

- Petovar, K. (2012). Professional associations as actors in making planning decisions about urban space. In Gotovac, S. A. and Zlatar, J. (Eds.): *Akteri društvenih promjena u prostoru; Transformacija prostora i kvalitete života u Hrvatskoj*, Institut za društvena istraživanja u Zagrebu, Zagreb, pp. 99-115.
- Petrović, M. (2005). Cities after socialism as a research issue. Discussion papers (South East Europe series), DP34. Centre for the Study of Global Governance, London School of economics and political science, London, UK.
- Mele, M. (2014). Transition stories. Politics of urban living place in Tirana city region, Albania. Master Thesis. University of Hul.
- Reimer, M., Getimis, P., Blotevogel, H. (2014.) *Spatial Planning Systems and Practices in Europe. A Comparative Perspective on Continuity and Change*. Routledge. London
- Stead, D., & Cotella, G. (Eds.) (2011) *Differential Europe*, special issue, *disP*, 186(3): 12-83.
- Szelenyi, I. (1996). Cities Under Socialism and after. In Andrusz; G; Harloe, M. and I. Szelenyi (Eds.), *Cities after Socialism*, Oxford, Cambridge: Blackwell Publishers, pp. 286- 317.
- Tosics, I. (2004). Determinants and Consequences of Spatial Restructuring in Post-Socialist Cities. Conference paper: *Winds of Societal Change: Remaking Post-Communist Cities*.
- Tsenkova, S., & Nedović-Budić, Z. (2006). *The urban mosaic of Post-socialist Europe*. Liepzig: Physica-Verlag.
- Turnock, D. (1989). *Eastern Europe, an Economic and Political Geography*. London: Routledge
- Vujošević M. (2003). *Planning in post-socialist political and economic transition*. Belgrade: IAUS.
- Vujošević, M. & Petovar, K. (2006). Public Interest vs. Strategies of Individual Actors in Urban and Spatial Planning. *Sociologija*, vol. 48, no. 4, pp. 358-382.
- Žegarac, Z. (1999). Illegal construction in Belgrade and the prospects for urban development planning. *Cities*, vol. 16, no. 5, pp. 365–370.

## **ID 1746 | SYDNEY IS NOT AUSTRALIA: WHAT CAN AUSTRALIAN TRANSPORTATION PLANNING POLICY MAKERS LEARN FROM THE EUROPEAN DIMENSION OF PLANNING?**

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**ABSTRACT:** There is much that Australian policy-makers could (and should) learn from their European cousins. Vettoretto (2009) identifies “good governance” as one of the central strengths of Europe’s planning and policy-making practice, noting that policy-making should support, among other things, regulation through sense-making, strategic representation and advocacy. These tenets make the European approach to planning attractive to communities that feel isolated or left out of broader strategies for economic development that inform transportation planning. However, the transfer of European planning concepts to the Australian context, particularly for transportation, faces an uphill battle (as per Pojani & Stead, 2015). Australia’s major transportation planning agendas appear more interested on increasing mobility and urban densities in capital cities at the expense of improving regional community sustainability and connectivity. This has the effect of making busy transport systems busier, and promotes a classist system for promoting economic growth – not just between cities and regional areas, but between biggest city and next biggest cities, and so on. The density of international flights to Sydney and Melbourne make it commonplace, and often a pragmatic requirement, for residents who live anywhere other than the South East of the Australian continent to fly first to one of these two cities to access connecting international flights. This is the equivalent of having to fly from New York to Miami to fly to Lisbon, or from Lisbon to Istanbul to fly to South Africa. The inconvenience of having to fly South to fly North (intercontinentally) is only exacerbated for regional communities that first have to fly to a capital city, then on to Sydney or Melbourne, then on to their international destination. This makes international mobility the most inaccessible for the communities already provided with the least infrastructure, and struggling to maintain

sustainable communities due to the attraction of the populace away from regional agricultural communities and into the coastal cities. Furthermore, this inequity in accessibility works against the Australian Government's aspirations for promoting new (migrating) Australians to settle in regional areas. To provide strategic representation and advocacy for regional communities, Australia's transportation planning, and the planning and governance of its aviation network, can and should learn from a more balanced, more European dimension of planning. By reviewing the current state of the country's aviation network (airports, tourism assets, passenger routes, supporting infrastructure and supporting governance mechanisms), the authors have identified the policy-making opportunities for the Australian State of Queensland to learn from European planning approaches. By taking the European perspective of developing regulation through sense-making, this research identifies a range of aviation network design and regulation principles that promote the interests of regional mobility and inclusion, sustainable communities, and advocating equitable access to international transport and economic growth opportunities for the State of Queensland.

## 1 INTRODUCTION

It is a fascinating concept that for a country the size of Europe, flying from Australia's third largest city to the AESOP 2017 conference requires the presenting author to fly 733km south from Brisbane to the nation's busiest hub of Sydney, to then fly 18166km to the northeast to Lisbon (particularly when the route is 17930km if flown from Brisbane). Much of Australia's aviation growth has centered on Sydney, as both the country's primary financial hub and internationally marketed tourist destination. Sydney-centered aviation growth has been supported by Federal government initiatives to boost tourism to Australia, and a succession of Federal grants to boost the capacity of Sydney Airport via the development of the airport's third runway in the early 1990's. Much of Sydney Airport's airside expansion has taken place during a previous era of government, when major airports were still owned and operated by the Federal government, prior to the privatization of most of Australia's major airports in the late 1990's and early 2000's under the Airports Act 1996. The Federally funded infrastructure and international tourism initiatives has, in effect, created a self-fulfilling prophecy that favours international airline routes to Sydney over others. Other major airports around the country have successfully attracted and developed international routes over time, but the legacy of Sydney as the primary entry point for the country continues to act as a thorn in other states, particularly for regional and remote communities trying to access international air travel in an "as convenient as practical" way.

For those unfamiliar with the geography of Australia, Sydney sits at the southeast of the country in the state of New South Wales. While Sydney is the most well-known of Australia's cities, it is not the nation's capital (which is Canberra, 250km southwest of Sydney in the Australian Capital Territory). As an example of just how great an importance is placed on Sydney for representing other parts of Australia to an international audience, when the countdown to the 2018 Commonwealth Games was formally announced to the world stage by the event organisers, the announcement was made in Sydney, 680km south of the venue which is to be held at Queensland's Gold Coast. The Queensland state capital of Brisbane (>\$100 billion metropolitan economy, as per Clark, 2015), which is less than 70km from the Gold Coast, wasn't deemed a sufficient platform for announcing the news – it would appear that if news doesn't come from Sydney, it doesn't come from Australia.

This insight might seem overly harsh or too direct at first glance (and may indeed be a jaded view from a Queensland author), but it's important to note that the example above is an artefact of how Australian organisations see the branding of Australia as being firmly centred on the identity of Sydney. It is not too large a jump of imagination to expect that other nations around the world perceive Australia's identity as being that displayed by the Sydney image. Unsurprisingly, if passengers (and by extension, airlines) consider travelling to Australia, Sydney is the logical default port of entry. However, with aircraft movements capped for Sydney airport, and a strict curfew in place to limit the impact of aircraft noise on Sydney's residents, the ability of Sydney to serve as the central hub to Australia's domestic and international aviation network has an expiry date.

Melbourne, which sits at the south-east corner of Australia's mainland in the state of Victoria, 713km south of Sydney, hosts the country's second busiest international airport. The Victorian government has been developing an international and domestic branding strategy that aligns the promotion of the region's tourist attractions to Melbourne's primary port of entry – Tullamarine Airport – as a means of competing with Sydney's ability to attract and retain key international and intercontinental air routes. This strategy has had

its successes, with growth in international air movements outstripping Australia's other largest international airports, including Sydney. The outcomes of supernormal international air movement growth in Melbourne, coupled with the legacy of international air movements coupled to Sydney, has created a veritable gravitational pull of domestic travel to the south east of the country to access international, and especially intercontinental, air routes.

The development of a second airport for the Sydney area, Badgery's Creek Airport, has been announced but will likely take a decade to be built and become fully operational. This interim period, as Sydney Airport gets closer to its operational limits and before the new Badgery's Creek Airport comes online, presents an opportunity for rethinking the structural design of Australia's aviation network for connecting domestic and international routes to the country's population and tourist destinations. Reframed, there is an opportunity to leverage the impact of aviation network design to support a fundamental change in the ways in which the world perceives and accesses Australia, and shift the focus of Australia's international brand from the current Sydney-centric (and increasingly south east-centric) narrative to a richer picture of the country's culture and regional diversity. This paper critiques Australia's existing governance mechanisms for influencing aviation network design against some of the tenets of European approaches to planning. This allows the identification, exploration and advocating of some of the structural design features that would allow Australia's aviation network to support current Federal and State government agendas for regional mobility and inclusion, sustainable communities, and migrant employment, while also making a clear statement that Sydney is only a small part of a much bigger Australian tapestry, and so should be treated as such in policy interventions and national marketing agendas.

## 2 THE STRUCTURE OF AUSTRALIA'S AVIATION NETWORK

Europe is orders of magnitude greater in population size and density, when compared with Australia, and entertains an array of intercontinental connecting airports (Amsterdam, Paris, Frankfurt, Munich, Istanbul, Barcelona, Madrid, Rome, Zurich, Lisbon, etc.) to connect the diverse regions of Europe to the world. Domestic travel within Europe is supported by well-developed rail networks, and longer intra-European travel is made simple and cost effective by the abundance of major and regional airports serviced by a highly competitive market of airlines. This makes travel from one region within Europe to another relatively convenient and cost effective, and travel from one region within Europe to another continent quite direct.

In a similar way to Europe's diverse regionality and attractions, Australia hosts an enviable list of tourist destinations and regions that range from the urban shopping drawcard of Melbourne and the vineyards of the Barossa Valley in the south to the natural wonder of the Great Barrier Reef in the north, from the glistening shores of Surfers Paradise to the east to the more exclusive red dusty center of Uluru, and onwards to the horizontal waterfalls adjoining the Kimberley Ranges in the west. Australia has a diversity of destinations that attract international and domestic visitors en masse, yet as a country almost 4000km square, travel from one region to the next is almost exclusively by air – the difficulties in travelling between Australia's population centers is often referred to as the tyranny of distance (Dhakal, Mahmood, Wiewiora, Brown and Keast, 2015). Travelling from one region to the next, domestically, is therefore largely subject to the routes offered by airlines (of which there are few). The sparse population density of regional centers away from the coastline also means that the routes that do exist, often require government assistance to remain profitable enough for airlines to continue servicing them. Given the distances between population centers and the country's population density is not going to change any time soon, it would be logical to assume that a government agency considering the long-term economic and community development for the country would make attempts to improve the accessibility of regional and remote communities.

Australia has 138 airports (BITRE, 2009) that service the nation's capitals and regional centers, however there are far more small airports scattered throughout rural and remote areas that serve as important access points for mining operations and otherwise difficult to access communities. For example, there are 141 airports servicing remote and rural communities in the state of Queensland alone (compared to 40 airports servicing the state's capital and regional centers) yet these account, collectively, for less than 10.4% of the state's passenger volume (Donnet, Ryley, Lohmann & Spasojevic, 2017). Australia's domestic aviation network currently (as at March 2017) carries 59 million passengers per year with annual growth at 1.6% (BITRE, 2017a). This compares to the country's international connections at 37.94 million passengers with annual growth at 1.7% (BITRE, 2017b). While growth for the national's aviation network

appears, at face value, to be reasonable, the data tells a different story for Australia’s rural and remote communities.

Donnet and Baker (2012) discussed the stress faced by rural and remote communities with respect to declining access to aviation services. Data for regional passenger and aircraft movements is currently only available for the period up to 2012 on the Australian Department of Infrastructure and Regional Development’s publicly available database (BITRE, 2017c) as the government stopped tracking regional volumes compared to national totals, so remains a relevant point of reference for this discussion. Within the BITRE (2017c) data, it is apparent that while domestic airlines were able to increase movements to major airports by 59% from 2000 to 2012 (an increase of 293422 aircraft movements) and international aircraft movements increased by 49% (an increase of 55244 aircraft movements), regional airline movements decreased by 34% in the same period (a decrease of 242870 aircraft movements). This decline versus growth demonstrates there has been a considerable shift towards centralising aviation growth to Australia’s capital cities. When comparing more recent international aircraft movements between the three busiest airports in the country (see Figure 1 below), it becomes apparent that Sydney’s ability to continue attracting the lion’s share of new routes has dissipated in recent years as it gets closer to its operational capacity, yet calls from government reviews state that “Sydney Airport will continue to be the most important airport for the Sydney region and for Australia, both for passengers and freight” (Mrdak, Haddad, Wielinga, Smith, Westacott, Mundy and Brown, 2012, p. 6). The recent announcement for approving Sydney’s second major airport, Badgery’s Creek, reaffirms the Sydney-centric approach to air transport in Australia, which appears at odds with Federal government initiatives calling for improved employment and economic growth in rural and regional areas of the country, which by definition, require improved access to air transport to make sustainable.

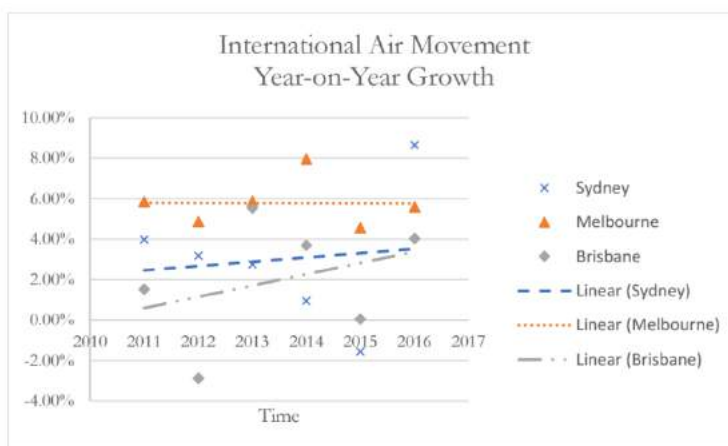


Figure 1 – Evidence of Sydney’s decline in attracting new international routes.

Federal government regional economic growth initiatives are limited to a \$220 million Regional Jobs and Investment Package (RJIP) program, which provide support funding for businesses that adhere to assessment criteria, defined in a Local Investment Plan tailored to each individual region (business.gov.au, 2017). The approach taken by the government to stimulate regional growth appears an attempt to drive business creation and job demand in regional areas, in the hope that increased business attraction will lead to more diverse and sustainable revenue streams for regional communities. However, this approach places the cart before the horse; concessions supporting employment only attend to one aspect of business – availability of labor. Businesses require sufficient economic infrastructure (including accessibility) to develop a coherent and sustainable business strategy, and without access to adequate air transport, the available funding may only have a short-term impact on regional economies. That is, an integrated approach that places fundamental economic infrastructure development first, in regional Australia’s case air-transport accessibility, is far more logical an approach for the long-term development and sustainability of regional economies and their communities. To do this, placing investment in a more distributed air transport network makes sense at a time that the country’s incumbent international hub is reaching capacity.

## 2.1 QUEENSLAND: A MORE DISTRIBUTED AVIATION NETWORK

Looking within the Australian aviation network for a fractal that may provide learnings for a national approach to aviation network design, Queensland presents interesting network architecture. Queensland has two major population centers on its coastline, often referred to as South East Queensland, which includes the state’s capital, Brisbane, and the beach tourist focused Gold Coast; and North Queensland, which includes the military and mining focused Townsville and the gateway to the Great Barrier Reef, Cairns. Each of the cities mentioned above have international airports, with the vast distances to travel from one end of the state to the other requiring two hubs (Brisbane in the south and Cairns in the north) within the state’s domestic aviation network. For reference, the state of Queensland is seven times the size of Great Britain, so airline routes must span considerable distances between the state’s population centers. The Queensland aviation network is illustrated in Figure 2, and demonstrates the practicalities of linking regional destinations (i.e. Weipa, Mount Isa, and Horn Island) to the north via Cairns and Townsville.

The practicalities of having a more local hub for North Queensland’s regional communities makes sense, as it is inefficient to pour government funding into long concrete or bitumen runways for communities that could not sustain passenger volumes required for cost effective operation of aircraft capable of flying from Brisbane or even further interstate. Smaller communities with smaller runways create a physical hurdle for airline operations, where small aircraft can only travel shorter distances. While this appears common sense, the difficulty in expanding this network design and operating reality to the context of the Australian continent is for providing equitable access for regional communities to international transport. For example, in New South Wales, regional communities are often serviced by smaller aircraft operating on a “mail-run” route, which appears on a map as a single spoke extending from Sydney with multiple stops in regional areas before returning to Sydney. This creates a lengthy transit for passengers in the more remote areas of the state wishing to access international services from Sydney.

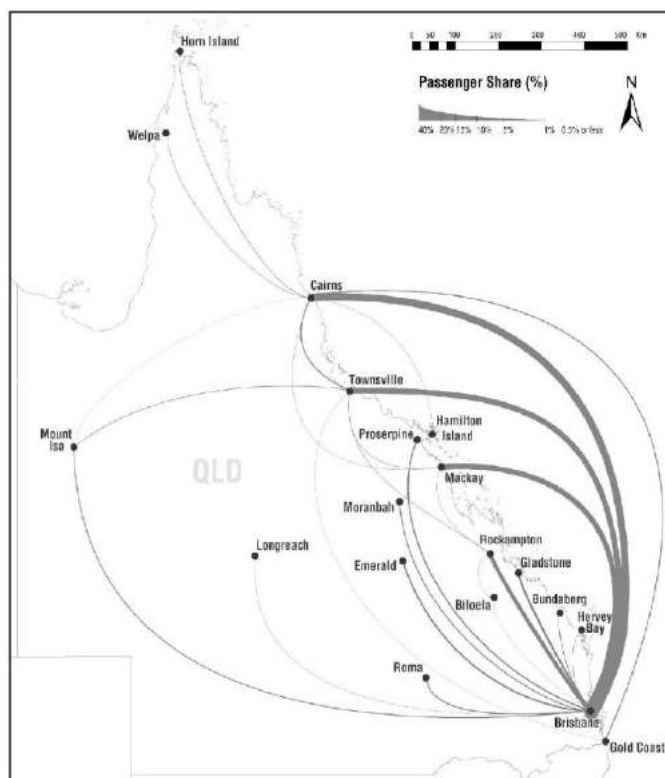


Figure 2 – Intrastate aviation routes for Queensland (from Donnet et al., 2017, p.6)

Figures 2 and 3 (sourced from Donnet et al., 2017, pp.8-9) provide insight to the nature of Queensland’s aviation network connectivity to the rest of Australia, as well as to the world, respectively.

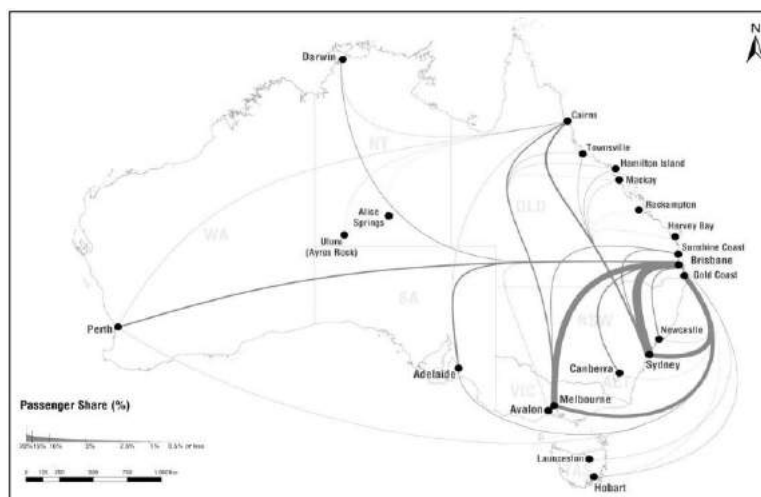


Figure 3 – Interstate routes between Queensland and other Australian states

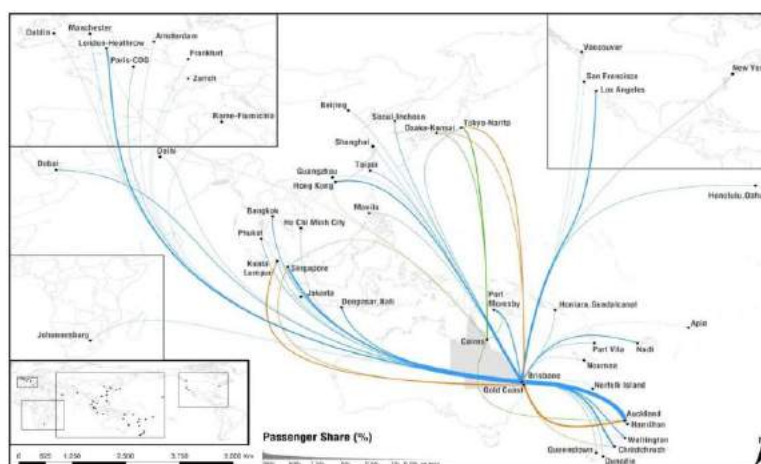


Figure 4 – International routes connecting Queensland to the world

The diseconomy of time and convenience is particularly relevant for regional communities that are often framed by lower socio-economic statistics and, with the support of current migration agendas supported by migrant peak bodies and the Federal government (see FECCA, 2015), become increasingly populated by residents with relatives overseas. Having a state or national aviation network that requires regional residents to commute hundreds, even thousands of kilometers south, only to hop on an international flight to the north, imposes additional costs and environmental burden to those already underprivileged by an imbalance in employment opportunities and economic infrastructure. In sum, there has to be a better way.

### 3 WHAT CAN AUSTRALIAN TRANSPORT POLICY MAKERS LEARN FROM EXAMPLES FROM EUROPE?

In comparison to Australia, Europe is advantaged by higher population densities and mature regional economies that deliver goods and services domestically and abroad, and destinations for international and intercontinental tourist travel. This has not been an accident, and is the product of each individual nation's long-term vision for meeting internal job and productivity demands as well as investing in fundamental infrastructures that support economic growth. As Vettoretto (2009) aptly states, good governance is a central strength to planning and policy-making practice in Europe, with a keen focus to robust decisions for investment and infrastructure development that are designed to work in the long-term against many variable scenarios. A technical report by Appold et al. (2008) identified an array of different governance structures used by jurisdictions around Europe (including Estonia, Spain, Germany, and Finland) that, at their core, demonstrate a robust focus towards progressing regional and national economic growth (i.e.

arbitration processes for airport development in Germany) while at the same time appreciating local contexts (i.e. tailoring airport expansion to protect local public values in Spain). Governance mechanisms that champion public engagement, be it by arbitration or by up-front negotiation, allow for greater buy-in by stakeholders but more importantly allow policy makers to critique the very nature of the vehicle of value creation (i.e. building a new airport) in the first place (as per Healey, et al., 2003).

In Australia, the more deliberative planning process is an element of policy-making that underdeveloped, and the political will to look towards the long term has been sorely missing in more recent times. Having had six different Prime Ministers since 2000, and what is essentially a two-party government system (by definition, Government and Opposition), policy making in Australia is often highly politicised, which means decisions for significant investment in regional infrastructure or changes to existing economic systems is typically met with fierce opposition in press and in Parliament (as discussed by Wegrich, Hammerschmid and Kostka, 2017). A decision to invest in one sector by the government of the time can easily be overturned or withdrawn in the following three-year term of government, which undermines the long-term vision and ongoing support required for nation building exercises – such as transitioning a transport network from one system of network structure to another. Creating an appetite for long-term agendas that are developed through a more deliberative consensus approach (i.e. similar to the slow but robust approach utilized in the Netherlands) presents an opportunity for critically rethinking some of the fundamental design principles that underpin the structure of Australia’s current aviation network. For example, Australia’s policies and initiatives place emphasis on market forces to meet demands as a means of ensuring efficient use of government funds. That is, the Australian government has shrunk its direct involvement in the provision of air transport to Australia through its privatisation of major airports and divestment from the national air carrier, Qantas. In doing so, the government attempts to steer businesses at arm’s length through tax (dis)incentives and concessions for providing air services for regional communities, trusting that the market will provide services when revenue is available. However, as economically rational organisations, airlines provide lean services for regional communities, which does little for the attractiveness of regional communities to those outside of them.

Looking at past planning interventions in Europe for stimulating regional growth, fiscal strategies for decentralising economies have drawn criticisms for sub-national governments taxing businesses in ways that diminish their effectiveness in generating a positive economic impact (Thornton, 2007). However, Crescenzi and Rodriguez-Pose (2011) introduce the notion that successful regional growth is stimulated via innovation, rather than subsidising for increased density of existing industries, which requires investment in social infrastructures alongside economic infrastructure. This aligns with more seminal insights posed by Scott (1998) for flexible production systems in Western Europe that leveraged urban and rural assets and labor to improve value creation and stimulate regional development. From this European perspective, treating rural and regional areas as integrated parts of a broader value chain for the production of value traditionally nested in more metropolitan areas in presents an important opportunity for rethinking how the government approaches economic development initiatives for regional Australia.

Rather than aiming to improve economic development through financial support to businesses in a particular region, placing a focus on joining up businesses that are vertically linked within a supply chain (from city to rural/remote region) presents a far more attractive approach that explicitly places value in the role of regional Australia contributing to the broader economic performance of the country. That is, in advancing the major population centers the remainder of the country is not left behind in investment or in cultural spirit.

#### **4 CONCLUSION**

This paper set out to drive critical discussion for how to rethink Australia’s aviation network structure to improve outcomes for regional and remote communities, and identify the inequities in current air transport routes connecting Australia’s non-Sydney communities with the rest of the world. Current approaches by the Australian government that try to create self-sustaining regional communities may be enhanced by appreciating some of the more hands-on strategies that characterise trends of European spatial governance, and not leaving economic development to market forces alone. By shifting focus from self-sufficient (but still isolated) communities to more integrated, connected communities with direct economic ties to their value-chain-affiliated coastal economic centers, a more equitable platform for supporting and including regional Australia into economic and social growth can be founded. To do this, we propose that

rethinking, and more importantly championing (via policy as opposed to concessions), a formal network approach for Australia's domestic and international networks is required as a starting point for change. This is particularly relevant as the tyranny of distance remains a continual thorn in Australia's regional mobility, access to services, and business growth. This task is a formidable political minefield that could only eventuate from bipartisan support across all levels of government – the very European tenet of democracy via consensus is required for success. But at its core, the task is to answer a very straightforward question: How could Australia best organise its aviation network to deliver efficient, equitable air transport for its communities? The challenge has been set, and we look forward to hearing the debate that ensues from this beginning of a much larger discussion.

## BIBLIOGRAPHIC REFERENCES

Appold, S., Baker, D., Donnet, T., Kimmet, P., van de Riet, O., & van Twist, M. (2008). Deel C: Internationale vergelijking. Technical Report (Fase 2) on behalf of the Commissie Ruimtelijke Ontwikkeling Luchthavens. TU Delft, Netherlands.

Bureau of Infrastructure, Transport and Regional Economics (BITRE). (2009). Air transport service trends in regional Australia 2009 update: Bureau of Infrastructure, Transport and Regional Economics Information Sheet 35. Australian Government, Canberra, ACT.

BITRE. (2017a). Domestic airline activity [Statistics database]. Retrieved from <https://bitre.gov.au/statistics/aviation/domestic.aspx> on May 20, 2017.

BITRE. (2017b). International airline activity [Statistics database]. Retrieved from <https://bitre.gov.au/statistics/aviation/international.aspx> on May 20, 2017.

BITRE. (2017c). Air traffic data [Statistics database]. Retrieved from [https://bitre.gov.au/publications/ongoing/airport\\_traffic\\_data.aspx](https://bitre.gov.au/publications/ongoing/airport_traffic_data.aspx) on May 20, 2017.

business.gov.au (2017). Regional jobs and investment packages (RJIP) [Information site]. Retrieved from <https://www.business.gov.au/Assistance/Regional-Jobs-and-Investment-Packages> on April 12, 2017.

Clark, G. (2015) quoted in Atfield, C. What is a 'new world city' anyway? Brisbane Times. May 10. Retrieved from <http://www.brisbanetimes.com.au/queensland/what-is-a-new-world-city-anyway-20150509-ggxti9.html> on 5 March, 2017.

Crescenzi, R., & Rodríguez-Pose, A. (2011). Innovation and regional growth in the European Union. Springer Science & Business Media, London.

Dhakal, S. P., Mahmood, M. N., Wiewiora, A., Brown, K., & Keast, R. (2015). Stakeholder engagement and asset management: a case study of the Gold Coast airport, Queensland. In Proceedings of the 7th World Congress on Engineering Asset Management (WCEAM 2012) (pp. 195-205). Springer International Publishing.

Donnet, T., Ryley, T., Lohmann, G., & Spasojevic, B. (2017). Developing a Queensland aviation network strategy: Lessons from three international case studies. Transportation Research Board 96th Annual Meeting, January 8-12, Washington DC.

Federation of Ethnic Communities' Councils of Australia (FECCA). (2015, August). Migration: An opportunity for rural and regional Australia [Report]. Retrieved from <http://fecca.org.au/wp-content/uploads/2015/08/Migration-and-Regional-Australia.pdf> accessed April 10, 2017.

Healey, P., deMagalhaes, C., Madanipour, A., & Pendlebury, J. (2003). Place, identity and local politics: Analyzing initiatives in deliberative governance. In Deliberative policy analysis: Understanding governance in the network society, eds. M. A. Hajer and H. Wagenaar, pp. 60-88. Cambridge, Cambridge University Press.

Mrdak, M., Haddad, S., Wielinga, L., Smith, W., Westacott, J., Mundy, W., & Brown C. (2012). Joint study on aviation capacity in the Sydney region [Technical Report]. Retrieved from [http://westernsydneyairport.gov.au/sydney\\_av\\_cap/files/sydney\\_aviation\\_capacity\\_exec\\_summary.pdf](http://westernsydneyairport.gov.au/sydney_av_cap/files/sydney_aviation_capacity_exec_summary.pdf) on April 9, 2017.

Pojani, D., & Stead, D. (2015). Going Dutch? The export of sustainable land-use and transport planning concepts from the Netherlands. *Urban Studies*, 52(9), 1558-1576.

Scott, A. J. (1988). Flexible production systems and regional development: the rise of new industrial spaces in North America and Western Europe. *International Journal of Urban and Regional Research*, 12(2), 171-186.



Thornton, J. (2007). Fiscal decentralization and economic growth reconsidered. *Journal of Urban Economics*, 61(1), 64-70.

Vettoretto, L. (2009). A preliminary critique of the best and good practices approach in European spatial planning and policy-making. *European Planning Studies*, 17(7), 1067-1083.

Wegrich, K., Kostka, G., & Hammerschmid, G. (2017). The challenges of infrastructure: (ir)rationalities, and the search for better governance. In K. Wegrich, G. Kostka, & G. Hammerschmid (Eds.) *The Governance of Infrastructure*. Oxford University Press, Oxford.

## ID (1285) | SHAPING REGIONAL FUTURES: PERFORMANCE OF REGIONAL DESIGN IN EUROPEAN REGIONS

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### 1 INTRODUCTION

In metropolitan regions, municipal borders and other administrative boundaries have long since been transcended by spatial patterns of interaction and land use. In the emergence of spatial patterns, multiple spatial scales intertwine – from the neighbourhood up to the functional region and beyond. Governments and their administrations often experience statutory limitations when trying to address these developments. Their territories are fragments of regions; they have difficulties detecting problems that are caused by factors outside of their spheres of influence and feel that addressing them is beyond their competence and political mandate. Planning instruments available to them, along with specific rules and regulations, are often too generic, rigid and defensive to address the specific development potentialities that are the product of intertwined issues and scales. Simultaneously, analytical information about regional spatial development is increasing, thanks to new technologies that can handle (big) data. More information and knowledge on what is going on beyond the horizon of a single city is not unproblematic, though. There is little experience about how to transform the insights and activities of single individuals and organizations into collective knowledge and action on a regional scale.

In response to these deficiencies of statutory planning, politicians, planning authorities and also civil and private organizations in numerous European regions are participating in informal, network typed governance arrangements, in order to coordinate sector issues and issues that play at different levels of scale (see for instance Allmendinger et alia, 2015). They seek, for instance, to integrate economic, transport and housing development, and water management stretching across multiple and multi scalar boundaries. Being voluntary associations with few formal planning instruments available to them, the resulting partnerships collaboratively engage in jointly creating inspiring and encouraging spatial agendas with the help of regional design.

Design is a creative practice, orientated towards finding solutions to problems in the built (and unbuilt) environment. It is a 'conversation with the situation' (Schön, 1983), driven by normative, desirable futures, and also by a wish to understand the 'holistic' wholes of a region and dependencies among its parts. The use of such creative and comprehensive design led approaches in planning often raises high expectations, usually associated with the intense use of spatial representation such as maps, models, and other geographic imagery (see for instance Thierstein & Förster, 2008). Such representations are expected to 'explain' the region: to increase understanding of interdependencies across scales and issues, and to focus attention on the places and locations that are affected. They are also expected to be persuasive as visualised 'storytelling about the future' (Throgmorton, 2003); they provoke thoughts and feelings, and therefore function as a kind of invitation to individuals and organizations to get involved in regional politics and planning. In the context of interactive design processes, visualizations and spatial representations are seen to be platforms or dialogues, malleable collections of spatial information that expose conflict, facilitate learning, and mediate in the context of complex governance settings. However, despite an increase of use