

Driving Change

Perth and Peel
Economic Development Strategy
and Infrastructure Plan

to 2050



to 2050



Foreword

Driving Change: Perth and Peel Economic Development Strategy and Infrastructure Priority Plan is a collaborative effort that has had extensive input from a range of stakeholders representing commonwealth, state, and local governments, industry and the community.

The intent of this work was to identify the infrastructure priorities that would deliver the greatest return to the State in terms of business investment and jobs growth. This approach is a departure from those that allow population growth to determine infrastructure needs, as it is using economic development to drive catalytic infrastructure provision.

Economic development is paramount to the success of our regions and we must maintain a sense of urgency to meet current and emergent competitive demands. There is a need to strengthen the spine of our logistics infrastructure that allows ease of access between port, rail and air and industries need to be clustered in strategic locations to manage future growth.

Western Australia will always rely on its resources strength but the State can also become home to emerging opportunities that will elevate both Perth and Peel as globally competitive regions. This document is aligned with the *Perth and Peel @3.5 Million* but prioritises key projects that will help shift the economy and open up opportunities for new business investment.

Population driven economies such as health, education, retail and construction will continue to grow as new people move to the regions, but there is also a requirement to foster development in clean energy, automation, science, intensive agriculture and tourism; these are some of the new frontiers that will beckon future generations of Western Australians. The new economies will need to foster entrepreneurs and reward innovation.

Government has a changing role in unlocking economic potential: establishing strategic partnerships at a subregional level with the state and commonwealth and utilising funding to de-risk projects and leverage private sector investment to fund regional infrastructure needs.

All stakeholders, planning strategically, collaborating and leveraging their resources, must work together, utilising infrastructure to deliver a bright, innovative, economic future for Perth and Peel.



Keith Ellis
RDA Perth Chairman



Mark Holdsworth
EDA Chairman

Acknowledgements:

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Economic Development Strategy and Infrastructure Plan



A new approach

Infrastructure planning, coordination and delivery is the foundation of regional jobs growth and has the potential to guide efficient and sustainable growth. It acts a platform for ensuring residents and businesses have appropriate access to a wide range of locations, services, markets and resources. Infrastructure is also a catalyst to ancillary investment, productivity and economic development.

Where planning and infrastructure delivery fails to be effective, economic growth becomes stifled and inefficiencies pervade all aspects of the economy from price escalation to increased transport and travel costs.

Governments play a vital role in planning for and delivering infrastructure, however, funding limitations restrict the regular provision of leading infrastructure. New and innovative funding approaches must be implemented to deliver major leading infrastructure into the future. Continuing to rely on a solely government funded and reactionary model is ineffective and leads to suboptimal outcomes.

The release of the draft *Perth and Peel@3.5 million* by the Western Australian State Government highlights an effective doubling of the population to 2050 and clarifies a number of previous regional planning uncertainties. Combining a review of the objectives of the draft *Perth and Peel@3.5 million* and input from the extensive consultation with key Local and State Government and other key regional stakeholders highlights a current and pressing need for:

- Job growth in key industries to support population increases and continued diversification of the Western Australian and Perth and Peel economy
- Efficient utilisation (and development) of basic infrastructure to reduce the ongoing maintenance burden (e.g. power, water, gas, wastewater)
- Enhanced connectivity and infrastructure to support trade with local, regional, state, national and global markets (e.g. ICT, intermodal connections between transport networks (port, airport, road and rail))
- Reduced congestion on the passenger transport network, through enhanced services, completion of regional road networks and/ or provision of employment lands near residential areas to reduce the passenger transport task moving forward
- World class amenity and lifestyle characteristics to attract and retain key workers.

Meeting these needs will require a broad range of responses, including major new infrastructure, industry development, local jobs initiatives, efficient infrastructure utilisation programs, alternative and remote working arrangements, place making and local business and industry skills development around management and embracing new technology.

The Perth and Peel region is well positioned to drive a pro-active model of regional investment given its size, structure and location. This model must utilise key infrastructure development to lead and drive economic growth. This model cannot simply react to population needs.

Regionally significant initiatives (i.e. require government support and policy development) and nation building initiatives (i.e. require strong government intervention) must come to the fore. These must be initiatives that strengthen the economy and expand the capacity and competitiveness of the region in an increasingly competitive global market – these initiatives are the focus of this report. At the same time local initiatives and population driven household services employment must be encouraged and cultivated – these initiatives, as important as they are, are not the focus of this report.

The purpose of this document is to highlight future opportunities for Perth and Peel and identify game changing initiatives.

The game changing initiatives identified in this document include:

Nation Building: Initiatives that require strong government intervention:



- **Development of the Outer Harbour at Kwinana:** To facilitate additional capacity in trade infrastructure, efficient transport and logistics infrastructure and ensure the opportunity for Fremantle as a destination and activity centre is realised.



- **Latitude 32:** To support major industry growth through the delivery of a 1,600ha industrial precinct.



- **Intermodal sites (Bullsbrook and Mundijong):** To secure future intermodal sites and ensure long term transport and logistics capacity (Mundijong will require greater private sector investment).

Regionally Significant: Initiatives that require government support and policy development:



- **Common User Facilities:** To support innovation hubs and encourage smart business start-ups as well as digital hubs to support regional annexes of larger organisations and departments traditionally only able to offer employment in the CBD.



- **Peri-Urban Development:** To ensure productive agricultural land is retained and leveraged at the same time as encouraging residential and urban development and lifestyle options.



- **Knowledge Economy:** To deliver globally respected knowledge precincts leveraging Curtin/ Bentley and UWA - QEII as core knowledge assets to drive and grow world class research, development and commercialisation programs in these institutions and the surrounding precincts.



- **Skills Development & Training:** To ensure local business and industry has access to the skills and development they need as managers as well as access to skilled employees.

Region



Nation Building Initiative

Bullsbrook Intermodal Terminal

Jandakot Airport

Perth Airport

Yanchep

Joondalup

Perth CBD

Midland

Armadale

Fremantle Port

Rockingham

Mandurah

Knowledge Centres
 - UWA/ OEII
 - ECU
 - Murdoch University
 - Curtin University



LEGEND

- Sub-Regional Precinct Boundary
- Sub-Regional Internal Precinct Boundary
- Freeway
- Key Roads
- Freight Rail Line
- Waterbodies
- Peri-Urban Land
- Location Marker
- Infrastructure Marker
- City Centre
- Knowledge Centre
- Potential Knowledge Centre / Common User Facilities

Nation Building Initiative

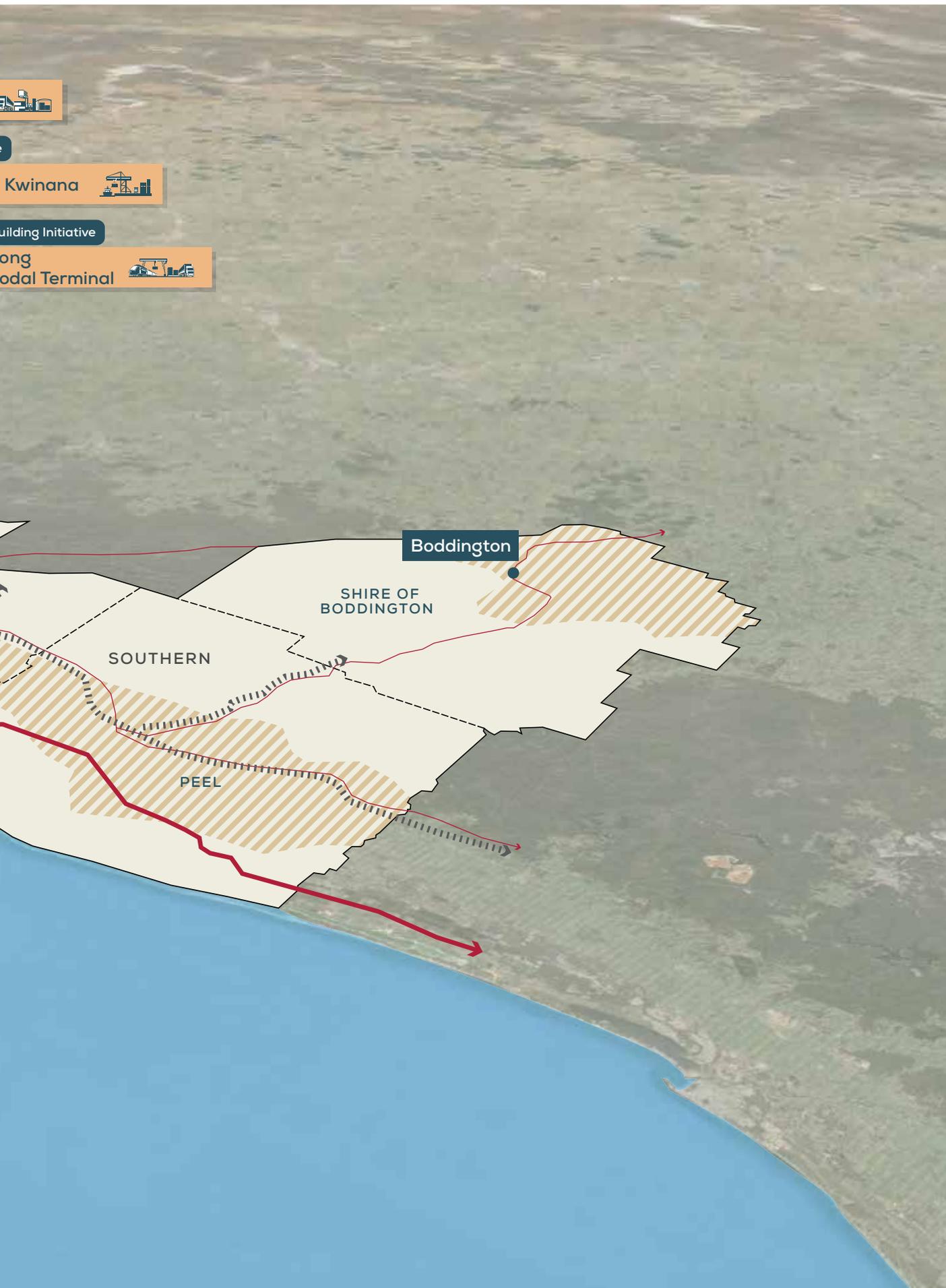
Latitude 32

Nation Building Initiative

Outer Harbour at

Nation B

Mundij Inter



The Driving Change - Perth and Peel Economic Development Strategy and Infrastructure Priority Plan to 2050 is the first step toward a new collaborative regional attitude and creative way of thinking that will deliver observable on-ground change.

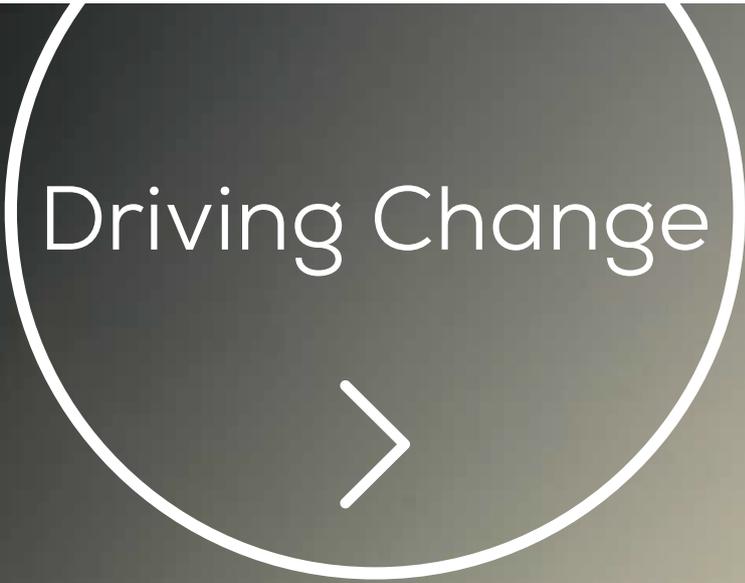
A critical component of this new approach is to ensure high levels of engagement.

Extensive engagement and consultation was undertaken in the identification of the key initiatives for development. The opportunity for engagement was provided and conducted across a number of phases:

- Individual face-to-face engagement with each local government in the Perth and Peel region
- Six sub-regional workshops
- Engagement with State Departments and utilities providers
- Steering Committee and Local Government Working Panel meetings
- Ongoing stakeholder comment.







Driving Change

Vision

A highly connected,
productive and globally
competitive city.

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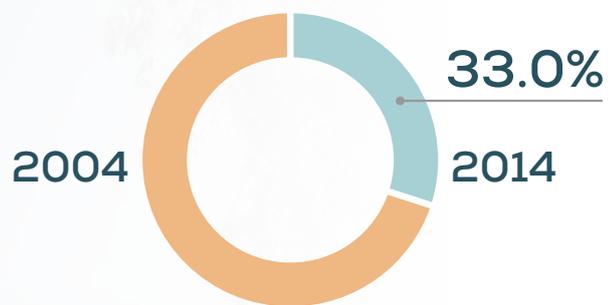
to 2050



Perth and Peel

A unique region

- Perth is the second most isolated capital city in the world and the most isolated capital with a population in excess of one million people.
- Perth CBD is the administration hub of the Western Australian mining sector.
- The Perth and Peel region is within the same time zone as what will be five of the seven most populous countries in the world by 2050.
- The Perth and Peel region faces considerable challenges surrounding its pending growth. These challenges are mainly due to a growing population, the high cost of infrastructure delivery and a relatively low tax base for an area of its size. Highlighted by Perth being Australia's second most expensive city to live in, with a median house price above the national average, and household electricity tariffs having risen 79% since 2009.
- Dependent persons¹ are projected to increase faster than employed persons, increasing the support burden on the 'economically active' cohort of the community.



Between 2004 and 2014, population grew by 33.0%
The fastest of all major cities and their greater metropolitan regions in Australia.



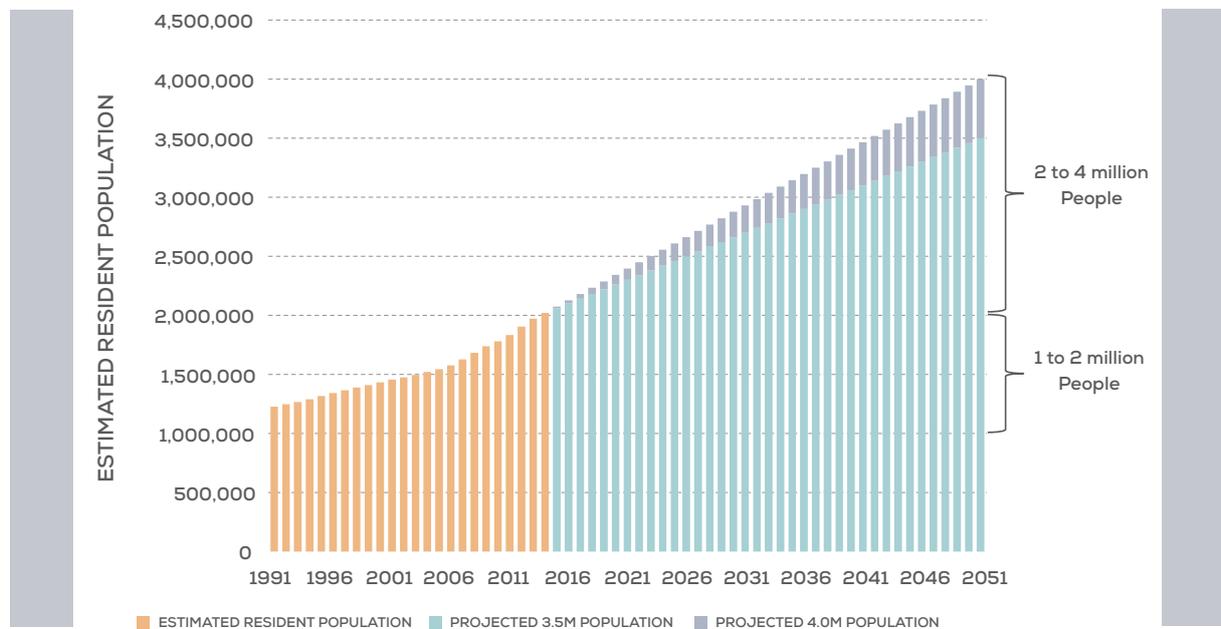
Perth and Peel will double its current population to between

3.5 million and 4 million
by 2050.

Population

- Population growth has driven an expanded urban development footprint along a 170km coastline, which presents a significant infrastructure delivery burden.
- Population has roughly doubled from 1 million to 2 million over the past 30 years, increasing at approximately 90 people per day.
- Population will double again from 2 million to around 3.5-4 million by 2050. This is approximately 45% faster than the previous doubling, with between 110-150 additional people every day. All of these are anticipated to reside within the 170km of coastline.

Figure 1. Estimated Resident Population Growth Rates, Perth and Peel, 1991-2051



Source: ABS (2015), AEC



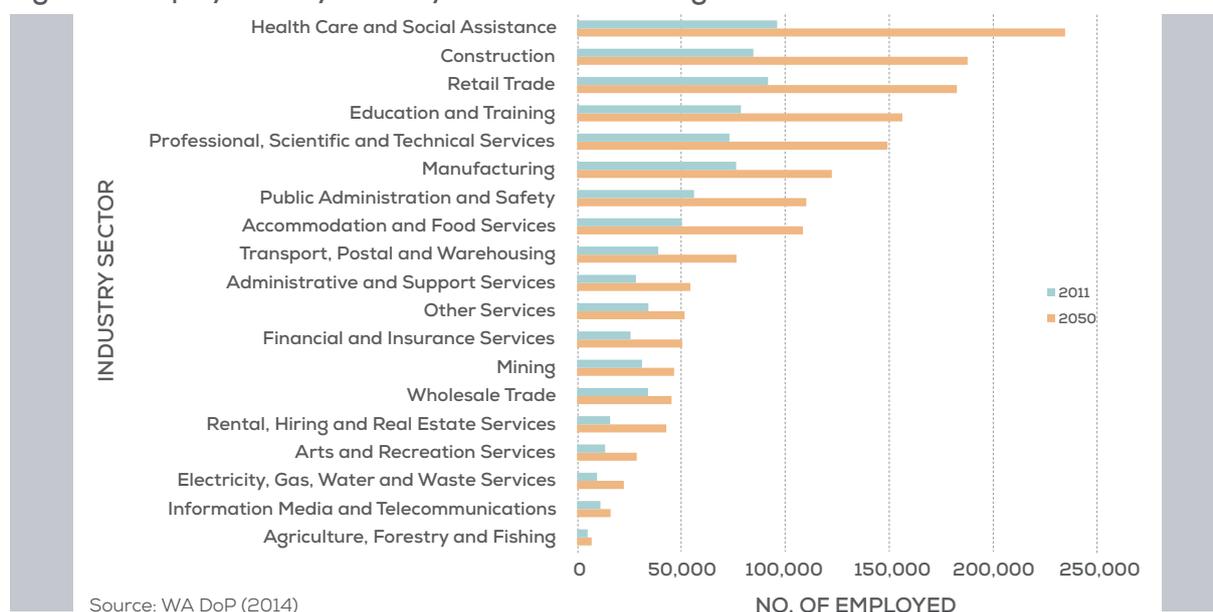
Economy

- Mining, construction and professional, scientific and technical services are the dominant industry sectors in Perth and Peel².
- GRP has grown at an average 9.2% per annum in Perth and Peel since 2006/07 and 9.6% per annum in WA. The Australian economy averaged growth of 5.5% per annum over the same period.
- The fastest growing sectors in Perth and Peel have been agriculture, forestry and fishing (18.5% per annum), electricity, gas, water and waste services (13.5%), administrative and support services (12.5%), construction (12.3%) and mining (11.9%).
- Technology advancement has contributed to growth in recent years and is changing the way people live and do business. A number of emerging technologies will continue to transform the economy moving forward including mobile and remote internet access and computing, cloud technology, advanced robotics and virtual intelligence, renewable energies and energy storage, advanced materials design and manufacture, and next generation genomics.

Jobs

- Significant jobs growth will be required to meet the needs and service requirements of an ever increasing population, but employment growth in other key growth sectors is also required.
- A virtual doubling of the number of jobs is projected by 2050, to 1.7 million employed persons
- These jobs will cover a broad range of sectors, with the WA Department of Planning indicating key sectors of growth as:
 - 138,000 additional health care and social assistance services jobs
 - 103,000 additional construction jobs
 - 91,000 additional retail trade jobs
 - 78,000 additional education and training jobs
 - 76,000 additional professional, scientific and technical services jobs

Figure 2. Employment by Industry, Perth and Peel Region, 2011 and 2050



Income

- Employees in the Perth and Peel region in 2011 earned 6.7% more than the average Australian (average of \$1,057 per week, compared to \$991 per week for the average Australian) (ABS, 2012), highlighting the importance of a productive workforce and skills development to remain competitive.



Employees in the region earn



More than the average Australian

2016 ————— 2050



to 2050

Influencing Factors

Successfully delivering economic, business, industry and population growth requires an understanding of the different factors driving and influencing the way people live, move and go about working.

Flexibility in response to these issues is key to harnessing, rather than resisting these factors and leveraging them for new opportunities. A summary of the key influencing factors in the Perth and Peel region is presented below. Additional detail is included in Appendix A.

Funding for infrastructure

The population will double to approximately 3.5-4 million by 2050, which equates to an additional 110-150 people per day. These sustained levels of population growth will create increased pressure and demand on infrastructure delivery.

Perth and Peel delivers and supports infrastructure up and down a 170 kilometre stretch of coastline. Continuing to expand and stretch infrastructure development presents a significant tax burden and is unsustainable from a capital and maintenance point of view.

Local Context: Infrastructure can either to lead or follow development. Good economic outcomes are achieved when the right infrastructure leads development. Based on this, some of the priorities for consideration include:

- Where there is capacity within the local service network high levels of infill development should be pursued as a priority, followed by areas where effective augmentation can deliver significant increases in capacity. Creating greater density with more residential and commercial development around transport nodes will ease pressure on infrastructure and generate increased activity and new economic development opportunities and associated jobs. Consideration should also be given to the pending impacts of climate change and the role of planning and infrastructure in responding to these changes.
- New funding models that are not entirely reliant upon government delivery need to be explored. Without new approaches regional infrastructure will likely continue to be reactive and responsive rather than proactive and leading (some examples are provided in the box overleaf).

An additional 110-150 people per day



Based on a coordinated centres planning approach, identified priority infrastructure areas will deliver the best economic outcomes for the entire region. However, this requires a regional and collaborative approach to planning and investment attraction to ensure Local Governments work collaboratively rather than in competition.

Alternative governance and infrastructure delivery models need to be considered to support this. Traditional infrastructure financing methods go by many names, but can be generally grouped into five categories of general taxation, government borrowing, user charges, developer contributions and public private partnerships. However, there are also many alternative methods of financing public infrastructure in use around the world. A sample of the more relevant options include:

- Specific Purpose Securitised Borrowing: The issuance of debt instruments such as bonds, debentures and inscribed stocks in the capital market to finance a particular initiative.
- Certificates of Participation: Governments enter into agreements with entities that issue bonds to finance facilities that are leased back by the government.
- Value Capture Levy: Capture the uplift in land value that results from the planning process, development of land, or construction of beneficial infrastructure.
- Specific Purpose Levies: Implementation of an ad hoc levy to meet specific infrastructure needs of an area.
- Growth Area Bonds: Issue of bonds to finance infrastructure enhancement that are tied to a specific area repaid through future tax revenues collected in a defined area.
- Business Improvement Districts: Stakeholders within a defined boundary make a collective contribution towards the maintenance and promotion of an area.

It is critical new and collaborative approaches to infrastructure funding and project delivery are considered and implemented.



Changing production trends

Rising demand for services, the industrialisation of East Asia, economic reform and technical change are driving a structural shift in Australia's economy from a reliance on production and processing based activities to a knowledge based economy.

Local Context: Manufacturing is a key sector in the Perth and Peel economy, supporting over 7% of local GRP and 9% of total employment. Assisting manufacturing businesses transition towards high-value add activities will improve economic stability and resilience.

Industrial precincts need more than simply designated areas with appropriate urban separation, they need first class road and rail connectivity to efficiently access distribution networks and markets, as well as high speed internet to access and utilise real time data. Production workers of the future will be highly skilled, well paid and look for lifestyle in their choice of employment location, so proximity and reduced journey to work times are key.

The evolving workforce is made up of highly skilled, knowledge based workers who increasingly drive prosperity, are able to work globally and are highly mobile. Activated and culturally diverse 'interesting' employment precincts are increasingly driving city liveability and are key considerations in attracting these employees and business innovators. Increasingly, home-based work will drive less commuting as people are afforded the ability to work from either home or a tele-hub nearby home. Bandwidth is critical for this.

Facilitation and development of local policies and incentives to ensure appropriate and compatible home based employment options are encouraged is important. This also facilitates a reduced transport (journey to work) task for the public transport system.

The Perth and Peel region needs to create an economic and business environment that supports the growth of key emerging industries.

Changing consumption trends

Consumer expenditure is increasingly trending towards households reducing debt, paying down mortgages and embracing the 'sharing economy' to optimise assets by leveraging digital networks to allow collaborative consumption as well as online retailing.

Local Context: Creating an environment that supports the needs of the modern consumer and facilitates the demands of the future employee is critical to Perth and Peel in maintaining its identity as a highly desirable and liveable destination. Some priorities to achieve this include:

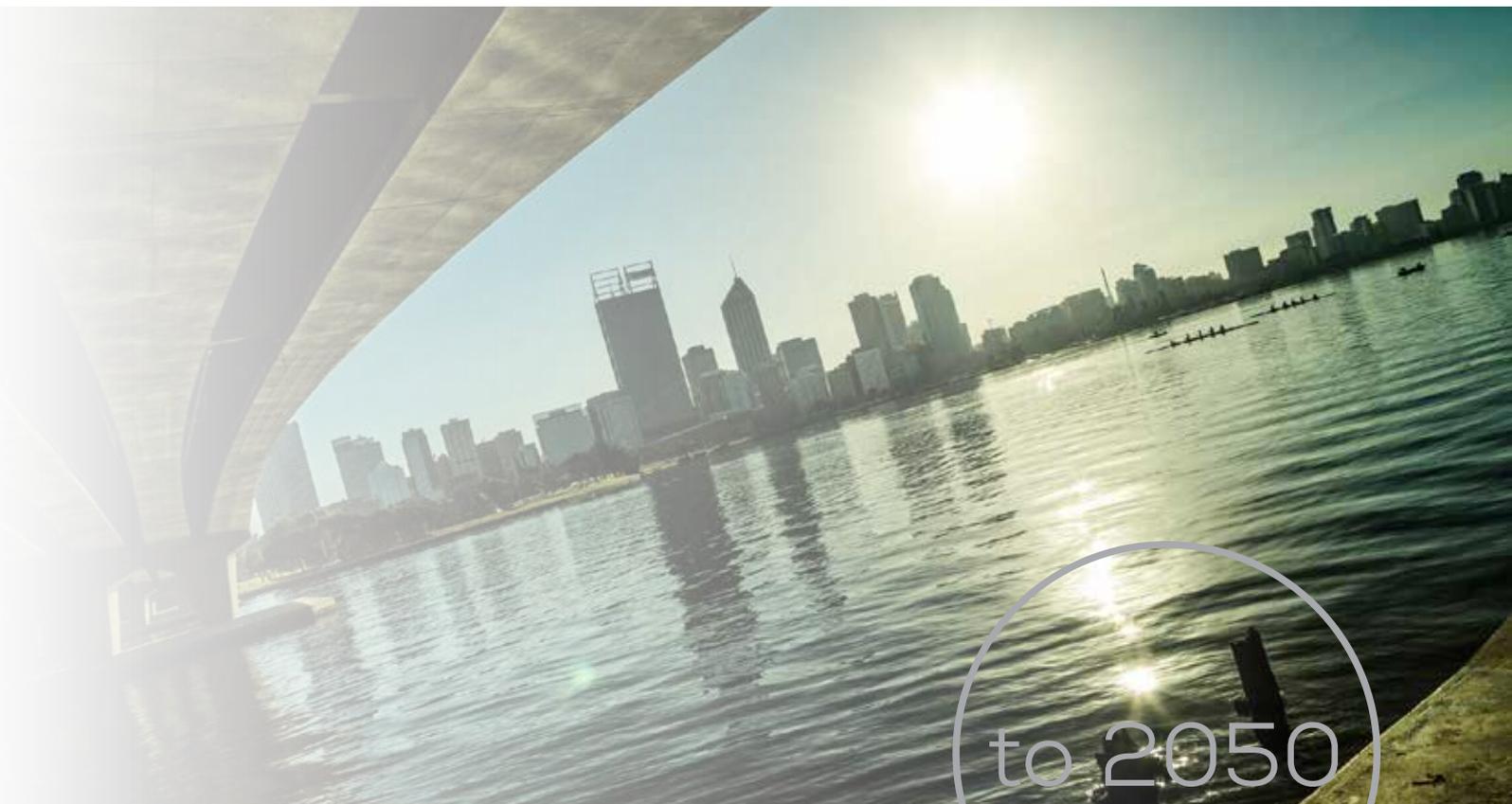
- Delivery of ICT infrastructure and high speed data transfer will support these trends moving forward.
- Local business and industry, particularly small business operators who have established their business based on a technical skill (rather than extensive business management expertise), will require a high degree of assistance and training support to embrace new technologies and leverage them into their day-to-day business operations to ensure they are sustainable into the future.
- Local business and industry, particularly small business operators who have established their business based on a technical skill (rather than extensive business management expertise), will require a assistance and training support to embrace new technologies and leverage them into their day-to-day business operations. This will assist them respond to customer needs and ensure they are sustainable into the future.

Emerging technologies

Mobile internet, automation of knowledge work, machine based learning, cloud technology, advanced robotics and autonomous vehicles, next generation genomics, energy storage, 3D printing, advanced materials, advanced oil and gas exploration and recovery and renewable energy are just some of the known technologies that will change how people conduct business and their lifestyles into the future.

Local Context: These emerging technologies will impact the Perth and Peel region in a number of ways and if the region is to embrace them and take full advantage of the associated opportunities then the following priorities need to be considered:

- Delivery of infrastructure to support the adoption of these technologies is critical in relation to creating the environment conducive to attracting high value, knowledge based emerging industries.
- Leveraging these new innovations to drive efficiency for local business and assisting local businesses adopt these is key for a prosperous small to medium business sector.
- Taking a leading role in the development and delivery of innovation is another opportunity for the Perth and Peel region through the leverage and full development of existing knowledge based assets (e.g. the Curtin Bentley and UWA - QEII Specialised Centres and the Edith Cowan Commercialisation Strategies).



Competitiveness

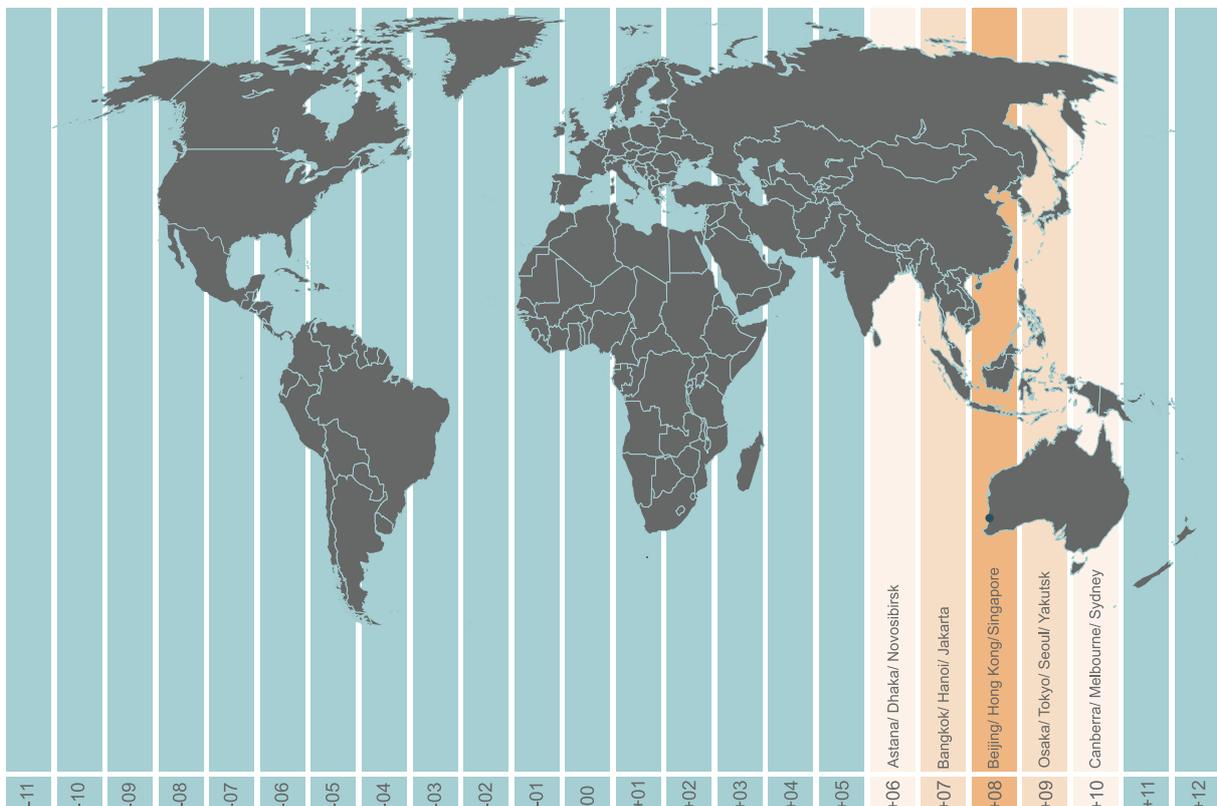
The competitive edge or points of difference that make Perth and Peel stand out as a region are presented below. Additional detail is included in Appendix A.



Connection to Asia

The Perth and Peel region and Western Australia is proximate to some of the fastest growing populations and economies on the planet, many of which are within just a few hours of the Western Australian time zone.

Figure 3. International Time Zones



Local Context: The Perth and Peel region is well placed to take advantage of the growing demand for high quality Australian export commodities such as meat, horticulture, poultry and dairy in a range of processed and un-processed forms. The opportunities generated as a result of the size of these economies cannot be overlooked and in order to take advantage of such opportunities, the region needs to explore a range of avenues, such as:

- 'Governance' – Establish and grow industry collaboration structures to build the critical mass needed to break into global markets. These collaborations can be industry and/ or geographically based, depending on the demand and relationships established.
- 'Capability' – Identify opportunities to build the global capability of local producers/ suppliers to ensure they have the capacity and skills to operate in this market.
- 'Cost' – Work with relevant government and industry stakeholders to ensure the cost of getting products to market (distribution) is comparable with major competitors.
- 'Relationships' – Identify opportunities and develop strong relationships with strategic Asian markets where mutually beneficial outcomes can be achieved. Identify areas with complimentary needs that are consistent with the existing and emerging strengths of the Perth and Peel region.
- 'Market Knowledge' – China, Indonesia and Bangladesh are within two hours of the same time zone as Western Australia. There is a need to develop a strong understanding around the current gaps and associated opportunities within these markets and to establish what the key drivers are that influence relationships and business decision making.

Mining services hub

The resources sector and associated professional services have underpinned strong economic growth for the Western Australian economy for many years, with Perth serving as the business and administration hub of the Western Australian resources sector. This sector delivers over \$100 billion in annual production and multiples of this in terms of planned and committed expansion and exploration projects.



Local Context: Perth and Peel has a strong role to play in terms of ensuring the needs of the ongoing workforce in the broader mining and engineering industries are met. Skills development and identifying the jobs of the future for this industry is an important part of the regions workforce planning requirements.

The mining sector is subject to fluctuation of international demand. Opportunities therefore exist for the export of specialist services and skills to other regions and also other industries where the opportunity for skills transfer exists (eg. Defence and maritime).

Lifestyle

Perth is the gateway to the many unique tourism offerings of Western Australia, ranging from food and wine precincts (Margaret River) to the landscape of the Pilbara and the beauty of the Ord. The Perth and Peel region contains a vibrant capital city and a diverse regional offering with a range of employment, residential and lifestyle offerings. Perth is routinely cited in the world's top ten most liveable cities.

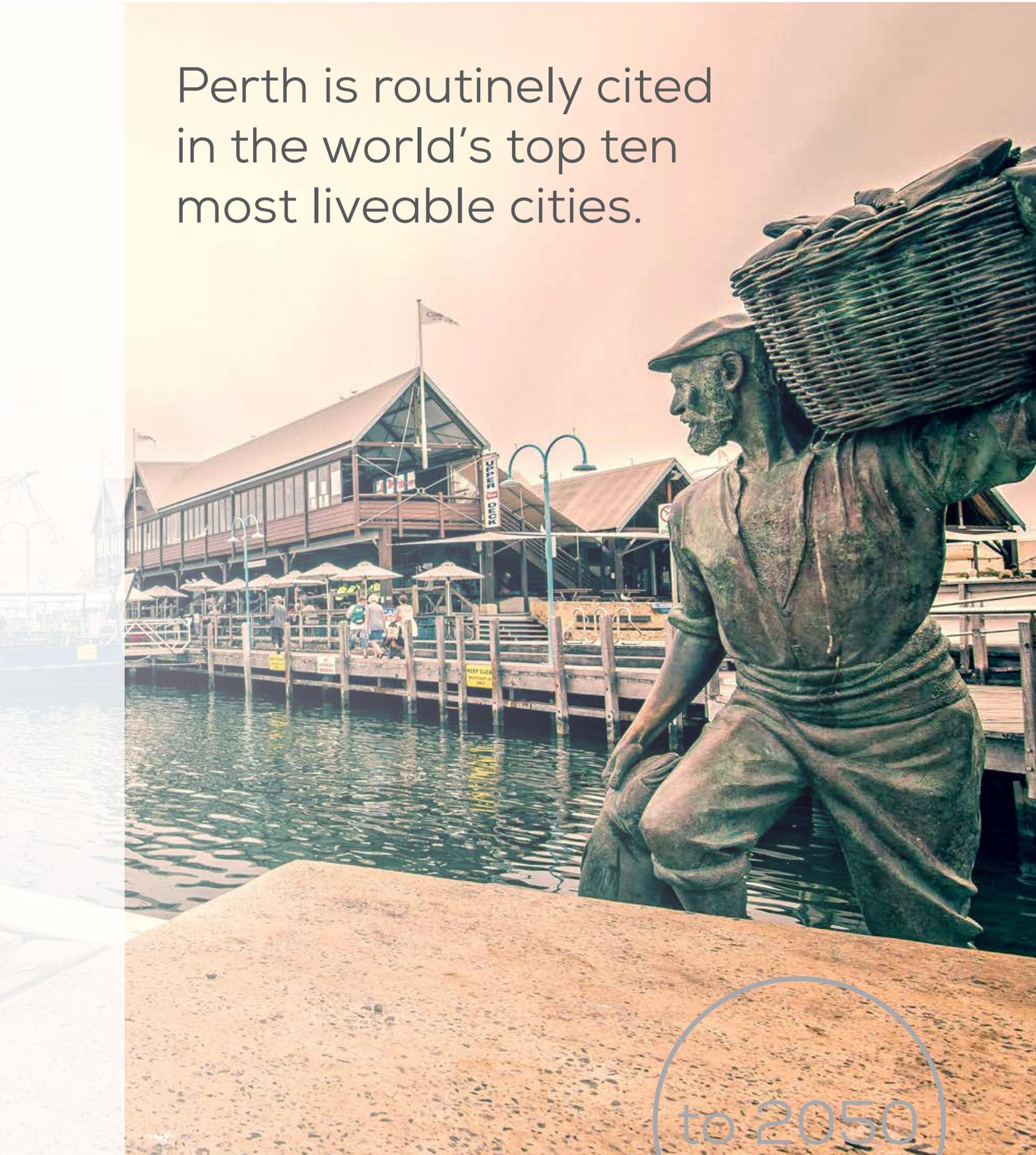
Liveable cities are a key ingredient in attracting today's 'creative professional' and knowledge economy worker. These individuals choose where they work based on high levels of amenity, diversity, lifestyle and opportunities for interaction. City liveability is a strong predictor of economic activity, productivity and wage growth because areas that are strong in these indicators are able to attract the innovative creative professionals who drive this activity.

Local Context: For the Perth and Peel region to continue to feature as one of the most liveable cities in the world it needs to continue to evolve and create spaces and opportunities for creative professionals to prosper. Consequently urban consolidation, intensification and/ or densification must improve to maintain local living standards and facilitate the opportunities for people to interact, network and develop innovative, and entrepreneurial output.

Another liveability indicator is the capacity to work remotely from the traditional place of work or independently from home. The opportunity for flexible work options (home based, hub, etc) is one of the many drivers of liveability and an ingredient for population attraction to the region. Workers will no longer need to commute long distances to office towers to do their work. They can choose where they work from, based more on lifestyle preferences – critical to this is adequate telecommunications infrastructure and connectivity.

The Perth and Peel region extends along 170kms of coast line and is made up of expanding population centres. Focusing on liveability and lifestyle as a competitive edge is a priority to attract skilled workers from the global labour pool. This includes a combination of good transport and telecommunications infrastructure as well as flexible work options (i.e. work hubs).

Perth is routinely cited in the world's top ten most liveable cities.



Economic diversity

Perth and Peel is at the centre of the Western Australia economy and has world class businesses across a mix of industries. The region has a specific competitive edge in the mining services sector, but at the same time as a State capital also has a relatively diverse economy that has ensured a stable base through changing commodity values and prices. Further diversification will continue to benefit the Western Australia economy.

Local Context: The main growth opportunities for the Perth and Peel region are across a number of different industry sectors, these include:

- Minerals and resources:
 - Supplies and servicing
 - Technology and research
 - Logistics
 - Administration
- Health: Technology and research
- Agri-business
 - Peri-urban projects
 - Specialist and niche products for a growing Asian market
- Education: Knowledge export
- Tourism
- Specialist manufacture and fabrication

A number of these industries will be driven by population growth, while others will expand or relocate to the region based on market opportunity and efficiency (cost, clarity and certainty). Key stakeholders across the Perth and Peel region have an important role to play in creating the right environment that will attract desirable investors (high value, low impact, large job numbers) to the area.



Necessary Outcomes

The enormity of the task at hand

The Perth and Peel region is projected to approximately double in population by 2050³. Between now and 2050 the Perth and Peel region is expected to grow by around 3,500 people per month – an average of 5 additional people an hour. To support this growth the region must:

- Complete the build of more than 50 dwellings each day for the next 35 years
- Generate 60 jobs per day (420 jobs per week)
- Ensure key sector jobs growth is targeted to appropriate employment centres
- Estimates derived from the *Perth and Peel@3.5 million* projections highlight an additional:
 - 894 medical professionals⁴ per year
 - 901 education professionals⁵ per year
 - 127 legal professionals per year
 - 357 accountants⁶ per year
 - 99 forklift drivers per year
 - 109 plumbers per year

**MORE THAN 60 NEW
JOBS
NEEDED EVERY DAY**

Extensive consultation and research identified a range of development needs to ensure the Perth and Peel region becomes a “highly connected, productive and globally competitive city.”

These needs can be distilled into five groupings:

• Industry and jobs growth:

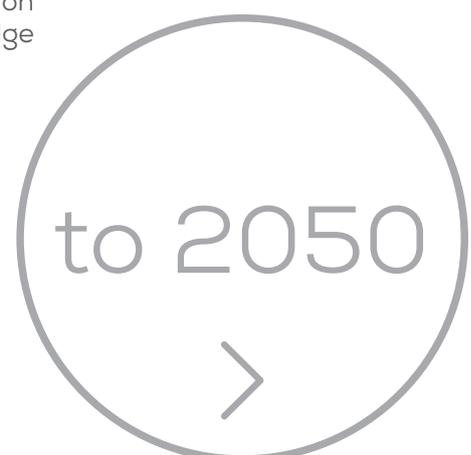
- To meet the service and business needs of a growing population and economy
- To meet the demand for new jobs by a growing and evolving labour force
- To meet changing business (production) and population (consumption) trends, including adoption of disruptive/ transformative technologies, demographic shifts (e.g. ageing population), and lifestyle
- Focussed in employment centres (activity, industrial and specialised)
- Located near to residents to reduce commuter requirements and pressures on the transport network
- That diversifies and strengthens the resiliency of the economy, while enhancing and leveraging innovation and new technology to build towards a leading edge economy in the Perth and Peel region

³ All data presented in this report is for 2014, the data presented in these metrics is for 2014-2050.

⁴ Health diagnostic, promotion and therapy, medical practitioner, midwifery, and nursing professionals

⁵ Education professionals, school teachers, tertiary education teachers

⁶ Accountants, auditors and company secretaries



- **Skills development and attraction** to meet the needs of existing and emerging business and industry in a timely manner, including enhanced business management capacity, local worker skills growth and attraction of key workers
- Ensuring **appropriate standards and levels of infrastructure are provided whilst minimising the cost burden** (development and maintenance) on government (e.g. dwellings, employment lands, power (including undergrounding), water, gas, sewerage and wastewater, ICT, transport, parks, regional recreational facilities, etc). This includes:
 - Maximising/ optimising the use of existing infrastructure assets
 - Focusing development (residential, commercial and industrial) on key nodes (e.g. activity centres) to generate maximum return on existing and delivered infrastructure
 - Ensuring the timely release and provision of sufficient residential and employment land/ zonings for development
 - Delivering efficient freight and passenger transport across all modes (i.e. rail, road, port, airport)
 - Identifying and focussing on priority infrastructure needs
 - Securing alternative funding and new project delivery mechanisms
- **Enhanced connectivity for businesses to trade with local, regional, state, national and global markets**, by:
 - Embracing new technologies in small business
 - Providing appropriate ICT infrastructure, including teleworking hubs
 - Providing efficient intermodal connections between transport networks (port, airport, road, rail)
 - Facilitating links and connectivity between residential centres and employment centres (activity, industrial and specialised)
 - Consolidating and leveraging the Knowledge Arc into a globally competitive centre of excellence
 - Facilitating opportunities for businesses to be leaders in this space
- **World class amenity and quality of life**, including:
 - Ready access of residents to core household services (e.g. health care, education, community/ social and public services)
 - A well connected and activated urban realm that provides abundant and vibrant cultural, recreation and entertainment options across the region
 - A built form that enhances and co-exists with the natural assets of the region
 - A region that provides a broad range of housing and lifestyle options, and job opportunities

The needs outlined above are pertinent across the Perth and Peel region. In addition to these needs, the sub-regions of Perth and Peel present further requirements to meet their specific future growth expectations and deliver a connected and cohesive region. Specific sub-regional needs are presented on the following pages.

Central

The Central sub-region is the primary employment and population centre of the Perth and Peel region, and includes the Perth CBD. Rapid population growth combined with often reactionary planning and lagging infrastructure delivery has seen the Central sub-region come under increasing pressures in terms of transport burden, connectivity, and a dated urban realm in many areas. The CBD also has existing utilities capacity constraints that are in various stages of upgrade.

Key requirements specific to the Central sub-region (in addition to the needs outlined for Perth and Peel above) include:

- Parts of the existing transport network are nearing capacity and are highly congested. There is a need **to alleviate the passenger and freight transport burden** in the Central sub-region.
- A congested transport network is exacerbated by an inefficient public transport network. **Improved public transport is required to enhance urban connectivity, and improve mobility of residents to employment, cultural and leisure nodes.**
- Many pockets of the Central sub-region are dated and in need of **rejuvenation and activation**. An activated and open urban realm providing amenity and leisure, entertainment and cultural activities would greatly enhance the attractiveness of key nodes in the Central sub-region to assist in attracting and retaining key businesses and skilled workers.
- The Central sub-region is land constrained. To support population and economic growth, **higher density development is required, and higher value uses of land prioritised.**



Northern Sub-Regions

Northern (North West and North East)

The Northern sub-regions are projected to be high population growth areas and will require supporting hard and soft infrastructure to support this growth. Key requirements specific to the Northern sub-regions (in addition to the needs outlined for Perth and Peel above) include:

- **Passenger transport infrastructure linking the Perth CBD to the urban growth corridor along the coast from Joondalup to Yanchep.** This includes road and rail infrastructure. The urban growth corridor will be a key population growth area for the Perth and Peel region, and transport infrastructure is required to ensure appropriate connectivity for residents to undertake their job, recreational and social activities with relative ease.
- **Development of industry and key sector growth drivers** for the North West and North East sub-regions, which currently have limited economic assets driving jobs growth. Economic development initiatives should target and incorporate knowledge and creative industries, education, health, advanced manufacturing and transport and logistics (e.g. Bullsbrook) as well as tele-working options to reduce the reliance on jobs in the Perth CBD.
- **Improved freight connectivity from the Northern sub-regions that avoids congested major arterials.** Port infrastructure is located to the south of Perth, and freight travelling from the north is required to navigate around the Perth CBD to access port infrastructure, using congested road infrastructure. Improved freight connectivity that avoids congested major arterials on the CBD fringe would improve the attractiveness of these sub-regions for industry.

Southern Metro and Peel Sub-Regions

Southern Metro and Peel (South West, South East and Peel)

The Southern Metro and Peel sub-regions (South West, South East and Peel) include key manufacturing and agri-business areas of the Perth and Peel region. Key requirements specific to the Southern Metro and Peel sub-regions (in addition to the needs outlined for Perth and Peel above) include:

- **East-west connectivity and access to port infrastructure from inland areas** is generally poor and needs to be enhanced to improve the connectivity of business and residents to export infrastructure and jobs near coastal areas.
- **Development of industry and key sector growth drivers to meet demands of population growth.** This should include strategic development of key employment lands identified for the Southern Metro and Peel sub-regions, (for example, Latitude 32 industrial area and Mundijong intermodal hub). The rural and semi-rural nature of the South East and Peel sub-regions also presents considerable opportunities for agri-business growth, and should be supported.
- The Southern Metro and Peel sub-regions, in particular Peel, has a large older demographic. This will require **appropriate services to be provided to maintain lifestyle amenity** for this demographic and support appropriate ageing in place.



The Response

It is acknowledged that much work has and will continue to be dedicated to addressing many of the issues raised and these existing initiatives should continue. However, in order to achieve the vision and embrace the new approach, more must be done. It must also be done in collaboration to...

...work together to drive nation building initiatives forward

...work together to foster and grow regionally significant initiatives

Existing initiatives

Significant planning has already been undertaken across the Perth and Peel region, all of which is designed to support and respond to the needs of the region. The objectives, strategies and tasks outlined in current planning frameworks must be acknowledged and progressed.

The aim of this report is not to re-emphasise or re-imagine existing plans. The focus of this document is the identification of catalytic and leading initiatives that integrate with existing planning to ensure desired outcomes are delivered.



Key State Government policy settings and spatial planning frameworks include:

- State Planning Policy/ Strategy
- *Perth & Peel@3.5 million* (which includes the Regional and Sub-Regional Planning frameworks), which supersedes the *Directions 2031* suite of documents, *Economic and Employment Lands Strategy: non-heavy industrial, Perth metropolitan and Peel Regions* (EELS)
- Perth Transport Plan 2011
- Perth Freight Network Plan
- Metropolitan Region Scheme (MRS).

A brief overview of the key implications of these strategic planning documents is included in Appendix B. The current planning frameworks and policy setting is guided by the Connected City principles, involving substantial intensification and increased development density. The spatial framework generally confirms the key locations for economic growth in Perth and Peel, including:

- Activity centres and urban corridors
- Specialised activity centres
- Industrial land
- Logistics hubs
- Peri-urban land

The current planning framework also identifies the key structuring element of people movement and freight transport as these employment areas need well-formed and connected transport routes.

There are also a raft of local government strategic planning documents that inform and shape the current and intended development path for each sub-region. These include Local Governments':

- Strategic and Community Plans
- Economic Development and Tourism Strategies
- Infrastructure Plans

Many of these Local Government strategic documents pursue similar objectives and goals in similar ways. Whilst there is a statutory need for local governments to develop individual Strategic and Community Plans, there is an opportunity for Local Governments to collaborate and deliver regionally focussed economic development and investment attraction.

Working collaboratively will present efficiencies in process as well as deliver results far superior to those that could be achieved by working alone.

to 2050



Strategic Development Initiatives

The latent development potential of Perth and Peel is enormous.

The number of opportunities for economic and social development and jobs growth is significant.

The challenge is to distil the opportunities down to those that require truly collaborative approaches to deliver game changing outcomes.

The existing planning frameworks provide the Perth and Peel region with a strong platform and a path forward to meet regional needs. However, planning frameworks on their own will not deliver the change that is required, including major infrastructure and industry development, local jobs initiatives, flexible work places, place making and local business and industry skills development around management and uptake of new technology.

Regionally significant initiatives (i.e. those that require government support and policy development) and nation building initiatives (i.e. those that require strong government intervention) must come to the fore to act as a major catalyst for the economic growth required. These must strengthen the economy and expand Perth and Peel's capacity with a focus on the region's national and global competitiveness. At the same time, local initiatives and population driven household services employment must be encouraged and cultivated through local development activities (that can leverage these larger catalytic initiatives). These local initiatives should and will be conducted by local proponents, ideally working together with their neighbouring municipalities. An overview of the range of important roles local governments play in economic development is included as Appendix C.

At a minimum, priority initiatives need to deliver game changing and regionally significant job and business investment outcomes and ideally drive truly nation building outcomes. Game changing initiatives should be viewed as those that create a stepwise change or contribution in the delivery of jobs outside of 'normal' growth patterns.

DRIVING CHANGE – Perth and Peel Economic Development Strategy & Infrastructure Priority Plan to 2050 acknowledges population growth will demand many jobs into the future (e.g. retail, construction, health and education) and that these jobs are important. However, the focus of this strategy is not on those potential future outcomes that may or may not be realised, but on those game changing catalytic initiatives that will allow the region to achieve its vision. This new approach, seeks to deliver observable on-ground change.

The game changing initiatives identified in this document, using the approach outlined in Appendix D, include:

Nation Building: Initiatives that require strong government intervention:



Development of the Outer Harbour at Kwinana:

To facilitate additional capacity in the trade infrastructure, present efficient transport and logistics infrastructure and ensure the opportunity for Fremantle as a destination and activity centre are realised.



Latitude 32:

To support major industry growth through the delivery of a 1,600ha industrial precinct.



Intermodal sites (Bullsbrook and Mundijong):

To secure future intermodal sites and ensure long term transport and logistics capacity (Mundijong will require greater private sector investment).

Regionally Significant: Initiatives that require government support and policy development:



Common User Facilities (CUFs):

To support innovation hubs and encourage smart business start-ups as well as digital hubs to support regional annexes of larger organisations and departments traditionally only able to offer employment in the CBD.



Peri-Urban Development:

To ensure productive agricultural land is retained and leveraged at the same time as encouraging residential and urban development and lifestyle options.



Knowledge Economy:

To deliver globally respected knowledge precincts leveraging Curtin/ Bentley and UWA - QEII as core knowledge assets to drive and grow world class research, development and commercialisation programs in these institutions and the surrounding precincts.



Skills Development & Training:

To ensure local business and industry has access to the skills and development they need as managers as well as access to skilled employees.

A more detailed overview of the outcomes from these initiatives is contained in a supporting document *Driving Change – Perth and Peel Economic Development Strategy & Infrastructure Priority Plan to 2050: Regional Outcomes*.



Outer Harbour at Kwinana

| Consideration | Description |
|------------------------------|---|
| Classification Tier: | Nation Building |
| Description: | <p>Fremantle Port consists of the Inner Harbour, situated on the mouth of the Swan River and which currently handles all container traffic and the Outer Harbour in Cockburn Sound, which currently handles bulk cargo including grain, petroleum, liquefied petroleum gas, alumina, mineral sands, fertilisers, sulphur and other bulk commodities. The Outer Harbour Kwinana Quay initiative will provide additional container and general cargo port facilities with road and rail connections to inland transport and logistics hubs.</p> <p>This has been identified as a site for a container and general cargo port since the 1960s and detailed development options have been in place since 2004. Planning and development of complementary road and rail access and land-side industrial areas has been underway since the 1990s.</p> |
| Opportunity: | <p>There is a need to ensure the primary freight gateway to the State can continue to support economic growth. Further extension of the Inner Harbour is not viable. Road access to it is heavily constrained and the rail connection requires further investment. Development of the new Outer Harbour presents significant jobs growth opportunities with regard to industry, transport and logistics as well as additional trade opportunities. Development of the Outer Harbour also provides potential to relocate activities from the Inner Harbour, reducing the freight task on congested road and rail links to the Inner Harbour, and potentially unlocking enormous opportunities for precinct development and amenity enhancement in Fremantle.</p> |
| Growth factors: | <p>The Port of Fremantle is Western Australia's primary container, general cargo and automotive port, currently handling over 90% of the State's container trade. It is Australia's fourth largest container port. Container volumes have been growing steadily and the Inner Harbour is estimated approach full capacity for container handling by 2025 and 2035, depending on growth rates.</p> |
| Risks: | <p>Environmental:</p> <ul style="list-style-type: none"> • Water quality and seagrass impacts in Cockburn Sound. • Noise, light, air quality and operational risk (these are minimized in the preferred location) <p>Timing, staging and sequencing: there is no resolved position on the sequencing of development, either politically or within the community. Options include:</p> <ul style="list-style-type: none"> • As a complement to continuing operations at Fremantle Inner Harbour – this implies later development. • As a replacement for Fremantle Inner Harbour – this implies earlier development. • As a staged development, with the Latitude 32 intermodal facility constructed early with an upgraded rail link to Inner Harbour well in advance of Outer Harbour port works. |
| Outcomes: | |
| • Employment: | <ul style="list-style-type: none"> • It is estimated that over the construction and operation phases of the Outer Harbour 37,000 direct jobs and over 49,000 indirect jobs will be created with this development (City of Kwinana, 2015) |
| • Growth: | <ul style="list-style-type: none"> • The initiative is essential to the Western Australian economy. Without it, growth will be held back through inefficiencies and lost opportunities (directly related to transport and logistics as well as local production and export). |
| • Sectors impacted: | <ul style="list-style-type: none"> • Key sectors impacted include: <ul style="list-style-type: none"> - Transport and logistics - Imports - Export of primary production, manufacturing and other goods |
| • Productivity: | <ul style="list-style-type: none"> • The initiative can allow for continued operation and utility of existing assets at Inner Harbour and presents a significant step forward for travel cost savings and enhanced infrastructure utilisation. |
| • Amenity/ Lifestyle: | <p>The initiative will cap freight transport movement in the sensitive and valuable area of Fremantle. The site allows for:</p> <ul style="list-style-type: none"> • Separation between freight related port and residential areas • The support of port related tourism uses (in Fremantle) • Compatibility with surrounding industrial land uses • Maintenance of Kwinana beach (assuming an offshore port design) • Minimised land based freight traffic impacts on residential uses due to ability to link in with road and rail freight links |



| Consideration | Description |
|-------------------------------------|---|
| • Needs addressed | <ul style="list-style-type: none"> • Industry and jobs growth to meet business and population needs. • Enhanced connectivity for businesses to regional, state, national and global markets. • Reduce transport burden in Central sub-region by diverting some activity from Inner Harbour to Outer Harbour. • Deliver efficient freight transport infrastructure that avoids congested major arterials in Central sub-region (in conjunction with intermodal facility planned for Latitude 32). • Potential for an enhanced urban realm and amenity in the Inner Harbour precinct (i.e. Fremantle), due to transfer of some activity from Inner Harbour to Outer Harbour. • Easier access for inland areas in the Southern sub-regions to port infrastructure. • Development of key sector growth drivers for the Southern sub-regions. |
| Capital intensity: | High |
| Anticipated Funding Models: | <p>This is a large and complex initiative and funding might come from a combination of:</p> <ul style="list-style-type: none"> • State Treasury • Australian Government (Infrastructure Australia) • Public-private partnership |
| Implementation Requirements: | <ul style="list-style-type: none"> • Agree development option and gain necessary approvals • Identify forward works requirements • If developed via public-private partnership: tender and secure development partner |
| Complexity: | <p>High:</p> <ul style="list-style-type: none"> • Multiple stakeholders with potentially contentious action/ progress points • Likely to attract relatively well coordinated negative lobby/ activist groups |
| Partners in delivery: | <p>The State Government is the main proponent via various agencies:</p> <ul style="list-style-type: none"> • Fremantle Ports (a Western Australian Government trading enterprise that manages the Port of Fremantle) • Department of Transport – freight and logistics • LandCorp – associated industrial land development, including Latitude 32 • Institutional investors as capital funders and potentially operational partners • City of Kwinana, City of Cockburn, City of Fremantle • Kwinana Industries Council |



Latitude 32

| Consideration | Description |
|-----------------------------|---|
| Classification Tier: | Nation Building |
| Description: | Latitude 32 is well located master-planned industrial estate proximate to the Outer Harbour. It is a significant precinct with a gross area of around 1,600 ha. Latitude 32 is a key component of the Western Trade Coast strategic industrial area, which also includes the Kwinana Industrial Core, the Rockingham Industry Zone and the Australian Marine Complex precinct at Henderson. This is the major focus of metropolitan and state industrial activity, with a focus on heavy manufacturing, processing, fabrication and export. These industrial centres provide a significant amount of employment land to meet the short, medium and long term market demand. Latitude 32 includes the site for an intermodal facility to service the Outer Harbour Kwinana Quay container port. Under one of the Outer Harbour development options construction of this intermodal facility would be advanced to the short term, with a rail connection to Inner Harbour, on the basis that a high and growing proportion of container destinations would be driven by the Southern Metro and Peel sub-regions. This would remove the need for difficult and continuing upgrades of road freight connections to Inner Harbour. |
| Opportunity: | Port-related industrial land is valuable and scarce and opportunities to create it are few. The Latitude 32 industrial estate and its essential intermodal facility will secure the Western Trade Coast as a trade gateway of international standing. |
| Growth factors: | The initiative is a key parcel of industrial land in a rapidly growing sub-region. Its intermodal facility with direct links to Fremantle Ports is essential to the growth of the State's economy. |
| Risks: | <ul style="list-style-type: none"> • Land ownership: the site has a large number of private landholders. These must be assembled for key elements to be constructed. • Trunk services are insufficient and must be upgraded. • Residential encroachment: planning for the area includes land uses which have off-site impacts (e.g. odour, noise, light spillage, operating hours). These would be constrained if residential development is allowed too near to the site. • Timing and deliverability: the precinct needs a catalyst development to trigger the broader development of the precinct. An obvious catalyst would be the development of the Outer Harbour at Kwinana. |
| Outcomes: | |
| • Employment: | • It is anticipated it will create up to 10,000-15,000 jobs and be home to hundreds of Businesses (Latitude 32, 2015). |
| • Growth: | <ul style="list-style-type: none"> • The intermodal facility at Latitude 32 will be a key element in linking the State's major cargo port with international markets. • Its industrial land is one of the largest aggregated industrial land areas in the metropolitan area and will supply a high proportion of industrial land demand for its sub-region. |
| • Sectors impacted: | <ul style="list-style-type: none"> • Key sectors impacted include: <ul style="list-style-type: none"> - Transport and logistics - Manufacturing |
| • Productivity: | • The intermodal facility has easy direct connection to the existing rail freight network and minimal additional rail work is required. |
| • Efficiency: | <ul style="list-style-type: none"> • The initiative is the key element integrating port operations with intermodal container freight movement, directly connected to inter-regional road and rail networks. • The initiative confirms the preferred site for industrial operations and will likely ease and facilitate further industry development that would not otherwise be realised. |
| • Needs addressed | <ul style="list-style-type: none"> • Industry and jobs growth to meet business and population needs. • Enhanced connectivity for businesses to regional, state, national and global markets. • Reduce transport burden in Central sub-region by diverting some activity from Inner Harbour to Outer Harbour. • Deliver efficient freight transport infrastructure that avoids congested major arterials in Central sub-region (in conjunction with intermodal facility planned for Latitude 32). • Potential for an enhanced urban realm and amenity in the Inner Harbour precinct (i.e. Fremantle), due to transfer of some activity from Inner Harbour to Outer Harbour. • Easier access for inland areas in the Southern sub-regions to port infrastructure. • Development of key sector growth drivers for the Southern sub-regions. |



| Consideration | Description |
|-------------------------------------|--|
| Capital intensity: | High Capital is required for <ul style="list-style-type: none"> • Land acquisition • Trunk services (utilities) • Transport network connections • Land and lot development |
| Anticipated Funding Models: | Land assembly is a key requirement for the construction of the intermodal facility; government is best placed to achieve this, therefore a coordinated joint government approach is required. Construction would likely be through a public-private partnership to capitalise on industry expertise. |
| Implementation Requirements: | <ul style="list-style-type: none"> • Fund and task LandCorp to undertake the initial stages of the initiative • Explore opportunities to introduce institutional capital • Explore opportunities to establish Latitude 32 as a local area special economic zone (SEZ), which could be as simple as having planning and pre-approvals in place for investors |
| Complexity: | High: <ul style="list-style-type: none"> • Multiple stakeholders with potentially contentious action/ progress points • Likely to attract relatively well coordinated negative lobby/ activist groups |
| Partners in delivery: | <ul style="list-style-type: none"> • LandCorp: proponent under the Hope Valley-Wattleup Redevelopment Act • WAPC: planning approval authority • Department of Transport – connectivity to road and rail infrastructure • Institutional investors as capital funders and potentially operational partners |



Intermodal sites at Bullsbrook and Mundijong

| Consideration | Description |
|-----------------------------|--|
| Classification Tier: | Nation Building |
| Description: | <p>Sites have been identified at Bullsbrook in the North-East sub-region and Mundijong in the South-East sub-region for new intermodal facilities. Both sites are well located to transport infrastructure and workers, are relatively flat, and have few environmental constraints:</p> <ul style="list-style-type: none"> • The state is committed to Bullsbrook but Mundijong will require significant private sector investment and will be reliant on commitment to an eastern grain freight link rail from Brookton and may exceed the 2050 timeframe. • Bullsbrook is adjacent to the Perth – Geraldton freight rail line and close to the major east-west interstate rail line and is proximate to the planned route of the Perth – Darwin Highway (currently termed NorthLink). The site is a component of the extensive future North Ellenbrook industrial area. This has a gross area of around 2,400 ha and capacity to employ around 16,000 workers at full development. • Mundijong is on the Bunbury – Perth rail line, and closely linked to both the South-West Highway and the route for an extended Tonkin Highway. When complete Tonkin Highway will seamlessly link Forrest Highway to the south with the Perth – Darwin Highway and Brand Highway and will be the main north-south road freight route across the metropolitan area. |
| Opportunity: | <p>Suitable sites for large scale intermodal facilities are difficult to source. They must be well located to regional rail and road networks, accessible to major ports and other freight sources and destinations, have access to labour markets and minimal environmental and construction constraints. Each of the Bullsbrook and Mundijong sites meets these criteria. They stand out as efficient and well located sites to meet future development needs without presenting significant implementation and land use 're-tasking'. Mundijong is also an optimal site in the event Market City needs to be relocated.</p> <p>It is best-practice strategic planning to secure sites for future use at a time when they are affordable and available.</p> |
| Growth factors: | <p>These are both longer term initiatives but planning and land assembly must be in place now to preserve the long term opportunity and provide surety to other key development opportunities (e.g. Outer Harbour and Latitude 32).</p> <p>Both Bullsbrook and Mundijong provide an important industrial link between Perth and the north-west and south-west of the State, linking the ports at Geraldton and Bunbury to the Perth region. Each has long term potential for container handling capability. Both sites have the capacity to provide a strong economic and employment base for the north eastern and south eastern metropolitan regions. With the already established Gateway and NorthLink projects, the Tonkin Highway is a strategic freight link and when extended to both Bullsbrook and Mundijong and beyond, will alleviate freight congestion and provide a genuine employment driver in an area where the population is expected to grow.</p> |
| Risks: | <p>Each of these is a longer term initiative. The main risk is the land will not be easily available when required for this purpose. The critical need for this initiative is to act now for the opportunity to be preserved:</p> <ul style="list-style-type: none"> • The sites should be assembled into government ownership. The key sites are currently in private ownership and zoned rural and can be purchased relatively inexpensively. • The sites can then be incorporated into detailed structure planning. • Environmental and planning: there will be technical considerations/ risks to be mitigated and addressed (including pressure from opposition groups surrounding land uses in these areas). |
| Outcomes: | <ul style="list-style-type: none"> • The industrial estate of which the land for the Bullsbrook intermodal facility is a component has the potential to have a workforce of 16,000, providing employment to both the north-east and north-west sub-regions, supporting a broader workforce of between 20,000–30,000 workers in the surrounding industrial precincts by 2050. • The Mundijong intermodal facility will expand industrial opportunities in the metropolitan south-east sub-region (supporting an estimated 5,000 to 10,000 jobs by 2050), and the Bunbury connection means that its effect will reach to the south-west of the State. |
| • Growth: | • The interstate and inter-regional connections of these facilities make them essential elements to the overall growth of the State's economy. |
| • Sectors impacted: | <ul style="list-style-type: none"> • Key sectors impacted include: <ul style="list-style-type: none"> - Transport and logistics - Agriculture and value adding processing (in particular for Mundijong) |



| Consideration | Description |
|-------------------------------------|--|
| • Productivity: | • Well located intermodal facilities are essential to the overall productivity of the economy by providing the 'ingredients' to support effective value add and distribution of Western Australian agricultural commodities and other goods. They also present good and high value future use of the sites and free up other more valuable land closer to the Port and CBD for re-development. |
| • Efficiency: | • Preserving the opportunity will ensure the freight and logistics functions of Perth and Peel can expand in the most efficient way with the knowledge of the site and location for future key infrastructure. |
| • Amenity/ Lifestyle: | • The sites are in locations separated from current and future residential development. • The proposed developments also free up other more valuable land for redevelopment. |
| • Needs addressed | • Industry and jobs growth to meet business and population needs, that is focused in key employment centres. • Deliver efficient freight transport infrastructure. • Enhanced connectivity for businesses to local, regional, state, national and global markets, by providing efficient intermodal connections and employment lands with links to export infrastructure • Maximise use of existing infrastructure assets (e.g. proximity to existing and planned road/ rail infrastructure, employment lands). • Reduce transport burden in Central sub-region by augmenting the freight network with key freight transport nodes that avoid major arterials on the fringe of the Perth CBD. • Enhanced access for both the Northern and Southern sub-regions to port infrastructure. • Development of key sector growth drivers for the Northern and Southern sub-regions. |
| Capital intensity: | Preserving the opportunity: Low |
| Anticipated Funding Models: | • Land Assembly: Metropolitan Region Improvement Fund for Bullsbrook • Development: Public-private partnership in particular for Mundijong |
| Implementation Requirements: | • Identify key sites • Assemble into Government ownership • Incorporate into structure planning |
| Complexity: | Low |
| Partners in delivery: | • WAPC • LandCorp • Private sector • Institutional investors |



Common User Facilities (Innovation)

| Consideration | Description |
|-----------------------------|--|
| Classification Tier: | Regionally Significant |
| Description: | <p>Common User Facilities (CUFs) can be in a number of formats. These include a physical location that houses state of the art equipment and expertise (on a user pays system) for access by small to medium enterprises (SME's), in industry specific sectors, to assist with advancing ideas, products and markets that will make Perth more globally competitive. These facilities allow access to equipment and/or processes that would have been considered cost prohibitive on their own. This allows SME's to develop 'proof of concept' to prove value, develop foundation components, secure endorsement, test the ability to scale, and mitigate future risk. Sectors for prioritisation include:</p> <ul style="list-style-type: none"> • Creative and knowledge industries • Professional, technical and scientific services • Arts and cultural services • Energy intensive industries, such as agri-food, manufacturing, water, transport/ logistics, and mining • Spatial information systems <p>CUFs can also provide collaborative work spaces with a large and flexible shared work space, a board room, and a series of semi partitioned offices and access to key business and digital infrastructure. They can provide excellent digital connectivity for business while allowing flexible business location and work practices.</p> <p>CUFs also require softer infrastructure to be successful such as networks, programs, services and systems, which are all critical to encourage and develop innovation.</p> |
| Opportunity: | <p>Development of CUFs reduce risk and increase the performance of small and start-up enterprises working in new areas of the economy. These businesses are the drivers of our economic future and any assistance to them will improve economic and social outcomes.</p> <p>CUFs have the capacity to integrate disruptive technologies as they develop. The telecommunications capability underpinning the digital economy and focussed in the form of CUFs can provide incentive for digitally driven businesses to locate or partly locate operations at CUFs. These could be situated outside capital cities to provide places of work close to where people live, with consequent social benefits and transport cost reductions. This is valuable in a sprawling metropolis such as Perth.</p> <p>Options for work closer to home will support the re-engagement in the labour force of a current disengaged component (i.e. older skilled workers and mothers considering re-entering the labour market)</p> <p>CUFs would be best located near existing centres of innovation in the Central sub-region to maximise synergies, or in Strategic Metropolitan or Secondary activity centres in the outer sub-regions as this would provide access to high level infrastructure in key employment nodes of these sub-regions. Key potential locations for CUFs are thereby considered to include:</p> <ul style="list-style-type: none"> • Perth CBD, Murdoch, UWA-QEII, Curtin/ Bentley and Mount Lawley ECU in the Central sub-region • Joondalup and Yanchep in the North West sub-region • Midland in the North East sub-region • Rockingham in the South West sub-region • Armadale in the South East sub-region • Mandurah in the Peel sub-region (as an alternative, the Nambelup Industrial Area is proposed to include a technology park/ hub and could be a suitable location for a CUF in the Peel sub-region). |
| Growth factors: | <ul style="list-style-type: none"> • Small and start-up enterprises are at the core of the innovative process and will most benefit from support (i.e. access to infrastructure, networks, mentoring and commercialisation/ development funding) to be successful. • The rapid change in work patterns enabled by increased access to digital and telecommunications capability can be captured and focussed at CUFs with benefit both to individuals and organisations. Importantly, CUFs have the capacity to facilitate the development, adoption and diffusion of disruptive technologies by providing access to cutting edge technology across a wide number of users/ clients. |
| Risks: | <ul style="list-style-type: none"> • Successful CUFs and hubs to date have relied on key individuals for their establishment and early stage operations. The model may need to be modified for wider application. • Supporting the development of CUFs outside of Perth and the Central sub-region will likely require some buy-in from large organisations seeking to locate part (or all) of their business in these facilities to promote flexible work arrangements (i.e. the distributed and remote working model). To do so requires an appropriate corporate culture within large organisations to enable it. This will take time, technological innovation (and adoption) to implement. |



| Consideration | Description |
|------------------------------------|---|
| Outcomes: | |
| • Employment: | <ul style="list-style-type: none"> • CUFs focussed on innovative businesses and start-ups can be job creators in new and growing sectors of the economy. Examples from other comparable facilities from around Australia indicate 1-5 out of 10 businesses go on to generate/ provide multiple employment opportunities. • CUFs targeting remote work practices for larger organisations are not anticipated to significantly increase final demand for employment, but they are likely to enhance access to the labour pool, which would assist in addressing an ongoing skilled labour issue in Western Australia. |
| • Growth: | <ul style="list-style-type: none"> • The main objective of CUFs focussed on innovative businesses is to improve the innovation and development process. Giving organisations the opportunity to gain a competitive edge by accessing the innovation and collaboration space for their staff and connecting with entrepreneurs through organisation memberships and networks is critical. |
| • Sectors impacted: | <ul style="list-style-type: none"> • All sectors are impacted, but particularly: <ul style="list-style-type: none"> - Professional, technical and scientific services - Arts and cultural services - Creative and knowledge startups - Energy intensive industries - Spatial information systems |
| • Productivity: | <ul style="list-style-type: none"> • CUFs increase productivity by clustering like industries or supply chain industries together sharing high tech equipment. • CUFs promote the adoption and diffusion of disruptive technologies, which typically generate considerable increases in productivity over the short and longer term. • CUFs targeting remote work practices allow workers in large organisations to work much closer to home, thus reducing travel costs, enhancing worker amenity and likely health outcomes by increasing available recreational time. • CUFs targeting remote work practices also assist in addressing skilled labour shortages by providing broader access for business to the labour pool, and encouraging greater participation rates. |
| • Efficiency: | <ul style="list-style-type: none"> • CUFs clusters allow shared access to high tech equipment which could be costly individually and the active cluster node allows more efficient use of the equipment. • CUFs focussed on innovation are a low cost and efficient way of providing essential networking, mentoring and skills development to small start-up enterprises. • CUFs targeting remote work practices improve business and worker flexibility and reduce travel time. |
| • Amenity/ Lifestyle: | <ul style="list-style-type: none"> • Reduced travel and increased recreational time and activity. • More lively regional activity centres and places for individuals to interact, collide and learn from each other. |
| • Needs addressed | <ul style="list-style-type: none"> • Industry and jobs growth to meet business and population needs, that is: <ul style="list-style-type: none"> - Focused in key employment centres - Located near residents - Diversifies the economy, while leveraging and embracing innovation and new technology - Enhanced connectivity for businesses to local, regional, state, national and global markets, by providing flexible, high tech employment lands with high speed digital connections • Reduce passenger transport burden by providing jobs near residential areas • Enhanced amenity by providing greater diversity of employment opportunities in proximity to residents • Development of key sector growth drivers for the Northern and Southern sub-regions |
| Capital intensity: | Low - high depending on the size and nature of the requirement (i.e. physical infrastructure and space versus facilitation of networks and connections) |
| Anticipated Funding Models: | <ul style="list-style-type: none"> • Public private partnerships • Local or State government sponsorship of private sector development (possibly on government land) |



| Consideration | Description |
|-------------------------------------|---|
| Implementation Requirements: | <ul style="list-style-type: none"> • Further development of significant industry clustering • Facilities to house state of the art equipment and technologies • High speed and reliable internet connectivity is key • CUFs focussed on innovation: <ul style="list-style-type: none"> - Engagement of the regions universities and their activity in this space - Engagement with private sector that is active in this space - Mapping industry clusters for new and emerging industries across the Perth Region - Identify potential locations for such a facility - Establish institutional arrangements to facilitate a CUF - Develop an appropriate business model to run such a facility. • CUFs targeting remote worker practices: <ul style="list-style-type: none"> - Identify and engage with organisation or agencies (or groups of agencies) with ability to incorporate a distributed working model into their operations. - Identify potential locations for such a facility - Establish institutional arrangements to facilitate a CUF - Develop an appropriate business model to run such a facility. |
| Complexity: | Medium |
| Partners in delivery: | <ul style="list-style-type: none"> • Commonwealth Government • Private sector office developers, owners and operators • Local government • Department of Commerce • Small Business Development Commission |





Peri-Urban Development

| Consideration | Description |
|-----------------------------|---|
| Classification Tier: | Regionally Significant |
| Description: | <p>Peri-urban Perth is home to 32% of the region's population and is also referred to as the 'food arc'. It is the area that immediately surrounds metropolitan Perth, but as the definition of peri-urban suggests, it is not a rural area either (see map on page iv and v). Peri-urban Perth is fast becoming a location for increased urbanisation and housing density as people move from the City into the outer areas of Perth for a mix of affordability and lifestyle reasons. In the past this area was predominantly made up of agricultural land as a major food source for the area, but over time with the demand for increased housing to accommodate population growth the area has been encroached upon by ever increasing housing density.</p> <p>Peri-urban is defined as those land uses within the study area that currently participate in agricultural (direct or indirect) activities and does not require nor encourage further subdivision of those areas.</p> |
| Opportunity: | <p>Key drivers for innovation and prosperity sit within the food and agri-tourism sector. Other obvious opportunities surround the location based population driven household support sectors (health, education, retail, cultural and recreational services and professional services), which need to be facilitated through local planning and development strategies.</p> <p>Peri-urban development can be a significant contributor to jobs and business investment in the areas of intensive cropping, agri-tourism and agri-industrial sites. The key to unlocking this potential is developing planning policy that enhances the productive capacity of underutilised agricultural land and supports complementary food processing and other agri-business activity. This should occur concurrently with increased densities in peri-urban areas.</p> <p>The North East and North West sub regions are suitable for the intensive production areas and the South West, South East and Peel region is best suited for agri-industrial precincts, with all sub regions benefitting from agri-tourism.</p> |
| Growth factors: | <p>Key aspects needing to be managed and mitigated include:</p> <ul style="list-style-type: none"> • Peri-urban land is often held (land banked) by both government and private landholders to realise value gains through potential future urban development. This has the effect of 'artificially' constraining supply, which results in increased land prices and in some instances reduces the viability of agricultural operations. The Toward Perth and Peel @3.5 million framework sets clear expectations in relation to this, and this needs to be firmly established in the market to remove expectations that important agricultural land will be able to be rezoned in the future for urban development. • Land use conflict as mid and high density housing moves outward. • Key agri-industrial sites for food processing and agricultural industry processing require development and protection from encroachment by other uses while the sector becomes established. These need to be encouraged into key nodes of activity and be sported by an efficient transport and distribution/ export network. • Less people in peri-urban Perth have post-secondary qualifications compared to the remainder of the Perth and Peel area. This is a potential risk in relation to attempts to diversify the economy and enhance skills. • With fly-in-fly-out mining employment being a major source of jobs for people who live in the peri-urban areas this has the potential to result in community participation issues and associated social and economic impacts. |
| Risks: | <p>Key aspects needing to be managed and mitigated include:</p> <ul style="list-style-type: none"> • Peri-urban land is often locked up by both government and private landholders for potential future urban development. This has the effect of increasing land prices beyond those viable for continuing agricultural uses. The Toward Perth and Peel @3.5 million framework sets clear expectations in relation to this, and this needs to be firmly established in the market to remove expectations that important agricultural land will be able to be rezoned in the future for urban development. • Land use conflict as mid and high density housing moves outward. • Key agri-industrial sites for food processing and agricultural industry processing require development and protection from encroachment by other uses while the sector becomes established. These need to be encouraged into key nodes of activity and be sported by an efficient transport and distribution/ export network. • Less people in peri-urban Perth have post-secondary qualifications compared to the remainder of the Greater Perth area. This is a potential risk in relation to attempts to diversify the economy and enhance skills. • With fly-in-fly-out mining employment being a major source of jobs for people who live in the peri-urban areas this has the potential to result in community participation issues and associated social and economic impacts. |



| Consideration | Description |
|-------------------------------------|---|
| Outcomes: | |
| • Employment: | <ul style="list-style-type: none"> The focus in peri-urban Perth is to get the balance right between property development to service a growing population, development of local jobs and employment centres, while at the same time protecting and enhancing good quality agricultural land to assist in the diversification of this sector. If this can be achieved sustainable employment growth should be observed in the property development industry as well as peri-urban agriculture. For the outer fringes of the metropolitan area, peri-urban agriculture provides a strong opportunity for increased and diversified employment and businesses. |
| • Growth: | <ul style="list-style-type: none"> Economic diversification Improved food security Mid to high density housing |
| • Sectors impacted | <ul style="list-style-type: none"> Key sectors impacted include: <ul style="list-style-type: none"> Agriculture Horticultural services Retail Tourism Transport and logistics Food processing Construction and property development Flow on demand from increased population and economic activity (e.g. retail, health services and education) |
| • Productivity: | <ul style="list-style-type: none"> More is being done with less land, but a balance needs to be maintained to ensure peri-urban Perth does not lose its agricultural value and just become an outer suburb of Perth without the creation of more jobs to support the population increase. An objective is to bring under-utilised land into productive use. |
| • Efficiency: | <ul style="list-style-type: none"> The initiatives generally fit within the existing or proposed general infrastructure framework Other than mining, jobs growth in the Perth and Peel region are mostly in areas that are population driven, suggesting that more needs to be done to attract and develop a wider and more diverse range of industry sectors to balance and generate a more efficient regional economic structure. |
| • Amenity/ Lifestyle: | <ul style="list-style-type: none"> The economy of Perth and Peel would be further diversified, stabilising the regional economies Agri-tourism provides day-trip opportunities for Perth urban residents. Reduced journey to work transport burden increasing available recreation and health pursuits. |
| • Needs addressed | <ul style="list-style-type: none"> Industry and jobs growth to meet business and population needs, that is: <ul style="list-style-type: none"> Focused in key employment centres Located near residents Meeting business and population preferences, including lifestyle Strengthening the resiliency of the economy Reduce urban sprawl by focusing development in key nodes. Reduce passenger transport burden by providing jobs near residential areas. Enhanced amenity by providing: <ul style="list-style-type: none"> Ready access of residents to core household services Greater diversity of employment opportunities in proximity to residents A built form that co-exists with the natural assets of the region Development of key sector growth drivers for the Northern and Southern sub-regions. |
| Capital intensity: | <ul style="list-style-type: none"> Planning policy: Low Agri-business industrial development: medium |
| Anticipated Funding Models: | <ul style="list-style-type: none"> Individual agriculture/ horticulture project initiatives: private sector funded Industrial land development: <ul style="list-style-type: none"> LandCorp Public-private partnerships Private sector |
| Implementation Requirements: | <ul style="list-style-type: none"> Recognition of opportunity by WAPC and incorporation into state and local policy. Coordination across peri-urban initiative elements: production, processing, tourism. Centralised and efficient processing precincts near to or within transport and logistics hubs. Business attraction strategy targeted towards industries that will add value to the peri-urban area and assist in diversifying the economic structure. |



Knowledge Economy

| Consideration | Description |
|------------------------------|--|
| Complexity: | Medium – there are numerous government and industry stakeholders that need to be engaged if peri-urban Perth is to be developed and diversified in the way that is going to generate the best economic opportunities for the community. |
| Partners in delivery: | <ul style="list-style-type: none"> • WAPC: agri-precinct zoning policy • Local Governments • Department of Agriculture: Skills development and market knowledge • LandCorp: Complementary industrial land development • Tourism WA: Support for agri-tourism initiatives • Industry stakeholders and land owners • Private sector: funding and land development • Peel Development Commission |
| Classification Tier: | Regionally Significant |
| Description: | Australia's comparatively high cost of labour means our competitive edge will come through leveraging the high level skill base to develop and commercialise technology and innovation. Research and development of an international standard will seek high class and up-to-date facilities in an environment that favours interaction and networking amongst peers. World class IT infrastructure is not a competitive advantage but a base minimum requirement – without first class IT infrastructure and connectivity, no region will be globally competitive. |
| Opportunity: | <p>There is research and development activity in various locations across the metropolitan area. The Curtin Bentley Specialised Centre and the UWA – QEII Specialised Centre stand out as two of Perth's premier education, knowledge, scientific research and development centres. These facilities house world-class research and development in resources technology, astrophysics, health and medical research and bio-medical technology. Each is recognised as a Specialised Centre in Toward Perth and Peel@3.5 million. They:</p> <ul style="list-style-type: none"> • Form the key nodes for the knowledge economy in Western Australia. • Provide many opportunities for further development and a broad range of opportunities for spin-off economic activity. • Must be connected by high speed internet, collaborative thinking and commercialisation programs/ processes and funding. <p>There is an opportunity for these education, knowledge, scientific research and development centres to link with and support Common User Facilities (CUFs). The focus of these should be on creative and knowledge-based innovative businesses and start-ups. They would support these facilities by providing access to leading edge services, programs, researchers and the best young, innovative minds looking to forge careers in these industries.</p> |
| Growth factors: | <p>Ensuring the growth of the knowledge economy is essential to the prosperity of the State. It underpins continuing productivity in traditional industries such as mining and resources and new technologies, applications and supply chains (i.e. new products or existing solutions applied to new areas). Key factors driving growth in this sector include:</p> <ul style="list-style-type: none"> • Availability of high speed internet and data transfer. • Funding for research and development and commercialisation of research. • High levels of international networking and idea 'sharing'. • Lifestyle and amenity (workers in this space are highly sought after and have opportunity to live/ work anywhere). • Collaboration with industry to ensure research is meeting current and future industry needs. |
| Risks: | <ul style="list-style-type: none"> • Attracting and maintaining high level research and development activity (and world leading researchers) is intensely competitive and requires consistent effort and reinvigoration. • The sector has multiple stakeholders and limited funds. A high degree of collaboration between stakeholders and consistent, supportive policy and base level funding is required. • Generating early traction with industry to form long term constructive and efficient collaborative relationships. • Timeliness of telecommunications infrastructure capacity. This is not yet fully in place. |



| Consideration | Description |
|------------------------------------|---|
| Outcomes: | |
| • Employment: | There are currently around 5,000 – 10,000 high-level researchers in the Curtin/ Bentley and UWA – QEII Specialised Centres. It is anticipated these numbers will increase three to four fold over the next 30 years. |
| • Growth: | <p>Each of these knowledge hubs has capacity for at least a three or four-fold growth in activity and employment. These form a core for associated and complementary research efforts in the main activity centres throughout Perth and Peel with some of the elements for a successful concentration of science and technology activity in specialised areas. These potentially include:</p> <ul style="list-style-type: none"> • Perth CBD • Curtin/ Bentley • UWA – QEII • Murdoch • Joondalup • Midland • Mandurah. <p>Active programs to promote this will be specific to each centre, but the common elements will include:</p> <ul style="list-style-type: none"> • Integration of research, education, innovation and development with industry needs. • Promotion of clustering and concentrations of activities. • Promotion of interaction and physical connection with the right urban environment. • Providing high quality virtual connections. • Supporting incubation, business development and commercialisation programs. • Investigating governance and promotion models (particularly with respect to the Curtin/ Bentley Precinct). • Providing very high quality physical accessibility and openness, including public transport. |
| • Sectors impacted: | <p>Key sectors impacted include:</p> <ul style="list-style-type: none"> • Professional, technical and scientific services • Education. • Health and medical research services |
| • Productivity: | There is significant investment in each of the knowledge hubs that can be extended and expanded and used more intensively. This initiative seeks to drive and support the long run productivity gain that occurs and is delivered in sporadic and significant leaps forward. |
| • Efficiency: | <p>Increasing scale and increasing intensity of use, including land use intensity, at the key knowledge hubs leads to efficiency and productivity gains.</p> <p>Application of new technologies and commercialisation of the research applications will also support significant steps forward in industry productivity and gross state product (GSP)</p> |
| • Amenity/ Lifestyle: | Development of the key centres makes them attractions in their own right, particularly where they are accessible and encourage participation of industry and community stakeholders outside the academic and research sphere. |
| • Needs addressed | <ul style="list-style-type: none"> • Industry and jobs growth to meet business and population needs, that is: <ul style="list-style-type: none"> – Focused in key employment centres – Adopts and embraces disruptive/ transformative technologies – Strengthens the resiliency of the economy • Enhanced connectivity to markets through consolidation and leveraging the Knowledge Arc into a globally competitive centre of excellence. • Enhanced amenity by providing greater diversity of employment opportunities in proximity to residents. • Development of key sector growth drivers for the Northern and Southern sub-regions. |
| Capital intensity: | <ul style="list-style-type: none"> • Planning and policy settings: Low • Development: Medium – high • ICT infrastructure: Medium |
| Anticipated Funding Models: | There many opportunities for public-private partnerships and for self-funding of development initiatives by key institutions within the knowledge hubs and or by industry. Opportunities for commercialisation programs and funding (development or angel funding) exist and have the potential to generate the 'attraction' of leading intellectual property, not just the generation and activation of research |



| Consideration | Description |
|-------------------------------------|--|
| Implementation Requirements: | <p>Specific actions are:</p> <ul style="list-style-type: none"> • Confirm the vision for each specialised centre at 2050 with key institutions, including: <ul style="list-style-type: none"> - Type and nature of research and knowledge generated - Student, worker and community amenity - Urban realm and spaces for high levels of interaction and 'collision of ideas' - Connectivity to transport infrastructure - Interaction with surrounding precincts • Develop a strategic long term masterplan for each specialised centre and surrounding precinct: <ul style="list-style-type: none"> - Infrastructure requirements (urban realm, ICT, road, rail and development/ construction) - Development timing and staging/ work packages - Immediate and surrounding land uses and precincts encouraging access and activation - Consistency with the existing strategic masterplans for the individual institutions • Align local and regional planning • Work with the institutions to support their: <ul style="list-style-type: none"> - Research agenda - Commercialisation process and funding program/ model - Investment attraction campaigns (e.g. angel, venture capital, crowd) |
| Complexity: | High (multiple stakeholders with contentious action/ progress points) |
| Partners in delivery: | <ul style="list-style-type: none"> • Universities • CSIRO • Research Institutes and Centres • State Government (policy settings) • Industry |





Skills Development & Training

| Consideration | Description |
|-----------------------------|---|
| Classification Tier: | Regionally Significant |
| Description: | <p>Skills development in Perth and Peel takes four main forms:</p> <ul style="list-style-type: none"> • Enhancing the skills and management expertise of local business owners to ensure they have the knowledge and abilities required to lead their businesses growth and development in changing economic times. • Developing the supply pipeline of skilled workers from local sources to meet future needs (both new workers and up/cross skilling of existing workers). • Attracting skilled labour to meet any future skills gap. • Proactively identifying and understanding the degree to which future industry growth may be constrained by a lack of skilled resources is a critical component to ensure economic development opportunities in Perth and Peel are realised in an efficient and timely fashion. |
| Opportunity: | <ul style="list-style-type: none"> • Address the long term skills availability issue (and perception) with doing business in Western Australia (and Perth). • Support local businesses grow, prosper and take advantage of entrepreneurship will increase local level employment, increase productivity and provide a more sustainable and diverse economic base for the region. • Business and industry need a ready supply of skilled labour to support growth and to operate more efficiently. There are consistent and observable trends in technology and capital replacing labour, however, this is also driving significant increases in specialist skills needs. • Specific opportunities include: <ul style="list-style-type: none"> - Establish life-long learning programs that address work cultural issues, build cooperation and collaboration and increase the skills flexibility of the individual - Broaden the landscape by developing accelerator programs that not only up-skill but also extract innovation and engagement of millennials - Modernise the responsiveness of training systems through the increase of online programs for ease of access to skills development - Establish Common User Facilities (CUFs) for industry clustering which will broaden the landscape for up-skilling of SME's and strengthen the role of industry sectors • Encourage more work based learning programs. |
| Growth factors: | <ul style="list-style-type: none"> • There is a strong and pressing need to identify the future labour requirement for the Perth and Peel region, the State of Western Australia as well as Australia overall. This includes identifying the skills that will be required to meet business and industry needs and deliver jobs growth, across a number of future scenarios, and set in place a robust series of training, skills development and education policy responses. |
| Risks: | <ul style="list-style-type: none"> • Rigidity in education and training programs • Structure of vocational education funding (limiting cross training opportunities). |
| Outcomes: | |
| • Employment: | <ul style="list-style-type: none"> • Skills development enables industry growth. For example, if 1 in every 10 of the estimated 170,000 small businesses could enhance their business management/ administration and marketing skills to employ 1 additional person, there would be an additional 17,000 jobs and associated value added activity generated in Perth and Peel. • Further benefits include enhanced labour force capacity (i.e. skills re-development and career re-direction), reduced unemployment and longer term enhancement in participation rates, particularly in underutilised cohorts of the potential labour force (e.g. encouraging mothers to return to the work force or utilising retirees). |
| • Growth: | <ul style="list-style-type: none"> • Skills development and training is an essential aspect of a region expanding and growing organically. This natural/ organic growth is not dependent on speculative investment attraction programs. |
| • Sectors impacted: | <ul style="list-style-type: none"> • All sectors require continued skills maintenance and upgrade, across the entire economy. |
| • Productivity: | <ul style="list-style-type: none"> • Assisting existing local Perth and Peel businesses to grow, prosper and take advantage of entrepreneurship will increase local level employment, increase productivity and provide a more sustainable and diverse economic base for the region. |
| • Efficiency: | <ul style="list-style-type: none"> • Skills development enables business efficiency and increased productivity and a more prosperous community. Additional turnover and value added production within individual businesses also provides a significant increase in administrative productivity. |



| Consideration | Description |
|---|---|
| <ul style="list-style-type: none"> • Amenity/ Lifestyle: | <ul style="list-style-type: none"> • A richer and more fulfilling lifestyle by providing skills needed to promote job flexibility and success. |
| <ul style="list-style-type: none"> • Needs addressed | <ul style="list-style-type: none"> • Skills development and attraction to meet the needs of existing and emerging business and industry in a timely manner, including enhanced business management capacity, local worker skills growth and attraction of key workers. • Enhanced amenity by providing greater diversity of employment opportunities for residents. |
| Capital intensity: | Low - medium |
| Anticipated Funding Models: | <ul style="list-style-type: none"> • Government-sponsored training funds • Business self-funding and internal investment • Professional and trades associations members funding |
| Implementation Requirements: | <p>Enhanced business management capability:</p> <ul style="list-style-type: none"> • Identify business owner/ manager training needs • Identify existing assistance programs • Facilitate connections • Facilitate networks and local supply chain expansion <p>Skills development:</p> <ul style="list-style-type: none"> • Future labour demand scenario/ risk planning to assist in a refocus of current programs toward future need • Review policy requirements/ mechanisms <p>Attracting skilled labour:</p> <ul style="list-style-type: none"> • Identify likely skills gap and where this may be sourced from • Develop and implement targeted marketing program with appropriate collateral (e.g. skills attraction packs) |
| Complexity: | Low |
| Partners in delivery: | <ul style="list-style-type: none"> • Department of Employment • Small Business Development Corporation • VET sector • Local Chambers of Commerce • Professional and trades associations • Department of Training and Workforce Development • Universities |

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Appendix A: Influencing Factors & Trends

Traditional & Alternative Infrastructure Finance Options

Governments in Australia generally use an established range of financing methods/ models for the provision of public infrastructure. Whilst these frequently have different names they generally fall into one categories outlined in the following table.

Table A.1. Traditional Infrastructure Finance Options

| Name | Overview | Description |
|----------------------|--|--|
| General taxation | Covers the full range of Commonwealth, State and Territory taxes, and also includes municipal rates levied by local government | Governments have legislative authority to impose financial charges on individuals or legal entities. Finances raised are used to provide goods and services that would generally not be provided otherwise, known as public goods or services |
| Government borrowing | The issuing of long-term government debt, typically in the form of various bonds | Commonly used for long-lived assets, debt financing of infrastructure allows a government to match the financing costs with the revenue generated by that infrastructure. In the 1980s each state jurisdiction established a central borrowing authority (CBA). Bringing all government borrowing under one umbrella results in greater efficiency. For example, in Queensland, the CBA is the Queensland Treasury Corporation (QTC) which raises money for on-lending to Queensland Government departments, local authorities, government owned enterprises and public sector bodies. Funds are sourced in both the domestic (45%) and international (55%) markets through the issuance of a variety of debt instruments. The Western Australian Treasury Corporation provides this function and works with its public sector clients to assist them to achieve sound financial risk management. |
| User charges | Fees ranging from cost recovery to full commercial pricing, levied on infrastructure users | User charges are prices or fees charged for receiving services from an infrastructure asset. Generally user charges are highly regulated as many of the providers are monopolies or are a Government Trading Enterprise in competition with the private sector. Generally there will be a regulator which has a responsibility to ensure: <ul style="list-style-type: none"> • Significant government business activities which compete with the private sector do so fairly (Competitive Neutrality) • Government owned monopolies and privately owned monopolies do not abuse their market power (Monopoly Prices Oversight) • Essential infrastructure is accessible to all potential users (Third Party Access). |

| Name | Overview | Description |
|-----------------------------|--|---|
| Developer contributions | Upfront user charge for future infrastructure services, generally required prior to construction | Developer contributions (or infrastructure charges) are widely used by local governments in Australia to fund urban infrastructure associated with the development of land. Whilst the developer will generally include local roads and drainage in their subdivision they are also required to contribute to other urban infrastructure that would be impacted on or be demanded by the new population, including headworks infrastructure (e.g. water, arterial roads) and social infrastructure (e.g. parks, libraries and affordable housing). The forms of contribution can either be transfer of land, work-in-kind, or monetary. |
| Public Private Partnerships | Where the private sector is contracted to design, build, operate, manage and finance new infrastructure and meet government obligations for a set period of time | <p>There are many types of public private partnership (PPP) but essentially they typically involve a partnership between the public and private sector where the private sector is contracted to design, build, operate and manage and, most importantly, finance new infrastructure or services and meet government obligations for a set period of time (typically 20 to 30 years).</p> <p>Typically a Special Purpose Vehicle (SPV) or stand-alone business will be used to finance and deliver a PPP project. There has also been a number of innovative financing techniques used to spread risk and lower the total cost of finance by the private sector including:</p> <ul style="list-style-type: none"> • Securitisation of PPP loans • The credit guarantee finance scheme • Tax-exempt private activity bonds • Refinancing of debt • Equity sales in specialised secondary markets. <p>The Allen Consulting Group (2007) found that PPPs demonstrate a cost efficiency over traditional procurement methods ranging from 30.8% (from project inception) to 10.4% (from contractual commitment) to completion. There was also a time efficiency, with PPPs found to be completed 3.4% ahead of time on average compared to 23.5% behind time for traditional projects.</p> <p>However, PPPs are not without their difficulties which mainly relate to the consistency and level of the associated revenues. For toll roads in particular traffic volumes may not meet forecast levels prompting the venture to significantly increase tolls or, in the worst case collapse. These adverse outcomes point to the need to consider alternative mechanisms for the private sector to be involved in the financing of public infrastructure.</p> |

Source: AEC

There are also many other alternative methods of financing public infrastructure in use around the world. A sample of the more relevant options are outlined in the table below.

Table A.2. Alternative Infrastructure Finance Options

| Name | Overview | Description |
|--|---|--|
| Specific Purpose Securitised Borrowing | Issuance of debt instruments such as bonds, debentures and inscribed stocks in the capital market to finance a particular project | Specific purpose securitised borrowing is used to finance a particular project with the debt being repaid from the income that the project generates. In Australia, quasi-government entities used specific purpose bonds from the mid-1800s until the late 1970s when reforms in the financial sector and the movement to central borrowing authorities (CBAs) in each jurisdiction resulted in the demise of specific purpose borrowing. Funds raising through bonds by these entities typically no longer specifies the purpose of the borrowing or the entity using the funds. |
| Certificates of Participation | Where governments enter into agreements with entities that issue bonds to finance facilities that are leased back by the government | A variation on specific purpose securitised borrowing is the Certificate of Participation (CoP) or lease revenue bond. A bond issue is created in order to fund the construction of a capital facility that is within the city limits. Rather than owning the facility outright during the period of construction, the city leases the facility during the construction period and makes instalment payments toward the lease. When the payment schedule is completed, the municipality assumes ownership of the completed facility. For the investor, the CoP represents proof of involvement in the bond issue. Purchasing a share of the lease revenues can be an attractive alternative to the more traditional bond for a couple of reasons. Payments are made to the investor for the duration of the project, based on the percentage of share that the investor has in the lease agreement. This means that the investor does not necessarily have to wait for a bond to mature before he or she begins to receive a return on the investment. Payments specified by the terms of the CoP can be deferred until later in the project, if the investor prefers to receive larger payments at less frequent intervals. In the unlikely event that the municipality defaults on the arrangement, the terms of a CoP provide investors with the ability to assume control of the facility. Once the default is complete and the transfer of title is in the hands of the investors, they are free to do with the asset as they see fit. This includes the ability to either complete the facility and sell it to a private investor, or choose to band together and use the completed structure for purposes of their own. |

| Name | Overview | Description |
|--------------------------------|--|---|
| Value Capture Levy | Capture the uplift in land value that results from the planning process, development of land, or construction of beneficial infrastructure | A value capture levy aims to capture the uplift in land values that result from the planning process, development of land or construction of beneficial infrastructure (i.e. they target the portion of the economic rent created by the planning process rezoning the land and therefore making it more valuable (windfall)). The levy is generally only captured when the property changes ownership. Levy receipts are then used to fund infrastructure to support development. |
| Specific Purpose Levies | Implementation of an ad hoc levy to meet specific infrastructure needs of an area | <i>Ad hoc</i> levies can be used by governments to raise finance for a specific purpose. However where they are not linked directly back to the services they are levied upon they are often regarded as a tax. |
| Growth Area Bonds | Issue of bonds to finance infrastructure enhancement that are tied to a specific area repaid through future tax revenues collected in a defined area | Growth area bonds (GABs), also known as Tax Increment Financing (TIF) in the US, are a specialised form of debt financing where future property tax revenues are set aside to repay bonds issued to finance items of public infrastructure. When new public infrastructure is developed, it normally spurs new property development and higher valuations, both of which increase the revenue from property taxes such as transfer duty and municipal rates. Under GAB financing, specific GAB districts are established with a plan outlining the district's infrastructure needs and their cost. A financing body would issue GABs that are tied to a specific region and its future tax revenue collections. Alternatively, generic state government bonds could be issued until investors have confidence in the GAB process. The new public infrastructure encourages property development and higher valuations in the GAB district. Property tax revenue in the GAB district increases and this increment to tax revenue is used to make repayments on the bonds. When the debt has been repaid, the entire tax revenue from the district reverts to the original taxing authority. GABs are different from value capture levies in that GABs target the growth in property taxes levied on a continuous basis, whereas a value capture levy will only capture part of the growth when a property changes ownership. GABs require a defined area whereas value capture levies can apply within a defined area or a whole jurisdiction. |
| Business Improvement Districts | Stakeholders within a defined boundary make a collective contribution towards the maintenance and promotion of an area | A business improvement district (BID) is a business and local authority partnership in which businesses in a defined area pay an additional tax or fee in order to fund improvements within the district's boundaries. BIDs may go by other names, such as business improvement area (BIA), business revitalisation zone, community improvement district, special services area, or special improvement district. BIDs provide services, such as cleaning streets, providing security, making capital improvements, and marketing the area. The services provided by BIDs are supplemental to those already provided by the municipality. |

Source: AEC

Delivery of alternative funding arrangements may well also require amended governance structures to ensure the initiatives are delivered efficiently to drive regional change. An overview of some current proposals regarding amended governance arrangements raised through the consultation component of this study and review of documents such as CCIWA (2015) are outlined in the box below.

The role of local government is continually expanding, as is their capability. There is pressing and emerging role for regional groupings of local governments, or large local government on their own account, to be lead agency for major initiatives. However, the essential government mechanisms to allow this are not in place. Specifically, the Local Government Act 1995 does not enable local government to routinely enter into the business arrangements that are necessary for even moderate scale infrastructure initiatives and does not allow regional groupings of local government to be easily formed to undertake joint infrastructure projects.

The draft Regional Subsidiaries Bill⁷ is an essential governance mechanism and is supported by WALGA. It would enable regional groupings of local governments to form a corporate entity to undertake common and cross-border infrastructure projects.

Repeal of relevant sections of the *Local Government Act 1995* is required to enable individual Councils to form individual LGA enterprises (Council Controlled Organisations) and multi-LGA Regional Subsidiaries (similar to the New Zealand model) to undertake major initiatives.

These would spend not only their own funds and activate their own assets, but would also seek to access traditional State Government funding sources and funds from other sources such as the private sector and/ or other sources (for e.g. a potential new General Infrastructure Levy Fund, from the MRIF, from Infrastructure Australia).

⁷ An Act to amend the Local Government Act 1995 to enable local governments to form regional subsidiaries and to make consequential amendments to other Acts.

Regional subsidiaries: Two or more local governments making arrangements under which they are to provide a service or carry on an activity jointly may, with the Minister's approval and in accordance with the regulations, form a subsidiary body (a regional subsidiary) to provide that service or carry on that activity.

A regional subsidiary is a body corporate with perpetual succession and a common seal, and is to have a governing body consisting of members appointed in accordance with the charter on the basis of which the Minister approved the formation of the regional subsidiary. A regional subsidiary as a governing body may consist of or include members who are not council members or employees.

The Infrastructure Coordinating Committee was established to advise the WAPC on planning for the provision of physical and community infrastructure throughout the state. During consultation, views expressed by industry noted there was significant opportunity for continuous improvement across all jurisdictions to deliver more coordinated and transparent planning in the provision of infrastructure. It was suggested improved governance can be achieved by the following two points:

- Strict adherence to Treasury Strategic Asset Management Framework procedures with cost benefit analysis and business cases required for all initiatives (these would need to include social and community benefits)
- Department of Treasury looks into a 'value for money' approach that addresses the triple bottom line with 100 per cent compliance to the strategic objectives of the Strategic Asset Management Framework.

Population & Dwellings

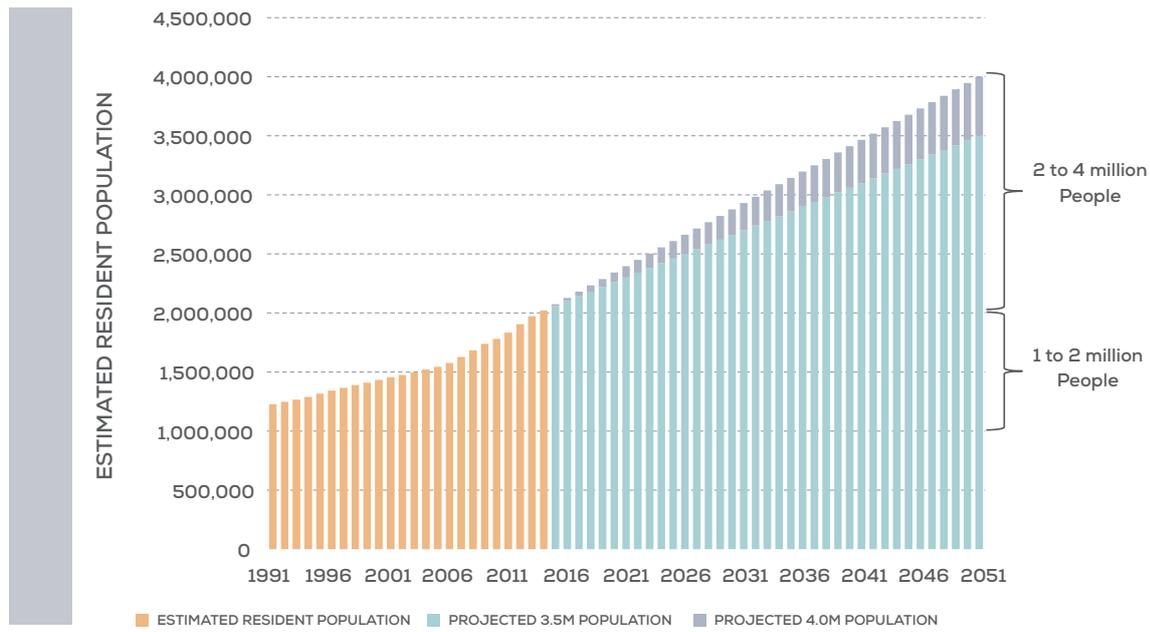
The doubling of population in Perth and Peel from 1 million to 2 million was largely accommodated by an ever expanding urban development front with greenfields development at the edges of the city, resulting in Perth and Peel now delivering infrastructure along a 170km stretch of coastline. It is anticipated the population of Perth and Peel will again double to approximately 3.5–4 million to 2050.

In 2013-14 the population of Australia increased by approximately 40 people per hour (ABS, 2015). The Perth and Peel population is anticipated to increase by approximately 5 people per hour or approximately 3,740 people per month to 2050.

Continuing to expand up and down the coast line will present an insurmountable infrastructure delivery (funding) task for the Perth and Peel region. *Perth and Peel@3.5 million* highlights policy settings for infill development to assist in making the infrastructure delivery issue more manageable.

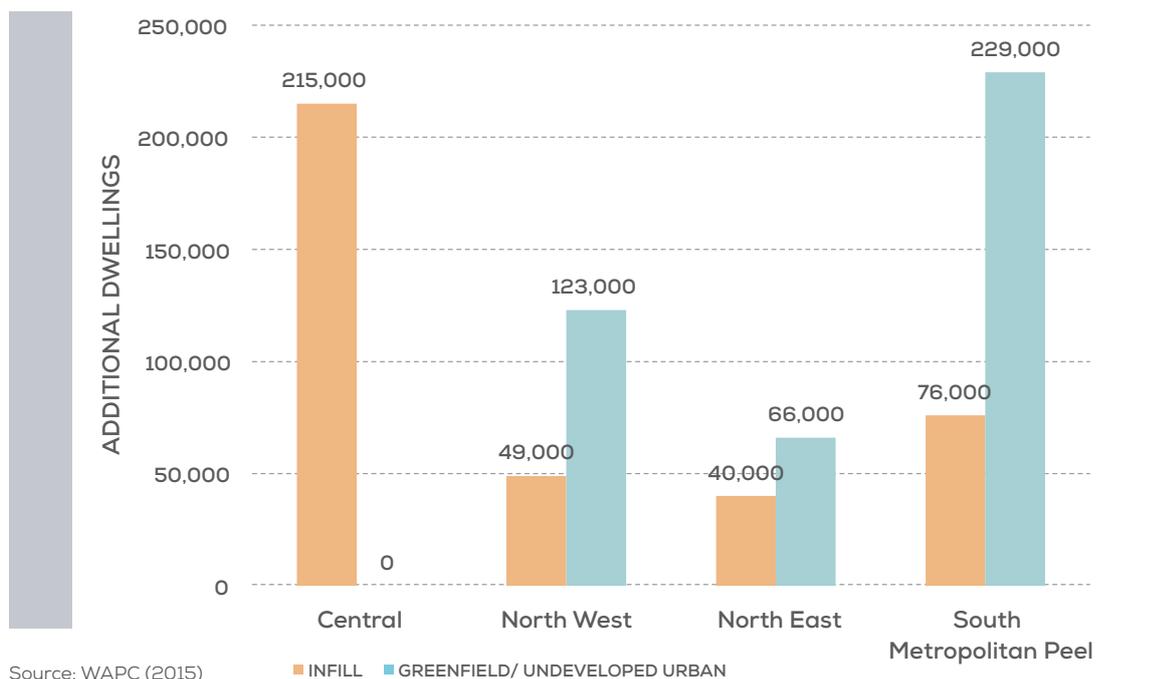
Infill is one response to reduce the infrastructure (utilities, transport and ICT) network and capacity/ delivery burden. Other opportunities to reduce the burden on infrastructure is to close the distance between an employees place of residence and their place of work. Opportunities to do this over the next 30–35 years include relocation of white collar jobs to regional activity centres through teleworking hubs and cultivating home based employment.

Figure A.1: Perth and Peel Estimated Resident Population, 1983-2050



Source: ABS (2015), AEC

Figure A.2: Sub-Regional Proportions of Infill and Greenfield Development



Source: WAPC (2015)

Proximity to Fast Growing Economies

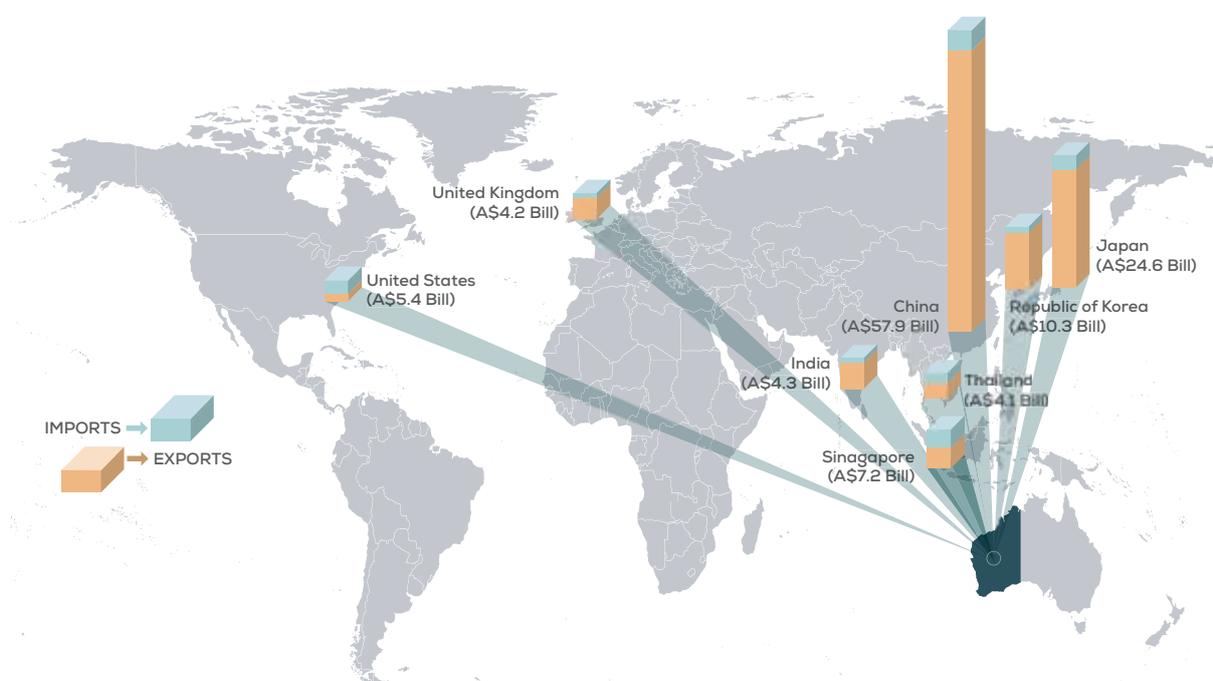
Western Australia has significant global location advantages opportunities. It is estimated that by 2050:

- Five of the seven most populous countries in the world will be nearby in Asia⁸
- Three of these will be within two hours of the same time zone as Western Australia⁹
- Asia as a whole will account for over half of the global population (PRB, 2012).

Most of these countries are increasingly wealthy with an enormous consumption and demand being driven by the burgeoning middle class. Opportunities exist for Western Australia, with Perth as the key trading hub, to leverage this increase in demand for Australian goods.

China, Japan, South Korea and India are the Western Australia's top export destinations and collectively accounted for 77% of total export value in 2012-13. There is also great potential to attract further investment from this region into Western Australia, as well as for Western Australia to provide professional services to the region.

Figure A.3: Western Australia's key trading partners 2012 – 13



Source: WAPC (2015)

⁸ The top seven are projected to be India, China, the United States, Nigeria, Pakistan, Indonesia, and Bangladesh.

⁹ China, Indonesia and Bangladesh.

Strong Economic Base with Growth Potential

The State has world class operations in resources, energy, agriculture, health and medicine, specialised manufactures and is a substantial education exporter. All of these are leading economic drivers and compliment the population driven sectors such as construction, retail and other household services.

In 2012-13, 66% of Australia's mineral exports (by value) came from Western Australia. In 2012-13 the value of Western Australia's mineral and petroleum production was nearly \$104 billion and the value of resource projects either committed or under construction was \$146 billion and a further \$97 billion were planned or possible in coming years. In 2012, Western Australia accounted for 85% of national LNG exports, 100% of Australia's crude oil exports and 98 per cent of its iron ore exports.

The Western Australian marine industry leads in the construction of high speed ferries, car/passenger ferries, patrol boats and para-military vessels and luxury super yachts. In 2009 this industry's output was \$1.5 billion and its direct employment exceeded 6,000 people. The services sector, which includes financial, education, communications, tourism, legal, business and medical services, accounted for almost 40% of Western Australia's GSP in 2010-2011.

For Perth and Peel the main growth opportunities for strategic employment and economic growth (i.e. jobs to support the anticipated population increase) can be found across a variety of sectors, but particularly in the areas of economic strength, which include:

- Minerals and resources:
 - Supplies and servicing
 - Technology and research
 - Logistics
 - Administration
- Health: Technology and research
- Agri-business
 - Peri-urban projects
 - Specialist and niche products for Asian market
- Education: Education exports
- Tourism
- Specialist manufacture and fabrication.

Disruptive & Transformative Technologies

Technology advancement continues to drive economic growth and in some cases unleash disruptive but also transformative change. Technologies transform the way we live and work and their effect must be accounted for in long term planning. They will be increasingly influential on our future. The table below, from a study by McKinsey (2013), summarises some examples.

Table A.3. Disruptive and Transformative Technologies

| Aspect | Affect |
|---|--|
| Mobile internet | Increasingly inexpensive and capable mobile computing devices and internet connectivity |
| Automation of knowledge work | Intelligent software systems that can perform routine knowledge work tasks involving unstructured commands and subtle judgements |
| Internet of things | Networks of low-cost sensors and actuators for data collection, monitoring, decision making and process optimisation |
| Cloud technology | Use of computer hardware and software resources delivered over a network or the internet, often as a service |
| Advanced robotics | Increasingly capable robots with enhanced senses, dexterity and intelligence used to automate tasks or augment humans |
| Autonomous and near-autonomous vehicles | Vehicles that can navigate with reduced or no human intervention |
| Next generation genomics | Fast, low cost gene sequencing, advanced big data analytics, and synthetic biology ("writing" DNA) |
| Energy storage | Devices or systems that store energy for later use, including batteries |
| 3D printing | Additive manufacturing techniques to create objects by printing layers of material based on digital models |
| Advanced materials | Materials designed to have superior characteristics (e.g. strength, weigh, conductivity) or functionality |
| Advanced oil and gas exploration and recovery | Exploration and recovery techniques that make extraction of unconventional oil and gas economical |
| Renewable energy | Generation of electricity from renewable sources with reduced harmful climate impact |

Source: McKinsey (2013)

These disruptive and/ or transformative technologies will impact the region in a number of ways. Most will change the way infrastructure is used and require new infrastructure. For example, the effects of vastly increased ICT capability (IBM, 2012) are only now starting to be felt, but this will accelerate rapidly. Examples will be in the increasing incidence of:

- Remote control of operations (mining and resources)
- Remote working (work from home, work from tele-commuting hub)
- Remote shopping
- Redundant job categories and new jobs emerging
- Use of battery technology, with households and businesses moving off the grid
- Driverless cars and convoy freight.

Changing production trends

Rising demand for services, the industrialisation of East Asia, economic reform and technical change are driving a structural shift in Australia's economy from a reliance on production and processing based activities to a knowledge based economy. Manufacturing is a key sector in the Perth and Peel economy, supporting over 7% of local GRP and 9% of total employment. Assisting manufacturing businesses transition towards high-value add activities will improve economic stability and resilience.

The fastest growing sectors in the economy are anticipated to be service based (e.g. health, education, financial and out-sourced personal services).

Changing consumption trends

Consumer expenditure is increasingly tending towards housing costs such as mortgage repayments and rents, as well as expenditure on internet and TV fees. At the same time, Australian households are continuing to save a relatively high proportion of their disposable income. Consumers are also turning to online retailing as a means of shopping.

The trend to out-sourcing many aspects of day-to-day life (for example food preparation and household chores) continues and will be an on-going consumer feature.

Changing urban form

Moving toward a population of 3.5 million, Perth and Peel will require significant urban consolidation and land use intensification. This will include higher density development and increased building heights.

A recent CEDA (2015) report considers to fully realise the advantages of Australia's favourable environment:

The nation should create discrete city-wide entities with the responsibility for whole-of urban planning in its urban centres¹¹. These entities should preferably be vested with hypothecated funds from sources that generate it within the jurisdiction, such as the fuel excise and appropriate congestion pricing, to ensure adequate investment so that these cities remain liveable.

Urban consolidation, intensification and/ or densification must improve and enhance, not just maintain local living standards.

¹¹ Western Australia already has this via the West Australian Planning Commission and the Metropolitan Redevelopment Authority.

Home based and remote working

A growing proportion of workers around the world are choosing to work remotely from their formal place of work or independently from home. This trend comes as technological advancements have made remote working a viable option for both employees and employers reducing overheads and delivering in many instances a higher quality of life. Home-based work has potential as a key driver of population attraction to the region as workers no longer need to live where they work and can choose where to live based more on lifestyle preferences – as long as adequate bandwidth is available.

Aging population

The Australian population is ageing as Australian families are having fewer children and recent technological advancements are allowing us to live longer. Perth and Peel is younger and ageing slower than the rest of Australia. In 2011, approximately 12.4% of the region's population was aged over 65 years. By 2050 it is estimated 17.2% of the population will be over 65 years of age. In order to accommodate a growing aged population, the region will need to ensure adequate health care and social assistance infrastructure provision as well as adequate aged housing options.

Geography – An Economic Challenge

The geography of Perth and Peel presents a particular economic challenge. It is now one of the most spread out cities of its size in the world, with urban development spreading up and down the coast from south of Mandurah to north of Yanchep. This is of a scale that is found in much larger population centres – for example Los Angeles and greater Miami both fit within the footprint of Perth and Peel, but have far higher populations from which they are able to support infrastructure development and services. Two challenges arise from this:

- The utilisation of infrastructure is relatively inefficient and the tax base to fund it is small
- The large and growing population concentrations to the north and south are sufficiently distant from the centre to require strong and independent regional economies with high employment provision to avoid unsolvable transport requirements with unsustainable costs. Providing this employment base to the north and south of the Perth and Peel region is one of the key challenges for economic development to 2050.

Appendix B: Existing Policy Context

State Planning Strategy

The State Planning Strategy (WAPC, 2014) is the lead strategic planning document within Government. It takes into account what is known about the future and the expectations of Western Australians, to provide a guide for future land-use planning and development throughout the State and offers a view of the interconnections and interrelationships that are likely to influence Western Australia's sustained growth and prosperity.

It highlights principles, strategic goals and strategic directions that are important to the land-use planning and development of Western Australia.

Perth and Peel@3.5 million

The draft of *Perth and Peel@3.5 million* (WAPC, 2015) was released in May 2015 and it supersedes a number of previous planning framework documents, including the Directions 2031 suite of documents (WAPC, 2010). It also partially supersedes EELS (WAPC, 2012), although some of the detail in EELSs remains relevant. *Perth and Peel@3.5 million* (WAPC, 2015) is now the pivotal document for long term planning in Perth.

Perth and Peel@3.5 million (WAPC, 2015) adopts a set of Connected City principles:

- A strong central business district
- A network of connected activity centres with high-quality public transport and road linkages
- Connected, specialised hubs of innovation, education, health, research and technology
- Urban areas that deliver a range of contemporary lifestyle choices
- High-quality global and local infrastructure networks
- Urban form that maximises the use of existing infrastructure assets
- Integrated land and water management.

Perth and Peel@3.5 million adopts a middle road policy, between extensive greenfields development and extensive infill of targeting 47% of development in infill zones by 2050. Although this is a significant lift from current development levels and will require significant application of policy and incentives to ensure these targets are met.

Perth Transport Plan 2011

The Public Transport for Perth in 2031 (DoT, 2011) was released in 2011 and is now somewhat superseded by subsequent events and announced projects and by *Perth and Peel@3.5 million*. The main network that was identified in that report remains the reference point for future planning, although the timing of individual projects identified in the report is no longer fixed.

Perth Freight Network Plan

The Perth Freight Network Plan is in preparation by the Department of Planning, with targeted release some time in 2016. Significant elements of any future plan are already announced, funded and in development. The key components of this includes Perth Freight Link¹², Gateway and North Link. Other elements of a future plan are not yet fixed in scope or time.





Appendix C: The Diverse Role of Council's in Economic Development

All key stakeholders within a local community have a role to play in facilitating economic development – from local, state and federal government, to local business, the community and to media organisations. A positive perception about a region will provide an ongoing and positive presentation of the region to potential future investors and residents.

Local Government plays an important role in the development of local economies. The type and nature of the role varies, but includes a Council acting as a:

- Facilitator
- Coordinator
- Communicator / Advocate
- Promoter/ Driver
- Planner & Regulator
- Service Provider

It is very hard for any level of government to directly develop a local economy. However, Local Government can have a strong indirect influence over how the economy is shaped and grown by strategically realising its role and how best to achieve outcomes.

Qualifier – LG's can directly have an impact on developing an economy when they operate outside the traditional roles of a LG, eg. Many Council's undertake development projects themselves as a means to generate alternative revenue streams. The investment Council's make in infrastructure within a community can also potentially have a direct impact on the local economy, especially if local service providers are engaged to deliver the service, however, this could also be viewed as Council facilitating the economic driver.

The above best describes the types of roles Councils can play, the following information describes the framework under which these roles are typically delivered.

- Business capacity building:
 - Skills development workshops / programs – these programs could be based around almost anything, but must be guided by gaps and needs within the business community, some examples include – marketing, business planning, financial planning, digital marketing, export development, supply chain development ... to name a few. Council's typical role here is one of a connector rather than facilitator.
 - Workforce development – workforce planning, attraction and development relates to identifying what current and future workforce needs a business has and then developing programs to support this.
 - Networking and events – these are a slightly less structured program aimed at connecting businesses, so they can share ideas and information, discuss business relationships. Generally speaking it is about creating an environment where businesses can come and discuss and develop opportunities.
- Investment attraction:
 - Business attraction – this is about identifying the capabilities of a city/region and promoting them to a compatible target market.
 - Business retention and expansion – this is about supporting the retention of existing businesses and identifying locations for them to expand into if that is part of their strategy.

- Placemaking:
 - Connected communities – transport, wayfinding, technology (public wi-fi), infrastructure (paths to encourage pedestrian traffic)
 - Attractive communities – beautification and public realm programs, people friendly spaces (inviting, interesting and safe), a mix of development
 - Activated communities – a mix of entertainment options catering for a diverse mix of people (ages, families, cultures)
 - Collaborative communities – where Council, property owners and the community work together. Where the reliance isn't upon one over the other to deliver everything
 - Advocacy:

- Local, state and Australian government – identifying needs within a community that requires involvement from other levels of government to help realise the desired outcome. This could include major infrastructure development. The key to being successful in these activities is adopting a collaborative approach around working with the other levels of government to identify solutions. The other critical element to being successful in this space is to prepare detailed and costed business cases for the identified project. No investor, whether it be with public or private funds, is going to contribute to a project that is not well planned managed and organised.
 - Private sector – this is about identifying projects and opportunities that government and the private sector can work collaboratively on, and similar to the above, develop fully costed business cases that clearly articulate roles and responsibilities.

- Lifestyle marketing:
 - Lifestyle services and facilities – when a business is making a decision about where to establish once they have the key business related information they will also look at what a community has to offer for their families and employees. Therefore when marketing a region for investment attraction purposes it is important to highlight lifestyle services such as schools, hospitals and medical centres, shopping experiences, natural and built attractions ... to name a few. Ease of accessibility to this information is key.

- Destination marketing and development (tourism):
 - Marketing the destination to potential visitors
 - Attraction of new tourism related products
 - Managing a destination
 - Bringing local tourism operators together to explore opportunities to develop packages
 - Capacity building / skills development initiatives aimed directly at tourism operators
 - Developing trails and wayfinding initiatives – making it as easy as possible for visitors to find their way around your community

Councils have an important role to play in facilitating economic development in their local areas through their ability to influence the factors driving economic growth, business and industry investment. The outcomes achieved become even stronger if Local Governments work together in common areas.

It is not up to Council to 'deliver' economic development outcomes in isolation from all other stakeholders. Rather, the role of Council is to encourage and facilitate, as one of the many regional stakeholders, business and industry investment by providing an environment where local business and industry thrives and flourishes (while at the same time protect, preserve and enhance the important values and qualities of the local region).

Appendix D: Identifying Game Changer Initiatives

Identifying the key game changing initiatives involved a three step process:

1. Engagement & Consultation
2. Outcomes Delivered and Needs Addressed
3. Classification.

Step 1: Engagement & Consultation

Extensive consultation and engagement with local government to understand initially what the issues and needs of each sub-region were and the opportunities and requirements to facilitate effective change.

Step 2: Outcomes Delivered and Needs Addressed

Consideration of the opportunities primarily against the two core criteria of projects that would drive new jobs and new business investment

The initiatives were also reviewed and examined for their capacity to address the needs of the Perth and Peel Region, as well as the sub-regions, which included consideration of:

- Perth & Peel wide needs:
 - Industry and jobs growth
 - Skills development and attraction
 - Ensuring appropriate standards and levels of infrastructure provided whilst minimising the cost burden (development and maintenance) on government
 - Enhanced connectivity for businesses to trade with local, regional, state, national and global markets
 - World class amenity and quality of life
- Grouped sub-regional needs:
 - Enhancing passenger transport infrastructure and network to CBD and throughout the region
 - Enhancing freight transport infrastructure and network
 - Encouraging direct jobs growth
 - Rejuvenation and activation of urban realm in key centres
 - Higher density and higher value development
 - Enhanced services to support and maintain lifestyle for older demographic.

An overview of the outcomes and how regional needs are addressed by the Game Changing projects is contained in a supporting document Driving Change – Perth and Peel Economic Development Strategy & Infrastructure Priority Plan to 2050: Regional Outcomes.

Step 3: Classification

Projects were then grouped into being Nation Building or Regionally Significant, the key differentiating aspects of these being:

- Nation Building Initiatives are those that require strong government intervention.
- Regionally Significant Initiatives are those that require government support and policy development.

