Faculty of Social Sciences - Papers   Faculty of Social Sciences

2016

Cities of Australia and the Pacific Islands

Robyn Dowling
Macquarie University

Pauline M. McGuirk
University of Wollongong, pmcguirk@uow.edu.au

Cities of Australia and the Pacific Islands

Abstract

The Pacific region is a constellation of islands of varying sizes. Australia (the island continent) and Aotearoa/ New Zealand (now carrying both Maori and Pakeha, or settler, names) dominate the region geographically and economically. However, many smaller islands are found in those vast realms of the Pacific Ocean known as Melanesia, Micronesia, and Polynesia. Socially, politically, economically, and biophysically, this is a diverse region with diverse cities. In this part of the world, it is easiest to understand cities as forming two main groups: those of Australia and Aotearoa/New Zealand, and those of the Pacific Islands.

<Figure 12.1>

12

Cities of Australia and the Pacific Islands

ROBYN DOWLING AND PAULINE MCGUIRK

KEY URBAN FACTS

Total Population	36 million
Percent Urban Population	71%
Total Urban Population	23.5 million
Most Urbanized Countries	Nauru (100%)
	Guam (100%)
	Australia (89%)
	Northern Mariana Islands (89%)
Least Urbanized Countries	Papua New Guinea (13%)
	Solomon Islands (22%)
	Samoa (19%)
Annual Urban Growth Rate	1.57%
Number of Megacities	None
Number of Cities of More Than 1 Million	6 cities
Three Largest Cities	Sydney, Melbourne, Brisbane
World Cities	Sydney

KEY CHAPTER THEMES

1.   Cities in this region may be understood as forming two groups—those of

Australia and Aotearoa/New Zealand and those of the Pacific Islands—each with distinct

characteristics.

2.   All countries in this region are dominated by primate cities, but in the case of Australia primate cities are the capitals of states in federal union.

3.   Australia and Aotearoa/New Zealand exhibit many of the urban characteristics of other developed countries, such as the United States.

4.   The urban character of Pacific Island cities is similar to that of less developed countries though they are smaller and have considerably lower rates of population growth.

5.   Sydney is by far the most globally linked city and the key economic center in this vast realm, though the global economic, cultural, and social connections of all cities have increased dramatically.

6.   Many of the cities in the region were established as colonial or national capitals, and urban patterns and character are tied to this political influence.

7.   In Australia, a popularly documented "sea change" phenomenon is drawing people away from the big cities toward small coastal towns.

8.   Suburbanization and gentrification remain key residential forces in Australian and Aotearoa/New Zealand cities, and globalization is a central driver of urban economies.

9.   A multicultural population is increasingly the norm in most cities in the region, especially in Australia and Aotearoa/New Zealand.

10.   Awareness of the environmental impacts of urbanization is rising, with attempts to adapt planning frameworks and everyday life to sustainable outcomes.

11.   Environmental vulnerability, especially to the direct and indirect consequences of climate change, is a key issue confronting the future of cities in the Pacific Islands.

The Pacific region is a constellation of islands of varying sizes (fig. 12.1). Australia (the

island continent) and Aotearoa/New Zealand (now carrying both Maori and Pakeha, or settler, names) dominate the region geographically and economically. However, many smaller islands are to be found in those vast realms of the Pacific Ocean known as Melanesia, Micronesia, and Polynesia. Socially, politically, economically, and biophysically, this is a diverse region with diverse cities.

<Table 12.1>

In this part of the world, it is easiest to understand cities as forming two main groups: those of Australia and Aotearoa/New Zealand, and those of the Pacific Islands. The former have cities with characteristics of more developed countries: industrialized, with a generally high level of affluence, and connected into global flows of people, money, information, and services. There are two key urban characteristics shared by both these nations. First, they are urban. Currently, over 89 percent of Australia's and 86 percent of Aotearoa/New Zealand's population live in urban areas. Second, they are, and long have been, nations of urban primacy: their urban pattern is dominated by a small number of large cities. Approximately one-fourth of all Aotearoa/New Zealanders live in just one city—Auckland—and Australia's two largest cities—Melbourne and Sydney—are home to more than 40 percent of the nation's population (table 12.1).

<Table 12.2>

The islands within Micronesia, Polynesia, and Melanesia have starkly different urban characteristics. They have highly non-urban populations. Although reliable statistics are difficult to obtain, it is estimated that 35 percent of the population lives in urban areas, with a projected increase to over 50 percent by 2025. There are 35 towns and cities with a population greater than five thousand. Two-thirds of the southwest Pacific realm's urban dwellers are to be found in Papua New Guinea (PNG) and Fiji, the most populous nations in the region (table 12.2). The

region's largest cities—Port Moresby (PNG), Nouméa (New Caledonia), and Suva (Fiji)—are tiny by world standards. Negligible population growth is occurring in these cities, where economic opportunities remain limited. In Pacific Island nations, prestige and status are still very much tied to the land and the rural, rather than to cities and the urban.

HISTORICAL FOUNDATIONS OF URBANISM

Australia, Aotearoa/New Zealand, and the Pacific Islands have indigenous peoples with long histories of settlement, up to 40,000 years in the case of Australian Aboriginals. Cities in this part of the world are, however, very young. Urban settlement began with the arrival of numerous colonizers in the 18th and 19th centuries. Australia became a penal colony of the British in 1788, with the arrival of convicts to Sydney and Port Arthur (near Hobart, Tasmania) and later to Brisbane. The continued arrival of convicts to these coastal towns and the establishment of additional settlements like Melbourne and Adelaide, for purposes of colonial administration, commerce, and trade cemented metropolitan primacy. The political independence of each of the British colonies (later to become states) also meant that the capital cities operated independently of each other throughout the 19th century, providing services to their rural hinterlands, acting as ports for the import and export of commodities to and from Europe, and functioning as centers of colonial administration. Indeed, competition between the capitals further worked to bolster primacy. With each capital focused on ensuring continued economic growth, backed by political force within their respective territories, the establishment of alternative, prosperous, and comparable urban centers was made more difficult.

Two major events of the mid- to late-nineteenth century further enhanced the size, functions, and importance of Australia's six colonial capitals. Railroads were focused on the capitals, facilitating more efficient connections between the cities and their hinterlands.

Industrialization similarly occurred within (rather than beyond) these coastal centers of colonial administration, though there were to be later exceptions like Wollongong and Newcastle in New South Wales, and Whyalla in South Australia. By the end of the 19th century, Australia had a total population a little less than four million. Sydney and Melbourne each had populations of approximately half a million, Adelaide, Brisbane, and Perth more than 100,000 each, and Hobart remained small at 35,000 people. Colonialism had hence been responsible for this uniquely Australian urban primacy and settlement pattern in at least two ways. First, the sites of European settlements (either convict or free), with their coastal locations and trading functions, formed the foundations of the colony and its growth. Second, the functions of colonial administration, and competition among the capitals fueled the growth of existing rather than new urban centers.

The first half of the 20th century saw urban Australia grow in the spatial pattern established by British colonialism. A manufacturing boom that began in the 1920s reinforced the primacy of each state capital. This era also saw the beginning of the systemic suburbanization of Australian cities. The establishment of middle-class suburbs in attractive surroundings away from the central city was facilitated by the development of public transport lines radiating out from the city center, as well as the activities of land developers and house builders. With the absence of inner-city slums on the scale of those in Britain, the social differentiation of Australian cities took on characteristics of the sector model related to transport links and features of the natural landscape.

<Figure 12.2>

The turn of the 20th century did see one challenge to the existing capital cities with the planning of the new city of Canberra. The federation of Australia's colonial territories in 1901 was designed to both create and unite a nation. The colonial capitals became capitals of states in the newly formed Commonwealth of Australia, and a new national capital—Canberra—was

established between the two cities that dominated the national urban hierarchy—Melbourne and Sydney. Canberra's location between these two urban leaders was a compromise. The Australian Parliament did not formally relocate to Canberra until 1927, and the city remains comparatively small, with fewer than 400,000 inhabitants (fig. 12.2). Its dominating characteristic is the prominent role played by formal urban planning. A master plan developed by an American—Walter Burley Griffin—guided its development as a "garden city" built around a large lake, with a central focus on a "parliamentary triangle" and satellite suburbs with town centers of their own. Canberra's expansion was slow—only 16,000 people lived there in 1947—and its early economy was reliant on public service and diplomatic functions. Today, its economy is supplemented by a large student population which attends the relatively large number of public and private institutions of higher learning, including the Australian National University.

<Figure 12.3>

In Aotearoa/New Zealand, European settlement and modern urbanization began in 1840 with the signing of the Treaty of Waitangi between the British and the Maoris. Unlike the convict bases of Australia's settlements, free setters in Aotearoa/New Zealand were encouraged to migrate and invest, with the resultant economy largely dependent on pastoral activities like grazing sheep and cattle. Unlike Australia, urban primacy was not a 19th century phenomenon here, due to the originally more dispersed settlement pattern and more diverse reasons for urban settlement. For example, early towns like Wellington and Christchurch were established by trading and/or religious interests; Auckland's natural harbor made it an ideal port (fig. 12.3); and gold rushes underpinned the growth of Dunedin. Thus, by 1911, Auckland had a population of 100,000, Christchurch 80,000, Wellington 70,000, and Dunedin 65,000. Over half of the non-Maori population lived in urban areas. In contrast, throughout the 19th century and the first half

of the 20th century, Maori settlement was predominantly rural.

Like Australia and Aotearoa/New Zealand, Oceania has had a long established indigenous population, and similarly it was the colonial context that underpinned the urban system of the region. Oceania was one of the last regions of the world to be colonized, with British, French, American, and Dutch powers establishing presences in countries like Fiji, Samoa, Tonga, and Vanuatu at various times across the 19th century. Towns first developed as trading ports, usually close to existing villages, good harbors, and viable anchorages. These towns grew slowly, and some, like Levuka in Fiji, declined over time because of relative inaccessibility. They were never large: in 1911 Suva had a population of only 6,000 people, about 5 percent of Fiji's population.

The first half of the 20th century saw a diversification of urban functions and sporadic urban growth. Although widespread industrialization did not occur, the processing of agricultural commodities like sugar, and the extraction of resources through mining, diversified the economic base and saw the growth of cities in Fiji and New Guinea, where the mining towns were nearly as large as the colonial capital of Port Moresby. In Micronesia, intense Japanese colonialism saw cities like Koror, on the island of Palau, grow substantially; other administrative capitals grew slowly. By the middle of the 20th century, urbanization remained limited.

CONTEMPORARY URBAN PATTERNS AND PROCESSES

The contemporary urban systems of Australia, Aotearoa/New Zealand, and the Pacific Islands are based upon the patterns established in previous decades. Economic, social, and political influences across the region have consolidated urban primacy. Urbanization processes, the overall urban pattern of the region, and the characteristics of cities within it, are far from uniform. For cities of the Pacific Islands, tourism, political independence, and instabilities, migration, and environmental hazards play significant roles. In Australia and Aotearoa/New

Zealand, in contrast, industrialization followed by deindustrialization, globalization, international immigration, urban governance, and rural/urban population dynamics are the primary influences.

The Pacific Islands

The historical pattern of urban primacy in a largely non-urban region remains a hallmark of the Pacific's urban geography (table 12.2). By 1960, only Suva (Fiji) and Noumea (French Caledonia) had populations greater than 25,000, and even today the size of cities remains small. Political independence from colonial powers began in the 1970s. Only a few territories, such as French Caledonia, remain in colonial hands. Independence had a number of significant impacts on the region's urban system. Colonial administration was no longer the primary purpose of the largest cities in the region, but processes associated with independence cemented the primacy of these towns. In some, like Port Moresby, independence fostered urban growth because of new investment in urban housing and services. Across the region accelerated urban growth followed independence because of, for example, the removal of negative perceptions of urban living, or the establishment of some countries as tax havens (*e.g.,* Port Vila, Vanuatu). Independence also required bureaucracies in national capitals, and encouraged education and urban living in general.

Land and land tenure systems are a defining characteristic of Pacific cities. In Melanesia, Polynesia, and Micronesia, customary land tenures pose significant challenges for urban growth, housing, and infrastructure provision as well as the quality of urban life. In Port Moresby, for example, one-third of the city's total area is held by traditional owners, and land is seen as a communal resource. However, customary land tenure places limits on the land available to house urban residents and is associated with higher housing costs. It also provides a disincentive to invest in land development and urban infrastructure. A number of possible solutions to the

limitations customary land tenure places on capitalist urban growth have been proposed. These include proposals to lease customary allotments, or the ability to use land to generate income through means other than compensation. Such proposals have been severely hindered by the limited capacity of urban governance across the islands.

Connected to issues of land tenure are the general housing characteristics of the urban Pacific. Palatial houses exist, but they are often built by expatriates and in gated communities. Formal housing of the type commonly found in Australian and Aotearoa/New Zealand cities exists as well. Far more common, however, are informal settlements. The great demand for housing, in the context of substantial urban poverty and limited employment opportunities, means that informal housing is common. Public housing is available, though waiting lists are extremely lengthy.

<Box 12.1; includes Figure 12.4>

Finally, the present and future of the cities of the island Pacific cannot be understood without reference to environmental contexts and threats (box 12.1). Urban settlement has involved degradation of islands' fragile coastal environments. The waste and water requirements of growing urban populations threaten to overwhelm already stressed ecosystems. Urban water is typically sourced from freshwater lenses, and if these are over pumped, saltwater contamination can occur and render the water unsuitable for human use. Because of the geology of the islands, waste disposal also affects the environment. Other forms of water supply contamination can occur (*e.g.,* by chemicals, sewerage), which in turn affects human health. The most important environmental issue for these cities in the 21st century is climate change, especially global warming. The low-lying islands, and their cities, are at risk of inundation because of sea level rise. Climate change is also believed to involve increased storm activity, accelerated coastal

erosion, saltwater intrusion into reserves of fresh water, and increased landward reach of storm waves. Each of these events has the potential to dismantle city infrastructure and threaten urban livelihoods. Environmental hazards are further exacerbated by social vulnerabilities, especially limited institutional capacities for urban planning. In 2010 at the U.N. Framework Convention on Climate Change meeting in Cancun, the Deputy Prime Minister of Tuvalu classed climate change as a "life or death survival issue," threatening the very existence of this Pacific island nation. The highest point on Tuvalu's capital island, Funafuti, is less than 14 ft (4.3 m) above sea level.

The global economic context is crucial to urban economies in the Pacific. Many nations, like Fiji, have turned to tourism for economic survival, with urban consequences. Global commodities and mining, as well as the presence of wealthy expatriates, underpin the urban hierarchy of Papua New Guinea (PNG). And finally, global migration and in particular out-migration, can relieve some of the social, economic, and environmental pressures in cities. In Tonga especially, migration to Aotearoa/New Zealand, Australia, and the United States operates as an urban "safety valve," allowing Tongans to realize economic opportunities overseas rather than in overcrowded and economically limited urban areas. This safety valve has also become part of new, informal, urban economic activities.

In sum, cities of the island Pacific are places of vulnerability and opportunity. In a largely non-urban context, in which effective urban planning and coordination is non-existent at worst and problematic at best, urban living is still sought as a chance for a better quality of life. Though officially derided, life in informal settlements remains attractive.

Australia

<Figure 12.5>

The dominance of state capital cities remains the defining characteristic of Australia's urban

system. The primary drivers of urban development in the 20th century—industrialization, migration and, latterly, globalization—have only reinforced the importance of the state capitals and fueled their population growth. Between 1947 and 1971, the population of Australia's five largest cities doubled, and growth has continued since then. Historically, Sydney (capital of New South Wales) and Melbourne (capital of Victoria) have been the island continent's largest and most economically dominant cities. Australia's manufacturing growth after World War II was centered in Melbourne, which, until recently, housed the majority of Australian corporate headquarters (fig. 12.5). Other state capitals served their rural and resource-based hinterlands, with smaller and less diversified economic bases. In the immediate postwar period, Adelaide was somewhat of an exception, as the center of Australia's car industry.

Aboriginal Australians are much less likely to be urbanized than the broader Australian population. They are also more likely to live in small towns rather than large cities. Indeed, a little over 1 percent of Sydney's total population, and 1.7 percent of Perth's population are indigenous. Indigenous movement to capital cities is often temporary, and linked to kinship and friendship ties with rural areas. Aboriginal people have long dwelled on the fringes of cities, often in substandard housing. Places of residence within the city are related to the provision of public housing and also localities with strong identification for indigenous Australians. One of these places is "The Block," in Sydney's inner city Redfern, where housing and other cultural services are concentrated.

The past 25 years have seen some shifts in the distribution of economic and population growth across Australia's large cities. Two factors underpinned these slight alterations in the urban system. The first was the influx of people into Australian cities through international migration. For the past twenty years, more than 100,000 people annually have migrated to Australia from around

the world, most of these to the capital cities, particularly Sydney, Brisbane, and Perth. Cities that have not received substantial numbers of migrants, like Adelaide and Hobart, have declined in relative terms. The second factor was globalization, or more specifically changing urban functions as the Australian economy became increasingly tied to, and driven by, global flows of commodities and money, and increasingly reliant on globally networked business services. Globalization has seen Sydney rise in prosperity and prominence to become Australia's only world city. The headquarters of Australian-based businesses, and the regional offices of multinationals, are now more likely to be in Sydney than in Melbourne. The relative growth of Brisbane and its surrounding region during the same period can be attributed to internal migration (principally from Sydney), the rise of a tourist-based economy, growing economic ties between Brisbane and the Asia-Pacific region, and Queensland government incentives for business to relocate to Australia's sunbelt. Connections to Antarctic tourism and scientific activities are emphasized in the southern-most capital of Hobart (Box 12.2).

<Box 12.2>

<Box 12.3; includes Figure 12.6>

<Figure 12.7>

<Box 12.4>

Australia's state capitals are highly suburbanized and geographically expansive by international standards (box 12.3). Historically, the predominant housing preference is for a detached house, producing sprawling suburban conurbations (fig. 12.7) like that between Brisbane and the Gold Coast, 37 miles (60 km) away. The continued proliferation of suburban housing is currently under some threat. The high energy demands of suburban life—use of the private car, heating, cooling, and the water use demands of large houses—are increasingly questioned. Limited

availability of land and the high costs of servicing the social and physical infrastructure needs of

new suburbs have led to policies of urban consolidation across the nation, with an emphasis on

sustainable building practices (box 12.4). Mixed-use residential and commercial developments on

old industrial land are increasing, and in some years the construction of new apartments outstrips

that of detached houses. Equally important is a cultural and economic re-evaluation of living in

Australia's inner cities. Australian inner cities are vibrant, cosmopolitan spaces, with a wealth of

retail, social, and recreational opportunities; and they are highly accessible by public transport

(Box 12.4).

<Figure 12.8>

The internal structure of Australian cities has changed over the past three decades. Based

on an analysis of social and economic characteristics, metropolitan localities may be divided into

seven types of places (fig. 12.8): three advantaged and four disadvantaged. In *new economy*

localities are found people employed in new global industries and many educated professionals.

Gentrifying localities are found across Australia's inner cities, and are home to those with ties to

the global economy but with a sizeable proportion of low-income residents as well. *Middle-class*

suburbia houses many educated professionals, though with a low density of connections to the

global economy. *Working-class battler* communities have trades people, often homeowners,

while *battling family communities* have above average levels of single-parent and non-family

households. In *old economy* localities, primarily suburban and especially in Adelaide, the decline

of manufacturing has seen concentrations of unemployment. Finally, *peri-urban* localities on the

fringe of the capitals, attract low-income people seeking cheaper housing or homes for

retirement.

While state capitals have, on average, been growing, small towns in rural and regional

Australia have exhibited divergent patterns. Many rural towns, traditionally operating as service centers for the surrounding farms, have experienced population declines. Decreasing farm incomes, the closure of many public and commercial services such as banks, and limited employment and education opportunities for young people have encouraged migration out of these towns and into larger regional centers or, more commonly, capital cities. A counter trend of growth in Australia's coastal towns is also evident. The 21st century boom in resource prices has meant that towns in coastal Australia have grown rapidly, instigating severe housing shortages and consequent escalations in house prices. The "sea change" phenomenon, in which city dwellers swap a hectic city lifestyle, transport congestion, and high housing costs for a slower pace of life and cheaper housing in coastal towns is also important. Initially confined to older people, principally retirees and those nearing retirement, sea changes are now undertaken by young professionals able to run businesses outside the major cities, as well as less affluent families seeking cheaper home ownership. Towns like Byron Bay, Coffs Harbour and Port Macquarie in New South Wales, Barwon Heads in Victoria, and Denmark in West Australia are commonly identified sea-change locations. "Tree change" is a more recent but similar phenomenon in which urban dwellers move to greener locations like rural Tasmania, inland New South Wales (*e.g.,* Orange, Mudgee) or Victoria (*e.g.,* Daylesford).

Aotearoa/New Zealand

After World War II, the growth trajectories of the cities in Aotearoa/New Zealand largely paralleled those of Australia. The four largest cities of Auckland, Wellington, Christchurch, and Dunedin continued to grow, as did the primacy of Auckland (table 12.1). A number of processes underpinned this pattern. Market reforms since the 1980s have strengthened global economic, cultural, and social ties, which in turn have transformed large cities. Second, immigrants, initially

from the Pacific Islands but also more recently from China and India, have flowed into the large cities, especially Auckland and Christchurch. The third factor is the internal shift in economic activity. Whilst a general process of deindustrialization in Aotearoa/New Zealand occurred in the late 20th century, employment losses in manufacturing were more severe in Wellington, Christchurch, and Dunedin; and some manufacturing relocated to Auckland. Finally, entrepreneurial urban governance processes were deployed to make cities more attractive and to stem population decline. In Wellington, for example, the waterfront was redeveloped using both public and private sector investment. The aim was for the city to become an international conference venue, and the government also located the new Te Papa National Museum there.

Aotearoa/New Zealand cities are low density, though suburban living is no longer the only residential option as high- and medium-rise apartments are becoming more common. The proportion of Maoris living in urban Aotearoa/New Zealand is now almost on par with that of the non-Maori population, because of the loss of Maori land and consequent rural-to-urban migration. Maoris face significant disadvantages in the cities, with high rates of unemployment and lower levels of home ownership and education. Increasing ethnic diversity is also an important urban characteristic.

DISTINCTIVE CITIES

Sydney: Australia's World City

<Figure 12.9>

<Figure 12.10>

With a population currently of about 4.5 million, and projected to reach 5.7 million by 2031, Sydney is the most populous and most prosperous city in Australia. The city is home to some of Australia's most widely recognized iconic landmarks: the Harbour Bridge (fig. 12.9), the Opera

House (fig. 12.10), and Bondi Beach. It is an international finance market, it attracts a growing concentration of corporate headquarters, and it is Oceania's highest value-generating economy and dominant world city. Equally, it demonstrates some of the defining characteristics of contemporary Australian urban life: suburbia, urban-based prosperity arising from an advanced service economy, multiculturalism, and environmental threat.

<Figure 12.11>

<Figure 12.12>

Sydney entered the 20th century as the primate city and highest order service center in the state of New South Wales (fig. 12.11). By 1911, just 123 years after first European settlement, it had a population of 652,000 and was already a city of suburbs. Sydney's post-World War II "long boom" brought unprecedented economic and population growth and set in motion the formative settlement patterns that have shaped the contemporary city. Between 1947 and 1971, population expanded by 65 percent to reach 2.8 million; it grew to 4.1 million by 2006. The vast majority of growth has been accommodated in expansive suburban developments, including large-scale public housing estates built mainly across the city's western suburbs. Despite planned expansions of public transport networks, the rate of urban expansion and rising levels of car ownership meant that the city quickly assumed the car-oriented form of autosuburbia, connected by networks of freeways rather than public transport corridors. Speculative developers' and housing consumers' preferences for low-density, detached dwellings meant that the city assumed a sprawled metropolitan form, poorly served by the existing rail network radiating from the Central Business District (CBD) (fig. 12.12). Twenty years of urban consolidation policy has contained the extent of sprawl but strong population growth (50,000 per year since the late 1990s) has meant that fringe expansion has continued. Sydney's employment,

retailing, and services have been decentralizing since at least the 1970s. The development of regional centers of commercial activity, such as Ryde, North Sydney, Parramatta, Penrith, and Liverpool has given the city an increasingly polycentric form. Indeed, the current metropolitan planning strategy labels Sydney a "city of cities."

<Figure 12.13>

Despite Sydney's predominantly low-rise suburban form, the city center is characterized by high-rise office towers, global tourist landscapes and, lately, residential towers tightly grouped on the edges of one of the world's most spectacular natural harbors (fig. 12.13). Since the late 1960s significant waves of international property investment—in commercial office and hotel developments—have transformed the CBD's built environment, as has the transformation of Sydney's economic base to one dominated by increasingly globally connected financial and other advanced services. Sydney has become one of the most significant financial centers in the Asia-Pacific realm, making up 40 percent of Australia's telecommunications market. Employment in the global city sectors of finance, insurance, property, and business services is concentrated in and around the city center where many of the estimated 600 multinational companies who run their Asia-Pacific operations from Sydney are clustered, along with the headquarters of approximately 200 of Australasia's top companies. The economy of the city center now generates 30 percent of the value of metropolitan Sydney's economic output and contains 28 percent of all metropolitan employment, with high concentrations in the highly paid professional and managerial occupations.

<Figure 12.14>

Concentrated in Sydney's city center are high-paid, advanced-services workers, as increasingly globalized connections have driven long-standing processes of gentrification, the recent resurgence of high-rise luxury residential dwellings, and the multiplication of globalized

consumer spaces. Inner suburbs of 19th-century housing have been revitalized. New up-market residential locales have been built in high-density, previously used land on the edges of the CBD (fig. 12.14), and in a host of high-rise high-density towers throughout the CBD. These developments have meant that the resident population of Sydney's inner city has increased by 40 percent since 1996. The development of a range of globalized consumer spaces, catering both to global tourists and to inner-city residents, have also transformed the city center. In the 1980s the New South Wales government redeveloped Darling Harbour container terminal as an international conference center, festival shopping, and entertainment precinct. In the 1990s, special legislation was passed to enable redevelopment of heritage wharves at Walsh Bay as an exclusive residential, commercial office, and restaurant precinct. Currently the redevelopment of the Green Square precinct, located halfway between the airport and the CBD, is transforming the reisidential and commercial space of this former industrial precinct.

Sydney's world city status is also reflected in the fact that about 40 percent of all migrants to Australia settle there, thus deepening and diversifying the long-established multicultural nature of the urban area's population. Eight out of every ten residents of Sydney were either born overseas or are the children of immigrants. The UK, China, and Aotearoa/New Zealand are the dominant source countries, though there are also substantial numbers of residents born in Vietnam, Lebanon, India, Philippines, Italy, Korea, and Greece. Historically, particular migrant groups—especially those of non-English-speaking backgrounds—have tended to settle initially in particular Sydney suburbs: Greeks in Marrickville and Italians in Leichardt in the 1950s and 1960s, Vietnamese in Cabramatta in the 1970s and 1980s, and Lebanese in Auburn in the 1990s. However, recent research has shown that Sydney's settlement is characterized more

by multi-ethnic suburbs, such as Auburn, rather than ethnic minority concentrations, and by intermixing of different ethnic minority groups both with each other and with the host society rather than by ethnic segregation. Over time, spatial and social assimilation of migrants into a predominantly multicultural city has been the dominant pathway.

Whether growing evidence of social polarization in Sydney will produce more entrenched socio-spatial segregation along lines of class and ethnicity is a concern both to Sydney's planners and citizens. In a trend common to many global cities, Sydney's median dwelling price rose doubled between 2004 and 2014, with the consequence that housing stress (*i.e.,* paying more than 30 percent of household income on housing costs) affects approximately 200,000 households across the city. As the median house price has crept up, lower income groups, including recent migrants, have been increasingly confined either to rental housing or to less-accessible suburbs removed from employment opportunities and services. It remains to be seen whether Sydney's social divides, traditionally nowhere near as pronounced as in U.S. cities, are set to become increasingly stark.

<Box 12.4; includes Figure 12.15>

Nonetheless Sydney remains renowned for its quality of life. It habitually enjoys a top-ranking position in international benchmarking exercises assessing physical and cultural lifestyle assets. However, the city's beautiful natural environment, open spaces, and national parks belie the environmental challenges generated by Sydney's car-dependent nature and population pressure, especially regarding air quality and water supply. Car ownership is ubiquitous and 71 percent of work trips are taken by private motor vehicle. Consequently, air quality suffers due to photochemical smog producing ozone at levels that, while improving, still regularly exceed the 4 hour standard for ozone concentration on 21 days a year. In addition, despite falling rates of

water use per capita, Sydney's population growth is challenging the adequacy of the city's water supply (box 12.4). In 2002, Sydney's water consumption was at 106 percent of the amount that can be sustainably drawn from the drainage basin. Continuing urban development poses a significant threat to Sydney's water quality.

Perth: Isolated Millionaire

<Figure 12.16>

<Figure 12.17>

With a population of 1.7 million, Perth may be the world's most isolated large city (fig. 12.16). Located on Australia's west coast, Perth was established in 1829 along the banks of the Swan River and laid out according to a grid pattern commonly associated with colonial planning. As the colonial capital of Western Australia until 1901 (when the states were united as a Commonwealth), Perth grew slowly for its first one hundred years. Throughout its history Perth served both a rural and mining hinterland, with much of Australia's key mineral resources located in Western Australia—gold and bauxite, for example. It is mining and other global connections that have shaped the city over the past fifty years. The mining boom of the 1960s and 1970s, coupled with immigration (primarily from the United Kingdom but also from parts of southeast Asia), instigated an acceleration of the city's economic and population growth. The location of offices of mining companies and associated services saw tall buildings emerge on the city skyline (fig. 12.17). In Australia the 1980s were a decade characterized by an entrepreneurial spirit embraced by both government and business. A consumption and leisure-based economy emerged, aided by the city's hosting of the 1987 America's Cup Challenge. For the past two decades, the Perth economy has continued to thrive on its economic base of mining and tourism, boosted by substantial immigration.

Now capital of the state of Western Australia, Perth today is far removed from its colonial beginnings. Not only does it have a modern skyscraper-dominated skyline; but the entrepreneurial governance of the 1980s and 1990s involved substantial redevelopment of older parts of the city as tourist and leisure spaces. The redevelopment of the old Swan Brewery site in inner Perth is one example of these processes. The State Government's development corporation chose to redevelop the site which was once home to the factory making Perth's famous beer. The Old Swan Brewery complex now hosts a myriad of leisure activities including theatres, dining, and office space, as well as car parking. Across Australian cities such redevelopment plans are invariably contested. Conflict over the Swan Brewery redevelopment project is representative of indigenous struggles to claim space within urban Australia. In this particular case, Aboriginal protesters drew attention to the symbolic significance the site held for them; and they wanted the brewery buildings demolished and the land returned to parkland. Their point was made in a variety of ways, including an eleven-month period in which they camped on the site. The protests were unsuccessful, with the government authority going ahead with the redevelopment and incorporating elements of Aboriginal culture into the design. At another level the protest was successful for the ways it brought an Aboriginal presence into the urban world.

Perth, like other Australian cities, is a sprawling city. Population growth has spawned metropolitan growth, initially to the east and more recently southward toward the municipality of Mandurah. Population growth also instigated increased demand for water in an environment of minimal rainfall. In 2006, a desalination plant for the city was opened to bolster the city's water supply. For much of the 20th century it was presumed that the private car would adequately cater to the transportation needs of this growing population. More recently, however, the need for better public transportation has been recognized. A new, profitable and well-patronized suburban railway

line to east Perth was opened. Perth is also home to a wide variety of other sustainable transport initiatives. Foremost here are "TravelSmart" programs, run by employers, schools, universities, or workplaces. These programs encourage individuals to consider non-car travel, and sometimes provide incentives to do so. Like Auckland's "walking school buses," they have been successful in reducing private automobile travel in Perth, and in raising awareness of the city's precarious environmental future.

Gold Coast: Tourism Urbanization

Australian sociologist Patrick Mullin has used the term "tourism urbanization" to describe a scenario of tourism-sustained urban growth, where (1) urban development is based primarily on tourist consumption of goods and services for pleasure, and (2) urban form is shaped by the city's function as a leisure space. The Gold Coast on Australia's Queensland coast can be understood in these terms.

In Australia's Gold Coast—25 miles (40 km) south of Queensland's capital city, Brisbane—white settlement began in the 1840s with timber-getting and agricultural development. By the 1870s wealthy Brisbane residents were already discovering the area as a leisure destination, known simply as the South Coast. The development of a rail connection from Brisbane in the 1930s saw the area's appeal broaden and some minor beach resorts emerge. But it was not until the boom of the 1950s that the area took on the name "Gold Coast" and began its development as Australia's highest intensity, high-rise tourist destination. Through many cycles of boom and bust, intense real estate investment in tourist accommodation, retail, restaurants, and entertainment ventures along this 35-mile (56 km) strip of spectacular surfing beaches, transformed the Gold Coast into the most intensely developed coastal tourist strip in Australia and a key international tourist destination.

By the 1980s, the area—especially Surfers Paradise at the heart of the Gold Coast—had gained a dubious reputation as a place of relaxed social norms, brashly opulent neon-lit landscapes, and get-rich-quick real estate deals. Nonetheless, the region matured as a tourist destination. Large-scale foreign direct investment in real estate, especially from Japanese interests in the 1980s and more recent Middle Eastern investment, brought significant diversification to the array of tourist products and consumption landscapes in Surfers Paradise and its hinterland. The area developed a series of integrated tourist resorts such as the Marina Mirage and the golf-themed Sanctuary Cove; large-scale retail malls such as Pacific Fair, Conrad Jupiters casino; multiple golf courses; and its multiple theme parks, including Movieworld, Sea World, Dream World, and Wet'n'Wild Waterworld.

The Gold Coast (incorporated as a city since 1959) has had a rapidly expanding resident population, which now stands at about half a million. Its more than 13,000 accommodation rooms in hotels and serviced apartments accommodate an additional 3.5 million domestic visitors and 800,000 international visitors annually, primarily from Asian countries and Aotearoa/New Zealand. But the Gold Coast today is underlain by more than a consumption-driven tourist economy. It is also one of the most rapidly developing cities in Australia, characterized by sustained rapid population growth rates of around 2 percent annually. Its growth is largely migrant-driven as lifestyle attractions have drawn in-migrants from across Australia, many of whom have found housing in low-density canal-estates built behind the high-rise coastal strip. More recently, as the Gold Coast has expanded, more conventional forms of suburbia have developed including a major new-town development in Robina to the southwest. As this has occurred, the initial dominance of retirees amongst in-migrants—prompting one author to label the city "God's waiting room"—has subsided such that the largest in-migrant group now ranges between 20–29 years old. The city's population is expected to reach nearly 789,000 by 2031; but the Gold Coast is also blending into

the extended urban region of southeast Queensland (SEQ), a conurbation which stretches 150 miles (240 km) from Noosa southward through Brisbane and the Gold Coast to Tweed in northern New South Wales. SEQ's population is approaching 3 million, representing more than two-thirds of Queensland's population. The population of SEQ is projected to reach 4.4 million by 2031.

As the Gold Coast blends into this urban region, its economy is diversifying. Tourism-related industries have tended to support lower-skilled occupations and low-paid and/or casual employment, prone to seasonal fluctuation. Now, the state-supported Pacific Innovation Corridor initiative aims to promote the region's hi-tech, biotech, computing, and multi-media industries that will integrate the region into a globalized knowledge economy and improve rail and road connections to Brisbane's larger economy. Nonetheless, Gold Coast is still one of the lowest income cities in Australia and has higher levels of socioeconomic disadvantage than other Australian cities, in part a product of its occupational structure. The tourism-dominated economy is reflected in lower-skilled occupations, low rates of higher education, high rates of low-paid casual employment, and high rates of unemployment. As the conurbation expands, challenges emerge: managing disadvantage, enabling economic diversification, building roads and transit systems, developing sustainable communities, and balancing environmental protection against development.

Auckland: Economic Hub of Aotearoa/New Zealand

Whilst not the nation's capital, Auckland has dominated Aotearoa/New Zealand's urban system since overtaking Dunedin and Christchurch as the country's largest city in the late 19th century. Like Sydney, it developed on an aesthetically and economically advantageous harbor, and is similarly renowned for its natural beauty. Historically, it too served a rich agricultural and forested hinterland. The deregulation of the national economy in the 1980s paved the way for the

transformation of Auckland. It is Aotearoa/New Zealand's largest, most prosperous and economically active city. By the 1990s, it hosted more than a third of the nation's employment in manufacturing, transport, communication, and business services. It increasingly occupies a strategic position in the national economy, through its operation as a place in which and through which the global economy operates. It is the location of multinationals, international financial transactions, global property investments, and a hub for international tourists. Global rather than local connections are also important in explaining a number of other facets of urban life in Aotearoa/New Zealand.

<Box 12.5>

The 1980s saw the transformation of the Auckland residential and commercial landscapes. High-rise residential towers (like the famous Sky Tower, tallest building in the Southern Hemisphere) were built around the city's CBD, often financed in foreign currencies, designed by architects outside Aotearoa/New Zealand, and managed by global property conglomerates. High-rise residential living has become increasingly popular. The building of medium-density housing has added to the city's density. Sometimes modeled on "new urbanist" ideas imported directly from the United States, these new suburbs modify the conventional suburban way of life with smaller houses, a gridded street pattern, and sometimes a communal open space. Though not gated communities in the strictest sense, the role of these new suburbs in fostering social exclusion is an ongoing issue. In fact, the same issue often arises as inner city neighborhoods undergo gentrification (box 12.5)

Lifestyle television programs and home-focused magazines are hugely popular and foster expenditure on household items and renovation projects in Auckland and its suburbs. Suburban backyards may be getting smaller, but they still serve the important purposes of providing a place

for children to play, domestic vegetable cultivation, and the fulfillment of aesthetic and economic aspirations. Some new groups of migrants do aspire to and do fulfill these suburban ideals, like residence in a detached house. Migration has also transformed suburban landscapes. Suburbs like Sandringham, with new places of worship and retail landscapes, have been the destination of many migrants from Asia.

The sustainability of a large, dynamic city like Auckland is attracting increasing scholarly and policy attention. Contradictions between reliance on the private motor vehicle and a strong environmental consciousness have seen the widespread adoption of "walking school buses." Rather than children being driven individually to school, they are dropped at locations along a designated route and walk to school with other children with parental supervision. Walking school buses now operate in many Auckland suburbs, more likely to be middle-class neighborhoods. They have been credited with removing cars from the road, reducing air pollution, reducing obesity, and enhancing community. Official urban policies of sustainability have already influenced the building of medium-density housing and housing with a small ecological footprint. A more widespread implementation of urban sustainability in Auckland has also recently been discussed.

Port Moresby and Suva: Island Capitals

<Figure 12.18>

Port Moresby and Suva are the largest cities, and political capitals, of their respective nations of Papua New Guinea (PNG) and Fiji (fig. 12.18). They have parallel histories, urban patterns, and contemporary influences. While their current political instabilities may be unique, their other characteristics are broadly representative of cities in the island Pacific.

<Figure 12.19>

Neither PNG nor Fiji has a prosperous economy. They have weak manufacturing sectors,

are reliant on an agricultural enterprises beset with inefficiencies and at the mercy of low globalization, and are plagued by political instability. Hence, both Suva and Port Moresby have fragile economic bases. While population has been steadily growing in both cities, employment opportunities have not. Consequently, unemployment is high, with one estimate putting unemployment in Port Moresby at around 60 percent. These fragile economic circumstances underpin the most salient characteristics of Pacific Island cities: a large informal sector, including informal settlements, plus political problems and unrest (fig. 12.19).

Informal, squatter-like settlements are common in these cities. Port Moresby has at least 84 agglomerations of substandard, poorly serviced housing, in which urban poverty is concentrated; Suva has just a little less. Basic urban infrastructure—water, sewerage, electricity, and garbage collection—is either completely lacking or minimally provided in such settlements. Problems are exacerbated by a lack of formal employment opportunities. Urban poverty is rising, exemplified by the increasing number of street children. Informal employment, particularly prostitution, has arisen to counter the lack of formal-sector employment opportunities.

Policy responses to urban poverty and marginalization in Suva and Port Moresby have been small and problematic. The under funding of basic infrastructure has contributed to the problem. There is widespread opposition to the urban poor and street prostitution. The government's response to prostitution, the prevalence of street children, and informal settlement has been largely negative. In PNG, problem settlements have been bulldozed rather than adequately resourced. More generally, these cities have been sites of social and political unrest, which has had implications for the internal structures of these cities. In Port Moresby, for example, security concerns have seen European and other expatriates withdraw further into barricaded residential estates on the hillsides of the city.

TRENDS AND CHALLENGES

Many of the cities in Australia and the Pacific are cradled by fragile ecosystems and are extremely vulnerable to the multifaceted impacts of climate change. Australia's largest cities are further challenged by the fact that they area all located in areas where climate change is inducing significant declines in rainfall levels. All of the capital cities have desalination plants in operation or nearing completion, to convert seawater to drinking water. This may be one solution to water supply, but has other environmental impacts due to the voluminous energy demands of the desalination process. In addition, the geographic expansion of urbanized areas involves the loss of productive land, loss of biodiversity, and increased energy use. The imperatives in all cities have thus become reduced energy consumption and emissions reduction alongside increased use of renewable energy.

<Figure 12.20>

Urban governance provides many challenges across the region. The challenge is the establishment of effective urban governments able to meet environmental and security challenges and fashion positive outcomes (fig. 12.20). Governance processes that contribute to social cohesion are also key. In Australia and Aotearoa/New Zealand, urban governance is now characterized by a variant of neoliberalism in which market processes and solutions underpin policy. Waterfront redevelopments in many cities are classic outcomes of neoliberal policies. The extent to which such governance is equitable remains questionable, and ways to produce more "just" cities within such a framework are still being sought. Equitable outcomes for indigenous peoples of these cities are especially important.

Finally, the provision of adequate, appropriate, and affordable housing is a pressing issue for all cities in the region. In Sydney and Melbourne particularly, where house-price escalation has been intense, affordability has now reached historic lows. Mortgage stress—where

households are paying more than 30 percent of gross household income on housing—has risen, most particularly in the suburbs. The impacts of the affordability crisis include displacing younger people and lower-paid workers from high-cost urban areas, labor shortages, and growing debt burdens on households with mortgages.

SUGGESTED READINGS

Baum, Scott, Robert Stimson, and Kevin O'Connor. 2005. *Fault Lines Exposed: Advantage and Disadvantage across Australia's Settlement System.* Clayton, Victoria: Monash University ePress. Uses quantitative analysis to identify categories of places that are differentially advantaged and disadvantaged by processes of global change.

Connell, John, and J. P. Lea. 2002. *Urbanisation in the Island Pacific*. London: Routledge. Third edition. An overview of urbanization in 11 independent island states.

Connell, John, and Phill McManus. 2011. *Rural Revival? Place Marketing, Tree Change and Regional Migration in Australia.* Surrey: Ashgate. Examines urban-rural migration using numerous case studies across Australia, to understand how urban-to-rural migration can be achieved and offer approaches for wider applications.

Forster, Clive. 2004. *Australian Cities: Continuity and Change*. South Melbourne: Oxford University Press. Explores the urban experience across the Pacific Islands, including the role of cities in national development and as centers of globalization.

Jacobs, Jane M. 1996. *Edge of Empire: Postcolonialism and the City*. London and New York: Routledge. An analysis of how the connections built by globalization and the postcolonial world shape and reshape the composition of cities.

Le Heron, Richard, and E. Pawson. 1996. *Changing Places: New Zealand in the Nineties*. Auckland: Longman Paul. Provides an overview of the transforming geography of New

Zealand including its cities and regions in the context of globalization.

Major Cities Unit. 2013. *State of Australian Cities 2013.* Infrastructure Australia. Canberra: Australian Government. Provides a detailed empirical snapshot of demographic, economic, social, environmental and governance dynamics of Australia's major cities.

McGillick, Paul. 2005. *Sydney, Australia: The Making of a Global City.* Singapore: Periplus. A photographically illustrated history of Sydney's built environment.

McManus, Phil. 2005. *Vortex Cities to Sustainable Cities: Australia's Urban Challenge*. Sydney: University of New South Wales Press. Examines the histories and planning decisions that have contributed to the unsustainability of Australian cities.

Newton, P. (ed) 2008. *Transitions: Pathways toward Sustainable Urban Development in Australia*. Canberra: CSIRO Publishing. Examines demographic and developments trends and their implications for resource demands and potential pathways to sustainable urban development.

O'Connor, Kevin, Robert Stimson, and Maurice Daly. 2001. *Australia's Changing Economic Geography: A Society Dividing*. Melbourne: Oxford University Press. Provides an overview of the impacts of economic and social change, including globalization, on spatial patterns of economic performance across Australia.

Randolph, Bill, and Andrew Tice. 2014. Suburbanizing Disadvantage in Australian Cities: Sociospatial Change in an Era of Neoliberalism, *Journal of Urban Affairs*, 36(1): 384-399. Analyses Australia's social disadvantage using Census data from 1981-2006, focusing on Sydney.

Box 12.1 Urbanization and Human Security

"Existing insecurities (e.g. income inequalities, environmental degradation, lack of services etc.) are catalysts in the process of urbanization (fig. 12.4). Rural to urban population movements, however, give rise to vulnerabilities within urban places, including pollution, exposure to hazardous substances, resource scarcities and inequalities. Vulnerability is defined as having biophysical and social components. Biophysical vulnerability refers to the potential for loss from environmental threats. . . . Social vulnerability refers to the social and institutional capacity that defines both the susceptibility and the ability to cope with environmental threats. . . . [I]t is the interaction of social and biophysical vulnerability that contributes to the vulnerability of specific places. At the center of the Figure is the definition of human security, especially in the context of urbanization. The definition suggests that the state of human security will be determined by environmental threats, referred to in the figure as biophysical vulnerabilities, which in an urban setting would include scarcities of basic resources, such as water, land and energy, and degradation of environmental quality. These threats have potential to undermine human security in myriad ways, but include most notably their implications for human health and physical well being, economic welfare, nutrition levels, and access to adequate housing."

Source: Abridged from Chris Cocklin and Meg Keen, 2000, Urbanization in the Pacific: environmental change, vulnerability and human security. *Environmental Conservation* 27, 4, pp. 392-403.

Box 12.3 The Geography of Everyday Life in Suburban Sydney

Australia is a suburban nation. Despite increasing urban consolidation and gentrification, more than 72% of Sydney's population lives in detached housing, and 33% in areas more than 15 kilometers (9 mi) from the city center. Suburban Sydney, unlike North American suburbs, is heterogeneous. Sydney's greatest concentration of migrants is found in its suburbs, and hence we see pockets of affluence and poverty neighboring each other. What is everyday life like in this differentiated world city?

Suburban Sydney residents live in houses of varying age and design. New houses are more likely to be large – 27% of houses have four or more bedrooms, a double garage, formal and informal living areas, separate rooms for each child, perhaps a games/media room and a backyard that may just be able to accommodate a cricket pitch. Family members – both adults and children – typically know their immediate neighborhood and participate in local sporting and recreational activities. The family shops locally, sometimes at a small corner shop or on a main street, but more likely at a supermarket in a large shopping mall. Here, not only can they pick up their weekly provisions, but they can also eat a meal and see a movie.

Daily travel patterns are increasingly complex spatially and socially. One adult (more likely male) will commute to the CBD for his job in the finance or business sector or to another suburb for manufacturing employment. The woman is likely to work in this or a nearby suburb, most likely in retailing or a similar service sector job in banking, hospitality or education. The limited availability of public transport in certain parts of suburban Sydney, and the generally poor servicing of cross-suburban travel mean that these journeys to work are most likely to be undertaken by car. For mothers of young children the

importance of the car is even more pronounced, as she drops children at school/childcare on her way to work, and takes them to social and sporting activities on the way home (fig. 12.7). For these suburbanites, the time and cost of car travel is becoming an increasing burden, though with no relief in sight.

Box 12.2 Hobart as a Gateway to Antarctica

Hobart is Australia's southernmost capital city, located at approximately 43 degrees south of the equator on the island of Tasmania. While the majority of Australian and New Zealand capital cities have strong connections to the Pacific and its islands, Hobart's location and history provide foundations for strong links to Antarctica, and the designation 'gateway to Antarctica'. Historical ties, research connections and tourism underpin this designation. Building upon a long history as a sealing and whaling port in the first half of the nineteenth century, Hobart became a key staging point for many Antarctic explorations. French and British expeditions of the 1830s were pioneering, though there was a lull until a flourishing of scientific and exploration visits in the 1890s. Hobart has been involved in most of the significant Antarctic explorations, including those of Roald Amundsen (1910-12) and the first Australian expedition by Sir Douglas Mawson (1911-14). Hobart was used to gather supplies before ships departed, and also as a site from which to announce the success (or otherwise) of voyages upon their return.

Hobart remains a hub for Antarctic scientific exploration today. A number of key research bodies concerned with Antarctica and its surrounding oceans are either based in or

networked through Hobart, such as the International Antarctic Institute and the Australian

Antarctic Division. The latter is responsible for overseeing Australia's engagement with the

Antarctic territories, both scientific and more broadly.

Tourism is an increasingly critical element of Hobart's economic fortunes. While the

majority of visitors to Antarctica leave from South America, a small number depart via ship

or plane from Hobart, typically destined for East Antarctica. These journeys take between 7

and 14 days by ship and 4.5 hours by plane. For those unable to afford the time or expense

of such journeys, Hobart also offers visitors recreations of the Antarctic expeditions of the

20th century. Hobart's Constitution Dock houses the Mawson's Huts Replica museum, a

series of buildings that recreate the physical sensations of the huts lived in by Douglas

Mawson and his team during their expedition of 1911-1914. Built from the same materials,

and with the use of digital audio to recreate a windy Antarctic landscape, the huts enable

visitors to experience what life was like for Mawson and his team of 18 men. This theme of

replicating Antarctic experiences is found at a number of other sites in Hobart, such as a

sub-Antarctic plant house at the botanical gardens, and a walking tour of significant sites

and moments in Antarctic exploration.

Box 12.4 Green Buildings

The challenges of reducing the consumption of finite resources – especially water

and fossil fuels – in cities of Australia, Aotearoa/New Zealand are great. National scale

policies that encourage the reduction of demands for energy and water and/or promote the

use of renewable sources of energy are sparse. The picture at the building scale is more

positive. Encouraged by local government policies and building regulation, new housing developments in the inner cities are innovatively embracing low energy infrastructures. The Central Park development in inner Sydney is a salient example. Occupying the 5.8 hectare site of a former brewery, Central Park consists of 8 residential, commercial and heritage precincts with an eventual expected occupation of 4,000 residents. Building a neighbourhood that was sustainable across multiple dimensions was a goal of the development. The use of non-renewable sources of energy is achieved with an onsite tri-generation facility that provides power to site. Water supply is harvested from rainwater collected in tanks at various parts of the site, while wastewater from commercial, residential and garden uses is collected and recycled for use in cooling systems, toilets and landscape irrigation. Finally, the buildings have both green walls and green roofs, planted with native vegetation and watered with recycled water, with the aim of providing not only more visually appealing facades but also natural means of cooling. Importantly, this neighbourhood was reliant on financial and regulatory support from various state agencies. This includes subsidies and grants from the NSW Government, as well as the sustainability measures implemented by the City of Sydney.

Source: Central Park Sydney (2015) *Central Park Sydney* [ONLINE] Available at: http://www.centralparksydney.com. [Accessed 04 May 2015].

Box 12.5 Multiculturalism and Local Government in Australia

Cities in Australia have long been immigrant cities. After World War II, labor migration to Australia was dominated by people from the United Kingdom, Ireland and southern Europe. The 1980s and 1990s saw a shift to the countries of southeast Asia, and

more recently toward refugees from Africa and the Middle East. Hence, cities like Sydney are characterized by considerable cultural diversity. It is largely within urban neighborhoods that "everyday multiculturalism," the ordinary living of cultural diversity, occurs. Sometimes, this engenders conflict, as seen in the following excerpt from an article by a religious affairs reporter for the *Sydney Morning Herald.*

A Muslim centre built in the heart of Sydney's Bible Belt is facing fresh opposition - over its plans to host midnight prayers. But plans to extend the Annangrove prayer centre's hours and permit it to open late at night on three holy days have attracted four objections - well short of the thousands of complaints that almost blocked its construction four years ago. . . . The trustees [of the Imam Hasan Centre] want permission to open the doors until midnight three times a year, an increase in capacity from 120 to 150 people and a 45-minute extension in operating hours to permit cleaning and the occasional committee hearing. "Can you tell me any church that has any time restriction or limit on numbers?" said Abbas Aly, one of the centre's trustees. . . . If you ring up our neighbours they'll tell you they hardly notice us here. It's hardly used midweek and most of our programs are on a Saturday."

The [Baulkham Hills] council originally refused to approve the centre when more than 900 local residents claimed its existence threatened the ambience and character of the semi-rural suburb, in Sydney's north-west. Mr Aly appealed to the Land and Environment Court, which reversed the decision on the grounds that the local objections were not based on facts. Once construction started, the site was vandalised, sprayed with racist graffiti and smeared with animal offal. Pigs' heads were impaled on wooden stakes. Mr Aly said tensions between local people and the centre had long since dissipated, except for the occasional persistent critic, especially as it had become

clear that the centre looked more like a community centre than a mosque. "We've had quite a

positive response to our latest development application from neighbours, compared to the 8500

complaints to our construction. We get quite a number of people who have come in to apologise.

I asked them did they see the plans, they said, 'No, we just believed what we were told', and I

take my hat off to them for coming in and making their peace." The Mayor of Baulkham Hills,

Tony Hay, said four complaints had been lodged against the variation in consent orders, mainly

expressing concern that creeping changes were undermining the intent of the original Land and

Environment Court proceedings. No decision had been taken yet. . . .

Source: Linda Morris, "Midnight prayers raise objections," *Sydney Morning Herald*,
September 10, 2007.

Box 12.6 Heat, Fire and Flood

Nature and culture—geographical location, environmental conditions and human

practices—combine to ensure that the cities of Oceania face a daunting array of

environmental hazards including bushfires, drought and the impacts of climate change.

When the yearly Australian bushfire season crosses paths with urban development

the impacts can be devastating. There have been eight major bushfire events—mainly

caused by human agency—in the Sydney region since the late 1950s. They have resulted in

extensive losses of property, wildlife and human life. In the catastrophic Sydney fires of

1993-94, 800 fires resulted in 4 deaths and the loss of 206 homes. 800 000 hectares were

burnt, including most of Sydney's historic Royal National Park. Fires reached within 10

kilometers of the CBD and 25,000 people were evacuated as smoke shrouded the city and

black tide-marks of ash were washed up on Sydney's famous beaches. The historic drought

conditions afflicting all of eastern Australia since 2001 has heightened the severity of individual fire events, producing "unstoppable" fire conditions. January 18, 2003, saw Australia's capital city, Canberra, engulfed by fires that had been triggered by lightning strikes in drought-affected vegetation areas and had burned around the city for several days previously. High temperatures and strong winds took the fires out of control as they reached the urban limits. As the city set alight, more than 500 homes were destroyed and 4 people killed; many more were afflicted by smoke inhalation and fire-related illnesses. At the margins of Australia's cities, as residents seek to live close to high quality natural environments at the edge of the bush, the interface of fire-prone ecosystems and urban development continues to expand, meaning that bush-fire hazard will be an on-going feature of Australian urban life.

Many further forms of environmental hazard arise from climate change. By 1999 Australia was the world's worst per capita emitter of climate-change-inducing greenhouse gases, with about half of those emissions attributed to urban activities including energy generated predominantly from coal. Despite research suggesting that carbon dioxide emissions could be significantly reduced through economically feasible technological advances, shifts to renewable energy and subsidized promotion of energy efficiency practices, the political will to secure this transformation is currently lacking. While this is the case, both Australian cities and those of neighboring Pacific Island nations will continue to live with the threat of the escalating hazards of climate change. For the Pacific Island nations the most devastating of these is sea level change, already disrupting tourism and local livelihoods, and pushing islanders to migrate. Australian cities are liable to become increasingly vulnerable to flooding related to intensive storms and sea level change: a

particular concern to a nation in which the population is intensely concentrated in coastal cities. Simultaneously, rising temperatures will bring intensified photochemical smog, water shortages and rising numbers of days with very high temperatures. In a peculiar circularity, this will limit the number of days in which controlled burns to reduce the fuel load of bushland on the urban margins are possible and the product of this will be intensified risk of severe bushfires.

Box 12.7 Gentrification and Ponsonby Road, Auckland

Whether the claim that gentrification is now a global phenomenon is valid or not, this urbanization process has certainly reshaped the inner suburbs of many of Australia's and New Zealand/Aotearoa's cities. The process has witnessed middle class renovation and resettlement of formerly working class housing in inner city neighborhoods in all the major metropolitan centers, as well as in regional cities such as Newcastle and Wollongong in New South Wales. Gentrification is not merely a residential phenomenon but one involving re-fashioning local shopping streets, leisure and recreation facilities and neighborhood services as residents' aesthetics, ethos and consumption patterns combine to mould local streetscapes. These impacts are evident on King Street in Sydney's Newtown, Brunswick Street in Melbourne's Fitzroy's, Boundary Road in Brisbane's West End, Darby Street in Newcastle's Cooks Hill, and Ponsonby Road in Auckland's Ponsonby.

The suburb of Ponsonby is located less than a mile west of Auckland's CBD. After World War II, many of Ponsonby's more prosperous residents relocated to the expanding outer suburbs and were replaced by lower-income Pacific Island and Maori migrants. However, waves of gentrification commenced in the 1970s, as diverse groups of young,

well-educated, Pakeha (white New Zealanders of European descent) were attracted to the

area by its cheap property, low rents and social and ethnic diversity. Ironically that

diversity can be threatened by the very process of gentrification. In Ponsonby's case,

gentrification overlapped with an Auckland-wide housing boom and property price

inflation in the 1990s; the result has been significant displacement of lower-income, less-

educated inhabitants, driven out by rising rents and spiraling house prices. Ponsonby's

population has, proportionately, become distinctly "whiter" and higher income.

Nonetheless, despite price inflation, the area has maintained a relatively young population

and a significant proportion of rental housing.

Certainly, diversity is characteristic of the dramatic transformation of the

consumption spaces and public culture of Ponsonby Road

(http://www.ponsonbyroad.co.nz/ponsonbyroad/). Gentrification has combined with

changes to licensing laws to see the birth of a thriving agglomeration of over 90 cafes,

restaurants and bars, interspersed with specialty stores, greengrocers, butchers and

newsagents. Mark Latham's (2003) research has shown how the plethora of cafes and

bars—often flamboyantly and expensively styled and open to the street—depart from the

more traditional, enclosed spaces of pubs and the culture of hard-drinking masculinity they

accommodate more readily than other forms of sociality. As a result, gentrification has seen

Ponsonby Road develop a range of more ambiguous spaces for consumption and sociability

that are welcoming to women, gay-friendly and less confined to traditional norms of

gendered identity. In this particular site of gentrification, working class displacement and

middle-class colonization have been accompanied by the development of a diverse public

culture that, while definitely accessible (most easily to those with disposable income), is

open to diverse expressions of identity and diverse ways of inhabiting the city.

Source: Latham A. 2003. Urbanity, lifestyle and making sense of the new urban cultural

economy, *Urban Studies*, 40, pp. 1699-1724.

Table 12.1   Australia and Aotearoa/New Zealand: Changes in Distribution of National

Population

Nation/Cities	% National Population 1981	% National Population 2006	% National Population 2013
Australia			
Sydney	21.8	20.7	20.9
Melbourne	18.6	18.1	19.1
Brisbane	7.2	8.9	9.8
Perth	6.2	7.3	8.7
Adelaide	6.3	5.6	5.7
Hobart	1.1	1.0	1.0
Darwin	0.4	0.5	0.6
Canberra	1.6	1.6	1.7
Aotearoa/New Zealand			
Auckland	26.1	29.2	33.4
Christchurch	10.1	8.7	8.0
Wellington	10.8	9.6	4.5
Dunedin	3.6	2.7	2.8

Sources: New Zealand Official Yearbook, 88th ed.; *Year Book Australia*; New Zealand *Census of Population and Dwellings 2006*; Australian *Census of Population and Housing 2006;* New

Zealand *Census of Population and Housing 2013*; Australian *Bureau of Statistics Estimated Resident Population 2013*

Table 12.2   Population of Pacific Island Cities

ISLAND NATION/City	Population (2015)	% of Country's Population
FIJI	909,389	
Suva	77,366	8.5
Nadi	42,284	4.6
Lambasa	24,187	2.6
KIRIBATI	105,711	
Tawara	40,311	38.1
Betio Village	12,509	11.8
Bikenibeu Village	6,170	5.8
MARSHALL ISLANDS	72,191	
Majuro	25,400	35.2
VANUATU	236,486	
Vila	35,901	15.2
Luganville	13,397	5.7
Norsup	2,998	1.3
TONGA	106,501	
Nukualofa	22,100	20.7

Neiafu	4,320	4.1
Havelu	3,417	3.2
SOLOMON ISLANDS	622,469	
Honiara	56,298	9.0
Gizo	6,154	1.0
Auki	4,336	0.7
SAMOA	197,773	
Apia	40,407	20.4
Vaitele	5,631	2.8
Faleasiu	2,592	1.3
PAPUA NEW GUINEA	6,672,429	
Port Moresby	283,733	4.3
Lae	76,255	1.1
Arawa	40,266	0.6

Source: Country Watch 2015 *Country Profiles*, http://www.countrywatch.com/