We provide three types of estimations based on three types of demographic data, but with the assumption that the 2010 census is of similar quality with the 2000 census. In applying this assumption, we perform linear regressions between the census data and the education or household registration (*hukou*) data. Estimates of the child population are generated by plugging the 2010 census child population data into the regression equations. Various estimates of the child population are then backward projected to obtain annual births and fertility over 2000-2010.

Education data result in the highest estimation of fertility, with TFR dropping from 1.70 in 2000 to 1.65 in 2002, and then going up to 1.8 or slightly lower after the middle of the decade. The lowest estimation resulting from the 2010 census data had a TFR of 1.4 in 2000, declining to 1.3 and rising up to 1.5. Estimates based on *hukou* data stand in between, with a TFR of 1.57 in 2000, 1.50 in 2002, and over 1.65 to 1.68 after 2004. Estimates based on the annual births published by the NBS show a different path from the above estimates, with TFR having a similar high level in 2000 as the estimates from the education data, but much lower after 2004, and also lower than the estimates from the *hukou* data, which is roughly around 1.50-1.55 after 2004. In conclusion, if we do the average of all the above estimates, fertility in China dropped further to below 1.5 in the early 2000s, but bounced up in the mid-2000s, standing at around 1.6.

Chester, Tricia (Australian Bureau of Statistics)

Regional internal migration estimates - methods and challenges

The Australian Bureau of Statistics (ABS) is working on the production of an exciting data series, which aims to fill the biggest gap in Australia's official demographic data - an ongoing series of regional internal migration estimates. This data series will provide a better understanding of regional population change, provide a useful input into sub-state projections and lead to preparing better quality population estimates. Building on the experimental series released in August 2012, these estimates are being prepared based on the current geography (the Australian Statistical Geography Standard) and include output for both Statistical Areas Level 2 (SA2s) and Local Government Areas (LGAs) by age and sex. The initial series includes migration estimates for 2006-07 to 2012-13, with annual updates proposed up to 2015-16. As this series is based on administrative data, this presentation will explain some of the technical challenges faced, including issues in converting geographies, and dealing with missed population groups. It will then give you an understanding of how the ABS is accounting for these issues. The presentation will also provide a summary of estimates from this new series and compare them with migration data from the Census. This analysis will provide an interesting insight into the accuracy of the series going into the future.

Churchill, Brendan (University of Tasmania)

Towards a life course perspective on attitudes towards gender roles

Since the early 1970s, social scientists have measured social attitudes on gender roles to gauge societal views on gender and gender equality, and to measure the impact of wider social changes. Over the last fifty years, male and female attitudes towards gender roles in both the household and the workplace have significantly changed mirroring the substantial increase in female labour force participation, a growing acceptance of women outside the familial home and the emergence of the 'new father' ideal. While social scientists have sought to explain these changes over time, there has been scant attention paid to how attitudes change over the life course. Drawing upon the Household, Income and Labour Dynamics of Australian (HILDA) survey, this paper examines attitudinal measures using multi-level modelling techniques. Preliminary results suggest that attitudes are indeed shaped by a number of life course factors, most importantly parental education and employment status and birth cohort membership. However, the influence and strength of these factors differ across different attitudinal measures and are mediated by life course domains, such as education, labour market participation and relationship status. These results coupled with previous research are used to present a life course perspective that provides a detailed understanding of attitudes and attitudinal change in Australia.

Churchill, Brendan (University of Tasmania); Denny, Lisa (University of Tasmania)

Thank God you're here: The coming generation and their role in future proofing Australia from the challenges of population ageing

Like much of the industrialized world, Australia's population is ageing, the implications of which are twofold: increasing demand for publicly funded services and a decline in the supply of prime working-age people. In grappling with the challenges of a diminishing workforce, the Australian Government is currently relying on its migration programs to provide both the much needed labour and skills to stimulate the economy through population growth. However, there may be another, not yet fully considered, solution to the upcoming demographic problem. This paper investigates how the grandchildren of the baby boomers, termed here the Thank God You're Here generation (Gen TGYH), might impact in Australia's predicted workforce shortage. This generation of workers will enter the labour force as the last of the baby boomers reach retirement age, and, will not only be bigger in size than preceding generations (Y, X and Baby Boomers), but also potentially better educated than the retiring generation. This paper will also canvas the opportunities for both Gen TGYH and employers as well as the challenges for policy-makers and governments in maximising the opportunity provided by this generation in the Australian economy.

Cooper, Jim (The University of Queensland); Wilson, Tom (The University of Queensland)

How low can we go? Issues in projecting the population of very small areas.

Users of population projections demand projections for increasingly small geographic areas. The adoption of the Australian Statistical Geography Standard (ASGS) in recent years has made projections for small areas seem a possibility, as at least there is the promise that the boundaries of such areas will remain unchanged over one or more intercensal periods. The transition from SLAs to SA2s as the primary small geographical unit for which ERP estimates are published, and therefore the core areal unit for which projections are sought, has presented demographers in Australia with numerous challenges, many of which remain unresolved. Yet projection users want more still. SA2s seldom conform to previously used boundaries. School catchment areas, health districts,

police districts, electoral divisions, local council wards – all seem to differ from each other and from the ASGS boundaries. To obtain reasonable population projections for non-standard areas of interest we need building blocks that can be assembled in various combinations to closely match these areas. SA1s exist as small, perfectly formed components of SA2s, as do population estimates for them, annually from 2001-2011. This paper describes an approach to the creation of SA1 level projections, totals and by age group, and the issues that have arisen in building a model to project them, using data for Queensland.

Corr, Patrick (Australian Bureau of Statistics)

Democracy and dollars: Use of demography in distribution with a focus on Tasmania

The compilation of official statistics on the size and geographic distribution of a nation's population are critical for public policy purposes. Recognising the importance of these specific official statistics, provisions have been made in the Constitution of the Commonwealth of Australia and in legislation for the compilation, provision and use of official statistics on population for official purposes, including democratic representation and government revenue and funding distribution. The Parliament of the Commonwealth of Australia comprises the Queen (represented by the Governor-General) and two chambers, a Senate, and a House of Representatives. Key features of the House of Representatives set out in section 24 of the Constitution are that it be comprised of members '...as nearly as practicable, twice the number of senators' and '...the number of members chosen in the several States shall be in proportion to the respective members of their people' to be ascertained using the '... latest statistics of the Commonwealth'. The distribution of funding by the Australian Government to the governments of the States and Territories of Australia has for many decades been determined using two measures, the population of each jurisdiction, and an adjustment factor for each jurisdiction to accommodate for differences in the cost of providing services of equivalent quality across jurisdictions and for differences in their revenue raising capacity. This presentation illustrates these two distribution processes with a specific focus on provisions and outcomes relevant to the State of Tasmania.

Dao, Ha (The Australian National University)

Mobile phone and gender-power relations in mother-away families

Nowadays in Vietnam, mobile phones have become reachable and affordable more than ever. Everyone including many rural mothers who have left their families behind to engage in migrant work can obtain one. Previous literature has noted that the mobile phone helps migrant mothers to fulfill their maternal duties from a distance. However, it is still uncertain whether the mobile phone and the ability to make instant and frequent communications are powerful enough to ease the problems caused by family separation especially when it comes to the emotional dimension. Moreover, little is known about how mobile phones facilitate conjugal relations and how it challenges gender roles and gender and power relations within migrant families. Drawing on in-depth interviews with 46 migrant mothers, left-behind fathers and left-behind children, this paper shows the vital role of the mobile phone in helping mother migrant families to mitigate some migration strains and prevent serious family tensions or family fragmentation. This paper also argues that while the mobile phone enables migrant mothers and left-behind fathers to engage in new fathering, mothering and partnering practices, it does not allow them to disregard existing gender role boundaries and therefore it could make more complex their conjugal power relations which are already complicated.

Day, Alison (University of Waikato)

Is New Zealand facing a dementia epidemic? Projections of the potential number of dementia cases in the 65-plus population at national and DHB level, 2011-2051.

This paper projects the prevalence of dementia by age and sex in the 65+ population nationally and at District Health Board (DHB) level to 2051 for New Zealand. Using data based on the 2006 Census, three different sets of prevalence rates are used to model high, medium and low variants. Using these variants presents a more comprehensive picture of potential future trends as some studies suggest there is likely to continue to be an increasing prevalence of dementia while other research implies future cohorts may not be as susceptible as those presently in the 65-plus age group.

Data are analysed at both national and DHB level to generate the potential projected numbers for dementia by high, medium and low variants. These numbers are investigated for prevalence patterns across the DHBs and nationally for the timeframe 2011-2051, to indicate whether some DHB's are projected to have a higher percentage of dementia in their population than others, which may reflect more rapid structural ageing. Certain limitations of the data used in the study and the effect these may have on determining the prevalence of dementia, such as the lack of consistency in how dementia is diagnosed, are also explored. Finally, using the projections, some conclusions are drawn regarding potential dementia prevalence in New Zealand.

Denny, Lisa (University of Tasmania)

Population ageing at a sub-national level: A case study on why Tasmania is ageing for different reasons than Australia

Most policy initiatives to address the fiscal challenges associated with an ageing population are developed at a national, aggregate level. The reality is that a nation's population profile is the product of its sub-national regions and cities; states and territories. In Australia's case, Tasmania's population is ageing for different reasons than the Australian aggregate and at a faster rate. This paper explains different factors which influence the rate of ageing in sub-national statistical areas, using the state of Tasmania as a case study. While both numerical and structural ageing are present in Tasmania, underpinned by declining fertility rates and increasing

life expectancies as explained by Demographic Transition Theory, interstate migration movements and their age profiles have a much greater impact on the age structure of the Tasmanian population. As such, policies designed at a national level to address the implications of an ageing population may be ineffective at a sub-national level.

Denny, Lisa (University of Tasmania); Polkan, Eugene (University of Tasmania)

Measuring mendicancy: identifying capacity for economic sustainability by developing a measure of government dependency

Accusations of mendicancy have raised the question of the level of government dependency in Australian states; how much is acceptable and in what circumstances. Like other developed nations, and as set out in the periodic Intergenerational Reports, Australia faces a complex mix of long-term challenges, specifically from an ageing and growing population and the associated increasing demand for publicly funded services - all of which require fiscal prudence. In this paper we develop a measure of government dependency which incorporates age-based and behavioural approaches to reflect the various components of government dependency; welfare recipients, public sector employees and youth. We found that government dependency varies considerably by state and territory and is influenced differently by each component of dependency. Further analysis to account for varying population age structures fails to fully explain the differences in government dependency rates. Projections of future government dependency to 2050 find increases for all states and territories under three different scenarios. As such, policy development aimed at managing the fiscal challenges of an ageing population and reducing potential mendicancy in Australia should address the components which influence dependency rather than relying solely on age-based measures, as per the Intergenerational Reports. In addition, the Government should focus on facilitating growth in the private, traded sectors to reduce government dependency.

Dugbaza, Tetteh (Australian Institute of Health and Welfare); Scott, Brendan (Australian Institute of Health and Welfare); Al-Yaman, Fadwa (Australian Institute of Health and Welfare)

Differentials in risk factors associated with disparities in birth outcomes between Indigenous and non-Indigenous mothers

In spite of overall improvements in childhood mortality in Australia, Indigenous women still experience significantly worse birth outcomes than non-Indigenous women, in terms of pre-term delivery, birth weight and birth status. Poor birth outcomes, in turn, lead to poor health outcomes of babies, in terms of perinatal, infant and child mortality. How to account for and reduce the disparities in birth outcomes between Indigenous and non-Indigenous women has been the subject of various studies which have identified several factors that may be associated with these disparities. These factors include: the health characteristics of women of child-bearing age; their socioeconomic status; access to culturally appropriate maternal and child health services; pregnancy history; use of antenatal care services; and lifestyle factors, including smoking during pregnancy. Research into the simultaneous effect of these factors has been hampered by the lack of a national dataset that contains relevant information across these demographic, health, lifestyle, social, and contextual domains. To address the lack of data to examine these issues, this project proposes to create a linked perinatal, births and deaths dataset to bring together information across these datasets to enhance our understanding of the complex and multi-faced factors that are associated with birth and child health outcomes. The study will cover all children born in Australia between 2003 and 2010, and deaths occurring among these children between birth and age five; that is, deaths from 2003 to 2015. The objectives of the linked perinatal data set are closely aligned with the health building block in Schedule F of the Council of Australian Government's (COAG) commitment to addressing Indigenous disadvantage. The results of the study will be discussed during the conference.

Dunstan, Kim (Statistics New Zealand | Tauranga Aotearoa)

Forecasting mortality: empirical modelling as an input into stochastic population projections

Forecasts of mortality are a key input into population projections. This is especially so in an era of low fertility rates and population ageing. This presentation gives an overview of the coherent functional demographic model (FDM) used to forecast mortality, as used in Statistics New Zealand's national population projections (2011-base and 2013-base). The main advantages of the method are its empirical basis, transparency and replicability compared with previous methods. Death rates are allowed to decline at different paces at different ages, driven by historical trends. The model maintains the persistent male-female longevity differentials over a long forecast period. Importantly, the model provides measures of uncertainty. These are valuable in themselves but also a necessary input into stochastic population projections. Given the inherent uncertainty of the future, a meaningful indication of uncertainty is consistent with how projections should be conveyed and interpreted. Despite the benefits of an empirical model, we found practical challenges in implementing the new method. Initially, the mortality forecasts had implausibly narrow prediction intervals, and short-term forecasts were implausible compared with the latest historic data. These exemplify the need for official projections to be demographically plausible in the short and long term, as well as having a sound statistical and methodological basis.

Edgar, Barbara (The Australian National University)

Ethnic concentration, socioeconomic disadvantage and labour market outcomes in Sydney and Melbourne, 2011

Sydney and Melbourne have large non-Anglo-Celtic populations living in less advantaged suburbs to the west of the city centres. Some authors have linked ethnic segregation with negative labour market outcomes. On the other hand, a prosperous ethnic economy can facilitate job opportunities. This study examines whether ethnic concentration and neighbourhood disadvantage affect Sydney and Melbourne residents' prospects of employment and the likelihood of being 'over-qualified', i.e. having a job which does not adequately utilize one's educational qualifications. The analysis uses 2011 Census data and multivariate statistical techniques. The study finds that first generation migrants are more likely than later generations to be unemployed or economically inactive, after controlling for sex, age, human capital and other factors. Employed migrants are more likely than later generations to be over-qualified for their occupations. Women have a greater likelihood of unemployment, economic inactivity and over-qualification than men. Labour market outcomes differ across the ten ancestries in the study and some interaction effects are observed. For example, Chinese and Indian ancestries are more likely than Australian, English, German and Italian ancestries to be unemployed, economically inactive or occupationally over-qualified, *ceteris paribus*. For Australian and German ancestries, neighbourhood disadvantage predicts lower employment prospects, and a reduced likelihood of over-qualification for those with jobs. In contrast, for Chinese, Indian and Vietnamese ancestries, neighbourhood disadvantage predicts a greater likelihood of employment and over-qualification. For Asian ancestries, a high concentration of one's ethnic group predicts greater unemployment and over-qualification.

Evans, Ann (The Australian National University); Gray, Edith (The Australian National University)

Gendered dimensions of living apart together relationships

This qualitative study of 'Living Apart Together' (LAT) relationships is based on data collected through focus group interviews. Previous qualitative studies of LAT relationships have involved in-depth interviews of individuals or couples. Following Morgan (1997:12) focus groups were used in this study 'to produce data and insights that would be less accessible without the interaction found in a group'. This was the first time that all of the LAT group participants had been given an opportunity to discuss their experiences of being in a LAT relationship within a LAT-only focus group environment. Through the LAT focus group discussions it was possible to investigate how participants responded to questions about LAT relationships and what issues they considered to be of most importance within a group environment, highlighting areas of shared versus individual experiences in LAT relationships. The results contain insights into the reasons for having a LAT relationship, the benefits and disadvantages of LAT relationships, as well as the gendered aspects of negotiating non-cohabiting partnerships. The findings highlight that there are some aspects which reflect different considerations for women and men in their experiences of LAT relationships. These include risk and fear of the consequences of relationship failure, including financial considerations; negotiation between LAT partners about the nature of the relationship; choice versus obligation in terms of caring in LAT compared to co-habiting relationship; and how the presence or absence of a child or children shapes LAT relationships.

Falkiner, Alice (The Australian National University)

The effects of dual caring: Investigating the impact of combining informal care with other child care responsibilities

Informal care provided by family members is the most common form of care for people with disabilities or long term health problems in Australia. A significant proportion of Australia's informal carers are 'dual carers': these are carers who combine their informal caring responsibilities with other child care responsibilities. Role overload theories suggest that the wellbeing of dual carers could be negatively impacted by their increased caring responsibilities. Although little Australian research has been undertaken to determine the effects of providing dual care, research which has touched on dual carers indicates that they experience worse mental health and higher levels of stress and depression than both the non-caring population and single carers (Cummins, Hughes et al. 2007; Edwards, Higgins et al. 2008). Using longitudinal data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, this paper investigates the effects of dual care responsibilities over time. Multilevel model analysis, controlling for other socio-economic factors, is used on data from waves 5-12 (years 2005-2012) of the HILDA survey. Findings indicate that dual caring does reduce reported wellbeing compared to both the general population and those with only one caring responsibility.

Golebiowska, Kate (Charles Darwin University); Boyle, Alicia (Charles Darwin University)

How to engage recently arrived immigrants and refugees in the Darwin labour market to assist the Northern development?

This presentation will discuss the approach and preliminary findings from a new pilot project investigating how to unlock the potential of the 'hidden', resident labour force in the Northern Territory (NT), case study Darwin. It will focus on recently arrived immigrants and refugees, who represent an important component of this labour force. The NT is experiencing an unprecedented economic development boom, which is constrained by a tight labour market, mobile workforce and skills shortages across a number of occupations. With a renewed focus on the North, more development is anticipated to occur. Upskilling and getting into meaningful employment under-engaged and disengaged groups is critically important to unlock the potential of the 'hidden', resident labour force in the NT and by doing so, assist in seizing the opportunities for economic growth with which it is presented. This project will involve analysis of the publicly available statistics and an online survey questionnaire of Small and Medium

Enterprises (SMEs) in Darwin, designed in collaboration with stakeholders who work with and support disengaged and under-engaged residents. The project aims to identify in what sectors the gaps exist, determine what forms of training and/or short-term upskilling are needed for these groups to fill in those gaps, establish in what areas of vocational education and training and higher education they should be offered and establish what ongoing support is necessary for employers and employees in order to retain these workers. This will permit formulating and communicating recommendations to the relevant stakeholders with capacity to initiate change.

Graham, David (University of Sydney and Institute for Jewish Policy Research, London)

Migration as a source of ethnic sustenance: the experience of Australia's Jewish population

Australia's Jewish population is distinctive among migrant groups in having had an unbroken presence in the country since the landing of the First Fleet. Today the community is thriving and demographically it is larger than it has ever been. Yet the recurring process of structural assimilation means that few Jews can trace their Australian ancestry to anything like as far back as that first generation. Indeed, it is arguable that today's community only exists in contemporary Australian society because of multiple Jewish migratory influxes into the country, many in response to some of the world's most notorious human upheavals. Today half of all Australia's Jews—a group with strong ethnic, cultural and religious traits—reports being born overseas. Migration not only sustains the population but has also influenced its geographical distribution at national and local levels. However, with no obvious source of new and sizable Jewish migration on the horizon, leadership concerns about the long term viability or 'continuity' of the community are increasing. Rich sources of data on Australia's Jews from both the national census and community surveys allow an unusual picture to be painted which presents migration as a sustainer of ethnic distinctiveness. But as migration abates, it also highlights the dilemma of maintaining that distinctiveness in a free and open society. Further, the Jewish migratory experience may provide hints about the futures for other migrant groups in the country.

Gregor, Bruce (FIAA AIA Actuary and Demographic Researcher and Macquarie University)

A passion for survival

This presentation will use cohort population mortality for Australia, covering the period 1901 to the present time, to analyse the survival characteristics of individuals who have maintained lifelong "passions" outside work and family. The presentation is partly inspired by the work of Sir Michael Marmot, noted longitudinal researcher of health and longevity in the UK and author of the book "Status Syndrome". Groups studied for this presentation include the following: Federal Cabinet Ministers of Australia from 1901 onwards; Australians of the Year from 1960 onwards; Archibald Art Prize Winners from 1946 onwards; and Winning Skippers (on handicap) in Sydney to Hobart Yacht Races from 1945 onwards.

Hansnata, Erick (University of Canberra)

Migration in the Murray-Darling Basin during the millennium drought: Does the environmental aspect play a role?

The issue of environmental degradation was important in the Murray-Darling Basin (MDB) during the Millennium Drought period (2001-2009). It raises a question on the issue of population dynamics. Thus, understanding why people move within and outside of the MDB is fundamental to many of the key policy questions that arise in the debates on MDB policies and water futures. The study examines the relationship between migration activity not only with socio-economic conditions, but also with a particular focus on the environmental aspect that has never been done in the literature on the MDB. Moreover, the study also contributes to the global migration studies, where environmental factors have been increasingly regarded as one key determinant of migration. In order to examine migration in the MDB, the study develops the dataset from three different sources to capture migration data, socio-economic, and environmental factors. The spatial unit of the dataset is based on Local Government Area (LGA) level with the latest geographic boundaries as described in the Australian Statistical Geography Standard (ASGS) 2011. The migration data is obtained by utilising the 2011 Census of Population and Housing. In order to develop parameters of socio-economic factors, the study applies the latest National Regional Profile (NRP) of 2007-2011 from the Australian Bureau Statistics (ABS). In addition, following the key literature of environmental migration studies, this paper uses rainfall data as an instrument of the analysis of the environmental factor. The rainfall data is obtained from the Bureau of Meteorology (BoM) Australia, and the methodology is to construct the rainfall data based on the selection of reliable weather observations. Based on empirical estimation, the study confirms the relationship between migration and socio-economic factors, particularly among the young-age workers. The study also finds that the intensity of rainfall has an association with business activity, and thus has an impact on the decision to migrate.

Hosgelen, Merve (Flinders University); Saikia, Udoy (Flinders University); Dasvarma, Gouranga (Flinders University)

Population growth and forest dependence in Timor-Leste: Directions for conservation targeted policies

Timor-Leste, the newest nation in Asia, has one of the poorest and fastest growing populations of the world. It faces many development challenges, one of which includes rapid deterioration of its forests, with a 1.3 percent deforestation rate annually. This paper investigates the role of forests in maintaining and strengthening people's livelihoods at the household level and explores the socio-economic and demographic determinants of forest dependence in Timor-Leste. It discusses the pressures on Timor-Leste's forests in the face of population growth and current institutional framework. The main analysis of this paper is based on primary data (collected during field work in Timor-Leste between October 2011 and May 2012), which include 170 household interviews, 8

village questionnaires, 4 focus group discussions, and a number of in-depth interviews collected in 5 of 13 districts in Timor-Leste. This paper also processes the secondary data to analyse Timor-Leste's current population dynamics and to develop a future population scenario for the period between 2010 and 2030.

This paper finds that gathering of forest products by communities in Timor-Leste is still a complementary part of subsistence and traditional living and a supplementary source of household income. Having found a statistically significant relationship between a household's level of forest reliance and the number of children in a household, this paper suggests that deterioration of forests will be exacerbated by a growing population and unless conservation targeted policies address population growth and people's diverse dependence on forest resources, the sustainability of forests will not be ensured.

Hossack, Darren (Australian Bureau of Statistics)

The urban dilemma - a comparison of OECD and ABS urban definitions for Australia.

International comparisons of urban areas have always been difficult, due to the fact that an urban definition designed for one country may not work well for another – it's hard enough to derive a definition that works for your own country. This issue is further compounded when trying to compare multiple countries on the same basis. The difficulties in making these comparisons are well-known and generally acknowledged. The Organisation for Economic Cooperation and Development (OECD) has, by trial and refinement, developed a methodology for comparing urban areas across its member countries in order to make valid comparisons. However, to now this has not been applied to Australian cities. The Australian Bureau of Statistics has undertaken a study of this methodology and the results of its application to Australian cities, and compared it to locally-derived definitions. The results have been interesting and in some cases surprising, with a number of significant anomalies identified. This presentation shows the results of that work, and highlights some of the difficulties that arise when trying to establish a common "one-size-fits-all" methodology to what is a more complex issue than is first imagined. It looks at some of the issues that have arisen with the application of this methodology and the anomalies that have been identified, and offers a way forward for Australia to fulfil its data provision obligations as a member country of the OECD.

Hosseini, Meimanat (The Australian National University); McDonald, Peter (The Australian National University)

The gendered nature of assistance needs for core activities in older Australians

Population ageing generates many challenges and concerns for the health care system of Australia. There is an increased probability of having disability or need for assistance as people get older. This paper focuses on disability among elderly people in Australia and explores gender differentials of core activity needs for assistance. Requiring assistance with activities related to self-care, mobility and communication are considered because of disability, chronic health problem, or age are defined as 'core activity need for assistance (CANA)'. The 2011 Australian Census and the 2009 Survey of Disability, Ageing and Carers (SDAC) are utilised to explore to what extent gender and socio-demographic differentials explain CANA among older Australians. Living arrangements, origin, labour force participation and income seem to be predictors of CANA among older Australians when age and gender are controlled. The results indicate that less than 7% before age 65 need assistance with core activities, rising to 13% at 75 years, and to 35% at 85 years. Up to the age of 70, women have slightly lower assistance needs, but above 70 years these needs are consistently higher than their male counterparts (19% vs 16% for those aged 65-74 years). This gap rises to 49% for females compared to 38% for males aged 85-89 years. Multivariate analysis reveals that living with a partner/spouse significantly reduces the probability of needs for assistance, though; women are more likely in need of assistance than men at age above 80. Further investigation on women's life course, their motherhood and care giving tasks explains gender differentials.

Howe, Andrew (Australian Bureau of Statistics)

Restocking and improving Australia's regional population estimates

Since 2012 the Australian Bureau of Statistics (ABS) has significantly increased the quantity, quality and accessibility of Australia's regional population estimates. After realigning regional population estimates with the new statistical geography (the Australian Statistical Geography Standard), the ABS enhanced the historical series in 2013 by revising all regional population estimates back to 1991. After consulting and determining that changes needed to be made, the ABS developed and implemented a strategy to make these revisions, which impacted the regions in different ways. These revisions to 20 years of Australia's official population estimates was an extraordinary process, with changes made to long-standing population figures previously regarded as final. This presentation will focus on why these revisions needed to be made, how they were made and how the new regional series looks better. In 2014, the ABS further updated Australia's stockpile of historical population counts, by publishing regional population figures back 100 years. These will also be summarised in the presentation. The new, improved and easily-accessible population figures provide a richer and more realistic indication of how Australia's regional populations have changed over time, which in turn will better shape future regional policy and planning.

Hull, Terence H. (The Australian National University)

Confusion in the measure of Indonesian maternal mortality ratio trends

Since the adoption of the maternal mortality rate (MMR) as part of Millennium Development Goal (MDG) 5 in 2000, the pressure on countries to generate reliable and valid estimates of MMR has risen steadily. This paper reviews the experience of Indonesia in dealing with a string of contradictory estimates that show dramatically different trends as the country faces international judgement at the end of the MDG monitoring period in 2015. Unusually in Asia, Indonesia had mortality questions on the 2010 Census that allowed a rough count of maternal deaths. There have also been numerous demographic and health surveys using the sisterhood estimation method, and a number of attempts to use covariates in regression models to produce MMR estimates. The outputs of these prodigious efforts have been confusing for policy-makers, embarrassing for statisticians, and challenging for analysts. Though there is disagreement about the Indonesian target for 2015 (102 or 110 depending on the estimate for 1990) all recent estimates show the country will fail to come close. The 2012 DHS estimate of over 340 contrasted with the multiple estimates from the 2010 census in the range of 260 to 320. Recent Lancet and WHO publications produced estimates of around 190. For demographers the question is whether any method and data set can be relied upon, and if not how can estimates of MMR be best handled in public policy debates?

Huq, Nafisa Lira (International Centre for Diarrheal Disease, Bangladesh); Mahmood, Hassan Rushekh (International Centre for Diarrheal Disease, Bangladesh); Haque, Nafis al (International Centre for Diarrheal Disease, Bangladesh); Kabir, Ahsan (International Centre for Diarrheal Disease, Bangladesh); Ahmed, Anisuddin (International Centre for Diarrheal Disease, Bangladesh); Hossain, Shahed (International Centre for Diarrheal Disease, Bangladesh); Reichenbach, Laura (International Centre for Diarrheal Disease, Bangladesh); Quaiyum, MA (International Centre for Diarrheal Disease, Bangladesh)

Quality of antenatal care and identification of severe pre-eclampsia and eclampsia from rural community in Bangladesh

Identification of incidence of severe pre-eclampsia (SPE) and eclampsia is an indicator for the quality of antenatal care (ANC). Community Based Skilled Providers (CBSPs) are available to provide ANC in rural Bangladesh. This study observed the quality of ANC and identification of mothers with SPE and eclampsia from ANC records. All women giving birth between mid 2012 - mid 2013 in four sub-districts (approx. 1,200,000 population) of Hobiganj district were enrolled. Identification of mothers with SPE and eclampsia was conducted through reviewing CBSP's ANC register, referral hospital's case notes and household visits. The quality of ANC was assessed through observation of 413 mothers using a semi structured checklist at 67 community level facilities.

Among the 302 cases identified, 181 were eclampsia and 121 were SPE cases. Nineteen maternal deaths, 26 neonatal deaths, 81 recurrent convulsions, 46 unconsciousness, 25 still births, and 4 birth asphyxia were reported. Half of the cases were identified from referral hospital's notes and others during household visits from mothers' prescription. CBSP's ANC register was the least utilized source for case identification due to inadequate diagnostic records. ANC observation revealed that 96% mothers had blood pressure measurement and 61% had urine protein tested. Less than 20% were counselled on danger signs. Blood pressure measurement was not recorded instantly and testing urine protein rarely followed the standard guideline. This study found a large number of SPE and eclampsia cases resulting in high rates of maternal morbidity and fatalities. Training and motivation of CBSPs is a necessity to improve the standard of ANC.

Jackson, Natalie (University of Waikato)

Subnational depopulation in New Zealand – Tai timu tangata. Taihoa e?

The first data release from New Zealand's 2013 Census was accompanied by the statement that between 2006 and 2013, most of New Zealand's 16 regions grew, with just two declining in size. This was true at Regional Council level. At Territorial Authority (TA) level, where 67 administrative units are enumerated, 20 declined in size (30 per cent), up from 15 (22 per cent) 2001-2006, and at Census Area Unit (CAU) level, one-third of the 1,869 CAUs declined, up from one-quarter 2001-2006. This paper outlines the deepening trend of rural and non-urban depopulation in New Zealand, placing it in its broader (global) context and raising some of its implications. The paper draws on early output from a recently awarded Royal Society Marsden Fund project (The subnational mechanisms of the ending of growth – towards a theory of depopulation), the Maori interpretation of which is Tai timu tangata. Taihoa eh? With the ebbing of the human tide, what does it mean for the people? The paper also draws on a Ministry of Business, Innovation and Employment (MBIE) funded project under which New Zealand's first demographic accounting model has been developed, and which assists in explaining the nature of the trends.

Jatrana, Santosh (Deakin University)

Health service utilization between immigrants and non-immigrants in Australia

Health service utilization is critical for everyone to maintain good health. This study uses data from wave 9 of the Household, Income and Labour Dynamics in Australia (HILDA) survey to assess whether there were any differences in health care utilization, measured in terms of visits to general practitioner (GP), among foreign-born (FB) from English Speaking Countries (ESC) and non-English Speaking Countries (NESC) relative to native-born (NB) Australians. We used negative-binomial regression models for

evaluation of number of GP visits among 1,221 FB from ESC, 1,458 FB from NESC and 10,618 NB people, covered in this study. After adjusting for predisposing, enabling, and need factors, FB from NESC were found to have a higher number of GP visits relative to the NB people. We also found FB from ESC had relatively fewer number of GP visits while their duration of residence (DoR) was less than 20 years and after 20 or more years of DoR they had similar levels of GP visits as those of the NB people. On the other hand, FB from NESC though had a relatively fewer number of GP visits while their DoR was less than 10 years relative to NB people but they were not significantly different from the NB people while their DoR was 10-19 years and after 20 or more years of DoR they were more likely to have more GP visits than NB people. On the whole, this study showed that differences in health care utilization between FB and NB depend upon the country of birth and duration of residence in Australia.

Johnstone, Kim (NSW Department of Planning & Environment)

Communicating population projections to stakeholders: the New South Wales experience

Population projections provide important evidence to inform policy and planning decisions. However, most users of population projections are not demographers, nor do they understand the models that underpin them. Much of the public commentary about projected population futures, and the responses from government agencies that release such data are informed by local views of place and headline population numbers. In this context, communication of projection outputs by the demographers responsible for them needs to fall outside the technical parameters with which they are most familiar. This paper uses the recent release of official preliminary and final population projections in New South Wales (NSW) as a case study to explore the diverse strategies needed to communicate population information from government. It outlines key messages, the range of products used and responses to the projections from different stakeholders. It includes recommendations for successful communication and identifies those issues that remain challenges for demographers talking about their work with policy makers, planners and the wider community.

Joshi, Suresh (Deakin University); Jatrana, Santosh (Deakin University); Pasupuleti, Samba Siva Rao (Deakin University)

Does the smoking behaviour of foreign-born people converge to the native-born Australians? A longitudinal study

Tobacco smoking is considered as a major preventable health risk factor and is also a leading cause of morbidity and mortality worldwide. Using multiple rounds of panel data from wave 1-12 of the Household, Income and Labour Dynamics in Australia (HILDA) survey, a group-mean-centred multilevel mixed model, this study aims to investigate: a) whether differences exist in the smoking behaviour between foreign-born (FB) people from English speaking (ES) and non-English speaking (NES) countries and the native-born (NB) Australians, b) the differences in smoking behaviour of FB groups by duration of residence (DoR). The main exposure variables in this study were country of birth (CoB) and the duration of residence (DoR) for various FB groups. Self-reported tobacco smoking behaviour of the respondents is the outcome measure.

After adjusting for time-varying and time-invariant covariates, this study did not find any significant difference for the likelihood of smoking between FB from ES and NB Australians. But, FB people from NES were less likely to be tobacco smokers than FB from ES countries and NB people. Smoking behaviour of the FB people from NES countries converges to the NB Australians as they stay more than 20 years in Australia. However, FB people from ES countries have similar odds of smoking as compared to NB people, irrespective of their duration of residence in Australia.

Kandiah, Kasipillai (Department of Immigration and Border Protection); Arif, Usha (Department of Immigration and Border Protection)

Long-term economic implications of net overseas migration

In recent years, the level of net overseas migration (NOM) has generated a significant level of national interest and debate among demographers, policy makers, academics and other researchers. Estimating NOM levels has not only helped projecting the size, growth and structure of Australia's population but also provided vital information and insights to several areas of policy formulations such as migration management, infrastructure planning, housing supplies, water, social amenities and so forth at all levels of government including local and regional levels. Mainstream demographic research in Australia extensively studied how NOM will impact on the size, growth and structure of the Australian population over the long term. This research intends to shed light on the economic implications of NOM through economic modelling rather than the usual three Ps (Population, Participation and Productivity) framework that has generally been used to evaluate the economic benefits of NOM. It endeavours to answer the following questions by employing a Computable General Equilibrium Model (CGE) which was developed by the Centre of Policy Studies, Victoria University, Melbourne to evaluate the economic performance of immigration:

- What are the major macroeconomic implications of NOM growth over coming years for Australia broadly and its regions in particular?
- Is there any uneven economic dividend due to NOM growth between Australia's metropolitan and regional area, and are there distinctive patterns of economic benefits of NOM growth to cities and regions over time?
- Is there evidence that NOM growth below a certain level may result in negative economic consequences at the industry or sector levels?

Keygan, Amina (The Australian National University)*Australian men's intentions for children: What determines them?*

The contexts of 'low' and declining fertility rates in Australia, coupled with a structurally ageing population, have increased academics' and government interest in measures of family size and child number intentions. Family size intentions are considered one of the most proximate determinants of subsequent childbearing behaviour. However, the majority of work in this area focusses primarily on the childbearing intentions of women. This study differs by examining the determinants of child number intentions for Australian men. Using multivariate models, it draws on three waves of data from the Household Income and Labour Dynamics in Australia (HILDA) survey to investigate the key socio-economic, demographic and attitudinal variables associated with men's intentions for children. It specifically questions whether the effect of these variables has remained consistent over the previous eleven years. The results indicate that over time, the characteristics most strongly related to family size intentions of men have shifted, particularly across different parities. It finds, for example, at Time 1 (2001) that religion and country of birth were insignificantly related to men's intentions for children. However, at Time 3 (2012), these variables were amongst the strongest predictors of family size intentions. The preliminary explanation for these findings—which remains to be proven by further research—is that, over the previous decade in Australia, pro-natalist rhetoric has affected the social, political and economic context in which men make decisions about intended numbers of children.

Lavu, Esther (Papua New Guinea National Research Institute); Dasvarma, Gouranga (Flinders University); Saikia, Udoy (Flinders University)*Fertility behaviour of the Motu Koitabu women of Papua New Guinea.*

Urban women and women with Grade 7+ education have the lowest fertility in Papua New Guinea (TFR 3.6 and 3.8 respectively). A demographic study conducted in 2009-2010 shows ever married Motu Koitabu women of Hanuabada have a much lower TFR of 3.3. The mean ages at first marriage and first child birth of these women are 21 and 22 years respectively. The mean number of children ever born (MCEB) is 2.52. The MCEB of urban women and the highest educated women of PNG is 4.15 and 4.38 respectively. More than one half (62%) of the Motu Koitabu women had ever used family planning.

For the Motu Koitabu women, a bivariate analysis shows their fertility is influenced by income, skills in informal learning, age at first birth and ever use of family planning, but a multiple classification analysis used for controlling for age shows that age at first birth, income and ideal family size are the most important factors in explaining their fertility. The Motu Koitabu people live in cramped conditions in the densely populated Hanuabada, outside Port Moresby, but they are reluctant to move for fear of losing their clan support and cultural traditions. Thus, limiting their fertility appears to be one way of alleviating their population pressure. Therefore, they need better access to reproductive health to maintain their low fertility and further reduce it. Investments on informal sector activities to provide full employment would also help in empowering these women to lead a better reproductive life.

Li, Jianxin (Peking University); Cuicui, Xia (Peking University)*Socioeconomic status and health: Convergence or divergence (based on the data from CFPS2012)*

This paper uses data from the 2012 survey of Chinese Family Panel Studies (CFPS) and different health indicators to explore the relationship between socioeconomic status and public health in China, and to find out the influences of socioeconomic status on health and the socioeconomic difference in relation of age to health. The results suggest that the influence of socioeconomic status on health enhances with the growth of age and confirms the divergence hypothesis in some health indicators. Adversely, in other health indicators the results indicate a convergence effect. Generally speaking, the research finds the constant and accumulative effect of socioeconomic status on health throughout every age group. Therefore, improving social policy, focusing on social equality and reducing the inequality of socioeconomic status are of great importance to enhance the overall level of health.

Lu, Jiehua (Peking University); Li, Yue (Peking University)*The effects of socio-economic factors on mortality risk of the elderly with cognitive impairment in China: Evidence from CLHLS: 2008-2011*

Drawing upon data from the Chinese Longitudinal Healthy Ageing Survey from 2008 to 2011, this paper analyses key factors affecting mortality risk of the elderly with cognitive impairment in mainland Chinese from a sociological perspective. Under the premise of considering demographic characteristics, this paper studies the effects of physical health, living behaviour, mental states and socioeconomic supports on mortality risk. The results show that the impact of physical health on mortality risk is the largest one. Mortality risk of the elderly whose Activities of Daily Living (ADL) is functional is about 60% of that of the elderly whose ADL is dysfunctional. Among the living behaviours, whether to exercise is the only factor that is correlated with mortality risk. Mortality risk of the elderly who regularly exercise is about 80% of others. And whether to drink alcohol has no effect on mortality risk. A positive mental state could significantly reduce the mortality risk by about 15%. Socioeconomic supports, however, is not correlated with mortality risk. In conclusion, physical health, mental state and whether to exercise are the factors that affecting mortality risk of the elderly with cognitive impairment. Socioeconomic factors have no significant correlation with mortality risk.

Lu, Jiehua (Peking University); Wang, Weijin (Peking University)

Patterns of urban hierarchy and its changes in China since 21st century: Based on data of prefecture-level cities in 2001 and 2011

From the perspective of urban organization and integration in the urban system since the 21st century, this paper found an inverted Ding(T)-shaped pattern of urban hierarchy with six classes in China, a few metropolises with national, regional or provincial influence, led other cities, while a large number of ordinary cities gathered at the bottom of the urban hierarchy. From 2001 to 2011, China's urban hierarchy system showed a strong characteristic of inheritance, the top cities maintained dominant power persistently, while some cities with poor location or depleted resources were absolutely dominated by other cities in both years. In terms of mobility of urban hierarchy, cities in the middle and western part of China closely adjacent to the coastal provinces or municipalities rise rapidly, while cities in the northeast region, Shanxi province and outlying cities far from the delta areas in Guangdong and Fujian dropped sharply. Geographic location, transportation, resources, macroeconomic restructuring and industrial transfer in the coastal provinces as well as the strong government intervention contributed to these changes.

Lucas, David (The Australian National University); Edgar, Barbara (The Australian National University)

The Africa-born in Australia, 2011: Employment and education

The number of persons born in Sub-Saharan Africa (including Sudan) enumerated in the Australian Census doubled from 146,590 in 2001 to 295,375 in 2011. In this paper we compare sources of skilled migrants (South Africa, Zimbabwe, Kenya, Zambia and Nigeria) with selected refugee source countries: Sudan, including South Sudan; Horn of Africa (Ethiopia, Eritrea, Djibouti, Somalia); Central Africa Francophone countries (Burundi, Congo and Democratic Republic of Congo); Liberia and Sierra Leone. We analyse 2011 Census data related to residential distribution, human capital (language spoken at home, post-school qualifications), labour force status and occupation for males and females. As expected, migrants from refugee source countries are less likely to hold a degree and are more likely to be unemployed compared with migrants from skilled source countries. The educational gap between males and females is also greater among migrants from refugee source countries. Around half of employed skilled source country migrants are managers or professionals compared with fewer than 25% of migrants from refugee source countries. Among the latter category, approximately 45% of males are machinery operators/drivers or labourers. Further analysis is needed to see whether these educational and employment gaps persist over time. For example, consideration could be given to the education and jobs of different age and arrival cohorts from Africa using 2006 and 2011 census data. Regarding residential distribution, are migrants from Africa in low socioeconomic areas doubly disadvantaged because of schooling and job opportunities?

Makaev, Lev (Australian Bureau of Statistics)

Australian Census and Migrants Integrated Dataset (ACMID), 2011

The Australian Census of Population and Housing provides a wealth of information about migrants living in Australia. However, there are certain questions that the Census data alone cannot answer. Key questions remain relating to the relationship between a migrant's entry conditions and the quality of their post arrival outcomes. The Migrants Census Data Enhancement (CDE) project brings together the breadth of the 2011 Census data with Australian Government administrative information on permanent migrants from the Skilled, Family and Humanitarian streams - from the Settlement Database (SDB). Integrating 2011 Census data with the SDB using probabilistic linking methods has resulted in the creation of a new enhanced dataset, the Australian Census and Migrants Integrated Dataset (ACMID), 2011. Settlement outcomes of recent migrants who arrived in Australia between 1 January 2000 and 9 August 2011 can now be understood in terms of Census data items cross classified by their entry conditions (i.e. visa stream, onshore or offshore applicant status, main or secondary applicant). This project contributes significantly to the pool of available migrant data and can inform policy and assist in the evaluation of migration programs and support services. The ACMID enables examination of variations in labour market and other socioeconomic outcomes for different migrant groups. This presentation will provide an overview of the Migrants CDE project, the 2011 ACMID and present some interesting findings.

Mao, Fei (The Australian National University)

What factors contributed to family changes during China's rapid economic development?

China has undergone tremendous changes since the late 1970s. Peoples' daily lives are largely changed during rapid economic development and demographic transition. Family is the basic component unit of human society and it has absorbed the interests of researchers in various areas. However, the main contributors of the changes in Chinese family and household composition are still unfolding. In this study, 1982, 1990, 2000 and 2010 Census data are used. This paper uses standard statistics and demographic methods to analyse the changes in family and household composition and formation and the major factors which are closely related to the changes. In my preliminary study, nuclearization is apparent. However, the proportion of three-generation family households did not change markedly. The changes are found to be highly related to both fertility decline and old people's living propensity. How did family and household composition change in the past decades? What are the major factors affecting family structure during socioeconomic and demographic transition? This paper aims to give the answers.

Massey, Simon (NSW Department of Education and Communities); Tranquille, Melissa (NSW Department of Education and Communities)

Can we trust the accuracy of population projections?

Population projections are a key component of work for many public and private sector population research teams. Projections are used to underpin strategy development, effective service planning and delivery, capital investment decisions, and are the foundation of many research projects. Despite the wide use of population projections, there have been few papers evaluating their accuracy. This presentation seeks to answer the age old question of “how accurate are population projections?” by comparing the last 10 sets of New South Wales (NSW) Government projections with finalised Australian Bureau of Statistics (ABS) Estimated Resident Populations (ERPs). Comparisons are made of the total population and age/sex distributions for NSW, Sydney Statistical Division (SD) and LGAs. In addition to a comparison of projection outputs, an evaluation has been made of the NSW state input assumptions for the last 10 sets of population projections, revealing which component of growth is the hardest to predict. Implications for the development of future population projections in all jurisdictions will be drawn out.

Maxwell-Stewart, Hamish (University of Tasmania)

Living in a convict colony

This presentation will outline a range of ways in which longitudinal data can be used to explore living conditions in 19th and early 20th century Tasmania, Australia. It will use height records for transported convicts (born 1770–1830), free migrants (born 1820–1880) and the colonially born (1830–1910) to show how the nutritional status of successive birth cohorts was impacted upon by coerced and other forms of migration. The novel perspective we hope to add to the discussion is the potential advantages of linking height records for successive generations, as well as the longitudinal use of height observations taken for the same individual at multiple points in their life. We will also look at the ways in which information about parental occupation, location of birth and offending history can help to interpret the findings of this work. Amongst the many challenges is the issue of under registration of births and the problems that this entails for intergenerational record linkage.

McCalman, Janet (The University of Melbourne); Kippen, Rebecca (The University of Melbourne)

The Founders and Survivors Ships Project: life courses of convicts transported to Tasmania, 1812–53

Around 60,000 men and 12,000 women were transported to Tasmania over the period 1803 to 1853. This paper reports on a sample of these convicts consisting of just over 20 per cent of the men and half the women. Working with a team of volunteer genealogists and using a variety of sources we have traced the convicts from transportation through to death. We investigate differences in background characteristics (including country of birth, family background and crime), experience under sentence (including further offences committed and punishments received), and life outcomes (including marriage, children, grandchildren and age, cause and place of death). We find that both background characteristics and experience under sentence were related to success in family formation and length of life.

McDermid, Ian (The Australian National University)

Dying with a disease, but not from that disease: evidence from Australian multiple causes of death data

For many medical conditions that are increasingly prevalent in an ageing population, such as prostate cancer, there is a common belief that you are more likely to die with that disease, rather than from that disease. “Prostate cancer can be a serious disease, but most men diagnosed with prostate cancer do not die from it” (see the US Cancer Society website: <http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-key-statistics>). Since the introduction of ICD-10 (the tenth edition of the International Statistical Classification of Diseases and Related Health Problems) in 1997, Australian death registrations have included not only the underlying cause of death, but also other antecedent and contributory causes of death (called the “multiple causes of death”). In this research, using prostate cancer and dementia as examples, we examine Australian multiple cause of death data from 1996 to 2005 to investigate conditions that are likely to be present in deaths at relatively old ages, but which were not considered to be the underlying cause of death.

McDonald, Peter (The Australian National University)

Temporary skilled migration to Australia: an assessment of the 457 visa programme

Outside of Australia, the Australian way of doing temporary skilled migration is generally regarded favourably, as something of a model for the rest of the world. Within Australia, however there are highly polarised views about the vehicle for temporary skilled migration, the 457 visa programme. It has now been in operation for 18 years and, during that time, has had six major reviews and several other investigations. Problems have arisen because the nature of the visa has evolved over time but administrative procedures have failed to keep pace with this evolution. When introduced in 1996, the visa was directed primarily at persons with high-level professional skills. Later, as the Australian economy boomed in the 2000s, the occupational range widened, in particular, to cover the skilled trades. More recently, it has become one of the principal pathways to permanent residence in Australia. It seems surprising that a group that constitutes less than one per cent of the total Australian labour force should create such controversy however abuses of the system by Australian employers hit the press with relative frequency. In the lead-up to the 2013 election, an Australian prime minister broke ranks with the long-term bipartisan support for the programme by publicly criticising it and

instigating legislation to restrict access to the visa that was enacted at five minutes to midnight on the parliament's last day. This paper examines the trends in the 457 visa programme since 1996 and provides an assessment of its changing fortunes.

McGuigan, Karen (Department of Immigration and Border Protection)

Net overseas migration

On a quarterly basis, the Department of Immigration and Border Protection release a set of net overseas migration (NOM) projections. These projections are undertaken by visa major group, and produce estimates to 2017-18. Over the last year or so, the department have been reviewing (i) the visa classification used in NOM and (ii) the methodology used to produce the NOM forecasts. This paper will briefly discuss the changes to the visa classification, results of the NOM modelling investigation and the revised methodology used to forecast NOM.

Regional net overseas migration

In late 2013, the Department of Immigration and Border Protection released its first set of regional net overseas migration (NOM) estimates and forecasts. The net overseas migration information included: annual net overseas migration forecasts 2016-17 by visa major group and capital city/balance of state annual estimates from 2004-05 to 2016-17 by visa major group. This paper will discuss the methodology used to split the actual and forecast net overseas migration estimates into regions, including the assumptions used. The paper will also discuss the differences between the department's NOM estimates by state, the limitations of the current work and consider future work to improve our estimates.

McMillan, Rachael (University of Waikato)

A disaster waiting to happen? Elderly people and population ageing in at risk locations

Recent catastrophic natural hazard events and their ongoing impacts have accentuated the need to reduce risk and community vulnerability to natural hazard events (Wang & Yarnal, 2012). Elderly people suffer more than the general populace from natural hazard events both in the event itself and in the aftermath (Cutter, et al., 2003; Mountfort, 2012; Ngo, 2012; Tobin, 1999; Wang & Yarnal, 2012). A case study was undertaken in Mt Maunganui to examine the vulnerability of elderly people to tsunamis and assess whether restricting rest homes from being built in known hazard risk areas would improve overall place vulnerability and community resilience to natural hazard events and if so, whether such measures would be feasible. It was found that Mt Maunganui is vulnerable to tsunamis and that there is a significant risk to elderly people in beachside locations, which will increase with an ageing population and as more people retire to the coast (Statistics NZ, 2006; Wang & Yarnal, 2012). Interviews with stakeholders highlighted extreme challenges for evacuating elderly people in significant hazard events. Fatalism, evacuation priorities and elements of euthanasia were unearthed as inhibiting effective evacuation. Perceptions of risk were found to influence attempts to reduce risk. This research has policy implications for an ageing population as more elderly people chose to live in marginal hazard prone areas.

Meng, Xiangjing (Renmin University of China)

Slowing down the urbanization pace and going through the peak population period smoothly: Discussion the way of urbanization by analyzing the demographic scenario in China

The urban population reached 50% of the total population in 2011 in China. It means that the process of urbanization in China has come to a new stage. In the meantime, the Chinese government is now making an effort to accelerate urbanization as their goal and new economic growth dynamic. The new plan of urbanization which was published in 2014 indicates the percent of urban population will reach 60% by 2020 while the percentage of urban household population will reach 45%. Urbanization becomes a hot issue of the academy and huge project for the whole country. The process of urbanization is a complex movement which will influence every family and every single person especially rural people. Though there are many experiences and different ways of urbanization in developed and developing countries in the world, the process of urbanization in China is the most complex and special case, not only because of its huge population size, and not only because of the abnormal ups and downs of urbanization since 1949 in China, it is also because of the great change of population structure in urban and rural China in the past 30 years and the fact that it will come to a peak in the near future. This paper will use 2010 population census data to analysis the structure of urban population, rural population and floating population and how the population structure will change before 2030 and their influence on land, environment, economy and society. The results will figure out that keeping urbanization in an optimum speed and focus to settle the 0.25 billion floating population in urban area is the most critical and sustainable urbanization way in China.

Micallef, Nicole (NSW Department of Planning & Environment); Taylor, Alison (NSW Department of Planning & Environment)

Flocking to Sydney: A review of 20 years of regional youth migration in NSW

Migration within Australia is a key contributor to changes in Australia's population distribution and one of the causes of New South Wales' (NSW) variable population growth. It is well established that young people are the most mobile age group; this is no different for NSW. For many, this entails a move from regional areas to a larger population centre or the city lights of Sydney. This exodus of youth from regional NSW is not a new phenomenon, but a longstanding trend with numerous implications for both

source and destination areas. Drawing on data from the Census, this paper describes the changing patterns of youth migration in NSW over the past 2 decades. It explores drivers of migration for young people aged 15-24 years, for both interstate moves and for those within NSW. Also addressed are the resulting impacts on population age structure. The paper investigates whether the strong pull of Sydney for regional youth is still evident today. Appreciating the patterns and drivers of migration helps us understand NSW's current and future population dynamics.

Miranti, Riyana (University of Canberra); Brown, Laurie (University of Canberra)

Moving up the ladder? Examining the impact of internal migration on occupational mobility in Murray Darling Basin (MDB), Australia

Despite the proliferation of migration studies, there have been few which have examined the impact of internal migration on occupational mobility within Australia. This paper analyses the impact of migration on occupational mobility with a focus on the Murray Darling Basin (MDB). The MDB is one of the largest river systems in the world and Australia's most iconic river catchment area. Over 2 million people currently live in the MDB. Over the five year period 2006-11, some 17.4% of the MDB population moved out of the Local Government Area (LGA) in which they resided - 6.4% shifting to another LGA in the MDB and 10.9% to a LGA outside of the MDB. Thus a number of people in this region are indeed 'movers'. Our previous work found that in comparison to the 'stayers', the movers tended to have higher socio-economic status. For example, they had a higher level of educational attainment, a higher proportion worked full time, and earned more. However, it is not clear what happened in terms of their occupations post-migration. Extending our previous results, there are two objectives to this paper. First, it will analyse the patterns of occupational mobility in the MDB over the period 2006-11 using the 2011 Census data. This will include a comparison with the occupational mobility of in-migrants to the MDB as well as migrants relocating in other parts of the country. Second, the paper will investigate whether a past internal migration experience increases the likelihood of upward occupational mobility, for both the MDB and other parts of Australia by utilising the Australian Census Longitudinal Dataset, 2006-2011.

Moyle, Helen (The Australian National University)

The historical decline of fertility in Tasmania, Australia: When did it begin and to what extent was it due to 'stopping' or 'spacing' behaviours

Fertility began to fall in Australia in the early 1880s, although it may have occurred slightly later in Tasmania and from a higher level. There were marked variations in the fertility decline by husband's occupation, urban/rural location and mother's birthplace, with the decline starting earlier in urban areas, for the 'elite' and 'white collar' workers and for women born in the United Kingdom. The evidence as to the extent the fertility decline was due to couples stopping childbearing at lower parities and/or spacing their births, however, is very limited. To date, the Australian historical fertility decline has been examined using data from the 1911 and 1921 Australian censuses or in small studies that have used vital registration data from specific colonies or regional areas. For this study of the Tasmanian fertility decline, I have reconstituted birth histories of four cohorts of couples married in Tasmania in 1860, 1870, 1880 and 1890 using digitized Tasmanian 19th century registration data plus data from many other sources. This enables me to use multivariate methods to examine the timing of the fertility decline, the extent the decline was due to changes in stopping and/or spacing behaviours, and what factors were associated with these, for instance, socio-economic status and geographic location.

Muhidin, Salut (Macquarie University); Silalahi, Maria (Provincial Health Office of East Nusa Tenggara, Indonesia); Pardosi, Jerico Franciscus (Macquarie University & Indonesian Ministry of Health); Prasodjo, Rachmalina S. (Indonesian Ministry of Health)

Community engagement for saving lives at birth in East Nusa Tenggara, Indonesia

Studies have indicated that a combination of clinical and community-based interventions have supported the efforts to reduce early mortality in the context of developing countries (Piane 2009). In the same direction, a high child/maternal mortality rate province of East Nusa Tenggara in Indonesia has introduced an integrated health program so-called the "Revolusi KIA" with a strong community engagement of the 2H2* system. The program emphasizes the efforts to ensure and facilitate mothers to have health facility-based births. The 2H2 support system is part of the intensive health monitoring programs to pregnant women within 2 days before and 2 days after the time of birth which is considered as the most critical period for having risks of child/maternal mortality. It aims to alert and mobilize communities to be involved in ensuring that the mothers would have safe births. Nevertheless, the program has achieved variable results in this province and so far there is no valid evidence and documentation that indicate what has been going on for the 2H2 system and whether it is working effectively. This paper attempts to outline preliminary results and findings from an on-going study supported by WHO and USAID that aims to investigate why variation in results occurred in community engagement through 2H2 system. Some recommendations about potential solutions to overcome the barriers will also be provided.

*"The "H" in the program's name stands for hari, the Indonesian word for "day". Under 2H2, women are monitored closely for two days before their delivery date and two days after through a mobile phone network that extends from far-flung villages to the district's capital, Larantuka"
<http://aipmnh.org/web/news/97-aipmnh-news/174-partnering-with-a-life-saving-mobile-phone-network.html>

Neilson, Jessica (Australian Bureau of Statistics); Carlton, Denise (Australian Bureau of Statistics)

Australian historical population statistics - The ABS collection

In September the Australian Bureau of Statistics (ABS) updated the Australian Historical Population Statistics publication for the first time since 2008. This collection of historical datasets tells a compelling story of Australia through demographic data on a variety of topics including population size and growth, population distribution, births, deaths and migration. The data are available going back, where possible, to the beginning of European settlement, illustrating the ages of penal transportation, gold rush and post-Federation. Using a selection of topics from this comprehensive collection of datasets, this presentation will use visual storytelling to bring two centuries of demographic data to life.

Newell, James (Monitoring and Evaluation Research Associates Ltd (MERA))

Industrial and demographic structures by type of Australian local labour market catchment area in 2011

This paper reviews evidence of coherence between local labour market catchment area "types" based on industry composition, and the corresponding usually resident population age structures. Local labour market catchment areas as used are based on the method of Newell and Papps (2001) applied to Australia population census travel to work commuting data. The method delineates discrete local labour market area commuting catchments areas from Australian population census travel to work commuting data. In this exploratory analysis, local labour market catchment "types" are grouped into industrial employment composition types based on similarity of employment composition by industry group data.

Okumura-Rougeaux, Reiko (The Australian National University)

Pathways to employment: Experiences among youth in Indonesia

This study examines the patterns of school-to-work transitions of senior high school graduates in Indonesia. It tracks their individual life courses by using the longitudinal Indonesian Family Life Survey (IFLS). Not only does Indonesia have the largest proportion of youth in the Southeast Asian region but also the highest youth unemployment rate. The unemployment rate of the senior high school graduates is significantly high. The study is important because it helps in understanding their detailed activity patterns in order to identify factors associated with their activity status. The data represent young people 18 to 29 years old from 1993 to 2007 with four waves of IFLS. Past studies on school-to-work transitions in Indonesia have often focused on the correlation between school levels and future earnings or skill demands by firms in general mostly by using cross-sectional data. These studies have provided broad information on formally employed youth or an overall picture of youth unemployment, however, little is known about individual experiences and choices of youth. The results of this contribute to understanding underlying causes of high youth unemployment and to providing practical suggestions for better youth employment policies and programs.

Pardosi, Jerico Franciscus (Macquarie University & Indonesian Ministry of Health); Parr, Nick (Macquarie University); Muhidin, Salut (Macquarie University)

Fathers' and grandmothers' perspectives on and knowledge and experience of child health and survival in Ende District, Indonesia

Husbands and elder relatives continue to play major roles in household decision-making in Indonesia. However there is a shortage of literature on their influence on child health-related decision-making. This paper aims to explore fathers' and grandmothers' perspectives on and knowledge and experience of child health and survival in an underdeveloped district in Indonesia. Fifteen fathers and five grandmothers were interviewed in-depth. The results show most of the fathers and most of the grandmothers had an inadequate knowledge of the determinants of child survival and childhood illness signs. None of the informants had received education on child health from the local health staff. None of the fathers who had experience of child deaths were aware of the cause of their child's death. A few respondents expressed disappointment with the availability of village midwives and had experienced discomfort during the child's delivery. Involving fathers and grandparents in continuous health education programs by village midwives and nurses and addressing issues of child health service staff availability are important measures needed to improve child survival in Ende district.

Parr, Angélique (NSW Department of Planning & Environment)

Opening a window on the motivations for return migration in Australia

The over-reliance on census data to observe mobility patterns in Australia leaves some dimensions of migration poorly measured or inferred, and others unexplored. The lack of information about why people move is a major deficiency of the census, and an absence of other suitable alternatives has made this a seldom researched field, particularly in relation to return migration. A dearth of work by migration researchers outside of Australia provides little light on the topic. This paper posits that returns are linked to significant events in people's lives, but extends this explanatory framework to look for additional underlying factors and motivations to better explain return mobility. Utilising information collected from a series of migration biographies from Australians who have returned to a former place of residence, this paper steps forward to provide some illumination on the underlying reasons why people make such moves. It reveals a breadth of explanation that reaches beyond those offered by previous return migration studies, particularly those previously set within a neoclassical economic framework. In doing so it enriches research already undertaken in this field and suggests some reasons why work on the selectivity of return has failed to be more definitive.

Parr, Angélique (NSW Department of Planning & Environment); Argent, Neil (University of New England)

Drivers of regional migration in New South Wales, 2006-11

The modelling of internal migration change is an obviously vital yet often fraught aspect of national and sub-national population projections. Drawing on a small set of local economic, locational and environmental indicators, this paper sets out a model to better predict inter-regional migration processes across non-metropolitan New South Wales for the 2006-2011 intercensal period. Following a series of parametrical linear and spatially weighted statistical analyses applied to the model at two scales - that of the entire non-metropolitan area of the state, and of the six non-metropolitan planning regions used by NSW Department of Planning & Environment - the paper finds that the model is a powerful predictor of in-, out- and net migration. What is more, the model's power to explain regional migration flows across NSW is increasing over time.

Parr, Nick (Macquarie University); Johnstone, Kim (NSW Department of Planning & Environment)

Fertility in New South Wales: What we know and implications for the future

Recent development of new official NSW population projections led to the setting of higher fertility assumptions than had been set in the past and higher assumptions compared to those used by the Australian Bureau of Statistics for its population projections. In order to strengthen the evidence base underpinning the fertility assumptions for future reviews of the NSW population projections, more detailed analysis of fertility trends in New South Wales was undertaken. The aim was to identify those factors likely to inform future fertility intentions and behaviours. This paper presents key findings from the analysis, showing a move to older childbearing alongside a halting of the trend to smaller average number of children ever born to women at age 40. There are marked geographic differences between urban, rural and remote areas, with urbanization associated with lower fertility. Lower completed fertility has also been a characteristic of migrants to NSW, both from overseas and interstate. The implication of these patterns for the future is that NSW is likely to see relatively little change in completed cohort fertility in coming years.

Parr, Nick (Macquarie University); Li, Jackie (Curtin University); Tickle, Leonie (Macquarie University)

The cost of living longer: Projections of the effects of prospective mortality improvement on economic support ratios for fourteen more advanced economies

The aims of this paper are threefold: (1) to forecast mortality for a wide range of more developed countries from 2010-2050; (2) to project the effects of the forecast mortality patterns on economic support ratios assuming continuation of current fertility, migration and labour force participation; and 3) to calculate changes to labour force participation which would offset these effects. The mortality forecasts are prepared for fourteen countries using the Poisson Common Factor Model proposed by Li (2013). The mortality forecasts show that the projected gains in life expectancy are greatest in Japan, Australia and East-Central Europe, and are least in Netherlands, North America and Sweden. The results for the projections show that the support ratios are projected to fall most over the period to 2050 in Japan, East-Central and Southern Europe, and least in Sweden and Australia. However, except for Poland, some recovery in support ratios is projected for the East-Central and Southern European countries post 2050. Using the valuation method of Guest and Parr (2014), the largest percentage increases in labour force participation needed to counterbalance the projected effects of mortality improvement are for Japan, Poland and the Czech Republic, and the smallest increases for the USA, Canada, Netherlands and Sweden. Whilst the forecast gains in life expectancy for Australia are above average, the percentage increases in labour force participation rates needed to compensate for their projected effects on support ratios are below average, due to the younger age structure of Australia's projected population.

Pasupuleti, Samba Siva Rao (Deakin University); Jatrana, Santosh (Deakin University)

Whether incidence of disability vary by country of birth and duration of residence in Australia? A longitudinal investigation

Disability, which refers to a physical or mental health condition that limits a person's movements, senses, or activities, is a growing concern in Australia. Its affect can be more severe among immigrants than among the non-immigrants, mainly because of the former's disadvantage in terms of both knowledge and the access to health care facilities. Using data from a nationally representative Australian household panel survey, this study examined whether the incidences of disability vary by country of birth (CoB) and duration of residence (DoR) in Australia. All the respondents who do not have any type of disability in wave 3 of the Household Income and Labour Dynamics in Australia (HILDA) survey have been followed to investigate whether the risk of disability during waves 4 to 12 vary by CoB and DoR. Kaplan-Meier techniques and extended Cox regression models were used. Study findings showed incidence of disability does not vary by country of birth but vary by duration of residence in Australia. In particular, the incidence of disability is significantly less likely among the immigrants from non-English speaking countries (NESC) relative to the native born (NB), while their DoR is less than or equal to 20 years in Australia. For DoR greater than or equal to 20 years immigrants from NESC have similar levels of incidence of disability as those of the NB people. No significant difference was found in the incidence of disability between immigrants from English-Speaking countries (ESC) and the native-born people, irrespective of their DoR in Australia.

Pawar, Shefali (University of Waikato); Jackson, Natalie (University of Waikato)

New Zealand's first demographic accounting model

This paper outlines the development of New Zealand's first demographic accounting model, funded by the Ministry of Business, Innovation and Employment (MBIE). It discusses the strengths and limitations of the underlying data and approach, and demonstrates several examples of the model's output. Although some methodological issues still need to be resolved, the model provides a first comprehensive evidence base linking fertility, mortality and migration and showing how these have combined to shape New Zealand's Territorial Local Authority (TLA) populations over the past two decades. This is particularly so in terms of the compounding effect of successive years of net migration loss at young adult ages, which for many TLAs can be shown to have incrementally decimated the future reproductive age cohort, and hastened the shift towards natural decline.

Pennec, Sophie (Institut national d'études démographiques); Gaymu, Joëlle (Institut national d'études démographiques); Morand, Elisabeth (Institut national d'études démographiques); Monnier, Alain (Institut national d'études démographiques); Riou, Françoise (University of Rennes and Pontchaillou hospital); Aubry, Régis (Observatoire national de la Fin de vie and Jean Minjot hospital); Pontone, Silvia (AP-HP, Robert Debré hospital (Paris, France) and Institut national d'études démographiques); Cases, Chantal (Institut national d'études démographiques)

Where do people live during their last month of life: is there an age effect?

In France, like in many other Western countries, deaths arise at a more and more older age. At the same time, home was the main place of death until the 1950's, but place of death has steadily evolve towards institutions and in particular hospital. Dying at hospital does not mean that all the end of life took place at the hospital. Previous research have shown that at this stage of life, medical symptoms, pathology, type of treatments are very much related to the place of end of life. The aim of the presentation is to assess whether the factors related to each end-of-life trajectories are the same at all ages. We will compare the trajectories of people aged 70-89 and of those aged 90 and over. We will analyse how socio-demographic and medical variables are associated to each end of life trajectory. This analyse of the age effect on circumstances and trajectories at the end of life will help to understand the constraints related to staying at home or getting to hospital at this period of life. The sample of the survey "End of life in France" run by INED in 2010 is made of a representative sample of deaths. The respondents are the physician who signed the death certificate and they were questioned about the circumstances around the end of life of these persons. Our analyses are made on a total of 2823 non sudden-deaths with a complete residential trajectory. Logistic regressions are performed for both age-group on 7 different trajectories: remaining at home, at hospital, in nursing home or changing place of residence within the month from home or nursing home to hospital or vice versa).

Qu, Lixia (Australian Institute of Family Studies); Weston, Ruth (Australian Institute of Family Studies)

Leaving and returning to the parental home: What does the 2006-2011 Australian Census Longitudinal Datasets suggest?

Whether temporary or permanent, leaving one's parental home is an important marker of achieving adulthood. The timing and circumstances leading to this transition and any return home vary considerably. Using the Australian Census Longitudinal Datasets (ACLDS) 2006–2011, this paper focuses on patterns of leaving one's parental home or of returning to it apparent among young men and women between 2006 and 2011 and some of the socio-demographic factors associated with these trends. Particular attention is given to links between leaving home and family type, here defined in terms of whether the young adult was living with both natural parents or with one natural parent and a step-father or step-mother, as prior research has found that young adults tend to be less satisfied with their relationship with step-parents than with biological parents.

Raissi, Mahin (The Australian National University); Ackland, Robert (The Australian National University)

Homogeneity in personal networks of Australians aged 50 years and over: evidence from Facebook

Sociologists have long observed that people who are similar to one another tend to form social connections, a phenomenon known as homophily. This leads to clusters or groups in the social world. This clustering based on socio-demographic attributes has important implications for the spread of information, support, disease or any socially exchanged good. In this paper, we study homogeneity in personal networks and its implication for the psychological well-being of Australians aged 50 years and over. We collected data on the Facebook personal networks of 112 Australians aged 50+ that comprises more than 70,000 Facebook friendship ties among 10,000 people. Our data include three components: 1) The structure of relationships between participants and their friends and among their friends 2) Socio-demographic attributes (sex, age, relationship status and education) and geographical location of participants and their friends 3) Psychological well-being of the 112 participants in this research. Our analysis has two parts. First, we describe homogeneity in personal networks. Homogeneity is measured in two ways: network structure (i.e. number of clusters) and individual attributes (socio-demographic and geographical location). We first study the extent to which participants and their network members have similar attributes and then how network members with similar attributes are clustered together within personal networks. Second, we provide analysis and findings on associations between homogeneity in personal networks and psychological well-being. This paper also discusses the advantages and challenges of using Facebook to conduct population research and in particular for studying homogeneity.

Rarere, Moana (Waikato University); Kukutai, Tahu (Waikato University)

Changing patterns of identification and tribal population growth in Aotearoa New Zealand

Tribes or iwi are core institutions in contemporary Māori society, linking together individuals, whānau (families) and hapu (sub-tribes) through ties of common descent. As a result of receiving financial settlements for historical injustices, a growing number of iwi now have the resources to influence the economic and social and cultural well-being of their people. Despite their growing importance, however, little attention has been given to their changing demography. Using data from the New Zealand Census of Population and Dwellings from 1991, we analyse changes in population growth and age-sex composition for the ten largest iwi between 1991 and 2013. We find a great deal of variation in iwi growth patterns in any given intercensal period, as well as over time. In most cases, iwi birth cohorts increased rather than decreased in size and gains from 'new' members were especially marked among children, the middle-aged and women. Our analysis suggests that the increased propensity to report an iwi affiliation in the census cannot be solely attributed to a 'settlement' effect, but rather is likely due to a number of factors including instrumental changes in census and classification practices, changes in the broader socio-political environment, and individual-level demographic characteristics. Our findings reaffirm the importance of accounting for non-demographic factors when projecting and planning for future iwi population growth.

Raymer, James (The Australian National University)

Developing a projection model for Australia's Indigenous interregional migrants

In this paper, a model is developed for projecting the interregional migration flows of Australian Aboriginal and Torres Strait Islander (Indigenous) populations in Australia at the regional level by age and sex. Interregional migration flow data from the Australian censuses are first analysed using log-linear models in order to identify key structures and patterns over time. This information is then used as the basis for projecting the origin by destination by age by sex patterns forward in five-year increments to 2031. These projections will be used as inputs in a dynamic multiregional model of Indigenous population change being developed as part of the ARC Linkage Project on 'Improved Indigenous Population Projections for Policy and Planning.'

Rennie, Morgan (Regional Australia Institute)

Breaking the regional population myth

Australia's regions are diverse and dynamic – despite the popular misconception of regional Australia as a single entity that is in constant decline. The Regional Australia Institute (RAI) has identified three population trends that will be fundamental to shaping the future of regions: regional returners, super-boomers and international migration trends. 'Regional Returners' are people who left regional Australia in their younger years but have returned in their next state of life. There are now more people aged 25-44 migrating from the capital cities to regional areas than vice versa. The rise of the 'Super Boomer' comes as the most diverse, educated, wealthy and experienced generation to reach retirement age are increasingly choosing to spend their time in the regions. Baby Boomers living in regional Australia are transforming themselves into Super Boomers, re-shaping regional Australia and the ageing experience. Finally, international migrants settling in regional Australia are responsible for the growth and sustainability of many regional populations. From skilled to unskilled and humanitarian, they are, and will, play a vital role in the development of regional workforces. Achieving the best outcomes from these three trends requires a considerable shift in our thinking. The RAI presents a new perspective, informed by current ABS and [In]Sight: Australia's Regional Competitiveness Index data, that sees both the opportunities and challenges that regions will face in the near future.

Safra de Campos, Ricardo (The University of Queensland); Bell, Martin (The University of Queensland); Charles-Edwards, Elin (The University of Queensland); McNamara, Karen (The University of Queensland)

Living with drought: Understanding the role of mobility in livelihood strategies to cope with climatic variability

Migration is now recognised as integral to the suite of livelihood strategies adopted by rural households to cope with the impacts of climate variability, but less attention has been given to the role of temporary and circular mobility as strategies for adaptation. Analysis of the subtle changes in the circulation pattern of families and individuals has been constrained both by a lack of data and a dearth of appropriate measures. Simple mobility maps have provided useful insights into migrant destinations in culturally-sensitive settings, but without a sophisticated tool to capture the more nuanced changes in movement behaviour, many changes in mobility are effectively invisible to researchers and policy makers. Extending prior applications of the mobility maps technique we outline a methodology for capturing key spatial and temporal dimensions of mobility at the individual and household level and illustrate its application in the drought affected State of Ceará in Northeast Brazil. Field data were obtained from rural smallholder households in three research sites impacted by the most recent drought (2010-2013), which yielded 549 responses tracing migration, circulation and mobility patterns of household members. The results reveal systematic shifts in the intensity, timing and patterns of mobility at the local level in response to climatic events and emphasise the role of short-term and local mobility in shaping livelihood strategies to mediate the effects of climatic events.

Saikia, Udo (Flinders University); Chalmers, James (Flinders University); Dasvarma, Gouranga (Flinders University)

Health and wellbeing: findings from Assam Wellbeing Survey 2013-14

Contemporary measures of the success of human development policy decisions, for the most part, have been about reducing income poverty, illiteracy, mortality and morbidity, and increasing longevity. While these objectives have produced crucial improvements in human development, the subjective outcomes and processes involved – i.e. as experienced by people and their communities – have not been a part of policy-making. This research provides an account of the current status of wellbeing health and life satisfaction in the state of Assam, Northeast India. The main analysis of this paper is focused on the multi-dimensionality of poverty and is based on primary data collected through “Assam Wellbeing Survey 2013-14” which covered around 39,000 households in all 27 districts of Assam. The methodology adapts those dimensions that were used in the 2010 Bhutan Gross National Happiness index. The composite measures are designed to reflect a holistic estimate of the well-being of people measured across eight different dimensions that includes: psychological and emotional; health, education, culture, governance, community vitality, living standard and environment. The findings from the analysis in this paper are expected to contribute to strategic interventions related to official concern with the high number of impoverished rural persons, which has recently been demonstrated by priority agenda items of the Government of India Planning Commission’s Eleventh Five-Year Plan (2007-2012). These are related to building the necessary supportive infrastructure, expanding access to health and education, undertaking programmes for improving living conditions for the weaker sections and their access to economic opportunity.

Salmon, Jan (Charles Darwin University)

Historic antecedents of Indigenous settlements in the Northern Territory

It is often assumed that modern day Indigenous people living in remote settlements are living on country and have ancestral linkages to the land. In fact, many of the settlements were actually ‘created’ by external, and generally European forces, such as religious missions, pastoral stations, mining, exploration, the forced separation of Aboriginal children of the stolen generation, and displacement during WWII. The paper will look at the historical antecedents of 43 small settlements in the Northern Territory using ‘grey’ data from multiple sources, such as Northern Territory Local Government websites, and will build on research (Carson et al, 2008) which found that the small towns had different characteristics in terms of size, growth pattern, sex ratio, age profile, residential mobility and labour force engagement. It is proposed to update this analysis using 2011 census data, and in addition to investigate if or how the historical origins have influenced the demographic profile of the communities today, using language as an indicator of cultural diversity, kinship and ties to country.

Shahidullah (Australian Bureau of Statistics)

Aboriginal and Torres Strait Islander population projections

On 30 April 2014, ABS released the latest set of five yearly projections for the Aboriginal and Torres Strait Islander population. This release used assumptions about future fertility, paternity, life expectancy at birth and migration. Ten series of projections of the Aboriginal and Torres Strait Islander population have been generated at a national and state/territory level for 2012 to 2026. Three series, Series A, B and C, have been chosen for analysis in this release. The release included an unprecedented amount of data, including population projections by single year of age at a national and state/territory level and single year of age and sex by Remoteness Area. This data was also made available for the first time through ABS.Stat as well as through Table Builder and Excel. As it is not currently possible to produce annual estimated resident population (ERP) numbers for the Aboriginal and Torres Strait Islander population, these projections are used as ERP figures for national reporting purposes. This presentation will cover: the methodology used to project the Aboriginal and Torres Strait Islander population key results associated data quality issues, and the challenges with using this data to look at changes in Aboriginal and Torres Strait Islander wellbeing over time.

Smart, Diana (Australian Institute of Family Studies); De Maio, John (Australian Institute of Family Studies); Silbert, Michelle (Australian Institute of Family Studies); Jenkinson, Rebecca (Australian Institute of Family Studies)

Insights from the first wave of the Building a New Life in Australia study

The “Building a New Life in Australia” study is a 5-year longitudinal research project that aims to improve understanding of the factors that influence humanitarian migrant settlement outcomes thereby providing a broad evidence base to assist policy development and program improvement. The first wave of data collection was conducted during October 2013 - March 2014 with the recruitment of approximately 2400 individuals who had been granted permanent visas in the previous 3 to 6 months through Australia’s “offshore” (refugee) and “onshore” (asylum seeker) humanitarian programs. Participants were recruited from 11 sites around Australia (including capital cities and regional areas) and came from a diverse range of national and cultural backgrounds. A range of key domains are being investigated including: family composition and characteristics; housing arrangements; English language proficiency and training, educational background and engagement in study, employment and income; pre-migration experiences; physical and mental health; self-sufficiency; community engagement and support; life satisfaction; and perspectives on life in Australia. This paper describes the aims of the study, research questions addressed, methodology, sample recruitment, and provides an overview of key findings from Wave 1.

Smith, Crichton (Macquarie University)

School sector or school location: exploring the spatial patterns of NAPLAN outcomes of Australia's schools

This presentation explores, primarily through a series of maps, the spatial distribution and patterns of educational outcomes and examines whether the school's location is more significant than the ownership of the school (government/non-government) in influencing the educational performance. Through the mapping of the annual National Assessment Program - Literacy and Numeracy (NAPLAN) outcomes of all schools in Australia, this presentation will illustrate that Australia's cities have a definite, spatially contiguous clustering of educationally advantaged and disadvantaged schools. This spatial dimension is a significant, but relatively unexplored, aspect of Australia's educational inequality. The presentation will also explore the differences in the NAPLAN performance of schools outside of the cities to highlight that non-metropolitan disadvantage is more nuanced than an 'urban/rural divide'. Through an exploration of the relationship between NAPLAN and the socio-demographics of the community in which the school is located (not just the school's demographic profile), the presentation will consider to what extent the 'neighbourhood effect' influences the NAPLAN outcomes of schools.

Sollis, Kate (Australian Bureau of Statistics)

The 2006-2011 Australian Census Longitudinal Dataset

The Australian Bureau of Statistics released the first issue of the Australian Census Longitudinal Dataset (ACL D) in December 2013. This new dataset has been used to examine a variety of transitions between 2006 and 2011, including changes in how people identify their Aboriginal and Torres Strait Islander status, shifts in labour market participation in the automotive industry and compositional changes in families. The ACL D combines a 5% sample of about one million records from the 2006 Census with corresponding records from the 2011 Census. The linkage was based on a range of Census variables other than name and address. Further waves of data will be added from future Censuses to build a comprehensive national longitudinal database of Census information for policy and research. This presentation looks at the motivation and history of the project, similar initiatives by other national statistical organisations, linkage methodology and quality, and future plans. Examples of how the ACL D has been used in the first year since it was released are also presented.

Sugiyarto, Teguh (Indonesian Central Board of Statistics and Flinders University); Dasvarma, Gouranga (Flinders University); Mwanri, Lillian (Flinders University)

Inequalities in maternal mortality in West Java, Indonesia: A micro level analysis based on the Population Census of 2010

Disparities in maternal mortality ratio (MMR) occur not only between countries but also within countries, and at sub-national levels. Previous studies on inequalities in MMR in Indonesia have revealed large differentials across regions and socioeconomic status. This is detrimental to the achievement Millennium Development Goal 5 of improving maternal health. This paper discusses the levels and determinants of inequalities in MMR in the province of West Java, Indonesia with data taken from Indonesian Population Census of 2010. The discussion is focused on West Java because this is a province with sufficiently large number of maternal deaths to allow for detailed analysis and at the same time it exhibits a large variation in maternal mortality among its districts. Analysis of data based on the index of concentration shows that maternal deaths cluster in households with lower socio economic status. A decomposition of the concentration index reveals the importance of the characteristics of the head of the household such as age, sex and educational background to determine the inequality in MMR. This is further confirmed by logistic regression analysis. This finding leads to the conclusion that measures to reduce maternal mortality should consider the involvement of close family members or husbands because during delivery, women rely on such close persons for safe deliveries.

Tamang, Jyotsna (The Australian National University)

Risky sexual behaviour among young men in Nepal

Young people need to constantly negotiate the changing attitudes of their own peers and cultural norms and values of their society. They spend more time for their educational endeavors, often pushing the age of marriage afar. Transition to their adulthood may engage them in behaviors such as smoking, drinking, substance use and entry into relationships which would potentially impact their well-being. This paper investigates sexual risk behavior among young men in Kathmandu, Nepal and the different factors that affect such behavior in different contexts. This paper employs mixed methods using data obtained from a national survey conducted among young people aged 15-24 years and from in-depth interviews with young men. Results from the survey show that 33 per cent of men have ever had sex. Over half of the men reported that girlfriends were their first sexual partners and nearly two-fifths had not used contraceptives during their first sexual encounter. Further analysis reveals that first sexual experience, educational level, residence, age of first partner, mother's education and parental monitoring were significantly associated with use of contraceptives. In addition to this, the study also shows that 14 per cent of young men had more than two partners in the past one year. The qualitative study shows that friends are an important source of information with regards to contraceptive use and sex workers. The findings suggest that despite the restriction placed on young people, they still engage in risky sexual intercourse which could have an effect on their well-being.

Tan, George (The University of Adelaide); McDougall, Kelly (The University of Adelaide)

Australian emigration and diaspora: The role of family geographies in the mobility of Australians in Singapore

There are an estimated 1 million Australians living overseas, and in the year 2012 – 2013 over 90,000 Australians left the country on a long-term or permanent basis. Australia-born long-term and permanent departures are much more likely to be employed in highly-skilled occupations when compared to overseas born departures and Australia's national resident population. Despite growing emigration and the potential economic value of these emigrants, little research about emigration and diaspora has been undertaken in high-income countries.

This paper draws on results of a study of the Australian diaspora living in Singapore to explore the experiences of Australians living overseas in an increasingly popular destination country. Australians living in Singapore maintain transnational livelihoods with regular return visits to Australia, frequent long-distance communication and continued identification with Australia as 'home'. As the discourse on the transnational migration of the highly skilled has largely been skewed towards men, there is a particular focus in this paper on the aspects of children and gender in the overall migration decision making process. It is suggested that families, specifically wives and children should be more prominent in the study of transnational migration. Findings from this study help to highlight the potential benefits to Australia in better understanding and engaging with Australian emigrants and the diaspora.

Tan, Philip (Macquarie University and NSW Department of Planning & Environment)

Housing options for new migrants in urban areas: Is it really just apartment blocks?

Globalisation has pushed Australia to the forefront of attraction for skilled migration. Recent migration flows have shifted from long-term permanent migration to short-term (skilled) migration. The housing options of short-term migrations may be affected by household size, proximity to the workplace and lifestyle preferences. In light of their living arrangements prior to migration, and constraints on housing availability in Australia's capital cities, continued large flows of short-term migrants may increase demands for certain types of housing; it is crucial for Australia to plan and tailor its future land use to meet the housing needs of both the existing population and new overseas arrivals. This study explores some of the underlying issues by focusing on the housing experience of recent migrants in Sydney.

Taylor, Andrew (Charles Darwin University); Barnes, Tony (Charles Darwin University); Henderson, Alice (Charles Darwin University)

Not just ageing: Implications from the changing population composition of the Northern Territory for service delivery costs

Governments must plan well into the future to meet the anticipated costs for delivering core services like health, education and justice to changing populations. One technique for understanding likely absolute and relative costs across service sectors is the population-based unit cost method. This method assumes that compositional demographic change is the sole cause of cost shifts in the form of changing age, sex and other compositions (for example, numbers of Indigenous people). Ageing is one example of a significant compositional change which is impacting on service costs and the fiduciary health of the State and Territory budgets. In the Northern Territory a range of factors, and especially the size and composition of the Indigenous population, mean that budgetary challenges associated with population change necessitate detailed consideration of the effects on service provision. In this research we utilise outputs from a major update of the Northern Territory Population Projections to extrapolate future changes to service costs in the Northern Territory according to individual service sectors. The aim is to quantify current and future unit and relative costs for delivering a range of services. The findings provide a basis for strategic budgetary planning in the Northern Territory into the future and indicate the changing share of costs according to service sectors.

Telford, Jenny (Australian Bureau of Statistics)

Emerging trends in international census taking

National statistical offices around the world are operating in an environment of great change. Traditional Censuses are becoming increasingly expensive and the challenge of making contact with householders is growing with changing living arrangements and increased mobility. Australia and our international partners are starting to rethink the role a Census will play in the future and the best method to deliver on its objectives. This presentation will discuss changes being explored for Census taking around the world as we head towards the 2020 round of Censuses. The UK Government recently welcomed a recommendation by their National Statistical Office for a predominantly online census in 2021 supplemented by further use of administrative and survey data. Other countries are exploring and actively working towards leveraging administrative based datasets to provide a richer and timelier source of statistics than a traditional Census can provide. Citizens are choosing to interact with governments in different ways and are moving to predominantly digital channels. As Australia continues its move towards a primarily digital data collection we are already starting to think about the next steps in this transition and what the role of the future Australian Census should be.

Terblanche, Wilma (The University of Queensland)

Understanding the growth of centenarian populations across Australian states

In recent years, the number of people worldwide who lived for a century or more has grown more than any other population group. Accurate numbers and an understanding of the demographic drivers of the growth in the centenarian numbers are essential for planning and budgeting for their aged care, health care and residential needs. Little is known about the historical growth in centenarian numbers in Australia, especially at the state level. Population estimates based on census counts tend to overestimate very elderly numbers and the degree of overestimation is particularly high at ages 100 and above. In this paper the number of centenarians in Australian states is estimated from death counts using the extinct cohort and survivor ratio methods. Based on a decomposition of centenarian numbers in 1981 and 2012 into births, survival and net migration, contributions of these factors to the total growth are quantified. It was found that both male and female centenarian numbers in all the states increased significantly over this period. Rates of growth in centenarian numbers have been steadily increasing in the last ten years and male centenarian numbers are now growing faster than females. Across the states, improvement in survival from age 85 to 100 was by far the most significant driver of the growth in centenarian numbers. The later arrival of the gold rush in the 1890s in Western Australia resulted in significant increases in birth numbers and decreases in net migration between the cohorts considered.

Tindale, Alex (University of Wollongong); Klocker, Natascha (University of Wollongong)

Geographies of inter-ethnic couples across Australia

Intimate relationships that cross ethnic boundaries are an important indicator of the social and cultural distance between groups, and the extent of cultural 'mixing' in a given society. In Australia, and other immigrant societies, the population of inter-ethnic couples (and multi-ethnic households) is on the rise. This has led to unique residential settlement patterns contributing to a shifting ethnic landscape characterised by increasing diversity in urban areas. However, the geography of inter-ethnic partnership has received minimal attention in Australian scholarship. This paper uses customised 2011 Census data to map the residential geographies of co-habiting inter-ethnic couples across Australia. We focus on couples in which one partner stated an ethnic majority ancestry (white, Anglo-Australian/European) and the other stated an ethnic minority ancestry. These intimate relationships challenge the perceived divide between the Anglo-Australian/European ethnic majority and those minority ethnic groups that continue to be excluded from dominant imaginaries of national identity and belonging. This paper explores geographical variations in the propensity for partnership between members of the ethnic majority and different ethnic minority groups. We also contrast the dispersed settlement patterns of these couples with the more concentrated geographies of their respective ethnic minority groups. By shifting the scale of analysis from the individual to the household, these findings complicate existing understandings of ethnic diversity and segregation across Australia's urban areas.

Toulemon, Laurent (Institut National d'Études Démographiques); Pennec, Sophie (Institut National d'Études Démographiques)

A lifecourse perspective on two-home residents in France

With the increasing diversity of family situations, more people, children as well as adults, now 'usually' live in more than one dwelling. In France, some 3 to 4% of inhabitants have two homes, with a first mode of 11% at age 20, and a secondary mode widespread between ages 55 and 90; between one third and one half of two-home people at one point in time have become one-home residents one year later (Toulemon and Pennec, 2010; 2012). The significance of the "two-home" family situations heavily depends on whether they are long-lasting or transitory. The aim of this paper is to describe the transitions into and out of the different "two-home" situations, in order to better understand their place in the family biographies of adults and children taking into account the duration of these episodes. Preliminary research had shown that the episodes are very diverse: some are related to family transition, others to education or work. Using all available waves (2004 to 2011) of the French EU-SILC survey, we will firstly estimate the distribution of multiple residence episodes by duration; and then describe the family and professional situations before, during, and after the episode of multiple residences according to age, sex, and socio-economic status.

Valentine, Mitchell (Northern Territory Department of Treasury and Finance); Taylor, Andrew (Charles Darwin University)

Simulations of changing rates of Indigenous identification change on population growth rates

Indigenous identification change is suspected to have contributed significantly to the high rates of Indigenous intercensal population growth between 2006 and 2011 at 20.5 per cent. The phenomenon of identification change is thought to be largely occurring in the major cities with comparative growth rates in remote and very remote areas reflecting this. There are limited studies documenting the effects of shifting rates of Indigenous identification on population growth rates and how these might vary across jurisdictions. In this study we use cohort component population projections modelling to simulate a range of scenarios around Indigenous identification change using variations in the Gross Identification Change Rate. We examine the effects on population growth by comparing the Northern Territory, the jurisdiction with the highest Indigenous composition, to the rest of Australia. The results highlight the importance of starting population profiles and map out the effects of increasing or decreasing identification rates across jurisdictions. For the Northern Territory, any loss in the share of Australia's Indigenous population has substantial implications for the distribution of funding to the Northern Territory under the current Goods and Services Tax distribution methodology which uses Indigenous population share as a key variable.

Vidal Torre, Sergi (The University of Queensland); Perales, Francisco (The University of Queensland); Lersch, Philipp (University of Cologne); Branden, Maria (University of Stockholm)

Long-distance relocations of families in Australia, Britain, Germany and Sweden: Intersections of gender and institutional context

It is well-known that gender plays an important role in the determination of couples' long-distance residential relocations in developed countries. For instance, there is ample evidence that one-earner couple households with a male breadwinner and a female homemaker are more prone to migrate than two-earner couple households, and that moves are generally more responsive to men's than women's labour market placement and prospects. While these patterns are fairly consistent across countries, time periods and studies, there is substantial variation on the width of these gender gaps and the specific resources (i.e. earnings, education, occupational features) that have greater gendered impacts on household relocations. We argue that such disparities are not only due to different research designs across studies, but also to unaccounted institutional features that serve as moderators of micro-level associations. To date, the internal migration literature has been dominated by multiple, confronted, micro-level explanations, with little attention being paid to macro-level factors. However, there is extensive evidence from other fields of substantial cross-national variation in gender inequalities at home and at work, which has been attributed to institutional arrangements such as family policies and labour market regulations. We draw upon this body of evidence to provide a more encompassing picture of the intersections between gender, long-distance residential relocation within countries, and institutional arrangements than ever before. To do so, we investigate the precursors of long-distance couple relocations, comparing one- and two-earner households in four developed countries. Specifically, we analyse changes in migration intensities over the duration of the partnership and the individual and couple-level factors that moderate these in Australia, Britain, Germany and Sweden, using discrete-time event-history analysis of comparable, nationally representative, annual panel data stretching between 1992 and 2010.

Wadley, David (The University of Queensland)

Labour force dynamics in Australia to 2050: An unauthorised view

Free of hype, spin, irrational exuberance and econometric modelling, this presentation takes a stone cold look at the prospects for Australian employment to 2050 as today's high-wage structure faces a pincer movement between advancing technology and low cost foreign labour sources. It will discuss influences like the new www (the worldwide workforce), the race to the bottom, digitisation, global standards, scale economies, footloose operators, co-investment overtures and capital strikes. A commitment to realism equally demands mention of offshoring and onshoring, product life cycles, price degradation, corporate chiselling, efficiency drives in industry and the exhaustion of ideas. The upshot is a quiet word to the young about where to find a secure and well paid job in what could be the much changed national economy of the future.

Walsh, Laura (Australian Bureau of Statistics)

Feasibility study of linking migrant settlement records to personal income tax data

A recent study by the Australian Bureau of Statistics (ABS) has found that it is likely to be feasible to link Australian Tax Office (ATO) unit record Personal Income Tax (PIT) data with the Australian Government's Settlement Database (SDB). The study demonstrated that the linked SDB/PIT dataset could provide useful information on the economic contribution of permanent migrants by providing valuable new income data for research into, and identification of, the factors associated with varying migrant settlement outcomes. The ABS is increasingly looking to use administrative sources to enhance the range of relevant statistical information available to policy and decision makers. As the SDB population was not a subset of the PIT population, it was not possible to exclude those records on the SDB without a corresponding PIT record prior to the linking. This presented challenges in defining the scope of the population for linking and for assessing the linkage. A Gold standard (i.e. using names and addresses) predominately Deterministic linking methodology was used because relatively few common variables were available on the SDB and PIT files, with strict privacy protections observed throughout the project. Age, visa stream and arrival date were used to define the population most likely to have a taxable income. This presentation will provide an overview of the feasibility study, a brief description of the linking methodology and quality along with some findings and future directions for the Migrant PIT Data Integration project.

Wang, Guangzhou (Chinese Academy of Social Sciences)

Computer simulation on the parent-child structure of Chinese aged population

After double-checking the reliability of the Chinese Family Panel Survey (CFPS) 2010 survey data, this paper confirmed the survey data has a very good representation for the parent-child structure and age structure of the Chinese population. Although the problem of CFPS2010 registered population is not completely covered all the family members or all the family of the population to effect the statistical indicator, but it can be solved by the sample marker method. Based on CFPS2010 and 2010 Chinese population census data, the author has proposed a computer simulation model and data processing methods for the aged population and their children data. Applying the computer simulation model, the author has studied the trends and process of the parent-child structure, and the structure of survival children of the elderly population in the future. From the research, this paper has made the following conclusions: under the condition of low fertility level, there is a big difference between cohorts of the elderly population who have how many children in the future. The proportion of no children, no son or no daughter will be rapidly increasing in the elderly population, and the proportion of the aged population with both son and daughter will rapidly decrease. By the year of 2050, the proportion of the childless elderly population will be more than 10% and the childless elderly population size will be more

than 56 million. The proportion of the aged population with both son and daughter will decrease from the current 60%, down to around 35% in 2050. The proportion of the aged with more than two children will also decrease from currently around 56 %, down to 10% in 2050.

Wang, Guixin (Fudan University, China); Shen, Jie (Fudan University, China)

Urbanization in China: A new "leap forward"?

China has witnessed rapid urbanization since economic reform. In 2012, for the first time in history, more than half its population are living in urban areas. This study examines the salient features of urbanization in China and discusses its implications for economic development, social change and environment degradation. It is revealed that the absolute numbers of urban residents has greatly increased with an accelerating rate of growth. Moreover, urbanization in China exhibits an uneven spatial pattern with the urban population disproportionately concentrated in coastal areas. While natural growth, rural-to-urban migration and administrative adjustment are the major factors driving urbanization, rural-to-urban migration has become more important since 1996. Nevertheless, because of the ad hoc Hukou system in China, most rural migrants in cities cannot obtain urban household registration and a unique 'semi-urbanization' phenomenon is common. Urbanization has profound impacts on China. It has greatly promoted industrialization and thus economic growth. However, rapid urban growth has also created a range of social problems and led to increasing environmental degradation. In social terms, inequality between the rural and urban areas is not reduced but reinforced. Rural migrants are severely disadvantaged in the urban labour market and Hukou system continues to be a significant factor denying their access to formal housing and thus better urban living. As for environmental impacts, although the accelerated urbanization has alleviated the pressure of carbon emissions to some extent, cities release huge quantities of waste products and cause serious environmental problems.

Wang, Jinying (Hebei University and Renmin University); Huijing, Wei (Hebei University)

The family structure and family development ability in China: Based on the China Family Panel Studies

In China, with the significant reduction in fertility and the change of the way of life, family structure tends to be small; mainly reflected in the decreased of the family members and declined of multi-generational family's proportion. Secondly, the family pattern is more diversified, core family as principal, the proportion of the joint family and stem family gradually descend too; at the same time there are some new family forms, such as bachelordom, single parent, DINK, empty-nest, lost-only child, etc. With the decrease in family size and the trend of core family, families have lost their favourable conditions of risk-sharing in traditional extended family, especially for some special families such as empty-nest and single family, which is bound to affect the development of the family. In addition, with the increasing seriousness of an aging population, it seem to be an increasing prominent problem that the family population has been aging and more and more families are faced with pressure of providing for the aged, thus it will restrict the development of family for family development ability not being effectively improved.

Based on the data of the China Family Panel Studies and on a comprehensive evaluation of the family development ability, we will construct the family data in different stages of family life cycle through the age of the head of household and the type of family structure. Using the hypothetical-cohort method, we will analysis the relationship between the change of family structure and family development ability in a quantitative way and expect to explain the following questions: 1. With the transformation between the different stages of the family life cycle, what feature and level will the family development ability present? 2. The fertility rate decline is mainly due to the intervention of family planning policy in China, at least it is such a fact before 1995; fewer children in a family due to fertility rate decline accompany with the trend of the core family, then, what is the difference between the composite family and nuclear family in family development ability? What is the difference between the one-child family and the non-one child family in family development ability? 3. How is the development ability with the special family? And how does the special family to get support from the social?

Ware, Helen (University of New England)

Analysing the Aboriginal/ non-Aboriginal mortality gap: Poverty, behaviours and outright discrimination

For Finland, the gap in life expectancy at age 35 between the highest and lowest income quintiles is 12.5 years for men and 6.8 years for women (Tarkiainen et al. 2012). For Australia, the gap in life expectancy at age 25 between Indigenous and non-Indigenous Australians is 10.5 years for men and 9.0 years for women (ABS 2009). These statistics prompt the question: how far can the Indigenous/ non-Indigenous gap in Australia be attributed to differences in levels of poverty and disadvantage between the two groups? In order to make effective plans to reduce the Australian gap further, we need to understand more about how it is constituted and its causation. Owing to the extreme reluctance to discuss class differentials in mortality in Australia, it is a far from simple matter to determine to what extent focusing on reducing Aboriginal poverty would serve to close the gap and how far Aboriginal Australians are disadvantaged beyond other Australians living in poverty in similar urban/rural distributions with comparable levels of formal education. The considerable local research into urban-rural and even remote rural mortality differentials associated with disadvantage is highly relevant, although such studies almost all suffer from using small area data on socio-economic status rather than personal data on individual attributes. This paper explores the policy-significant inter-relationships between Aboriginal mortality levels, avoidable mortality and general socio-economic gradients in mortality and specific Aboriginal disadvantage.

Wasserman, Romy (The University of Adelaide)

Migration between South Africa and Australia

A dynamic migration system exists between Australia and South Africa. This system involves flows of people in both directions; flows defined not only by the direction of movement but by the people who undertake it, their length of stay at the destination and their reasons for migrating. The largest flow in this system is the permanent migration of South Africans to Australia. South Africans are now a major source of skilled migrants in Australia but they remain a notably under-researched migrant group. Questions remain about who these migrants are, why they come to Australia and what their settlement experiences are. This presentation is based on recent PhD research that examined migration between Australia and South Africa. It uses comprehensive secondary data from Australian sources including the Australian Bureau of Statistics, Census of Population and Housing and the Department of Immigration. These data reveal the component parts of the Australia-South Africa migration system, as well as providing a comprehensive understanding of the demographic, cultural and economic characteristics of the South Africa-born in Australia. Added to this, primary data from a survey of 500 South Africans in Australia provides a unique insight into the motivations for migration from South Africa and the settlement experiences of this group. This presentation follows on from a poster presented at the 2012 APA conference in Melbourne that examined the transnational lives of South African migrants in Australia.

Wei, Yan (Xi'an University of Finance and Economics); Yang, Dawei (Xi'an University of Finance and Economics)

Marriage payment and conjugal power: Findings from hundreds of villages in China

The conjugal power in rural China has changed gradually, it is still dominated by males because of traditional patriarchal culture. The pre-marriage payment including bride-price and dowry constitutes the economic basis for the newly-married family in China, and the payment as an important resource will have remarkable influence on the newly married couple's conjugal power. Using survey data named Marriage Migration and Rural Females' Development conducted from January to February 2014 in 241 villages of nine provinces in China, this paper explores the impact of marriage payment on current conjugal power in rural China using resource theory. This paper has come up with several findings. First, marriage payment represented by spouse's pre-marital resource has significant influence on conjugal power. The higher the dowry, the greater risk of jointly shared power. It can be seen that the rural conjugal power has been stabilized before marriage, and it is limited for the wife to improve her power through personal resources in marriage. Second, there is regional difference of marriage payment and conjugal power. Different economic development, modernization, and cultural customs result in the difference of marriage payment and conjugal power. Third, spouse's relative income, relative contribution to household and wife's autonomy also has significant influence on conjugal power. Fourth, though the conjugal power tends to be equalized over time, the role of traditional culture cannot be neglected in explaining the rural conjugal power in China.

Wilson, Tom (The University of Queensland)

Investigating alternative cohort-component models for local area population projections

It is generally accepted by demographers that cohort-component projection models which incorporate directional migration are conceptually preferable to those using net migration rates or numbers. Yet net migration cohort-component models, and other simplified variations, remain in common use by both academics and practitioners because of their relative simplicity and low data requirements. To date, arguments in favour of directional migration cohort-component models have been mostly conceptual. In contrast, this paper takes an empirical and applied perspective. Are there circumstances in which net migration and simplified versions of the cohort-component model provide accurate and plausible projections? Or should directional migration models always be used? This paper evaluates the forecast accuracy of eight cohort-component models which differ in the way they handle migration, some of which are well-known, and some of which are proposed for the first time. Retrospective projections for 100 local government areas of New South Wales were produced for the period 1991 to 2011 and then compared to population estimates. Assessments of both total and age-specific population projections are made. The findings should be of particular use to practitioners in selecting appropriate models for local area population projections. They will demonstrate the extent to which each type of cohort-component model produces accurate projections, and whether trade-offs between data requirements and forecast accuracy can be made. They will also provide guidance on whether, in the absence of directional migration data, simplified cohort-component models can be used or whether directional migration models must be employed using indirectly estimated migration flows.

Wilson, Tom (The University of Queensland); Ueffing, Philipp (The University of Queensland)

Understanding recent average household size increases in Australia

Average household size is one of the most widely used and valuable summary measures of household composition, especially when calculated for specific household types. It is used for a range of planning activities, forms part of the assessment of demand for numerous goods and services, and is an important component of some population estimation and projection methods. This paper presents average household size changes in Australia at the capital city/balance of state scale for the 2006-11 intercensal period. It seeks to understand why average household sizes in some regions have departed from the decades-old trend of gradual decline. Data from the 2006 and 2011 censuses are used to calculate average household sizes. The decomposition methods of Das Gupta are employed to understand the relative contributions of population age composition, household type composition, householder rates, immigration and higher education status on average household size changes. It is shown that average household sizes

increased in six of the eight capital cities between 2006 and 2011, whilst in all the rest of the state regions average household sizes declined. Where increases occurred it was due to lower age-specific householder rates, although the effects were partially offset by population ageing. The contributions of the other factors to average household size changes are also quantified. Understanding changing average household sizes is useful for urban planning and population projections, informs debate about housing affordability, and contributes more generally to our knowledge of the relationship between population and housing in Australia.

Xin, Yuan (Nankai University)

Missing girls in the largest population countries: Comparative between India and China

China and India are the largest population countries in the world. The sex ratio at birth (SRB) of both of them has become higher than the normal scale 103-107 (per 100 females) and rising since the early 1980s. Currently, China's SRB is around 118 and India is 113.

Data sources: China's and India's national population census data in 1990/1991, 2000/2001 and 2010/2011. China's national 1% population survey data in 1995 and 2005; and China's and India's annual population statistics data from 1990.

Methods: Integration of quantitative and qualitative analysis, e.g. (1) analysis of reported SRBs from data of various surveys and censuses. (2) annual SRBs estimation by using different periods of ASMR and model life table based on census data. (3) to estimate sex ratios of age by using life table and compare them with normal scale. (4) to compare age-sex pattern in 1990/ 1991 and in 2000/2001 and estimate sex ratio of missing population by age.

Results: Estimates based on the census data of India (2001) and China (2000), the number of missing girls aged from 0 to 19 in India and China are 11.95 million and 16.12 million, and the rate of missing girls are 6.12% and 6.82% respectively;

The number of missing girls and missing rates decreases with age in China, mainly due to the number of prenatal females missing because of the higher SRB, sex selective abortion and female missing report or under-report. There was an increase with age in India, mainly due to postnatal female disappearance because of the lower sex ratio of age specific mortality rate and superior living conditions for males at a young age. With the family planning policy, total fertility rate in China drops much faster than in India, which is the main reason for the serious Chinese prenatal sex selection problem.

Yang, Chenggang (University of Finance and Economics, China); Zeng, Yongming (The Australian National University)

Spatial disequilibrium, population mobility and regional choice of FDI based on Spatial Panel Data Model in China: 1995-2010

This paper puts out a research issue of whether population mobility could influence the regional choice of Foreign Direct Investment (FDI) or not and its spatial difference. From this issue, this paper research the relation between population mobility and FDI with 31 provinces in China (except Hangkong, Macao and Taiwan) from space and time dimension from 1995 to 2010 with spatial economy. This research shows that it has object connection between population mobility and FDI. There are several research results:

1. Global Moran's I shows spatial dependence excites between FDI and population mobility, and it is more significant with time period;
2. Centers of Gravity of FDI and population mobility in China located in the central area of China, nearby Wuhan, Nanchang, Hefei to be exact. And both of them have a trend from west to east from 1995 to 2005, while direction changing to west between 2005 to 2010, and the trend is relation to the regional development strategies. But there are also some spatial diversities among the Centers of Gravity of FDI, inside province moving population and outside province moving population;
3. This paper analysed the influence of population mobility, government service and economic development on FDI, and prove that population mobility, especially the long-distance trans-provincial population movement influence much more on FDI divergence and spatial choice in China.

Yang, Fan (University of Finance and Economics, China); Yang, Zifan (University of Finance and Economics, China)

The elderly welfare and intergenerational equity under the background of urbanization and ageing

Population ageing in China requires more attention on the elderly, especially on the elderly welfare. Meanwhile, China is now in the accelerating stage of the urbanization process and urbanization will continue. Urbanization has been associated with huge social change which affects all aspects of society including elderly welfare, family relationships and social participation of the elderly. This research is taken under the dual background of ageing and urbanization in China. Starting from urbanization and its effects, this research takes family relationships and characteristics of social resources distribution under the perspective of intergenerational equity as the medium in order to study the relationship between urbanization and elderly welfare. The theoretical framework and the research hypothesis are based on literature study and interview. The interviewees include urban residents, current urban residents who used to be living in rural area, the elderly in urban communities and officers in local government, etc. Besides, the research takes a survey conducted in a county of Sichuan province and quantitative data analysis as empirical support. Results show that urbanization broadens the meaning of elderly welfare; the change of intergenerational family relationships and the distribution of social resources caused by urbanization leads to intergenerational unfairness which could be considered as loss of elderly welfare; policy paying attention to intergenerational equity under the background of urbanization and population ageing could have positive effect on the promotion of the elderly welfare.

Yeo, Christina Ken Yin (The University of Adelaide)

Malaysians in Australia vs. Australians in Malaysia: A comparative study of its motivations, identifications and intentions.

There is increased interest in the potential for diaspora to contribute to both origin and destination countries. Previous studies and reports of the Malaysian and Australian diaspora (including Hugo 2001; 2003; 2006; 2011; World Bank 2010) support the view that these migrants should be seen as having distinct role in their home countries and represent great potential resources for their home countries too. They are often highly skilled, visit their home countries frequently for business and leisure, and many retain a strong sense of connection and identification with the countries they move between. Nevertheless, understanding of the migrant progression experience, future intentions, commitment, investments, contribution, patterns of international mobility and transnational linkages are at present limited. Drawing from data collected in an online survey of 767 Malaysians living in Australia and 103 Australians in Malaysia, this paper provides a preliminary analysis of these migrants' mobility patterns, transnational networks and identifications. It is anticipated that research findings will assist policy makers to better understand the factors influencing the decision making processes of Malaysians in Australia and vice versa. This will result in relevant recommendations for policy and future research in continuing to enhance mutual benefits of migration for both origin and destination countries.

Yu, Yan (The Australian National University)

Obesity and the role of educational attainment in the United States: Changes over a 40-year period

Obesity has reached epidemic proportions in the United States and elsewhere. The obesity trends could have a negative impact on the improvement in health and longevity. Education is positively associated with a host of favorable outcomes; in most industrialized populations, more educated people are less likely to be obese. All else being equal, educational improvement should contribute to lower obesity levels, but the national obesity trends have been otherwise. Using survey and Census data, this study conducts two sets of analyses to examine changes in the relationship between education and obesity among non-Hispanic blacks and whites in the United States. First, I analyze changes over time between 1971 and 2010 in how the obese propensity differs across educational groups. Second, I combine survey estimates with Census data and apply demographic standardization techniques to estimate U.S. 2010 obesity levels under various scenarios of the population educational composition and the obese propensities within educational groups. A comparison of the actual and hypothetical obesity levels quantifies the respective obesity impact of population composition and educational inequality in obesity.

Yufen, Tong (Capital University of Economics and Business, China); Yumei, Li (Capital University of Economics and Business, China)

Trends in urban and rural population ageing and policy implications in the context of urbanization in China

Using data of Chinese population censuses and multi-regional population forecasting models, the authors in this paper predict and analyse population ageing trends in Chinese urban and rural areas during the urbanization process in the next four decades. Results show that there would be some differences between the impact of urbanization on ageing in rural and urban areas. According to current age structure of rural-urban migrants, the fast pace of urbanization will lead to the fast increase of the aged population in urban areas, with dramatic decrease in rural areas. After 2022 the aged population in urban areas will exceed that in rural areas. On the other hand, the proportion of the aged population in rural areas will always be higher than that in urban areas, although the gap will be narrowing rather than expanding. Meanwhile the greater the scale of rural-urban migration is, the higher the proportion of the aged population and the dependency ratio in the rural region would be, and the situation appears opposite in urban areas. Then we will face greater pension burden and economic pressure in urban areas, and the challenges of home care and long-term care would be more serious in rural areas. Policy implications of these trends and policy suggestions are discussed.

Zeng, Benxiang (Charles Darwin University); Taylor, Andrew (Charles Darwin University)

Now you see us: Implications from the emerging seniors cohort in the Northern Territory population

Like other jurisdictions in Australia, ageing is an important demographic and economic challenge for the Northern Territory. Unlike other jurisdictions, ageing is only now manifesting as an emerging population trend and unlike other jurisdictions the ageing process is influenced significantly by Indigenous residents who make up a third of the population. Population projections suggest the proportion aged over sixty five years will double by the year 2041. Nevertheless, to date evidence suggests only a small proportion of retiree's choose to remain in the Territory after retirement. The relatively recent emergence of population ageing means that there has been limited prior research to map out the economic, social and lifestyle aspirations of senior Territorians. This paper reports on a large survey of the seniors cohort aimed at providing a research baseline for the strategic planning of services and infrastructure by government, service providers and others. The results indicate retirement intentions and express a range of concerns and aspirations in relation to several aspects of their economic and social wellbeing. This study can inform policy and program initiatives in response to this rapidly growing cohort over coming decades.

Zhang, Guangyu (Australian Bureau of Statistics)

Reconstructing fertility levels of Aboriginal and Torres Strait Islander women during 1991-2011 using recent Censuses

Estimating fertility for Aboriginal and Torres Strait Islander women is challenging due to inaccuracies in the identification of Indigenous status in both births and deaths registrations, as well as inconsistency between the numerator, i.e. births from registrations, and the denominator, i.e. estimated resident population (ERP) based on the Census. It is possible to estimate fertility

consistently by applying the own-children method on Census data, as both mothers and children are from the same data source. The own-children method has proven to be less sensitive to Census undercount and various mortality assumptions. Estimates using the own-children method can be corroborated by the fertility estimates using the Census variable children ever born. Nonetheless, Census-based fertility estimation still has several challenges. One outstanding challenge is the intercensal discrepancy in Census counts of Aboriginal and Torres Strait Islander people, which has frequently occurred during the past decades due to changes in response to the Census question on Indigenous status. This paper applied the own-children method to recent Censuses undertaken in 1996, 2001, 2006 and 2011 to estimate Indigenous fertility during the past two decades. By combining the analysis of four Censuses together, it is possible to identify consistent trends and patterns of fertility, which could well address the challenge arising from intercensal discrepancy in Census counts due to identification change. Building upon this, this paper reconstructed levels of Indigenous fertility during 1991-2011 at the Australian level, and for selected jurisdictions, including New South Wales, Queensland, and the Northern Territory. In addition, the paper also illustrated fertility differentials in Census years by family type, education and employment outcomes, and by remoteness of areas.

Zhao, Zhongwei (The Australian National University); Attenborough, Robert (The Australian National University)

The survival of lineage populations in the past: A simulation study

Humankind has a natural desire to survive. This is true for individuals, families, lineages and a population as a whole. Accordingly, many people had hoped that their descendent groups or lineages could survive forever; but we know that many of such lineage populations have become extinct during the long history. Although people living in the contemporary world have all descended from our common ancestors who lived millions of years ago, many of those who had survived in the past were not able to carry their family or lineage line to the future generation. We know little about the survival of lineage populations and population dynamics in the lineages in the past. For example, suppose 1,000 individuals and their spouses started their lineages 500 years ago, how many of these lineages have extended for more than ten generations or survived to the present? What was the chance of survival for a certain number of generations? What kinds of demographic conditions contributed to the extinction or continuation of lineage populations? To what extent do fertility, mortality and marriage patterns and speed of population growth vary among the surviving lineage populations?

In this study, we will use CAMSIM, a stochastic computer micro-simulation system, to examine these questions. CAMSIM has been developed by James Smith and Jim Oeppen. It applies an ego-centric approach in simulating the type and number of kin available to a group of individuals that may be seen as a randomly selected sample from a birth cohort. The approach can also be used to simulate many lineage populations that descended from the 'founders' of these lineages. This system has already been used successfully in about twenty computer micro-simulation studies. In this study, input parameters that are close to the demographic conditions existing in pre-transition China are compiled and entered in the system. The system is then used to simulate 3000 male egos and their descendants of ten generations (the total number of simulated individuals is more than 10 million). Following that, the simulated lineage populations are analysed according to their survival status, and their demographic differentials are examined. The study also addresses a number of issues that are closely related to the survival of lineage populations in the past.

Zhao, Zhongwei (The Australian National University); Zhu, Yuan (The Australian National University); Jow-Ching Tu, Edward

The impact of extreme temperature on mortality

There has been extensive evidence showing that world temperature has increased in recent history and this trend is most likely to continue in the foreseeable future. During this process, there has also been an increase in extreme climate events. These changes are expected to have some devastating impacts on the future of the planet and humankind. Despite that, however, considerable uncertainty about the precise nature, severity, location and impact of these changes remains. There is a great urgency to improve our knowledge on these issues. A considerable number of studies have been undertaken in recent years to investigate the impact of extreme weather conditions on population health and mortality in Europe and America, while similar studies are still limited in other parts of the world. This study is designed to further improve our knowledge on this issue through examining the impact of extreme weather conditions on mortality in several East Asian populations. Through analysing detailed mortality and meteorological data collected over the past four decades, the study first analyses whether a high or low temperature, or an unusually high or low temperature, is related to the rise of mortality in the study population. Following that, it investigates major changes in the relationship between extreme temperature and mortality over the study period. Finally, it examines variations in such relationships across sub-population groups and identifies the people who are vulnerable to extreme weather conditions. The research findings reported in this study add new knowledge and help to improve our understanding of the impact of extreme weather conditions on population health.

Australian Population Association 17th Biennial Conference 2014
Australia's Population in a Global World

WEDNESDAY 3 DECEMBER 2014

8.00	Registration			
9.00	Welcome GRAND BALLROOM 2			
	The Lord Mayor Alderman Sue Hickey			
9.15	APA Presidential address GRAND BALLROOM 2			
	Dr Alison Taylor Chair: Edith Gray			
9.45	Panel session GRAND BALLROOM 2			
	Engaging the media and other clients: how to get your work noticed and talked about Chair: Alison Taylor			
10.30	Morning tea			
11.00	Plenary GRAND BALLROOM 2			
	Tasmania's population: Past, present and future Professor Natalie Jackson (University of Waikato) and Dr Rebecca Kippen (The University of Melbourne) Chair: Alison Taylor			
12.30	Lunch and poster session			
1.30	1A Demography and policy	1B Fertility	1C Maternal and child health	1D Historical demography
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Elin Charles-Edwards	Ann Evans	Santosh Jatrana	David Lucas
	1. Kim Johnstone . Communicating population projections to stakeholders: The New South Wales experience	1. Gordon Carmichael . Estimating paternity in Australia, 1976-2010	1. Jerico Franciscus Pardosi, Nick Parr, Salut Muhidin . Fathers' and grandmothers' perspectives on and knowledge and experience of child health and survival in Ende District, Indonesia	1. Helen Moyle . The historical decline of fertility in Tasmania, Australia: When did it begin and to what extent was it due to 'stopping' or 'spacing' behaviours
	2. Shefali Pawar, Natalie Jackson . New Zealand's first demographic accounting model	2. Amina Keygan . Australian men's intentions for children – what determines them?	2. Teguh Sugiyarto, Gouranga Dasvarma, Lillian Mwanri . Inequalities in maternal mortality in West Java, Indonesia: A micro level analysis based on the population Census of 2010	2. Janet McCalman, Rebecca Kippen . The Founder and Survivors Ships Project: Life courses of convicts transported to Tasmania, 1812-53
	3. Simon Massey, Melissa Tranquille . Can we trust the accuracy of population projections?	3. Wei Chen, Jinju Liu . Recent fertility trends in China	3. Terence H. Hull . Confusion in the measure of Indonesian maternal mortality ratio trends	3. Hamish Maxwell-Stewart . Living in a convict colony

	4. Lisa Denny, Eugene Polkan. Measuring mendicancy: identifying capacity for economic sustainability by developing a measure of government dependency	4. Esther Lavu, Gouranga Dasvarma, Udoy Saikia. Fertility behavior of the Motu Koitabu women of Papua New Guinea	4. Salut Muhidin, Maria Silalahi, Jerico Franciscus Pardosi, Rachmalina S. Prasodjo. Community engagement for saving lives at birth in East Nusa Tenggara, Indonesia	4. Jessica Neilson, Denise Carlton. Australian historical population statistics – The ABS Collection
		5. Nick Parr, Kim Johnstone. Fertility in NSW: What we know and implications for the future	5. Nafisa Lira Huq, et al. Quality of antenatal care and identification of severe pre-eclampsia and eclampsia from rural community in Bangladesh	
3.00	Afternoon tea			
3.30	2A Internal migration and urbanization	2B Gender	2C Mortality and population ageing 1	2D Chinese demography
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Lisa Denny	Kim Johnstone	Rebecca Kippen	Terry Hull
	1. Angélique Parr, Neil Argent. Drivers of regional migration in New South Wales, 2006-11	1. Sergi Vidal Torre, Francisco Perales, Philipp Lersch, Maria Branden. Long-distance relocations of families in Australia, Britain, Germany and Sweden: Intersections of gender and institutional context	1. Sophie Pennec, Joëlle Gaymu, Elisabeth Morand, Alain Monnier, Françoise Riou, Régis Aubry, Silvia Pontone, Chantal Cases. Where do people live during their last month of live: is there an age effect?	1. Zhongwei Zhao, Robert Attenborough. The survival of lineage populations in the past: A simulation study
	2. Nicole Micallef, Alison Taylor. Flocking to Sydney: A review of 20 years of regional youth migration in NSW	2. Ann Evans, Edith Gray. Gendered dimensions of living apart together relationships	2. Ian McDermid. Dying with a disease, but not from that disease: Evidence from Australian multiple causes of death data	2. Fei Mao. What factors contributed to family changes during China’s rapid economic development?
	3. James Newell. Industrial and demography structures by type of Australian local labour market catchment area in 2011	3. Yan Wei, Dawei Yang. Marriage payment and conjugal power: Findings from hundreds of villages in China	3. Kim Dunstan. Forecasting mortality: Empirical modelling as an input into stochastic population projections	3. Guangzhou Wang . Computer simulation on the parent-child structure of Chinese aged population
	4. Aude Bernard, Francisco Rowe, Sergi Vidal Torre. Life-course transition sequencing and internal migration in Australia	4. Brendan Churchill. Towards a life course perspective on attitudes towards gender roles	4. Nick Parr, Jackie Li, Leonie Tickle. The cost of living longer: Projections of the effects of prospective mortality improvement on economic support ratios for fourteen more advanced economies	4. Chenggang Yang, Yongming Zeng. Spatial Disequilibrium, Population Mobility and Regional Choice of FDI Based on Spatial Panel Data Model in China:1995-2010
5.15-6.15	Borrie Lecture GRAND BALLROOM 2			
	Demography, time and space Professor Martin Bell (University of Queensland) Chair: Peter McDonald			
6.30-8.30	Welcome Reception: Tasmanian Museum and Art Gallery (TMAG) The Hon. Matthew Groom MP , Tasmanian Minister for State Growth, Minister for Energy, Minister for the Environment, Parks and Heritage			

THURSDAY 4 DECEMBER 2014				
8.00	Registration			
9.00	Plenary GRAND BALLROOM 2			
	Population ageing: An international perspective Professor Sarah Harper (University of Oxford) Chair: Ann Evans			
10.30	Morning tea			
	Book launch: <i>Family Formation in 21st Century Australia</i> (10.45am) - All welcome			
11.00	3A Demographic data and methods 1	3B Regional population issues 1	3C Population ageing 1	3D Internal migration in China
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Sophie Pennec	James Raymer	Santosh Jatrana	Zhongwei Zhao
	1. Jenny Telford . Emerging trends in international census taking	1. Martin Bell, Elin Charles-Edwards, Philipp Ueffing, Aude Bernard, Francisco Rowe, Tom Wilson, Jim Cooper, Nikola Sander . Inter-regional migration in Australia: Thirty years of change	1. Brendan Churchill, Lisa Denny . Thank God you're here: The coming generation and their role in future proofing Australia from the challenges of population ageing	1. Guixin Wang, Jie Shen . Urbanization in China: A new "leap forward"?
	2. Kate Bond, Tracey Chester, Duncan Young . Plans for the 2016 Census of Population and Housing	2. Neil Argent, Trevor Griffin, Peter Smailes . Differential ageing processes in Australia's Murray-Darling Basin	2. Meimanat Hosseini, Peter McDonald . The gendered nature of assistance needs for core activities in older Australians	2. Jiehua Lu, Weijin Wang . Patterns of urban hierarchy and its changes in China since 21 st century: Based on data of prefecture-level cities in 2001 and 2011
	3. Kate Sollis . The 2006-2011 Australian Census Longitudinal Dataset	3. Erick Hansnata . Migration in the Murray-Darling Basin during the Millennium Drought: Does the environmental aspect play a role?	3. Mahin Raissi, Robert Ackland . Homogeneity in personal networks of Australians aged 50 years and over: Evidence from Facebook	3. Xiangjing Meng . Slowing down the urbanization pace and going through peak population period smoothly: Discussion the way of urbanization by analyzing the demographic scenario in China
	4. Lev Makaev . Australian Census and Migrants Integrated Dataset (ACMID), 2011	4. Riyana Miranti, Laurie Brown . Moving up the ladder? Examining the impact of internal migration on occupational mobility in Murray Darling Basin (MDB), Australia	4. Tong Yufen, Li Yumei . Trends in urban and rural population ageing and policy implications in the context of the urbanization of China	
12.30	Lunch and 3-Minute Thesis Competition (Judges: Martin Bell and Ann Evans)			
1.30	4A Indigenous demography 1	4B Regional population issues 2	4C Health and ageing	4D Labour and workforce participation
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Gordon Carmichael	Angélique Parr	Liz Allen	Simon Massey
	1. Guangyu Zhang . Reconstructing fertility levels of Aboriginal and Torres Strait Islander women during 1991-2011 using recent censuses	1. Karen McGuigan . Regional net overseas migration	1. Jeoffrey B. Abolos . Gender differences in health expectancy among older persons in the Philippines	1. Barbara Edgar . Ethnic concentration, socioeconomic disadvantage and labour market outcomes in Sydney and Melbourne, 2011

	2. Nicholas Biddle, Paul Campbell, Yin Paradies. A behavioural model of Indigenous identification: Evidence from new data and implications for policy and planning	2. Tricia Chester. Regional internal migration estimates – methods and challenges	2. Laurie Brown, Riyana Miranti, Natalie Jackson, Helen Bartlett. Ageing, health and life satisfaction: A case study of older Australians in the “Fourth Age”	2. Peter McDonald. Temporary skilled migration to Australia: An assessment of the 457 visa programme
	3. Mitchell Valentine, Andrew Taylor. Simulations of changing rates of Indigenous identification change on population growth rates	3. Morgan Rennie. Breaking the regional population myth	3. Bruce Gregor. A passion for survival	3. Laura Walsh. Feasibility study of linking migrant settlement records to personal income tax data
	4. Moana Rarere, Tahu Kukutai. Changing patterns of identification and tribal population growth in Aotearoa New Zealand	4. Jim Cooper, Tom Wilson. How long can we go? Issues in projecting the population of very small areas		4. David Wadley. Labour force dynamics in Australia to 2050: An unauthorised view
		5. Andrew Howe. Restocking and improving Australia’s regional population estimates		
3.00	Afternoon tea			
3.30	5A Population ageing 2	5B International migration, migrant populations and ethnicity 1	5C Indigenous demography 2	5D Youth
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Natalie Jackson	Barbara Edgar	Kim Johnstone	Ann Evans
	1. Lisa Denny. Population ageing at a sub-national level: A case study on why Tasmania is ageing for different reasons than Australia	1. Karen McGuigan. Net overseas migration	1. Huw Brokensha. When can Indigenous Australians retire? How the proposed increase to the age pension qualifying age affects Aboriginal and Torres Strait Islander persons	1. Reiko Okumura-Rogaux. Pathways to employment: Experiences among youth in Indonesia
	2. Andrew Taylor, Tony Barnes, Alice Henderson. Not just ageing: Implications from the changing population composition of the Northern Territory for service delivery costs	2. Kasipillai Kandiah, Usha Arif. Long-term economic implications of net overseas migration	2. Jan Salmon. Historic antecedents of Indigenous settlements in the Northern Territory	2. Mohammad Jalal Abbasi-Shavazi, Rasoul Sadeghi, Graeme Hugo, Peter McDonald. Adaptation patterns of Afghan youth in Iran and Australia
	3. Wilma Terblanche. Understanding the growth of centenarian populations across Australian States	3. Diana Smart, John De Maio, Michelle Silbert, Rebecca Jenkinson. Insights from the first wave of the Building a New Life in Australia study	3. Helen Ware. Analysing the Aboriginal/non-Aboriginal mortality gap: Poverty, behaviours and outright discrimination	3. Lixia Qu, Ruth Weston. Leaving and returning to the parental home: What does the 2006-2011 Australian Census Longitudinal Datasets suggest?
	4. Rachael McMillan. A disaster waiting to happen? Elderly people and population ageing in at risk locations	4. Kate Golebiowska, Alicia Boyle. How to engage recently arrived immigrants and refugees in the Darwin labour market to assist the Northern development		4. Jyotsna Tamang. Risky sexual behaviour among young men in Nepal

5.00-5.30	ABS Presentation GRAND BALLROOM 2			
	ABS Transforming People Statistics Project Mr Bjorn Jarvis (Australian Bureau of Statistics)			
7.00-11.00	Conference Dinner: Hobart Function & Conference Centre (Elizabeth Street Pier)			
	FRIDAY 5 DECEMBER 2014			
8.00	Registration			
9.00	Plenary GRAND BALLROOM 2			
	Population mobility in the Pacific region in the 21st century: Trends and prospects Professor Richard Bedford (Auckland University of Technology & University of Waikato) Chair: Denise Carlton			
10.30	Morning tea			
11.00	6A Regional population issues 3	6B Health, wellbeing and morbidity 1	6C Population and environment	6D Population-related issues
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Tom Wilson	Terry Hull	Amina Keygan	Edith Gray
	1. Patrick Corr. Democracy and dollars: Use of demography in distribution with a focus on Tasmania	1. Yan Yu. Obesity and the role of educational attainment in the United States: Changes of a 40-year period	1. Ricardo Safrá de Campos, Martin Bell, Elin Charles-Edwards, Karen McNamara. Living with drought: Understanding the role of mobility in livelihood strategies to cope with climatic variability	1. Yuan Xin. Missing girls in the largest population countries: Comparative between India and China
	2. Phil Browning. Rebasng and recasting of State and Territory population estimates	2. Samba Siva Rao Pasupuleti, Santosh Jatrana. Whether incidence of disability varies by country of birth and duration of residence in Australia? A longitudinal investigation	2. Zhongwei Zhao, Yuan Zhu, Edward Jow-Ching Tu. The impact of extreme temperature on mortality	2. Jennifer Baxter. Exploring child care patterns in the context of parental employment and family characteristics
	3. Angélique Parr. Opening a window on the motivations for return migration in Australia	3. Udoy Saikia, James Chalmers, Gouranga Dasvarma. Health and wellbeing: findings from Assam Wellbeing Survey 2013-14	3. Shelby Canterford, Valdis Juskevics. Housing recovery in South East Queensland following the January 2011 floods	3. Crichton Smith. School sector or school location: Exploring the spatial patterns of NAPLAN outcomes of Australia's schools
	4. Natalie Jackson. Subnational depopulation in New Zealand – Tai timu tangata. Taihoa e?		4. Merve Hosgelen, Udoy Saikia, Gouranga Dasvarma. Population growth and forest dependence in Timor-Leste: Directions for conservation targeted policies	4. Bruce Caldwell. PIAAC: How literate (and numerate) are Australian adults and what are the implications?
12.30	Lunch			
	APA Annual General Meeting			

1.30	7A Measuring Australia's population	7B Health, wellbeing and morbidity 2	7C International migration, migrant populations and ethnicity 2	7D Housing and urbanization
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Patrick Corr	Ian McDermid	Merve Hosgelen	Simone Alexander
	1. Alex Tindale, Natascha Klocker. Geographies of inter-ethnic couples across Australia	1. Tetteh Dugbaza, Brendan Scott, Fadwa Al-Yaman. Differentials in risk factors associated with disparities in birth outcomes between Indigenous and non-Indigenous mothers	1. Christina Ken Yin Yeo. Malaysians in Australia vs. Australians in Malaysia: A comparative study of its motivations, identifications and intentions	1. Tom Wilson, Philipp Ueffing. Understanding recent average household size increases in Australia
	2. Shahidullah. Aboriginal and Torres Strait Islander population projections	2. Suresh Joshi, Santosh Jatrana, Samba Siva Rao Pasupuleti. Does the smoking behavior of foreign-born people converge to the native-born Australians? A longitudinal study	2. George Tan, Kelly McDougall. Australian emigration and diaspora: The role of family geographies in the mobility of Australians in Singapore	2. Philip Tan. Housing options for new migrants in urban areas: Is it really just apartment blocks?
	3. James Raymer. Developing a projection model for Australia's Indigenous interregional migrants	3. Santosh Jatrana. Health service utilization between immigrants and non-immigrants in Australia	3. David Lucas, Barbara Edgar. The Africa-born in Australia, 2011: Employment and education	3. Laurent Toulemon, Sophie Pennec. A lifecourse perspective on two-home residents in France
	4. Elin Charles-Edwards. A framework for understanding temporary populations in Australia	4. Jianxin Li, Xia Cuicui. Socioeconomic status and health: Convergence or divergence (based on the data from CFPS2012)		4. Darren Hossack. The urban dilemma – a comparison of OECD and ABS urban definitions for Australia
3.00	Afternoon tea			
3.30	8A Family formation and life course	8B Mortality and population ageing 2	8C International migration, migrant populations and ethnicity 3	8D Demographic data and methods 2
ROOM	GRAND BALLROOM 1	GRAND BALLROOM 2	GRAND BALLROOM 3	HARBOUR VIEW ROOM 1
CHAIR	Brendan Churchill	Zhongwei Zhao	Usha Arif	James Newell
	1. Alice Falkiner. The effects of dual caring: Investigating the impact of combining informal care with other child care responsibilities	1. Benxiang Zeng, Andrew Taylor. Now you see us: Implications from the emerging seniors cohort in the Northern Territory population	1. Romy Wasserman. Migration between South Africa and Australia	1. Tom Wilson. Investigating alternative cohort-component models for local area population projections
	2. Jennifer Baxter. Motherhood and employment transitions: New research opportunities with the Australian Longitudinal Census Data	2. Alison Day. Is New Zealand facing a dementia epidemic? Projections of the potential number of dementia cases in the 65-plus population at national DHB level, 2011-2051	2. David Graham. Migration as a source of ethnic sustenance: The experience of Australia's Jewish population	2. Simone Alexander, Esther Hogenhout. Introducing SAFi – a new approach to population forecasting
	3. Ha Dao. Mobile phone and gender-power relations in mother-away families	3. Fan Yang, Zifan Yang. Elderly welfare and intergenerational equity under the background of urbanization and ageing	3. Catherine Bladen, Neil Scott. Who said Kiwis don't fly?	3. John Bryant, Kirsten Nissen. Stochastic multiregional population forecasts
	4. Jinying Wang, Huijing Wei. Family structure and family development ability in China based on the CFPS	4. Jiehua Lu, Yue Li. The effects of socio-economic factors on mortality risk of the elderly with cognitive impairment in China: Evidence from CLHLS 2008-2011		
5.00	APA CONFERENCE 2014 ENDS			

SUBJECT TO CHANGE

NOTES

