Geraldton – From a Local to Global Regional City

Local Planning Policy

VERSION 2

December 2015

town planning services

Version	Adoption	Comment
1	27 November 2012 Council Item SC075	Final – No objections received during advertising.
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1.0 CITATION

This is a local planning policy prepared under the *Planning and Development (Local Planning Schemes) Regulations 2015* and the City of Greater Geraldton Local Planning Scheme No. 1 ('the Scheme'). It may be cited as the *Geraldton – From a Local to Global Regional City local planning policy*.

The local government may prepare a local planning policy in respect of any matter related to the planning and development of the Scheme area. In making a determination under the Scheme the local government must have regard to each relevant local planning policy to the extent that the policy is consistent with the Scheme.

2.0 BACKGROUND

The Curtin University Sustainability Policy (CUSP) Institute has produced the 'Geraldton – From a Local to Global Regional City' paper that sets out a road map for a journey that looks 50 years into the future of Geraldton.

3.0 OBJECTIVES

a) To have due regard to the document in relevant decision making.

4.0 POLICY MEASURES

Refer to the attached *"Geraldton – From a Local to Global Regional City"* publication.

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GERALDTON – FROM A LOCAL TO GLOBAL REGIONAL CITY

Over the next 50 years
Geraldton will undergo
a transformation...

By

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GERALDTON – FROM A LOCAL TO GLOBAL REGIONAL CITY

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From being a small regional city dedicated to harvesting the land and the ocean...

... into a truly diverse, exciting and interesting city

FOREWORD BY THE HON MINISTER SIMON CREAN MP

Geraldton is a great city and region with a marvellous history and a very bright future.

I encourage you to read Geraldton – from a local to global regional city that maps out how the people of the Geraldton region can embrace economic opportunities to become a global centre, while retaining their local, regional character.

This paper demonstrates this potential and looks to the future. I share this vision.

Overlooking the Indian Ocean, the Western Australian Museum — Geraldton celebrates the rich heritage of the land, sea and people of the Mid-West region. It is also a focal point for the Yamatji people who are the custodians of this ancient landscape.

Having visited Geraldton late last year and spoken with locals people, I know community leaders have a great vision for the region which includes the ambition to be the second Pilbara for iron ore mining.

A major expansion of mining in the Geraldton or Mid-West region will require access to vast power resources and an understanding that underpinning this will be harnessing the potential of renewable energy. The region has huge potential to expand solar, geo-thermal, bio-mass, wave power and wind power generation.

I am aware there are plans to triple the extent of wind farming in the region taking generation up to 450mw.

There are so many opportunities in the Geraldton region.

These opportunities will not only benefit the region, they will strengthen the national economy and also draw the Geraldton region into the global economy.

I am a great believer in the importance of local decision making to develop strong regional economies and communities and Geraldton is a good model.

As the Minister for Regional Australia, Regional Development and Local Government and Minister for the Arts I am making sure that Australian Government policy effectively targets investment in regions, particularly in the areas of health, education, skills, communications, infrastructure, water, climate change as well as the arts.

Our Government is making sure that all regions of Australia are empowered to identify local need and to guide their own futures, through a strong Regional Development Australia network and other mechanisms.

The Australian Government has a genuine commitment to regional Australia and to entrenching the concept of 'regionalism' in our national decision making.

The opportunity to unlock the potential of our regions has never been greater or more important.

As Australia's regions realise this potential – building on their diversity and lifting productivity – this will improve prosperity both in the regions and for the nation as a whole.

Australia's regional communities must be given the tools to shape their future. I know that a top-down, one-size-fits-all approach will not work. Instead, we need a place-based approach to investment and local development, so regional communities can secure their future based on their own unique characteristics and priorities.

Hon Minister Simon Crean MP

Minister for Regional Australia, Regional Development and Local Government; Minister for the Arts

Our Government is committed to meaningful engagement with regional communities on these issues. Local government and the Regional Development Australia network are central to these efforts.

To support regional communities to grow in a sustainable way means equipping them to meet challenges and seize opportunities created by changing population patterns and demographics, such as the ageing population, the conditions of the global economy and the transition to Australia's low carbon future. It is as much about environmental sustainability as it is economic.

I look forward to working with regions like Geraldton to secure this future and to make sure that the voice of local and regional communities is strong and is heard loud and clear.

FOREWORD BY
THE HON BRENDON GRYLLS MLA

Regional WA remains the backbone of the WA and national economy. The continued growth in the resources industry, plus development of diverse industry sectors and strong population and workforce growth presents enormous challenges and opportunities for regional areas.

It's pleasing to see regional communities working proactively to capture these opportunities and seek to leverage sustainable long term outcomes for current and future generations. The Mid-West regional centre of Geraldton is an excellent example.

The Mid-West Development Commission's (MWDC) Mid-West Major Projects Summary (March 2011) identified more than $19 billion worth of projects planned or proposed for the Mid-West over the next five-seven years. If all such projects come to fruition, one study predicts that the region's population may grow from around 55,000 to 80,000 by 2021. Such growth and societal change presents the CGG and other Mid-West communities with significant challenges and opportunities that can't be ignored.

In concert with the Western Australian Planning Commission's Mid-West Regional Planning and Infrastructure Framework, the MWDC has prepared a Mid-West Investment Plan (MWIP) to clearly outline the region's strategic priorities. Concurrently the City of Greater Geraldton has undertaken extensive consultation and various strategic visioning exercises to help guide its transition from a stable regional centre to thriving, sustainable global city.

The "Geraldton – from a local to global regional city" discussion paper aligns closely with the Liberal-National governments focus on developing major regional cities in WA. The paper is the second in the series, following the ground breaking Pilbara Cities document that has already driven unprecedented public investment in Karratha and Port Hedland. Such research and strategic technical planning helps decision makers ensure that public and private investment is targeted to deliver the best and most sustainable outcomes for regional communities.

As the Mid-West enters this period of intense change, this discussion paper can be used to support coordinated development and leverage funding through various Federal and State programs. The Royalties for Regions funding program is one important tool for reshaping regional WA that has already made substantial investment in the Mid-West, including $220 million towards implementation of the MWIP. Significant region changing projects borne out of this discussion paper may also target other Royalties for Regions funding opportunities.

I congratulate the Curtin University Sustainability Policy Institute (CUSP) and Parsons Brinckerhoff (PB) and other stakeholders for their involvement in preparation of this publication and encourage decision makers to use it to help the community of Geraldton achieve its vision of becoming a liveable, growing, carbon-neutral and economically adaptive city.

Hon Brendon Grylls MLA

Minister for Regional Development; Land; and Minister Assisting State Development

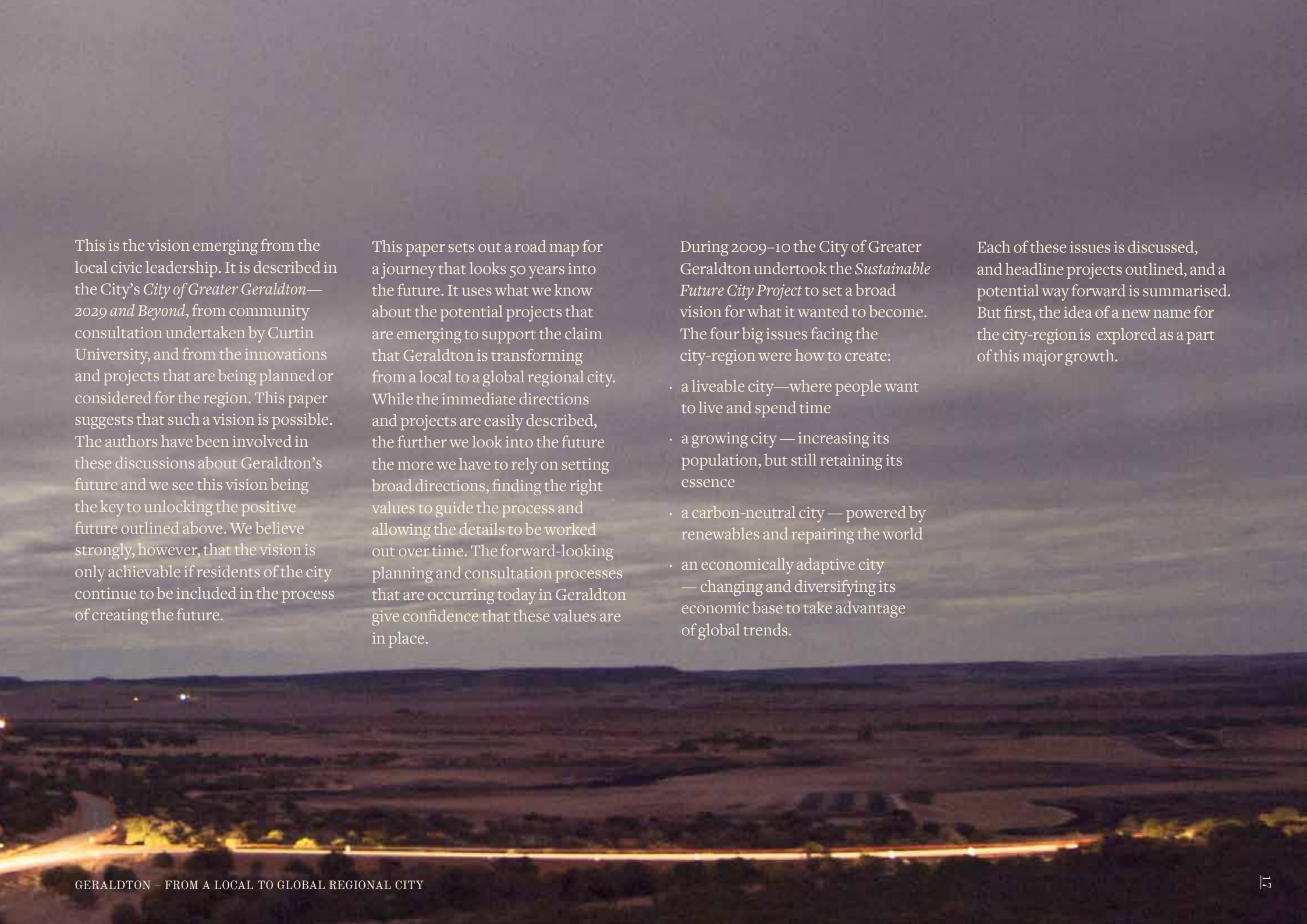
THE VISION

Geraldton is at the start of a substantial economic growth process driven by mining, trade and science that will draw the Geraldton region into the global economy. The people of the region want to embrace this economic opportunity and become a truly global city, but to do so in a way that retains the local and regional appearance, culture and character. Over the next 50 years Geraldton will undergo a transformation — from being a small regional city dedicated to harvesting the land and the ocean, into a truly diverse, exciting and interesting city supported by many different economic and community activities.

Based on a series of public engagement processes and interviews with key people, this Discussion Paper describes what will be needed to match the global economic development drivers with a broadening of the economic base, a deepening of the social and cultural commitment to being a liveable city, and a strengthening of the environmental features that the region holds so dearly.

The vision is that in 50 years the city will have achieved a far more diverse economic base, resulting in the growth of efficient and productive local service industries supporting mining, trade, science, education and arts related commerce. Local people will be employed in a diverse range of work opportunities. Ultimately this broader economic approach will help reduce local and regional cost structures and promote nationally and internationally aligned growth and market competitiveness. But many features of life will remain. Geraldton will still sit between the Indian Ocean and the Moresby Ranges, offering similar types of recreational pursuits to those available today. Fifty years of hard work will overcome the inequalities between Aboriginal people and the other people of the city. People will still be able to move easily around the city and enjoy its amenities. Food will still be produced close to, or within, the well-planned and structured city. Added to this will be a reversal of ecological damage and a regeneration of the natural environment. Geraldton will have broken its dependency on fossil fuels and will be a model of how a regional city underwent this transition.

The city will become an economic, cultural and social hub in its own right — a global city — but will still be the place people recognise as Geraldton.



This is the vision emerging from the local civic leadership. It is described in the City's *City of Greater Geraldton—2029 and Beyond*, from community consultation undertaken by Curtin University, and from the innovations and projects that are being planned or considered for the region. This paper suggests that such a vision is possible. The authors have been involved in these discussions about Geraldton's future and we see this vision being the key to unlocking the positive future outlined above. We believe strongly, however, that the vision is only achievable if residents of the city continue to be included in the process of creating the future.

This paper sets out a road map for a journey that looks 50 years into the future. It uses what we know about the potential projects that are emerging to support the claim that Geraldton is transforming from a local to a global regional city. While the immediate directions and projects are easily described, the further we look into the future the more we have to rely on setting broad directions, finding the right values to guide the process and allowing the details to be worked out over time. The forward-looking planning and consultation processes that are occurring today in Geraldton give confidence that these values are in place.

During 2009–10 the City of Greater Geraldton undertook the *Sustainable Future City Project* to set a broad vision for what it wanted to become. The four big issues facing the city-region were how to create:

- a liveable city—where people want to live and spend time
- a growing city — increasing its population, but still retaining its essence
- a carbon-neutral city — powered by renewables and repairing the world
- an economically adaptive city — changing and diversifying its economic base to take advantage of global trends.

Each of these issues is discussed, and headline projects outlined, and a potential way forward is summarised. But first, the idea of a new name for the city-region is explored as a part of this major growth.

A NEW NAME FOR A GLOBAL CITY-REGION

Geraldton will rapidly become a lot more than a town of 35,000 people on the mid-west coast of Western Australia. As shown below, the region around Geraldton will grow to more than 100,000 or even 250,000 people as it becomes a significant city-region known internationally for its livability; science, mining and trade industries; food production; and renewable energy. In this new, larger city region, the City of Geraldton-Greenough as it is known now will become the regional capital.

But what will the region be called?

Currently the region is known by the lack-lustre title of 'the Mid-West'. As the region receives more international attention, this name will become increasingly inappropriate because of its associations with the United States of America. Other parts of Western Australia have more context-evoking and engaging local names, such as Kimberley, Pilbara, Gascoyne and Goldfields.

As the region grows and develops, it will be easier to find a more suitable name for its long-term future. Some suggestions include:

Abrolhos

Taken from the Abrolhos Islands off the Geraldton coast, the word is an Anglicisation of the Portuguese abri vossos olhos, which means 'open your eyes', a good metaphor for a region that is growing and looking to the future.

Wajarri or Wajarri Yamatji

This is the name of the Aboriginal language group area that covers a significant part of the inland portion of the Mid-West region. Using this word would acknowledge that the roots of today's activities touch a culture and landscape that is thousands of years old.

The decision on the name will rest with the City and the State Government.

Kawasaki
JET SKI
SX-R

A LIVEABLE CITY-REGION

In his 1950 novel *A Town Like Alice*, Neville Shute wrote about the characteristics of a 'lousy' outback town like Willstown and compared it to the 'bonzer' town of Alice Springs. The difference was that Alice Springs had something more than just work and pubs for men; it had attractions for women and was a place of cultured social activity. It had a cinema, an ice-cream parlour, a swimming pool, women's clothing and jewellery stores, a beauty parlour... and most of all, it was a place that offered employment for women.

Neville Shute describes what happens when a town begins to invest in the elements of a more liveable city. Rather than being just a stop-over on the way to somewhere else, for the predominantly male population of the Northern Territory, Alice Springs began to attract women. Along with women came households and families. And with households and families came diverse and growing communities with a new prosperity and positive approach to the future.

Geraldton needs to be a town like Alice, built around the whole fabric of life, attractive to all people, rather than solely an economic powerhouse where quick money is made from the region's finite natural resources. It needs to ensure that, in the midst of its growth and change, it focuses on becoming a liveable, engaging, intelligent and vibrant city. Historically, many cities (such as Melbourne and Fremantle) have experienced the benefits of a mineral boom or gold rush. These cities managed to link economic boom times with cultural, civic and architectural excellence. The Geraldton city-region has now taken up this challenge.

The elements of a liveable city currently being explored by the city include:

- building community connectivity through transport opportunities and the soft infrastructure that helps people gather together in places where they want to meet
- providing services for the economically and socially disadvantaged, thus helping to ensure that the people who helped make the place aren't disadvantaged when the new money starts to flow
- including Aboriginal people in decision making and the new employment opportunities through training for the jobs that will be created directly by the new industries, as well as for the jobs that come indirectly, such as small businesses related to their cultural economy
- clustering non-government organisations (NGOs) and community service centres, and embedding these into the business and commercial areas to create a real mix of activities in the city centre and other district hubs
- ensuring that each of the commercial centres contain a diverse range of activities which will help prevent the formation of run-down areas when economic factors change
- developing and articulating a Geraldton style for the city's architecture, housing and cultural activities
- providing housing stock that reflects the demography of the region, especially the ageing portion of the population, and focusing on medium density housing in high amenity nodes along the coast
- supporting affordable and culturally appropriate housing in high-amenity and other areas
- supporting and strengthening social networks that enable the city's social capital to promote civic pride and a sense of place
- introducing a level of fine detail to urban design, especially to streets, so that the streetscape, architecture, materials, facilities and services make the city an attractive and walkable place that draws people to it.

Developing and articulating a Geraldton style

A SUSTAINABLE GROWING CITY-REGION

Every day we are reminded in the media that we live in a world where nothing is stable — global financial crises, cyclones, floods, bushfires, climate change, and vulnerability to diminishing resources like oil. The anxiety caused by this can, unfortunately, discourage people from taking positive action to change and overcome these issues. However some cities, such as Geraldton, are favoured with economic growth opportunities and have a real chance to make a difference and aim for a more sustainable future. For Geraldton to create its vision it will need to become a global destination for people who see the city as a long-term lifestyle and investment opportunity, and who want to be associated with a city that is not only growing but showing the world how to be more sustainable.

The community wants this growth to be supported through major contributions from the new regional economic drivers. These contributions are needed to create social and economic opportunities as well as to significantly reduce its environmental footprint. Its civic and business leaders believe this growth needs to happen in an intelligent and sustainable way — more than just piecemeal economic contributions to specific projects.

Geraldton can take the opportunity to grasp emerging technologies, such as decentralised green infrastructure, SmartGrids and renewable energy; and it can create much better housing opportunities. It can do this through new procurement and funding mechanisms such as public–private community partnerships, and it can demonstrate leadership in managing its future with a planned agenda built around sustainable development.

Demographics and planning

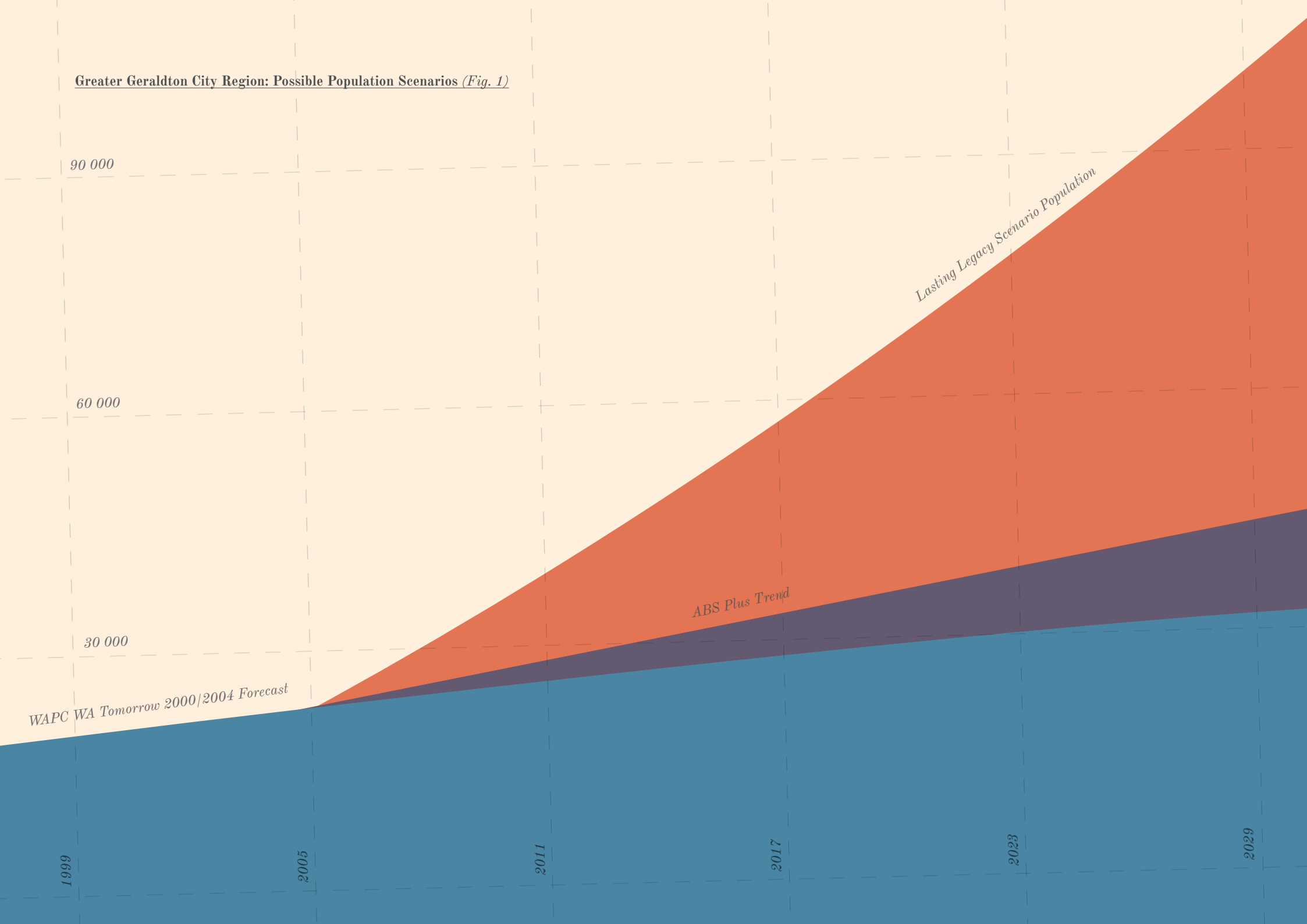
As indicated in Figure 1 current projections place the population as high as 79,800 people by 2021 and up to 99,700 people by 2031. Growth of Geraldton from the current population of 40,000 to nearly 100,000 in 20 years is very significant. These people all need to live somewhere and to enjoy where they live, whether that be in the regional capital of Geraldton or in regional towns such as Northampton, Cue or Mullewa.

Over the next 50 years Geraldton will need to plan so that it can:

- adequately prepare for the influx of new people of mixed ethnic backgrounds
- provide better housing and services than are presently available
- give easy access to areas of high amenity to as many people as possible
- grow within geographic and environmental constraints
- provide high-quality food and water from local sources
- build a city with a diverse and flexible structure that can adapt to change
- reduce its fossil fuel consumption dramatically compared to present day levels.

This will need to be reflected in housing policy, spatial planning policy and co-ordinated infrastructure policy and development.

Greater Geraldton City Region: Possible Population Scenarios *(Fig. 1)*



Housing policy

The vast majority of houses and suburbs built in the region are designed for the nuclear family of a couple with dependent children. However this is not the usual family structure in Australia. Nuclear families represented only 35% of families in 2006, showing a significant decline over the previous 30 years. This trend will continue.

In addition the population will be ageing. Set against these trends will be the influx of people attracted by the increase in economic activity in the region. This is likely to skew the demographics towards singles and couples, and a mobile population with short-term accommodation requirements. In addition to changing demographics the wealth produced from the mining industry is unlikely to be distributed evenly across the community. This may result in a segmented income structure, with significant numbers of people being able to pay high rents and property prices, while at the same time a similarly significant number of people will be excluded because they are not working in high-paid jobs.

Over 95% of the housing stock in Geraldton is located in suburban neighbourhoods, which suits the needs of many people during the family raising phases of their lives. With changes in population structure, however, there will be a demand for medium-density urban development linked to good transport systems and placed in prime locations. Mixing medium-density centres with corridors of traditional low-density suburbia is known to create the best, most equitable, vibrant and sustainable cities. Geraldton is well placed to change the form and structure of its coastal urban areas to reflect this type of urban form, and it is small enough to make these changes with relatively low capital investment.

To meet its future demographic, economic and social needs, Geraldton's housing stock needs to change from its current structure. Specifically, more emphasis will be needed on:

- apartments — both for the high and low sections of the market
- self-contained units with small outdoor recreation areas
- provision of affordable housing in desirable locations
- areas for storing recreational equipment (e.g. cars, boats, caravans)
- provision of high-quality 'nomad'/ temporary accommodation.

Research into radio astronomy, natural resource management, renewable energy, marine sciences, regional health

A real chance to make a difference and aim for a more sustainable future

Spatial planning policy

The City of Greater Geraldton is constrained geographically to the north by the Oakajee Industrial Estate; to the east by the Moresby Ranges, the airport and Narngulu Industrial Estate; and to the south by the productive lands of the Greenough Flats. This is not a bad situation because many of the world's best and most vibrant cities are geographically constrained, forcing innovative housing, transport and infrastructure solutions that provide for rich, diverse and vibrant built-form and related functional outcomes. Importantly, there are also real productivity gains in cities that do not rely on extensive travel distances and times as well as substantial savings in public expenditure associated with reduced costs for transport infrastructure.

The Western Australian Planning Commission recently released the Greater Geraldton Structure Plan 2011. This plan focuses on urban areas and areas likely to experience pressure for development within the City of Greater Geraldton and the Shire of Chapman Valley.

The City has embarked on a major review of its physical structure through the preparation of a new Town Planning Scheme. In addition the State Government has created a new Regional Planning Committee that advises the Western Australian Planning Commission on regional issues and will provide a much needed local focus to strategic planning decisions.

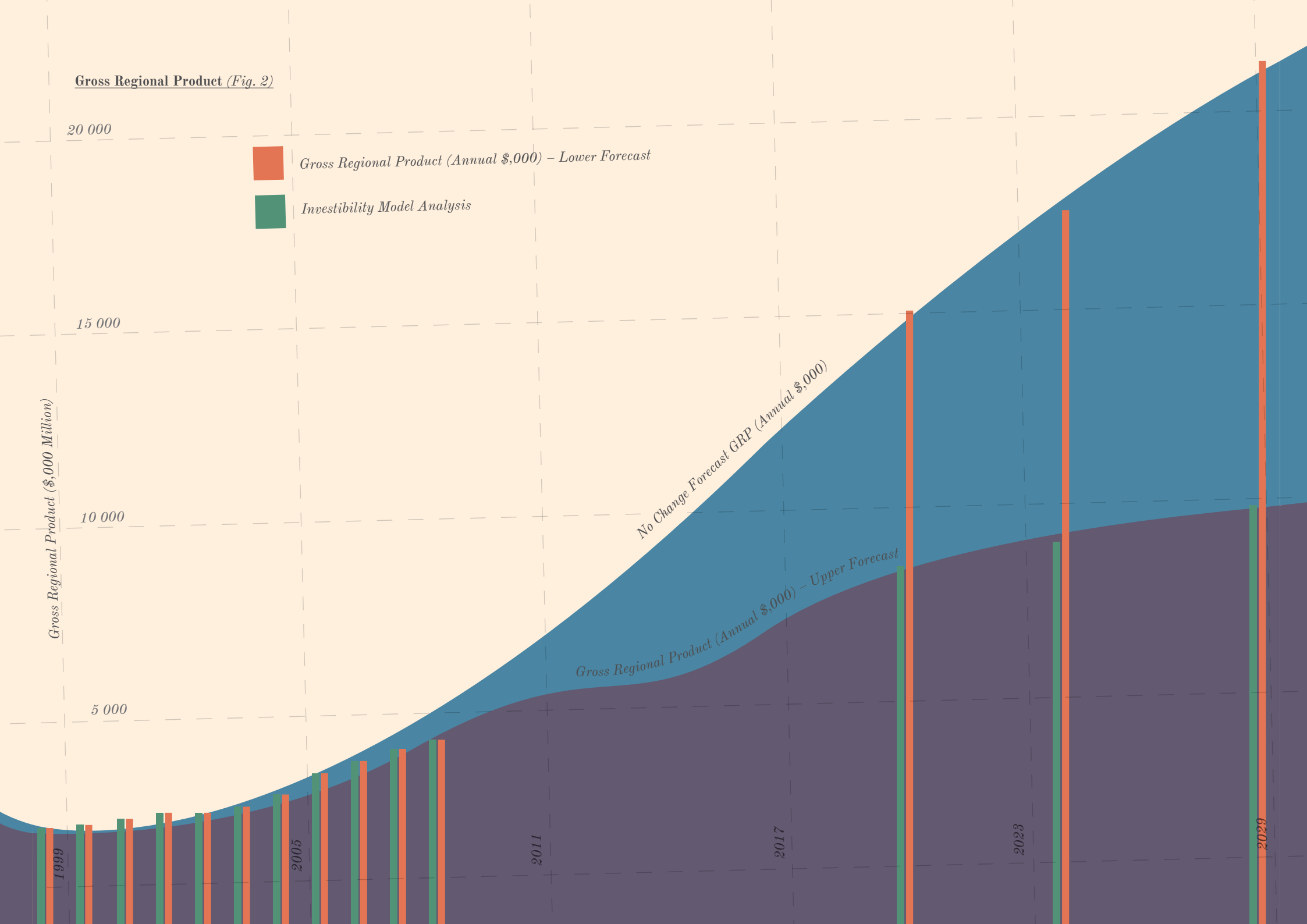
Economy

The economy of the Greater Geraldton and Mid-West region has been experiencing a rapid level of growth over the past decade. The population growth evidenced over this period and that projected in the future is inexorably linked to the economic drivers, in mining, renewable energy, the SKA and city services.

A factor in this initial driver of growth was government sector investment in infrastructure and services. During the period 2001 – 2005, the State Government invested heavily in the deepening of the Geraldton Port harbour (enabling an increase of ships to 70,000 tonne panamax vessels) a new public hospital, new police complex and the development of the Geraldton Universities Centre.

In terms of future growth it is expected that Geraldton can leverage off the regional projects, which according to the Mid-West Development Commission amount to $18 billion between now and 2020. The City of Greater Geraldton has adopted a "Positive Lasting Legacy Principles" policy and is seeking to have this policy apply to all new major industry and government projects. The intention is to seek the maximisation of local economic benefits and multipliers to ensure the local and regional economy is both supported and enhanced.

Gross Regional Product *(Fig. 2)*



Land use and transport

Despite the geographic constraints, there is no shortage of land for housing. The projected population growth can be easily accommodated even if all the development is a continuation of the current suburban sprawl. Over 100,000 people can be accommodated on land currently planned and approved for development following suburban density models similar to Perth and Sydney. The major dilemma with following the urban sprawl housing model is that all the issues of car dependence, congestion, transport inefficiencies and high infrastructure costs will be created in Geraldton when there is no need to do so.

Modest increases of density around selected urban nodes would easily allow the city to grow to 250,000 people. Consequently, it is proposed that a series of medium-density urban nodes, placed close to the beach and linked by a cheap, efficient and safe mass transit system, be designed and built over the next 50 years. These nodes and transit system would look like a 'chain of pearls' (see Figure 5).

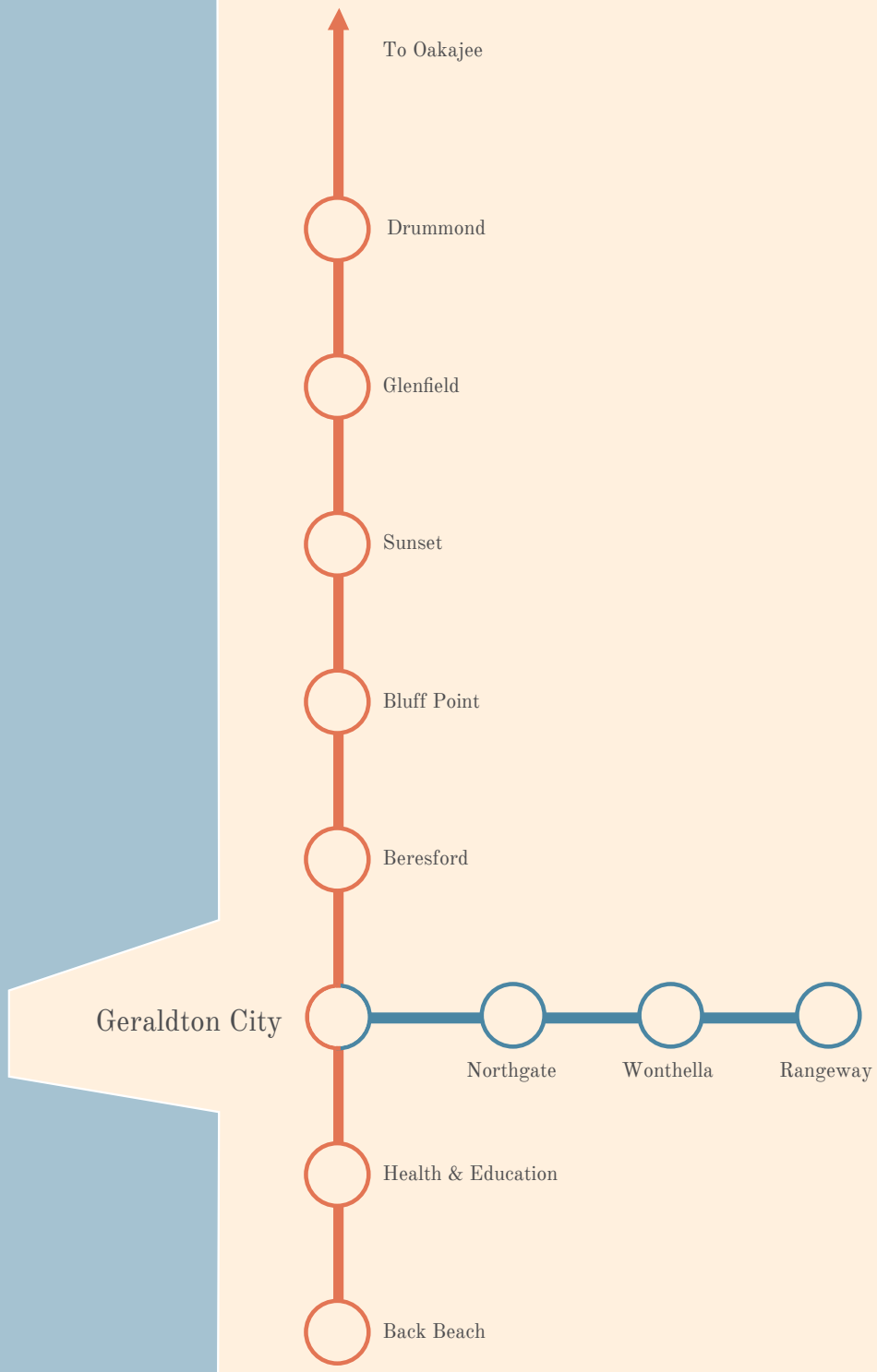
Each of these nodes will be surrounded by more typical suburban development, but the increased population of the medium-density nodes will support local businesses and recreational areas, reducing the need to travel long distances to shops and facilities.

While everyday living can be supported through these nodes, people want to have an active and alive city centre. Typically this will require redevelopment of the central business district to increase building heights up to four or five storeys, with the upper storeys containing apartments. The heights of these buildings should be staggered back from the waterfront so that the upper storeys of all buildings have good views of the ocean. The emphasis should be on making the centre of the city highly liveable and based around pedestrian traffic with lots of green spaces, rather than being dominated by cars as currently occurs.

Geraldton has committed to becoming a walkable city, and has already begun a review of traffic and movement around the city. This needs to be extended to include and link into the long-term vision for the 'chain of pearls' along the corridors of growth.

The Port

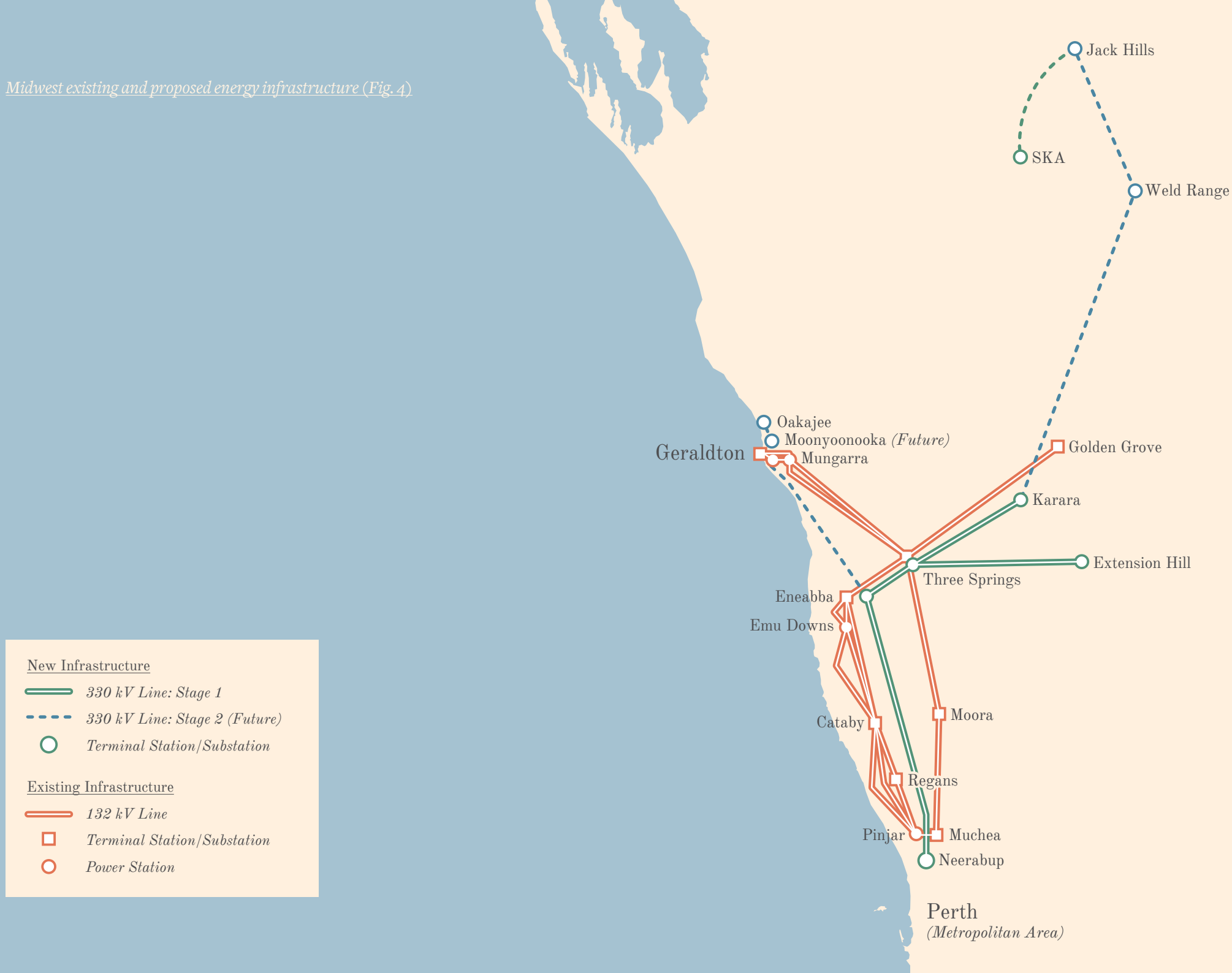
The long-term plan is to move the mineral export activities of the Geraldton port to Oakajee. This will free Geraldton port for uses that are more integrated with the city and its residents — freight handling, tourism, fishing, recreational boating, housing and education. Freeing up the port land and the adjacent area along Point Moore will create huge opportunities for highly desirable urban development. Current plans for the city recognise and incorporate this objective.



Transit Oriented Development Concept for Geraldton City (Fig. 3)

An active and alive city centre

Midwest existing and proposed energy infrastructure (Fig. 4)



Midwest existing and proposed rail infrastructure (Fig. 5)

Food and water

Increasingly regional cities have to insulate themselves from the risks associated with interruptions to long-distance supply chains for the human essentials of energy, food and water. As a city-region, Geraldton-Greenough is well endowed with good supplies of arable land in the Greenough Flats and east of the Moresby Ranges, as well as with reasonable quantities of good quality groundwater. Local market gardens are adequate to feed the city with fresh food.

As the region grows, however, it is important that local food and water supplies are protected and enhanced, and supply chains shortened. In all the planning for the future it will be essential to retain the horticultural districts and reserve the groundwater supplies for the future resilience of the city-region, rather than using them for short-term economic advantage.

Infrastructure policy

A sustainable city demands that we be more intelligent about the supply of water, energy and reuse/disposal of waste. Currently, Geraldton's water and waste water infrastructure, telecommunications and electricity cabling are inadequate to accommodate the increased density of development. Expanding this infrastructure following business-as-usual (BAU) design approaches will be an enduring drain on the city's rate base, particularly for ongoing operations. This is something that will need carefully considered, innovative and strategic planning. In particular the City needs to provide leadership to State infrastructure agencies which currently use a supply-on-demand model of infrastructure development.

In addition, BAU design is generally about using environmental resources, polluting them, then dumping the waste into the environment. The City of Geraldton-Greenough has decided to plan that future infrastructure will be green infrastructure that works with natural systems, rather than against them. The public forums strongly endorsed this policy. This represents a significant commitment to a sustainable, low-carbon, low-water, high-recycling approach. CUSP research has shown this can be cost effective.

In addition to infrastructure, the city needs sustainable buildings for civic, commercial and domestic use. To implement this will require some changes to building bylaws, and the city's support for pilot and demonstration urban development and housing projects. This needs to be supported by good economic evidence that such innovation won't negatively impact upon peoples' livelihoods.

The long-term sustainability of green infrastructure from smart, efficient energy, better transport options, clever water and wastewater management, as well as world-class information technologies needs to be coupled with a commitment to reducing carbon emissions. This is discussed further below.

Photo by Karl Monaghan

Long term sustainability of green infrastructure from smart, efficient energy, better transport options, clever water and wastewater management as well as world-class information technologies

A CARBON-NEUTRAL CITY-REGION

While climate change presents major challenges, reducing emissions from the generation of power is one of the challenges most readily addressed through technological advances; transport and the production of food are more difficult. However, the redesign of the urban form discussed in the previous section will make very significant contributions to reducing emissions from these sources.

Described as 'the Middle East of renewable energy', due to its wind and solar resources, the city-region of Greater Geraldton has a vision to be a leading user and provider of clean energy, exporting renewable energy out of its region to Perth, regional energy-hungry magnetite mining operations, and other urban centres. The city's ambition is to become the capital of a carbon-neutral region.

Renewable energy hubs

In certain locations relatively close to Geraldton the geographic proximity of renewable energy supplies will enable renewable energy hubs to be created. Depending on their locations these hubs will combine different mixes of wind, wave, geothermal, solar and storage technologies, and feed into a regional and state-wide grid. These will be the basis of much employment, as well as enabling the region to be a model for decarbonising the economy across Australia and the world.

Linking into the grid

Many of the large miners in the region will be significant power users and will be building transport and electricity transmission infrastructure and power generation capacity to support this demand (see Figure 4).

The City of Greater Geraldton considers that with relatively modest levels of investment, and considerable application of policy and administrative initiative, the energy-intensive mining operations will help create a carbon-neutral region by accessing renewable energy through well-planned, fit-for-purpose transmission assets that align to and run off pre-existing state-owned transmission infrastructure.

Energy efficiency

The city has begun initiatives to boost the energy efficiency of both public and private buildings across the region. By combining this with green infrastructure and SmartGrid technology, the demand for energy can be significantly reduced across the region and enable small scale renewables to be built into all new urban development.

Carbon credits

While it is technically feasible to completely switch to renewable energy over the next 50 years, there is still a real imperative to sequester carbon and avoid future emissions. Geraldton is the major coastal city in the Southern Rangelands of Western Australia, an area that has some of the most degraded landscapes in the country. Developments in land management technologies mean that these degraded areas are now able to be managed and turned into very significant long-term carbon stores featuring new plantations, soil biochar and new rangeland management techniques. The city is well placed to provide large-scale brokerage of carbon credits linked to regional sequestration and avoidance projects over the next 30 years as the world economy is decarbonised.

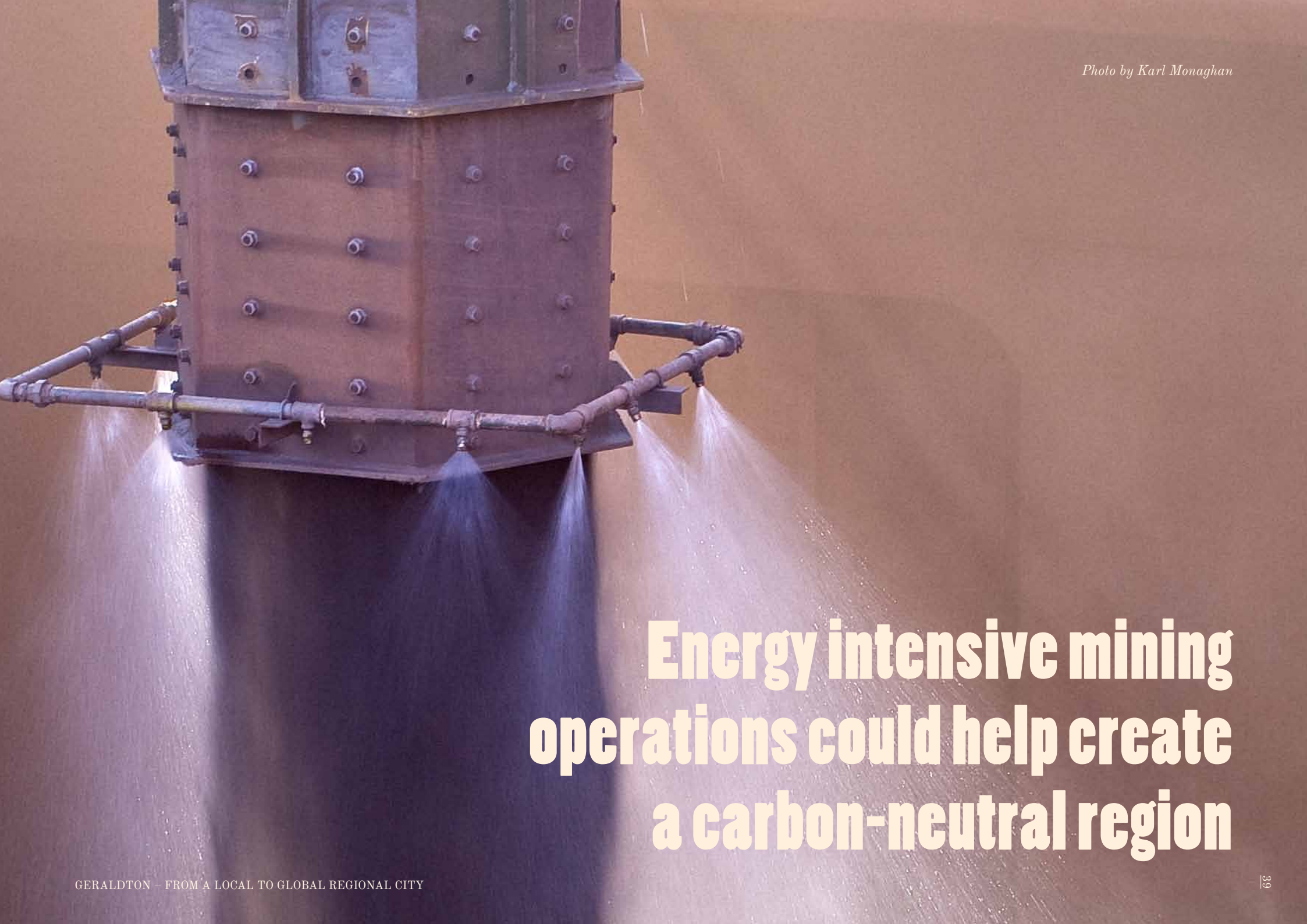
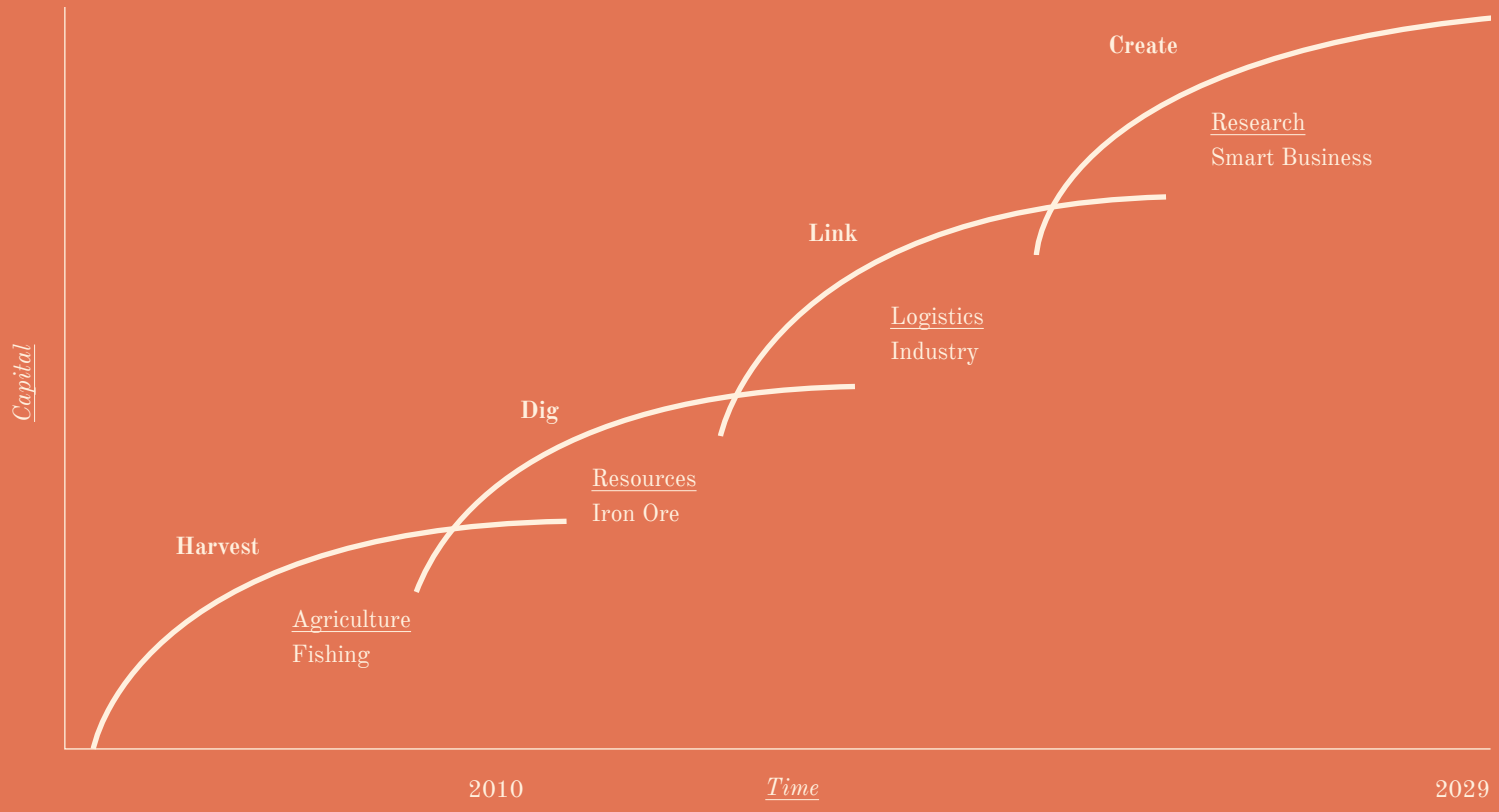


Photo by Karl Monaghan

Energy intensive mining operations could help create a carbon-neutral region

AN ADAPTIVE ECONOMIC CITY-REGION

As seen in Figure 6, traditionally the city has been supported economically by *Harvesting*, with a focus on agriculture and fishing. The reliance on agriculture as the dominant economic activity will soon shift, both due to the arrival of the mining and export industry and as climate change affects the productivity of agricultural output. The City of Greater Geraldton recognises the benefits that will be gained from this *Digging* phase, but also acknowledges that it will have to move beyond this into a diversified and sustainable economy based on developing regional logistics industries and *Creative*, clever industries. These will *Link* to the world, creating new and innovative businesses and culture. Figure 6 indicates these opportunities.



Traditional and future economic opportunities (Fig. 6)

A global regional city that is more liveable and sustainable

Central to the vision of being a city with an adaptive economy is the creation of economic precincts to help provide a focus for the city's economic development. The precincts envisaged as critical to long-term growth include:

- *Heavy Industry* – Oakajee Port and Industrial Estate, Oakajee Narngulu Infrastructure Corridor and Narngulu Industrial Estate to facilitate processing and export of mined commodities
- *Logistics* – Oakajee Port, state rail network upgrade, and links into the national rail network, Geraldton Port, Geraldton Airport
- *Research and Technology* – links to the National Broadband Network (NBN), Australian Square Kilometre Array Pathfinder (ASKAP/SKA), iVEC, research into radio astronomy, natural resource management, renewable energy, marine sciences, regional health
- *Administration* – IT services hub for regional agencies and local government, backup/mirror for state government IT systems
- *Health, Education and Training* – training, education, tele-health, virtual work building on the clustering of two major hospitals, Durack Institute of Technology, Combined Universities Centre for Rural Health, Geraldton Universities Centre, high schools
- *Arts* – providing artistic work spaces and building on the local physical and Digital Arts community's initiatives
- *Sport* –building on Geraldton's fascination with sport, cars and all things that move fast

All of these components must be combined in a broad regional plan to help lead the city-region through the anticipated transitions outlined above. The sooner this is done and the first steps taken to encourage their facilitation the sooner Greater Geraldton will begin the journey to becoming a global regional city that is more liveable and sustainable.

CREATE A DELIBERATIVE & ENGAGED COMMUNITY

2029 and beyond is a long-term initiative to improve sustainability in the Greater Geraldton city region of Western Australia by implementing participative governance, 'deliberative democracy', as a way of life. This involves the community – ordinary citizens, all levels of government, industry and the non-government sector – learning and undertaking new ways of cooperative problem solving and collaborative decision-making. This initiative includes a 3-year action research project with Curtin University (CUSP) to find, document and evaluate innovative ways to reach for sustainability through deliberative democracy and social media. After the first year, there is now an agreed 'community directions forward' and collaborative implementation teams tackling some of the tough sustainability issues Geraldton faces.

To date, initiatives have included the implementation of a new form of participatory governance, 'the Alliance Governance Group' (community, industry and government) to oversee and help implement outcomes of 2029; 'community champions' who initiate and engage the scommunity in conversations that matter; a strong alliance with the media, in particular the widely read local newspaper, to foster informed dialogue and involvement; new connections with Indigenous and multicultural groups, an interactive website, the implementation of innovative online deliberation, 'CivicEvolution' to encourage the community to develop ideas into proposals; and small and large scale face-to-face deliberations to facilitate joint problem solving and collaborative action.

Photo by Ashton Wright

A new city-region within 50 years that will be considered one of the world's success stories as an international city-region with a strong local identity

Undertaking new ways of cooperative problem solving and collaborative decision-making

STANDBY

FROM A VISION TO A REALITY

Turning this vision into a reality over the next 50 years will take intelligence, commitment, effort and leadership. It also requires recognition that the world is constantly evolving and we will have to modify this vision over time. It will require the community and the City of Greater Geraldton to continue to recognise and strengthen the values of a visionary, civilised and civic minded community, including:

- welcoming the opportunities for change as a means of creating a better future
- continuing to work together for the common good
- enhancing the local environment and heritage
- creating new forums where people can talk through their ideas and access assistance with developing them, including development of the entrepreneurial spirit
- using the talents and resources that are present in the region
- forming partnerships with the best and finest people and organisations from outside the region
- having a commitment to excellence and believing that the Geraldton region truly represents a world-class opportunity
- working for tolerance, equity and inclusion
- recognising and celebrating difference.

We have developed this document to give an overview of Geraldton's potential as it enters an intense period of growth. In our view, creating this vision will depend on how strongly the people of the region hold to these values and work towards the vision. We're optimistic that Geraldton will create a new city-region within 50 years that will be considered one of the world's success stories as an international city-region with a strong local identity.

A visionary, civilised and civic minded community

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The city will become an economic, cultural and social hub in its own right – a global city – but will still be the place people recognise as Geraldton

Photo by Ashton Wright

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