CHAPTER SUMMARY AND RECOMMENDATIONS:

- Significant population growth, coupled with economic and employment growth, underpins increasing demand for infrastructure and transport services in the South East Queensland (SEQ) region.

- Brisbane’s economy is projected to increase from $114 billion to $217 billion by 2031, which will support approximately 1.2 million jobs for the region by 2041. Retail, health, education and tourism activities will also escalate over the coming decades, generating increased travel demand into and within the city and surrounding precincts.

- While forecast population growth is strongest in the areas outside Brisbane, much of the employment growth is expected to remain within the Central Business District (CBD) and surrounding inner suburbs.

- SEQ's transport challenge cannot be met by building more roads that funnel more traffic into an already congested urban core. Limited scope exists to further develop the road network into Brisbane’s dense inner core and recent major road investment in Brisbane has been focused on bypassing the CBD (such as Clem 7, Go Between Bridge and Legacy Way) rather than directly improving access to the CBD.

- Providing frequent, high-quality public transport services to Brisbane’s inner-city and CBD from commuter catchments outside of Brisbane, as well as inner-city distribution services, will be critical to respond to and drive population growth across the region and economic growth in Queensland’s primary activity centre.

- The Brisbane Metro aligns with numerous Australian, Queensland and Council plans and strategies by:
  - supporting the delivery of an integrated transport infrastructure solution to meet the future economic and social needs of the region
  - improving the connectivity of Brisbane’s public transport system through delivery of a high-frequency Metro service integrated with other existing modes, such as bus and rail
  - making better use of existing infrastructure and targeted investment in urban areas to reduce congestion
  - improving public transport journey times and reliability, reducing congestion and enhancing experience for customers to create a sustainable and more attractive transport system
  - improving accessibility to and within the inner-city and to other key employment growth areas, fostering agglomeration through easy movement of people and knowledge.

- Furthermore, the Brisbane Metro is the right response at the right time. Through better use of existing infrastructure, it provides an affordable solution that can be readily implemented, while allowing for service provision to be increased over time to meet increasing demand.
3.1 Purpose and Overview of this Chapter

The purpose of this chapter is to provide an overview of the forecast drivers of demand impacting current and future transport service needs for the SEQ region. It also confirms the strategic need for transport infrastructure investment and its alignment with relevant government objectives and policies.

This chapter outlines:

- The strategic objectives developed to drive the development of the Brisbane Metro.
- Relevant Australian, Queensland and local government strategic policies, and how the strategic objectives for the Brisbane Metro align with the objectives of these policies.
- Forecast economic growth of the Brisbane and wider SEQ region, including a focus on:
  - population growth and changes
  - current and future distribution of employment
  - future demand for transport.
- Forecast future strategic challenges facing the SEQ region, including demographic shifts, expansion of the CBD and emerging transport technologies.

Defining the strategic objectives and confirming the alignment of the Brisbane Metro with key policies and frameworks provides clear context for the remaining analysis completed in the Business Case.

3.2 Strategic Objectives for the Brisbane Metro

Improved public transport does more than stimulate economic development; it is an essential component for the Brisbane community to enjoy the benefit of economic growth. Transport benefits have a positive impact on productivity, business activity, employment, income, property value, social inclusion and environment.

Reflecting on the above, strategic objectives for the Brisbane Metro have been developed, including:

- delivering high-frequency ‘turn-up-and-go’ services
- increasing the capacity of the busway network
- reducing bus congestion on the busway in the CBD and inner-city
- reducing the number of buses in the CBD
- improving travel times and reliability
- delivering more services to the suburbs.

Understanding community and stakeholder views and key concerns, and ensuring stakeholders have an opportunity to contribute to the development of the project, has also been a key objective for the Brisbane Metro.

These objectives have guided the development of the optimal solution for the Brisbane Metro. They supported a focus on exploring what solution is best suited to achieve a particular outcome, rather than simply directing decision-making towards investment oriented solutions. They have stimulated strategic thinking and planning, resulting in a
project solution that is more likely to be considered and developed in a broader and more integrated strategic context.

Specifically, these objectives drove a range of analysis within the Business Case, including:

- Providing guidance in ensuring the Brisbane Metro aligns with key policies and frameworks from all levels of government, as presented in this chapter
- Identifying, assessing and prioritising problems that in turn provide the foundation for identifying suitable project solutions to address the priority problems
- Defining, assessing and shortlisting the identified project options to derive a preferred solution for further analysis.

As noted above, the following sections present the relevant policies and frameworks from differing levels of government. Discussion around how the objectives for the Brisbane Metro align with the objectives of each policy is provided, thereby demonstrating that the Brisbane Metro supports and integrates with the long term plans of all levels of government.

3.3 Alignment of Government Polices and Frameworks with the Brisbane Metro

A range of federal, state and local government plans and policies have been identified and considered in the context of the Brisbane Metro to understand how the objectives of the Brisbane Metro aligned to the concepts presented in the plans and policies.

Understanding the alignment between the Brisbane Metro and these government policies is critical to ensuring the Brisbane Metro aims to achieve the same strategic goals. These goals aim to improve the economic, environmental and social standings of cities, states and the nation, and a project should be assessed against how well it delivers against these goals.

The alignment of the Brisbane Metro to these policies ensures the major investment decision required for the project supports the transport infrastructure priorities of all levels of government.

3.3.1 Australian Government Plans and Policies

3.3.1.1 Infrastructure Australia – Australian Infrastructure Plan

The Australian Infrastructure Plan, released by Infrastructure Australia in February 2016, provides a positive reform and investment roadmap for Australia. The plan sets out the infrastructure challenges and opportunities Australia faces over the next 15 years and the solutions required to drive productivity growth, maintain and enhance the nation’s standard of living and ensure Australian cities remain world class.

The plan outlines a long-term strategy that lays the foundation for a more productive Australia. Key proposed reforms are summarised into the following headings and subheadings:

- Productive cities, productive regions
- Efficient infrastructure markets
- Sustainable and equitable infrastructure
- Better decisions and better delivery.
The Australian Infrastructure Plan indicates that Australia “must upgrade its urban passenger transport networks so they are more integrated, have higher capacity and are able to meet the twin demands of population growth and rising expectations for service levels”\(^1\). At the same time, the structure, operation and use of these networks should be transformed to meet connectivity needs.

In particular, the Plan notes that in Brisbane there is a high degree of connectivity by car, with a large component of metropolitan Brisbane able to access over 50 per cent of the city’s jobs by a 45-minute car trip\(^2\). In contrast, public transport connectivity is much lower. In large sections of metropolitan Brisbane, fewer than 10 per cent of jobs can be reached by a one-hour public transport journey.

A key conclusion from the Australian Infrastructure Plan is workers need high-frequency, interconnected public transport systems to move them efficiently and comfortably. Changes to the structure, operation and use of passenger transport to deliver services are required. Australia’s largest cities including Brisbane should start planning for integrated, timetable-free, ‘turn-up-and-go’ train and bus services – similar to that of New York, Singapore, London and Paris\(^3\).

**How the Brisbane Metro aligns with Australian Infrastructure Plan**

The Brisbane Metro will improve the connectivity of Brisbane’s public transport system by delivering a high-frequency metro service integrated with other existing modes, such as bus and rail. This will improve public transport journey times, as well as the accessibility and connectivity to and within the inner-city.

The Brisbane Metro will provide benefits for city, state and national productivity by:

- Improving connectivity between key economic areas, both within the inner-city and to other key employment growth areas, to foster agglomeration through easy movement of people and knowledge
- Reducing travel times and improving travel time reliability for commuting journeys
- Ensuring future travel demands will be met through provision of frequent services, high-capacity vehicles, facilitating easy transfers, and providing the opportunity for bus network reform
- Reducing car dependency and encouraging mode shift from private to public transport, freeing up road space for freight vehicles.

The Brisbane Metro is the right response at the right time. Through better use of existing infrastructure, it provides an affordable solution that can be readily implemented, while minimising disruption to existing networks, and allows for service provision to be increased over time to meet increasing transit demand.

**3.3.1.2 Australian Infrastructure Audit**

The Australian Infrastructure Audit, completed in 2015, takes a strategic approach to assessing Australia’s infrastructure needs, examining the drivers of future infrastructure demand, particularly population and economic growth. The Audit provides a top-down assessment of the value-add, or direct economic contribution of infrastructure, considers the

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\(^1\) Australian Infrastructure Plan 2016, Infrastructure Australia, p46
\(^2\) Australian Infrastructure Plan 2016, Infrastructure Australia, p52
\(^3\) Australian Infrastructure Plan 2016, Infrastructure Australia, p6
future demand for infrastructure over the next 15 years, and delivers an evidence base for further gap analysis, long term planning and future investment priorities.

The Australian Infrastructure Audit has found that without action, Australia's productivity and quality of life will be tested, with population and economic growth set to cause increasing congestion and bottlenecks.

Key findings of the audit include the following:

- Growth in Brisbane will impose additional demands on urban infrastructure, already subject to high levels of demand
- Infrastructure decision making must place a high priority on productivity growth, through efficient management of existing infrastructure, rigorous and disciplined evaluation of investment initiatives and efficient delivery of new projects
- The cost of congestion in our capital cities, estimated at $13.7 billion in 2011, is expected to increase to around $53.3 billion by 2031 in the absence of additional capacity and/or demand management.

Major reforms are needed to improve the way infrastructure is planned, financed, constructed, maintained and operated to ensure it can underpin gains in Australia's productivity in the decades ahead, and contribute to economic growth.

**How the Brisbane Metro Aligns with Australian Infrastructure Audit**

The Brisbane Metro aligns with the intent of the audit findings, by addressing productivity concerns, through better use of existing infrastructure and targeted investment in urban areas to reduce congestion.

By providing a dedicated metro and bus path, particularly through the most constrained sections of the busway network, the Brisbane Metro will provide an increasingly viable alternative to car use as road congestion worsens. The travel time reliability and connectivity provided by the Brisbane Metro will improve productivity through reducing commuting journey times and linking key economic activity areas such as employment growth nodes, regionally and nationally significant health, education and cultural facilities, and regional activity centres.

The Brisbane Metro builds on the success of Brisbane's high-quality busway network through addressing infrastructure constraints and extending the capacity of the existing infrastructure through a combination of use of higher capacity vehicles operating at high frequencies and rationalisation of services. The Brisbane Metro also provides increased public transport river crossing capacity at minimal cost by repurposing the existing Victoria Bridge as a green bridge for public and active modes.

3.3.1.3  Department of Infrastructure and Regional Development – State of Australian Cities

The State of Australian Cities 2014–2015 report analyses cities in relation to population, settlement, economy, human capital and infrastructure and transport. The report states that issues of space and the potential conflicts (such as the movement of people versus the movement of freight) and usability of cities, long-term capacity of freight hubs and the movement of goods and people are key concerns for the continued growth of productive cities. Economic output of the major cities has grown, and as such, transport networks are experiencing significantly higher demand than planned for the networks.

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4 Australian Infrastructure Audit 2015, Infrastructure Australia, Key Findings p6 - 9
Australia’s cities are increasingly characterised by the significant spatial divide between areas of highly productive jobs and the areas of population-based services, reflected through the price premiums associated with houses that have better access to the city centre.

Dwelling stock in Australian cities has shown a shift from the traditional detached dwelling on a large parcel of land towards construction of semi-detached and apartment dwellings. Detached dwellings have declined as a portion of all dwellings, while medium and high-density dwellings have increased. While there is evidence that Australia’s major cities are increasing in density because of the construction of higher-density apartment developments in inner-city locations, growth in the detached housing market in urban fringe locations remains strong. Urban fringe areas are, however, becoming more distant from many of the established employment, education and health opportunities.

In the past decade, the rate of average annual growth of public transport patronage (2.4 per cent) surpassed the rate of population growth in capital cities (1.8 per cent)\(^5\), and as such demand for public transport modes such as buses and heavy rail is continuing to increase\(^6\). The report also highlights the criticality of integrated planning outcomes to anticipate and address growing demand and avoid unnecessary additions to transport tasks, making efficient use of existing transport infrastructure and identifying and planning for future needs\(^7\).

### How the Brisbane Metro Aligns with State of Australian Cities

The Brisbane Metro will address the problems associated with the forecast demand for bus services, as well as deliver an integrated transport solution for the inner-city. The Brisbane Metro aligns with the report findings by:

- Addressing the spatial divide between outer population growth areas and growth in inner-city high-value knowledge jobs by reducing travel time and increasing travel time reliability
- Encouraging densification in inner-city areas by providing a viable alternative to car use in congested inner areas through frequent, reliable services with good network integration, facilitated by easy same platform transfers
- Efficient use of transport infrastructure through better use of the existing busway network, fully integrated with other bus and rail services for greater accessibility and connectivity, with the ability to expand to meet planned future travel demand
- Providing easy and accessible links to key economic activity areas such as employment growth nodes, health and education facilities, and regional activity centres to foster agglomeration and economic growth.

### 3.3.1.4 Smart Cities Plan

The Smart Cities Plan sets out the Australian Government’s vision for cities and outlines three pillars of Smart Investment, Smart Policy and Smart Technology:

- We will become smarter investors in our cities’ infrastructure:
  - prioritising projects that meet broader economic objectives
  - treating infrastructure as an investment wherever possible
  - getting involved early to ensure rigorous planning and business cases

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\(^5\) State of Australian Cities 2014-15, Department of Infrastructure and Regional Development, p111
\(^6\) State of Australian Cities 2014-15, Department of Infrastructure and Regional Development, p112
\(^7\) State of Australian Cities 2014-15, Department of Infrastructure and Regional Development, p2
• We will coordinate and drive smarter city policy:
  o delivering ‘City Deals’
  o leading regulatory reform
  o measuring success.

• We will drive the take-up of smart technology to improve the sustainability of our cities and drive innovation:
  o thinking of technology solutions first
  o leveraging open and real-time data
  o driving use of energy efficient technologies.

The Smart Cities Plan highlights the challenges facing cities of economic transition, jobs, housing and transport. Businesses have an incentive to locate in areas with access to the largest numbers of potential employees. Likewise, people have incentives to settle where they can access the greatest number of employment opportunities. As economic activity becomes more concentrated, demand for housing and land in nearby areas rises. To deal with rising prices, Australians have taken on relatively high levels of household debt, moved to the outer suburbs, or both. As a result of more people living in cities’ outer suburbs, more people are travelling longer distances and for longer periods to get to work.

Congestion affects freight as well as passenger networks. While no city around the world has eliminated congestion, most world-class cities have invested in fast, efficient public transport systems to provide viable alternatives to private passenger vehicles. Well-designed public transport networks including heavy and light rail, buses, ferries and integrated active transport are an efficient, convenient and environmentally friendly way of transporting large numbers of people within and between cities. Better accessibility needs a combination of demand management and investment in public transport, roads and active transport, including walking and cycling.

The Smart Cities Plan outlines the concept of a 30-minute city where everyone can easily access the places they need to visit on a daily basis, wherever they live. It involves planning cities so residents can access employment, schools, shopping, services and recreational facilities within 30 minutes of home.

How the Brisbane Metro Aligns with Smart Cities Plan

The Brisbane Metro aligns with the Smart Cities Plan by providing a more efficient and resilient transport system to improve accessibility and connectivity in Brisbane, Queensland’s key economic and employment centre, and drive regional economic growth.

The Brisbane Metro assists with achieving the concept of a “30 minute city” for Brisbane by delivering a high-frequency service connecting key education, employment and recreation centres.

Furthermore, Council has engaged with the Australian Government during project planning and business case development to ensure the Brisbane Metro addresses key requirements in regard to integrated land use and transport planning; development of a highly integrated

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8 Smart Cities Plan 2016, Department of the Prime Minister and Cabinet, p11
public transport network; adaptability to allow for future growth; resilience to cater for potential disruption; and efficient and best use of limited funds for infrastructure investment.

### 3.3.1.5 Infrastructure Australia – Urban Transport Strategy

Infrastructure Australia’s Urban Transport Strategy (2013) identifies the following as key transport issues which need to be considered as part of the context of continued growth in urban cities:

- Integrating transport systems
- Integrating long-term infrastructure planning and land use planning
- The impact of urban transport systems on productivity
- The importance of urban access and equity, coherent and consistent funding and financing, consistent measurement and reporting of results.

The Australian Government has a strong interest in ensuring urban transport systems allow for productive national outcomes and that systems are planned in conjunction with land-use plans. The strategy states that, while large infrastructure projects are not the only urban transport issue, they can be very influential on system performance and land use over time. Finding the right balance between private car use and public transport is a key issue which impacts not only on travel but also on freight.

Productivity is influenced by the amount and type of travel undertaken. Travel is influenced by where people live and work and the convenience and user cost of transport options such as walking, car, or public transport. Land use decisions have long term implications for travel patterns and urban transport.

#### How the Brisbane Metro Aligns with the Urban Transport Strategy

The Brisbane Metro aligns closely with the objectives of this strategy by providing a more efficient, resilient and integrated transport system. The Brisbane Metro will help drive economic growth by improving accessibility and connectivity in the Brisbane region, Queensland’s key economic and employment centre.

The Brisbane Metro will improve integration of transport and land use outcomes and encourage more sustainable urban development through improved public transport connections, specifically, between the areas where people will live and the places where they will work.

### 3.3.2 Queensland Government Plans and Policies

#### 3.3.2.1 State Infrastructure Plan

The State Infrastructure Plan (SIP) was released in March 2016. It outlines a new strategic direction for the planning, investment and delivery of infrastructure in Queensland. The SIP sets out the Queensland Government’s strategic direction for infrastructure by identifying what is required from infrastructure (objectives) and how these objectives can be best achieved (directions). These objectives and directions seek to address the high-level challenges Queensland will face over coming decades.

The SIP outlines the following four objectives to guide infrastructure priorities:

- Improving prosperity and liveability

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8 Urban Transport Strategy 2013, Infrastructure Australia, p12
Infrastructure that leads and supports growth and productivity
- Infrastructure that connects communities and markets
- Improving sustainability and resilience.

It also outlines Queensland’s infrastructure directions, which are:
- Finding the right solutions: better planning and assessment
- The most effective funding and financing options available
- The most efficient procurement: lower costs for business
- Getting the most from what we have: better use of existing assets
- Better engagement: understanding needs and setting expectations.

Specific to the transport infrastructure requirements in Queensland, the SIP outlines the strategic responses and priorities to the key objectives. This is to enable Queensland Government departments and industry to align their activities in response to these priorities. The responses include the following:
- Focusing on maintenance and rehabilitation of existing infrastructure to reduce the long-term cost of repair and improve network resilience
- Unlocking the potential of critical supply chains by identifying and improving the freight network
- Seeking innovation and technology solutions to create a better performing and lower emissions transport system
- Seeking public transport solutions, including demand management, to address the strong growth of SEQ
- Digitally connected smart infrastructure to improve capacity, safety and security
- Connecting regional communities with access to essential services and opportunities.

How the Brisbane Metro Aligns with the State Infrastructure Plan

The Brisbane Metro supports the key objectives of the SIP and has continuously considered these principles to ensure transport outcomes support the wider public transport network and land use opportunities.

The Brisbane Metro also addresses the following key transport responses contained in the SIP by:
- Focusing on maintenance and rehabilitation of existing infrastructure to reduce the long-term cost of repair and improve network resilience by maximising use of the existing significant investment, by the Queensland Government, in the busway network
- Providing a coordinated land use and public transport planning solution that connects areas of high growth and high productivity ensuring infrastructure investment is maximised.
- Seeking public transport solutions including demand management to address the strong growth of SEQ by a more effective network plan to move more people while minimising ongoing costs
- Seeking innovation and technology solutions to create a better performing and lower emissions transport system by delivering new generation vehicle technologies
- Digitally connected smart infrastructure to improve capacity, safety and security by implementation of passenger and vehicles ‘smart’ systems to enhance customer experience and squeeze more capacity out of the existing infrastructure.
3.3.2.2 ShapingSEQ (Draft South East Queensland Regional Plan) 2016

As the economic, social and cultural hub of Queensland, the SEQ region has been subject to sustained high levels of growth since the early 2000s. While this growth has significantly altered the region, the Queensland Government has been successful in harnessing the opportunities it has provided to enhance SEQ's liveability and prosperity, through using effective growth management tools and frameworks such as the South East Queensland Regional Plan (SEQRP).

The first statutory regional plan for SEQ came into effect in 2005, and the current regional plan (SEQRP 2009-2031) refined and modified the strategic directions, principles and policies of the first statutory plan, in response to changing circumstances and revised population forecasts.

In 2016, the Queensland Government completed a review of the current SEQRP 2009–2031. This review has resulted in the development of ShapingSEQ (Draft South East Queensland Regional Plan). The draft plan was open for public consultation up to March 2017, with submissions currently being considered. The final plan is due for release in mid-2017.

ShapingSEQ provides a framework for managing the region's growth over the next 25 years and sets a vision for the next 50 years. Its development has included significant consultation with state and local governments and the community in response to the region's expected changing population, both in size (from 3.4 million in 2016 to 5.3 million people by 2041) and demographics. Five key themes underpin the 50-year vision for SEQ's future: Grow, Prosper, Connect, Sustain, and Live.

ShapingSEQ proposes policy directions and benchmarks to address the expected growth, including creating a region which is well-designed with communities that provide a diverse range of affordable living. It also seeks to boost jobs growth across the region, in the industries of the future. ShapingSEQ will drive for a region that is smart, sustainable, compact, connected, safe and healthy for now and into the future.

ShapingSEQ discusses the long-term vision to change the region’s transport priorities to achieve a more sustainable, healthier and fairer transport system, and the priority of public and active transport. This includes making the most of existing systems and targeting strategic investment in new region-shaping infrastructure. Integrated land use and infrastructure planning is fundamental to achieving community aspirations, economic growth, and efficient and affordable infrastructure delivery\(^\text{10}\).

**How the Brisbane Metro Aligns with ShapingSEQ**

The Brisbane Metro supports the 50-year vision for South East Queensland with good public transport network integration and connectivity, and frequent, reliable services to connect people with jobs, education, health facilities and recreation opportunities, reducing reliance on private car travel and improving inner-city amenity.

The Brisbane Metro connects areas of high growth and high productivity ensuring infrastructure investment is maximised. The Brisbane Metro supports planned growth and will catalyse new development.

\(^{10}\) ShapingSEQ (Draft South East Queensland Regional Plan) 2016, Queensland Government, p57
3.3.2.3 Connecting Brisbane (currently in draft)

Jointly delivered by the Queensland Government and Council, in conjunction with the Australian Government, Connecting Brisbane is a contemporary, holistic strategy for Brisbane’s passenger transport system, to set Brisbane’s public transport network up for the future as it emerges as a New World City. The vision for the future of public transport in Brisbane is to create a customer-friendly, efficient, integrated and reliable system that promotes connectivity and provides a foundation for future growth and innovation.

*Connecting Brisbane* identifies a passenger transport system transforming from a radial network, with buses and trains making long journeys into the city centre, to a ‘turn-up-and-go’ high-frequency trunk network with feeders, improving service and reducing duplication.

**How the Brisbane Metro Aligns with Connecting Brisbane**

The Brisbane Metro is a fundamental part of the *Connecting Brisbane* strategy. In conjunction with Cross River Rail, it will support key visions for the future transport network including:

- Creating an attractive customer experience where public transport becomes the preferred mode of travel where it best suits
- Providing an efficient, reliable and modern service and network which offers on-time services on a high-frequency trunk network supported by appropriate feeders, responding to community needs
- Connecting people, businesses and places through a system that provides a high level of access to major facilities, services and hubs in Brisbane
- Establishing a foundation for growth and innovation through a cohesive, network that is flexible enough to continue to grow and evolve in response to present and future needs.

These projects will work together to deliver a complementary high-capacity people movement system to form key elements of a world-class inner-city passenger transport network that supports employment growth in the capital city centre and, more broadly, employment and infill growth throughout the metropolitan sub-region.

3.3.3 Local Government Plans and Policies

3.3.3.1 Brisbane City Plan 2014

The Brisbane City Plan 2014 (City Plan) commenced on 30 June 2014. The plan’s strategic framework is based on a range of Council and Queensland Government documents and plans, including:

- Brisbane Vision 2031
- Brisbane Economic Development Plan 2012–2031
- SEQRP.

The City Plan strategic framework seeks to ensure Brisbane has an outstanding lifestyle and a globally competitive economy supported by safe, efficient and reliable public transport. The framework supports growth along major road corridors and within and near major centres including the city centre and city frame including Fortitude Valley and South Brisbane. Regional centres including Chermside and Upper Mount Gravatt are also identified growth nodes.

The following key strategic transport objectives are reflected in the City Plan:
• Brisbane has a safe and efficient public transport network
• Public transport is the preferred mode of travel to the city centre and the city’s other major centres, and provides a high level of access to all facilities and services in Brisbane, reducing the need to use a car\textsuperscript{11}.

How the Brisbane Metro Aligns with Brisbane City Plan 2014

The Brisbane Metro aligns Brisbane City Plan’s strategic intent as it supports planned growth. It will support and drive new development helping the city’s residential and productive precincts reach their full potential. This includes building on the principles of transit oriented development.

The Brisbane Metro will better integrate transport modes and support connections between sustainable land use and transport infrastructure to strengthen the economy.

3.3.3.2 Brisbane City Centre Master Plan

The Brisbane City Centre Master Plan (BCCMP) 2014 sets the vision and strategic framework to manage the forecast high growth in the Brisbane CBD and city frame over the next 20 years – “around 50 more office and apartment towers will be needed to accommodate demand, there will be an 80 per cent increase in public transport journeys as more people commute and city centre streets will have double the number of pedestrian trips”\textsuperscript{12}.

Strategic development sites identified in the BCCMP relevant to the Brisbane Metro are the Brisbane Transit Centre and Woolloongabba area. The plan envisages redevelopment of the Brisbane Transit Centre to deliver a safe and attractive gateway marking the western entry to the city centre. Woolloongabba is identified as a suitable location for a key transport interchange for regional commuters, enabling them to access inner-city destinations without congesting the main transit corridors. The area offers advantages such as easy access to skilled labour, customers, other businesses and key transport routes.

City frame renewal precincts identified include Valley Heart and Centenary Place, City West and Petrie Terrace, Kurilpa and Spring Hill. Other renewal precincts identified that have a significant relationship with the core of the city centre include Woolloongabba, Milton, Kangaroo Point and Bowen Hills.

The BCCMP’s transport strategy ‘where people connect’ states that public transport will be the best way to commute to the city centre and investment will be made in high-capacity and high-frequency transit to maintain the city’s strong growth. It also indicates Brisbane will boast an extensive intermodal network, new transit infrastructure and improved services to sustain continued growth and prosperity.

How the Brisbane Metro Aligns with Brisbane City Centre Master Plan

The Brisbane Metro aligns with the Brisbane City Centre Master Plan’s visions by facilitating rapid transit to reduce impacts on city streets and improve amenity for pedestrians and business.

A part of a network of rail, bus and CityGlider services, the Brisbane Metro will ensure an efficient ride between the region and the state capital as being vital to ensuring the journey to the city centre is a convenient, comfortable and hassle-free experience from start to finish.

\textsuperscript{11} Brisbane City Plan 2014, Brisbane City Council, Section 3.6.2
\textsuperscript{12} Brisbane City Centre Master Plan – A Vision for Our Open City, Brisbane City Council, Brisbane, 2014, p12
3.3.3.3 Brisbane Vision 2031

Brisbane Vision 2031 is Council’s long-term community plan for the city. The main priorities influencing the vision are to:

- Maintain or improve quality of life for the Brisbane community
- Ensure that Brisbane has the services and infrastructure to meet the liveability and sustainability challenges of the future
- Provide an overarching plan of action for Council, its partners and the people of Brisbane until 2031.

The themes in the vision outline the shared aspirations for Council and the community. These are:

- Our accessible, connected city
- Our active, healthy city
- Our clean, green city
- Our friendly, safe city
- Our new world city
- Our smart, prosperous city
- Our vibrant, creative city
- Our well-designed, subtropical city.

The most relevant theme for the Brisbane Metro is ‘our accessible, connected city’. The relevant aspirations to achieve this theme are:

- Brisbane is an accessible city for everyone. Residents, workers, students, visitors and business people can move easily throughout the city
- Road, public transport and active transport networks provide safe, efficient, fast and reliable travel options throughout the city. These networks help deliver economic benefits to Brisbane and support the growing community and changing economy
- Freight moves easily and efficiently around Brisbane, using dedicated corridors to service key industry and logistic destinations.

How the Brisbane Metro Aligns with Brisbane Vision 2031

The Brisbane Metro aligns with Brisbane Vision 2031 by delivering a safe, connected and reliable public transport network and services that are planned to support forecast population, employment and economic growth, is resilient to disruption from climate and technological change, and supports a vibrant 24-hour inner-city and our subtropical lifestyle.

The Brisbane Metro will help address the following key aspirations:

- Increasing public transport mode share, particularly for commuting trips to the inner-city
- Improving travel times and travel time reliability
- Improving public transport accessibility and sustainability
- Providing for the safe movement of people about the city
- Providing infrastructure to support population, employment and economic growth, particularly in export industries.
3.3.3.4 Brisbane Economic Development Plan

The Brisbane Economic Development Plan 2012–2031 (BEDP) indicates significant capacity building will be required to meet growth opportunities, including expanding transport infrastructure and improving public transport services, particularly those that serve commercial and industrial precincts. The BEDP notes business precincts across the inner-city must be linked by good public transport networks for corporate businesses to enjoy efficient connectivity and to realise the associated agglomeration benefits.

The plan indicates moving people efficiently into and around inner-city employment hubs from across the region, particularly from areas outside of Brisbane as the broader SEQ region grows, will be critical to future economic growth.

**How the Brisbane Metro Aligns with Brisbane Economic Development Plan**

The Brisbane Metro closely aligns to the following priority actions in the Brisbane Economic Development Plan 2012–2031 by continuing to improve public transport connectivity between economic precincts and special attention to ensuring the inner-city and CBD maintains competitiveness and provides for economic growth.

The Brisbane Metro will strengthen the region’s economic direction through improved connectivity and accessibility to employment growth areas in the Brisbane region and population growth areas.

3.3.3.5 Brisbane Long Term Infrastructure Plan

The Brisbane Long Term Infrastructure Plan 2012-2031 (BLTIP) is intended to guide the prioritisation and alignment of Brisbane’s infrastructure as the city grows. It acts as a reference for other levels of government and the private sector. The key objectives of the plan include:

- Grow the economy: Road and public transport networks provide efficient and reliable travel options for workers to access jobs, residents and visitors to access services, and business and industry to operate effectively and productively
- Build the community: The transport network delivers people to their desired destination.

The BLTIP highlights that public transport is critical to maintaining the liveability of the city. Brisbane’s public transport system will evolve to provide:

- Reliable, frequent and accessible services
- Access to major centres, services and facilities that meet the needs of commuters
- Well-connected, multimodal networks with seamless integration between different modes.

Integral to achieving the outcomes sought for the public transport network is ensuring ease of access and use of public transport facilities, including for people with a disability. Locating bus and rail interchanges at strategic interconnection points, and providing ‘park and ride’ facilities where appropriate at key bus and rail station locations will facilitate this outcome.

**How the Brisbane Metro Aligns with Brisbane Long Term Infrastructure Plan**

The Brisbane Metro addresses the plan objectives by increasing capacity and delivering frequent and reliable transport services between areas of high population and employment growth areas to improve employment outcomes and boost economic activity.
The Brisbane Metro also addresses the objectives of the Infrastructure Plan by maximising interconnectivity between all modes of the transport network to ensure investment in the network delivers the greatest possible benefits to commuters (e.g. providing interchanges at key cross-city and radial transport nodes, and interconnecting active and public transport options).

3.3.3.6 New Transport Plan for Brisbane (in development)

Council is currently developing a new transport plan to outline how it intends to address the transport challenges facing Brisbane over the next 20 years and beyond, to achieve Council’s vision for the future. The plan is due to be released in late 2017, and will provide an overarching framework to guide Council’s transport policies and future investments.

The new transport plan will replace the current Transport Plan for Brisbane 2008-2026, as the majority of projects listed in the current TP4B are either completed or underway. More recent population and employment figures and forecasts are now available (2031 and 2041) and will influence the future of Brisbane in terms of strengthening the city’s economy and supporting high-quality access to facilities and services, while the city’s environmental quality and liveability are maintained.

The Brisbane Metro will be a key feature within the new plan.

How the Brisbane Metro Aligns with Transport Plan for Brisbane

The Brisbane Metro aligns with the New Transport Plan for Brisbane by improving connectivity and accessibility to/from and within the CBD and supporting the growth of the Brisbane economy.

It meets the principles outlined for investment in transport infrastructure – people-first; safety; sustainability; integration; connectivity; equity of access; effectiveness; whole-of-life considerations; adaptability; one-network; intergenerational equity; efficient use of existing assets; and manages transport demands.

3.4 Demographics and Demand

Over the next 25 years, significant population growth, coupled with economic and employment growth, will underpin increasing demand for infrastructure and services in SEQ. This includes transport infrastructure, which is vital to support this growth as it provides the means for people to access jobs and services. As such, demand for travel is expected to grow in response to population growth and the associated increase in economic activity. Some of these key demographic changes are discussed further in the sections below.

3.4.1 Population

By 2041, there will be an estimated 3.4 million people living in the Brisbane Statistical Division, of which 1.48 million will call the Brisbane Local Government Area home.

Figure 3.1 provides a graphical representation of the Brisbane Statistical Division, the Brisbane Local Government Area (LGA), and the area deemed inner Brisbane for the purposes of analysis in this Business Case.
To protect remaining green spaces from suburban sprawl, ShapingSEQ has set a target for 95 per cent of new homes/dwellings in Brisbane to be infill or redevelopment of existing sites. Approximately 78,500 of these new dwellings will be constructed in inner Brisbane, which is a 54 per cent increase in the current dwelling stock. From the present day, inner Brisbane’s population will increase by 46 per cent to 475,000 residents by 2041.

With few greenfield sites remaining, future growth will be focused in inner-city suburbs and along transit corridors. People will move to these inner-city precincts to reduce commuting times and improve access to a wide range of employment, education, shops and services. Figure 3.2 provides a geographical snapshot of forecast residential growth in the inner-city and southern corridor in 2041.

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*Figure 3.1 – Mapping of Brisbane’s demographic regions*

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13 Brisbane Metro Transport Model (2017)
As shown in Figure 3.3, inner Brisbane is forecast to grow at an annual rate of approximately two per cent. Within this central area, 29 per cent of households do not own a motor vehicle compared with seven per cent across the broader SEQ region. A significant proportion of the growth in demand for travel is therefore likely to be met by the public transport network, as well as active transport.
Providing frequent, high-quality public transport services to inner Brisbane and the CBD from commuter catchments outside of Brisbane, as well as inner-city distribution services, will be critical to respond to and drive population growth across SEQ and economic growth in Queensland’s primary activity centre.

### 3.4.2 Economy

The wider SEQ region performs the key administrative, political and service functions for Queensland. Critical economic markers include:

- The region generates almost two-thirds of Queensland’s gross state product
- More than 80 per cent of employment in Queensland’s professional, scientific and technical services, financial and insurance services, and information, media and telecommunications sectors is located in SEQ
- SEQ is home to the majority of Queensland’s key health, education and research clusters, with nine world-class universities and more than 100,000 international students
- The region is the apex of Queensland’s strategic freight network and the primary hub for goods movement within the state.

As shown in Figure 3.4, Brisbane’s gross regional product (GRP) contributes approximately nine per cent to Australia’s gross domestic product (GDP). Brisbane’s economy is projected to increase from $114 billion to $217 billion by 2031.

Figure 3.3 – Population projections for inner Brisbane

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14 Brisbane Metro Transport Model (2017)
15 ShapingSEQ (Draft South East Queensland Regional Plan) 2016, Queensland Government, p17
16 Brisbane Economic Development Plan 2012-2031, Brisbane City Council
The inner-city is forecast to grow faster than the Brisbane LGA as a whole, underscoring a key principle of agglomeration economics where density magnifies productivity.

### 3.4.3 Employment

Reflecting its economic importance to Queensland and the nation, Brisbane currently provides around one third of the state’s workforce\(^\text{18}\). As such, accessibility from outer suburbs and urban centres will be critical to supporting Brisbane’s future growth and the CBD’s function as a wealth creator for the region.

Figure 3.5 provides a geographical snapshot of forecast employment growth in the inner-city and Southern Corridor in 2041.

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\(^{17}\) Brisbane Economic Development Plan 2012-2031, Brisbane City Council

\(^{18}\) Queensland Government Statistician’s Office, Regional Profiles: Workforce: Brisbane City LGA
Figure 3.5 – Forecast jobs and student numbers in Brisbane inner-city and Southern Corridor by 2041

Employment forecasts indicate by 2041, more than 50 per cent of new jobs in the Brisbane LGA are expected to be located in inner Brisbane, growing to a total of approximately 630,000 jobs; driving demand for improved capacity and performance of bus and rail services to inner Brisbane. Figure 3.6 details employment forecasts by region within the Brisbane Statistical Division.

19 Brisbane Metro Transport Model (2017)
As shown in Figure 3.7, this growth will lead to a significant increase in the number of people travelling from outer areas into the CBD for work, as well as travel within the CBD.

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20 Brisbane Metro Transport Model (2017)
21 Regional Projections: 2010-11 to 2040-41 Data Tables, Queensland Treasury and Trade
Table 3.1 provides a summary of the key growth indicators for the SEQ region and inner Brisbane between 2016 and 2041.

<table>
<thead>
<tr>
<th>DEMOGRAPHIC CHANGES</th>
<th>POPULATION</th>
<th>EMPLOYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2036</td>
</tr>
<tr>
<td>South East Queensland</td>
<td>3,284,000</td>
<td>4,750,000</td>
</tr>
<tr>
<td>% Growth from 2016</td>
<td>45%</td>
<td>57%</td>
</tr>
<tr>
<td>Brisbane LGA</td>
<td>1,166,000</td>
<td>1,423,000</td>
</tr>
<tr>
<td>% Growth from 2016</td>
<td>22%</td>
<td>27%</td>
</tr>
<tr>
<td>Inner Brisbane</td>
<td>324,000</td>
<td>448,000</td>
</tr>
<tr>
<td>% Growth from 2016</td>
<td>38%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Table 3.1 – Demographic Changes from 2016 to 2041

### 3.5 Future Strategic Challenges

#### 3.5.1 Demographic Shifts

Brisbane in 2041 will not simply be a larger version of the same city. The way people live, work and travel will change due to technological advances, demographic shifts and economic forces. Future transport systems need to consider these emerging megatrends.

By 2041, there will be 145,000 new dwellings in Brisbane assisting to meet the ShapingSEQ target of 95 per cent of new homes/dwellings in Brisbane to be infill or redevelopment of existing sites. As discussed in section 3.4.1, with little greenfield land left to develop, future growth will be focused in inner-city suburbs and along transit corridors. Approximately 78,500 of these new dwellings will be constructed in Brisbane’s inner five kilometres, which is a 54 per cent increase in the current dwelling stock.

Inner-city residential developments in Brisbane are increasing, with 12,000 units currently under construction in locations like South Brisbane, Fortitude Valley, Milton and Newstead. Over the next 25 years, Brisbane will transition from a low-density city to a mixed density city, and this will change the way people travel.

Compact inner-city precincts provide new residents and workers with good access to employment, shops and education, whilst reducing travel demand on roads. People living and working in these locations will travel primarily by walking and transit. Most journeys will be shorter and streets will become places for walking, shopping and business.

Inner-city apartment living has been embraced by young professionals and international students. Younger generations are seeking greater access to employment, education, transport and entertainment and are less interested in car ownership. Research shows that younger generations are less likely to have a driver’s license than in previous years, and this trend is more pronounced in dense urban areas. These inner urban areas also have lower parking supply for residents.

22 Queensland Government Statistician’s Office Projected Population by local government area 2011 to 2036 (Medium Series) and Employment Projections: Journey to work - South East Queensland, 2010-11 to 2040-41. Note that the population statistics exclude the Toowoomba region
23 Brisbane Metro Transport Model (2017)
24 Brisbane Metro Transport Model (2017)
Another large demographic shift is the retiring baby-boomers and empty-nesters that are already moving to inner-city locations for the improved access and vibrancy of these neighbourhoods. As this generation ages over the next 25 years, their car travel will decline and they will rely on other transport services.

### 3.5.2 CBD Expansion and Brisbane’s global economy

Brisbane’s city centre is the globally facing commercial centre for all of SEQ, providing opportunities for national and international employment clusters. CBDs have traditionally been concentrations of high-value knowledge-based employment located within large office buildings.

By 2041, Brisbane’s city centre will have expanded beyond its traditional peninsula location to become a network of inner-city precincts, and these will host much more diverse and mobile forms of employment. Hospitals and universities will play a stronger role in the city’s economy, as will smaller and more mobile business enterprises. The ability of businesses and workers to move quickly and easily within and between these inner-city precincts will be essential to the success of Brisbane’s economy.

### 3.5.3 Emerging Transport Technologies

In 2041, many people will not buy or drive cars like they do today. The combination of driverless technologies, electric vehicles and ride-share services are expected to revolutionise private travel in urban areas over the next 25 years. The reduction in labour, fuel and maintenance costs will make ride-share services more affordable than they are today.

Shared autonomous vehicles (SAVs) could provide an affordable and convenient option for commuting to work, or to a nearby transit station. They could also be used by children travelling to school, the elderly and people without a license.

In future, fleets of SAVs could operate continuously on city streets, without need for parking. The risk for cities is that high patronage of SAVs could lead to increased congestion, particularly in central business districts. However a well-planned and prioritised transit system can keep the city moving and harness the emergence of SAVs to expand station catchments in suburban areas.

By 2041, other disruptive transport and vehicle technologies are also likely to emerge. The desire for convenient, reliable, and cost-effective transport services will be a constant challenge and a driver for innovation.

### 3.6 Strategic Analysis Summary

By 2041, Brisbane’s economy will provide 1.2 million jobs for the wider region. Retail, health, education and tourism activities will also escalate over the coming decades, generating increased travel demand into the city and surrounding precincts. The inner five kilometres will expand from a single CBD to a network of business districts, hospitals, universities and high-density living precincts.

These businesses and industries will need improved access to customers, skilled workers and each other to thrive. Yet as the city’s economy and population grows, so does the challenge of congestion. Every large city faces road congestion, but successful global cities employ rapid transit systems to keep their economies working.
This distribution of homes and jobs across SEQ reflects the desired strategic direction established by key plans and policies at all levels of government. This includes:

- **Australian Infrastructure Plan** – which indicates urban passenger transport networks should be upgraded so they meet future connectivity needs, are more integrated, have higher capacity and can meet the twin demands of population growth and rising expectations for service levels.

- **Smart Cities Plan** – which recognises as economic activity in cities becomes concentrated, demand for housing in nearby areas rise, resulting in more people living in outer suburbs and travelling longer to get to work. In this context, the Smart Cities Plan prioritises infrastructure that improves accessibility, promotes agglomeration economies and enhances amenity, housing affordability and sustainability.

- **State Infrastructure Plan** – which includes the provision of infrastructure that connects communities to markets and supports growth and productivity as a key objective.

- **ShapingSEQ** – which discusses the long-term vision to change the region’s transport priorities to achieve a more sustainable, healthier and fairer transport system. This includes making the most of existing systems and targeting strategic investment in new region-shaping infrastructure.

- **Brisbane City Plan** – which seeks to ensure Brisbane has an outstanding lifestyle and has a globally competitive economy supported by safe, efficient and reliable public transport.

- **Brisbane City Centre Master Plan** – which proposes public transport will be the best way to commute to the city centre and investment will be made in high-capacity and high-frequency transit to keep the city growing strongly.

SEQ’s transport network must cater for increased demand to Brisbane’s CBD by better linking outlying residential areas to the region’s key employment hub. Employment growth in the CBD and inner-city – and related economic spinoffs – depends on residents across the region being able to get to workplaces in a reliable and reasonable time, particularly during peak periods.

SEQ’s transport challenge cannot be met by building more roads that funnel more traffic into an already congested urban centre. Limited scope exists to further develop the road network into Brisbane’s dense inner core and recent major road investment in Brisbane has been focused on bypassing the CBD (such as Clem 7, Go Between Bridge and Legacy Way) rather than directly improving access to the CBD.

Expansion of the transport network in Brisbane must also be cognisant of demographic shifts towards apartment living in the CBD, as well as the ongoing expansion of the inner-city with new precinct developments. These shifts will impact on the long-term requirements for high-capacity, efficient, integrated public transport systems.

Better public transport offers the solution to SEQ’s future transport needs. Public transport accessibility is a key driver of economic growth, jobs growth, lifestyle enhancements and urban regeneration.