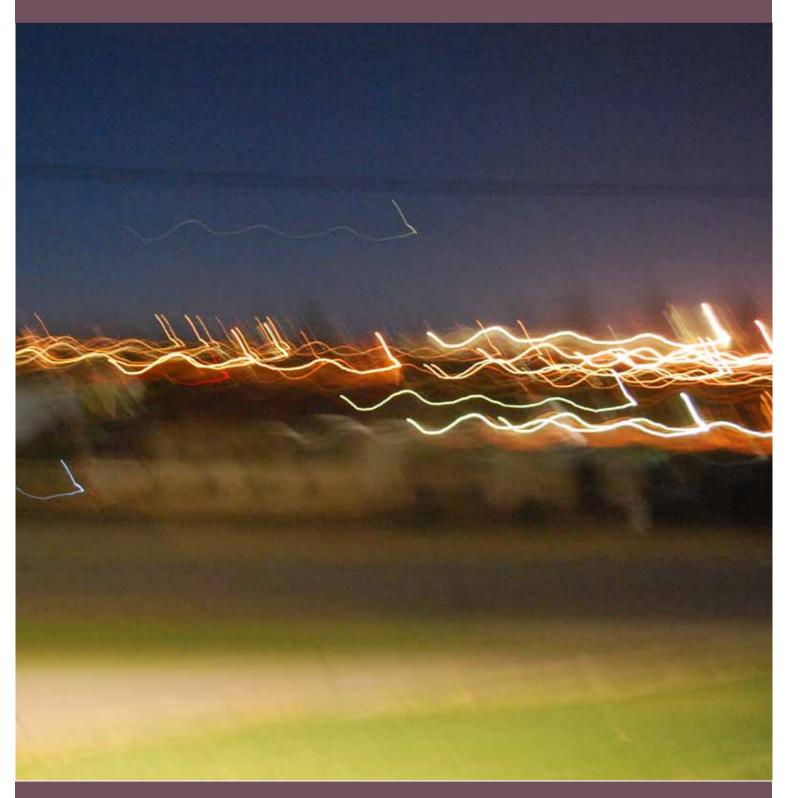
GERALDTON – A JOURNEY FROM LOCAL TO GLOBAL REGIONAL CITY

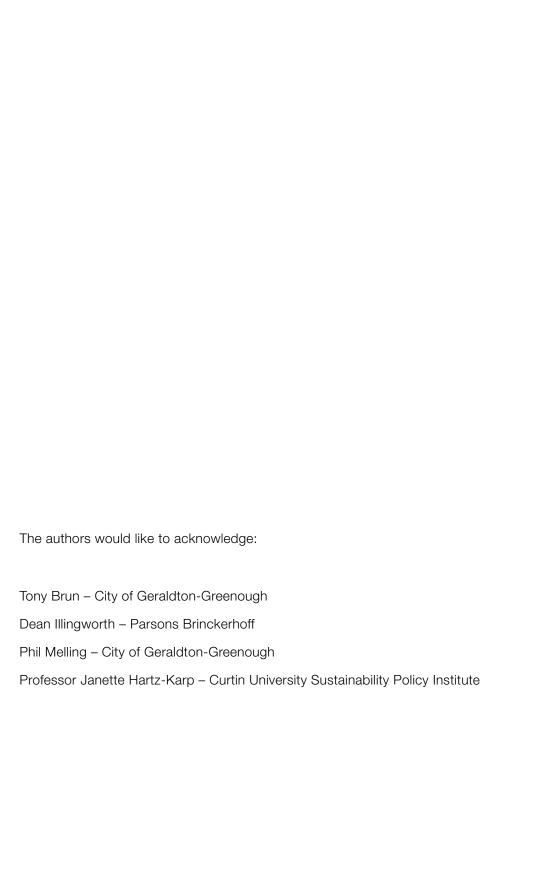
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1. Introduction

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 needs to 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- and trade-related commerce whilst employing local people 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 have been a model for 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 (including the City of Geraldton-Greenough 2029 and Beyond paper), from community consultation (undertaken by Curtin University), as well as 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 of Geraldton's future and we welcome them as 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 Geraldton-Greenough (the city) 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, before we summarise a potential way forward. But first, the idea of a new name for the city-region is explored as a part of this major growth spurt.



2. 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 liveability; 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.



3. 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 because 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 that will help prevent the formation of run-down areas
- supporting affordable housing in high-amenity areas, and thus providing high-quality, medium-density housing stock that retains a Geraldton-esque character
- providing housing stock that reflects the demography of the region, especially the ageing portion of the population
- supporting culturally appropriate housing and urban spaces that are relevant to the local places and cultures, while still being universally appealing
- 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.



4. 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 4.1 (and modelled in the Mid West Region Investability Report 2011), 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 35,000 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 ethnographies
- 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.

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 (Department of Health and Aged Care 2001). 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 and may result in a segmented income structure, with significant numbers of people being able to pay high rents and property prices. At the same time, a similarly significant number of people will be excluded because they are not working in high-paid jobs.

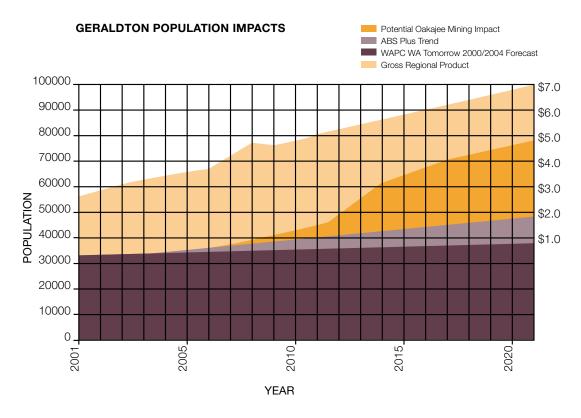


Figure 4.1: Selected anticipated Geraldton demographic data



Over 95% of the housing stock in Geraldton is located in suburban neighbourhoods, which suits the needs of many people during some 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 and corridors with 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-income market and the low end
- 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.

Spatial planning policy

The City of Geraldton-Greenough 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 (Trubka, Newman & Bilsborough 2010) as well as substantial savings in public expenditure associated with reduced costs for transport infrastructure.

Land use and transport

Despite the geographic constraints, there is no shortage of land for housing. The projected population growth can be accommodated even if all the development is a continuation of the current suburban sprawl. It is estimated that over 100,000 people can be accommodated on land currently planned and approved for development following suburban density models similar to Perth and Sydney.

Modest increases of density around selected urban nodes would easily allow this 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 4.2). The most likely nodes would be:

- Buller River and the interface with the Oakajee Industrial Area
- Glenfield
- 440 Road House near Drummond
- Sunset
- Bluff Point
- Beresford
- City CBD
- Health and Education Precinct
- Back Beach
- Wandina
- Cape Burney.

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, 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

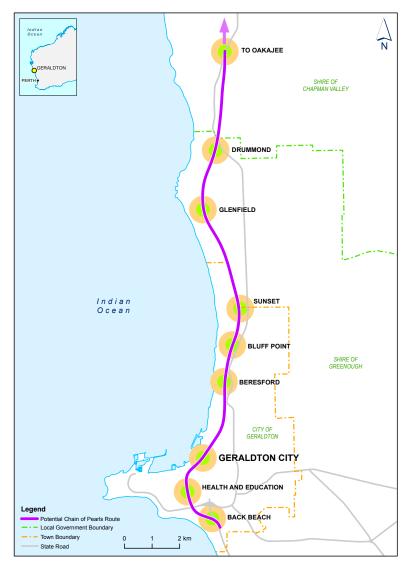


Figure 4.2: The 'Chain of Pearls' transit oriented development concept

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.

Geraldton has committed to becoming a walkable space, 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, amongst others. 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.

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 trunk mains 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 to be considered and planned for.

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 for future infrastructure to 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.

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 that embrace innovation and help establish a belief that such innovation won't negatively impact upon peoples' livelihoods.

Coupled with the long-term sustainability of green infrastructure are the benefits to be gained from smart, efficient energy, better transport options, clever water and wastewater management, as well as world-class information technologies. This is discussed further below.



5. A carbon neutral city-region

While climate change presents major challenges, reducing emissions from the generation of power is one of the challenges most easily 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', the city-region of Geraldton-Greenough 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. These hubs will combine different mixes of wind, wave, geothermal, solar and storage technologies (depending on their location), and feed into a regional and statewide 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 5.2). The City of Geraldton-Greenough 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.

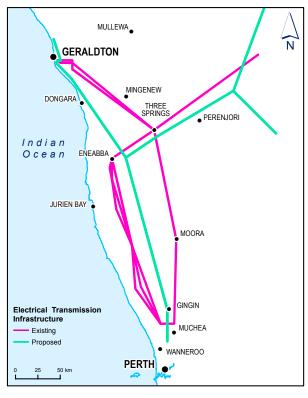


Figure 5.2: Existing and proposed electrical transmission infrastructure

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.

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 in 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. 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.

6. An adaptive economic city-region

As seen in Figure 6.1, 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 associated rail infrastructure, as per Figure 6.2 and as climate change affects the productivity of agricultural output. The City of Geraldton-Greenough 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 new industries, linking to the world, and creating new and innovative businesses and culture. Figure 6.1 indicates these opportunities.

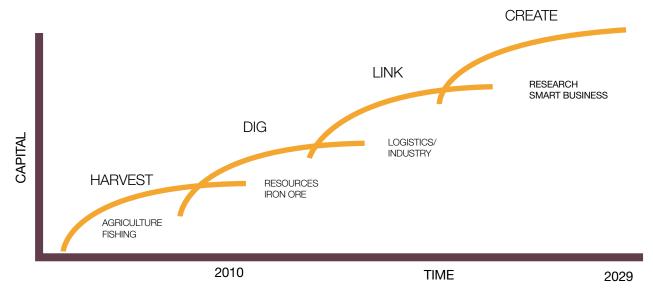


Figure 6.1: Anticipated future growth trends for the City Region

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
- motor sport building on Geraldton's fascination with 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 Geraldton-Greenough will begin the journey to becoming a global regional city that is more liveable and sustainable.

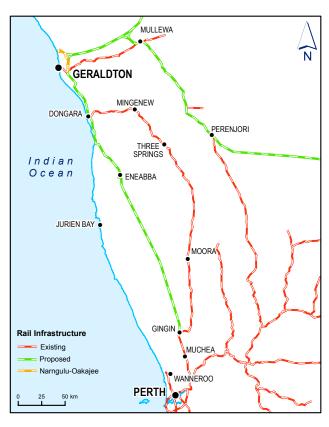


Figure 6.2: Existing and proposed rail infrastructure







7. Conclusions

Turning this vision into a reality over the next 50 years has no guarantee. All that can be done to ensure it happens is to recognise the values that are important to its fulfilment. It will require the community and the City of Geraldton-Greenough to continue to recognise and strengthen the kind of values listed here, 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 worldclass opportunity
- working for tolerance, equity and inclusion
- recognising and celebrating difference.

We have developed this document to give an overview of Geraldton's potential vision and values as it enters an intense period of growth.

Will the city-region achieve this or not? In our view this will depend on how strongly it holds to these values and works 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.

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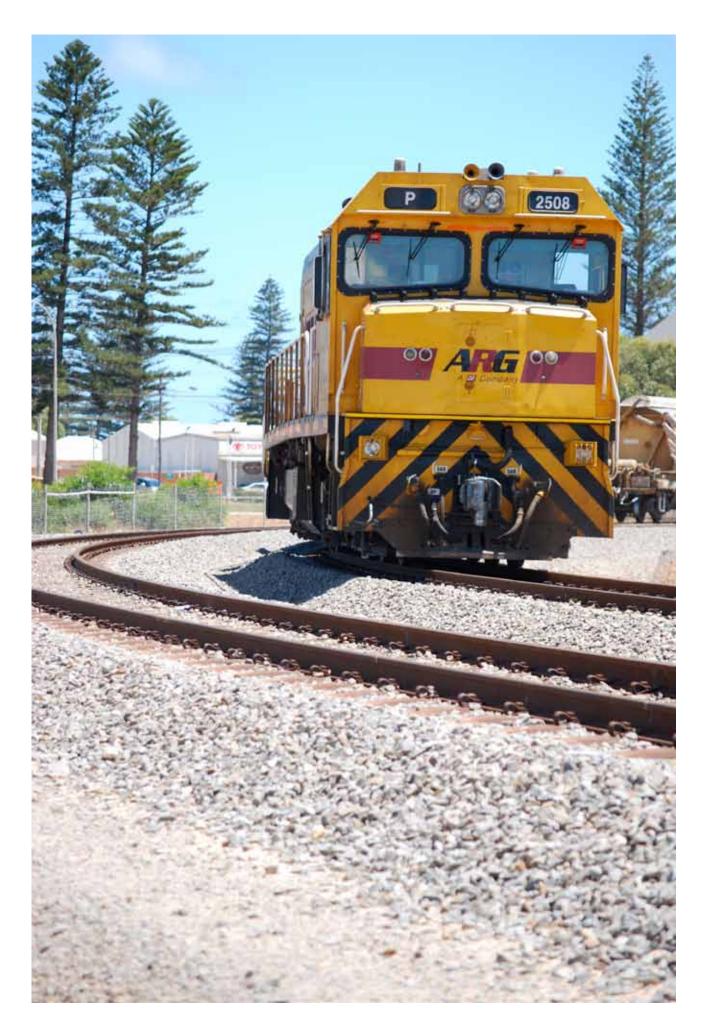
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