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THE RISE OF PERI-URBAN AREAS IN REGIONAL DEVELOPMENT AND LAND USE: A SOUTH-EAST QUEENSLAND CASE STUDY

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ABSTRACT

Despite historic myths and folklore, cities have always dominated Australia's settlement patterns and its economy. This is evidenced by the continued drift of capital and labour to the faster moving urban environments from outlining regional areas. The nature and physical manifestation of regions continues to change like in areas of South-East Queensland. In spite all that, peri-urban expansion theories may prove inadequate to explain such patterns. The state capital, Brisbane dominates; however other centres in the region are now gaining relative importance and adding new dimensions to the region as a whole.

The development of a multi-node into greater regions may bring into question relevance of the 'optimum city size' concept, particularly as locational trade-offs and interactions between existing and emerging nodes evolve.

A close definition of what constitutes 'peri-urban' areas in such a spatial layout is difficult to establish. To be of greater use, the concept needs to go beyond the traditional definition of simply being the edge of existing development stretching out from a single node and rather to describe it as the balance of any region outside the existing principal centre. As such, the dynamic mixture of dormitory and commuter zones can come together with the recently created 'activity nodes' which is quite different from the traditional centre.

This paper summarises research undertaken in South-east Queensland, Australia, one of the fastest growing urban area in the country. It challenges both concepts of optimum size and traditional definitions of peri-urban and describes how the new linkages between existing, dominant cities and distinct, new regional nodes are evolving. It is based on a literature review and structured interviews with key informants together with the author's recent high level involvement both in the state government's 30-year vision called the Queensland Plan and the Sunshine Coast Regional Economic Development Strategy 2013−2033.

Keywords: Peri-urban, regional economics, changing land use patterns, South-east Queensland, Sunshine Coast.

INTRODUCTION

The increased dominance of cities is recognised globally with mega-trends moving towards urbanisation. This phenomenon impacts urban form and certain dimensions of cities such as investment, social fabric and the nature of business. Even if the forces underlying these changes may be consistent, the physical manifestations of those changes are anything but uniform. Today's successful regions are vastly different in terms of scale, linkages to other regional, national and global nodes, specialities and products and level of impact on their wider regions and peri-urban areas.

These observations pose a range of questions for urban researchers particularly the causes for the spatial and physical variations and how these new forms of regional urbanism will continue to evolve. Challenges the relevance of traditional concepts and definitions of 'peri-urban' in rapidly changing, wider regions where multiple activity nodes are emerging. Furthermore, it questions whether the previously definable benchmark of 'optimum size' really remains applicable and useful.

The research applies emerging regional economic theory and includes information drawn from recent South-east Queensland Mayor's conferences, a new 30-year vision called *Queensland Plan* currently under development together with State Government, the recently launched *Regional Economic Development Strategy 2013−2033* of the Sunshine Coast region in Queensland and by a range of interviews with key informants.

The paper begins with a review of u trends of cities and peri-urban areas. It then applies these matters in the context of the high growth south-east area of Queensland, Australia and its component regions. It uses the Sunshine Coast which is located at its northern most end of the South-east Queensland (SEQ) region to illustrate the changing relationship of 'peri-urban' area with the traditional 'central place', Brisbane City, the state capital. The discussion flows on to the theory of optimum city size and the dynamic relationships emerging from these trends. The paper concludes with some ideas on how to strengthen these relationships.

Each region is inherently different. That notwithstanding, this paper identifies a number of key regional development issues and characteristics that may well be relevant across other regions in Australia and elsewhere.

URBAN TRENDS – 'CITIES' AND 'PERI-URBAN'

There is an innate tendency for humans to cluster in groups but that, of itself, fails to explain the dramatic changes to the urban frame that has occurred across most OECD countries over the past two decades.

Since the start of the industrial revolution the deep roots and reasons for urbanisation has not changed fundamentally. It is mainly caused by competition, the rise of science and innovation, the protection of property rights, advances in health and medicine, consumerism, the emergence of dominant 'work ethic' philosophies and, with that, the rise of entrepreneurship (Ferguson 2008). Such advances and activities are typically those disproportionately generated within cities (Glaeser 2011).

To appreciate the spatial development and change in urban development, a better delineation of the terms 'city' and 'peri-urban' is required – the former being relatively easy; the second, however, being less clear both in literature and the manner in which regions are now expanding and developing.

A city is a relatively large aggregation of people and with that, the permanency provided by a physical place where social, business and cultural networks are created. Its space reflects the universality of the urban experience – despite the vast differences in climate and location, there is a human need to aggregate into particular locations – for defence, trade, and governance, spiritual and cultural reasons (Kotkin 2006). Cities (as opposed to 'towns') are places that have aggregated in size and economy to be in a dominant position – either relative to their surroundings and catchments or to have reached a status and trading ability, with those outside that physical immediacy (Glaeser 2011; Reader 2004). Scale therefore is obviously important, as reflected in the growth of mega-cities scattered across the globe (Brugmann 2009). Time is another key parameter that must be considered. Cities and other urban areas are dynamic, not static and their future is established by a range of positive or negative factors, not necessarily related to their current scale or function (Short 1996, Wardner 2013).

Amongst leading contemporary theorists in this field, (Burgmann, Kotkin, Glaeser, Florida), there is general recognition of the increased scale, complexity and economic and social dominance of cities and large urban areas; though there is considerable debate as to the factors that create it. Some would see it as the emergence of an almost pre-ordained 'new urban order' while others, probably more realistically, would consider it as the physical manifestations of sweeping economic and demographic shifts, played out in different geographic locations (Gleeson 2012).

The concept of 'peri-urban' is not as easy to define – and perhaps that is expected given that, even geographically, all cases are inherently different. 'Peri-urban' has been traditionally seen as those fringe areas surrounding large population centres typically in transition as the forces of those major cities change and expand (Houston 2005). Such a definition may, however, be fairly limiting – apparently identifying outer suburbs, typical acreage developments including en globo or accommodation lands that are slightly beyond current limits of city's development perimeter.

Contemporary regions and their development is simply not that straight forward. Often, as in the case of SEQ, there are a number of emerging activity nodes interacting and creating a much more intricate and dynamic environment than of steady, lineal development pattern encroaching out of a single node. Ravetz et al. (2013) defines peri-urban areas more accurately: Peri-urban areas are not just the fringe areas in-between cities and countryside but a new multi-functional territory characterised (at that point in time) by a lower population density where growth is anticipated as new nodes emerge and grow. This definition better reflects many contemporary regions and their development in places such as SEQ.

An alternate view however is to see 'regions' as not particularly defined closely by geography nor political boundaries but rather as functional 'economic areas' – 'sunbelts' 'tourist regions', major 'ICT clusters', etc. (Barnes & Ledebuer 1988) (Stimson, R, Stough, R and Roberts, B 2006, *Regional Economic Development: Analysis and Planning Strategy 2nd edition*, Springer-Verlag, New York Berlin.

Each such area may well have urban concentrations (or sometimes called specialist areas) scattered across them which expand and contract based on a range of individual factors. Surrounding these nodes is what is described as 'economic commons' where development is influenced by a number of nearby nodes or activity centres, not just from the traditional dominant city. This seems to be a much more realistic or logical approach than the simple 'fringe land' model described earlier.

SOUTH EAST QUEENSLAND THE CASE STUDY AREA

This paper contends that, whilst there are fairly consistent drivers and themes to contemporary urban development, the manner in which that happens and the final, evolving urban forms are unique to each situation. Some regional areas provide valuable insights as to how contemporary urban areas grow and develop in response to a range of geographic, economic, demographic and political forces. The south-east of Queensland, Australia (SEQ) and within that, this Sunshine Coast region, provides one such example. Figure 1 below shows the regions within the SEQ region.

SEQ is designated as a regional planning area with a total of 22,887.7 square kilometres including the capital of the State of Queensland, Brisbane (OESR 2013a). It contains a little over three million people – about 75% of the entire State, even though its land area is only 1.3% of the State in total (OESR 2013a). It is the fastest growing area in Australia. That growth however is far from uniform − Brisbane city, together with the 10 other local authority areas (Gold Coast, Ipswich, Lockyer Valley, Logan City, Moreton Bay, Toowoomba (part of), Redland City, Scenic Rim, Somerset and the Sunshine Coast) make up SEQ. All have quite different characters, economies, demographic profiles and growth projections. On that basis, investigation of the region, and specifically the relationship between two of them – Brisbane city and the Sunshine Coast region, a hundred kilometres north of the capital, makes for interesting analysis as to how comparable global trends and forces can manifest themselves quite differently, even within the same country or greater region.

Figure 1 SEQ and its component regions

Like the rest of Australia, SEQ's history is a recent one with the first settlement occurring (in Brisbane) less than 200 years ago and with the State only becoming self-governing some 150 years ago. Based on its commencement, Brisbane dominated the State as its government and administrative headquarters, transportation hub and principle port. Education, health and the aggregation of business followed – an example of cumulative causation, identified in many countries but particularly relevant to practically all Australian cities and states. (Polèse 2009)

Even from the earliest times, geography played a critical role in development patterns in SEQ. Growth typically followed the narrow flood plain of the Brisbane River, running generally towards the south-west and coastal plains to the north and south – thus creating elongated star-shaped development defined by Moreton Bay to the east and undevelopable ranges to the west. Infrastructure followed those directions and, reinforced by statutory planning, created a low density urban sprawl for a 200 kilometre narrow coastal strip from the New South Wales' border through to Noosa at the northern extremity of the Sunshine Coast (Spearritt 2009).

In the first half of the 20th century, urban development took on a fairly predictable pattern, developing out in concentric retail, commercial, industrial and then dormitory rings from the Brisbane CBD. Over the past 30 to 40 years, however, quite different forces and patterns have emerged which fundamentally changed the nature of regional development in Australia. A catalyst to this, not only for SEQ but, indeed, for the whole of Australia, was the emergence of the Gold Coast, approximately 80 kilometres south of the Brisbane CBD as a whole new urban model. Unlike any other previous urban area in Australia, the Gold Coast was not based on historical settlement patterns, but rather on lifestyle and a single industry – tourism – primarily focused on international markets. Japanese funded infrastructure and capital investment through the 1970s and 80s reinforced that trend. It produced from what was a string of small beachside villages to a city in its own right of more than half a million people and with consistently the highest growth rates in the country (Salt 2004). Even the urban form it adopted – of strip, high-rise along the beachfront – reflected international (e.g. Miami, Florida) rather than Australian (vernacular design).

From that scale, transport, education and health infrastructure developed, thereby facilitating future growth. Distinctly noted here is the progressive contemporary culture that emanated, promoting an entrepreneurial ethos not experienced elsewhere in Australia. On the base of that, new regional dynamics and relationships were established.

Meanwhile, 100 kilometres to the north of Brisbane, the Sunshine Coast is also experiencing generally very high growth population levels, as shown in Table 1.

Table 1 Estimated resident population by local government area, SEQ Profile Region, 2007, 2011 and 2012r

Source: OESR 2013b

	Estimated resident population as at 30 June			Average annual growth rate	
Local government area	2007	2011	2012r	2007–2012r	2011–2012r
	number			% growth	
Brisbane (C)	1,010,222	1,089,879	1,110,473	1.9	1.9
Gold Coast (C)	466,940	515,202	526,173	**2.4**	2.1
Moreton Bay (R)	344,545	390,051	400,036	**3**	2.6
Sunshine Coast (R)	291,904	318,279	324,266	2.1	1.9
Logan (C)	264,410	287,474	293,485	2.1	2.1
Ipswich (C)	148,133	172,200	177,485	**3.7**	3.1
Redland (C)	133,596	143,711	145,507	1.7	1.2
Scenic Rim (R)	34,983	37,437	37,826	1.6	1
Lockyer Valley (R)	32,050	35,880	36,512	**2.6**	1.8
Somerset (R)	19,919	22,200	22,584	**2.5**	1.7
SEQ Profile Region	2,746,702	3,012,313	3,074,347	2.3	2.1
Queensland	4,111,018	4,476,778	4,565,529	2.1	2.0
SEQ Profile Region as % of Queensland	66.8	67.3	67.3	. .	.

**growth percentages in red/bold shows higher than average growth than SEQ average*

The Sunshine Coast had traditionally been a preferred holiday and retirement destination within the Australian domestic market, particularly from Brisbane and southern capitals. Population growth has been consistently strong in both the Sunshine Coast and Gold Coast regions over some decades. However the economic and demographic characteristics and, with that, development patterns and density is now quite different in each.

The Sunshine Coast region has a total land area of approximately 3,126 square kilometres and has a resident population of about 324,226 (OESR 2013c). In many ways, it mirrors the Gold Coast but has not been the beneficiary of the large scale tourist capital investment nor exposure to overseas tourist markets. The area is recognised for its remarkable physical environment with the economy historically underpinned by rural industries (timber, dairy and sugar) all of which have largely disappeared. Over the past decade, the tourism, retail, services and construction sectors have dominated the Sunshine Coast economy; with a population that has increased ten-fold over 59 years (Spearritt 2009, ABS 2011).

Again in the Sunshine Coast region, significant and different economic and development agendas are being set. In 2013, all regional bodies and institutions, led by the local council, developed a new Regional Economic Development Strategy (REDS) which now sets a different course for the region and its future development. The strategy continues to reflect the value of tourism but now also underpins growing importance of education, health services and infrastructure including a new town centre, cultural centres and health precinct all now made possible by the critical mass of population that has now been achieved.

The importance of these trends, first at the Gold Coast and now at the Sunshine Coast, is that both have set/are setting directions quite distinct and not of particular relevance to the previously dominant city of Brisbane.

The observations of Spearitt (2009) suggesting that SEQ is emerging as one ‘huge coastal city’ (p90) are important here. The physical linking of developments through the greater region, particularly along the main infrastructure corridors is obvious – though certainly not complete given the substantial ‘green belt’ and undevelopable tracts widely scattered through the area.

This image of near continuous development belies more complex economic, social and community systems that are unique to each region within SEQ. Closer observation would also establish that the type and characteristic density of

development in each of those regions is quite diverse and economic and, demographic differences are becoming more disparate, certainly not homogeneous.

AN OPTIMUM SIZE

As regions and their nodes evolve, the question of whether there is an optimum size for such regions is important for their efficiency, liveability and functionality. The concept of optimality, (the relationship between marginal costs and marginal revenue) are well known in economics but whether such neat theories can be applied to contemporary urban development is problematic.

Despite a century of investigation, a real understanding of the evolution of the urban areas and how (and if) they reach some predetermined optimum size remains quite inadequate (Batty 2008). Built forms cannot be seen simply as static or unchanging rather it is important to consider cities and their development (including that of their surrounding areas) as dynamic and complex systems. They grow, decline and transform themselves based on a range of economic imperatives (important as they are) and also on a range of community, lifestyle, environmental and other parameters. This is even made more complex given that these nodes are linked to their surrounding geography and are interconnected globally through instantaneous communication, using the same platforms for business and social contacts alike (Mitchell 1999).

Concepts of trade-offs are important here as businesses and individuals weigh up the typical urban advantages of trade, information sharing, innovation and business support with higher costs, congestion, pollution, crime levels and so forth (Brugmann 2009). These are complex, diverse and often subjective location decisions further complicated by the continual ebb and flow of people, capital, law, ideas and changes in institutional forms and business structures (Alonso 1971).

Consequentially, the idea that cities have a tendency to grow to some optimum size and then plateau seems illusionary. The enormous variations in size of cities across the world or even in a single country provide proof of that. Huge variations in land value and property prices across the regions that have little or no relationship to land use capacity would also testify to the non-economic determinants involved.

Yet another overlay here, is the much less locationally specific nature of contemporary industry and commerce. Fast moving sectors that are generating new, concentrated urban environments across OECD countries typically involving value-adding knowledge, education, innovation, entrepreneurship and clustering of like-minded talents. This is quite different to the traditional heavy manufactured goods of past eras which demanded specific locations and larger scale operations (Florida 2002; Moretti 2013). Rapidly developing physical clusters can therefore emerge in unexpected geographical locations further distorting regular or anticipated urban expansion (Moretti 2013).

The literature suggests that the agglomeration of economic activity in one place typically has spill-over effects in wealth creation, amenity and lifestyle, and there certainly comes to a point where those urban benefits begin to be eroded by congestion, high rents and environmental damage (Capello 2013). Consequently, whilst the underlying forces are consistent across Australia and internationally, the growth, economic, social, governance, history and existing built form is such that outcomes are vastly different.

Capello (2013) recognised that level of city specialisation, its history, whether it carries out higher order or lower order functions, its geography and the level of interaction with other nodes, all determine the likely size for a particular city at some point in time. The SEQ case study reflects these observations. In the first instance, whilst Brisbane itself is undoubtedly the dominant urban and economic force in SEQ, its ability to grow and develop is quite limited, based on geographic constraints. Infrastructure improvement is also difficult and expensive in high density areas, as - available, well located property is now within a physically constrained city and near city area. Consequently, whilst dominant, Brisbane itself has in fact grown remarkably slow. Figure 2 below reflects this with the decreasing share of Brisbane population compared to the entire SEQ.

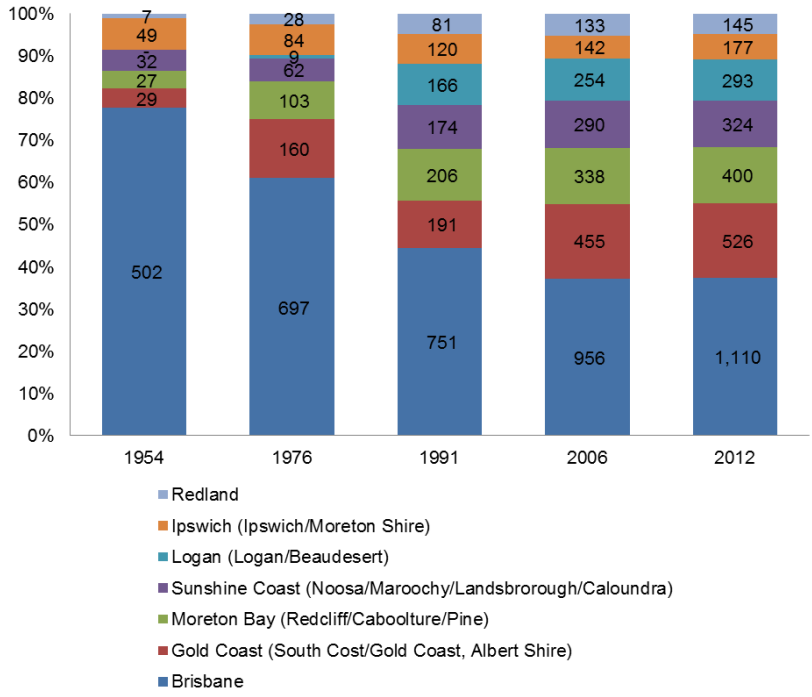

Figure 2 Population distribution of SEQ by region

Source: Spearrit 2009, ABS 2011

Meanwhile, the nodes to the north and south – the Gold Coast and the Sunshine Coast have grown much more quickly and experienced rapid physical expansion.

All of these contemporary observations challenge the concept of orderly outward expansion of urban centres out from and, with that, an eventual growth out from a single point with some optimum final size in mind.

DYNAMIC RELATIONSHIPS

Nothing in economics or demographics stays the same over time. When one considers regional development those continuous changes are played out against a backdrop of unchanging physical geography and of prior capital investment and existing built assets which are slow to change and evolve.

The overall environment is truly dynamic and as those changes occur in waves onto that physical backdrop, the actual ability for a particular region and its resource (physical and human) base to respond, will vary from case to case (Brand 1994). The SEQ case study area exemplifies this with the eleven regions all responding quite differently to economic and other events that are presenting themselves to each of them – in global, national and regional sources.

Brisbane City remains dominant because of its scale, history and critical mass of public infrastructure, government and educational institutions, corporate headquarters and so on. For all of that, the proportion of the regional population and with it the portion of regional income secured by those individuals and households has diminished dramatically in a single generation. In 1954, 78 per cent of SEQ's population lived in Brisbane; today, only 40 per cent make up the total SEQ population. Geographic constraints on Brisbane's growth, together with its cost structures and relatively poor transport infrastructure and (until recent times, at least) quite limited densification has growth largely occuring in the outer-lying regions as shown in Figure 2 above.

Other important changes are also afoot. A number of regions that are adjoining Brisbane City remain reliant on the commute to Brisbane employers for a very large proportion of their workforce and in some cases, up to 50% (OESR 2011). Table 2 below shows the journey-to-work statistics for some of those regions.

Table 2 Journey to work to Brisbane of key SEQ regions

Source: OESR 2011

Sunshine Coast		% to Total		Brisbane		% to Total	
Total workforce	135,073	100%		Total workforce	578,918	100%	
Within region	102,179	76%		Within region	462,045	80%	
Within SEQ	8,921	7%		Within SEQ	48,635	8%	
Into Brisbane	5,187	4%					
From Brisbane	796	1%	*	From outside	177,353	28%	*
Moreton Bay		% to Total		Logan		% to Total	
Total workforce	176,547	100%		Total workforce	132,460	100%	
Within region	76,157	43%		Within region	50,775	38%	
Within SEQ	74,774	42%		Within SEQ	60,097	45%	
Into Brisbane	70,591	40%		Into Brisbane	46,151	35%	
From Brisbane	11,317	12%	*	From Brisbane	15,044	19%	*
Ipswich		% to Total		Gold Coast		% to Total	
Total workforce	122,702	100%		Total workforce	237,686	100%	
Within region	63,272	52%		Within region	168,142	71%	
Within SEQ	40,557	33%		Within SEQ	25,538	11%	
Into Brisbane	36,116	29%		Into Brisbane	15,917	7%	
From Brisbane	16,958	19%	*	From Brisbane	4,520	2%	*
* Percentage of total of jobs in region							

For these regions (Ipswich, Moreton and Logan and Redland *not shown above*) particularly, the maintenance of their own identity, economic and political independence represents an ongoing challenge. Increasingly, they are economically dependent on Brisbane which is the only area in the entire state which is a net importer of labour.

In an increasingly globalised and knowledge based business environment, those trends may well be inevitable but they come with inherent dangers.

Of the other regions in SEQ, three, the Scenic Rim, Lockyer Valley and Somerset are very small and though not denying their viability and other positive characteristics, future prospects will remain limited in scope and scale. The two exceptional regions in SEQ are the Gold Coast and the Sunshine Coast – Gold Coast because of its size and unique characteristics and entrepreneurial drive described earlier in this work. That quite individualistic growth will continue with a further maturing of the links with Brisbane but on an increasingly equal basis.

The Sunshine Coast region presents quite a different prognosis and its relationships with Brisbane is, quite different. In the first instance, because it is beyond the normal 'commuter zone', its labour market is much less influenced by Brisbane – with only about four per cent of the Sunshine Coast labour force travelling to Brisbane for employment each day. Seriously deficient road and rail infrastructure makes the commute to Brisbane particularly unattractive. Even as the road link is improved to the outskirts of Brisbane, the long commute through the northern suburbs, plus rising transportation costs will not result in dramatic changes in that percentage until efficient heavy rail links are provided and that may be decades into the future.

Brisbane, of course, remains a very important market for the Sunshine Coast – for day trip and the holiday market together with a market for regional product and produce. Further, access to Brisbane International Airport, located on the northern outskirts of Brisbane, represent a significant benefit both to the tourist and business markets. At this stage, the Sunshine Coast airport does not regularly accommodate international flights.

The comparison between the two and their evolving relationships is, however, not confined to built assets and infrastructure. A rapidly growing region demands capital investment to develop particularly in a largely peri-urban space. Institutional and individual investors in capital assets and infrastructure as well as debt and venture capital for business will, all things being equal, prefer the safety of a larger, more mature place for investment (such as Brisbane) than smaller, 'pioneering' ones (such as from Sunshine Coast) (Ferguson 2008). Overall, however, the future of the Sunshine Coast, its economy and population, are very much in its own hands – again, providing some parallels with the earlier and continuing development of the Gold Coast.

This level of independence is not without its dangers – the region was remarkably affected by the global financial crisis in 2008 because of its narrow economic base dominated by tourism, retail and construction. Nevertheless, the Sunshine Coast has inherent advantages. In the first instance, it is an aspirational place – a region where individuals from around Australia and increasingly, overseas, desire to live – based on its environment, lack of congestion and availability of services either locally or in Brisbane to the south. Over recent years, it has greatly enhanced its educational and health sectors with the advantages of that now becoming more obvious.

Again, perhaps like the Gold Coast of several decades ago, migrants, be they firms, households or individuals are quite eclectic. Increasingly, they are drawn from the professions and from high wealth individuals, unlike the 'surf and

retirement' culture of times past. Its economic blueprints recently released reflect that change, and its potential as a destination in its own right, is unequalled in any of its sister regions, except perhaps for the Gold Coast.

Finally, here it is probably important to note that the economic, or social/community interaction between the various nodes appears limited except ongoing bilateral links with Brisbane as the central place. Whilst there are political and policy advantages in the continual association of SEQ Mayors in representing the interests of the wider region, coordinating infrastructure provisions and creating structured links between those nodes may be of limited value.

STRENGTHENING RELATIONSHIPS

In the contemporary environment, networks – both personal and business, and strategic alliances are vital. In the knowledge and service-based sectors that are now dominating the economy, the physical immediacy of those networks remains fundamentally important, despite the remarkable services available to business and community through social media. A high-speed, available and cost efficient network (such as the national broadband network) is a prerequisite for such business and community activities. Once such infrastructure is in place however, the business activity on it has little by way of traditional activity centre hierarchy (Mitchell 1999).

A considerable volume will be local, reflecting the typical clustering of knowledge-based, small-to-medium enterprises. Thereafter, however, virtual internet links will be global, with very limited regard to previous or traditional hierarchies within that home region. This assumes that both the infrastructure is in place and that the types of business and skill levels are such as to take advantage of it. With those in place, however, information and communications technological advances are about people much more than place (Leer 2000) and such change further loosens the earlier key linkages to other regional nodes or institutions (Putman 2000; Ferguson 2013)

In regions such as the Sunshine Coast, there may be some exceptions to this 'freestanding' approach. As new sectors emerge in areas such as health, education and professional services, the key is to stay professionally networked outside of a larger centre. It may be difficult to achieve this and the risk of 'professional isolation' can limit the attraction of new talent and skill to the region. Activities that enhance those local networks may have to be supported by public sector or institutional interventions.

Secondary to the creation and strengthening of those linkages is the need to boost the immature investment and venture capital market. The construction of pathways to major national and international finance to attract such capital into local ventures and assets will also require specific action.

CONCLUSION

Using a case study of south-east Queensland, this paper has considered how regional development has evolved and responded to the contemporary economic, business and social relationships – particularly in the context of peri-urban areas and various activity nodes, within a wider regional context.

It concludes that the concept of 'peri-urban' needs to be considered more broadly than simply the accommodation land around an existing, large urban centre or city. Rather it should reflect the whole spatial interplay within a greater region. Peri-urban lands in this context might better be considered as the 'economic commons' where nodes of economic or residential activity will emerge over time, stimulated by specific economic, community and political forces.

Given this complexity and unique characteristics of each region and locality, it is difficult to envisage that the growth of an existing city into a peri-urban area will somehow eventually settle to an 'optimum size' – the environment and other parameters are too dynamic to allow for such precise objectives.

Therefore, based on the SEQ case study, areas within reasonable proximity and affected by similar forces tend to produce different responses and there is certainly no unified model that explains or can predict that growth. The economic drivers of knowledge and service-based economies are critical to all regions, as are the requirements for education, health care, good governance and desirable lifestyles. Given however, the 'starting point' for each region is its particular history and existing characteristics, land uses and built environment, the manner in which that evolves and manifests itself will be unique to each case.

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