



Australia and New Zealand
Regional Science Association International
40th Annual Conference



DRAFT
CONFERENCE
PROGRAMME

ANZRS AI welcomes participants to its 40th annual conference, hosted this year at RMIT University, Melbourne. The core theme for this year's conference focuses on:

**TOWARDS THE FUTURE:
EMERGING PRIORITIES IN
REGIONAL POLICY AND PRACTICE**
(MELBOURNE, 5-7 DECEMBER 2016)

ANZRS AI is pleased to acknowledge our conference sponsors.



Australian Government
Department of Infrastructure and Regional Development
Bureau of Infrastructure, Transport and Regional Economics



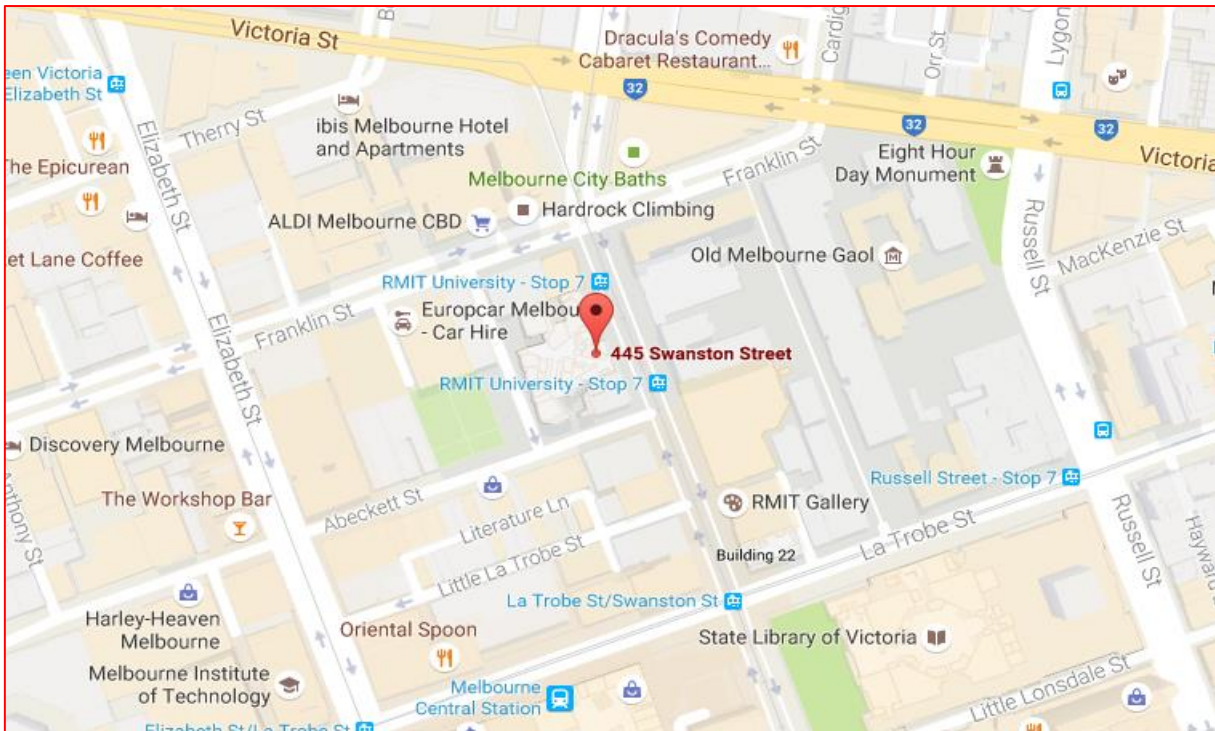
The Centre for People,
Organisation and Work



CONFERENCE VENUE

The conference will take place at:

**RMIT Swanston Academic Building, Building 80, level 7
445 Swanston Street Melbourne VIC 3000**



COCKTAIL RECEPTION AND CONFERENCE DINNER

The first day of the conference will conclude with a reception co-hosted by ANZRSAI and the RMIT. This will take place in the **Swanston Academic Building**, Level 7 (455 Swanston Street), beginning at 6:00pm after a public lecture at 5:00pm.

The conference dinner will take place on the evening of Tuesday 6 December, at the **Epocha** restaurant, 49 Rathdowne Street, beginning with pre-dinner drinks at 6:30pm. The conference dinner will include presentations of the ANZRSAI Awards, sponsored by the Bureau of Infrastructure, Transport and Regional Economics.

CONFERENCE DETAILS

Should you require further clarifications, please do not hesitate to contact:

Ms Fran Martens, Events & Office Coordinator
European Union Centre at RMIT University
Telephone: +61 9925 8214, Email: franny.martens@rmit.edu.au

WELCOME FROM THE PRESIDENT



This year is the 40th Annual ANZRS AI Conference and so I am thrilled we are returning to the City of Melbourne for this landmark event. ANZRS AI has teamed up with the European Union Centre at RMIT and the RMIT Centre for People, Work and Organisation (with the RMIT Social Change Enabling Platform) to host the conference in the university's superb Swanston Academic Building in the heart of Melbourne. We are delighted they are helping us host this conference. It promises to be a very exciting programme, with something for everyone with an interest in regional policy or practice.

The core theme of our conference is *Towards the Future: Emerging Priorities in Regional Policy and Practice*. On both sides of the Tasman, and indeed in many parts of the world, the future of regions, and how regions can be strengthened with well-designed regional policy and well-executed regional practice, remain hotly contested topics.

I want to acknowledge the hard work of Professors Bruce Wilson and Peter Fairbrother at RMIT, who are the convenors for our 40th conference. I also want to thank the Bureau of Infrastructure, Transport and Regional Economics in the Federal Government's Department of Infrastructure and Regional Development. BITRE are a long-standing supporter of this annual event, which we greatly appreciate.

Among other publication opportunities, participants are welcome to submit their paper presented at the conference for a forthcoming special edition of the *Australasian Journal of Regional Studies* on "Emerging Priorities in Regional Policy and Practice" to be edited by Bruce Wilson and Peter Fairbrother with Mike Hefferan. This will therefore be an exciting conference.

I hope that both the conference programme and its location will be an irresistible temptation to join us in December 2016.

Robyn Eversole
ANZRS AI President, 2016

The Keynote Speakers

ASSOCIATE PROFESSOR RACHEL FRANKLIN (BROWN UNIVERSITY, RHODE ISLAND)



Rachel Franklin is a population geographer and regional scientist at Brown University where she is Associate Director of the Spatial Structures in the Social Sciences (S4) initiative. Franklin's research interests include internal migration, human capital and demographic change, and urban and regional population decline. She will speak to the topic, "Loss and Space: Scale, Measurement, and the Implications of Unequal Population Change". Using examples from around the world, this presentation highlights what we think we know about changing population distribution and composition and discusses how our conclusions are constrained by data, scale, and measurement issues.

PROFESSOR KAREL WILLIAMS (ALLIANCE MANCHESTER BUSINESS SCHOOL)

Karel Williams is a professor at Alliance Manchester Business School who represents an international research team which argues that citizen welfare and capability can everywhere be improved by radical social innovation in the "foundational economy" They support this argument with empirical research into mundane sectors like food processing or adult care which deliver welfare critical goods and services and through analysis of the outcomes of structural reforms like rail privatization and government outsourcing. He will speak to the topic "Instead of regional policy: Radical social innovation in the foundational economy".



PROFESSOR FIONA HASLAM MCKENZIE
(UNIVERSITY OF WESTERN AUSTRALIA)



Professor Fiona Haslam McKenzie is Co-Director of the Centre for Regional Development at the UWA. She was previously the Western Australian Director of the AHURI and led the CSIRO Minerals Down Under Regions in Transition Project. In 2012 she was appointed Principal Research Leader of the *Regional Economies – Enduring Community Value from Mining* program until 2015, when she was appointed to UWA. She is currently researching uneven economic development in Western Australia. Her topic is “FIFO and long distance commuting workers: A government cost saving?”

DR DAVE MARÉ
(MOTU ECONOMIC AND PUBLIC POLICY RESEARCH)

Dave Maré has been a Senior Fellow at Motu since 2000. He is also Adjunct Professor of Economics at the University of Waikato. Dave gained his PhD in Economics at Harvard University in 1995, specialising in Labour Economics and Urban Economics. His current research interests include the economics of immigration, the economic performance of cities, and patterns of labour market adjustment - for individuals and in aggregate. He has published in the *Journal of Labour Research*, *Papers in Regional Science* and *Economica*. His keynote address will be on the topic of “Challenges for New Zealand Regional and Urban Policy”.



ED MORRISON
(PURDUE UNIVERSITY)



Ed Morrison is Director of the Purdue Agile Strategy Lab at Purdue University, USA. His research has been creating new, network-based models for economic and workforce development, emphasising the strategic value of focused regional collaborations and open innovation in today’s global economy. He was the first recipient of the Arthur D. Little Award for excellence in economic development. Ed will discuss the challenges that are now presented to traditional regional development policy and strategy and offer insights on his methodology he and his colleagues have developed for regional development called “Strategic Doing”.

CONFERENCE TIMETABLE

Monday 5 December

- 8.00am** **Registration Desk Opens**
Level 7 of Swanston Academic Building 80, 455 Swanston Street, Melbourne
Tea and Coffee available
- 9.00am** **Welcome to Country** **Location: 80.07.01**

Welcomes
Chair: Robyn Eversole

Robyn Eversole, ANZRSAI President
Bruce Wilson, Conference Convenor
Peter Fairbrother, Social Change Enabling Capability Platform
- 9.30am** **Opening Address** **Location: 80.07.01**
Chair: Robyn Eversole

Senator the Hon Fiona Nash
Minister for Regional Development, Australia
- 10.00am** **First Keynote Address** **Location: 80.07.01**
Chair: Paul Dalziel

Associate Professor Rachel Franklin
*Loss and Space: Scale, Management, and the Implications of Unequal
Population Change*
- 11.00am** **MORNING TEA**
- 11.30am** **Parallel Sessions 1**
- 1.00pm** **LUNCH**
- 1.45pm** **Parallel Sessions 2**
- 3.15pm** **AFTERNOON TEA**

Monday 5 December (Continued)

- 3:45pm** **Networks and Policy Issues for Regional Research** **Location: 80.07.01**
Chair: Tony O'Malley
- The Australian Policy Online Regional Development Collection**
Bruce Wilson (RMIT)
- The Sustainable Regions Applied Research Network (SRARN)**
Robyn Eversole (University of Tasmania)
- A Regional Analysis of Political and Economic Trends**
John Daley (Chief Executive Officer, Grattan Institute)
- 5.00pm** **Second Keynote Address** **Location: 80.07.01**
Chair: Peter Fairbrother
- Professor Karel Williams
Instead of Regional policy: Radical Social Innovation in the Foundational Economy
- 6.00pm** **Cocktail Reception** **Swanston Academic Building, Level 7**

Tuesday 6 December

- 8.00am** **Registration Desk Reopens**
- 9.00am** **Parallel Sessions 3**
- 10.30am** **MORNING TEA**
- 11.00am** **Third Keynote Address** **Location: 80.07.01**
Chair: Lauren Rickards
- Dr Dave Maré
Challenges for New Zealand Regional and Urban Policy
- 12.00 noon** **Presidents' Panel on Regional Research** **Location: 80.07.01**
Chair: Bligh Grant
- Professor Jacques Poot
President Elect, Regional Science Association International
- Professor Andrew Beer
Chairperson, Regional Studies Association
- Associate Professor Robyn Eversole
President, Australia New Zealand Regional Science Association International

Tuesday 6 December (Continued)

1.00pm LUNCH

1.45pm Plenary Panel on Regional Policy

Location: 80.07.01

Chair: Rolf Gerritsen

Representative to be confirmed

Department of Infrastructure and Regional Development

Representative to be confirmed

Regional Development Victoria

Jack Archer

Chief Executive Officer, Regional Australia Institute

3.15pm AFTERNOON TEA

4.15pm Fourth Keynote Address

Location: 80.07.01

Chair: James Rowe

Professor Fiona Haslam McKenzie

FIFO and Long Distance Commuting Workers: A Government Cost Saving?

5:00pm ANZRS AI AGM

Location: 80.07.01

All conference participants are invited to the AGM, which will be followed by a meeting between the Council and Rod Brown, CEO of the Cockatoo Network.

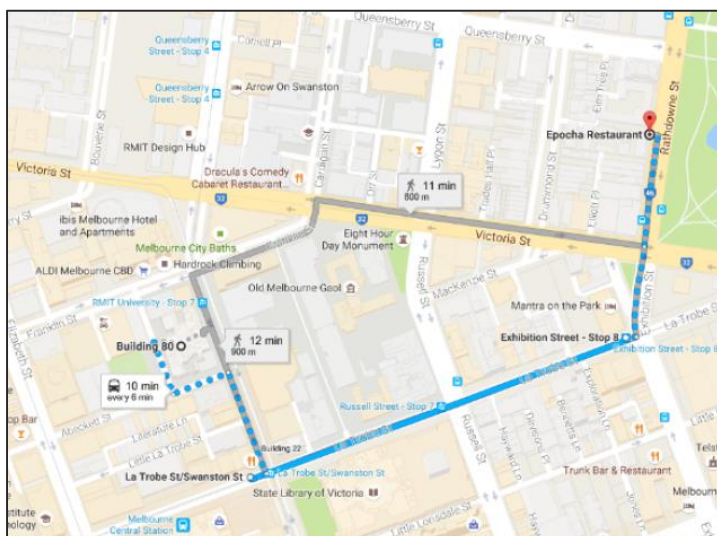
6.30pm Conference Awards Dinner

Location: Maybelle Room, Epocha

Pre-dinner drinks at 6:30pm, with people invited to be seated by 7:00pm.

Epocha is at 49 Rathdowne Street, overlooking the Carlton Gardens.

Awards at the dinner have been sponsored by Department of Infrastructure and Rural Development.



Wednesday 7 December

- 8.00am** **Registration Desk Reopens**
- 9:00am** **Parallel Sessions 4**
- 10.30am** **MORNING TEA**
- 11.00am** **Fifth Keynote Address** **Location: 80.07.01**
 Chair: Mike Hefferan

 Ed Morrison
Re-Imaging Regional Science in the Second Machine Age
- 12.00noon** **President's Closing Remarks**
Formal Close of Conference

CONTRIBUTED PAPERS PARALLEL SESSIONS

	Panels 80.07.01	Stream A 80.07.02	Stream B 80.07.06	Stream C 80.07.07
Sessions 1 Monday 11.30-1:00	Multiple Lenses on Regional Futures	Regional Innovation I	Regional Development I	Regional Transport
Sessions 2 Monday 1:45-3.15	Sustainable Regions Applied Research Network	Regional Futures	Regional Development II	International Connections
Sessions 3 Tuesday 9.00-10.30	APO Regional Development Collection	Regional Agency	Regional Development III	Public Sector Innovation
Sessions 4 Wednesday 9.00-10.30	Redefining Rural Communities	Regional Innovation II	Regional Development IV	Regional Policy and Practice

The Workshop Panels

The conference includes four workshop panels that were submitted by members in response to the Calls for Abstracts. All of the workshop panels will be held in Room 80.07.01, at the same time as the contributed papers sessions are being held in Rooms 80.07.02, 80.07.06 and 80.07.07.

MULTIPLE LENSES ON REGIONAL FUTURES

MONDAY, 11:30AM – 1:00PM

Regional transitions, transformations and futures are becoming a major preoccupation in policy and practice, particularly for regions moving away from fossil fuel production. Academia has an important part in this turn to regional futures, but different fields of research approach the topic in very different ways, limiting their capacity to contribute usefully to policy and practice. This panel aims to help address this issue by bringing together academics to discuss scholarship working on regional futures, including but not limited to the field of regional studies. In doing so, the panel hopes to illuminate not only some of the multiple challenges that regions face (e.g. climatic extremes as well as energy infrastructure, new identities as well as new industries), but some of the multiple conceptual lenses used to understand these challenges, and the tensions, complementarities and opportunities for integration that exist among them. Participants are Bruce Wilson, Lauren Rickards, Peter Fairbrother and Matthias Garschagen.



SUSTAINABLE REGIONS APPLIED RESEARCH NETWORK

MONDAY, 1:45PM – 3:15PM

The Australian Government, through the Council on Australia Latin America Relations (COALAR), has recently announced funding for a new Sustainable Regions Applied Research Network (SRARN). SRARN will enable knowledge exchange among researchers working to create sustainable regional development outcomes in rural regions of Australia, Chile and Argentina. It aims to stimulate knowledge partnering across country contexts to generate a next generation of innovative solutions. The workshop panel on the Sustainable Regions Applied Research Network will be led by Robyn Eversole.



The Workshop Panels (Continued)

APO REGIONAL DEVELOPMENT COLLECTION

TUESDAY, 9:00AM – 10:30AM

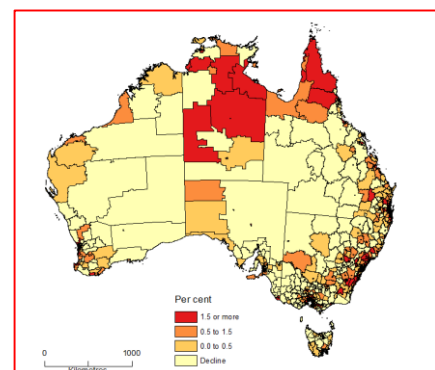
The Australian Policy Online Regional Development Collection is a new collaboration between APO and RMIT as part of the APO Linked Data PolicyHub Project supported by an ARC LIEF grant. It focuses on issues that are vital to regional Australia, offering resources on city-regions, communities, infrastructure, employment, industries and the environment. The collection aims to enable regional policy researchers and practitioners to: access historic and current regional policy resources; analyse documents and data in new ways; and connect with an audience of policy makers and advisors. The workshop panel on the APO Regional Development Collection will be led by Bruce Wilson.



REDEFINING RURAL COMMUNITIES: HOW RURAL COMMUNITIES CAN BE REFRAMED TO FOSTER REGIONAL DEVELOPMENT

WEDNESDAY, 9:00AM – 10:30AM

Rural decline is the ongoing loss of population, belonging, influence and community function in rural and regional communities. Communities that have not been able to adapt readily to social and economic change are most vulnerable to decline. A cycle of decline has developed where the loss of services and facilities has led to further population loss. Rural decline raises fundamental dilemmas such as the efficient distribution of services vs equity of access; and economic efficiency vs the values and vitality of communities. This panel will explore the full social and economic costs of rural decline, its implications for regional policy and development, and new responses that may better manage rural decline. It will deliberate how declining communities can build adaptive capacity, how government, private sector and community effort can be leveraged to manage decline, and the implications of continuing economic change on rural decline. Participants in this workshop panel are Jim Cavaye (USQ), Andrew Beer (UniSA) and Robyn Eversole (UTas).



Parallel Sessions 1

Monday 5 December, 11.30am–1.00pm

Session 1A Regional Innovation I

Chair: Tony Sorensen

Location: 80.07.02

ALAM, Khorshed

Innovation–Growth Nexus: The Case of Small and Medium Enterprises in Regional Australia

CEAPRAZ, Ion Lucian, Gaelle Kotbi and Loïc Sauvée

Territorial Innovation in France: How a Biorefinery Strategy Works at a Regional Level

SORENSEN, Tony

Cities in the Second Machine: Complexity, Uncertainty, Runaway Technology and a Planning Nightmare

Session 1B Regional Development I

Chair: Lee Pugalis

Location: 80.07.06

PUGALIS, Lee and Su Fei Tan

Metropolitan and Regional Economic Development: Competing and Contested Local Government Roles in Australia in the 21st Century

GIBSON, John, Geua Boe-Gibson and Frank Scrimgeour

Zombie Towns? Using Night Lights to Look for Evidence of Decline in New Zealand Towns, 1992-2012

REID, Neil

Craft Breweries: Embracing History through Adaptive Reuse

Session 1C Regional Transport

Chair: Yogi Vidyattama

Location: 80.07.07

Nakanishi, Hitomi and Yogi VIDYATTAMA

Investigating Bus Mobility of Older People in a Car Dependent City: An Analysis using Smart Card Data

Chen, Zhenhua and Kingsley E. HAYNES

Impact of High-Speed Rail on Regional Economic Disparity in China

KENEA, Kelbesa, Susan Kinnear and Delwar Akbar

Accessibility of Anbessa City Bus Service: A Case Study of Kolfe-Keraniyo Sub-City, Addis Ababa

Parallel Sessions 2

Monday 5 December, 1.45pm–3.15pm

Session 2A Regional Futures

Chair: **Karyn Bosomworth**

Location: 80.07.02

CARROLL, Michael C. and Steven Nelson

Place Branding: Viable Development Strategy or Practitioner Placebo

BOSOMWORTH, Karyn

Planning for Changing Regional Futures: Climate Change Adaptation in Catchment Management

FARLEY, Martin

Creating Preferred Regional Futures – A Place for Complex Systems Meta-Frameworks

Session 2B Regional Development II

Chair: **Fiona McKenzie**

Location: 80.07.06

MCKENZIE, Fiona

The Human Capital Factor: Generating, Attracting and Retaining Human Capital in Regional Australia

RAHMAN, Md Zillur, Delwar Akbar and John Rolfe

Developing a Conceptual Framework of Depicting Relative Changes in Affordable Housing Locations using Living Cost to Income Approach: Policy Implications in Melbourne, Australia

HERATH, Shanaka and Ajith Jayasekare

Measuring the Impact of Distance to Urban Centres on House Prices – From Accurate Measurements to Better Urban Policy

Session 2C International Connections

Chair: **Tony O'Malley**

Location: 80.07.07

Mapunda, Gido, Xiaohui Wang, **Tony O'MALLEY**, John Benson and Ying Zhu

Building Closer Economic Ties between China and Africa: Small Traders in the Export Trade from Guangzhou, China to Africa

ALIMI, Omoniyi, Dave Maré and Jacques Poot

Determinants of Internal Migration in New Zealand Revisited

DALZIEL, Paul, Caroline Saunders and Meike Guenther

The Contribution of Antarctic-Related Activities to the Canterbury Economy

Parallel Sessions 3

Tuesday 6 December, 9.00am–10.30am

Session 3A Regional Agency

Chair: Ruth Barton

Location: 80.07.02

GROCKE, Craig

Exploring a Theoretical Framework for Examining the Influence of Place Attachment of Community Leaders in the Barossa Region of South Australia

GLEESON, Grant

The Triumph of the Market or the Doom of History? What is the future for Regional Towns?

BARTON, Ruth

Trade Unions, Community and Industrial Regeneration on Tasmania's North West Coast

Session 3B Regional Development III

Chair: Bligh Grant

Location: 80.07.06

GERRITSEN, Rolf

The Whiteboard Rules, OK? Pork Barrelling in Australian Regional Development: A Discussion

GRANT, Bligh and Joseph Drew

The Future of Sub-National Government in Australia: Combining Economic Efficiency with Moral Force

BEER, Andrew

Governments and the Regions: History, Trends and Prospects

Session 3C Public Sector Innovation

Chair: Delwar Akbar

Location: 80.07.07

AKBAR, Delwar, Susan Kinnear, Prem Chhetri and Phillip Smith

Perceived Quality of Road Travel Condition in Mining Towns: Policy Implications for Transport Planning in Central Queensland, Australia

KLUZA, Krzysztof

Changes of the Risk Profile in the Local Government Sector: Evidence from Poland

WIPULANUSAT, Warit, Kriengsak Panuwatwanich and Rodney A. Stewart

Innovation in the Australian Public Service: A Qualitative Analysis

Parallel Sessions 4
Wednesday 7 December, 9.00am–10.30am

Session 4A Regional Innovation II

Chair: Bruce Wilson

Location: CB11.03.301

WILSON, Bruce

(Re-) Thinking Regional Innovation Systems in Australia

MARDANEH, Karim K., Jerry Courvisanos and Ameeta Jain

Economic Resilience of Regions: A Longitudinal Study of the Australian Economy from 1986 to 2011

DALZIEL, Paul, Tim Driver, Meike Guenther, Sini Miller et al.

Rewarding Responsible Innovation when Consumers are Distant from Producers: Evidence from New Zealand

Session 4B Regional Development IV

Chair: Lee Pugalis

Location: CB11.03.301

PUGALIS, Lee and Darren Keegan

The Regional Economic Development Paradox: Policy Order and Complex Practice

MADDEN, John

University Location and Spatial Development in Melbourne

WU, Qian and Marion Myhill

Going Off the Beaten Track: Exploring Chinese International Students' Motivations for Selecting Regional Australian Higher Education

Session 4C Rural Policy and Practice

Chair: Delwar Akbar

Location: CB11.03.205

BOSOMWORTH, Karyn, Brian Coffey, Andréanne Doyon and Fjalar de Haan

Exploring Intersections between Transitions Management and Regional Development: The Case of WAGA

AKBAR, Delwar, John Rolfe and Rahat Hossain

Perceived Risks to Housing Unaffordability in Resource and Regional Communities: Policy Implications for Housing Affordability in Central Queensland, Australia

SORENSEN, Tony

Context Is Everything: Key and Largely Uncontrollable Events to which Policy and Practice are Subserving

ABSTRACTS

AKBAR, Delwar
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Session 3C

Title: Perceived Quality of Road Travel Condition in Mining Towns: Policy Implications for Transport Planning in Central Queensland, Australia

Co-authors: Susan Kinnear, Prem Chhetri and Philip Smith

Abstract: Effective road transport networks are essential to both the ongoing growth of the mining sector and the liveability and sustainability of the communities that host resource development activities. This paper examines the perceived quality of road travel condition in mining communities in central Queensland. A household travel survey was conducted to explore mining communities' level of satisfaction with the road travel experiences, through a case study of the Moranbah and Emerald townships in central Queensland region. The condition of regional roads was the primary issue raised by residents, followed by concerns about safety and congestion issues associated with over-dimensional vehicles; and perceptions of poor driver behaviour, particularly around speed, inattention and fatigue. The findings have policy implications for all tiers of government and the mining industries, with respect to future transport planning.

AKBAR, Delwar
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Session 4C

Title: Perceived Risks to Housing Unaffordability in Resource and Regional Communities: Policy Implications for Housing Affordability in Central Queensland, Australia

Co-authors: John Rolfe and Rahat Hossain

Abstract: Housing unaffordability creates pressures on economic and social life of an individual to a community. This paper examined the perceived household risks to periodic housing unaffordability in Queensland resource and regional communities through a case study of Rockhampton and Gladstone cities. Two hundred households were surveyed from these two cities and then probability based consensus and agreement method used to identify the level of risks that the community perceived due to housing unaffordability. The study found that economic and social risks and stresses such as extra pressures on household budgets, reduction in disposable income, difficulty with children's schooling, strain in family relations and poor health were the common perceived risks in these two communities. An appropriate mix of housing development with suitable service options is required to maintain the well-being of various socio-economic groups during the resource boom period.

ALAM, Khorshed
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Session 1A

Title: Innovation–Growth Nexus: The Case of Small and Medium Enterprises in Regional Australia

Abstract: This research examines the causal relationship between innovation practices and performance of small and medium enterprises (SMEs). Data for this study are collected from randomly selected SMEs in the regional areas of Queensland. The finding reveals a bidirectional relationship between innovation practices and performance of SMEs. Second, there is a disparity in performance and innovation between agricultural and non-agricultural SMEs, and information and communication technologies (ICT) strategy is a major contributor to this sectoral difference. The findings of this research have significant policy implications, particularly in a regional Australian context. The government – local, state and national levels – would have to enhance innovation among rural SMEs by encouraging policies and strategies that will foster the development and deployment of ICT strategies specific to each sector, in order to improve their business performance while they attempt to improve on other forms of innovation.

ALIMI, Omoniyi
University of Waikato, New Zealand
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Session 2C

Title: Determinants of Internal Migration in New Zealand Revisited

Co-authors: Dave Maré and Jacques Poot

Abstract: New Zealand has one of the highest rates of internal migration in the world with about half of all New Zealanders changing their address at least once during a five year period. Migration is not random and migrants are self-selected based on certain personal and locational characteristics. It is important to understand the determinants of these movements especially for New Zealand where internal migration may make a significant contribution to population composition at the local level and affect policies to address growing regional population imbalances. This paper updates evidence on the determinants of internal migration in New Zealand using Census data from the 40 main and secondary urban areas of New Zealand from 1986 to 2013. Besides the traditional socio-economic variables typically considered, the paper provides evidence on the role of local income inequality as well as the ‘skating rink’ hypotheses which links international migration to internal migration of locals.

BARTON, Ruth
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Session 3A

Title: Trade Unions, Community and Industrial Regeneration on Tasmania's North West Coast

Abstract: In the last 80 years Tasmania's North West Coast has industrialised and then deindustrialised and with this has come high unemployment and levels of disadvantage. During this period of industrialisation organised labour played a central role with high levels of unionisation and was strongly integrated into the community and politics through regional trades and labour councils. However with deindustrialisation union membership and structures have contracted. The challenge then for the unions is how do they exert agency and influence the direction and process of regeneration in a way that advantages their members and the communities they live in. The concepts of scale and community unionism will be used to explore this issue and interviews and workshops with current North West Coast union leaders and activists analysed to draw out the factors that enable or hinder local union action on regional regeneration.

BEER, Andrew
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Session 3B

Title: Governments and the Regions: History, Trends and Prospects

Abstract: This paper considers the changing relationship between central governments and formal regional policy. It argues that while many accounts have suggested Australia's national and state governments have moved away from meaningful engagement with the regions, this paper argues that new evidence suggests otherwise. Using time-series data on formal Ministerial appointments to regional portfolios, this paper shows that previous commentators have over-estimated the commitments made to regional development by governments in the period 1945-75. It suggests that formal commitments to working for the wellbeing of regions became more evident from the 1990s onwards, as broader shifts in the delivery of government services and the orientation of the economy pushed governments on both sides of politics to ameliorative actions. The paper goes on to suggest that in some jurisdictions, neo liberal policies are also being progressively displaced by policy frameworks that place a greater emphasis on direct action to ensure the future prosperity of places. Recent political developments appear to be entrenching this trend, resulting in further reshaping of the administrative structure of the state in Australia.

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Session 2A

Title: Planning for Changing Regional Futures: Climate Change Adaptation in Catchment Management

Abstract: Most climate change planning identifies an ‘optimal’ pathway or uses ‘most-likely’ scenarios. Both approaches are destined for failure because the future will inevitably be different from those hypothesized and a singular pathway is unlikely to address diverse stakeholder values or dynamic policy environments. ‘Pathways planning’ is a powerful metaphor and analytical approach that can help decision-makers address these issues by helping develop an array of options that are robust across a wide range of possible futures, that consider multiple perspectives, and that provide flexibility in dealing with the inevitability of change. This presentation will discuss ongoing work with Victoria’s Catchment Management Authorities on using this approach in planning for climate change across our landscapes including wetlands, rivers, soils, biodiversity, estuaries, and coasts.

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Session 4C

Title: Exploring Intersections between Transitions Management and Regional Development: The Case of WAGA

Co-authors: Brian Coffey, Andréanne Doyon and Fjalar de Haan

Abstract: Regions around the world are facing intersecting challenges associated with economic and industrial restructuring, demographic changes, urbanization, and climate change. Regional development has successfully focused on an economic agenda but, has struggled to fully integrate environmental and social concerns. Climate change brings the need to address these issues holistically, to the fore. This paper explores the potential for transition management (TM) to give coherence and direction to transformative efforts of a group of regional actors. TM is an innovative governance framework for managing complex problems. Informed by theory and practice, it has achieved considerably policy success in northwest Europe. Yet, TM has only begun to be explored in Australian contexts. Our paper outlines a proposal to work with a regional alliance of local governments and industries to apply TM in Melbourne’s west; a region that is attempting to deal with multiple global challenges in an integrated way.

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Session 2A

Title: Place Branding: Viable Development Strategy or Practitioner Placebo

Co-author: Steven Nelson

Abstract: Much has been written about place branding in recent years. Some authors believe a city's brand is an important asset in positioning a city for future growth; others believe logos and slogans have a limited impact and development efforts should be concentrated in other areas. What the literature does agree on is the practitioner community's fascination with superficial branding. Useful or not, the use of slogans and logos is certainly popular. While these slogans are certainly clever, the real question is do they provide any real economic benefit? This paper explores the use of place branding strategies as economic development tools. Section one provides a brief review of the literature on place branding. It highlights some of the positive and negative aspects of the policy. Section two presents an employment analysis of two U.S. cities (Las Vegas and Austin) that have place branding at the center of their economic development strategy. We examine employment trends before and after the implementation of the place branding to see if the strategy had any tangible impact on the cities employment base. The final section is a policy discussion on the usefulness of place branding as an economic development strategy. It provides suggestions to local practitioners for the implementation of branding strategies.

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Session 1A

Title: Territorial Innovation in France: How a Biorefinery Strategy Works at a Regional Level

Co-authors: Gaelle Kotbi and Loïc Sauvée

Abstract: A biorefinery represents a new type of facility which resembles the well-known petroleum refinery. Its strategy of development is evolving gradually in relation with the geographical area where it is localized. The focus of our paper is to outline the most important features of its development seen as a new type of territorial innovation in France. Since its development was at the beginning related to the petroleum refinery, nowadays the biorefinery cannot develop without a strong regional commitment. Several theoretical works highlight the territorial innovation models not only as a new type of regional development (clusters, competitive poles, industrial district, etc.) but also as entities with certain features called "territorial innovations". These "territorial innovations" represents new tools which dispose the economic actors in order to improve the regional development. Examples of territorial innovations could be found in the case of France territorial development like the concepts of "territorial governance" and the "territorial engineering".

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Session 2C

Title: The Contribution of Antarctic-Related Activities to the Canterbury Economy

Co-authors: Caroline Saunders and Meike Guenther

Abstract: This report builds on earlier work conducted by the Agribusiness and Economics Research Unit (AERU) at Lincoln University; and it assesses the contribution of Antarctic-related activities to the Canterbury regional economy. The economic analysis was undertaken for five categories (1) National Antarctic Programmes, (2) Tourism and Events, (3) Fishing, (4) Education and Research, and (5) Antarctic Heritage. Results show that the aggregated direct economic impact of the surveyed Antarctic-related activities was \$124 million for the Canterbury economy. The total was \$235 million for Canterbury with 3,675 jobs in Canterbury estimated to depend on Antarctic-related activities in the region.

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Session 4A

Title: Rewarding Responsible Innovation when Consumers are Distant from Producers: Evidence from New Zealand

Co-authors: Tim Driver, Meike Guenther, Sini Miller, Paul Rutherford, Caroline Saunders, John Saunders and Peter Tait

Abstract: Recognising that increased intensification of agri-food production is pushing up against environmental constraints, a New Zealand national science challenge aims to enhance primary sector productivity while improving land and water quality for future generations. This might be conceptualised as ‘responsible innovation’, but as previous authors have pointed out, there are several practical issues undermining the adoption of a responsible innovation approach. This is made particularly difficult when local production is exported to distant consumers. In this context this paper reports on a study of consumers in five export markets for New Zealand agri-food products (China, India, Indonesia, Japan and the United Kingdom), exploring the importance of product credence attributes and sub-attributes in these markets and how capturing price premiums for these attributes can provide increased returns to reward responsible innovation.

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Session 2A

Title: Creating Preferred Regional Futures – A Place for Complex Systems
Meta-Frameworks

Abstract: Communities expect much from government and associated regional structures to support strong regional and local economies that simultaneously deliver valued social and environmental outcomes, in short, in creating a preferred future. Regions provide a scale that illustrates the convergence of people, place and prosperity and highlights an importance and interdependence of issues that are often lost within the silo structures of government agencies at sub-national or national levels. The regional scale ensures the community impact of varying levels of performance, productivity and innovation within sectors and across the system as a whole, is visible. The application of complex adaptive system principles (CAS), framing and thinking is a means of understanding and managing this transparent interdependency between sectors and issues and within the whole system. This paper outlines and demonstrates the use of a CAS based meta-framework and associated tool set that assists in understanding, analysing, innovating and governing policy and practice in the regional context. Within the context of regional development, this CAS approach extends program logic, cluster and platform theory by including wider perspectives and connecting micro to macro dimensions to assist in mapping and facilitating better understanding of the context within which development occurs as the basis of a reflexive and adaptive innovation, performance and productivity management approach across “the regional system”.

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Session 3B

Title: The Whiteboard Rules, OK? Pork Barrelling in Australian Regional Development: A Discussion

Abstract: Pork barrelling is expenditure by governments in particular ways (or, usually, in particular places) so as to secure partisan reward. It is a commonplace in conversations between regional development practitioners, academics and journalists that pork barrelling occurs, usually by governments seeking electoral advantage. Exemplifying this, during the 2016 election one national newspaper had a headline “Federal election 2016: one-way road funding agenda”. This article claimed that the majority of Commonwealth road funding was intended for electorates held by the government. This paper examines this model/stereotype and finds that the situation is much more complex than revealed by popular discourse. Analysis of Northern Development, schools funding and road funding will be used to illustrate these complexities.

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Session 1B

Title: Zombie Towns? Using Night Lights to Look for Evidence of Decline in New Zealand Towns, 1992-2012

Co-authors: Geua Boe-Gibson and Frank Scrimgeour

Abstract: We use night-time lights as detected by satellite to measure expansion of area of New Zealand towns over 1992-2012. In order to exclude major urban areas, we only consider towns that have a population below 100,000 people, searching all the way down to towns as small as 2000 people. Our remote sensing-enabled statistical enquiry is motivated by public discussion in New Zealand about the spatially uneven effects of population change and economic growth. Some of this discussion does not appear to be grounded in statistical evidence, but the colourful language has caught public attention. For example, a prominent commentator is on record as saying: "It's horrible to say but yes we have zombie towns and some of them do have to close" although no specific details on which particular towns should 'switch the lights off' were given. We estimate trend expansion rates for each of these towns, and test for evidence of decline.

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Session 3A

Title: The Triumph of the Market or the Doom of History? What is the future for Regional Towns?

Abstract: Functionally, regional towns cannot be the city states of history. By necessity, whilst regional towns exist as a centre for the catchment area that sustains it, they are nonetheless subject to and rely upon the patronage of the 'centre' that the town 'relates' to. In return for this patronage regional towns are bound by the laws made at the centre. These laws have the capacity to both help and hinder the economic development of a regional town. Viewed through the prism of power, regional towns are necessarily in an inferior relationship to the centre upon which they depend. The life force of the town can be drained by both deliberate and inadvertent decisions made at the centre. This suggests that for regional towns to prosper they must develop an effective relationship with the centre. The corollary is that a dysfunctional relationship will lead to a town being blighted. An aspect of dysfunctionality is the potential impact of planning laws made at the centre which inhibit the flow of capital into a regional town. It is time to question the effectiveness of the bureaucratic planning model?

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Session 3B

Title: The Future of Sub-National Government in Australia: Combining Economic Efficiency with Moral Force

Co-author: Joseph Drew

Abstract: The optimal politico-spatial design of Australia's regions has been a hotly-contested debate since long before Federation. Existing economic theories of decentralised government focus on efficiency with only a passing reference to a minimalist interpretation of the principle of subsidiarity. However, the deontological principle of subsidiarity is a far richer concept which emphasises the greater effectiveness which might be achieved when the roles of donors and recipients are made more transparent. We combine extant economic theories of decentralisation with the deontological conception of subsidiarity. What emerges is a comprehensive theory of decentralised government promising greater levels of efficiency *and* effectiveness. Moreover, we argue that 'as if by an invisible hand' local government in Australia is evolving towards a size and shape which positions it ideally as the fundamental unit of delivery of government goods and services. We conclude by evaluating the objections commonly proposed by opponents of reform to the Australian federation.

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Session 3A

Title: Exploring a Theoretical Framework for Examining the Influence of Place Attachment of Community Leaders in the Barossa Region of South Australia

Abstract: 'Place' is a social and physical construct created by people to bring meaning to their lives. It shapes peoples' identity and strong attachment to place contributes to a community's wellbeing. Empirical research suggests that to belong to a place can be enhanced through regular participation in community life. It also suggests that place attachment is a primary driver for participating in community groups to activate social capital to protect or strengthen place. This paper outlines a theoretical framework using Place Attachment theory to better understand how the people - place relationship forms as a driver for participation in place-based community groups. In particular, the framework will demonstrate a practical method to examine the conscious and subconscious place attachment 'processes' driving place-based community leaders in the Barossa Region of South Australia. This knowledge can improve place management partnerships between place-based community groups and government through better understanding of the motivations of community leaders who participate in place strengthening initiatives.

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Session 1C

Title: Impact of High-Speed Rail on Regional Economic Disparity in China

Co-author: Zhenhua Chen

Abstract: This paper investigates a fundamental question related to the massive railway infrastructure development in China. What is the impact of high-speed rail (HSR) on regional economic disparity? The question is investigated from three perspectives. First, the influence of HSR on regional economic disparity is discussed theoretically from the perspective of the New Economic Geography. Second, the variation of economic disparity at both the national and regional levels is investigated using three indexes: a weighted coefficient of variation, the Theil index and the Gini coefficient. Third, the linkages between regional economic growth and HSR measured in terms of both quantity and quality is evaluated empirically in accordance with endogenous growth modelling using panel data covering the period 2000 – 2014. The findings confirm that the development of HSR has a positive impact on promoting regional economic convergence in China after controlling for other factors.

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Session 2B

Title: Measuring the Impact of Distance to Urban Centres on House Prices – From Accurate Measurements to Better Urban Policy

Co-author: Ajith Jayasekare

Abstract: House price models often employ variables measuring distance from the city centre to housing locations. However, distances between different points in space can mainly be conceptualised in three different ways – Euclidean distance (distance ‘as the crow flies’), vector-based road-network distance (‘travel distance’) and raster-based road distance (‘overland distance’). Therefore, the particular distance measure that portrays as closely as possible the actual travel distance in a given study is context-specific. This paper proposes to consider all three measures of distance in a preliminary step, as a way to improve accuracy and the performance of house price models. Spatial econometric techniques developed within regional science provide a mechanism to carry out comparisons of distinctive distance measures in a robust manner. The case study of Sydney compares implications of using these different measures of distance on the findings. Improving the modelling procedure in this way leads to accurate measurements of ‘city centre effects’. This information is useful in planning infrastructure projects including roads and highways, and improving public transport efficiency

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Session 1C

Title: Accessibility of Anbessa City Bus Service: A Case Study of Kolfe-Keraniyo Sub-City, Addis Ababa

Co-authors: Susan Kinnear and Delwar Akbar

Abstract: Accessibility of transport services can be influenced by a range of factors, and it is important to understand the role and influence of each of these in order to create effective transport systems in urban, peri-urban and regional settings. Addis Ababa City is one of the fastest growing cities in the world, yet is constrained by poor accessibility of city bus transport services. This creates problems relating to journeys to work, school and other travel. This paper examines the factors affecting the accessibility of Anbessa City bus service in Addis Ababa through a case study of Kolfe-Keraniyo Sub-City. An exploratory research approach was taken, using in-depth interviews with the city bus transport regulators as well as the operator. The study identified eight principal themes impacting on the accessibility of the bus services, these being infrastructure conditions, stakeholder engagement, law enforcement system, user accessibility, institutional frameworks, transport operations, transport planning, and comfort and safety of the transit system. Identifying these themes should assist in implementing future improvements to the accessibility of bus service, thus providing more

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Session 3C

Title: Changes of the Risk Profile in the Local Government Sector: Evidence from Poland

Abstract: The local government sector plays an important role in the EU economies. Besides providing a vast range of public services, it accounts for over 8% of total investments. The crisis, which started in 2008, resulted in increased local government indebtedness and raised concerns over their debt repayment capacity. This paper proposes an alternative methodology of risk assessment of local governments to statutory debt limits. Firstly, it employs a corporate finance approach to evaluate the financial standing of individual entities. The ratios are based on free operating cash flow and net debt. Next, with the use of Data Envelopment Analysis, the relative performance of local governments in debt utilization is calculated, reflecting the unsystematic risk of these entities. The proposed methods are applied to an assessment of risk for the local government sector in Poland in the 2008-2015 period. This analysis reveals that towns with county rights are the category most threatened by future problems with servicing debt and performing statutory activities in the medium term. As this group represents 33% of Poland's population and 46% of sector debt, it has a vast importance also from the perspective of the whole public sector stability.

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Session 4B

Title: University Location and Spatial Development in Melbourne

Abstract: Does the presence of a local university affect the economic development of an area within a large city? In this paper I focus on the Western region of Melbourne. I analyse the importance of the region's University to the regional economy in 2013 with the aid of a 6-region computable general equilibrium (CGE) model, four of the regions covering Greater Melbourne. The analysis is undertaken by simulating a counterfactual that there was no university in the region during 1992 to 2013. The simulation accounts for a relocation of both the University's demand-side impacts (operating expenditures and student living costs) and its supply-side impacts (knowledge effects). A particular feature is the estimation of the interregional relocation of local productivity effects flowing in 2013 from returns to the stocks of human capital and research knowledge accumulated over the years from 1992. The simulation results suggest that the presence of a university in Western Melbourne has a significant effect on the region's GDP, but due to interregional commuting there is a more muted effect on the real consumption of the region's households. Sensitivity simulations are carried out for variations to assumptions regarding the effects of university proximity on tertiary education participation and on the degree of regional attachment.

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Session 4A

Title: Economic Resilience of Regions: A Longitudinal Study of the Australian Economy from 1986 to 2011

Co-authors: Jerry Courvisanon and Ameeta Jain

Abstract: Resilience is about addressing vulnerability, not only by surviving a shock to the system under investigation, but also for the system to thrive in an environment of change and uncertainty. A robust conceptual model is required to navigate through underlining elements of vulnerability. Providing such conceptual model and identifying patterns of economic resilience in regions by industry categories using census data from 1986, 1991, 1996, 2001, 2006 and 2011 is the focus of this paper. A model of regional adaptive cycles around four sequential phases – reorganization, exploitation, conservation and release – is adopted as the framework for recognizing such patterns. Resilience patterns emerge from adaptive capacity in four distinct functional groups of local government regions in Australia. A data-mining clustering method utilizes a k-means algorithm to evaluate the impact of major shocks including economic recessions, drought and the Global Financial Crisis – on four functional groups of regions, using census data from 1986 through to 2011. Preliminary results show different resilience patterns and stability for varied industry/functional regions ranging from non-resilient to very resilient regions.

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Session 2B

Title: The Human Capital Factor: Generating, Attracting and Retaining Human Capital in Regional Australia

Abstract: In the field of labor economics, human capital refers to the stock of knowledge or characteristics of a worker that contributes to their productivity. Investment in education and training of individuals can enhance their level of human capital and this will be valued in the market because it increases firms' profits. Various researchers have looked at the intersection of migration and human capital suggesting that higher levels of human capital are found in cities and that areas with high levels of human capital act as an attractor for individuals with high levels of skills and education. This self-reinforcing process of attraction raises many questions in the context of Australia's urban primacy, as it suggests that capital cities will enjoy a cumulative gain in human capital over time, potentially at the expense of non-metropolitan areas. Net flows of young adults from regional to metropolitan Australia reinforces the concentration of economic activity and a relatively young metropolitan labour force. At the same time, it has led to a gradual ageing of the population structure and a depletion of human capital in many rural communities, placing constraints for local development, particularly through skills shortages and difficulty attracting professional workers. This paper explores whether the loss of regional capital from regional areas is inevitable. It poses a number of questions for discussion such as: Are there non-traditional ways in which regional communities can access or generate human capital? Can human capital be enhanced via mobility rather than permanent migration?

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Session 2C

Title: Building Closer Economic Ties between China and Africa: Small Traders in the Export Trade from Guangzhou, China to Africa

Co-authors: Gido Mapunda, Xiaohui Wang, John Benson and Ying Zhu

Abstract: Little is written on trade links between China and Africa and even less on the role of small business in this trade. In this study, we investigate the goals and experiences of small African and Chinese traders in the Guangzhou, China, who conduct export trade from China to Africa. We find that they adapt in their own way to the social norms, cultural values and institutional environment of Guangzhou. They retain their traditional values, build networks within their own culture, specialize in certain customers and customer needs, and build strong cross cultural networks. Together with shippers, African and Chinese traders sustain global transactions secured by low cost and credible commitments created through community networks and family links. We suggest that governments and communities can benefit by encouraging this development.

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Session 1B

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Title: Metropolitan and Regional Economic Development: Competing and Contested Local Government Roles in Australia in the 21st Century

Co-author: Su Fei Tan

Abstract: Economic development is a priority of all levels of government; irrespective of country, constitution or system of governance. Traditionally the role of local government in the subnational economic development policy space has been rather limited, although their remit and engagement in this sphere has increased steadily since the 1980s. Even so, the role of councils in subnational economic development – and metropolitan and regional economic development in particular – remains ambiguous and contested. Derived from findings from a project funded by the Australian Centre of Excellence for Local Government, this paper makes two contributions to the literature. First, it shows how the conceptual messiness of the notion of (metropolitan and regional) economic development can both enable and constrain local government practice. Secondly, a state-level policy vacuum is apparent, which is a source of frustration amongst local practitioners. A key policy implication is the need to open-up more space for dialogue between different tiers of government to help engender a shared understanding of economic development, including the roles of different actors.

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Session 4B

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Title: The Regional Economic Development Paradox: Policy Order and Complex Practice

Co-author: Darren Keegan

Abstract: Regional economic development, in its various guises, is deployed throughout much of Australia. Whilst it remains a contested activity, conventional wisdom extols the need to embrace complexity, whilst simultaneously imbuing order and control. Insights from the literature reveal that regional economic development organisations (RDOs) are often the primary interface between government and the regional socio-economic systems – two highly dynamic and multidimensional, yet opaque, operational landscapes, characterised by interactive network relationships across place and time. Derived from analysis of practice in New South Wales, we find that RDO strategies tend to reflect a bias towards structured processes, transactional relationships and hierarchical decisions, which eschew spatio-economic complexities. We identify some striking future risks for regional development if extant practice continues as we seek to contribute to a richer understanding of the complexity that confronts economic development policy-makers.

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Session 2B

Title: Developing a Conceptual Framework of Depicting Relative Changes in Affordable Housing Locations using Living Cost to Income Approach: Policy Implications for Housing Affordability in Melbourne, Australia

Co-authors: Delwar Akbar and John Rolfe

Abstract: Affordable housing locations in metropolitan cities are usually assessed by rental cost or mortgage payment relative to income. Affordable housing locations are also influenced by locational characteristics such as distance from public transportation, service centres, city centre and employment centres. Once the locational amenities such as public transport and basic services are becoming available, rental price or median house price is also increased, and eventually these locations are becoming unaffordable. This paper develops a conceptual framework of depicting relative changes in affordable housing locations in Melbourne by comparing housing cost to income ratio approach to a living cost to income ratio approach. The developed conceptual framework is not only a method to identify the changing affordable housing locations but it also brings policy implications of living cost to income ratio approach of analysing housing affordability in Melbourne.

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Session 1B

Title: Craft Breweries: Embracing History through Adaptive Reuse

Abstract: In recent years the United States has experienced a craft beer revolution. Since 2010 there have been over 2,700 new craft breweries established. Craft breweries are small scale operations that provide consumers with an artisanal product that is produced by individuals that have a commitment to high-quality locally-produced beer. Many craft breweries have a strong commitment to environmental sustainability, including through what urban planners call the adaptive reuse of buildings. Adaptive reuse can be defined as reusing an old site or building for a purpose other than that for which it was designed. Many craft breweries are in buildings that were once used for something else – a church, a fire station, a potato chip factory etc. Not only do craft brewers use old buildings but they often embrace the former use and incorporate it into the identity of their brewery. The purpose of this paper is to explore adaptive reuse within the context of American craft breweries. In doing so the paper will attempt to answer three questions – a) how extensive is adaptive reuse, b) where adaptive reuse does occur to what extent do craft brewery owners leverage the building's former use in creating their brewery's identity, and c) do there appear to be a particular type of former building use that is favored by craft breweries?

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Session 1A

Title: Cities in the Second Machine: Complexity, Uncertainty, Runaway Technology and a Planning Nightmare

Abstract: This presentation parallels my first one offered to this conference, but rather focusing on spatial economic development it discusses the way in which every aspect of urban living could be transformed rapidly and in completely unexpected ways by impending technologies, thereby invalidating most of the assumptions on which both development control and long-range strategic planning have been based almost everywhere. It reflects on alternative ways for members of society to conjointly invent an urban management system that responds rapidly to emerging threats and opportunities posed by those technologies to harness the upside of economic and social change and abandon out-dated, if cherished, perspectives. The necessary outcome will be far more experimental, fluid and adaptable built form and infrastructure which can then play its part in accelerating adoption of technologies' transformative potential. If this doesn't happen will Sydney and Melbourne end up like Detroit?

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Session 4C

Title: Context Is Everything: Key and Largely Uncontrollable Events to which Policy and Practice are Subservient

Abstract: A raft of transformational technologies will likely reshape every aspect of Australia's and New Zealand's economy, society and polity over the next 20 years. In the process, geography will be comprehensively re-drawn, potentially devastating some cities and regions while benefitting others handsomely. But it is extremely difficult to specify in advance specific transformational trajectories for particular regions given that their economies and societies are embedded in a world beset by fast rising complexity and uncertainty. Moreover, the power governments and communities alike to influence local destinies is filtering ever faster from regions to the global as nations seek to secure their place in the emerging world order. What impacts, then, can either government policies or endogenous regional practices realistically have on steering cascading technologies and their spatial impacts – both before and after transformational events. An alternative and more pro-active approach to anticipating future regional change surely lies in enabling, if not directly supplying, (a) state-of-the-art, cost-effective and efficient infrastructure services, and (b) educating or retraining workforces with the knowledge and skills demanded by new technologies. Such approaches would in practice amount to an extension of current social security arrangements usually supervised, if not delivered, by governments.

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Session 1C

Title: Investigating Bus Mobility of Older People in a Car Dependent City:
An Analysis using Smart Card Data

Co-author: Hitomi Nakanishi

Abstract: The transport literature has discussed that older people in suburban areas prefer to drive until their ability to do so significantly decreases. In an ageing society, it is important that the necessary services for older people are well connected to the public transport network. In addition, it is critical to understand the travel patterns of older people in order to respond to their needs, especially to avoid social exclusion. However there is still a limited understanding of how older people travel around on public transport in an Australian low density environment where public transport service tends to be inefficient. This research examines the mobility patterns of older people using smart card data in a car dependent city of Canberra, Australia, to discuss the implications on transport policies that need to be developed to support the mobility and well-being of older people. The smart card data used for this research was recorded in June 2012 by the Australian Capital Territory Government. We find different pattern of use by older passengers in terms of time of usage as well as the proportion of those who used transit facility. The research proposes improvement of the connectivity of key service facilities (e.g. hospitals, shopping malls) with bus intersections to help facilitate the use of bus by older people.

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Session 4A

Title: (Re-) Thinking Regional Innovation Systems in Australia

Abstract: Over the past 20 years, there has been steady growth of interest in regional innovation systems, from both academic researchers and from policy makers. Amongst other developments, this interest has culminated in the decision by the European Union (EU) to make Smart Specialisation Strategies, or the implementation of 'RIS3', regional innovation smart specialisation, a central feature of its Regional Policy (and for access to the Cohesion Funds) for the 2014-2020 financial period. Now, all European Union regions are engaging with a defined process to develop strategies to build or enhance innovation systems which will in turn be supported by EU investment. Australian experience with regional innovation is much more erratic, and it is difficult to identify a coherent, let alone systemic, pattern. Most attention is given to national innovation policies, and interest in innovation in the regions is either focused on specific firms, or on occasional examples of clusters, rather than exploring innovation eco-systems and how they can be promoted. This paper will review the Australian experience over the past 25 years, and will consider the potential opportunities which might derive from a more systematic policy framework.

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Session 3C

Title: Innovation in the Australian Public Service: A Qualitative Analysis

Co-authors: Kriengsak Panuwatwanich and Rodney A. Stewart

Abstract: Innovation is considered to be a *sine qua non* to improve efficiency and effectiveness in government and respond to citizens' increasing demand for better services. This paper draws together literature related to innovation in the public sector. A qualitative analysis was conducted to establish the key aspects related to innovation raised by senior managers within the Australian Public Service (APS). This study used content analysis of transcripts from senior manager presentations in Innovation Month seminars from 2014 to 2016. The content indicated senior managers' perceptions of innovation in the APS in terms of four aspects: drivers of innovation; barriers to innovation; innovation characteristics; and typology of innovation. Content analysis revealed that those aspects typically associated with innovation in the APS, such as ad-hoc basis and top-down approach, have been hindered by a number of barriers within the public sector context studied. These barriers comprise risk-averse culture, hierarchy, and the silo effect. The implications of the findings are discussed to suggest directions for further research on innovation in the public sector.

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Session 4B

Title: Going Off the Beaten Track: Exploring Chinese International Students' Motivations for Selecting Regional Australian Higher Education

Co-author: Marion Myhill

Abstract: Following the adoption of the international education policy of *Tasmania's Place in the Asian Century White Paper* (2013), an increasing number of Chinese international students have enrolled at the University of Tasmania (UTAS), a regional Australian university, rather than follow the majority in attending universities in large Australian cities. This study aims to understand their motivations to make this different decision, based on positivism and interpretivism stances underpinned by grounded theory. Involving data from 501 online questionnaires and 23 semi-structured interviews of UTAS Chinese international students, this research revealed that the primary motivators of the UTAS choice were: more competitive tuition fee, the larger number of available scholarships, and quicker offer compared with metropolitan Australian universities, along with cooperative courses, specialist courses (eg. maritime courses), easy to graduate, credit transfer acceptance, immigration prospect, and the long history of UTAS. Nevertheless, Tasmania as a geographic location is not a high priority.

