

**FORWORD**

Where the Corona virus has spread since October 2020	1
Australia East Coast Floods 2021	2
ANZRSI 45 <sup>th</sup> Annual Conference 2021	3

**COMMENTARY**

From the Regional Australia Institute	4
Why City dwellers want a Life in the Country and when they might move	
From Brookings	5
The climate wolf at the door: Why and how climate resilience should be central to building back better	
From the Warren Centre for Advanced Engineering (U. Sydney)	6
The Circular Economy: Global trends and future challenges	
From CEDA	7
Disruption of Global trade (From Jarrod Ball, CEDA Chief Economist)	
From the Productivity Commission	
Register of Foreign-owned Water Entitlements	7
Vulnerable supply chains	7
Overcoming indigenous disadvantage: Key Indicators 2020	8
Uranium exploration and mining in SA	10
From the Cockatoo Network	
Economic policy approaches for contemplation in 2021	12
Australian perspectives	13
Lessons for local government	13
From The Conversation	
The \$50 boost to JobSeeker	14

**CONFERENCES and STUDY OPPORTUNITIES**

ANZRSI 45 <sup>th</sup> Annual Conference 2021	15
Regional Studies Blog	15

**CURRENT RESEARCH ABSTRACTS**

ANZRSI Abstract Alert	15
Regional Studies 54(10)	15
The Review of Regional Studies	16
Regional Science Policy and Practice 12(4) August 2020	16
Papers in Regional Science 100(1)	17
Australasian Journal of Regional Studies 26(1) 2020	18

**ABOUT ANZRSI**

ANZRSI Council Notes	21
Roles of Council Members	21
ANZRSI Council 2021	21

**Foreword****Where the Corona Virus has spread**

In 1 October 2020, 213 Countries and Territories around the world had reported a total of 34,167,124 confirmed cases of the coronavirus COVID-19 and a death toll of 1,018,880 deaths. By February 2021, 219 countries had reached 107,411,555 confirmed cases and a death toll of 2,351,195 deaths. Some of these countries are listed below because they are neighbours of Australia and New Zealand or are our trading partners. The countries included are arranged by the number of cases in December 2020.

Country	Date	Cases	Deaths	Region
<b>United States</b>	Dec 2020	7,447,693	211,752	North America
	Feb 2021	28,002,240	486,922	
<b>India</b>	Dec 2020	6,312,584	98,708	Asia
	Feb 2021	10,880,603	155,484	
<b>South Africa</b>	Dec 2020	674,339	16,734	Africa
	Feb 2021	1,484,900	47,382	
<b>United Kingdom</b>	Dec 2020	453,219	42,143	United Kingdom
	Feb 2021	3,998,655	115,529	
<b>Pakistan</b>	Dec 2020	312,806	6,484	Asia
	Feb 2021	560,363	12,218	
<b>Philippines</b>	Dec 2020	311,694	5,504	Asia
	Feb 2021	543,282	11,469	
<b>Indonesia</b>	Dec 2020	287,008	10,740	Asia
	Feb 2021	1,191,990	32,381	
<b>Israel</b>	Dec 2020	248,133	1,571	Asia
	Feb 2021	714,812	5,283	
<b>Canada</b>	Dec 2020	158,758	9,297	North America
	Feb 2021	817,163	21,088	
<b>China</b>	Dec 2020	85,414	4,634	Asia
	Feb 2021	89,748	4,636	
<b>Japan (+Diamond Princess)</b>	Dec 2020	83,722	1,577	Asia
	Feb 2021	412,463	6,787	
<b>Singapore</b>	Dec 2020	57,765	27	Asia
	Feb 2021	59,777	29	
<b>Australia</b>	Dec 2020	27,096	288	Australia/Oceania
	Feb 2021	28,892	909	
<b>Malaysia</b>	Dec 2020	11,224	136	Asia
	Feb 2021	258,306	953	
<b>New Zealand</b>	Dec 2020	1,848	25	Australia/Oceania
	Feb 2021	2,328	25	
<b>Papua New Guinea</b>	Dec 2020	534	7	Australia/Oceania
	Feb 2021	914	9	
<b>Fiji</b>	Dec 2020	32	2	Australia/Oceania
	Feb 2021	56	2	

For more look here:

<https://www.worldometers.info/coronavirus/countries-where-coronavirus-has-spread/>

### **Australia East Coast Floods 2021**

The deaths of two people whose cars became trapped in flood waters the week brought into focus the issue of vehicle safety. On Wednesday, 24<sup>th</sup> March a 25-year-old Pakistani man, Ayaz Younus, died after his Toyota Camry became trapped in flood waters. Though Younus had called triple zero and managed to stay on the line for 40 minutes, police could not find him in time. On the same day, rescuers found the body of David Hornman, 38, in a submerged ute in the Gold Coast hinterland.

Before and after: pictures reveal extent of flood damage across NSW as residents start returning. There have been 12,500 requests for help across the state this week and 1,000 flood rescues. About 500 SES volunteers remain in the field during this week, while the state's premier and the prime minister spent time with emergency service workers in Port Macquarie on Friday.

*Weather eases but major flooding still occurring across NSW state - A Picture by Getty Images*



The State Emergency Service said evacuated residents of Pitt Town North, Pitt Town Bottoms, Cornwallis, North Richmond, Agnes Banks, Gronos Point and Freemans Reach should not return until authorities give the all-clear. Rapid damage assessments were taking place through western and north-west Sydney in areas such as Penrith, The Hills and Hawkesbury. Some 3,500 assessments have been carried out to date.

Tourism operators hit by recent heavy rain are hoping the upcoming Easter break gives them a much-needed boost. At the Discovery Park at Forster on the mid-north coast of NSW, which was inundated by this past week's "rain bomb", manager Jane Ticehurst said they are gearing up for the holiday. Ticehurst said she was expecting a full house for the Easter break, which means accommodating about 1,000 guests. All of this past week's guests had to be cancelled and rebooked so staff could concentrate on cleaning up after flooding. The property sits above the Wallamba River, and while some locals said the waterway was at its highest level in memory, the park's infrastructure escaped relatively undamaged. Despite some facilities like the boardwalk going under water, Ticehurst said she was feeling fortunate.

For more look here: <https://www.theguardian.com/australia-news/australia-east-coast-floods-2021>

### **ANZRS AI 45<sup>th</sup> Annual Conference 2021**

The 2020 ANZRS AI Conference had been planned to be held in Melbourne in the first week of December. The ongoing travel restrictions and concerns to avoid exposing participants to the Coronavirus mean that the decision has been made to postpone the conference until 2021. Further details will be provided early in 2021.

**Commentary**

**From the Regional Australia Institute**

***Why City Dwellers want a life in the Country and when they might move***

**Liz Ritchie** *CEO, Regional Australia Institute (RAI)*

New research released [22 February 2021] by the Regional Australia Institute (RAI) shows one-in-five city residents are looking to move to the regions, with more than half wanting to make the jump within the next 12 months.

RAI CEO Liz Ritchie said metro movers are looking for more space, to be better connected to the natural environment and they want a more relaxed lifestyle – all the things that Regional Australia has to offer.

“What’s really interesting about the survey we had commissioned is that the appeal of Regional Australia is a stronger motivation to move than any dissatisfaction with city life,” Liz Ritchie said.

“Brisbane respondents came in as the most stressed in the country, followed by Sydney-siders and then those in Melbourne. More than 69 percent of all those surveyed said reducing general stress and anxiety is a major driver for considering a life outside our capital cities,” Ms Ritchie said.

When asked about the reasons for considering a move, 70 percent rated traffic congestion as a major factor and 68 percent want to reduce their cost of living.

But it’s the positives of life outside the city limits which resonate even more, with 77 percent of potential movers ticking both space and connection to nature as reasons to shift. The improved general well-being that regional life offers is a major drawcard for three-quarters of those surveyed.

While the COVID pandemic has significantly raised the desire to move to Regional Australia for 22 percent of survey respondents, more than half said they were already considering relocation before the pandemic.

The RAI commissioned qualitative and quantitative research among more than 1,000 people in Sydney, Brisbane, Melbourne and Perth who were considering moving to Regional Australia. The research was carried out in November and December 2020.

Larger coastal centres were the most popular locations for potential metro movers, but when it came to smaller areas, inland towns held their own against those on the coast, with about one third of respondents indicating an interest in both.

“Concern about limited job opportunities was identified by respondents as the biggest barrier to moving to Regional Australia, even though the latest job vacancy figures show there are more than 54,000 roles available in Regional Australia, with professional and skilled jobs featuring strongly across the regions,” Liz Ritchie said.

“Our research underpins a multi-million-dollar, multi-platform national awareness campaign that the RAI will launch next month at its National Summit in Canberra. It will inform potential movers about the great opportunities to live, work and invest in Regional Australia,” Liz Ritchie said.

“We are very excited to be unveiling this campaign, developed in conjunction with communications agency Redhanded, and look forward to seeing many regional stakeholders there on 17-18 March,” Liz Ritchie said.

For more information about the Summit, go to [www.regionsrising.regionalaustralia.org.au/summit-2021](http://www.regionsrising.regionalaustralia.org.au/summit-2021)

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***From Brookings***

***The climate wolf at the door: Why and how climate resilience should be central to building back better***

Robert E. Litan and John Fleming ( February 18, 2021)

For media inquiries, contact: Shannon Meraw [SMeraw@brookings.edu](mailto:SMeraw@brookings.edu) 202.797.6414

“The Biden administration’s economic recovery strategy, widely known as “Build Back Better,” is expected to vastly improve our national response to climate change. So far, virtually all attention on this subject has focused on mitigation—slowing the pace of climate change by reducing carbon dioxide emissions and taking existing carbon dioxide out of the air through “carbon capture” technologies. To the credit of the president and the vice president, their campaign platform’s plan for climate change included measures to make our economy and society more resilient to the impacts of climate change.

Our purpose here is to make the case that whatever recovery plan emerges from Congress must give high priority to climate resilience because the “climate wolf at the door” is already here. There is clear linkage between climate change and more intense and thus more damaging hurricanes, wildfires, and intense heat. Of the nearly \$2 trillion in weather related costs the U.S. economy has suffered since 1980, 47 percent have been incurred in just the past ten years.[1] Man-made climate change is a major reason behind the increased impact of severe weather events. Consider these extreme events experienced in the past year alone identified by the World Meteorological Organization:

- A record 30 named tropical storms and hurricanes in the Atlantic.
- Death Valley had the hottest temperature on Earth in the last 80 years.
- Record wildfires in the western U.S. and record heat in Australia.
- Record wildfires and a prolonged heat wave in the Arctic.
- Record low Arctic sea ice was reported for April and August, and the yearly minimum, in September, was the second lowest on record.

Much damage has already been done. Given the high ambient concentrations of carbon dioxide already in the atmosphere and continued increases in worldwide carbon dioxide emissions over at the least the next decade, the frequency and costs of climate-related weather events will grow worse, even if more aggressive mitigation efforts are undertaken immediately or in the near future.”

For the full article search here:

<https://www.brookings.edu/research/the-climate-wolf-at-the-door-why-and-how-climate-resilience-should-be-central-to-building-back-better/>

Climate change is a global threat in which regional science will play a very large regional role. (Ed)

**From University of Sydney, the Warren Centre for Advanced Engineering**

***The Circular Economy: Global trends and future challenges***

“The circular economy refers to a system where resources are redeployed and reused and waste flows are turned into inputs for further production.

These processes can happen at any scale from the composting of organic waste for gardening to entire industrial systems which exchange waste streams – moving away from our current linear economy model, in which 80-90% of goods become waste within six months of consumption.

Moving to the circular economy model will reduce waste and could also mean huge cost savings. But its creation and enactment will involve reform at a system level, product level and consumer level.

The circular economy requires a large overhaul of industrial systems to fully enable a closed resource loop and ensure full resource productivity.”

To date, The Warren Centre has released it’s own reports on the Circular Economy (PDF, 4.6MB) that addresses the global trends and future challenges.

<https://www.sydney.edu.au/content/dam/corporate/documents/faculty-of-engineering-and-information-technologies/industry-and-government/the-warren-centre/circular-economy-the-warren-centre.pdf>

**From CEDA**

***Disruption of global trade* by Jarrod Ball, CEDA Chief Economist**

International trade has played a significant role in Australia’s economic development, but current disruptions to the flow of goods and people across borders as a result of COVID-19 has some questioning how much our dependence on global trade could create havoc for our economy.

With the situation changing rapidly from week to week, initial concerns around delays to manufacturing in China and South Korea have broadened to other sectors of trade as the virus continues to significantly impact all of Australia’s major trade partners. Understandably, the immediate worry is accessing sufficient stocks of medical equipment to abate the devastating health impacts of COVID-19.

Fears of the impact of worldwide shutdowns on diffused supply chains has fuelled sentiments that were already growing amidst weak global trading conditions in the years leading up to the outbreak, featuring the on-going tariff wars between China and the US.

Some commentators are already making a bold call for structural adjustment policies to domesticise Australia’s essential goods manufacturing in the hopes of building long-term national resilience to similar crises in the future.

We know there will be impacts to our national supply chains, but what is still unclear is how deep these impacts will be and how long they are likely to last. Whether this pandemic marks the start of a new global trade paradigm remains uncertain.

For now, it is worth bringing some perspective to just how disrupted global trade will be and the impacts for Australia based on our trade profile. In this three-part blog series, CEDA researchers examine what the data suggests about how exposed Australia’s exports and imports are (Parts 1 & 2), and provide an initial assessment of some of the suggestions that are being made to bolster Australian trade supply chains (Part 3)

CEDA will be releasing a short research paper on COVID-19's impact on trade and supply chains before the end of May.

[https://www.ceda.com.au/NewsAndResources/Opinion/International-affairs/Trade-and-supply-chains-pressure-points-in-per-\(2\)](https://www.ceda.com.au/NewsAndResources/Opinion/International-affairs/Trade-and-supply-chains-pressure-points-in-per-(2))

### **From the Productivity Commission**

#### ***Register of Foreign-owned Water Entitlements 17 FEB 2021***

This inquiry will examine the effectiveness, costs and benefits of the Register of Foreign Ownership of Water Entitlements. The Register was established in 2017 to provide greater transparency on the level of foreign ownership of water entitlements in Australia.

The Commission has released this issues paper to guide people in preparing a submission. It sets out some of the issues and questions the Commission has identified as relevant at this early stage of the inquiry. Participants should provide evidence to support their views, including data and specific examples where possible. Read more in our issues paper.

For further information, please visit the inquiry page: [www.pc.gov.au/inquiries/current/foreign-water-entitlements](http://www.pc.gov.au/inquiries/current/foreign-water-entitlements) .

Have your say! You are invited to examine the draft report and to make submissions or brief comment by 26 March.

#### ***Vulnerable supply chains***

The Australian Government has asked the Productivity Commission to examine the nature and source of risks to global supply chains. The Commission will develop a framework for identifying supply chains that are vulnerable to disruption, identify imports of goods that might be vulnerable, and identify possible strategies to manage supply chains risks.

#### ***Background***

Australia's experience with the COVID-19 pandemic has highlighted Australia's potential vulnerability to global supply chain disruptions. While Australia's supply chains have held up relatively well during the COVID-19 pandemic, future shocks to supply chains will likely be different in nature.

#### ***Scope***

The purpose of the study is to examine the nature and source of risks to the effective functioning of the Australian economy and Australians' wellbeing associated with disruptions to global supply chains, identifying any significant vulnerabilities and possible approaches to managing them.

In undertaking the study, the Commission should consider Australia's part in global supply chains as an importer and exporter, and:

- consider the factors that make supply chains vulnerable
- develop a framework for identifying supply chains that are vulnerable to the risk of disruption and also critical to the effective functioning of the economy, national security and Australians' wellbeing
- use trade and other relevant data to identify supply chain vulnerabilities
- explore risk management strategies, including the roles of, and options for, government and businesses to manage supply chain risks.

*Process*

The Productivity Commission should undertake appropriate consultation, and provide an interim report focusing on Australia's role as an importer in March 2021; and a final report including Australia's role as an exporter in late May 2021.

*The Hon Josh Frydenberg MP Treasurer*

Media, Publications and Web | Productivity Commission | 03 9653 2244 | [mpw@pc.gov.au](mailto:mpw@pc.gov.au) | [www.pc.gov.au](http://www.pc.gov.au)

***Overcoming Indigenous Disadvantage: Key Indicators 2020***

The Overcoming Indigenous Disadvantage report measures the wellbeing of Aboriginal and Torres Strait Islander people.

Read more at: <https://www.pc.gov.au/research/ongoing/overcoming-indigenous-disadvantage/2020>  
Each section ends with the relevant website.

This comprehensive report card measures where things have improved (or not) against 52 indicators across a range of areas including governance, leadership and culture, early childhood, education, economic participation, health, home environment and safe and supportive communities. The report includes case studies on governance, with a specific focus on identifying arrangements that support shared decision-making between Aboriginal and Torres Strait Islander people and Australian governments.

This report was produced in consultation with all Australian governments, the Coalition of Aboriginal and Torres Strait Islander Peak Organisations and other Aboriginal and Torres Strait Islander people and organisations.

The 2020 report was released on 3 December 2020.

The following summaries point to the achievements and conditions affecting the lives and cultures of Aboriginal and Torres Strait Islander people. These extracts report particularly to Governance, Leadership and Culture.

Effective governance and leadership, and recognition of cultures, are essential to the wellbeing of Aboriginal and Torres Strait Islander people. These influence most indicators in the framework that underpin this Report. Governance refers to the way the members of a group or community organise themselves to make decisions that affect themselves and others. Central to the development of strong governance is leadership, and there are specific cultural aspects to Aboriginal and Torres Strait Islander leadership. Cultures include the diverse Aboriginal and Torres Strait Islander nations and peoples, each with distinct cultural norms, laws, languages and identities that are dynamic in nature.

***5.1 Valuing Aboriginal and Torres Strait Islander people and their cultures***

In 2018, more than 8 in 10 people in the general community felt it was important for all Australians to know about Aboriginal and Torres Strait Islander cultures and histories and about two in five rated their level of knowledge of Aboriginal and Torres Strait Islander cultures and histories as high — increases from 2014.

Over this period the proportions of people perceiving levels of trust as high have remained relatively unchanged.

[More on page 5.3 \(PDF - 4.7 MB\)](#)

## *5.2 Participation in decision-making*

There are no data available on Aboriginal and Torres Strait Islander people wanting to, and feeling that they can, participate in decision-making that is important to them. Available data on the participation of Aboriginal and Torres Strait Islander people show they remain underrepresented in the Parliament of Australia and in all State and Territory parliaments. As of May 2020, parity across all nine jurisdictions would be achieved with 15 additional Aboriginal and Torres Strait Islander parliamentarians.

[More on page 5.11 \(PDF - 4.7 MB\)](#)

## *5.3 Engagement of services*

The proportion of Aboriginal and Torres Strait Islander people aged 15 years or over who reported problems accessing services in the previous 12 months decreased from 30 per cent in 2008 to 24 per cent in 2014-15. Difficulty with access was higher in remote areas compared to non-remote areas (33 per cent compared to 22 per cent).

[More on page 5.19 \(PDF - 4.7 MB\)](#)

## *5.4 Case studies in governance*

There is no trend category for this indicator, which is based on qualitative case studies.

Governance arrangements that empower Aboriginal and Torres Strait Islander people to achieve the things that matter to them, and ensure they are able to participate in shared decision-making alongside governments.

Case studies in this section highlight that this works best when structures, rules and laws:

- provide Aboriginal and Torres Strait Islander people with decision-making authority
- promote Aboriginal and Torres Strait Islander cultural frameworks, processes, context and time frames recognise power inequalities, and share power, through mechanisms that are transparent
- ensure Aboriginal and Torres Strait Islander people can choose their representatives, and these representatives have the resources and support that they need to define desired outcomes, the steps to achieving them and the roles and responsibilities of participants, along with their mutual accountabilities.

The full report can be found at [www.pc.gov.au/resources](http://www.pc.gov.au/resources)

Media requests: Leonora Nicol, Media Director – 0417 665 443 / 02 6240 3239 / [media@pc.gov.au](mailto:media@pc.gov.au)

Media, Publications and Web | Productivity Commission | 03 9653 2244 | [mpw@pc.gov.au](mailto:mpw@pc.gov.au) | [www.pc.gov.au](http://www.pc.gov.au)

PS: ANZRSI has an opportunity to encourage and extend studies on the histories, development and engagement of Australia's diverse and ancient range of indigenous communities.

*Uranium exploration and mining in South Australia*



“Boss Energy is looking to recommence production at the Honeymoon uranium mine in northeast South Australia.

“A number of uranium stocks rallied this week amid speculation Joe Biden had included nuclear energy in his clean energy program, delays to planned closures of nuclear power plants in the US driving up demand and concerns of a supply squeeze when nuclear utilities replace existing supply contracts.

“Perth-based Boss Energy says it is in discussions with global lenders to secure funds to become Australia’s next uranium producer with the resumption of operations at the Honeymoon mine in South Australia.

“The publicly-listed company told the Australian Securities Exchange this week the Honeymoon project required just \$82.5 million (US\$63.2 million) in capital expenditure to resume, one of the lowest funding requirements of any pre-production uranium project worldwide.

“Honeymoon is about 80km north-west of Broken Hill and is one of only four permitted uranium mines in Australia. It was mothballed in 2013 because it had become too costly to run.

“However, its new owner Boss Energy announced in January last year it had developed technology to lower operating costs and was looking to commence production at Honeymoon within a year.

“Boss says it has already signed confidentiality agreements with several global lenders and formal indicative financing proposals are now being sought with a view to ensuring debt funding is well advanced when the company seeks to finalise offtake agreements.

“It says it is also on track to complete the Enhanced Feasibility Study (EFS) on Honeymoon in the coming quarter.

“Boss Managing Director, Duncan Craib, said completion of the EFS, project financing and offtake was expected to coincide with a rising uranium price.

“There is a widespread expectation that uranium prices will rise in the near term as the supply deficit grows,” he told the ASX on Monday.

“Our strategic timetable is aimed at ensuring we are in a position to sign long-term offtake agreements when prices strengthen, locking in robust margins and substantial free cashflow in the process.

“This strategy is underpinned by the fact that the 100 per cent-owned Honeymoon is already fully permitted, including the permit to export uranium. It also has an existing plant (in care and maintenance) and a large JORC Resource and will have one of the lowest operating costs among uranium producers worldwide.”

“ with Havilah Resources to secure the exclusive uranium exploration and mining rights for uranium deposits in the north-east of the state

“The deal is subject to Aroha Resources listing on the Australia Securities Exchange in the next 12 months.

“Aroha registered as a company in September and includes resource industry leaders Reg Nelson and Neville Alley on its board.

“Under the deal announced to the Australian Stock Exchange yesterday, Havilah would maintain a 25 per cent interest in Aroha at the time of listing.

“Aroha will also pay Havilah \$500,000 from the IPO proceeds and a 1.5 per cent smelter royalty on all Aroha sales revenue from within the licence area after the first \$10 million of cumulative uranium sales revenue.

“The Havilah exploration licences are between Broken Hill and Lake Frome in the remote north-east of South Australia.

“Many of the licences are believed to be highly prospective for uranium deposits, similar to the nearby Honeymoon uranium project.

“Havilah’s primary targets are copper, gold, cobalt and iron ore.

“Its uranium interests were acquired via the takeover of Curnamona Energy Limited in 2012.

“Havilah’s Technical Director Dr Chris Giles said the company was delighted that Aroha intended to fund and advance Havilah’s extensive uranium interests.

“Aroha’s team is well experienced and highly successful in the Australian resources industry and we look forward to working with them,” he said in a statement to the ASX yesterday.

“This MOU is consistent with Havilah’s stated strategy of maximising the value of its significant pipeline of exploration projects in South Australia while focusing the company’s main efforts on advancing its core projects with near-term potential for significant value uplift for shareholders.

“It also achieves Havilah’s objective of progressing its non-core prospects and projects in a prudent manner with external funding and leaves Havilah shareholders with a fair residual benefit in the event of success.”

“Fellow SA mining company Marmota announced in June that rising global uranium prices had prompted it to launch a strategic review of its Junction Dam uranium project about 15km from the Honeymoon mine site.

“Marmota owns 100 per cent of the uranium rights at Junction Dam but has not been active on uranium since 2014, at which point it had spent A\$8 million on uranium exploration.

“According to the World Nuclear Association, Australia has about 28 per cent of global uranium resources but only produces about 12 per cent of mined uranium, third behind Kazakhstan (42 per cent) and Canada (13 per cent).

“About half of Australia’s uranium comes out of BHP’s Olympic Dam mine near Roxby Downs in the north of SA, which is the world’s largest known uranium deposit.

“The other two operating uranium mines in Australia are the Ranger mine east of Darwin in the Northern Territory and the Beverley-Four Mile project, in the north-east of SA.

“The 2019 edition of the association’s Nuclear Fuel Report forecasts a 26 per cent increase in uranium demand between 2020 and 2030.

[https://indaily.com.au/news/2021/02/04/uranium-turnaround-has-companies-targeting-sa-deposits/?utm\\_medium=email&utm\\_campaign=INDAILY%20February%204%202021&utm\\_content=INDAILY%20February%204%202021+CID\\_5ae1d58937f3be443365626a8b79405d&utm\\_source=EDM](https://indaily.com.au/news/2021/02/04/uranium-turnaround-has-companies-targeting-sa-deposits/?utm_medium=email&utm_campaign=INDAILY%20February%204%202021&utm_content=INDAILY%20February%204%202021+CID_5ae1d58937f3be443365626a8b79405d&utm_source=EDM)

From [indaily@solsticemedia.com.au](mailto:indaily@solsticemedia.com.au)

### ***From the Cockatoo Network***

By courtesy of Rod Brown, Cockatoo Network, Canberra ACT Australia. Rod Brown is a former senior government official in the industry, regional development and construction fields. He now runs the Cockatoo Network and is a federally-registered lobbyist. WE CONNECT THE DOTS, 02 – 62317261 or 0412 922559, [apdcockatoo@iprimus.com.au](mailto:apdcockatoo@iprimus.com.au).

### ***Economic policy approaches for your contemplation in 2021***

The OECD in Paris is the world’s key policy think tank, and Australian economists, trade experts, education specialists, health statisticians etc. are scattered throughout the organisation. We even have an Ambassador to the OECD feeding back reports to Canberra. When Treasurer Frydenberg announces new spending initiatives or tax policies, it’s likely that OECD research provides the backdrop.

In this context, the latest OECD Economic Outlook serves as an excellent pointer as to how Australian governments – federal, state and local - might plot their way out of this COVID mess. Below are some of its findings.

- Despite huge policy band-aids, the pandemic has damaged the socio-economic fabric of countries worldwide. Output is projected to remain around 5% below pre-crisis expectations in many countries in 2021 and 2022. The most vulnerable will continue to suffer disproportionately. Smaller firms and entrepreneurs are more likely to go out of business. Many low wage earners have lost their jobs, with poor prospects of finding new jobs soon.
- Governments will have to continue using their policy instruments actively, with better targeting to help those hardest hit by the pandemic. This is not the time to reduce support, and health and economic policies must work hand in hand.
- Extensive fiscal support is pushing public debt levels to record highs, but the cost of debt is at record lows.
- There are three priorities for policymakers. First, investing in essential goods and services such as education, health, physical and digital infrastructure. Second, decisive actions to reverse durably the rise in poverty and income inequality. Third, international cooperation - the world cannot solve a global crisis through single-country and inward-looking actions.

The OECD highlights the faltering of international cooperation in recent years, just when it was needed more than ever e.g. border closures and protectionist measures. This is penalising economies that rely on their participation in global value chains.

#### *Australian perspectives*

The OECD's prognostications are interesting when viewed against informal feedback I've received over the Christmas break from current and former federal officials and a few Cockatoo members. While booze might have exaggerated the viewpoints, the Aussie collective wisdom broadly supported the OECD view, and can be summed up as follows:

- Australia must drastically reduce our export and import reliance on China, and coming to some sort of peace with China.
- Meanwhile we must strengthen our trade activity with the EC, post Brexit UK, the USA, India, Indonesia and our near neighbours. But recognise that many supply chains are in tatters.
- Accept the reality that growth in defence spending will continue, and that federal budgets in the medium term must focus on health, education and social security. Non-core areas like industry and regional development will consequently suffer. In any case, the strong 'Buy Australia' sentiment will have more impact than a swathe of government programs.
- The weakening of our labour market will continue viz. stagnant or falling wages, workforce casualisation.

#### *Lessons for local government*

The drivers of regional economic development are fundamentally changing.

**First**, the federal government role will surely shrink in the medium-term. Already we are seeing federal regional program expenditure being delayed. Don't expect much buy-in from the feds.

**Secondly**, the boost to regional tourism due to the closure of international travel is creating new regional investment opportunities that could arguably exist for some years. The pandemic has opened people's eyes to the attractiveness of rural lifestyles, and the shift to home-based work fits nicely with this. Local government can leverage these factors by facilitating improvements in local infrastructure (NBN roll-out, health and education upgrades etc.) and removing red tape.

A simple example of the latter is a pub in East Gippsland – nice old-time publican and a great location on the Prince's Highway – the only problem is that travellers aren't aware of his pub until they've zoomed past. I've suggested that he nail signs to trees at regular intervals (viz. cold beer, great pies,

best apple crumble in Victoria). He replied that the local council and/or Roads Victoria would never allow it because it would distract drivers. Que? My response was to challenge the local and state governments to loosen up, and give small business a chance. Or put up the signs, cop a fine and get decent press coverage about the idiocy of the nanny state. Thousands of regional businesses could follow his lead.

**Thirdly**, investor risk seems to be improving in regional Australia due to city-slickers reacquainting themselves with the Bush. However the reality is that revenue streams in regional areas can be weak and fickle, and that a mix of public-private finance can be the best option. I often get involved in organising these types of projects, but local government is better placed i.e. championing projects, knocking federal and state heads together, setting time deadlines, finding private sector investors. This can be time-consuming, but it's so important because projects will otherwise languish.

**Fourthly**, the OECD's call for increased international cooperation cannot be left to federal bureaucrats to ponder. The OECD is actually a strong proponent of local leadership, and that's where local councils can shine. For example, councils in northern Australia should be making overtures to counterparts in Indonesia, Malaysia, India etc. about reciprocal trade and investment opportunities (exports of chilled beef, seafood, engineering services – imports of sandalwood, spices, tropical fruit). The solution is 'region to region' – if local councils working with the private sector can highlight these opportunities, then the feds and states will follow.

With thanks to Rod Brown.

## THE CONVERSATION

### **The \$50 boost to JobSeeker will take Australia's payment from the lowest in the OECD to the second-lowest after Greece**

1. **Peter Whiteford** Professor, Crawford School of Public Policy, Australian National University
2. **Bruce Bradbury** Associate Professor, Social Policy Research Centre, UNSW

Fifty dollars sounds like a lot. But the increase in the JobSeeker unemployment benefit announced by Prime Minister Morrison ... is \$50 per fortnight, which is just \$25 per week. It will replace the temporary Coronavirus Supplement of \$75 per week, which is itself well down on the \$275 per week it began at in March last year.

It's hard to see the increase as anything other than a cut, especially when coupled with another change which will allow recipients to earn other income of only \$75 per week before JobSeeker gets cut. That's down from the present \$150 per week.

As the prime minister said, it's better than it would have been if things returned to the level we had before special coronavirus provisions. At that time, recipients could earn only \$53 per week before having their payment reduced.

But it's not particularly generous. The Age and Sydney Morning Herald are quoting senior government sources as saying the \$50 per fortnight increase in the rate was the lowest figure the party believed would be palatable to the public.

## **CONFERENCES and STUDY OPPORTUNITIES**

### ***ANZRSI 2020 Conference***

The ANZRSI 44<sup>th</sup> Annual Conference was to be held in Melbourne, 1-4 December 2020. As noted above, it has been postponed until 2021.

### ***Regional Studies Blog***

Professor Paul Dalziel, Executive Officer, ANZRSI has recommended the Regional Studies Association Blog, which has been running since 2010. Each post is an easy-to-read piece between 500 and 750 words on a topical issue in regional studies.

The link is [https://www.regionalstudies.org/category\\_news/rsa-blog/](https://www.regionalstudies.org/category_news/rsa-blog/). A recent contribution that is relevant to ANZRSI as we plan for the new post-CoVID normal is the following item: [Moving towards a new conference model? The rocky road to virtual conferencing](#), by Daniela Carl and Alex Holmes. Ashleigh Weeden talks about the 'right to be rural' during the CoVID epidemic in a contribution entitled [COVID-19 and Cottage Country: Exploring place, power, and policy in the 'right to be rural'](#). A recent contribution is [RSA Women's Network supports Collaborative International Research during Pandemic](#) by Sandy MacDonald, Aliya Tankibayeva and Silvia Grandi addresses the difficulties of making time for research while fulfilling teaching responsibilities.

The following is an outgoing address from President of RSA, Ron Martin. Professor Ron Martin is Professor of Economic Geography at the University of Cambridge. His main research interests include the geographies of labour markets; regional development and competitiveness; the geographies of money and finance; geographical economics; and evolutionary economic geography.

Access this article here: <https://www.regionalstudies.org/news/recovering-and-rebuilding-from-the-covid-crisis-implications-for-regional-studies/>.

## **CURRENT RESEARCH ABSTRACTS**

### ***ANZRSI Abstract Alerts***

To contribute to ANZRSI Abstract Alerts email the editors a title, abstract, and citation.

Yogi.Vidyattama

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### ***Regional Studies***

Vol. 55, Issue 2, 2021

### ***Cluster presence and economic performance: a new look based on European data***

Christian Ketels & Sergiy Protsiv

Pages 208-220

Received 03 Sep 2018,

Published online: 10 Aug 2020

<https://doi.org/10.1080/00343404.2020.1792435>

**Abstract:** This paper takes a fresh empirical look at how cluster presence matters for economic performance. It analyses a new data set developed for the European Cluster Observatory to assess the impact of clusters on industry-level wages and regional prosperity. It is found that industry-level wages are associated with industry- and surrounding-cluster agglomeration levels to a similar degree. For regional prosperity, cluster portfolio strength is found to matter, while the specific mix of clusters is insignificant once business environment conditions are accounted for. The data show a meaningful relationship between clusters and economic outcomes, independent of other locational qualities.

**KEYWORDS:** clusters productivity

**The Review of Regional Studies**

Vol. 51, 2021, pp. 41-63

***Spatial Analysis of an Education Program and Literacy in India***

Chitra Jogani     Department of Economics,  
Trinity College, USA

**Abstract:** This paper explores the inclusion of spatial dependency in measuring the impact of geographically targeted programs. Using an education program in India, which targeted educationally backward districts, I study the influence of the program on the change in the rural female literacy rate and the gender gap in the literacy rate. In the estimation of a non-spatial model, the residuals exhibit spatial dependency, and the data suggests the spatial error model or the spatial Durbin error model (SDEM) as the appropriate specification. According to the SDEM estimates, with a one percentage point increase in the educational backwardness of a district, there was a 0.08 percentage point increase in the rural female literacy rate and a 0.02 percentage point decrease in the gender gap in literacy rate. The results imply a small but insignificant influence of the program received by the neighbouring districts on the change in rural female literacy rate of a district. Limited financial flexibility and the lack of incentive to engage in a competition is a possible explanation for the absence of strategic interaction between districts.

Keywords: Spatial Dependency; India; Education; Literacy

JEL Codes: C21, I24, J18

**Regional Science Policy and Practice**

Volume 12, Issue 4 (August 2020)

***New technologies, potential unemployment and 'nescience economy' during and after the 2020 economic crisis***

Stepan Zemtsov

pp. 723-743. First published: 25 April 2020

<https://doi.org/10.1111/rsp3.12286>

**Abstract:** The coronavirus pandemic and the economic crisis in 2020 are accelerating digital transformation. During and after the crisis, there are opportunities and needs for remote work facilities, online services, delivery drones, etc. We discuss how unmanned technologies can cause a long-term employment decrease, and why compensation mechanisms may not work.

Using the internationally comparable Frey–Osborne methodology, we estimated that less than a third of employees in Russia work in professions with a high automation probability. Some of these professions can suffer the most during quarantine measures; employment in traditional services can be significantly reduced. By 2030, about half of the jobs in the world and a little less in Russia will need to adapt during the fourth industrial revolution because they are engaged in routine, potentially automated activities. In the regions, specializing in manufacturing, this value is higher; the lowest risk is in the largest agglomerations with a high share of digital economy, greater and diverse labour markets. Accelerating technological change can lead to a long-term mismatch between the exponential increase in automation rate and compensating effects of retraining, new jobs creation and other labour market adaptation mechanisms. Some people will not be ready for a life-long learning and competition with robots, and accordingly there is a possibility of their technological exclusion. The term “nescience economy” and corresponding assessment method were proposed. Using an econometric model, we identified factors that reduce these risks: human capital concentration, favourable business climate, high quality of life and ICT development. Based on these factors, some recommendations for authorities were proposed in the conclusion.

***Evaluating the effectiveness of ChileCompra's Entrepreneurship Centers policy***

Sergio A. Contreras Andrew J. Greenlee

First published: 03 March 2021

<https://doi.org/10.1111/rsp3.12408>

Abstract: Microenterprise support programs (MESPs) have gained popularity as a modern development policy starting in the 1980s, with an increasing number of countries adopting this strategy to enhance economic growth. However, few studies have examined the effectiveness of these programs. This paper evaluates one of these programs, Centros de Emprendimiento ChileCompra in Chile. This initiative has a dual mandate - to serve as a primary vehicle for national procurement; and to serve as a microenterprise support program. The microenterprise support component consists of regional centers that provide entrepreneurs with training in business plan development, financing, and taxation to enable greater participation among microenterprises in the public procurement market. Using eight years of panel data on program contracts from 2007 to 2014, we assess the impact of ChileCompra's microenterprise participation component with regards to the share of the total business and the share of revenues. Our results indicate that the program resulted in an increased share of contracts going to microenterprises at the national level, but that results were uneven at the local level. In many cases, contrary to the policy's goals, the share of microenterprises receiving contracts through ChileCompra declined substantially.

***Papers in Regional Science***

Volume 100, Issue 1

***Explaining the dynamics of relatedness: The role of co-location and complexity***

Sándor Juhász, Tom Broekel, Ron Boschma

Pages: 3-21 First Published: 18 August 2020

First published: 18 August 2020

<https://doi.org/10.1111/pirs.12567>

Abstract: Relatedness has become a key concept for studying the diversification of firms, regions and countries. However, studies tend to treat relatedness as being time-invariant or, alternatively, consider its evolution as exogenously given. This study argues that relatedness is inherently dynamic and endogenous to technological and economic developments. Using patent data, we test the extent to which relatedness between technologies developed along co-location and differences in technological complexity in 1980–2010. Our results show that co-located technologies are more likely to become related over time. Moreover, our results suggest that co-location and complexity of technologies are conducive to the intensification of relatedness over time.

***EU regional convergence in the agricultural sector: Are there synergies between agricultural and regional policies?***

Elena Calegari, Enrico Fabrizi, Gianni Guastella, Francesco Timpano

First published: 17 August 2020

<https://doi.org/10.1111/pirs.12569>

Abstract: Although the European Union's (EU) Common Agricultural Policy was intended as sectoral, its recent reforms lead to a stronger territorial vocation, allowing for possible overlaps with the objectives of the Cohesion Policy, the main regional policy of the EU. Through a threshold regression approach, we explore if the possible interactions between these policies influence the agricultural productive performance in more and less developed regions. Results show that in regions with agricultural Gross Value Added per worker lower than 25.53 thousand Euros, both policies exhibit a negative effect, mitigated if they are implemented together. In more productive regions, the effects are the opposite.

*Does the geographical mobility of scientists shape their collaboration network? A panel approach of chemists' careers*

Marine Bernard, Bastien Bernela, Marie Ferru

First Published: 2 July 2020

<https://doi.org/10.1111/pirs.12563>

Abstract: This study assesses the impact of geographical mobility of academic researchers on the formation and dynamics of their coauthorship network, through a bibliometric analysis. Based on 80 French chemists' careers (9310 publications and 14,783 coauthors), panel models point out first that coauthorship network features are independent of individual mobility: there is a stable volume of new coauthors and the researcher's lab colleagues per article, in all generations and career stages. Second, it highlights that mobility (i) allows network diversification but only in the short term and restricted to the new city attended and (ii) reduces the likelihood of sustaining collaborations with colleagues from the previously attended cities.

*Australasian Journal of Regional Studies*

Vol. 26, No. 3, 2020 (11 August)

*Models of horizontal collaboration in agrifood export supply chain: The case of Queensland's mango industry*

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ABSTRACT: The horticulture sector in Queensland, Australia, is highly diverse, producing tropical fruits, citrus, vegetables and nuts. However, domestic demand for many horticulture products is saturated in peak seasons, leading to a low farm-gate price. Therefore, the export of high-value horticulture products to Asia may offer producers market diversification, which could contribute to the future growth of horticulture industries in Queensland. Yet, in situations where there are large numbers of small- and medium-scale producers, it is unclear how this could be achieved since supply consolidation is needed for product export.

Hence, this study aims to assess which entities and links within the export supply chain are considered as important by stakeholders of Queensland's mango industry and to identify forms of potential horizontal collaborations between mango producers. This study uses a qualitative research approach consisting of a stakeholder workshop which was designed based on a literature review and face-to-face scoping interviews with mango industry

stakeholders. The study found that while there are already discrete collaborations existing among mango farmers in some regions of Queensland, cross-regional horizontal collaboration supported by producers, grading and packaging shed owners and wholesalers can improve the export supply chain. Factors identified as affecting the potential success of horizontal collaboration in export include product quality, access to market information, risk-sharing among supply chain actors, leadership, and management skills. However, improved vertical coordination or supply chain integration may also be required to increase the effectiveness of horizontal collaborations.

**KEYWORDS:** Australia, export, coordination, integration, horizontal, mango, supply chain

**ACKNOWLEDGEMENTS:** The research presented in this paper is funded by the CRC for Developing Northern Australia (CRCNA) and the project partners (Growcom, Rockhampton Regional Council, Passion Fruit Australia, Qld Dept. of Agriculture and Forestry, Qld. Dept. of State Development and Tropical Pines Pty Ltd).

***Airport social responsibility and regional community relations: noisy elephant in the sky?***

Subas Prasad Dhakal, Muhammad Nateque Mahmood, Kerry Brown and Robyn Keast

**Abstract:** Although the aviation industry is an integral component of regional economic development, aircraft noise complaints have become an increasingly contentious issue. This raises the significant question of how airports can better position themselves as socially responsible drivers of regional economic development. This study examines airport-regional community relations in one of the fastest growing airports in Australia—the Gold Coast Airport. The contributions of this paper are two-fold. First, it demonstrates the analysis of social barometers such as media reports and community attributes that can generate useful

insights for airport management. Second, it highlights the need for proactive airport social responsibility measures to address the issue of aircraft-noise in a regional setting.

***Failing to prepare is preparing to fail: How industrial policy can prepare regional Queensland for a global energy transition***

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**Abstract:** The economy of Queensland, Australia is dependent on coal exports for economic growth, the buoyancy of the state budget and employment in regional areas with limited alternative economic opportunities. Queensland policy-makers need to address the risks associated with dependence on a commodity which has an uncertain future. This article considers the history of

Australia's vulnerability to global transitions, current trends associated with a global energy transition, and suggests a strategy to mitigate against the multiple risks associated with a reliance on the export of coal by Regional Queensland.

***Regional Migration in Australia: Labour market response or pursuit of amenity?***

Paul Forbes, John Hicks, Mark Morrison and Kishor Sharmapage

**Abstract:** The persistence of differential labour market outcomes has led to the recognition that labour mobility may be influenced by both labour market variables and non-pecuniary factors such as amenity and quality of life. Using regional-level panel data and a fixed-effects estimation procedure, we examine the

relationship between labour mobility decisions and unemployment levels, amenity, as well as variables related to previous migration experience, location, the mining boom and the presence of a program designed to encourage labour mobility to regional areas. We find that labour market factors influence mobility decisions, but that these are moderated by amenity, and that mobility is also influenced by anthropocentric amenity. The findings with respect to anthropocentric amenity as well as the program designed to encourage regional relocation provide evidence of the potential effectiveness of government policies designed to overcome labour market impediments.

*The response of the Australian States to a National Economic Shock: A statistical analysis of regional economic resilience.*

Nicolaas Groenewold

Abstract: It is well known from the literature on regional business cycles in Australia that there are significant differences between the time-paths of economic activity of the Australian states. These differences must result from either differences in the response of the state economies to a common national shock and/or their response to state-specific shocks. The way in which a regional economy reacts to a national shock is closely related to the notion of regional economic resilience, a concept that has gained considerable popularity in the regional economics literature of the past decade or so. It has become common in that literature to distinguish between engineering resilience (the ability of a regional economy to return to the original equilibrium following a negative shock) and ecological resilience (the convergence of regional economies to new equilibria). The economic resilience of the Australian states is the focus of the research reported in this paper.

We analyse resilience within a vector-autoregressive (VAR)/vector-error-correction (VEC) model using monthly employment data

for the states and the nation as a whole from the 2<sup>nd</sup> quarter 1978 to 1<sup>st</sup> quarter 2019. We find that employment growth rates are stationary so that, in terms of growth rates, the state economies are resilient in the engineering sense, although they may revert to equilibrium at different rates. The (log) levels of employment, however, are non-stationary but cointegrated, suggesting ecological resilience in employment levels since cointegration implies that the cointegrated variables return to (likely new) equilibria following a shock. We use a VEC model to identify a national shock, generate responses of the state employment levels to this shock and compare the resulting time-paths (the impulse response functions) to assess relative resilience. We find that Western Australia is the least sensitive of the states to a national shock and so the most resilient, while the economies of Tasmania and Victoria are the most sensitive to an adverse national shock and so the least resilient. The responses of the other states are all quite close to the national average response, indicating little difference in the resilience of New South Wales, Queensland and South Australia.

*Eco-friendly yield-scaled global warming potential assists to determine the right rate of nitrogen in rice system: A systematic literature review*

Mohammad Saiful Islam Bhuiyan, Azizur Rahman, Gil Won Kim, Suvendu Das, Pil Joo Kim

Abstract: Rice paddies are one of the largest greenhouse gases (GHGs) facilitators that are predominantly regulated by nitrogen (N) fertilization. Optimization of N uses based on the yield has been tried a long since, however, the improvement of the state-of-the-art technologies and the stiffness of global warming need to readjust N rate. Albeit, few individual studies started to, herein attempted

as a systematic review to generalize the optimal N rate that minimizes global warming potential (GWP) concurrently provides sufficient yield in the rice system. To satisfy mounted food demand with inadequate land & less environmental impact, GHGs emissions are increasingly evaluated as yield-scaled basis. This systematic review (20 published studies consisting of 21 study sites and 190 observations) aimed to test the hypothesis that the lowest yield-scaled GWP would provide the minimum GWP of CH<sub>4</sub> and N<sub>2</sub>O emissions from rice system at near optimal yields. Results revealed that there was a strong polynomial quadratic relationship between CH<sub>4</sub> emissions and N rate and strong positive correlation between N<sub>2</sub>O emissions and N rate. Compared to control the low N dose emitted less (23%) CH<sub>4</sub> whereas high N dose emitted higher (63%) CH<sub>4</sub> emission. The highest N<sub>2</sub>O emission observed at moderated N level. In total GWP, about 96% and 4%, GHG was emitted as CH<sub>4</sub> and N<sub>2</sub>O, respectively. The mean GWP of CH<sub>4</sub> and N<sub>2</sub>O emissions from rice was 5758 kg CO<sub>2</sub> eq ha<sup>-1</sup>. The least yield-scaled GWP (0.7565 (kg CO<sub>2</sub> eq. ha<sup>-1</sup>)) was recorded at 190 kg N ha<sup>-1</sup> that provided the near utmost yield. This dose could be a suitable dose in midseason drainage managed rice systems especially in tropical and subtropical climatic conditions. This yield-scaled GWP supports the concept of win-win for food security and environmental aspects through balancing between viable rice productivity and maintaining convincing greenhouse gases.

### **ABOUT ANZRSAL**

#### **ANZRSAL Council Notes**

Council is planning for a 2021 conference, possibly in Melbourne, and working to improve access to and ranking of AJRS and the website. Conference participants gain access to support, encouragement and relevant experience. AJRS offers an opportunity for publication.

### **Roles of Council Members**

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**Council Secretary:** Rolf Gerritsen

**Correspondence Secretary:** Yogi Vidyattama

**Publications:** Vince Mangioni or Lee Pugalis.

**Conference Secretary:** Paul Dalziel

**Webmaster:** Paul Dalziel

**Conference Awards:** Volunteer required.

**Convenor: Contributed Paper:** Paul Dalziel

#### **Editors:**

**Conference Proceedings:** Rolf Gerritsen.

#### **Australasian Journal of Regional Studies:**

Mike Hefferan and Bruce Wilson,

assisted by:

Rolf Gerritsen,

Khorshed Alam and

Vincent Mangioni

#### **Sustaining Regions:**

Tony O'Malley and Azizur Rahman

*Accounts – Greg Jones*

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