

1.0 INTRODUCTION



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1.1 PILBARA'S PORT CITY

Western Australia's Pilbara Region and Port Hedland in particular have grown to become the economic might of the Australian economy on the back of an internationally significant resource industry. This resource sector is forecast to expand significantly with continued demand for Australia's natural resources, particularly in China and South-East Asia.

- Port Hedland is Australia's largest bulk commodity port with a total output in 2011 expected to surpass 200 million tonnes.

In 2009/10, Port Hedland exported US \$18.7b of Iron Ore. Iron ore Royalties to the WA Government from the Pilbara were \$1.7b in 2009/10 with royalties forecast to increase to \$3b in 2012/13, an increase of 77% (*Town of Port Hedland, 2011*).

Region	Gross Product (\$b)	Share of Australia
Port Hedland	\$3.3	0.3%
Pilbara SD	\$19.8	1.5%
WA	\$184.4	14.4%
Australia	\$1,283.6	100%

Figure 1.1: Gross Regional Product and Share of National Economy, Port Hedland, 2009/10 (Source: ABS 5206.0 National Accounts and AEC group)

Port Hedland's role is also well established on the national and international stage. It attracts internationally prominent resource companies, and contributes at a nationally recognised level to the broader Australian economy.

While the statistics are revealing, it should be noted that the figures are not a reflection of the actual contribution of Port Hedland to the national economy. Notably, they do not account for the contribution of a region (like Port Hedland) to key economic activities such as exports or Government revenues; they also do not take into consideration the enabling role of key infrastructure in Port Hedland (namely the Port) in facilitating economic activity and value-adding in other parts of the country (i.e. mining located in East Pilbara is almost wholly dependent on access to export infrastructure, services and facilities in Port Hedland).

This notwithstanding, national and state level re-investment in Port Hedland since the 1960's has not been at a nationally significant level. The resulting growth pressures are acknowledged in the *Pilbara Planning & Infrastructure Framework*, where severe infrastructure shortages, high living costs, demand for amenity improvement and housing affordability are all identified as major constraints to Port Hedland's sustained growth and development as a Pilbara City.



The housing situation (both rental and sales) is particularly acute and has been identified as by far the biggest single issue and impediment to future economic growth.

The Town of Port Hedland has recognised the many growth pressures it faces through the *'Hedland's Future Today 2010'* initiative, which documents a range of significant investment projects the town is seeking to deliver. While the Town and the State Government have successfully progressed a number of projects, a 'Whole of Government' approach from all levels is required to meet the growth challenges and deliver a successful Pilbara City.

BACKGROUND

The underlying direction and vision for the Pilbara's Port City Growth ('the Growth Plan') has been determined at both Local and State Government levels. Importantly, the Town of Port Hedland's (ToPH) aspirations have been well articulated in key strategic documents such as the *Port Hedland Land Use Master Plan (ToPH, 2007)*; *Strategic Plan 2010-2015*; *Hedland's Future Today 2010*; as well as the *Port Hedland Land Availability Plan (RPS, 2011)* and *Housing Capacity Study (GRA, 2010)*. Similarly, under the Pilbara Cities framework, the State Government has previously announced its vision to revitalise Pilbara towns, including developing Port Hedland as "Pilbara's Port City".

The *Pilbara Planning and Infrastructure Framework (WAPC, 2012)* provides a blueprint for the long term growth and sustainable development of the Pilbara Region, and identifies both Port Hedland and Karratha as Regional Cities of 50,000 people. The Growth Plan provides a local level strategic blueprint to facilitate the sustained growth of Port Hedland as Pilbara's Port City. Critically, it is intended to replace the current Land Use Master Plan (2008) as the ToPH's adopted Local Planning Strategy, proactively guiding future spatial development and statutory land use planning.

The Growth Plan is being driven by the need to modernise and transform Pilbara towns to support long term economic activity in the region, improve the quality of life for existing residents and to attract and retain new residents.

Achieving this transformation will require more than just local level enhancements. It will require an array of district and local level programs and projects focussed on strengthening local communities, providing growth opportunities, and diversifying the economic base. Enhancing the quality of life for Port Hedland's residents will involve responding to the needs and aspirations of people by enhancing local amenity, expanding job and related opportunities, addressing service shortfalls, and ensuring current and future settlements are built to meet the challenges of the region's climatic conditions.

Population growth is essential to sustain the long term economic activity in the Pilbara. Current forecasts, however, indicate that settlements across the Pilbara will not reach the population growth objectives of Pilbara Cities without significant intervention. A change in economic growth and diversification will be required at a regional and local level to capitalise on Port Hedland's unique strengths and advantages and pursue new economic opportunities. The Growth Plan will provide the background and framework for this intervention, and set out the spatial requirements to facilitate this.

Importantly, delivering the outcomes required to meet this vision of revitalisation requires commitment and contribution by many stakeholders across the region and the state – with sustained levels of support and resourcing. It is critical that this transformation is led at a local level by a strong and well resourced Local Government, playing a central role in the coordination of activities, investment initiatives and the development of strong and effective delivery partnerships.

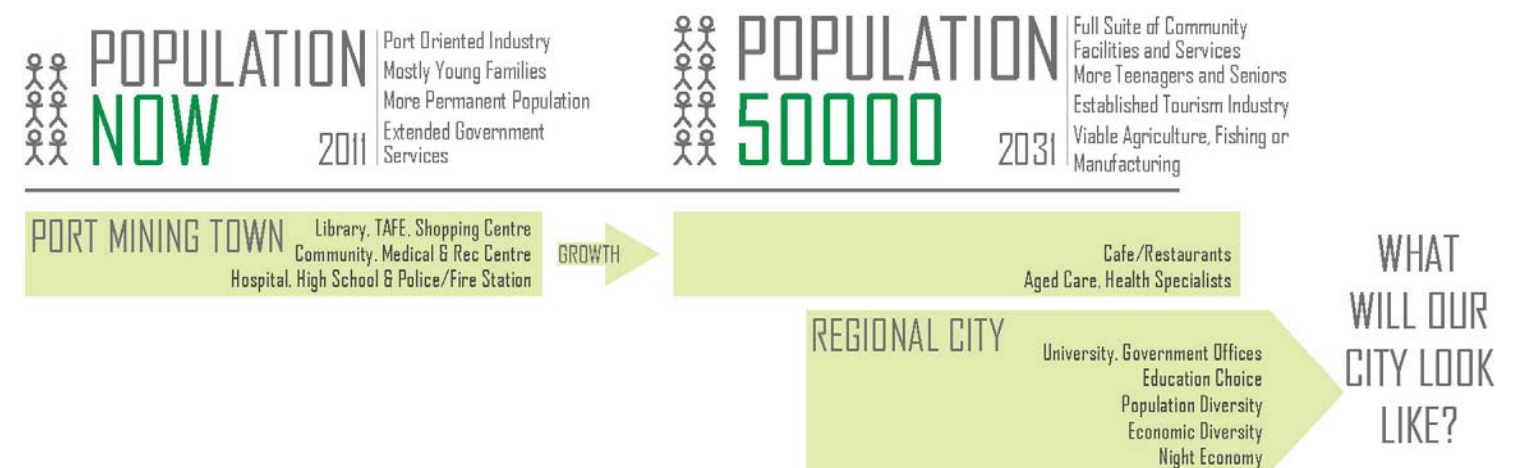




Figure 1.2: Aerial Context Plan

1.2 SCOPE

The boundaries of the Town of Port Hedland contain an area of approximately 18,700 square kilometres, extending from the coast to approximately 180 kilometres inland. This is an area of about four times the size of Metropolitan Perth, but it contains less than 1% of Perth's population. The Growth Plan covers the entire area of Port Hedland, but the focus of the plan is the area of settlement on the coast where over 98% of the Port Hedland community is located.



Figure 1.3: Port Hedland Regional Context

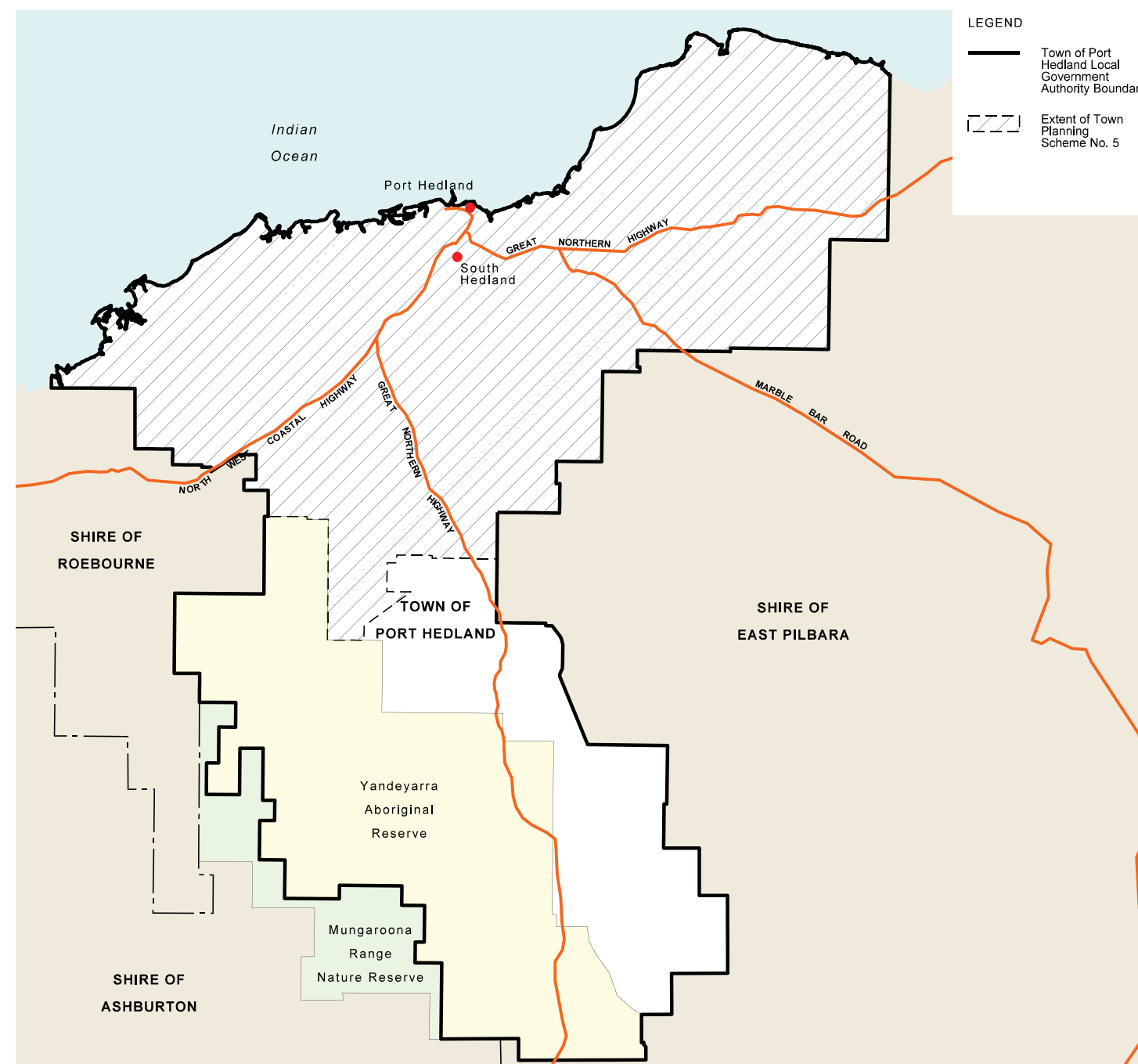


Figure 1.4: Town of Port Hedland Boundaries

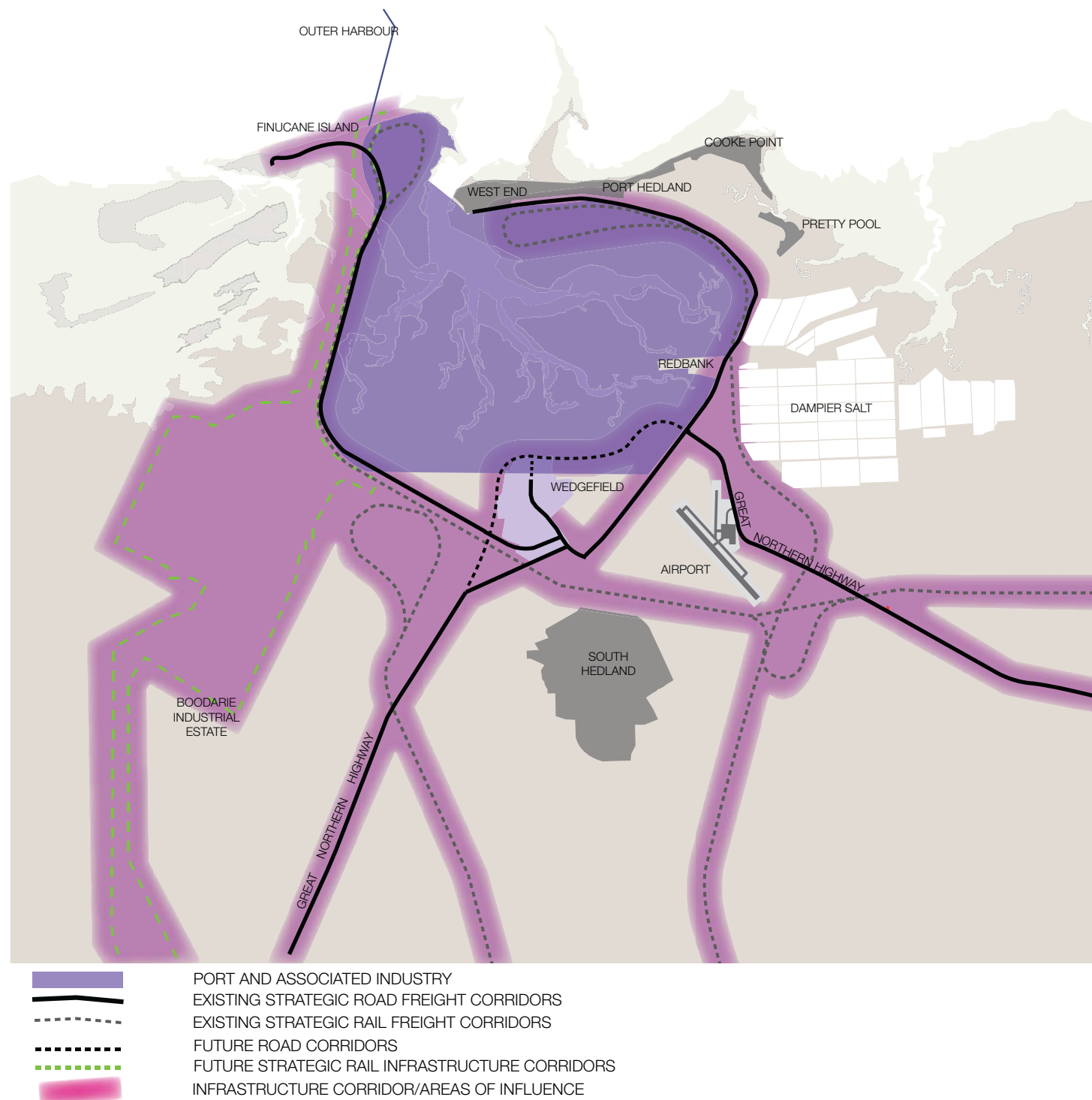


Figure 1.5: Port and Key Infrastructure

1.3 CONTEXT AND ROLE

As Port Hedland and Karratha become 'Pilbara Cities', their particular roles must be established. Beyond its position in a broader retail and centres hierarchy, it seems logical that Karratha will continue to serve an offshore industry support function given its proximity to the North West Shelf.

At the national, state and regional levels, Port Hedland will continue to form a critical element of the national, state and regional freight and logistics networks. At a regionally specific level it will be a higher order service centre for the East Pilbara, in addition to being the historical and cultural centre of the Pilbara Region. These roles and their impacts on this Growth Plan are explored further below.

Freight and Logistics

Port Hedland is, first and foremost, a port town. Its role at a national level, defined through the National Ports Strategy (*Infrastructure Australia*, 2011a) and National Land Freight Strategy Discussion Paper (*Infrastructure Australia*, 2011b), acknowledges Port Hedland as a strategic element of our national freight and logistics network. This role and function of Port Hedland is a significant



consideration of the Growth Plan:

"Given the nodal nature of ports (i.e. Port Hedland) and the large concentrated freight flows along land corridors, the port aspects should be among the most important yet the simplest and clearest aspects of any city plan or any freight plan. A capital city plan (apart from that for Canberra) or freight plan would be inadequate if it did not reference relevant ports and the key landside infrastructure that is used to service them. If an adequate ports plan cannot be developed, there is little prospect of planning for other much more complex activities. Hence, plans for relevant ports should be among the highest priorities for Australia's urban agenda." (*Infrastructure Australia*, 2010)

Australia's freight sector is a substantial economic activity in Australia. It generates and facilitates economic growth and employment, and accounts for a significant share of Gross Domestic Product. At a national level, freight movements will continue to increase and are planned to potentially treble by 2030 (*BTRE 2010*).

Port Hedland's capacity to function at the national, state and regional level will be underpinned by its capacity to accommodate increased freight movements associated with continued expansion of the resources sector. This means protecting and accommodating expansion of the port as well.

The Growth Plan protects and enhances the role of Port Hedland as a critical element of the nation's freight and logistics industry. The ancillary benefit in undertaking this will be to encourage increased investment of industry in Port Hedland by providing greater certainty on government policy which affects the growth and operation of the port (*Infrastructure Australia*, 2011a). To achieve this, the Growth Plan will enact some key recommendations of the National Ports Strategy (*Infrastructure Australia*, 2011a). This will include:

- In a spatial context, undertaking land use planning which protects critical existing and future freight corridors (road and rail) from encroachment of conflicting land uses whilst providing land for support industry to the freight sector;
- Implementing controls that are adequate to ensure the protection of the port against the existing sensitive uses; and
- Removing the barriers inhibiting the productive and efficient movement of freight on the land and sea side particularly in proximity to the urban areas where urban congestion can significantly affect the safe and productive movement of freight.

Defence

Australia's geographical size and location within an international context has been noted as a 'major defence planning challenge'. The Australian Defence White Paper (Department of Defence, 2009) further highlights:

The Defence Force has acknowledged a principal task in deterring armed attacks on the sovereignty of the nation, will include addressing the difficult task of protecting strategically significant offshore territories and economic resources in the remote north-west. This has been reaffirmed through suggestions that the Defence Force will identify the need for a new defence base in north western Australia as part of its Force Restructure Review.

A key threat to the safety of the nation is addressing the potential security risks from South-East Asia. This region sits alongside Australia's northern approaches and key trade routes. Similarly, the Indian Ocean and the central location of key international trade routes have been identified as having an increasingly strategic role to play within the Australian Defence Force's (ADF) primary operational environment (Department of Defence, 2009).

The ADF acknowledges a "fundamentally maritime strategy" where "forces can operate with decisive effect throughout the northern maritime and littoral approaches to Australia, and the ADF's primary operational environment more generally".

In the recently published ADF Posture Review Progress Report (Department of Defence, 2011), preliminary conclusions noted that "while permanent Navy bases in the North West are not

operationally necessary, there is a case for Defence to pursue improved access arrangements at commercial ports such as Exmouth, Dampier, Port Hedland and Broome". It also recommends that "Defence (Joint Logistics Command) carry out an assessment of Civil Infrastructure and its logistics capacity available to support operations in the North West in a range of contingencies".

The Growth Plan acknowledges the future role of Port Hedland as a strategic asset in the nation's broader defence strategy. This is consistent with the notion that Port Hedland can support a Marine Common User Facility which would compliment plans for a defence presence in Port Hedland (Department of Commerce 2011).

Strategic Industry and Manufacturing

Port Hedland's strongest assets are its strategic freight infrastructure, geographical location and access to raw materials. All of these elements are complimentary to the establishment of a manufacturing industry and an industrial service role (AEC Group 2011). Similarly, the capacity for Port Hedland to provide a servicing role to offshore industry has been confirmed (Department of Commerce 2011).

Port Hedland currently provides a marginal service and manufacturing role to the broader Pilbara Region (AEC Group 2011). Notwithstanding this, the strategic advantages Port Hedland has provide the foundation to develop a secondary role to the northern regions of Western Australia. The Growth Plan will facilitate this new function of Port Hedland by:

- Encouraging the stabilisation of the population and continued growth in line with population projections;

- Setting aside land to support downstream processing, manufacturing and distribution throughout the North-West;
- Setting aside land which is able to support supply chain industries to service the resource sector;
- Undertaking appropriate land use planning to reduce risks to the operation of industry by identifying and mitigating conflicts with sensitive uses; and
- Nominating an appropriate location for a Marine Common User Facility in the Port.

Cultural Core

Port Hedland has a rich history and culture which extends before the iron ore and core resource logistics and port role it now serves. Port Hedland also has a rich aboriginal culture extending over thousands of years.

Port Hedland's history and cultural wealth have defined Port Hedland as a cultural centre of the Pilbara. It offers unique and rich cultural experiences which are specific to its historical development. Fostering cultural growth increases the level of social capital in the region which is shown to improve health, education and life satisfaction and reduced crime (BTRE 2005). Furthermore, regions that are rich with social capital are likely to have a competitive economic advantage as it improves information flows and/or enhances the creation of knowledge and innovation (Maskell 2001).

The cultural role of Port Hedland at a localised and also regional level is equally important in fostering population and economic growth in the locality and the broader region as direct and tangible factors such as land release. The Growth Plan will foster the cultural role of Port Hedland by:

- Protecting and celebrating Aboriginal and European history elements of Port Hedland through appropriate land use planning and design;
- Fostering a stronger tourism industry through the increased provision of accommodation, retail and entertainment activities, along with greater emphasis on placemaking; and
- Identifying a range of community development strategies and initiatives (including cultural strategy) aimed at enhancing social capital within the community.



1.4 METHODOLOGY

The Growth Plan is not exclusively a land use planning strategy; it considers both spatial and non-spatial challenges to the expansion of Port Hedland into a sustainable city. The Growth Plan identifies where a population of up to 50,000 can reasonably be accommodated, what additional civil infrastructure and transport services, how community aspirations can be accommodated and how the environment, indigenous and non-indigenous heritage should be protected and celebrated.

In addition to serving as the Town's new Local Planning Strategy, the Growth Plan also addresses the core recommendations of the State Government's Dust Taskforce. Those recommendations require the preparation of a plan which:

- Identifies a range of sites for new development in South Hedland, which will see the majority of new residential development and population housed over the next 20 years, along with a major focus on South Hedland's city centre as the primary activity centre for Hedland and the wider region;
- Proposes significant new residential development in the east end of Port Hedland offering a new focal point for high amenity coastal living with a full range of local services and facilities;
- Identifies appropriate locations in the West End of Port Hedland for redevelopment as additional commercial premises, entertainment complexes and short stay accommodation facilities; and
- Provides greater guidance on residential density, dwelling types and building design for all areas of Port Hedland.

The whole of the Town of Port Hedland municipal area, and its national, state and regional context have been considered in preparing the Growth Plan. Critically, however, the geographic expansion of the existing settlement areas has been the key focus of the document.

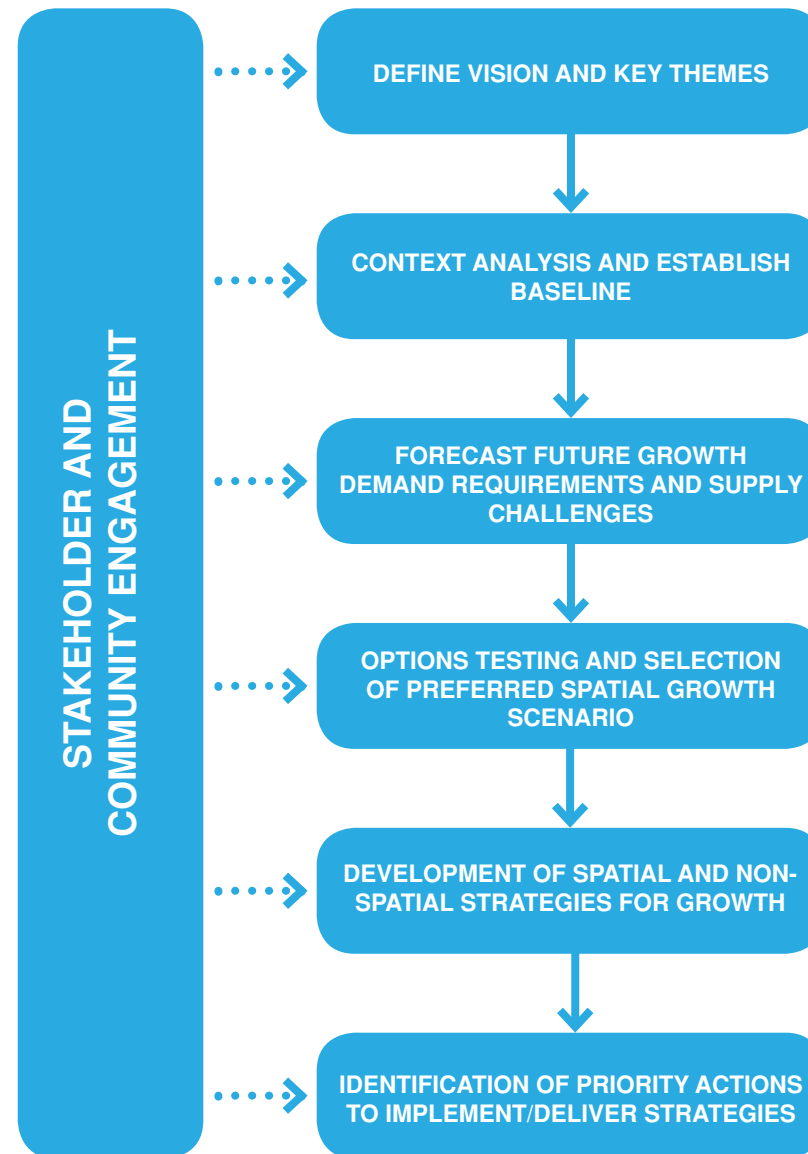


Figure 1.6: Project Approach

1.4.1 Project Approach and Decision Making

The Town of Port Hedland engaged a multidisciplinary team with specialist skills in town planning and urban design; civil infrastructure engineering; economic and property analysis; landscape architecture; indigenous and non-indigenous heritage; environmental assessment; traffic and transport engineering; community and stakeholder engagement. The Growth Plan has been prepared taking into account the particular characteristics of the Pilbara Region and Port Hedland settlement areas and surrounds.

Figure 1.6 illustrates the broad approach to the Pilbara's Port City Growth Plan project.

A coordinated process of reporting and decision-making was followed throughout the project as shown in Figure 1.7.

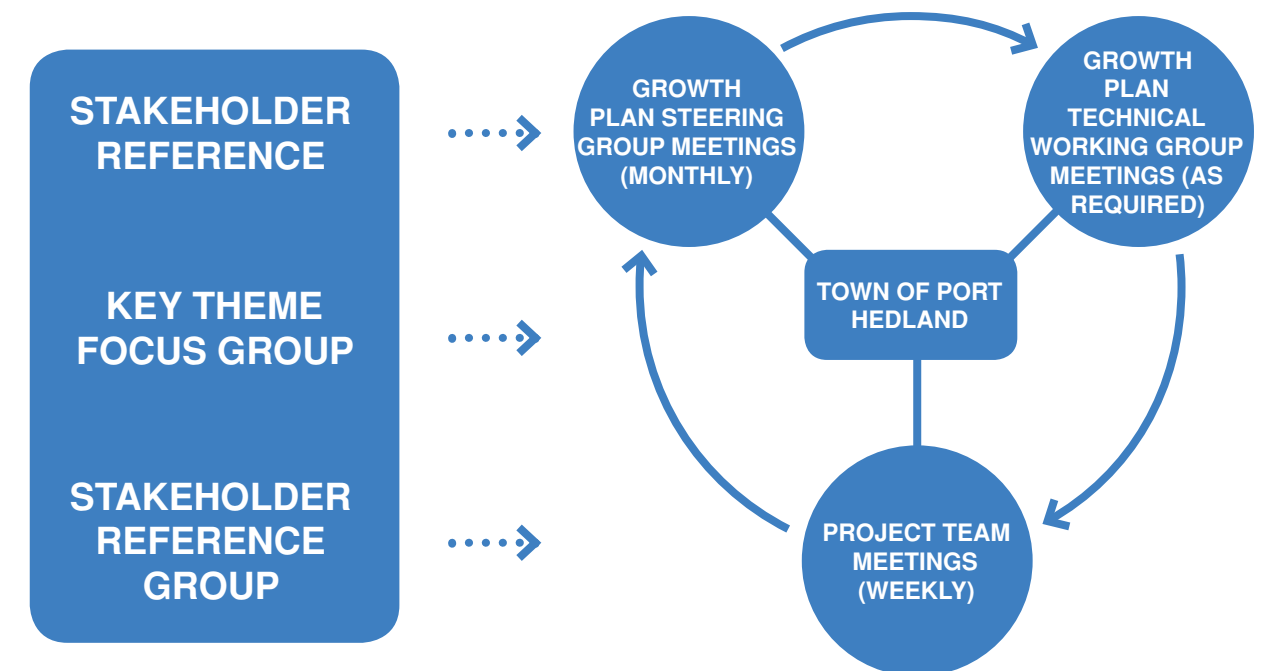


Figure 1.7: Decision Making.

1.4.2 Project Elements

The Pilbara's Port City Growth Plan project is comprised of two key components - a Growth Plan, setting the vision and strategies for growth, along with an Implementation Plan (refer Figures 1.8 and 1.9). An overarching Sustainability Assessment has also been undertaken.

Section 6.0 of the Growth Plan provides further details on the purpose and objectives of the Implementation Plan, which to be read in conjunction with this document.

What is an Implementation Plan?

An Implementation Plan is a programme and action plan for the delivery of the necessary community, economic, physical & governance projects identified in the Growth Plan.

Why is it an Important Document?

The Implementation Plan will:

- Provide greater certainty and recognition;
- Align stakeholder objectives in a single coordinated Plan/ Document;
- Be a reliable tool to facilitate business cases and funding submissions for projects and programmes;
- Activate key stakeholders to progress the necessary activities; and
- Provide flexibility to efficiently respond to change of circumstance(s).

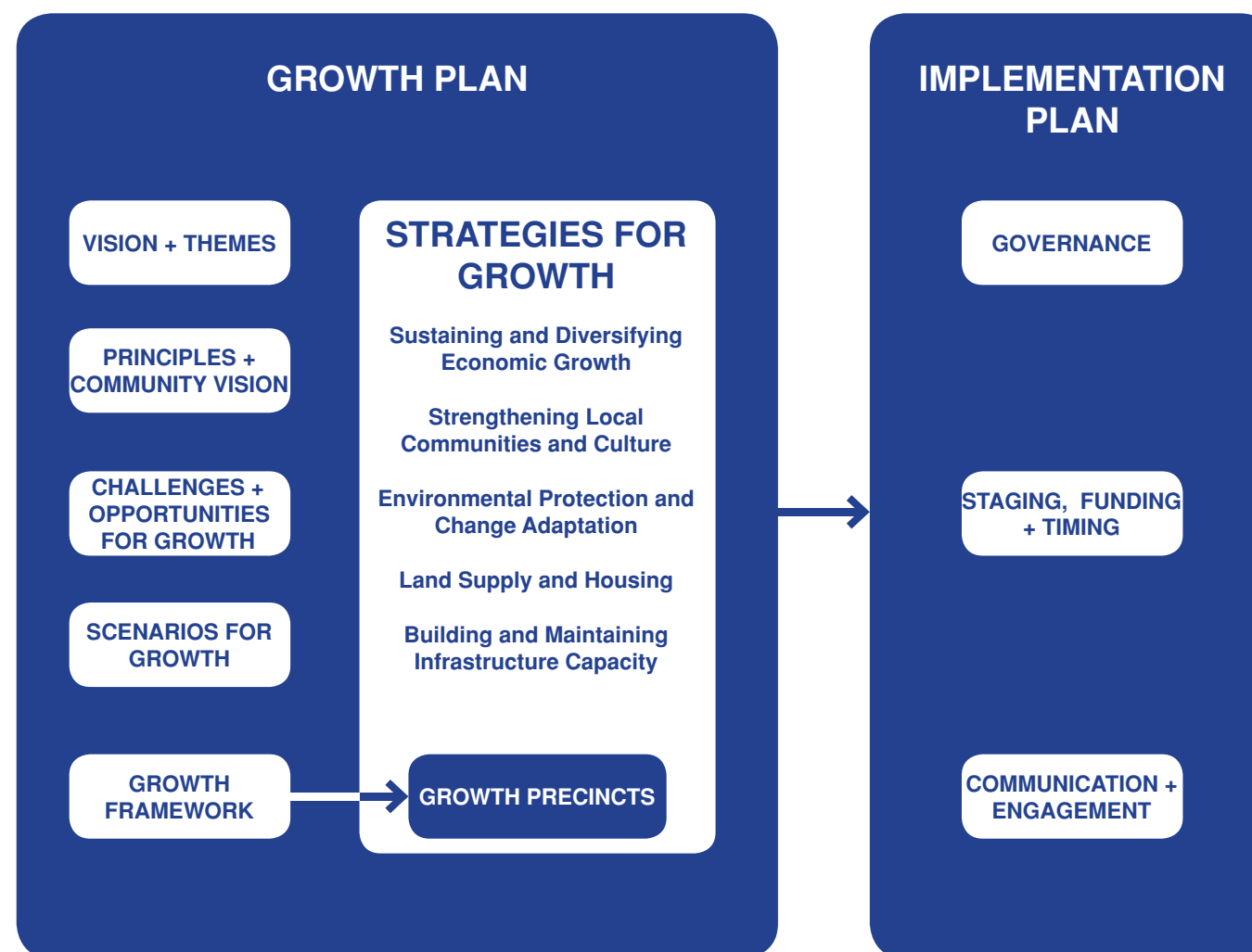


Figure 1.8: Project Elements

1.4.3 Structure of this Document

This document is divided into 6 sections as follows:

1. Introduction
2. Vision for Pilbara's Port City (including 5 themes)
3. Challenges and Opportunities for Growth
4. City Growth Scenarios
5. City Growth Strategy (including strategies across 5 themes and precinct plans)
6. Summary and Implementation (summary / guide to second document)



Figure 1.9: Core City Growth Plan Documents

1.4.4 Community Engagement

Effective communication and reporting is critical to good stakeholder management. Preparation of the Growth Plan has been underpinned by a robust and comprehensive consultation and engagement process with key stakeholders and the broader community. The community and stakeholder engagement strategy had five strategic objectives:

- To identify relevant stakeholders and to understand the nature of their interest and/or involvement in development of the Growth Plan and the Implementation Plan;
- To provide stakeholders and the community with appropriate, adequate and timely information on development of the Growth Plan and Implementation Plan;
- To seek input from key stakeholders and the community in developing the Growth Plan and the Implementation Plan;
- To achieve a high level of stakeholder and community satisfaction with the process used for developing the Growth Plan and the Implementation Plan; and
- To continue building and later maintain strong relationships with stakeholders including local community, industry and the media.

The key community and stakeholder engagement activities undertaken to support development of the Growth Plan and the Implementation Plan included;

- Internal engagement (with the project team discipline leaders);
- Establishment and liaison with a project Stakeholder Reference Group;
- Key Theme Focus Groups;

- 2 Day Growth Forum;
- Interviews with Aboriginal Corporations and Service Providers;
- Presentation to a Community Leaders Forum; and
- A range of targeted community meetings and presentations to key stakeholders e.g. resource companies, government agencies.

Stakeholder Reference Group

The role of the Stakeholder Reference Group (SRG) was to provide advice on proposed stakeholder engagement in the lead up to the Growth Forum, and then act as a vehicle for further testing of the Growth Plan strategies as they were refined.

An invitation to become part of the SRG was extended to more than 100 individuals and organizations on the Town of Port Hedland stakeholder database. On the advice of the SRG, additional stakeholders were approached to participate in SRG#2. An open invitation to participate in SRG#2 was promoted through Town of Port Hedland email bulletins and newspaper advertising.

Key Theme Focus Groups

Eight key themes were identified as part of Focus Group discussions. The key themes were identified in consultation with the multidisciplinary project team and validated with the Lead Consultant. Focus Group session plans were developed to detail the key questions relevant to each theme and identify target participants. These session plans were reviewed with the Town of Port Hedland. Seven focus groups were held in Port Hedland in June 2011 on the following themes:

- Strategic industry
- Economic development
- West End growth scenarios
- Environment
- Housing affordability
- Transport and infrastructure
- Sustainable community, amenity and character

Focus Groups were a maximum of two hours with participation open to any interested member of the community. Attendance at sessions varied between 5 and 26 participants.

At each session, the project consultant with primary responsibility for the Focus Group theme made a presentation to provide context to the session's key questions. This was followed by

a semi-structured facilitated discussion of key questions. In addition to the seven themed focus groups, an additional eighth theme associated with indigenous consultation and the needs of Aboriginal people was also considered. Key informant interviews of between 30 and 90 minutes were held with organisations providing services to Aboriginal people, seeking input and feedback with regard to their aspirations for the Growth Plan. Interviews were held with the following organisations:

- Rose Nowers Childcare Centre;
- I.B.N (Innawonga, Banjyma, Niapali) Aboriginal Corporation
- Youth Involvement Committee
- Bloodwood Tree Association
- Pilbara Indigenous Aboriginal Women's Group
- Yamaji Marlpa Aboriginal Corporation

Through these discussions and other community engagement processes, the need for continuous engagement and ongoing dialogue with Aboriginal people was highlighted, particularly with regard to addressing issues of housing and homelessness, access to education and employment, reconciliation and community inclusion.

Growth Forum

The Pilbara's Port City Growth Forum was held in Port Hedland over 2 days in July 2011. Core sessions were held during business hours and briefing sessions regarding the day's progress were held in the evenings of both days.

The event provided an opportunity for government agencies, the private sector and community organisations to review key elements of the Growth Plan and provide their feedback on options presented. The key objective was to receive early advice on any fatal flaws, major gaps or significant differences of opinion on the strategic directions being developed.

Information and discussion was structured in 19 sessions. The early focus during Day 1 was to establish the Growth Plan context, after which reactions were sought to the non-spatial enabling strategies (economic development, infrastructure provision and community facilities). After lunch on Day 1, the focus turned to the review of draft Precinct Plans. Stakeholders had the opportunity to work in small groups to modify and mark up plans.

The focus of Day 2 was on testing the approach that was to be used to develop the associated Implementation Plan.

Fifty-four stakeholders participated in the core sessions over the two days.



1.4.5 Sustainability Framework

The Growth Plan is aimed at addressing underlying social, economic and environmental issues in a defined area and takes a holistic view geared ultimately towards implementation. The associated Implementation Plan is delivery focused and, where public and private sector investment is required, considers delivery through partnerships as appropriate.

To this end, the plan is aligned with a tailored Sustainability Framework, developed to meet the future needs of Port Hedland. It provides a set of principles and aspirations to help guide and support planners and decision makers on how to achieve sustainable development and build a resilient Port Hedland for current and future generations.

The principles of the Sustainability Framework have been adopted from the national best practice GreenStar Communities framework and is designed to:

- **Enhance livability** - Sustainable communities are liveable. They are diverse, affordable, inclusive and healthy; they enhance social interaction and ownership, are safe and caring and improve people's well-being.
- **Create opportunities for economic prosperity** - Sustainable communities prosper. They encourage opportunities for business diversity, innovation and economic development that support local jobs for people in the region.
- **Foster environmental responsibility** - Sustainable communities respect the environmental systems that support them. They protect and restore the natural environmental values of their bio-regions. They are less resource intensive.
- **Demonstrate visionary leadership and strong governance** - Sustainable communities are characterised by leadership and strong governance frameworks that are transparent, accountable and adaptable. They enable active partnerships to build capacity and achieve a shared vision and deliver stakeholder benefit.
- **Embrace design excellence** - Sustainable communities are places for people. They are desirable, accessible and adaptable. They have their own distinct character and identity and evolve over time.

The Sustainability Framework principles are illustrated in Figure 1.10 and described below.

- **Reducing ecological footprint:** precinct urban design objectives; public infrastructure strategies;
- **Enhanced natural environment:** place-making strategy; public infrastructure strategies;

- **Attracting investment:** economic development strategy; business progression program; tourism strategy; young entrepreneur support program; former resident alumni network;
- **Transport & connections:** public transport strategy; transport corridor strategy; airport masterplan (as amended); place-making plan strategies (gateway and tourism objectives);
- **Future-proofing:** climate responsive precinct plans; spatial planning for transport corridors; coordination of infrastructure provision and facilitation of common infrastructure access;
- **Integrated design:** precinct urban design objectives, place activation programs;
- **Life-long education & learning:** Growth Model as input to social infrastructure coordination; tertiary institution attraction program; student achievement recognition program;
- **Accessibility:** precinct urban design objectives; transport strategies; detailed building and footpath access plan;
- **Diverse and affordable living:** land release program; affordability strategies;
- **Healthy, safe, secure communities:** place-making plan strategies; community development programming to strengthen networks; community service recognition programmes; reconciliation action plan; community leadership development program; open space strategy; and
- **Stakeholder engagement:** monitoring and reporting strategy.

The Sustainability Framework provides a consistent and agreed approach to sustainable development in Pilbara's Port City. This is important in the local context as there are many stakeholders who are interested in the economic, cultural, social and environmental success of the region. The Sustainability Framework is designed

using the guiding principles and themes of state, regional and local policies and supplemented with 'best practice' sustainable community frameworks.

Although in the first instance the Sustainability Framework is used to guide sustainable development options, it is expected that the framework will be used throughout the life of the project to monitor and evaluate project outcomes to ensure that sustainability objectives are being considered and targets met. During the next stage of implementation planning, the Sustainability Framework will be used to evaluate the initiatives and strategies considered to ensure that the plan aligns with the principles set, identify any gaps and adjust the plan accordingly. Furthermore, measures and targets will be determined during the next stage, which is a crucial element of on-going monitoring for sustainability performance.

1.4.6 Integrated Growth Model

In addition to the Growth Plan and the Implementation Plan, the Town of Port Hedland engaged AEC Group to prepare an integrated Growth Model for the Town. The Growth Model is designed to assist the Town to manage growth into the future and at the same time deliver better planning outcomes with greater certainty for the community.

The Growth Model leverages the existing assumptions and data underpinning the Growth Plan. It allows for manipulation of various future characteristics to understand how they will impact other future facets of the Growth Plan. The model will assist the Town to make informed decisions regarding future projects and development and at the same time understand the future implications of these decisions.

Population and economic stimulus are the main model inputs (which can be used to test a wide variety of future scenarios), which will allow for an understanding of changes to future levels of:

- Land demand (across retail, residential, industrial, commercial and tourist accommodation);
- Community infrastructure (parks, libraries, recreation centres, sports fields, etc.);
- Infrastructure demand (water, sewer, roads, etc.); and
- Economic impacts (GRP, employment, incomes).

The Growth Model presents a unique tool to assist in future decision making for key projects. It is a dynamic tool that can grow with the city's development and one that effectively links decision making on key planning and capital investment decisions more effectively than previous possible. As part of the Pilbara's Port City Growth Plan project, the Growth Model has informed development of the Implementation Plan to provide further certainty on the type, scale and timing of interventions required.

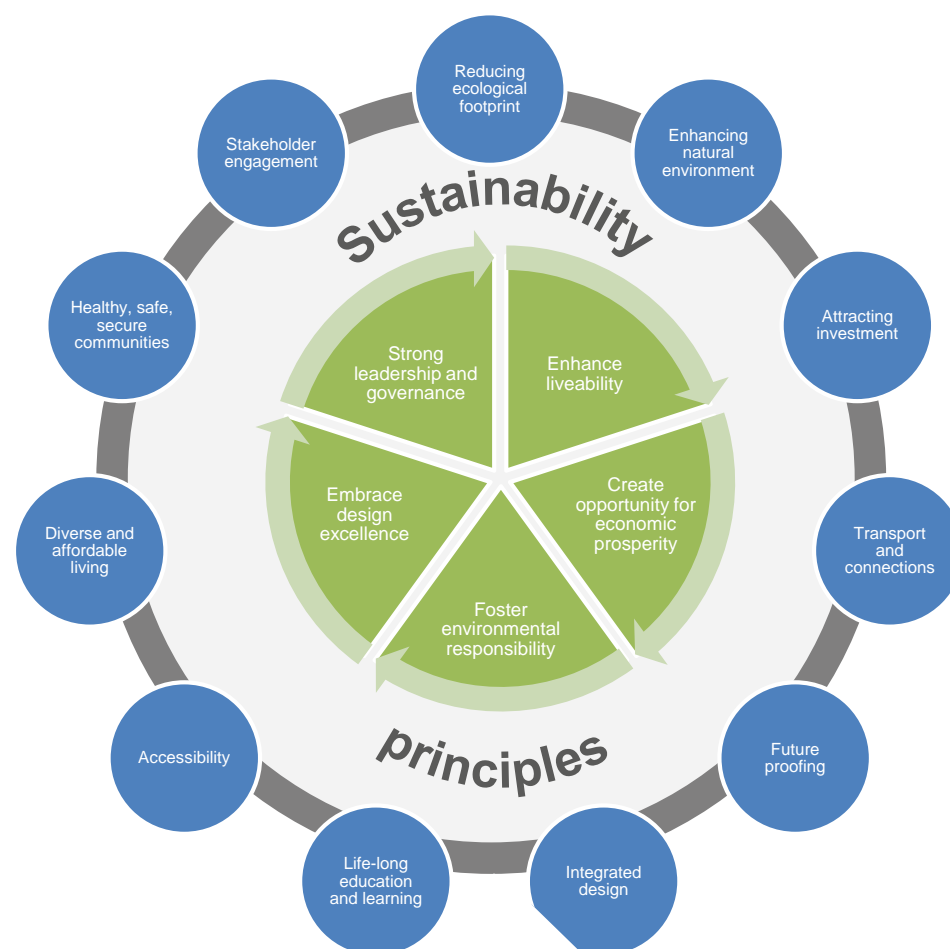


Figure 1.10: Sustainability Framework