

2. Auckland, New Zealand

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2.1 INTRODUCTION

Auckland is New Zealand's largest city, with a population of 1.4 million. Located on a narrow isthmus between the Pacific Ocean and the Tasman Sea, incorporating an area of 1,102.9 square kilometres, the city has grown rapidly as the result of a strong and dynamic economy, and high levels of immigration, especially from the Pacific Islands and Asian nations. Called the 'City of Sails', as a legacy of it hosting the America's Cup in the early 2000s, Auckland's harbour regularly is filled with hundreds of leisure boats. Auckland is considered one of the top 10 most liveable cities in the world.⁸¹

The city has undergone significant changes to its economy, demography and governance arrangements over the last three decades. Although a modern, well-developed and prosperous city, Auckland continues to struggle with problems associated with managing urbanization and past local urban governance issues, especially dealing with regional traffic, housing, and social issues associated with its complex mix of migrant and indigenous cultures. However, significant recent reforms to local government and improvements in the New Zealand economy have seen the city make considerable progress toward its transformation and revitalization.

Photo 2.1 Auckland City



Credit: Richard Harris.

The city has a very strong focus on sustainable development. Auckland has been very active in fostering sustainability approaches to urban and regional planning, housing, urban ecology, climate change, green energy and infrastructure, smart transport and participatory governance. Judged one of the most innovative cities in the Asia-Pacific region, it is a leader in areas of human talent diversity, technology innovation ecosystems and global integration in moving towards the future.⁸² Many of the city's initiatives are in line with international good practice.

The following chapter outlines key economic, governance, social, natural, physical and environmental issues facing the city of Auckland, and presents examples of sustainable urban development initiatives that have been adopted to address the growing challenges of urbanization and growth management. Many of these initiatives have the potential for adaptation and application in other cities in the Asia-Pacific region.

2.2 THE ECONOMY

Auckland is New Zealand's gateway city for trade, investment, transport and tourism. The city's estimated GDP in 2013 was NZD 86 billion (USD 66 billion), which accounts for 35 percent of New Zealand's GDP. GDP per capita in 2013 was approximately USD 46,600 compared to USD 41,500 for the economy as a whole. The city's GDP in 2013 grew by 2.9 percent, compared to 2.5 percent for the economy overall. McKinsey's predicts that GDP could increase to USD 83 billion by 2025.⁸³

For many years, the Auckland economy was moderately competitive relative to other Organisation for Economic Co-operation and Development (OECD) developed cities, with its relatively low productivity and labour performance.⁸⁴ However, the economy is now becoming more competitive, largely due to economic and governance reforms, and free trade agreements with Australia and economies in Asia. The reforms stimulated diversity and economic growth, creating new investment opportunities and jobs in a range of industry sectors, attracting innovators and entrepreneurs from around the world (Table 2.1 Key Economic Facts).

Table 2.1 Key Economic Facts – Auckland

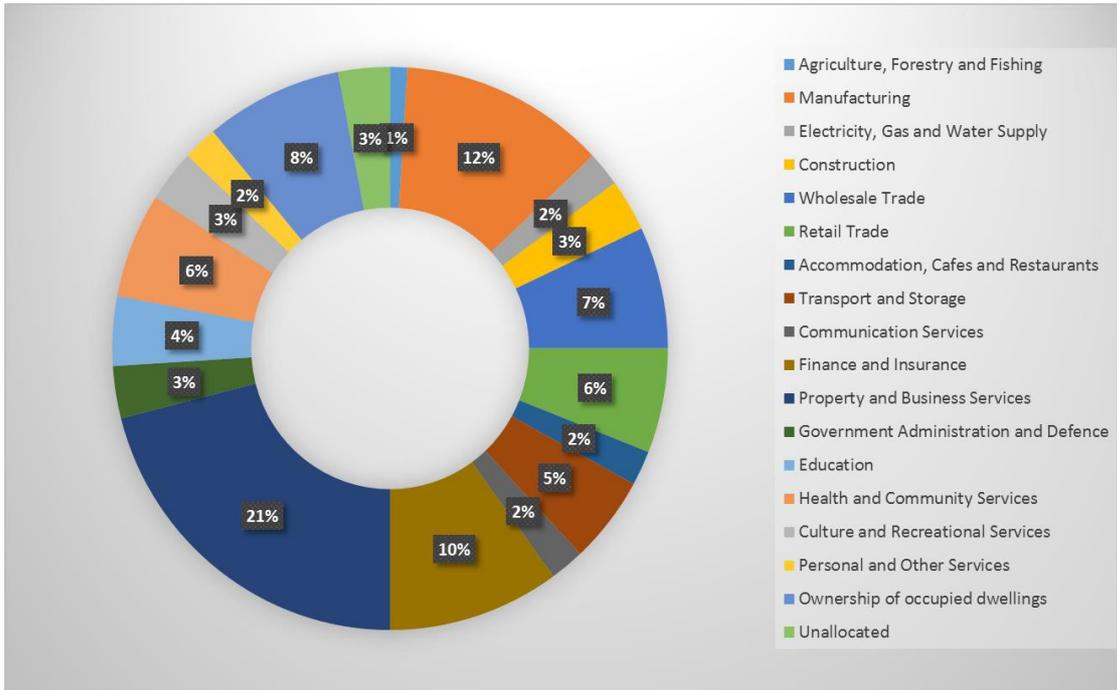
Auckland Regional Government Area	
Value of the economy (2013)	NZD 86.074 billion (USD 66 billion)
Area	Urban 1,102.9 km ² (23%)
	Rural 3,791 km ² (77%)
	Total 4,894 km ²
Estimated residential population (2014)	Urban 1,413,700 (92.6%)
	Rural 113,300 (7.4%)
	Total 1,527,000
Urban density (2013)	1,280 people per km ²
Economic growth (2013)	2.9%
GDP per km ² (2013)	USD 66 million
Employment participation rate (2013)	64.9%
Unemployment (2013)	5.4%
No. of businesses (2013)	163,582
Key export sectors	Dairy, meat, wool and wood products, fish and machinery

Source: Auckland City Council, *Monitoring Research Quarterly* 4(1) (2011): 4.

2.2.1 Key Industry Growth Sectors

Auckland is a magnet economy, pulling in labour, resources and capital domestically and internationally. As New Zealand's primary population centre and employment hub, it is a prime focus for investment, particularly in the real estate, finance and leisure industries. Figure 2.1 shows Auckland's industrial mix. Property and business services, manufacturing, finance and insurance, are the largest economic sectors and make up 40 percent of the city's economy.⁸⁵

Figure 2.1 Breakdown of GDP (percent) of Auckland’s Economy



Source: Auckland Tourism, Events and Economic Development (ATEED), 2013.

The largest industry sector comprises service industries catering to the local market. The growth in the economy and employment has been in low value adding services, driven by domestic demand for housing and rising household consumption leading to a steep rise in the growth of imports. The city recognizes the importance of increasing value added manufacturing and the export base of the economy but acknowledges this will need to be in more advanced technology-based products and services.⁸⁶ Auckland’s key industry growth sector strategies, therefore, have become more focused on the export of niche advanced services in recognition of the city’s growing competitiveness in the fields of yachting, computer graphics, and knowledge services.⁸⁷

2.2.2 Trade

2.2.2.1 Trade Flows

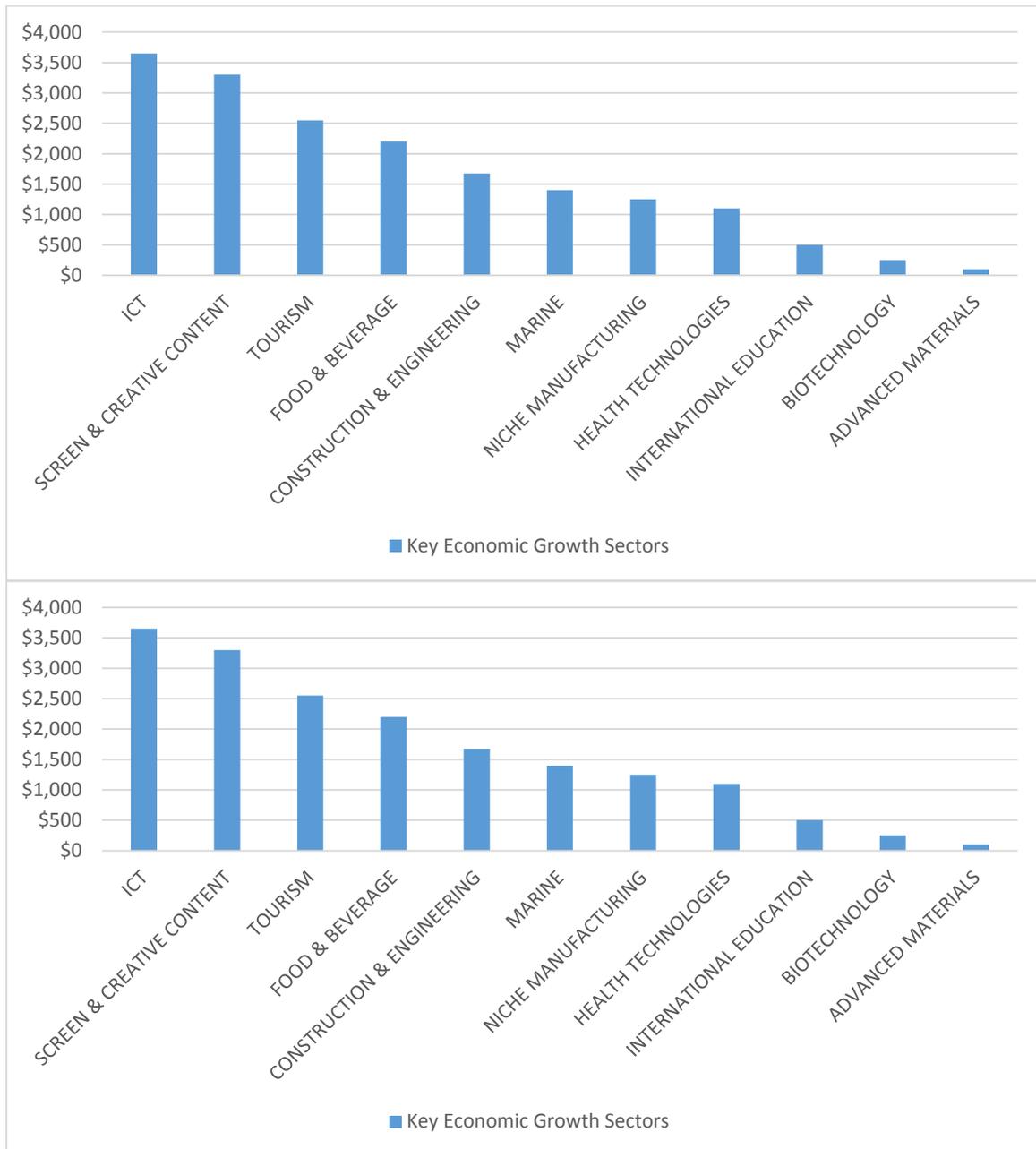
The Port of Auckland handles over NZD 26.4 billion (USD 19.8 billion) of trade annually, being 37 percent of New Zealand’s total seaport trade, and 31 percent of trade for all ports, including airports.⁸⁸ Figure 2.1 illustrates the current contribution of key industry sectors to Auckland’s GDP. Auckland’s trade is dominated by the services sectors, with the information and communications technology (ICT), creative and tourism industries being significant service industry export sectors. The city’s economic development strategy places a sharp focus on the strengthening of tourism, construction, engineering and ICT services with the goal of increasing the city’s overall GDP.⁸⁹

2.2.2.2 Trade Agreements

New Zealand currently has free trade agreements with many economies in and around the Pacific region including Australia; Hong Kong, China; Malaysia; China; Thailand; and Singapore. Negotiations are currently under way with Russia; Belarus; Kazakhstan; India; Korea; and the Gulf Cooperation Council, which manages trade agreements to the Middle Eastern market.⁹⁰

As one of the largest international cities in Oceania, Auckland maintains formal relationships with a host of cities worldwide. Most notable are Auckland's relationships with Australia and China. New Zealand's top five export destinations include Australia (19%), China (15%), the United States (9%), Japan (6.5%), and the United Kingdom (3.3%). The top five products are concentrated milk (15%), sheep and goat meat (5.7%), butter (4.4%), rough wood (3.9%) and frozen bovine meat (3.8%).⁹¹

Figure 2.2 Key Economic Growth Sectors of Auckland Economy, million NZD, 2010



Source: Based on data from Auckland Tourism, Events and Economic Development (ATEED), 2013.

2.2.3 Economic Competitiveness

The Economist Intelligence Unit's *Hot Spots 2025: Benchmarking the future of competitiveness of cities* (2013) ranked Auckland 42nd on the overall 2025 city competitiveness ranking of 120 cities. Auckland's overall ranking was marginally higher than the average for the 120 cities surveyed, reaching an overall score of 56.7/100. The city demonstrated above average strength in 'institutional effectiveness', 'physical

capital’, ‘social and cultural character’ and ‘human capital’. It ranked average for ‘financial maturity’ and below average for ‘global appeal’ and ‘economic strength’. In two categories, ‘institutional effectiveness’ and ‘human capital’, it ranked higher than both Sydney and Melbourne (Table 2.2).⁹²

Table 2.2 Economic Competitiveness of Auckland, Melbourne and Sydney, 2013

	Overall	Economic strength	Physical capital	Financial maturity	Institutional effectiveness	Social and cultural character	Human capital	Environmental and natural	Global appeal
Auckland	56.7	28.8	90.2	50.0	95.9	75.0	76.4	75.0	6.5
Sydney	63.1	31.3	98.2	83.3	94.8	95	68.7	75.0	25.5
Melbourne	62.7	31.3	100	83.3	94.7	87.5	68.9	83.3	18.9
Average for 120 cities surveyed	49.1	35.9	77.3	50.0	63.3	63.8	63.7	66.7	9.0

Source: Based on data from Economist Intelligence Unit, *Hot Spots 2025: Benchmarking the Future Competitiveness of Cities* (London: Economist Intelligence Unit, 2013).

2.2.3.1 Local Economic Development

Local economic development in Auckland is driven strongly by the desire of both government and business to grow the city’s economy to become an internationally competitive city. Auckland’s economic development plan⁹³ strongly focuses on a combination of five key factors:

- Regulations and policies that are simple, easy to navigate and have a realistic impact on business’s bottom line
- Urban and virtual infrastructure that is world-class and highly efficient, making it easier and faster to conduct business and connect globally with customers, suppliers and knowledge
- Timely access to capital and technology to grow ideas and develop products
- Skilled and ‘ideas’ people, created through education and training, alongside research–business partnerships that generate and showcase knowledge
- Virtual cultural events, a built environment and urban amenities that make Auckland a desirable place to live, work, visit and invest.⁹⁴

Labour Markets and Human Resource Development

Auckland’s labour market employs up to one-third of New Zealand’s workforce. Almost 50 percent of all wholesale traders are based in Auckland, and 43 percent of all overseas goods are processed via the city, both through importation and exportation. The majority of Auckland’s workforce are aged between 25 and 44 years, with the highest proportion being of European ethnicity. Seventy-nine percent of the city’s population are employed full-time, predominantly in the areas of finance, insurance and business services.

Auckland, on average, has marginally higher weekly income than New Zealand as a whole.⁹⁵ Table 2.3 shows employment by Standard Industry Classification (SIC) sector for the subregional districts of Auckland.

Table 2.3 Employment by Sector for Auckland Subregions, 2010

Sectors (Standard Industry Classification)	North	West	Central	South	Total
Agriculture and mining	1,836	443	570	2,823	5,672
Manufacturing	9,650	7,890	25,960	28,981	72,481
Utilities and construction	8,070	3,360	15,490	8,994	35,914
Wholesaling	9,950	2,080	26,910	12,470	51,410
Retailing	14,880	6,970	22,810	16,167	60,827
Accommodation, cafes and restaurants	6,220	2,370	21,540	7,524	37,654
Transport and storage	2,840	1,300	10,700	15,910	30,750
Finance and insurance	3,150	630	18,160	2,049	23,989
Other advisory and business services	16,770	4,470	80,520	18,376	120,136
Government, health and education	28,980	13,790	62,480	36,015	141,265
Other services	5,780	2,730	16,080	6,868	31,458
Total	108,126	46,033	301,220	156,177	611,556

Source: R. Paling and J. Williamson, *Economic Linkages within Auckland: Final Report* (Auckland: Ascari Partners Ltd and Richard Paling Consulting, 2013), 114.

New Zealand's labour market follows global employment trends, rising and falling in line with trends in OECD economies. There is a high demand for skilled labour. However, the

pressure of labour demand has not adversely impacted the performance of the economy. Job creation in many employment sectors in Auckland has been steady, and positive growth is expected, despite a net loss of 12,350 jobs in 2014.⁹⁶

Economic Development and Employment Centres

Auckland’s metropolitan area is divided into four geographic and economic subregional districts (Figure 2.3). The metropolitan commercial centres are located in the North Shore (‘North’), Newmarket, Ellerslie and the Central Business District (CBD) (‘Central’), and Manukau (‘South’). The major contributing area to the city’s GDP is Central. The polycentric structure of the city is the product of its geography, historical development and the former local government system. Until 2010 Auckland was governed by seven local councils. These were combined in 2010 to create the present Auckland Council. As a result, there are strong economic linkages between regional industry, commerce, retail and local government centres of the previous structure.⁹⁷

Figure 2.3 Employment Regions in the City of Auckland



Source: The Auckland Plan 2015.

Table 2.4 Employment Location Quotients (LQs) for Employment Regions, 2010

Sectors (Standard Industry Classification)	North	West	Central	South
Agriculture and mining	1.55	0.82	0.18	2.27
Manufacturing	0.75	1.45	0.73	1.55
Utilities and construction	1.27	1.24	0.86	1.00
Wholesaling	1.10	0.54	1.06	0.94
Retailing	1.39	1.53	0.77	1.03
Accommodation, cafes and restaurants	0.94	0.82	1.16	0.79
Transport and storage	0.52	0.56	0.70	2.00
Finance and insurance	0.74	0.36	1.54	0.33
Other advisory and business services	0.79	0.49	1.36	0.60
Government, health and education	1.16	1.29	0.90	0.99
Other services	1.04	1.18	1.04	0.86

Source: Adapted from R. Paling and J. Williamson, *Economic Linkages within Auckland: Final Report* (Auckland: Ascari Partners Ltd and Richard Paling Consulting, 2013), 114.

Table 2.4 shows employment location quotients (LQ) for the four employment regions of the city for 11 SIC industry sectors. Employment LQ is an indication of the level or concentration or specialization of employment and economic activities relative to the region as a whole. It provides an indication of competitiveness or relative advantages of economic activity. According to the LQ, in the South, the labour force is predominantly engaged in agriculture, manufacturing and transport, the latter two being significant employment sectors. In the Central region, employment is dominated by insurance, finance, and other business advisory services. The West is predominantly manufacturing and retailing, while the North is predominantly agriculture and retail services. The North is primarily a dormitory extension of the city, with more than 170,000 vehicle trips taken daily southbound across the Harbour Bridge. The enormous diversity of LQ in the employment pattern, especially in the primary employment sectors, is a significant contributing factor to the city's traffic congestion problems.

2.2.6 Innovation, Creativity and Business Entrepreneurship

Auckland's economic development plan places great emphasis on the importance of innovation, creativity and entrepreneurial business. The plan argues that with better governance, nurturing and promotion of innovative businesses, improved infrastructure and investment in education and skills Auckland will become more attractive to international investors.

The seaport is adjacent to the CBD and has been expanded through an extensive programme of reclamation works. The CBD is the highest employment generator, contributing to 48 percent of the city's jobs. Manufacturing, wholesaling and distribution occur more commonly in South Auckland around the area of Manukau and Auckland Airport. South Auckland provides the second highest employment levels.⁹⁸

Auckland's greatest global assets, knowledge and education, are mainly concentrated on the North Shore and Albany. This area hosts a broad industrial mix and is becoming the fastest-gentrifying locale economically and physically within the city.⁹⁹ West Auckland houses a significant population of low income earners and has high levels of unemployment. The area is a significant regional service industry centre. It has some manufacturing, but does not have the strength in the smart industry and business activities that the central and southern areas do.

2.3 STRATEGIC INFRASTRUCTURE AND ASSETS

As New Zealand's primate city, Auckland has a significant inventory of strategic infrastructure and assets which support its economy and its role as the logistics and trade hub for the Southwest Pacific Island economies. The city's airport handles over 3.7 million passengers a year, and almost 75 percent of the nation's air traffic movement. The main port is the principal departure centre for the Southwest Pacific cruise industry. The metropolitan area is well-connected by train and a network of roads to surrounding provinces. By international standards, the city has high-quality water supply, sewerage, storm water and wastewater management, electricity and telecommunications broadband internet systems.

Table 2.5 lists the city's primary strategic infrastructure assets. The city's softer strategic infrastructure such as its universities, hospitals, and cultural and recreation facilities are of international standard. Its logistics systems are well-developed; however, the capacity of the existing road network infrastructure is often severely constrained as a result of underinvestment during the late 1990s and 2000s. The polycentric structure of the city has resulted in the development of a number of subregional logistics hubs, which offer reasonably high quality accessibility to services and infrastructure in support of industries and commercial employment nodes.

Table 2.5 Inventory of Auckland’s Strategic Assets

Infrastructure Class	Existing Critical Infrastructure	Infrastructure Class	Existing Critical Infrastructure
TRANSPORT		TELECOMMUNICATIONS	
Roads	<ul style="list-style-type: none"> State highways and access points to and from state highways Northern busways The arterial road network 	Broadband	<ul style="list-style-type: none"> Southern Cross cable Australia–New Zealand cable Mayoral Drive exchange complex Telephone exchanges Radio DNR, CMAR links Wifi
Railways	<ul style="list-style-type: none"> Rail Lines Britomart rail station Newmarket, Sylvia Park, New Lynn, Onehunga rail stations and the network of local stations 		
Ports	<ul style="list-style-type: none"> Port of Auckland Centre Onehunga Port Wiri Inland Port Metro Port 	SOCIAL	
Airports and airstrips	<ul style="list-style-type: none"> Auckland Airport Ardmore Local airports, e.g. Dairy Flat, Kaipara Flats, Great Barrier, Waiheke and others Whenuapai Military Airbase 	Education	<ul style="list-style-type: none"> University of Auckland (includes marae and fale Pasifika) Auckland University of Technology (includes marae) Unitec (includes marae) Manukau Institute of Technology Massey University Secondary schools Primary schools Early childhood education centres
WATER		Health	<ul style="list-style-type: none"> Auckland Hospital: Grafton Auckland Hospital: Greenlane Middlemore Hospital North Shore Hospital Waitakere Hospital
Water supply	<ul style="list-style-type: none"> Sources include dams and abstraction facilities Raw water mains and water supply reservoirs Water transmission pipelines over 200mm in diameter and those that serve critical infrastructure (e.g. hospitals) Water treatment plants including Ardmore, Hula and Waikato 	Justice and corrections	<ul style="list-style-type: none"> High Court Southern Courts at Manukau Auckland Prison (Paremoremo) Mt Eden Prison and Mt Eden Corrections Facility Auckland Region Women’s Correction Facility
Wastewater	<ul style="list-style-type: none"> Metropolitan wastewater treatment plants (Mangere, Rosedale, Army Bay, Pukekohe) Wastewater trunk mains over 300mm in diameter and those that serve critical infrastructure (e.g. hospitals) Wastewater pump stations on the trunk mains Non-metropolitan wastewater treatment plants, e.g. Warkworth, Beachlands and others 	Defense	<ul style="list-style-type: none"> Whangaparaoa Military Training Area Whenuapai Military Airbase Devonport Naval Base Kauri Point Ammunition Depot Papakura Military Camp and Ardmore Military Training Area
Storm water	<ul style="list-style-type: none"> Pipe network Retention/detention ponds Swales Soakage pits 	Emergency and rescue services	<ul style="list-style-type: none"> Mechanics Bay Marine Rescue (Coastguard etc.) Police, ambulance, fire headquarters
ENERGY		Community and cultural facilities	<ul style="list-style-type: none"> Auckland War Memorial Museum Auckland Art Gallery (Toi o Tamaki) Auckland Zoo Marae Library network
Electricity	<ul style="list-style-type: none"> Southdown generation plant Otahuhu B generation plant Otahuhu A generation plant Electricity transmission lines, towers and cables Electricity substations 	Recreation and sporting facilities	<ul style="list-style-type: none"> International-standard sports and events facilities including: Eden Park, Vector Arena, Mt Smart Stadium, North Harbour Stadium
Gas and liquid fuel	<ul style="list-style-type: none"> Wiri to Airport fuel line Marsden to Wiri fuel pipeline High-pressure natural gas pipeline Liquid fuels and gas storage, Wynyard Quarter (limited time) 	Public open spaces	<ul style="list-style-type: none"> Auckland’s network of parks City parks Playgrounds

Source: Auckland City Council, *Asset Management Plans 2015–2025*; Auckland Transport, ‘Asset Management Plan Update 2014’ (Auckland: Auckland Transport, 2014), 36.

There has been substantial, and continuous investment in knowledge, research and development to support business, but in many cases this has not been sufficient to keep up with demand and create the critical mass leading to competitive advantage. Business systems infrastructure which supports investment and development have improved significantly in recent years, but there is need for substantial investment in strategic infrastructure and other assets to make the city more competitive.

2.3.1 Physical Infrastructure and Assets

Auckland is a corridor city; its urban form is shaped by its natural topography, landscape and infrastructure corridors. While its infrastructure meets most of the needs of a successful functioning city, significant issues are apparent if Auckland is to be competitive and continue to flourish.

International and domestic migration to Auckland is predicted to increase the population by over 700,000 in the next 30 years. This places significant demand on existing infrastructure and creates need for quality management and maintenance of current, and integrated implementation of new, infrastructure. Population growth will also place pressure on housing demand and development and could have significant impact on housing affordability.

Auckland residents have come to expect high-quality services, in line with the economy's high standard of living. The increasing population growth is putting significant pressure on local services, specifically public transport, arts and community centres, playgrounds, sports fields and walking and cycling networks. Population growth will require increasing levels of investment to maintain and repair utility services; the changing demographics and growing intensity of development will require careful planning of infrastructure and community services assets for different areas.¹⁰⁰

Environmental sustainability is a significant issue for the city's land-use and infrastructure. Auckland has the potential to be severely affected by climate change. Current infrastructure is not capable of managing rising sea levels, sea surges and other coastal hazards, volcanic ash and volcanic activity, increasing air temperature, changes in agricultural conditions, drought, earthquakes, tropical cyclones, torrential rains, winds and storm surges, and potential health problems.¹⁰¹

2.3.2 Public Infrastructure Reinvestment Plans

At the domestic level, New Zealand has a 20-year National Infrastructure Plan. The plan envisions that by 2030, New Zealand's infrastructure will continue to be resilient, coordinated and contribute to economic growth and increased quality of life.^{102,103} New Zealand's largest city has developed the Auckland Plan, which recognizes that infrastructure investment is not simply a response to demand; but a tool to shape growth within the urban system that will generate wider benefits.¹⁰⁴

Figure 2.4 The Influence of Infrastructure in Auckland

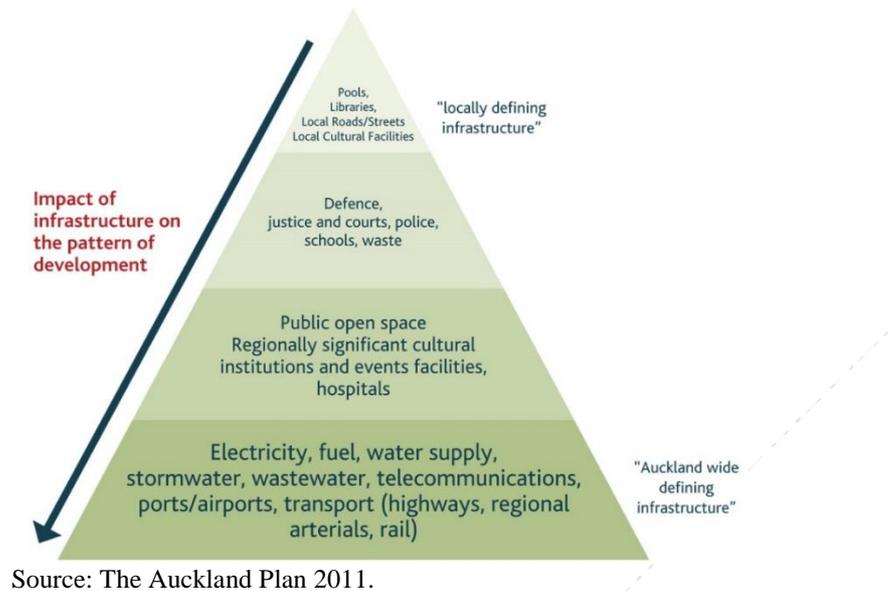


Figure 2.4 demonstrates the role of different types of infrastructure in shaping the urban form of the city. The Auckland Plan, which is discussed in more detail in Section 2.6.2, has two key principles: better use of existing infrastructure, and better allocation of future investment. These principles also guide Auckland's approach to infrastructure development contained in the draft Auckland 30 Year Infrastructure Strategy Long-term Plan 2015– 2045 (LTP).¹⁰⁵ Public infrastructure plans for Auckland centre around growth, resilience and environmental sustainability and the LTP recognizes the following key elements of reinvestment and public infrastructure plans:

- The importance of investing in the right infrastructure to best manage and shape growth and influence demand
- Encouraging investment in emerging technologies
- Holistic and horizontal planning and implementation of infrastructure to all areas.

Guidelines for planning infrastructure, consistent with the 30-year time horizon of the LTP, follow a sustainable development approach. A feature of the LTP is that it prescribes an integrated approach to the delivery of infrastructure guided by the availability of funds. It recognizes that priority should be given to meeting basic needs for urban services, but also the need to provide services to employment districts that will create jobs for the city. The LTP provides the basis for annual and medium term rollover plans that assure continued funding for projects and programmes so that these can be completed within specified time frames. The rollover provision avoids the problems facing many cities in the region that are working with annual budgeting that leave projects without funds for completion when delays occur at the end of a financial year.

2.3.3 Operation and Maintenance of Infrastructure

Auckland has suffered several infrastructure failures. In 1998, a series of failures in old power cables left much of the CBD without electricity. It took five weeks to restore the power supply during which time about 60,000 of the 74,000 CBD workers were forced to work from home or were relocated to offices in the suburbs. The power failure had a cumulative effect on other utilities. The compensation cost to business and disruption to the CBD ran into hundreds of millions of dollars. The city has also faced cable failures, a water crisis and gas supply disruptions. The source of failure in the city's infrastructure was not local, but resulted from events occurring both inside and outside of the region as a result of natural or technological hazards, human error, equipment failure or poor maintenance.

The need for the city to future-proof against disruption to infrastructure supply and network systems resulted in a series of actions to improve the operation, maintenance and replacement of urban utility services. The city government learned first-hand that infrastructure failure can be significant and costly. As a risk management strategy, the utility service agencies have undertaken comprehensive asset management planning to reduce the possibility of future failure and ensure that services are re-established as soon as possible if failure does occur. The Auckland Engineering Lifelines Group (AELG) of utility companies was established to investigate and manage the risk of infrastructure failure.¹⁰⁶

2.4 ENVIRONMENTAL SYSTEMS AND SUSTAINABILITY

Auckland is a city vulnerable to natural disaster and the effects of climate change.¹⁰⁷ Land that was once covered with dense native forest, was cleared for urban development resulting in significant runoff, flooding and soil loss, and increasing concerns about air and water pollution. Auckland is adjacent to numerous volcanic cones. By international standards, the city's environment is relatively clean, but there is recognition that much more needs to be done to restore and manage marine and land habitats, and to address the range of environmental risks facing the city.

2.4.1 Environmental Management and Sustainability: Policies and Measures

The Auckland Plan places significant emphasis on environmental management and sustainability. Table 2.6 outlines the city's strategic direction for environmental management leading up to 2040.

The Auckland Plan has six underpinning environmental principles:¹⁰⁸

1. The environment supports us – the natural resources provided by our environment have limits, and must be protected and restored to ensure our future wellbeing.
2. We need to consider environmental values in all that we do – the interaction between the environment and people is understood and considered in our everyday behaviour and choices.

3. Everything is connected – human activities affect the air, sea, land and freshwater systems. Understanding the connections between environments in the way we manage them is critical.
4. Biodiversity is everywhere – our flora and fauna and their habitats occur in both public and private spaces, and in urban, rural, freshwater and coastal areas. To maintain biodiversity values, we must all work together.
5. Natural hazards can affect our wellbeing – we need to ensure that Auckland and its people are resilient to the effects of natural hazards.
6. We are environmental stewards – future generations will depend on how well we manage the natural environment.¹⁰⁹

Table 2.6 Targets for Emissions Reduction, Auckland City

TARGETS				
Reduce gross per capita water consumption from 2004 levels by 15% by 2025	Ensure no loss in the area of significant landscape, natural character and natural features	Reduce the overall yield of suspended sediment to priority marine receiving environments from 2012 levels by 15% by 2040	Achieve approval from UNESCO for World Heritage status for the Auckland volcanic field by 2020	Achieve zero waste to landfill by 2040
Reduce air pollutant emissions (PM10) by 50% by 2016 (based on 2006 levels) in order to meet domestic and international ambient air quality standards and guidelines, and achieve a further 20% reduction by 2040	Ensure no regional extinctions of indigenous species, and a reduction in the number of ‘threatened’ or ‘at risk’ species from 2010 levels by 50% by 2040	Increase the proportion of residents who understand their risk from natural hazards and are undertaking measures to mitigate or reduce their risk from 2011 levels (baseline to be determined) to 80% by 2040	Establish by 2018, through the relevant statutory process, future marine-protected areas, including marine reserves, identified by the Hauraki Gulf, Kaipara Harbour, Manukau Harbour and West Coast marine spatial plans	Reduce the vulnerability of identified ecosystems by ensuring a 95% probability of each ecosystem type being in a viable state by 2040

Source: The Auckland Plan 2012.

2.5 SOCIAL INTEGRATION AND MULTICULTURALISM

Auckland has the fastest growing regional population in New Zealand, with a population of 1.57 million (2014) accounting for 34 percent of the nation’s population. That population is projected to increase to 2.3 million by 2033 and account for three-fifths of New Zealand’s population growth during this period. By 2028, Auckland is expected to be home to 37 percent of the nation’s population, increasing to 40 percent by 2043.¹¹⁰ These increases will have a significant impact on sustainability, and the city will have to pay close attention to social integration and the balance between immigration and natural population growth, and indigenous and international culture, as well as the provision of

affordable housing, employment, essential public and social services, education and governance.

2.5.1 A City of Immigrants

Auckland is the most ethnically diverse and multicultural region of New Zealand. The city’s cultural diversity is due to high immigration rates over the past three decades. Successive New Zealand censuses indicate Auckland’s population comprises more than 180 different ethnic groups. Over 40 percent of residents are born outside of New Zealand. Table 2.7 shows the breakdown of Auckland’s ethnic groups according to the 2001, 2006 and 2013 censuses.¹¹¹

One of the most significant changes to the city’s population has been the substantial rise in Asian immigration, driven by lifestyle, access to education and policies designed to encourage skilled migrants. In 2013 almost one quarter of Auckland’s population was of Asian origin or descent; by 2021 their numbers are projected to be 75 times greater than in 1990.¹¹² The high levels of immigration are having a significant effect on the physical and cultural development of the city, including its cultural capital, skills mix, innovation, diversity and creativity. It has enabled Auckland to improve its position in the innovative cities index, although it lags behind Singapore and some Japanese and Australian cities.

Table 2.7 Population and Ethnic Structure of Auckland, 2001–2013

Ethnic Group	2001	Percentage	2006	Percentage	2013	Percentage
European	755,967	68.5%	700,158	56.5%	789,306	59.3%
Māori	127,704	11.6%	137,304	11.1%	142,770	10.7%
Pacific Island	154,683	14.0%	177,951	14.4%	194,958	14.6%
Asian	151,644	13.8%	234,279	18.9%	307,233	23.1%
Middle Easterners / Latin Americans / Africans	13,335	1.2%	18,558	1.5%	24,945	1.9%
‘New Zealanders’	<i>n/a</i>		99,474	8.0%	14,904	1.1%
Others	276	0.0%	648	0.1%	735	0.1%
Total population	1,102,818	100.0%	1,239,054	100.0%	1,331,427	

Source: Statistics New Zealand 2014.

The city is expecting substantial population increase from immigration and natural population growth (which will contribute about one-third and two-thirds, respectively). The substantial increase in population will have a major impact on the city’s infrastructure, which is already experiencing significant capacity constraints.

2.5.2 Population and Urban Density

The expected increase in population has raised considerable debate about the sustainability of continued urban sprawl. The density of Auckland's population currently is low (less than 1,300 persons per square kilometre), and this is having a direct impact on the cost of providing and managing urban services as the city expands. The Auckland Regional Growth Strategy 2050 focuses on the need for greater intensification of urban development and density and places limits on further subdivision of peri-urban areas as key sustainability measures. The policy to limit urban sprawl is contentious. Low-density suburban living is a feature of the lifestyle of many New Zealanders. There is a realization by government that the business-as-usual model of urban development is no longer sustainable, and that Auckland's future lies in a more compact city, with a mix of opportunities to encourage ethnically and culturally diverse activities. Land prices, however, are a significant factor in the ability to foster a greater concentration of urban population and density, and to make housing more accessible and affordable.

2.5.3 Protection of Indigenous Rights

New Zealand is one of the few economies in the world where the rights of indigenous people are protected in legislation and a Treaty. In New Zealand, the Maori people are recognized in the *Te Tiriti o Waitangi*, or Treaty of Waitangi, which was signed in 1840. The treaty was the foundation document that set out the relationship between indigenous New Zealanders and the British government. The agreement ceded responsibility to govern to the British government in exchange for the protection of the local population and selective rights. The treaty had a significant impact: New Zealand's development was guided by a colonial government, and thus was shaped by western principles and practices.¹¹³ The treaty, however, did not prevent a prolonged period of civil war that ended in 1872 between Maori tribes and government over land disputes.

The loss of land and identity and the lack of respect for Maori culture led to a review of the Treaty of Waitangi in the 1970s, which resulted in the establishment of the Waitangi Tribunal, a government body created to moderate and investigate breaches by the government and to ensure that all laws and governments pay respect to and recognize traditional customs and traditions.¹¹⁴ Subsequent compensation claims and settlements have resulted in the emergence of a range of customary investment and development enterprises, many of which are located in Auckland. Some of these enterprises have been able to compete favourably in both domestic and international markets.

2.5.4 Multicultural Development

Immigration and multiculturalism place significant pressures on New Zealand and its cultural identity. Maoris have been custodians of the land for over 700 years, and British immigrants have been the largest population group over the past 150 years. However, as other ethnic groups continue to migrate at an increasing rate, issues have arisen over how the economy's cultural identity will evolve and the best means of managing it.¹¹⁵

New Zealand has taken significant measures to ensure that the culture and heritage of the Maori people, the traditional custodians of the land, are both respected and accounted for

in all planning initiatives. The government of Auckland has taken steps to ensure multiculturalism and social integration occur both efficiently and effectively.

The issues of cultural harmony and integration remain challenging; but the approach to the recognition and identity of cultures embedded in both overall development and economic development could be adopted in other parts of the region with significant indigenous and migrant cultures. New migrants bring new ideas, values and multicultural activities. The city's identity, through architecture, food, music, language and fashion design, is being shaped by multiculturalism.¹¹⁶

2.6 URBAN GOVERNANCE

New Zealand is a unitary state; it has a two-tier government system, with local government divided into regional and territorial authorities. Regional authorities are responsible for coordinating planning between local government authorities. The member economy has a long and impressive record of governance reform, with local governments given significant financial autonomy, including for sub-sovereign lending. This is underpinned by a well-managed system of accrual and asset-based management accounting across different levels of government. Auckland and several other cities have credit ratings.

2.6.1 Local Government Structure and Reform

Until 2010, Auckland was governed by seven local city governments: Auckland, Manukau, Waitakere, North Shore, Papakura, Rodney and Franklin. In 2007, a Royal Commission was established in response to concerns about the lack of coordination between local governments, which was causing significant urban development and management problems, and adding significantly to externality costs for business and undermining the competitiveness of the city.

In 2010, on the recommendation of the Royal Commission,¹¹⁷ the New Zealand government combined the seven local governments to establish one metropolitan area under an Auckland Council with a single mayor and several local boards.

The Royal Commission sought to design the most appropriate governance system for Auckland, and produced a management structure capable of meeting the needs of the metropolitan region for the next 50 years. The Royal Commission was guided by four principles.¹¹⁸ These focused on the need for:

- **Collective identity and purpose:** Auckland's governance arrangements should encompass the interests of the entire Auckland city-region and foster a shared regional identity and purpose, which supports integrated planning and decision-making.
- **Effectiveness:** The governance structure should deliver maximum value within available resources, in terms of cost, quality of service delivery, local democracy, and community engagement

- Transparency and accountability: Roles must be clear, including where decision-making should be regional and where local.
- Responsiveness: The structure should respect and accommodate diversity and be responsive to the needs and preferences of different groups and local communities.

The amalgamation of Auckland's seven local governments into a single metropolitan council was one of the most significant public sector reforms in New Zealand's history. The new Council is an organization with NZD 32 billion of assets, an annual budget of NZD 3 billion; and 8,000 staff brought together from the seven former councils and council-controlled organizations.

The amalgamation was unprecedented in New Zealand's public sector history and similar in impact and scale to the amalgamation of the city of Brisbane in Australia in 1924.¹¹⁹ The Council is among the largest and most complex entities in New Zealand, second in size only to the New Zealand government. It has complex and finely balanced governance arrangements, many of which seek to introduce collaborative governance arrangements to improve the efficiency of services delivery and reduce transaction costs both within the Council and for business. The Council's strategy and further planning is expected to have a significant impact on economic and social prosperity in New Zealand, given that one-third of New Zealand's population live in Auckland.

Ironically, the amalgamation of local governments in Auckland led to the development of a single metropolitan authority responsible for the conduct of many of the activities of the former Auckland Regional Development Authority (ARA) in 1963. The ARA was the vision of a former Mayor, Dover Myer Robinson. In 1989, the ARA was replaced by an Auckland regional council that had an umbrella function covering all the cities and districts of the region. Stripped of many of the regulatory powers and funding abilities of the ARA, local governments sought to look after themselves, rather than work collaboratively on regional issues. Subsequently, Auckland underinvested massively on logistics and essential infrastructure, and other local services. Auckland Council was providing many regional services for the region's population and business but was not recompensed for these.

2.6.2 The Auckland Plan

Significant sustainability initiatives have flowed from the governance reform in Auckland. The most significant has been the Auckland Plan¹²⁰. The Auckland Plan was developed under New Zealand's key environmental planning legislation, the 1991 Resource Management Act, which is recognized as a world leader in integrated approaches to planning and sustainable development. The Plan has a clear vision and strategy to make Auckland an even better place than it is now, and to create the world's most liveable city. It outlines how the city will prepare for a growth of one million people by 2040, and accommodate the additional 400,000 new homes and jobs needed to support the city's growing population. It includes details on institutional and urban management arrangements, corporate planning, and financing for city development.

The Auckland Plan is the city's most significant urban development and management tool. It places clear emphasis on preparing the policies and measures to make Auckland

the most liveable city. The Plan focuses on making Auckland a city that people want to visit, move to or invest in. It outlines 13 key framework items, including: people, Maori, arts & culture, historic heritage, recreation & sport, economy, environment, response to climate change, rural Auckland, urban Auckland, housing, physical and social infrastructure and transport. It also outlines measures to assess its progress over a 30-year period.

The Auckland Plan provides one of the best examples of an integrated approach to metropolitan planning and sustainability to be found anywhere in the world. A key factor in this has been the NZ Resource Management Act. The Auckland Council recognizes the importance of planning the future and has incorporated targets, and methods for reaching targets in every element of the Plan. The Plan acknowledges the need for flexibility and ability to change in response to events, risks, resources and circumstances that are outside the ability of the Council to control.

Developers also acknowledge the importance of integrated and holistic planning.¹²¹ An example of this is the integration of transport planning and land-use development. This is a priority of the transport planning addendum which integrates physical and social infrastructure planning. Collaborative planning underpins the decision-making process of the Plan and is seen as the most effective means for achieving sustainable development as it eliminates unforeseen long-term problems such as accessibility, social and community development, and spatial elements.

Apart from the strong emphasis given to sustainable and holistic planning, the Auckland Plan also places strong focus on climate change and environmental factors. The Plan caters to these futuristic planning matters and provides a long-term, sustainable guideline in preparation for potential environmental or climate change risks. Future issues recognized by the Plan include the need for innovation, smart urban design, new industry development and employment, transport and participatory governance.

2.6.2.1 Monitoring and Evaluation of the Auckland Plan

To back up the long-term environmental goals and underlying principles, the Auckland Council heightened the importance of policy measurement.

illustrates the monitoring and evaluation framework used to gain feedback from policy implementation to strengthen further the city's governance.

Figure 2.5 Monitoring and Evaluation Framework of the Auckland Plan



Source: Auckland Plan 2011.

Measuring the progress of environmental actions within the Auckland Plan is done by measuring achievability, by audits and reporting. The assessment is conducted on an annual basis and reviews the Plan's effectiveness on both short and long-term bases. In addition to citywide assessment, the Auckland Council also measures varying factors of the city's efficiency on a global scale, including areas such as liveability, cost of living, income and expenditure, housing affordability, city governance index, employment, innovation and global competitiveness. Measures have been taken to ensure that all 13 framework items covered in the Auckland Plan are assessed effectively to ensure Auckland has the best opportunity to prosper.

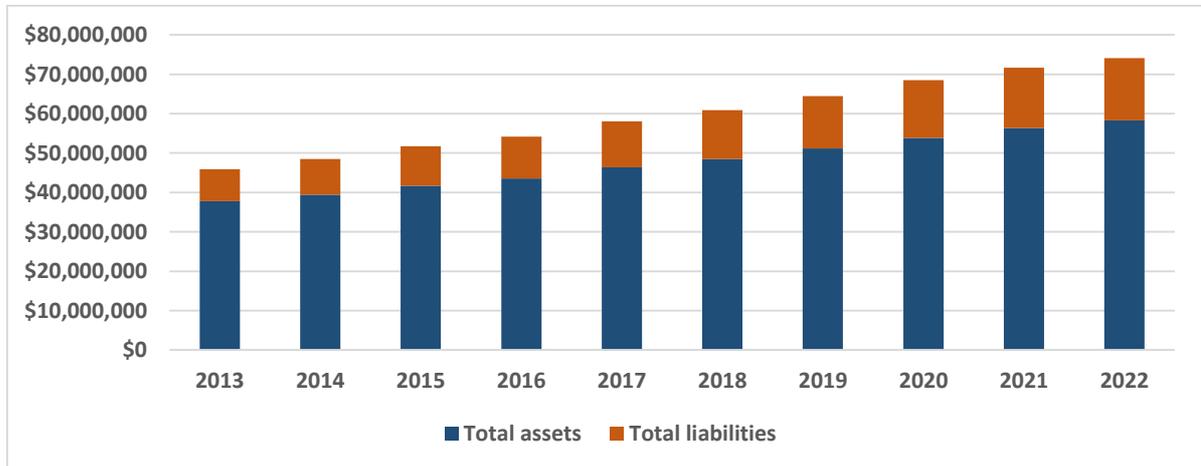
2.6.3 Financial Management

A significant outcome of local government reforms in New Zealand was the introduction of transparent financial and asset management, together with accrual accounting, and planning linked to financial planning and budgeting. Many cities in New Zealand, including Auckland, have credit ratings which enable them to leverage public assets through the issue of bonds, loans and other financial instruments to fund physical and social infrastructure. The Auckland Council's credit ratings following the amalgamations and annual reviews are good, leaving it as the biggest local body in Australasia and one of the highest-rated entities in New Zealand.

Local authorities in New Zealand are among the best managed in the world. The Auckland Council has well-established procedures for conducting audits and valuing public assets. Local governments are required to prepare cash flow and balance sheets listing and valuing public infrastructure and assets, including depreciation.¹²² In 2011, after its amalgamation, Auckland had over NZD 34.3 billion (USD 21 billion) of assets, including road and utility services networks, buildings and public facilities.¹²³ It is one of a few cities in the world to have a complete inventory and valuation of publicly owned

assets, depreciation schedules for valuing assets, and a forward 10-year balance sheet showing debt to equity (Figure 2.6). Debt to equity varies between 24 percent and 27 percent.

Figure 2.6 Ten-year Forecast for Assets and Liabilities, Auckland City



Source: Auckland City Council’s 2012–2022 Long-Term Plan.

2.7 PARTNERSHIPS FOR SUSTAINABLE DEVELOPMENT

Auckland has many different types of partnerships that support the development and management of the city. Some of the best-known partnerships that demonstrate strong commitment to sustainability are included in Table 2.8. These can be found on internet sites. Many of these involve the creation of formal structures, especially when they involve public–private sector partnerships between government and business. Others are less formal and involve networks and associations of professional, community and cultural interest groups.

Table 2.8 Examples of Partnerships for Sustainable Development, Auckland City

	City	Economic	Governance	Infrastructure and development	Research and innovation	Labour and skills	Social and environmental	Technology
Government		Regional Business Partnerships		Tamaki Redevelopment Company			Auckland Regional Settlements	
City	Sister Cities		Core Cities	CityNext			Youth Development Partnership	
Global business		Global Business Network						
National business		Regional Business Partner for Auckland						
Local business			Auckland Local Partnerships and Governance Group				Auckland Environmental Business Network	Innovation Partnerships
Public utilities				SkyPath				
Public institutions					Urban Research Network AU		Auckland Environment Observatory	
Community		Community Economic Development	Community Programme; Partnership Programme	Community Renewal – Housing New Zealand Corporation, Talbot Park, Auckland		Social Enterprise Auckland	The Onehunga Peoples Garden	

Source: Authors.

2.7.1 Regional and International Partnerships

Auckland maintains formal partnerships with a number of cities globally, with significant interactions with the 19 cities indicated in Figure 2.7. Each of these cities holds well-established business practices in areas ranging from education to tourism, cultural exchanges and trade agreements. The Auckland Plan places significant emphasis on improving international relationships with additional cities into the future.¹²⁴

Figure 2.7 Auckland's Formal Partnerships



Source: Auckland Council, *Global Partnerships and Strategy Auckland* (Auckland Council, 2015).

2.7.2 Core Cities Network

The New Zealand Core Cities Network was initiated in April 2011 by Local Government New Zealand and the Ministry of Business Innovation and Employment. It is the first of its kind in New Zealand and involves its six largest cities; and is not unlike the British Core Cities initiative.¹²⁵ Auckland has a key role in the Core Cities Network, which represents over half of the New Zealand economy. The initiative aims to develop a shared understanding of the economic contribution and core strengths of New Zealand's largest cities.

The Network provides a common baseline for councils and the New Zealand Government to remove barriers and enable businesses to grow, export and create high-value jobs. It is significant in offering opportunities for vertical and horizontal collaboration between city governments to overcome barriers of entry into markets and to enable economies of scale, by stretching and leveraging resources. Four shared principles to develop better connections were articulated. These include:

- Cities offer opportunities for economic growth, now and in the future.
- There is a shared understanding that the competition is the rest of the world.
- City-region specializations are based on different comparative advantages.
- Councils will work together to improve the economic environment of all New Zealand cities.

The cities agreed on four focus areas for collaboration:¹²⁶

- Sharing best practice, for example, policies and processes that build business-friendly councils.
- Collaborating on future mayoral-led delegations in China and other export markets.
- Continuing to invest jointly in the development of data about city-regions and using it to support economic strategy and planning.
- Using the research on city-regions as a tool to help focus and guide Councils' investments to support economic growth.

The Core Cities Network has initiated two key projects which are investing in engagement with China and business-friendly guidelines.

2.8 EXAMPLES OF BEST PRACTICE PARTNERSHIPS

The following selected partnerships that support the management and development of Auckland have potential to be adapted and applied in other economies in the APEC region. The case studies seek to draw out principles of sustainable city development from economic, social, environmental, and land development and governance perspectives.

2.8.1 Wynyard Quarter – Waterfront Auckland¹²⁷

Photo 2.2 Wynyard Quarter Rejuvenation Project, Auckland



Credit: Alistair Ray.

Wynyard Quarter is a good showcase of urban renewal, showing how to create sustainable urban waterfront living without disturbing the historical character and integrity of a site. This project maximizes efficient design, provides social amenities and is aesthetically pleasing. The Wynyard Quarter demonstrates an active re-development project that uses smart design elements to reconfigure and bring life back to an underutilized area of the city. This is a very simple best practice activity that can be modified to meet the needs of other cities.

In some ways, the Wynyard Quarter project is an ordinary waterfront rejuvenation project – with production spaces being replaced by consumption areas, particularly through the well-resourced and integrated public transport. What makes it stand out as an example of good practice is the interaction between Waterfront Auckland (an Auckland Council-controlled organization) and Landcare Research (a Crown Research Institute run as a private-sector research company¹²⁸) in the establishment of some very exciting and sustainable green spaces and water gardens on the site. This is an ongoing project.

2.8.2 Auckland Council's North West Transformation Project

Hobsonville is an area located approximately 20km northwest of the Auckland CBD. It was settled in the mid-1920s, primarily as an agricultural and horticultural area. Its proximity to the city made the area a prime location for an airport and it was later occupied by the Royal New Zealand Air Force (RNZAF) as the airfield base for Auckland. In 2006, the RNZAF sold the site back to the New Zealand government and plans were made to redevelop 435 hectares into a low density mixed-use town centre. The project is primarily led by the Auckland Council but involves many private stakeholders and investors.¹²⁹

The transformation of the Hobsonville area will guarantee strong regional economic growth alongside community, recreational and environmental benefits. Stage 1 of Auckland's North West Transformation Project aims to create:

- 20,000 new jobs
- 5,500 new homes, including public housing
- Schools, community facilities and open spaces
- A new town centre
- New roads and better transport links.

The first stage of this NZD 1 billion rejuvenation and transformation of Auckland's northwest is underway. The plan provides for the allocation of land for marine industries, recreational and commercial uses, and advanced technology business services. A key development objective is to reduce the commuter dependent employment; nevertheless, provision has been made for fast ferry services to link the Hobsonville area to Auckland's city centre and North Shore.

The transformation of Hobsonville and its surrounding suburbs is a successful example of a public-private sector partnership for bold, large-scale rejuvenation of a historic area, geared to activate economic growth as well as provide infrastructure, public and private housing, education, employment, transportation and nature sensitive design into a new area of urban development, and create social and recreational opportunities for outer city suburbs. It is unusual in that it is an urban revitalization project on the periphery of an

urban area. This project, like Wynyard Quarter–Waterfront Auckland is an ongoing project.

2.8.3 Tamaki Regeneration Project – Low Income Housing Revitalization

The conflict between indigenous people and Western culture is an unfortunate residue of development in New Zealand. It has resulted in tensions over land rights, cultural practices and discrimination. Unfortunately, this led to the New Zealand Maori becoming marginalized, losing their identity and being ghettoized in urban enclaves with poor housing, lack of access to good jobs, and a high incidence of crime, which adversely impacted the city's reputation. Nowhere was this more prevalent than in the predominantly residential areas of Tamaki, 6km east of the CBD.

Tamaki has a resident population of about 18,550. Some 57 percent of the existing 5,000 dwellings are owned by Housing New Zealand and rented to low income groups. The area has a significant Maori population, with parts of the area being ancestral land. Many of the dwellings are old, in poor condition and too small for the residents who now occupy them. The area has many social problems and is in urgent need of revitalization.

The Tamaki Regeneration Project – a development partnership between the public sector and the private sector – was launched to address some of the problems. Driven by community desire for development, the project involves stakeholders at all levels but is mainly run by the New Zealand government, Auckland Council, the Tamaki Redevelopment Company (TRC) and Mana Whenua. In 2012, the New Zealand government and Auckland Council provided the TRC with a NZD 160 million (USD 115 million) loan facility as essential working capital for infrastructure and housing projects, many of which will be developed by the private sector. The draft blueprint sets out a vision to construct up to 6,000 additional homes in the area with a good mix of social, affordable and market housing.¹³⁰

The TRC, which is jointly owned by the New Zealand government and the Auckland Council, is New Zealand's first urban redevelopment company.¹³¹ It was set up to help transform Tamaki (including Glen Innes, Point England and Panmure) over the next 20 to 25 years. The scope is ambitious, encompassing economic, social and housing initiatives to improve education, employment, health, safety and the environment. It is envisaged that these initiatives will involve collaborations between local communities, government, businesses, educational institutions, social agencies, developers and financiers.

Initial stages of the project involved the transfer of 2,800 houses from the Housing New Zealand Corporation to the TRC, after the expression of significant community interest. The initial exchange of housing ownership was welcomed, with the TRC committing to develop an additional 7,500 homes as well as to replace 2,500 existing homes within a 15-year timeframe. The project has three underlying outcomes:¹³²

- Lifestyle and Culture: Tamaki people are engaged, healthy and safe, and their cultural identity and diversity is celebrated.
- Talent and Creativity: Tamaki residents have good sustainable employment and education opportunities.

- Places and Neighbourhoods: Connected, safe, attractive and well-used spaces with quality, healthy homes.

The Tamaki Regeneration Project is ongoing and will provide current and future residents of the area with a better standard of living by co-improving education and employment opportunities, social and recreational amenities, infrastructure and sustainable development as well as maintaining the cultural significance of the area and its ties to indigenous New Zealand.

The Project has not been without controversy but it represents a multi-party collaborative approach to tackling a range of significant problems in Tamaki. It stands as an example of good practice because of its integrative ethos, illustrated by the involvement of different levels of government, the private sector and Maori and their willingness to tackle social, economic and environmental issues together.

2.9 CONCLUSIONS

Auckland is a dynamic and resilient city undergoing rapid change. In recent decades, several developments – structural reforms to government, including local government; the opening of the economy to greater competition; the adoption of integrated planning; and increased immigration, especially from Asia – have significantly changed the socioeconomic structure and governance of the city, mostly for the better. The city, however, still faces many challenges in addressing and managing urban development, transport, social and environmental problems. There is widespread recognition and understanding of these challenges and the need for collective action by government, business and communities to address them. Partnerships and other collaborative initiatives and efforts are part of a new model of sustainable development that the city has been very willing to embrace.

Sustainability is a strong underlining principle of the city's development. It permeates the policy and decision-making processes of government, business and communities. In the area of local economic development, the city has developed a wide range of partnerships between government, business, institutions and communities. As the New Zealand economy strengthens, unemployment rates have fallen, and investment capital has continued to flow into the city's economy. A concern is that development will be driven by real estate and not long-term jobs in advanced manufacturing and services to boost the region's GDP and exports.

Urbanization is a major challenge to the sustainable development of the city. Detached dwelling construction dominates housing supply, but this is changing as more land is released for an increasing number of higher density housing types. The propensity of the CBD to be the dominant and highest income generating employment centre has a compounding impact on traffic congestion and services capacity. The need for the city to focus on greater decentralization of employment, investment and services through planning support for polycentric city development is essential, if the city is to develop more sustainable land-use, employment, transport and urban services delivery systems.

Social and environmental problems, although not severe compared to other cities in the region, are nevertheless a concern for the future sustainable development of the city. The dynamic relationships between cultures, and the misunderstanding and tensions, especially over issues of land rights, housing, customs and practices will require greater tolerance, education, understanding and mutual acceptance of ideas and solutions to resolve them. Similarly, more customary and collaborative approaches involving government, business and communities in partnerships for social development is needed to restore harmony, cooperation and the development of social capital to manage the region's fragile natural environment.

Auckland has shown leadership in local government and governance reform. The amalgamation of seven local governments into one Auckland Council was both bold and controversial. It was born out a frustration at the inability of the local bodies to act uniformly in the interests of the region, to improve the coordination of planning and infrastructure and to make the city's economy more competitive. The amalgamation cost jobs, but it has led to savings and better spatial coordination of the projects and operational activities between agencies and departments. Identifying and valuing the city's assets, the Standard and Poor's (S&P) credit rating, and responsible financial management have been significant factors in raising recognition of Auckland as a well-run and managed city.

The progressive reforms to local government in New Zealand over two decades, and especially since the amalgamation, have enabled Auckland to make significant advances in the areas of planning, urban financial management, infrastructure development, operations and maintenance, and local economic and social development. The Auckland Plan is probably one of the most far-sighted, comprehensive, integrated and realistic plans developed for a metropolitan area in the region. It is a model that provides a pathway for collaborative approaches to sustainable metropolitan development planning and management.

Partnerships for development and services delivery have been an important platform underpinning the sustainable development of the city. The partnerships range from the revitalization of inner and outer urban areas, social housing delivery and improvements through a partnership involving government, business and Maori groups, and innovative approaches to the management of coastal environments and wetlands. These would not have been possible under former sectoral and poorly coordinated local economic development and urban planning policies.

Auckland provides many good examples of sustainable development practices that could be adapted and applied to other cities in the region. Its unique contributions to sustainable development are in metropolitan planning and governance. The amalgamation of local governments is seldom popular, but in Auckland's case it was necessary to address some of the serious transport, planning and social development problems facing the city's development. Auckland's emblem as the 'City of Sails' is fitting in that it provides a strong visual image of a city whose citizens know how to enjoy themselves, but know also that they are in a race for the future. It is important for the city to monitor its progress and, where necessary, alter course when the winds of financial, social, political and technological change occur.