Executive summary

Background

During the twentieth century towns were subject to large economic, social and technological changes, impacting on their key characteristics such as population, industry and human activity. Understanding the nature of settlement pattern change and the processes driving it can help both government and towns understand why this change occurs.

Objectives

This report examines how Australia's town settlement changed between 1911 and 2006, and the factors and processes which created this change. This study takes a very broad approach, in order to see whether there are observable, long-term patterns of change. This will aid understanding of the causes of change and provide a basis to consider future directions.

Method

The report uses Census counts of localities in 1911, 1961 and 2006 to examine population change in towns across Australia.

The interpretation of this change involves:

• consideration of existing theories

• examination of economic, technological and social changes over the century

• case studies of specific changes at a small area level

• an examination of the economic processes of change.

The report is divided into two parts. The first part (Chapters 1 to 7) examines data on the changing settlement pattern and relates it to large economic, technological and social changes. The second part (Chapters 8 to 11) of the report discusses the major contributors and processes of change through the prism of history and geography, industry and investment, provision of goods and services and amenity.

Settlement patterns in 1911

The patterns of development of Australia's towns were shaped by their function and history, resulting from the spread of mining and agriculture in response to exploration, topography and climate, the impact of the gold rushes, and the development of transport systems.

By 1911, most of today's towns were already established. There were many small agricultural towns reflecting limited personal transport options (horse and cart, walking), fewer mining-based 'boom' towns and a small number of larger centres. Regional Australia in 1911 was home to 60 per cent of the population, with 45 per cent of Australians living in towns of greater than 200 people, and 15 per cent in small localities and rural areas.

Changes to the spatial patterns of settlement to 2006

Changes to the settlement pattern throughout the twentieth century were consistent across Australia, strongly suggesting that these were caused by underlying widespread, fundamental influences rather than local factors.

There are several defining features of settlement pattern change between 1911 and 2006:

• **Decline in the number of small towns** is reflected in proportionately fewer people now living in regional towns of between 200 and 1000 persons. The loss of wheat-sheep belt towns is particularly noticeable, as rising productivity has led to a loss of employment and town function.

• **Growth of regional centres** means that they now represent a significant element of the settlement pattern. This has been in addition to the continued primacy of the capital cities.

• **Population movement to the coast** resulted in the development of some of the country's largest urban centres and the development of many new towns established after 1911.

• **New towns in the north and west** of the country are a reflection of the establishment of new mining operations and the timing of development across the nation. New towns also appeared in irrigation areas.

• **Geography and natural resources** have had an obvious impact on the position of towns and is clearly evident in 1911's pattern of settlement. It also continued to be an important consideration, especially through minerals, attractiveness of the environment and maintenance of access to markets.

• **History shapes the present.** Most towns and cities were established before 1911, with the overall pattern in 2006 very similar but with considerable variation in the size of towns.

Figures ES.1 and ES.2 illustrate how the settlement pattern has changed over the century. In particular, these figures reveal that regional Australia is much more urbanised than it was a hundred years ago.

Figure ES.1 shows the population by town size in 1911 and 2006 (excluding the five largest capital cities, and rural dwellers). This shows that in 1911, the largest number of people lived in the category of towns with populations of 200 to 500, with very few people in large towns.

Conversely, in 2006, the 200 to 500 category held the fewest people, while large regional cities dominated. This shows how the composition of regional Australia has changed dramatically, being far more concentrated in regional centres than it once was.
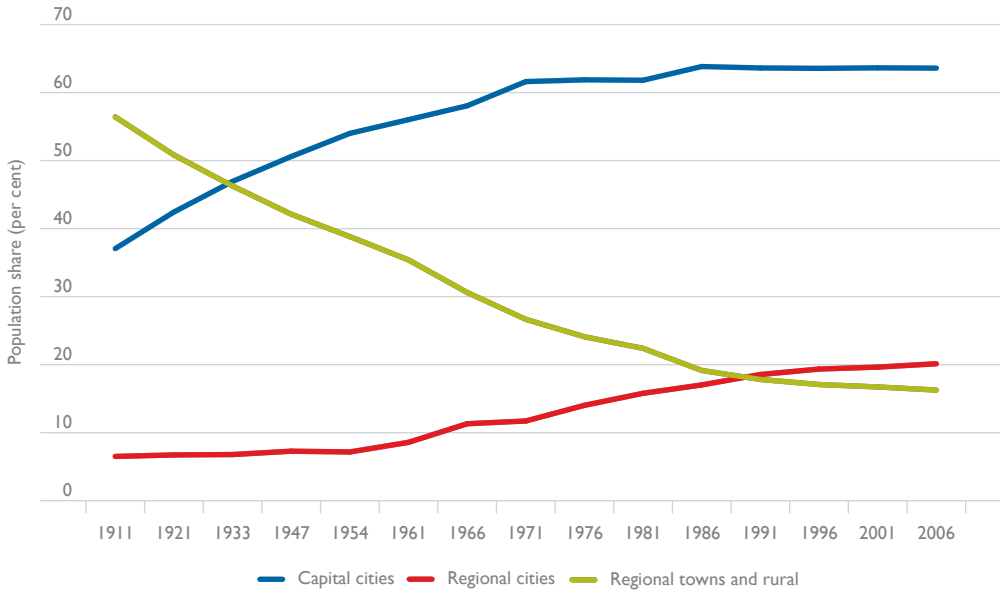
Figure ES.2 shows the timing of this rise of the regional centre. It presents three components of the settlement pattern in terms of their share of total population over the century: capital cities, regional cities and regional towns and rural areas. As the figure reveals, regional cities have largely increased their share of the total population since the 1950s.

Figure ES.1   Population by town size in 1911 and 2006
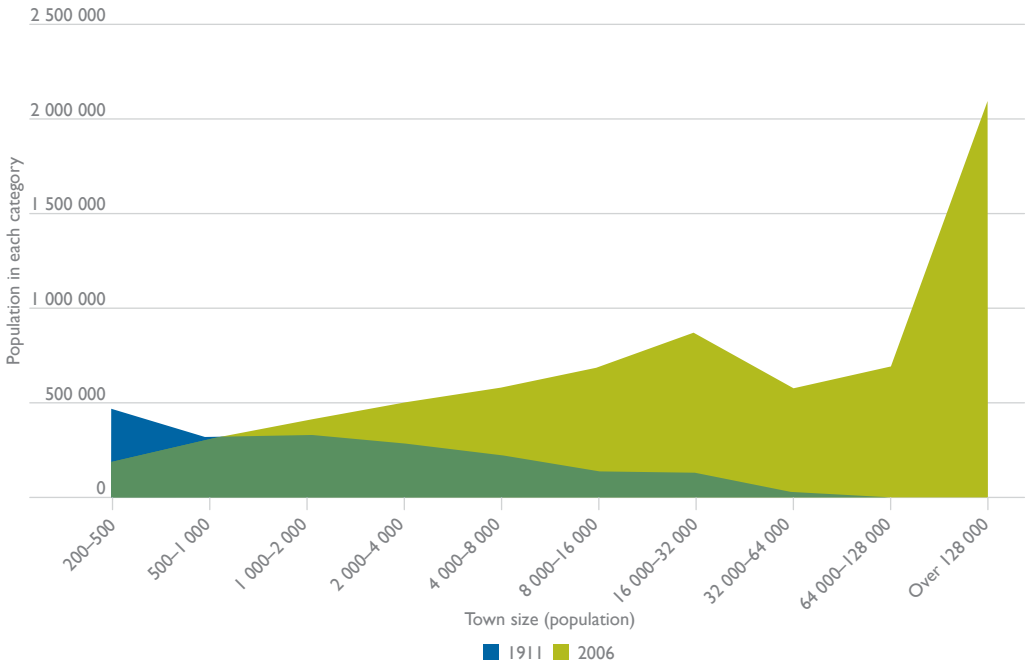
Note: Data does not include major capitals (Sydney, Melbourne, Brisbane, Adelaide and Perth).

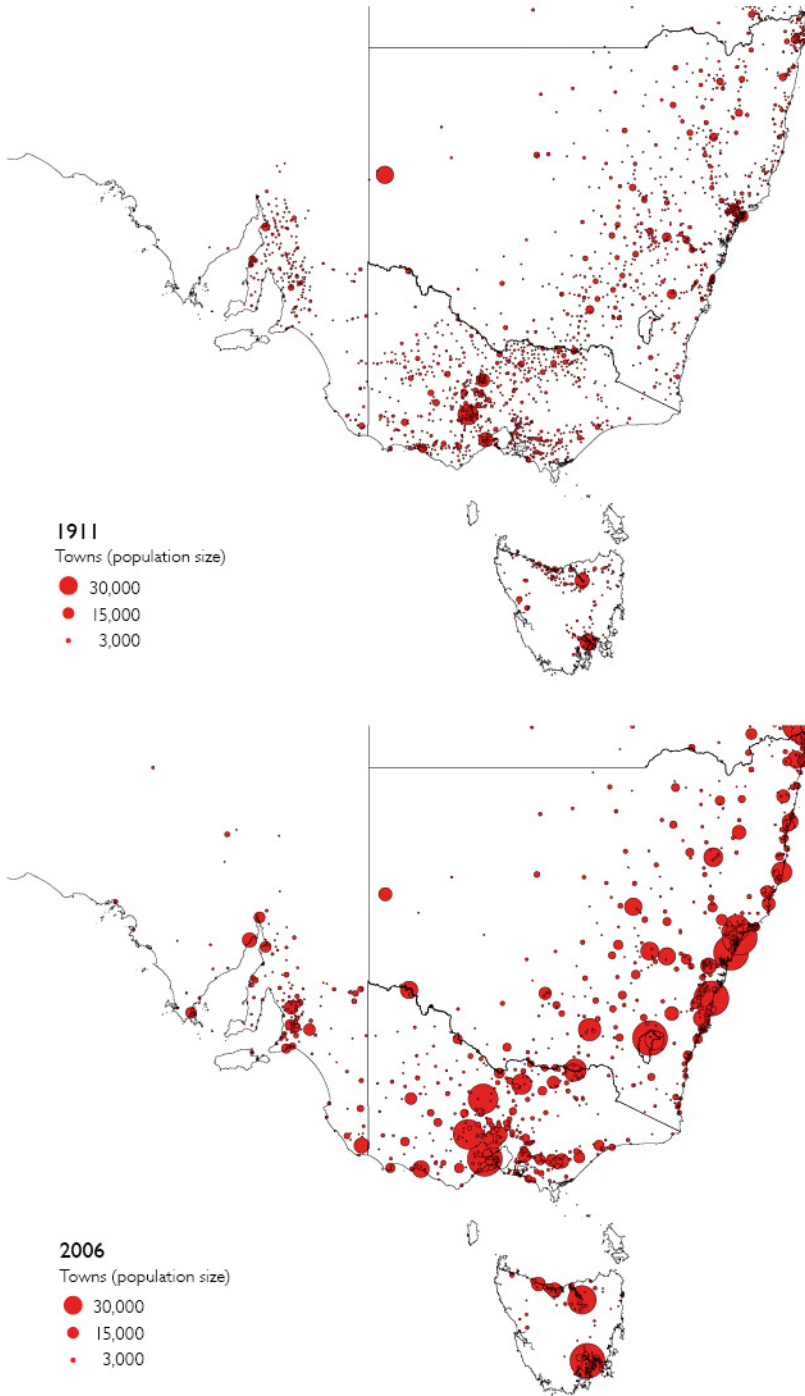Source: BITRE analysis of ABS Census results.

Figure ES.2   Population share by percentage for capital cities, regional cities and other regional, from 1911 to 2006

Population share (per cent)

| 1911 | 1921 | 1933 | 1947 | 1954 | 1961 | 1966 | 1971 | 1976 | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |

— Capital cities   — Regional cities   — Regional towns and rural

Source: ABS (2008a).

Map ES.1 illustrates the population change in towns for 1911 and 2006. The size of the dot reflects the size of the population. This shows the shift from many small towns to some very large regional centres with fewer small towns.

Map ES.1   Towns in South East Australia by population size over two Censuses; 1911 and 2006

Note: Sydney, Melbourne and Adelaide have been excluded, as the circles representing their population sizes would overwhelm the map.

Source: BITRE analysis of ABS/CBCS Censuses 1911, 1961 and 2006.

Factors behind settlement pattern change

Major economic, technological and social changes have driven settlement pattern change. Table ES.1 summarises these key factors.

Table ES.1   Key factors impacting on settlement pattern change

Factor	Impact on activity	Impact on settlement pattern
Increasing wealth	Capacity to embrace technology. Ability to choose lifestyle.	Amenity increasingly important
Increasing life expectancy	Enabled retirees to make location decisions independent of employment considerations.	Amenity increasingly important
Technological and productivity advancements	Change in industry mix, rise of services, reduced employment in traditional industries. Disconnect between industry and town.	Centralising of activity
Improved transport and communications	Personal mobility through the use of the car. Changed cost considerations in business location for inputs and transport to market. Separation of place of work and residence (cars, fly-in/fly-out and drive-in/drive-out).	Centralising of activity and amenity increasingly important
Population growth	Need for building, infrastructure to cater for population.	Centralising of activity
More women in the workforce	More complex household locational decision-making. Freedom of women to make a locational choice. Different occupational focus.	Centralising of activity
Income support system and superannuation	Reduces the links between residential location decision and employment.	Decentralising
History and existing infrastructure	Existing frameworks and assets frame current decision-making.	Favours retention of existing patterns

Source: BITRE analysis.

The processes of change

The process of change is considered through four lenses:

History and geography

Geographic requirements in industry and transport determined early settlement patterns. Primary industry was established in geographically appropriate areas, such as agriculture in areas with the appropriate soil and rainfall, and mining in areas with mineral resources. Geography also determined the location of key transport hubs such as sea and river ports. During the twentieth century, the influence of geography continued in terms of those factors, new mineral finds and amenity areas.

History shaped and limited change in the nation's settlement pattern, creating persistence of the pattern. Most of the towns which existed in 1911 were still present in 2006. History is an evolving context in which decisions are made. Each new decision slightly alters this context but is shaped by existing systems, which include the built environment, infrastructure and networks.

Industry and investment

The changing nature of industry in turn changed the settlement pattern. In the nineteenth century, towns were established to serve nearby industry and workers. This close geographical link created a mutually beneficial relationship. For example, the costs of moving people and goods were high, and so inputs (including workers) were sourced locally.

This link weakened during the twentieth century through technological advancements, productivity gains and structural changes. The effect was that small rural towns needed industry much more than industry needed small rural towns. This reflected the shift towards regional centres as a source of production, as distribution points and centres of manufacture. In conjunction, the decline of employment in agriculture led to a loss of people in these same small agricultural towns.

Towns also benefited from investment by industry and this was a key factor in the expansion of settlements. Investment is fundamental to a town's growth but it is a component of the economy which is volatile and difficult to attract, and subject to uncertainty especially in small towns. In general, larger towns have had a competitive advantage over smaller towns in attracting industry investment. This also applies to household investment as people are attracted to investments they consider less risky and which provide higher returns.

Provision of goods and services

One of the major processes driving centralisation was the changing way in which people access goods and services. This has occurred through the widespread adoption of the car, which enabled new choices by consumers about where they access goods. As consumers embraced the concept of pooling their purchases into 'one big shopping trip' this in turn created a competitive regional market and competition between towns themselves.

These new regional markets meant that the retailers and service providers in small towns were in direct competition with groups of retailers in other towns. In this situation larger towns have had the clear competitive advantage through economies of scale and positive feedback loops, which have led to the unequal growth of retailers in larger and strategically located towns at the expense of others.

Amenity

Improvements in personal transport and increases in wealth have given more people the ability to choose locations based on amenity rather than employment—that is, the desirable attributes of a location such as the physical features, services and social character.

Towns have been able to take advantage of the shift by transitioning their local economy towards the growing lifestyle and tourism industries. The implication for the development of towns is that amenity and not industry alone is now providing an economic base for many towns.

Understanding the process

One of the key findings of this study is that the explanation for changes in the settlement pattern can largely be found in basic economic theory. Rational decisions by people, given their capacity and preferences, form the basis of most of the change. Conventional economic forces such as taking advantage of economies of scale can explain the evolution of the settlement pattern in the broad sense, namely the observed changes of regional centre growth and small town decline.

The processes influencing towns have been fundamentally changing the functions and nature of towns themselves. Whilst towns remain the social centres for communities and their basic function is to serve its residents, they are no longer the only unit to support households and businesses. Towns are operating within a larger regional market. Nowadays, each town is best described by its relationship with the industry and towns of a wider region and typically compete in supplying households and/or businesses in that region.

The once-strong connection between industry and a local town has become weaker. Inputs are increasingly drawn from anywhere and the workforce requirements have been reduced as productivity and technological improvements have risen. Accordingly, a local industry does not necessarily translate into a substantial economic benefit for a town.

Also, households now have a greater say in where they choose to live and work. Previously, people lived where they worked but rising incomes and cheap, reliable, quality transport (including improved roads) have enabled people to live in one place and work in another. This has given rise to commuting towns closely connected to major centres, with a more acute example being fly-in/fly-out (or drive-in/drive-out) workers.

Transport has been a key component in this decoupling. It has also been the avenue to the centralising of activity. Regional cities have grown while a number of small towns have been lost, and many of those small towns that continue have fewer services than before. Several key processes have been contributors:

* Residents of small towns are travelling to larger centres to access a cheaper and wider range of goods and services, decreasing local demand.

* Some goods and services with *higher order* characteristics are positioned in major centres because of scale and expertise.

* Positioning higher order goods and services in regional centres in turn attracts households as they consider a location's amenity.

* Industry, driven by economies of scale and enabled by networks, transport and technological advancement have increasingly centralised the production (regional rather than local production) of goods and services.

* The centralising of activity makes investing in larger centres more attractive because of a perceived lower risk, while small towns have difficulty attracting investment.

These processes, covering investment, goods and services delivery, industrial centralisation and larger employment markets are not separate. In fact they are closely intertwined and at least partially explain the size and scale of change noted over the past century. They result in the reinforcement of positive feedback loops that favour large centres. Once started, there is momentum for change that is difficult to reverse as processes reinforce one another (see

Figure ES.3). The positive loop can also operate as a negative loop with a falling population (although typically less quickly). So rather than a virtuous circle, towns can also experience a vicious circle of decline. This explains the difficulties experienced by many towns seeking to reverse unwanted trends. History, a person's attachment to place, industry requirements, price signals, congestion, amenity preferences and infrastructure hangover may act as brakes to this process, but overall the process of change in the settlement pattern has been ubiquitous.

Figure ES.3   Interaction of positive feedback loops (population size)
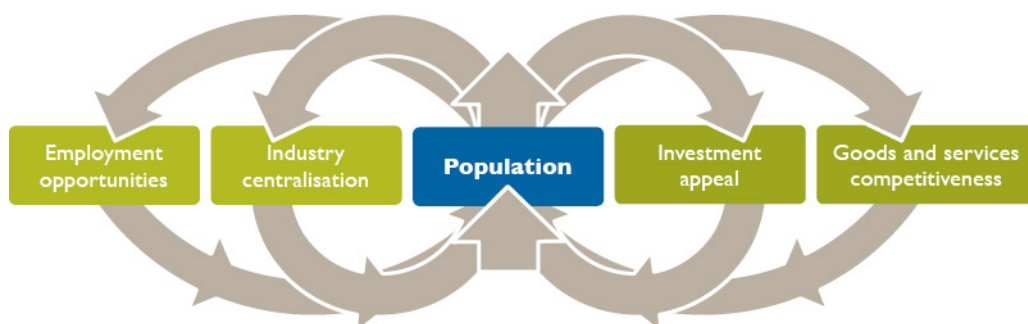
Source: BITRE analysis.

Implications for towns

This report provides some insights into national trends and processes around the changing settlement patterns and how they impact on towns. Viewed from a national perspective, these are strong forces with local implications that cannot be ignored. However it would be a mistake to not pay attention to the specific local circumstances surrounding particular towns, since the fate of individual towns is dependent on their unique circumstances and relations with their neighbours.

A spatial awareness of activity is vital. Understanding where a town fits into its region both economically and socially is increasingly important. Today, towns are interconnected, as people and businesses conduct their activities at a distance and across traditional regions. A small regional town will usually find it difficult to compete directly with a regional centre in the provision of goods and services. However, local residents and firms are often well positioned to capture different types of opportunities while taking advantage of the greater range, lower prices, enhanced social and economic infrastructure and extended labour market available to local residents accessing the regional centre.

The nature of inter-town competition is also part of the competitive structure that has developed. People are unlikely to visit multiple towns for different goods: therefore the town centre that provides an appealing package of goods and services to locals and visitors is most likely to receive their custom. There is much to be gained from collaboration within a town. Various local councils and towns are already promoting their local town or region, to distinguish themselves from other areas. A town can sometimes benefit from being associated with a particular industry such as wine, cheese or surfing or more generally with lifestyle and tourism pursuits.

That said, the relative competitive advantages of towns have been changing. Towns reliant on declining industries are likely to struggle, especially if they aren't large enough to be a service centre for the area. However, changes in the relationship between base industries and towns means that having a buoyant base industry close by is no longer a guarantee of success. Towns must make themselves relevant and competitive if they are to capitalise on nearby industry. In 1911 industry had little option but to use local labour and suppliers; in 2014 there are many alternatives. It is therefore important for towns to understand their relationship with industry. The strength of town links with industry can vary in different ways, including the relationship of industry and local employment because of the increasing separation between place of work and residence.

Towns in attractive areas have the advantage of being able to attract people on the basis of amenity. The mobility of the labour force and the relatively large number of people outside the work force means that some towns and cities are able to attract people without a strong local industry base. In particular, towns with natural and built amenity or locations near larger centres which offer a wider range of goods and services have an enhanced ability to draw new residents. Even if they are not able to retain services in their own town, relatively close regional proximity can be enough.

Consequently, towns need to concentrate on their strengths, including their natural advantages. Considering the diversity of towns, these strengths vary considerably. It is also true that some towns that functioned in the early twentieth century for primary industry have since declined, and do not have an obvious natural advantage (such as coastal amenity or proximity to a large centre) which enables them to shift function easily.

Towns that wish to influence their future need to understand their individual circumstance as a starting point. They will benefit from making an objective assessment of their position within their larger region. Some of the key issues to consider include transport systems, relative amenity, the labour market, goods and services provision and housing investment. Specific issues to be considered could include where residents work, shop, socialise and undertake leisure activities (in town, or in another location).

These issues are affected by the proximity to other towns in the region, both larger and smaller, so it is important to consider the proximity, sizes and strengths of other towns (particularly with consideration of the connecting transport networks).

Regional development

By taking a geographically broad and century-long perspective, this report draws attention to the long-term causes and effects that are not always apparent to policy makers and development practitioners dealing with the very real needs of regions in the shorter term.

Much of this report illustrates that the big changes in development patterns have essentially resulted from slow and sometimes subtle changes in wealth and technology—particularly transport technology. The decision-makers involved include businesses and households seeking to improve their own circumstances. These fundamental drivers and decisions are largely out of the government's direct control.

This is not to say that governments are powerless, or should do nothing. Rather it suggests that governments need to be aware of the fundamental drivers of changes in the settlement pattern. Spatial impacts, both positive and negative, can sometimes be missed when considering the implementation of industry, transport, health, social security or defence policies. This report suggests that these impacts can sometimes be profound and so confirms the wisdom of maintaining processes that seek out regional impacts as an explicit part of the policy process.

Access to services is an important part of understanding this process, with government-provided services among some of the most critical. Government will therefore need to understand the continuing reshaping of the settlement pattern and consider alternate approaches to service delivery. This involves recognising that there are significant spatial impacts to service provision for both towns and individuals.

Inevitably difficulties associated with change are real for many residents. Some are obliged to travel or move, others find services declining around them or a need for new services. Adjustment affects people in many different ways—many of them adverse. This difficult adjustment process suggests an important focus for government in dealing with structural adjustment: policies and programs that focus on the needs of those individuals and households adversely affected by change. Such policies are usually based around providing good information and support for transition and include retraining and access to appropriate education, provision of financial information and advice, and social support services.

Conclusions

During the twentieth century, Australia has seen increasing centralisation of population and activity, a decline in rural inland towns and growth in coastal locations. Much of this change in settlement patterns was due to major economic and technological change, and is explainable using basic economic theory. The trends that have been identified are major, have developed over the long term and are likely to continue.

This report considers these changes through the prism of interacting factors that include geography, history, the provision of goods and services, industry, amenity and investment. It finds that towns are no longer the sole unit to support households and businesses but operate as part of larger regional markets. Today, towns are interconnected, as people and businesses conduct their activities at a distance and across traditional regions.

Increased consumer mobility changed the way goods and services were accessed. As a result of this mobility, small-town retailers and service providers were forced into competition with retailers in other towns, effectively establishing competitive regional markets and competition between the collective offerings of towns.

These wider markets are also a result of industry increasingly being able to access inputs and markets from further away. This has meant that having a local industry does not necessarily translate into a substantial economic benefit for local towns.

Amenity has been gaining in importance for towns and has contributed to shifts in Australia's settlements patterns, particularly as people increasingly had more mobility and wealth. Amenity includes services (favouring regional centres), natural amenity (favouring the coast) and personal lifestyle preferences.

The implications of all of these changes for regional development are not so clear cut. It presents both opportunities and challenges moving into the future.

Future considerations

The conclusions of this report raise a number of questions for government, regional development practitioners and those with an interest in the future of towns and for the people who live in them—with respect to future policy and actions. Is it, for example, sensible or even feasible to pursue policies that resist or seek to reverse the types of long-term trends identified in this report?

Traditionally, governments have focused assistance towards regions and industry, yet the interests of individuals, industry and regions is not always the same. This raises questions about the degree to which government policy should focus on people, regions or industry when considering regional development.

In any event, strategies need to be targeted and informed by an understanding of the underlying spatial adjustment processes. It cannot be assumed that assistance targeted at a region or industry will necessarily help the people within them. Government responses need to be tailored to the specific circumstances of a region. In some instances the best approach may involve pursuing measures to assist those who have become distinctly disadvantaged, for example through training, education or social support services. In others, it may involve pursuing measures which build on a location's competitive advantages, or which assist the region to become better engaged with local industry.

In the past, industry policy has been used in an attempt to meet regional development aims. However, while industry generates the country's wealth, the relationship between industry and towns is weakening. With industry operating in a nationally or internationally competitive environment, is it feasible for government to continue to use industry policy to fulfil regional development objectives? Moreover, given the weakening link between an industry and the fortunes of the town in which it is based, how effective is the introduction of a new industry likely to be for a town? In contrast, this report points to amenity (built, service and natural) as becoming an increasingly important point of difference for locations.

Regardless of whether governments elect to have specific regional development objectives, mainstream government activity has spatial consequences. A major theme of this report is that transport has had profound effects on settlement patterns; therefore government involvement in transport (and communications) will be central to the shape of future development. However, it is also obvious that other mainstream activities of government (such as delivery of health and education services) have spatial implications. From a government perspective it is important to consider the impacts, both positive and negative, which flow from decisions about where government services are placed.