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**GEORGE**

# MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK

Version 5.1

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## List of Acronyms

CBA	Critical Biodiversity Area	PPTIF	Provincial Public Transport Institutional Framework
CBD	Central Business District	PSDF	Provincial Spatial Development Framework
CCTV	Closed-circuit Television	PWC	Price Waterhouse Cooper
CITP	Comprehensive Integrated Transport Plan	RDP	Rural Development Plan
DEA&DP	Department of Environmental Affairs and Development Planning	SALGA	South African Local Government Association
DHS	Department of Human Settlements	SANParks	South African National Parks
DMA	District Management Area	SEA	Strategic Environment Assessment
DRDLR	Department of Rural Development & Land Reform	SPC	Spatial Planning Category
EIA	Environmental impact assessment	SMME	Small, Medium and Micro-sized Enterprises
EMF	Environmental Management Framework	SPLUMA	Spatial Planning Land Use Management Act (2013)
ESA	Ecological support area	Stats SA	Statistics South Africa
FPSU	Farmer Production Support Unit	STEP	Sub-tropical Thicket Ecosystem Plan
FSBP	Fine Scale Biodiversity Plan	TDM	Travel Demand Management
GDP	Gross Domestic Product	WCG	Western Cape Government
GDPR	Gross Domestic Product per Region		
GIPTN	George Integrated Public Transport Network		
GM	George Municipality		
GRNP	Garden Route National Park		
GRI	Garden Route Initiative		
GVA	Gross Value Added		
HSP	Human Settlement Plan		
IDP	Integrated Development Plan		
IUDF	Integrated Urban Development Framework		
LSDF	Local Spatial Development Framework		
LUPA	Land Use Planning Act		
MSA	Municipal Systems Act		
MSDF	Municipal Spatial Development Framework		
N/A	Not applicable		
NEMA 1998	National Environmental Management Act 107 of 1998		
NMT	Non-motorised Transport		
NNAR	No Natural Area Remaining		
ONA	Other Natural Area		
PA	Protected Area		

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# 1 Introduction

## 1.1 Purpose of the George Municipal Spatial Development Framework

The purpose of the George Municipal Spatial Development Framework (MSDF), as set out in the Spatial Planning & Land Use Management Act (2013) (SPLUMA), is to:

- a) Interpret and represent the spatial development vision of the municipality – informed by a long term spatial development vision statement and plan;
- b) Represent the integration and trade-off of all relevant sector policies and plans;
- c) Guide planning and development decisions across all sectors of government and specifically the municipality and provincial government in its spatial planning and land use management decisions;
- d) Contribute to a coherent, planned approach to spatial development across the spheres of government;
- e) Provide clear and accessible information to the public and private sector and provide direction for investment purposes;
- f) Include previously disadvantaged areas, rural areas, informal settlements, slums and landholdings of state-owned enterprises and government agencies and address their inclusion and integration into the spatial, economic, social and environmental objectives of the relevant sphere;
- g) Address historical spatial imbalances in development;
- h) Identify the long term risks of particular spatial patterns of growth and development and the policies and strategies necessary to mitigate those risks;
- i) Provide direction for strategic developments, infrastructure investment, promote efficient, sustainable and planned investments by all sectors and indicate priority areas for investment in land development;

- j) Promote a rational and predictable land development environment to create trust and stimulate investment;
- k) Take cognisance of any environmental management instrument adopted by the relevant environmental management authority;
- l) Give effect to national legislation and policies on mineral resources and sustainable utilisation and protection of agricultural resources;
- m) Assist in integrating, coordinating, aligning and expressing development policies and plans emanating from the various sectors of the spheres of government as they apply within the municipal area; and
- n) Outline specific arrangements for prioritising, mobilising, sequencing and implementing public and private infrastructural and land development investment in the priority spatial structuring areas identified. (SPLUMA , 2013)

## 1.2 Role of the Municipal SDF

The George MSDF plays a leading role in the broader municipal planning system. A MSDF is required in terms of both SPLUMA and the Municipal Systems Act (2000) (MSA). The MSA requires an SDF as a core component of the Municipality's Integrated Development Plan (IDP). The IDP drives budget prioritisation and allocation decisions in terms of a rolling five year development plan. The MSDF is the spatial expression of the IDP while at the same time the MSDF couches the IDP within a long term spatial vision for the municipal area that seeks to implement the vision, principles and policy directives set out in national and provincial legislation, strategies, policies and plans. Therefore, decisions made by sectors, spheres and entities of the public sector should be consistent with and work towards realising the vision, spatial strategies and plan set out in the MSDF. Indeed, public sector actors are bound by the MSDF in their actions within the George municipal area.



The MSDF also leads the Municipality's policy-driven Land Use Management System. The MSDF provides the long term spatial framework for decisions made in terms of the Land Use Planning By-Law for George (2015) and George Integrated Zoning Scheme By-Law (2017). These by-laws standardise land use regulations across the municipal jurisdiction aligned to the long term spatial development outcomes sought by the MSDF and its policies. It is important to note that a MSDF does not confer or take away land use rights but guides decisions associated with the award and management of such rights. When deciding on an application, the Municipal Planning Tribunal, or any other authority required or mandated to make a land development decision must make a decision which is consistent with the MSDF (S22 of SPLUMA, 2013).

Figure 2 illustrates key components of the George Municipality's policy-driven land use planning and management system assisting decision-making. Within this system the MSDF provides the overarching spatial vision, principles, structuring elements, strategies and policies within which the Municipality implements its development and service delivery agenda and awards development permissions.

As a tool to promote the objectives of the MSDF, the George Integrated Zoning Scheme By-Law makes provision for "overlay zones". Through the establishment of overlay zones, additional development management provisions (over and above those related to use zones) may be imposed to direct the nature and form of land use and development in a specific area in accordance with the MSDF and more local area planning.

Overlay zones could, for example, be prepared for:

- Heritage areas.
- Sensitive environmental areas such as the coastal management zone
- Significant sections along scenic routes.
- Specific local areas intended for restructuring (e.g. inclusionary housing) or accelerated development

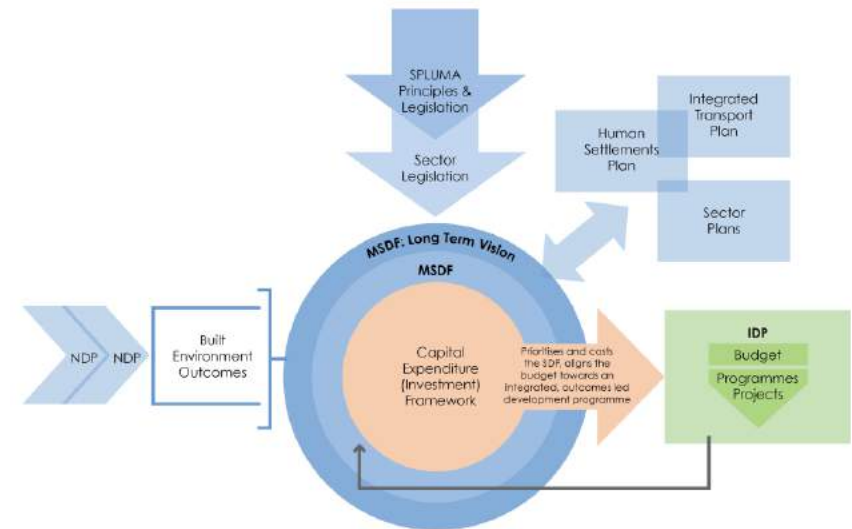


Figure 1: The Municipal Planning System

Importantly, the MSDF not only gives direction to the public sector but also aims to guide private investment decisions in the George municipal area by providing coherent information on the opportunities and constraints to development in the municipal area and offering a vision for sustainable development that will realise long term benefit for the whole of society. Clarity on the where public investment will be made and the objectives that will drive decisions on planning permissions also provides clear signals to investors on the municipality's intent.

### 1.3 Review of the Municipal SDF

This MSDF is a review of the SDF for the George Municipality adopted in 2013, drafted under the Built Environment Support Programme and re-adopted on 31 May 2017 concurrently with the new generation IDP (2017 – 2022). It is a five year review associated with a new term of office of the Municipal Council and its new IDP, as well as the need to ensure alignment with national and provincial planning legislation; namely, SPLUMA and the Western Cape Government's Land Use Planning Act (2014) (LUPA) brought in subsequent to the adoption of the 2013 MSDF. The Integrated Urban Development Framework published in 2016, whose implementation has taken on a particular focus on intermediate cities such as George, is also significant to this review.

In addition to understanding the directives set out by national and provincial policy and legislation as well as local leadership, the approach to the review process resulting in this MSDF was also informed by:

- i. an analysis of development trends since 2013
- ii. new or updated spatial information
- iii. sector planning
- iv. public sector budgeting and municipal long term financial planning, budgeting and associated trends
- v. new research
- vi. the Garden Route (Eden) District MSDF
- vii. Local Spatial Development Frameworks in place for the George municipal area in particular the Ward 24 and 25 LSDF.

The review framework is illustrated in Figure 3.

Public and stakeholder input into the drafting of this MSDF was also an important part of this review.

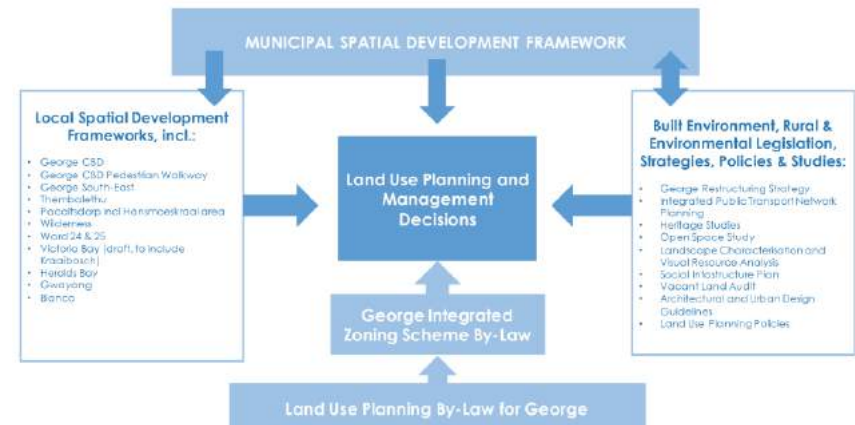


Figure 2: George Municipality's Land Use Management System

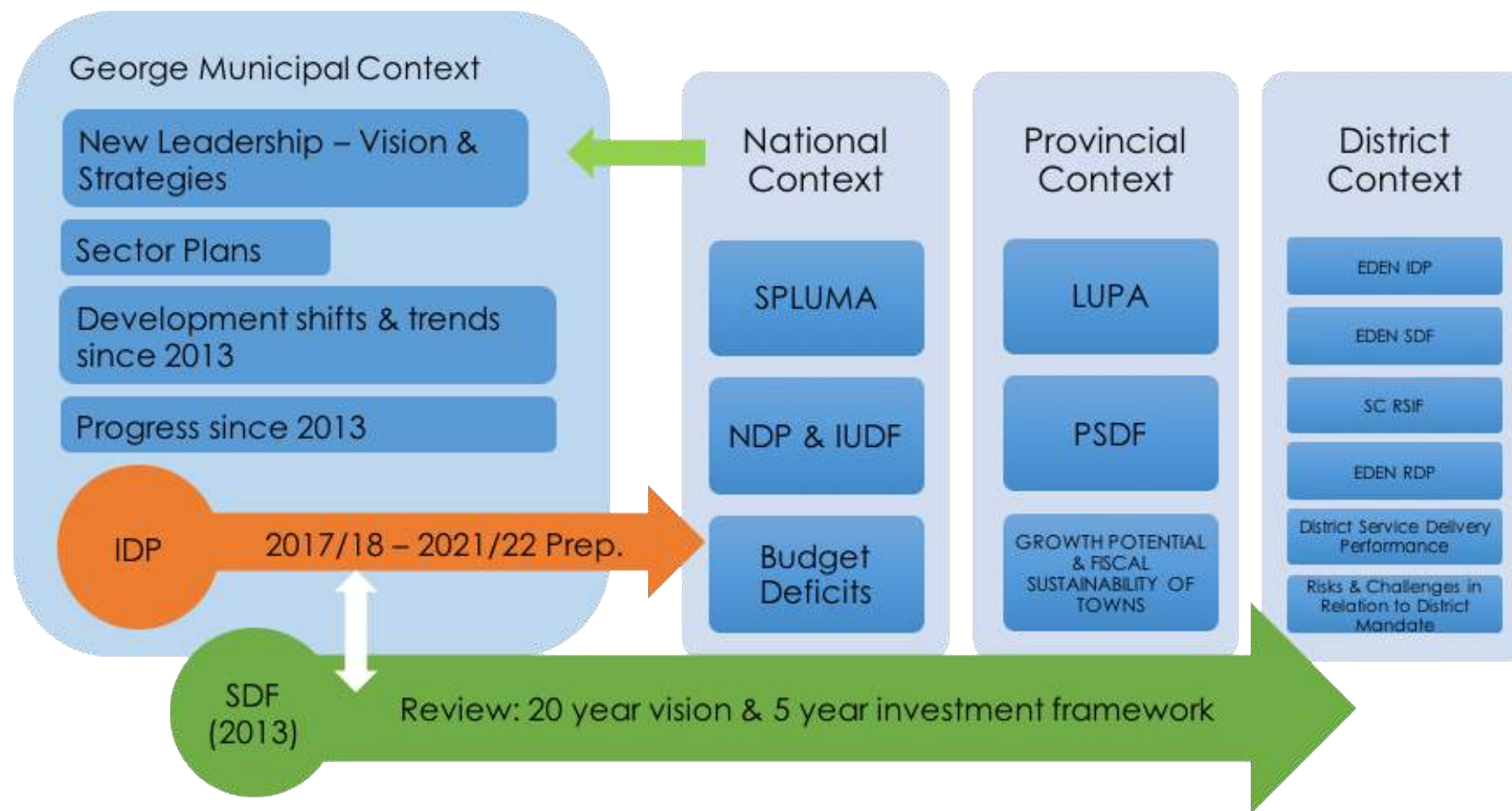


Figure 3: George MSDF Review Framework

## 1.4 Process and Timeframes

### 1.4.1 Review Process

The process followed to prepare this reviewed MSDF is set out in the process plan in Figure 4.

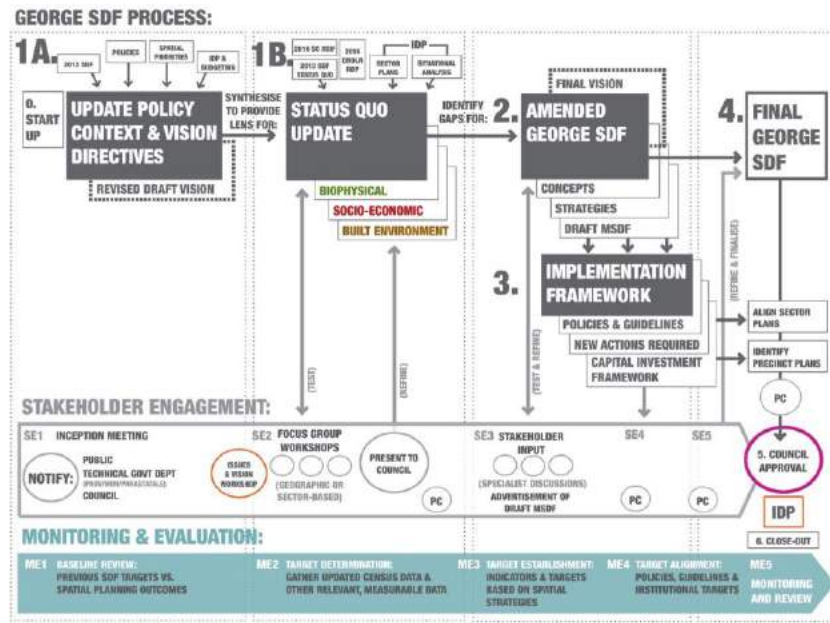


Figure 4: George MSDF Process Plan

### 1.4.2 Public Engagement

In November 2016, the George Municipality gave notice of its intention to review the MSDF. Stakeholders, including the general public, were invited to comment on the 2013 George MSDF, in terms of the Land Use Planning By-Law for George, in preparation for the review.

In the review process, Focus Group sessions were held to engage with interested and affected parties on themes identified as strategic to the review of the MSDF; including, urban growth and densification, housing, rural development and heritage.

In October – December 2018 the draft reviewed MSDF was formally published and advertised for public comment and input in terms of the statutory public participation requirements set out in the LUPA and the Municipal Planning By-Law. A number of open days were also held to present an overview of the draft reviewed MSDF and engage in discussion thereon. Extensive comment and input was received. A record of this and the Municipality's response is available.

### 1.4.3 Process and Timeframes

The MSDF review process was initiated in April 2017. This process included the following phases and key milestones:

**Phase 1A:** Policy Context and Vision Directives

**Phase 1B:** Status Quo Baseline - Context, Role and Issues

**Phase 2:** Draft George MSDF - Review and Update of Spatial Proposals (this phase includes setting up and applying the Fiscal Impact Tool for George)

**Phase 3:** Final George MSDF - Amendment and Action Plan

**Phase 4 and 5:** Endorsement and Adoption of Final George MSDF and Action Plan

## 1.5 Document Structure

This report structure is broadly in alignment with the DRDLR Guidelines for Spatial Development Frameworks. It consists of six parts, each of which contain the following:

- a) An overview of the George Municipality including Municipal Strategy and Planning Context.
- b) A synthesis of the vision directives and the status of key development issues and their spatial implications. This is the result of an exercise preceding the drafting of this MSDF that sought to take stock of the policy context and what directives this gives to George in the formulation of its spatial development vision. It is also the result of a scoping of development issues and trends on the basis of a set of key socio-economic and built environment variables, as well as an assessment of new or changed information associated with relevant built environment and biophysical spatial elements.
- c) The **Municipal Spatial Development Framework**: This section includes the Spatial Vision, the Spatial Concept – the spatial elements that structure the desired organisation of development and activity in space in George - and spatial policies to guide land use planning, management, regulation and investment decisions in the Greater George Area, organised around three spatial strategies that support the spatial development vision. Within each of the three strategies there is a stated objective of the strategy, and in the finalisation of this MSDF, an indication will be given of how the municipality intends to measure the successful implementation of the policies.
- d) An Implementation Framework, including a Capital Investment Framework and work towards a Capital Expenditure Framework.
- e) Conclusions and recommendations associated, in particular, with the future review of this MSDF and its impact on sector planning.

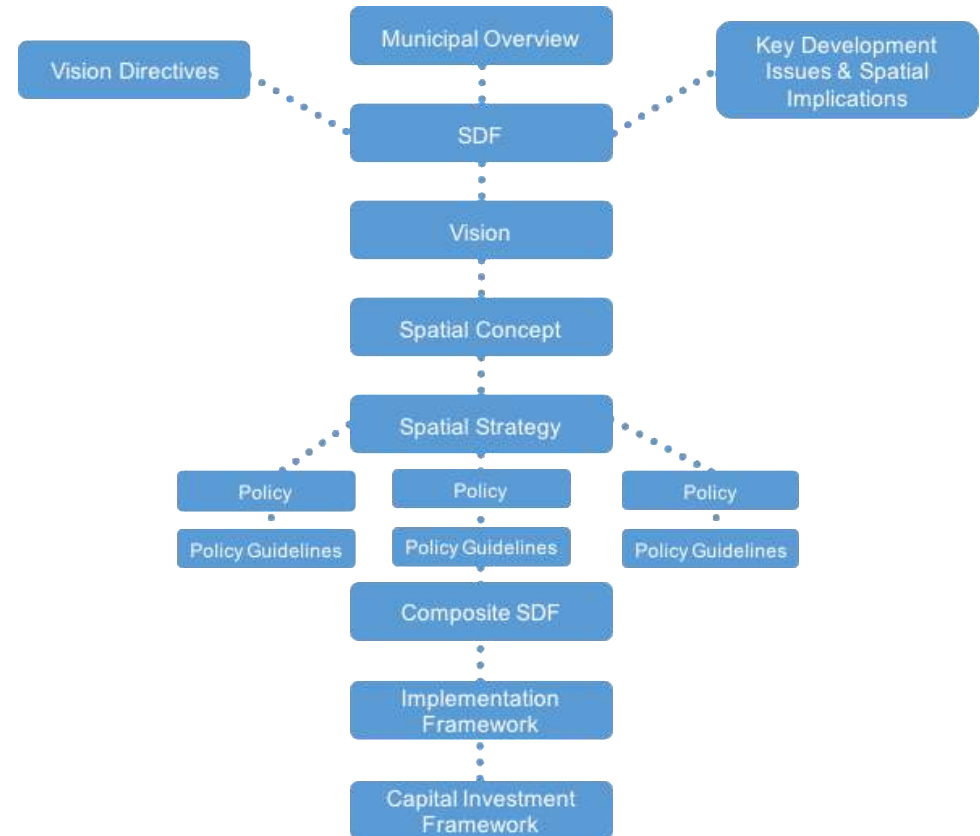


Figure 5: Document Structure



## 2 Overview of George Municipality

### 2.1 Location and extent

This MSDF for George applies to the whole of the Municipality's jurisdictional area. The municipal area is 5191km<sup>2</sup> and spans the Southern Cape and Little Karoo regions of the Western Cape Province and is situated halfway between Cape Town and Port Elizabeth. The area administered by the George Municipality forms part of the larger Garden Route District Municipality's jurisdictional area.

George Municipality administers a vast and diverse geographic area that extends from the dry and climatically extreme Little Karoo in the north, to the wetter more temperate Garden Route in the south. It is an area of considerable natural assets and beauty, including: expansive mountains and forests, wilderness areas, a varied coastline, and extensive lakes, rivers and estuaries. Its natural assets include parts of the Garden Route National Park and the Baviaanskloof Wilderness Area. The municipal area also includes fertile farmlands and timber plantations along the coastal plain, fruit orchards in the Langkloof and arid grazing areas in the Little Karoo.

Three important national roads/ routes, the N2, N9 (R62) and N12, traverse the area, and George regional airport serves the Southern Cape and Little Karoo, including the neighbouring towns of Mossel Bay, Oudtshoorn, Knysna and Plettenberg Bay. The George city area is the primary urban centre of the Municipality. 84% of the municipal area's population is located here. Wilderness, Uniondale and Haarlem respectively host the bulk of the remaining urban population. 9% of the municipal area's population is rural. The rural population is declining evidenced by a negative population growth rate per annum of -4% between 2011 and 2016 (StatsSA, 2016).

According to the Western Cape Government/ Statistics SA, in 2011 the total population for George was estimated at 193 672. The 2016 Community Household Survey estimated George's total

population be 204,197 people or 61,441 households. The estimated population in 2018 was 212,314. It is projected that the population will grow to 248,779 people by 2023 and 257,318 people by 2028 (in approximately 10 years time). A declining population growth rate per annum is evident, with the rate having dropped from a rate of 2.6% between 2001 and 2011 to 1.1% between 2011 and 2016. Conservative projections suggest that this growth rate may pick up slightly to 1.6% per annum between 2016 and 2023. The majority of the municipality's population is of working age and the dependency ratio is declining (George Municipality, 2018). The municipality's population is primarily located in the George city area, refer to Figure 6 for the distribution of population across the municipal area.

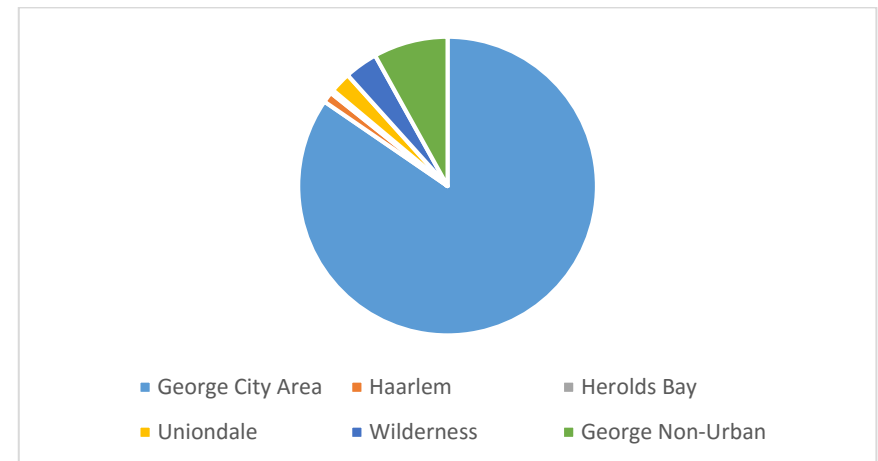


Figure 6: Population Distribution in the Greater George Area (Community Survey, 2016)

The current settlement pattern in the municipal area is dominated by the George city area as the primary regional service centre, and a number of much smaller towns, villages and hamlets which are based on agricultural and forestry activity, tourism and recreation, and the retirement market.

How the functionality of rural areas and accordingly, the wellbeing of the rural population, is supported will have a direct impact on the pressure felt by the urban areas to house people and to provide services. This MSDF aims to balance its attention between the urban and rural. At the same time, the clear concentration of most of the municipality's population in the George city area justifies a focus on this area, within the context of the municipal area as a whole.

In this report the “Greater George Area” refers to the whole municipal area.

The “George city area” refers to the urban agglomeration or the regional urban centre of George.



Map 1: The Greater George Area (Source: George Municipality, 2013)

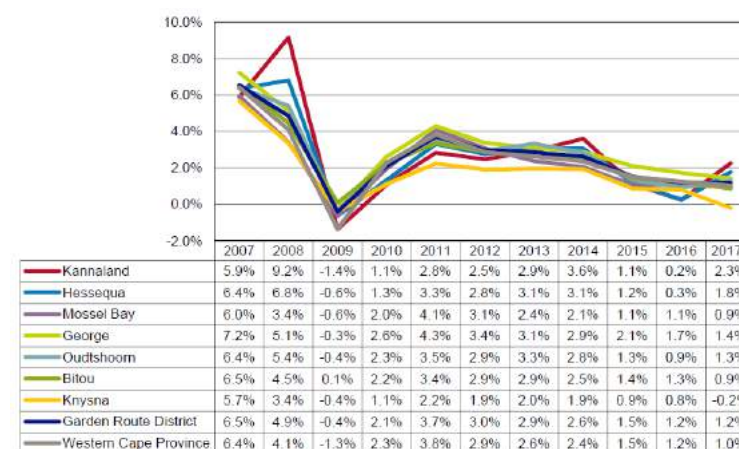
## 2.2 Regional Context

The George Municipality is one of the seven municipalities that make up Garden Route District Municipality. Economically it is one of the higher performing areas in the Western Cape Province. George Municipality has a significantly higher population than its neighbouring municipalities. Although, neighbouring municipalities such as Bitou are experiencing higher growth. Employment data compiled in 2015 suggests that George is the largest contributor to employment within the district (36%), contributing 39,7% of the District's GDP in 2016 with a slightly faster estimated in 2017 growth rate than the district and the province. However the growth rate is declining and the estimated 1.4% GDP growth in 2017 is lower than the average five year GDP growth rate of 2.3% (Western Cape Government , 2018).

The Western Cape Government's Growth Potential of Towns Study (WCG, 2014), indicated that George Municipality had very high growth potential in relation to towns within the Province. The Garden Route District SDF proposes that more robust infrastructure systems within George and Mossel Bay are better positioned to sustainably absorb settlement growth in the district than the neighbouring municipalities within the region.

The economy of George Municipality is interdependent with the regional economy. George dominates the regional economy and has the basis to perform better and create more jobs for those living in the region. In its role as a service centre, it is also reliant on the region to generate demand for services and beneficiation that will stimulate its growth.

The performance of the region as a whole in relation to its natural resources, agricultural economy and accessibility, impacts directly on how well George performs in terms of servicing its population and attracting tourism and investors.



Source: Quantec Research, 2018 (e denotes estimate)

Figure 7: George's Share of the District Economy (Western Cape Government , 2018)

Sector	Contribution to GDP (%) 2016	R million value 2016	Trend		Real GDP growth (%)						
			2006 - 2016	2013 - 2017e	2012	2013	2014	2015	2016	2017e	
Primary Sector	4.3	680.6	1.8	0.3	1.2	1.8	6.9	-2.6	-7.7	3.0	
Agriculture, forestry and fishing	4.1	652.9	1.8	0.2	1.2	1.7	6.9	-2.7	-7.9	2.8	
Mining and quarrying	0.2	27.7	1.2	4.4	2.0	3.9	7.9	0.5	1.2	8.5	
Secondary Sector	24.1	3 858.8	2.0	1.1	2.1	2.0	1.1	0.7	1.2	0.4	
Manufacturing	15.0	2 391.2	2.4	1.5	2.8	2.0	1.2	1.0	2.1	1.1	
Electricity, gas and water	3.5	554.0	-1.7	-1.7	-0.9	-1.7	-1.7	-2.5	-2.7	-0.1	
Construction	5.7	913.6	3.5	1.3	1.7	3.9	2.4	1.5	0.2	-1.4	
Tertiary Sector	71.6	11 448.7	3.7	2.7	3.9	3.6	3.1	2.8	2.5	1.6	
Wholesale and retail trade, catering and accommodation	18.3	2 920.2	2.7	1.6	4.2	2.6	1.7	2.1	2.1	-0.6	
Transport, storage and communication	11.5	1 845.1	4.1	3.1	3.5	3.9	4.7	2.3	2.2	2.7	
Finance, insurance, real estate and business services	26.7	4 275.5	4.9	4.0	4.7	4.4	4.0	4.6	3.7	3.2	
General government	8.9	1 425.4	2.5	1.0	2.3	3.3	2.3	0.1	0.2	-0.7	
Community, social and personal services	6.1	982.5	2.0	1.5	2.3	2.2	1.6	1.0	1.5	1.1	
<b>Total George</b>	<b>100</b>	<b>15 988.1</b>	<b>3.2</b>	<b>2.3</b>	<b>3.4</b>	<b>3.1</b>	<b>2.9</b>	<b>2.1</b>	<b>1.7</b>	<b>1.4</b>	

Source: Quantec Research, 2018 (e denotes estimate)

Figure 8: George GDP performance per sector, 2012 - 2017

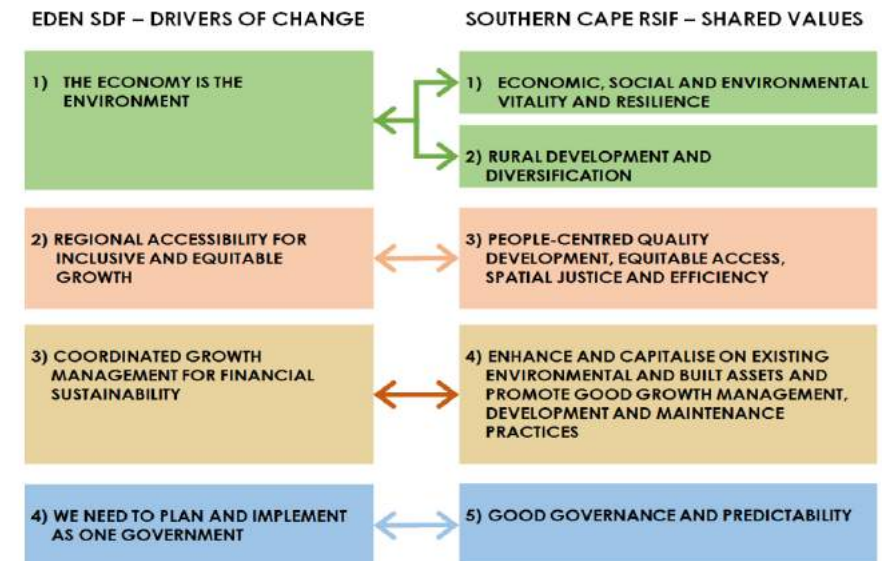
Specifically, regional or inter-municipal coordination concerns for spatial planning in the George municipal area relate to:

- Consistent management of the coastal system
- Maintaining and managing the integrity of the open space systems
- Understanding the regional settlement hierarchy and managing the major nodes and their sustainable growth related to one another
- Development of the R62 as an important mobility and tourist route for goods and people
- Protection of cultural and scenic landscapes, routes and passes

The Municipality's infrastructure and governance systems are established and relatively well managed, placing an expectation that it will continue to play a leading role in driving economic and employment growth and absorbing settlement growth within the region. George also has a leading role in resolving regional challenges, such as convenient access to and mobility through the region, waste management, disaster risk management, space for cemeteries and water security.

The draft Synthesis Report of the Regional Spatial Implementation Framework for the Garden Route District identifies a series of regional values, all of which are relevant to the George MSDF. These are outlined in Figure 9:

**Figure 9: Garden Route District SDF Spatial Drivers of Change and the Southern Cape RSIF Shared Values**





## 2.3 Municipal Strategy and Planning

### 2.3.1 Vision

George Municipality's vision, as encapsulated in its 2017 – 2022 Integrated Development Plan (IDP), is to be 'a city for a sustainable future'. To this end 5 Strategic Goals are identified.

For all of the citizens of George, to:

- Develop and grow George
- Keep George clean, safe and green
- Deliver affordable quality services
- Participate in George – participative partnerships
- Ensure good governance and human capital in George

In fulfilling its local government service delivery mandate, the IDP commits the Municipality to "live our values, focus on citizens, work smart, act like owners and be the brand."

Besides fulfilling its constitutional mandate and complying with applicable legislation, the IDP commits the Municipality to contribute to the development objectives of national and provincial government, as well as to Garden Route District Municipality's agenda.



Figure 10: Municipal Vision, Mission, Strategic Goals and Organisational Values (George Municipality, 2019)

### 2.3.2 Integrated Development Plan

The objectives of the three strategic goals most relevant to the MSDP are summarised in the Table 2 adjacent. The IDP articulates alignment of the objectives summarised below with national and provincial strategies, key performance areas and outcomes:

**Table 1: George IDP 2017-2022 Strategic Goals and Objectives**

<b>Strategic Goal 1: Develop and Grow George</b>
<ul style="list-style-type: none"> <li>• To create and facilitate an enabling environment for economic development in George</li> <li>• To ensure the development of participatory, practically implementable economic development and business retention and expansion strategies.</li> <li>• To ensure that industry support is focused on high-growth potential areas, with high job absorption ratios</li> <li>• To leverage construction industry potential through strategic housing related projects</li> <li>• To focus on building a revitalised and interactive CBD through a City Improvement District</li> <li>• To establish incubators, clusters and centres of excellence to contribute meaningfully to the demands of a growing economy</li> <li>• Red-tape reduction at all administrative levels</li> <li>• To establish a Science Park</li> <li>• To swap strategic land and buildings with other government departments to unlock economic potential.</li> <li>• To promote George as a sports tourism and business destination.</li> <li>• To identify an educational and research hub and to facilitate the continued growth of NMMU in George.</li> <li>• To improve planning and regulatory frameworks to encourage job creation.</li> </ul>

<b>Strategic Goal 2: Safe, Clean and Green</b>
<ul style="list-style-type: none"> <li>• To ensure that maintenance and cleaning within the physical environment remains of the highest standard</li> <li>• To ensure the development of a desirable and quality living environment that fosters the safety and welfare of the community concerned, preserves</li> <li>• The natural and cultural environment, and does not impact negatively on existing rights.</li> <li>• To develop a focused strategy on greening the city</li> <li>• To increase the roll-out and maintenance of street lights for improved safety</li> </ul>

<b>Strategic Goal 3: Affordable Quality Services</b>
<ul style="list-style-type: none"> <li>• To ensure infrastructure planning &amp; development keeps pace with growing city</li> <li>• To ensure proper asset management</li> <li>• To preserve resources and ensure sustainable development</li> <li>• To deliver services relevant to unique rural environment (New wards 24 and 25, old District Municipal Area )</li> </ul>

### 2.3.3 Municipal Financial Sustainability

Development patterns play a key role in driving municipal finances – capital and operating costs and maintaining the balance between costs and generating the income to pay for these costs.

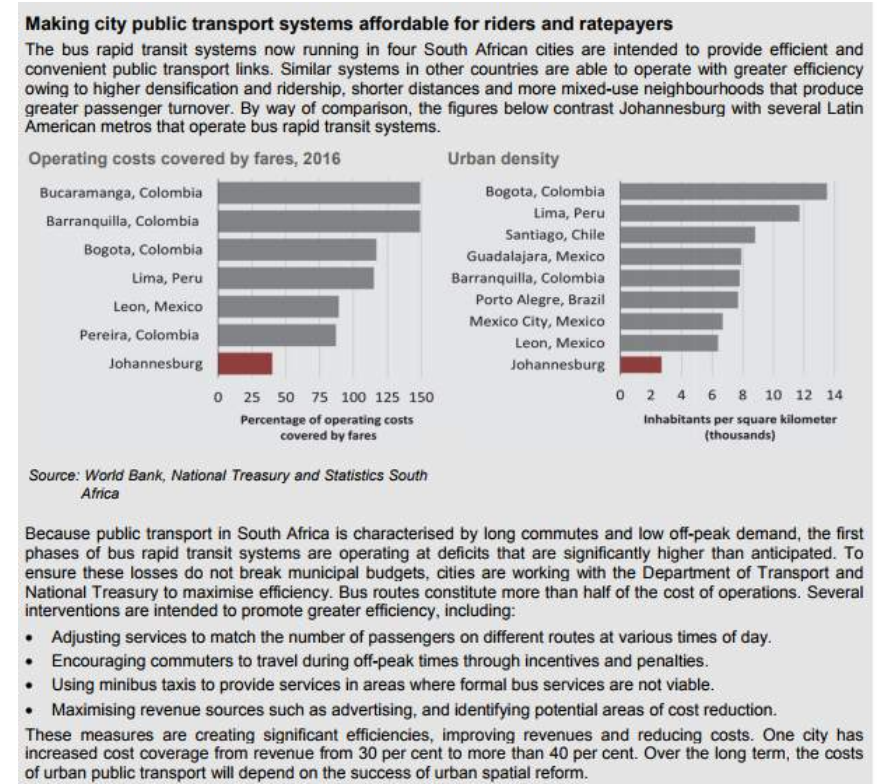
The drivers of operating costs in municipalities include:

- Travel time from main economic centres
- Settlement patterns (including levels of urbanisation)
- Scale and topography
- Population Size and Household Growth
- Poverty and unemployment (SALGA, 2016)
- Low infrastructure standards in state subsidised housing projects

Currently George is to some extent able to meet its operating needs from its revenue. The Municipality's dependency on transfers from national and provincial government, which enables the subsidisation of servicing indigent households and other services such as libraries, is less than a quarter of its operating budget. However, operational resources that would allow for its optimum functioning are not necessarily made available; for example in the operations of its waste water recycling facility and in adequately providing for repairs and maintenance, a critical requirement to ensure sustainability of existing assets (infrastructure).

There are a number of pressure points in respect to George's operational sustainability. GoGeorge is an important asset in the municipality, which has given it a competitive advantage. It is one of the primary municipal services supporting the growth and resilience of George. GoGeorge is almost entirely reliant on national and provincial public transport operating subsidies. The ongoing availability of these subsidies is not certain. This MSDF must contribute to increasing the sustainability of this public transport system over time by promoting land uses that support public transport viability. In the 2017 National Budget Review, the direct and unequivocal relationship between public transport

financial sustainability and urban density was recognised (National Treasury Budget Review 2017). National Treasury is actively seeking to reduce the financial burden associated with public transport operations functioning in low density settlements.



**Figure 11: Making City Public Transport Systems Affordable for Riders and Ratepayers (Source: World Bank, National Treasury & Statistics South Africa)**

George's Long Term Financial Plan, 2016 indicates that by 2026 its real per capita revenue will be less than the current revenue per capita based on a growth in indigent households and marginal economic growth prospects. Need for public investment will continue to grow based on the needs of the growing population (many of whom will require subsidisation), the need for

maintenance and upgrading and the need for investments that stimulate development.

It is important to note that the way in which George develops and maintains a balance between the operational obligations of the Municipality. Its ability to generate revenue to fund and deliver on these obligations in a manner that maintains affordability, will develop disadvantaged communities and stimulate growth. Operational efficiencies must be sought to release resources for value adding services and activities that will boost George's social development, economic prospects and allow for resources to be on stand-by to secure George's resilience. At present, the area within the urban edge of George city has extensive public and private vacant and under-utilised land – this limits the efficiencies that can be gained.

From a capital investment perspective, George is currently **not** able to meet its capital investment requirements in terms of the new infrastructure needed for the existing community or asset management requirements of existing and planned infrastructure. It has therefore put measures in place to ensure that funding can be set aside to ensure sufficient capital replacement reserves. 68.5% of the Municipality's capital budget is grant funded. The extent to which this can continue is also not certain in light of weak economic growth nationally and the impact this has on tax revenues. There is a pattern of decline in transfers from provincial government over the medium term.

National government funding relates primarily to the Municipality's equitable share of the country's tax revenue and public transport network funding. The Western Cape Government (WCG) is also a significant investor in George. Substantial investment is made on an ongoing basis into health and education in the municipal area, as well as public transport operations associated with these services. The WCG also provides significant operational subsidisation of GoGeorge.

Efficient urban form in particular is a significant concern for the WCG's ability to sustain quality education and health services and to keep up with growth and resultant demand. Currently it is focussed on catching up with existing, historical demand and rationalising services to sustain service delivery. Urban expansion is not supported by these departments, who are already overcommitted and failing to address backlogs. Grants are increasingly becoming conditioned on compliance with strategic goals.

At the same time, the WCG is the main developer of state-subsidised human settlement in the municipal area. These developments are the main driver of urban sprawl in the municipality and outweigh, in volume, private sector housing delivery substantially. The quality of infrastructure installed in these developments is presenting the Municipality with challenges. The servicing / operational costs of these newly developed areas are subsidised by the equitable share on the basis that households cannot afford to pay rates. It is crucial that the WCG is guided by the municipality on where these developments should take place to ensure implementation of its spatial development vision, to ensure operational efficiencies and sustainability which empowers the Municipality to progressively integrate these areas into the rates base of the Municipality. If this is not done, these developments could remain poverty traps, marginalised from economic development opportunity.

George is currently managed well, but there is no fiscal space for a major outward growth agenda that extends the capital and operating funding burden on the Municipality and Provincial Service departments locally or nationally. The MSDF must pursue a strategy of strengthening the basis for George's financial sustainability, as a very important foundation for its growth and resilience. Sustainable urban growth management is key to this. This includes making the most of and improving existing resources and infrastructure, providing service levels that protect existing investments and infrastructure and positively encouraging investment to support this approach. Ideally, the private and public

sectors should actively partner one another in this effort. Urban growth that is efficient and productive will allow for real and inclusive economic performance, supported by a sustainable municipal government, and will ensure the sustainable use of scarce resources. This will enhance George's resilience or in other words, reduce George's vulnerability.

#### ***2.3.4 Sector Strategies, Policies & Masterplans with Spatial Implications***

The sector plans associated with George's IDP and their priorities are summarised in Table 2. This MSDF seeks to support and reinforce these priorities.

The Water, Wastewater and Electricity Master Plans are based on the 2013 George MSDF. These are under review and will need to be informed by this MSDF. The MSDF will play a key role in guiding the finalisation of the Human Settlements Plan and in the review of the Comprehensive Integrated Transport Plan (CITP). The alignment of these plans to the vision, strategies, policies and proposals set out in this MSDF will be critical for the successful implementation of the MSDF.



**Table 2: Relevant George Municipal Sector Plan Priorities**

Sector Plan	Status	Priorities
Economic Development Strategy	2012	George's natural endowment is its comparative advantage
Comprehensive Integrated Transport Plan	2014/15 CITP to commence review in 2018/19	Land use & transport corridor integration Reduce car usage Non-motorised transport
Infrastructure Master Plans <ul style="list-style-type: none"> <li>• Sanitation</li> <li>• Water</li> <li>• Electricity</li> <li>• Waste</li> <li>• Roads</li> <li>• Integrated Public Transport Network Plan</li> </ul>	In place  In place Update underway 2014 Report under review  2006 To be updated 2018	Address backlogs and needs of informal settlements Improve quality Address backlogs and needs of informal settlements Address backlogs and needs of informal settlements Increase capacity & improve Integrated Waste Management & Recycling Informal Settlements Identify necessary road network linkages and hierarchy based on updated land use modelling Pro-poor public transport service delivery
Human Settlements Plan	Draft	Densification of activity nodes Re-development of poorly served areas Investment in gap housing, rental stock & site & service
Disaster Management Policy Framework		Fire is the greatest risk Natural Phenomena

## 3 Status Quo Synthesis

### 3.1 Vision Directives

SPLUMA states that all spatial development should conform to the following normative principles:

- spatial justice,
- spatial sustainability,
- spatial resilience,
- efficiency, and
- good administration

Municipalities have a strengthened mandate from SPLUMA to be bold and brave in managing growth and have an obligation to heal the spatial apartheid legacy

A review of the national, provincial and district policies suggests clearly that in an environment of increasing resource constraint, risk and resulting fiscal pressure:

- George must seek sustainability and resilience
- Growth must be smart, productive – it must be focussed – building on its existing investments
- Plans must be evidence based, achievable and affordable – make what we have, better!
- Plans and their implementation must be inclusive and transformative – making lives better for the poor

The primary levers for achieving SPLUMA principles include:

- Public transport and supporting road infrastructure
- Adequate bulk services (water and sanitation)
- Settlement restructuring – integrated human settlements
- Growth management – compact urban form
- Understanding the space economy
- Sustainable public finances

### 3.2 Key Development Issues and Spatial Implications

At the municipal scale, the key challenge is to manage the development and growth of the urban settlements to ensure ongoing sustainability and affordability whilst providing for the needs of the communities. Maintaining a balance between the need to deliver services and develop and grow the economy, within both the urban and the rural context, is critical.

The task remains to undo the spatial legacy of segregation and the inequitable allocation of resources left on the towns, villages and farms in the Greater George Area, and provide humane and enabling living environments for all. This is a catch up process, while settlements continue to grow to varying extents, with the George city area experiencing most of the growth, as urbanisation continues and new needs must be met, in a manner that strengthens the economy rather than weighing it down.

Climate change, resource insecurity, shifting patterns of farming displacing farmworkers and broader economic trends mean that the agricultural sector is playing a smaller role in the economy than it was in the past, but nevertheless, presents latent potential. In the meantime, rural populations increasingly resettle in urban areas and rural land in proximity to the George city area, in particular, falls prey to speculation, challenging on an ongoing basis efforts to maintain an efficient urban form (Refer to Figure 11 for more information).

As the main centre of the Municipality's population, services and employment, the George City Area needs to be restructured to integrate and enhance peripheral townships into the larger space economy of the city so that it functions more equitably and efficiently, with all of the opportunities that city living should bring.

George's housing backlog is significant but the figures differ significantly between the Western Cape Government's

Department of Human Settlements and the George Municipality, from in the order of 17,000 to 22,000. Neither are verified databases, making it difficult to plan accurately for the right kind of housing opportunities in the right location. Household sizes are dropping and this impacts on the appropriate form of housing needed considering the needs of single people and single headed households in particular. The current housing pipeline is focussed on large scale projects on the periphery of the George city area exacerbating isolation, inefficiencies and densities that struggle to support thresholds for economic investment. George's human settlement programme will be key, alongside its economic growth strategies, in determining to what extent it realises a demographic dividend or not. George's potential to get this right lies in the fact that there is significant, better located public land that can be developed for affordable housing in various forms.

Just over half of George's households earn below R50,000 per annum (George Municipality, 2018). Unemployment is high. It is important that people settle in a manner that reduces, as far as possible, their cost of living in terms of access to services and job opportunities, etc. The better located people are the more likely they are to access jobs or opportunities to enhance their ability to apply for jobs and/ or to generate an income in the informal sector. The informal sector is a growing source of income for George's households.

Settlement form impacts on the economy and economic opportunity, it is part of the solution to turning George's demographic challenge into a demographic dividend and is thus a priority informant in this MSDF as a mechanism to support economic inclusion and growth.

The George City Area currently comprises disparate urban areas, as shown in Map 3, and has the following spatial characteristics:

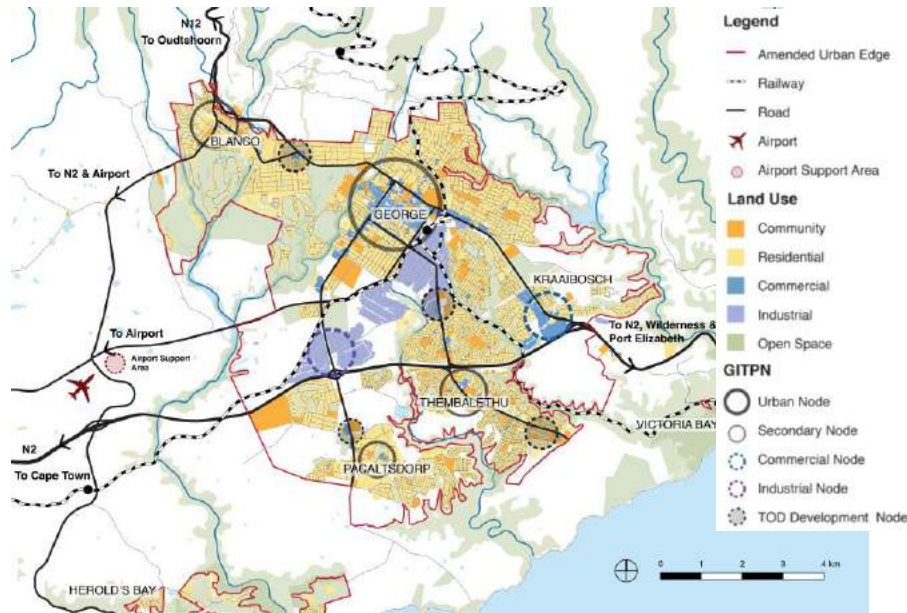
- An "old" town, relatively well off in terms of access to opportunity, commercial activity and public facilities.

- The space economy is concentrated in a triangle of opportunity comprising of the existing CBD Business node, the emerging Kraaibosch / Blue Mountain Commercial Node, and the Pacaltsdorp Industrial Node (See Map 3: The Existing Spatial Structure of the George City Area).
- Less well-off areas encircle the George CBD to the south and south-east mainly serving as dormant neighbourhoods with little economic opportunities, namely:
  - The older settlements of Blanco and Pacaltsdorp.
  - George South East (north of the N2).
  - The newer area of Thembaletu.
- A gradual shift of commercial development away from the old CBD focused on York Street, towards Courtenay Street and "mall" type developments closer to the N2.
- The N2 forming a major barrier between poorer neighbourhoods in the south and better resourced neighbourhoods in the north.
- Increased and significant "estate" type development in the vicinity of Herold's Bay, Kraaibosch and Kingswood.

The MSDF needs to give direction to facilitating George's transformation from an agglomeration of separate urban areas, into an integrated city that is underpinned by a thriving service economy and offers all residents access to the benefits of city living. The public transport corridors and well located publicly owned vacant and underutilised land are the primary spatial levers for this.

While the municipal systems tend to be urban in their focus, George is made up of an extensive rural area. In the Greater George Area the challenge is to be sensitive to the needs of rural settlers to settle in a manner that is dignified, secure and respectful of the desire of households to remain living in a rural environment and in harmony with the rural and agricultural economy and landscape. While at the same time, the Municipality has to be pragmatic about the means and tools with which the municipality and other organs of state can assist these households and wary of

the exploitation of the needs of these households by private property development interests that would require significant public subsidisation.



**Map 2: The Existing Spatial Structure of the George City Area: Land Use Zoning, Nodal Activity Centres and Primary Movement Network**

Five strategic municipal-wide spatial issues were identified in the process of reviewing the 2013 MSDF that have underpinned the approach to this MSDF:

- A better balance is required between consideration of the urban and rural development and management needs in the MSDF, noting the logic of an equitable focus on where most people reside in the municipality, and particularly many poorer people, as well as where the potential for development and growth is tangible.
- The MSDF needs to give clear direction – is the priority to densify, restructure and renew areas within the George city area; or, is it to yield to pressure for urban expansion, including substantial human settlement projects on the periphery of the built footprint of the George city area and speculative proposals for isolated residential estates? Clarity is needed within the context of substantial investment in GoGeorge and the urban form required to improve its operational sustainability.
- At the same time, George's position in the regional economy requires it to play a primary role in generating employment and enabling settlement and access to high quality social services. George's approach to creating settlement opportunities for poorer citizens is key in efforts to promote greater integration, inclusion and economic opportunity for these citizens.

### The fiscal impact of centrally located vs. peripheral public housing development

As part of the preparation of this MSDF, the Municipality commissioned research using the National Treasury's Fiscal Impact Tool to understand the comparative fiscal impacts for households and the state of two hypothetical public housing projects, one on a well located municipal site and the other on the periphery of Thembalethu.

On the well located municipal-owned site, households incurred 29% less cost because of the greater asset values of the subsidised housing unit and reduced travel costs. The municipal cost implication for both settlements is equivalent for the two case studies, but it is notable that over 20-years these developments will not cover their costs and remain a net loss to the municipality. The state incurs 12% more cost on the centrally located site because of the assumed higher value of the properties built there. The levels of state subsidy into these developments is significantly higher than the municipal subsidy levels.

#### Other indicators for the public peripheral and central development comparison:

	Well located	Peripheral
Initial capital requirement (water, sanitation, solid waste and electricity) (R million)	7	14
Total capital requirement (water, sanitation, solid waste and electricity) (R million)	84	152
Additional tons CO <sup>2</sup> (from transport) (tons/capita)	490	884
GVA from construction, operations and maintenance (R million)	3 291	3 065
Employment from construction, operations and maintenance (person years)	20 254	17 331
Average increase/decrease in travel time over 20 years (mins/day)	2	4
Economic cost of total travelling time (R million)	517	486
Maximum % of household income spent on transport in year 20	5%	16%

The table shows that, as for the private development case studies, the peripheral public development requires greater up front and long-term capital investment than the central location because of the existence of infrastructure networks. The environmental impact of transport from the periphery of Thembalethu is almost double that of the centrally located site because of travel distances and available modes of transport. GVA and employment is slightly higher for the well located development, but not significantly so. Increase in travel time is relatively insignificant and the economic cost of travel time is relatively low because of low assumed monthly income. Probably the most significant finding from the public housing case studies is that the maximum monthly percentage of income spent on transport from the peripheral project is three times higher than that of the more centrally located site. This is likely to place a heavy financial burden on households in this peripheral location. Households who can ill afford this burden.



### The fiscal impact of centrally located vs. isolated private development

The overall Net Present Value results for the two private developments indicate, as one would expect, that the bulk of the costs are borne by the private households and businesses who will purchase the properties and pay rates, tariffs and transport costs. Households located in the isolated development will incur costs effectively double that of household living centrally in the George City Area because of the increased link infrastructure costs (assumed to be passed onto households through the developer) and increased transport costs.

Municipal costs involve bulk infrastructure and long-term service provision, while revenues include development charges, service charges and property rates. While the absolute costs and benefits to the municipality for the two private case studies are small and effectively represent the municipality breaking even over the 20-year period, it is notable that the municipality would make a small loss on the isolated development because of the increased costs of service provision (even after property rates and service charge revenue), while the municipality would make a small profit on the centrally located development.

The State incurs costs on both private developments because of investments in national and provincial roads, education and health.

### Other indicators for the private isolated and central development comparison

	Central	Isolated
Initial capital requirement (water, sanitation, solid waste and electricity) (R million)	2	23
Total capital requirement (water, sanitation, solid waste and electricity) (R million)	33	171
Additional tons CO <sup>2</sup> (from transport) (tons/capita)	2 712	7 744
GVA from construction, operations and maintenance (R million)	1 835	1 908
Employment from construction, operations and maintenance (person years)	15 535	16 018
Average increase/decrease in travel time over 20 years (mins/day)	4	11
Economic cost of total travelling time (R million)	1 108	2 700
Maximum % of household income spent on transport in year 20	4%	17%

The table above presents a range of other indicators for the two private development case studies. The first two indicators reflect the fact that the isolated development has no existing connection to bulk water supply and sanitation networks, and a greater amount of investment would be needed immediately, as well as over the entire development period. The central site is much better served with existing infrastructure, but some investment is still needed. The isolated development has a far greater impact on the environment because of the greatly increased travel distances and lower NMT usage. The economic impacts on GVA and employment are similar for the two sites. Daily travel time from the isolated site is likely to increase by 11 minutes per day over 20 years, versus an increase of only 4 minutes for the central site. The economic cost of this travel time difference is R1.6 billion over 20 years. Whereas the maximum percentage of household income spent on transport in the centrally located development is 4% of monthly income, in the other, this can be as much as 17% for the lowest income household in the development.

- The importance of spatially focussing public investment in such a way as to attract private and household investment that reinforces the priority public transport corridors and nodes along these corridors. Clear policies are needed to achieve the articulated densities that will assist the sustainability and consolidate the basis for growth in these corridors and nodes, off the back of the broader benefits of transit-oriented or transit-adjacent development. A high quality, affordable public transport system is key to overcoming spatial barriers through enhanced, inclusive accessibility, especially where it is an ongoing struggle to redirect private investment patterns towards disadvantaged areas – high quality public transport investment can be a catalyst for change.
- As more knowledge, experience and data has been accumulated, the MSDF can promote adaptation to the impacts of climate change more effectively and specifically through its spatial policies; in particular, for example, associated with policies aimed at the protection of river corridors, integrated coastal management and veld fire risk management. Major vulnerabilities that are presently, and are likely to be experienced in the George municipal area; include:
  - extreme heat and water availability (reduced rainfall) resulting in for example, food insecurity and impermeable surfaces as a result of droughts increasing flooding of estuaries and floodplains;
  - sea level rise;
  - increasing frequency and intensity of storms and storm surges;
  - wildfires;
  - high winds, etc.

As more knowledge, experience and data has been accumulated, the MSDF can promote the mitigation of the

impacts of climate change more effectively and specifically through its spatial policies, in particular, for example, associated with integrated coastal management, and veld fire management.

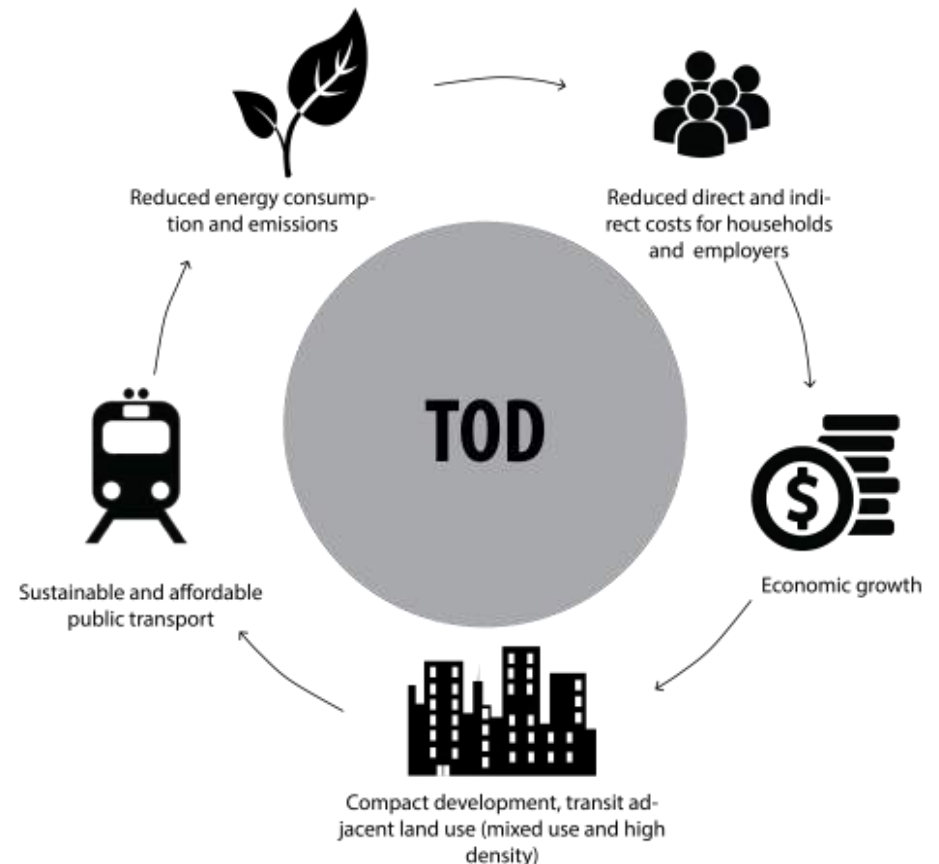


Figure 12: The Virtuous Cycle of Transit Oriented Development (City of Cape Town, 2016)

## 4 Spatial Development Framework

### 4.1 Spatial Development Vision

In response to the trends, challenges and opportunities outlined above and building on the George Municipality's integrated development vision of 'A city for a sustainable future', the supporting Spatial Planning Vision to guide the George MSDF is to:

***Develop George as a resilient regional centre of excellence for inclusive, smart urban and rural prosperity.***

### 4.2 Spatial Concept

There are three spatial drivers that give form to the George MSDF. These are applied both at the scale of the Greater George Area and the city of George.

The first is the natural and rural environment which must be protected and managed to ensure it is able to function optimally as a basis for supporting and nourishing prosperous and resilient settlement and economic activity in George.

The second is the settlements and, within the city of George, the system of corridors and nodes which must be reinforced and developed in a managed way to function as a productive and efficient system

The third is the regional accessibility network that links the settlements to one another within the Greater George Area, as well as to opportunities further afield. This includes the local accessibility network (motorised and non-motorised) connecting

people and activities along corridors to nodes within the city of George, enabling choice and participation in society and the economy within the urban areas. Within the George city area, four principal public transport corridors and a system of priority nodes are identified as strategically important in this MSDF.

These spatial drivers align with the Garden Route District SDF's Strategic Drivers of Change:

- The Economy is the Environment in Eden – a sustainable environment is an economy positioned for growth
- Regional accessibility for inclusive and equitable growth - In Eden improved regional and local accessibility is essential to achieving inclusive growth
- Coordinated Growth Management for Financial Sustainability – we have to manage growth and meet needs holistically, to do more with less

The performance of these elements - independently and together as an integrated system - is supported by three spatial strategies and accompanying policies for managing, guiding and promoting development in George, elaborated upon in section 4.3 below:



#### 4.2.1 The Natural and Rural Environment

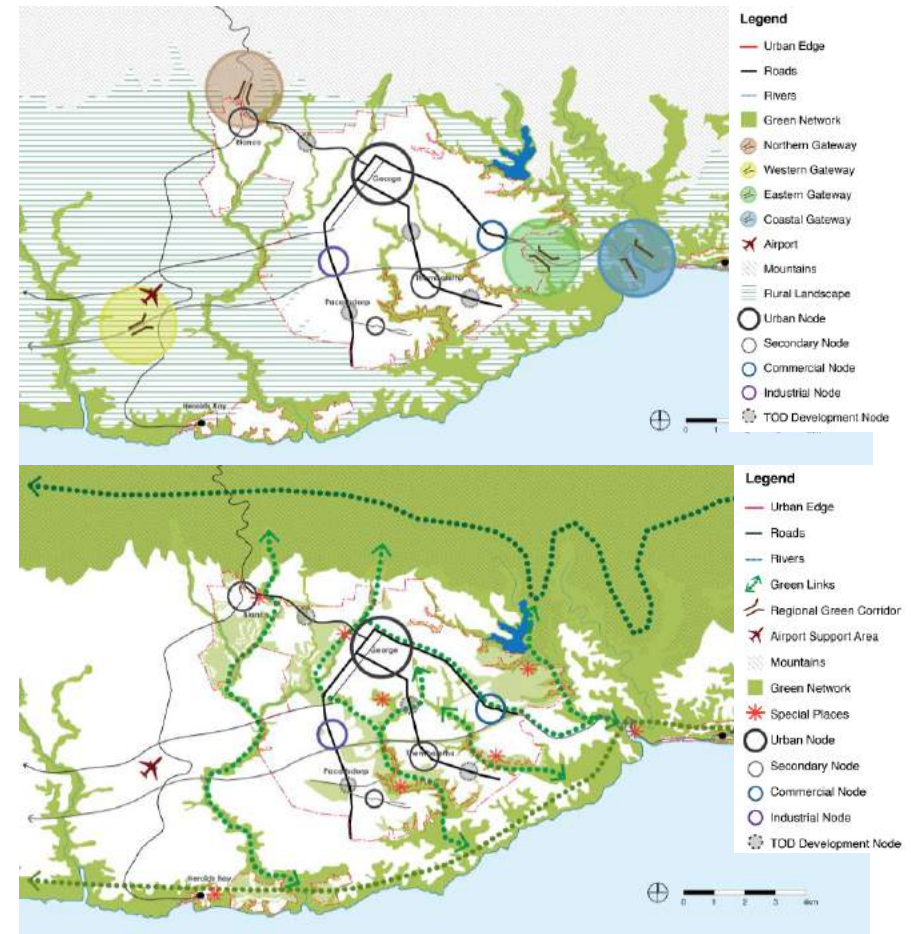
The Greater George Area is made up of two distinctive landscapes – the Garden Route and the Klein Karoo - divided by the Outeniqua Mountain Range, which itself provides a dramatic backdrop to the area. The mountain range is connected to a dramatic coastline through river corridors. These corridors and estuaries, the diverse scenic landscapes including indigenous forests and plantations on either side of the mountain range and the mild climate, are assets that have, continue to and can do more to support livelihoods and create well-being and prosperity in George. The MSDF seeks to respect these two unique but connected regions and their distinctive landscape elements that offer a critical natural and economic resource base for the regional and local economies.

##### 4.2.1.1 Gateways

At the scale of the George city area, its surrounding natural and rural environment provides a distinctive frame for the city which gives the city an identity by providing clear green edges and gateways supporting its attraction as a place to live and work. At the same time, there are “green fingers” or corridors linking the sea and the mountain, which pass through the urban area providing ecosystem services, amenity and opportunities for positive connections between different communities of George. The MSDF seeks to balance urban growth needs with the importance of protecting and rehabilitating the integrity of natural and rural systems that are the basis for sustainable, resilient and high quality settlement and economy in George and the marketing of George as a “city for all reasons”.

Careful management of land use and the urban-rural interface at the gateways to the George city area is therefore important to this MSDF. Landscapes speak to the unique sense of place experienced as one approaches George from the east, west and north. The experience of arriving in George from the northern access, Outeniqua Pass, with its many tourist viewing sites is an important scenic landscape worthy of conservation. Likewise,

passing George and heading east past Kraaibosch and moving on towards the Victoria Bay area gives one the feeling of leaving the built up area as the vistas are generally of farm fields in the foreground with trees including pine plantations and rolling hills in the mid ground and then the Outeniqua Mountains in the background.



Map 3: Green Gateways and Corridors Structuring the George city area



This is the gateway to the Wilderness approach and in fact where the experience of the Garden Route starts. It is the area where the Kaaimans Corridor starts, which is unique not only for the spectacular Kaaimans Gorge, but also because it is where the distance between the ocean and mountain is the shortest in the Southern Cape. If travelling along the Garden Route from Cape Town this is the first encounter with the dense indigenous forest characteristic of the Garden Route and, along with the commercial forestry plantations, an important part of the cultural history of the area.

The eastern approach to the George City Area along the N2 and the airport road (R102) traverses a rural landscape with views of the mountain range. This landscape is a strong part of the identity of George and connects to a rural tourism sector that is central to George's identity and has much potential. This land is also of significant agricultural value.

The natural vegetation associated with the areas hugging the city area is a mixture of fynbos and forest. Fynbos and forest communities contain a rich diversity of flora and associated fauna and have a relationship with the amenity and safety of the city area. Fynbos is well known to be a fire-driven ecosystem meaning that it needs fire to regenerate and function optimally. Forest conversely is not reliant on fire and as such offers a relatively stable habitat for species associated with the area. The fynbos and forest areas most closely associated with the George city area occur on the northern perimeter of the city and form an important buffer between the town and surrounding natural areas including the Outeniqua Nature Reserve which covers most of the mountain to the north of the city. These areas also contribute significantly towards the sense of place experienced by residents of the city with a view of such areas, and individuals and groups who make use of such areas for recreational and other purposes. On almost any given day, people can be found walking, cycling, running, dog-walking, bird watching etc. on the lower and upper contour paths above the city. This is unique to George and its value should not be underestimated. Any development to the north of the current urban

edge will have a significant and long lasting impact on the use and enjoyment of this area which should be conserved for generations to come.

While old and existing pine plantations to the north of the built area may be seen as suitable for intensive land uses to some, the opposite is in fact true. Not only do they play a vital role in supporting the above activities, precisely because the vegetation is not in pristine condition, they form an important buffer area to the town, both protecting the natural vegetation from unwelcome anthropogenic impacts but also serving as an area where fire breaks and defensible spaces can be developed.

#### 4.2.1.2 Surface Water Resources

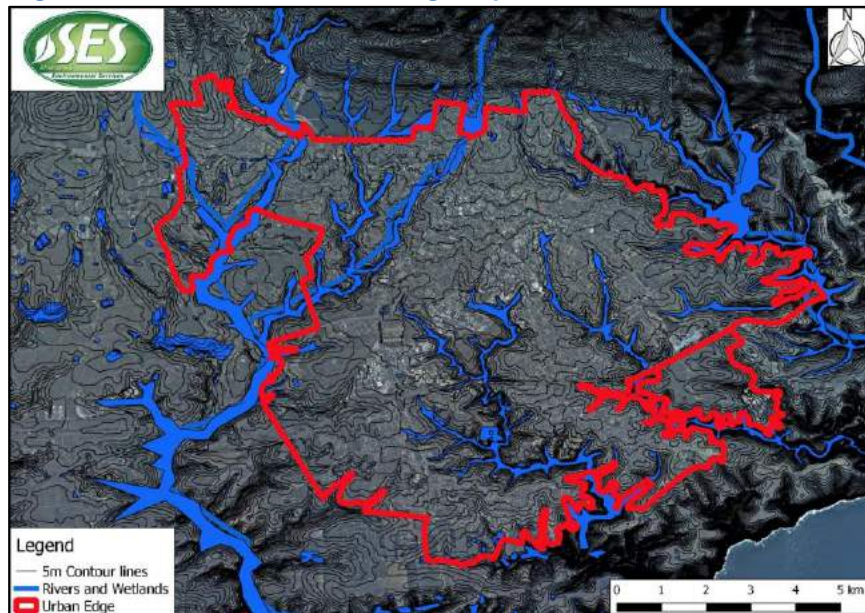
The fynbos growing naturally on the mountain to the north of George also plays an important role in terms of the quality and quantity of water which then becomes available to the city. Considering this is the main water storage vessel for the majority of the residents in the George City area, the area to the north of the George dam is vital in terms of its potential impact on the dam, and so the conservation of this area as an important natural buffer for water provision is paramount. This buffer area between the northern urban edge and the indigenous vegetation is also an important area for the health of the rivers flowing through George. They contain wetlands and seeps which are vital to the overall health of the rivers.

The watercourses in the Garden Route landscape flow from the Outeniqua Mountains, over the narrow coastal plain, to form narrow estuaries at the mouth to the Indian Ocean. The habitat provides refuge to biota during times of environmental stress and is an important corridor between the Outeniqua Mountains and the ocean. The river network provides a link between upstream and downstream biological functioning. The larger rivers are typically perennial, as they are fed by precipitation and surface runoff during the winter rainfall season and supplemented by mountain seeps during the lower rainfall periods. As the rivers reach the mountain foothills, the valleys broaden and the slope decreases, providing



conditions favourable for the formation of wetland habitat. A number of these rivers, and associated wetland habitat, traverse

Figure 13: Watercourses in the George city Area



the urban area and provide the community with valuable ecosystem services (such as biodiversity support, connectivity, storm water management, regulating the heat island effect, nutrient and toxicant removal, recreation and aesthetics). For example, there is substantially more water security provided to George by the rivers and wetlands than in most other regions of the Western Cape. Figure 13 shows the watercourses in and around the urban edge of George.

What we know is that the wetlands north of the urban edge are large, healthy systems that provide George with scenic beauty, biodiversity, flood attenuation (for property downstream), carbon storage (due to the presence of peat), erosion control (e.g. from mountain sediments after fire), and water recharge, amongst many other services. They need to be strictly managed and conserved for the benefit of the town. It is unfortunate that these systems become progressively degraded downstream. Any development within this northern area is likely to compromise these wetlands at a cost to greater society. There is an opportunity to prevent urban encroachment into this area, and prioritise it for conservation efforts, whilst maintaining the light recreational use it currently experiences.

Watercourses are set apart from many other ecosystem types by the degree to which they integrate with and are influenced by the surrounding landscape, or catchment. They are particularly vulnerable to human activities and these activities can often result in irreversible damage or longer term, cumulative changes. The majority of cities around the world have permanently lost their wetlands and transformed their rivers. They no longer benefit from the valuable ecosystem services healthy watercourses provide, however, George still retains much of its freshwater habitat. But today, these same systems that helped define the very character of the town, are under threat from the impacts of urbanisation.

Urbanization of the catchment and the resultant storm water runoff is increasingly recognised as a threat to freshwater biodiversity not only because of the increased hydrological disturbance and habitat loss, but also because of an increased delivery of pollutants to rivers. The encroachment of roads and housing onto floodplains and wetlands can dramatically alter the flow rates, water quality and sediment regimes of watercourses. The greater the extent of hardened surfaces (e.g. roofs, parking lots etc.), the lower the infiltration of storm water and therefore the greater the surface runoff and increase in flood peaks. A change in water distribution generally results in altered wetness regimes, which in turn affect the biophysical processes and the vegetation patterns. The

transformed land surface will promote increased volumes and velocities of storm water runoff, which can be detrimental to the rivers receiving concentrated flows off of the area. Increased volumes and velocities of storm water draining from the area and discharging into the rivers can alter the natural ecology, increasing the risk of erosion and channel incision/scouring. The watercourses of George have all been affected by this to varying degrees.

This MSDF establishes the watercourses as they run through the urban area providing the backbone of the passive and active open space system in the George City Area and while being protected should be used as the basis to create a city-wide integrated open

space and non-motorised transport network that connects disparate communities in a well-managed, safe and celebratory environment, positively building a respectful relationship between people and the natural systems on which they depend. In some parts of this network the river corridors offer the 'routes' through the city, and where this is not possible connections are made into the primary public transport corridors which should be developed to provide high quality non-motorised transport infrastructure as well as public transport infrastructure with landscaping that brings the green into the harder urban network. This landscaping can also contribute to regulating the heat island effect and can enhance the sense of place in areas presently dominated by cars and poor quality streetscapes.

#### 4.2.2 Settlement and Nodal Hierarchy

The municipal area of George hosts a number of settlements (defined to include a residential component), each of which play their own distinctive role in the regional economy summarised in Table 3.

Outside the George urban area the business centres of towns and small rural settlements are being consolidated and reinforced, and the decentralisation of economic activity curtailed.

Within the George city area, a network of existing and proposed mixed use nodal centres, serving as points of high accessibility and opportunity for surrounding communities at strategic locations, is identified in this MSDF, summarised in Table 4. These are the points of investment priority, where higher order facilities and business activities are concentrated and supported by a high quality public realm.

The primary economic centre remains George CBD. The strategy is to revitalise and redevelop it into a thriving city centre with a high quality public realm that embraces the concept of smart growth, contains a variety of complementary activities, as well as a substantially larger residential component targeting a broader spectrum of incomes than at present (see George CBD Local Spatial Development Framework, 2016 for detailed proposals).

Secondary nodes (existing and proposed) should complement George CBD as centres with particular specialisations relating to commercial, industrial or mixed use local area services, inclusive of public services (see their respective LSDF's for detailed proposals).

Additional points of high accessibility have been identified that should be prioritised for transit-oriented development to harness the potential of their location, existing uses and high connectivity in the public transport network.

Table 3: Settlement Hierarchy in the Greater George Area

SETTLEMENT TYPE	FUNCTION / ROLE	SETTLEMENT IN THE GREATER GEORGE AREA
<b>Regional (Services) Centre</b>	Main urban centre in terms of location of new housing, jobs, services and facilities with a focus on development and densification. The centre hosts main health, education, cultural facilities as well as government services. As an economic hub it contains industry, services sector and innovative business environments.	George city (incl. Blanco, Pacaltsdorp, Thembaletu)
<b>Secondary Regional Service Centre (District town)</b>	Urban centres with a special function (often tourism related) as well as a role in terms of servicing the surrounding areas and containing a mix of economic activities and services.	Uniondale Wilderness
<b>Small (rural) town</b>	Urban area with a dominant rural character, a limited and mostly singular economic base (e.g. tourism, agricultural services) and functions as a service centre to its broader environs.	Haarlem
<b>Rural / Tourism Settlement</b>	A rural or recreational nodal point characterised by community functions as well as a state of permanence (settled population). Such settlements function as agri-service centres, tourism centres, educational centres, individually or providing a combination thereof.	Herolds Bay Victoria Bay Touwsrante Hoekwil Erf 329 Hoekwil Avontuur Noll Herold (incl Campher) De Vlucht Kleinkrantz Bergplaas Collinshoek
<b>Rural Place</b>	Minor local service points or places of gathering e.g. school, church, rural shop, transport node (bus stop, railway station), usually having no, or limited resident population/ settlement.	Refer to Table 11

**Table 4: George city area's Integrated Public Transport & Land Use Priority Nodes or Centres Hierarchy**

<b>Primary</b>	George CBD	Primary activity centre of the city of George, to be developed to accommodate a vibrant mix of residential, commercial, office and public facilities.
<b>Secondary</b>	Eastern Commercial Node	Sub-regional mixed use node, focused presently on the commercial potential of the N2, but also containing a mix of residential and work opportunities; comprising the Garden Route Mall, the Eden Meander, surrounding zoned business and commercial zoned land adjacent to the N2. In time this node will include the future development of the "Destiny Africa" site.
	Western or Gwayang Industrial Node	Sub-regional industrial node in proximity to the N2 and airport, targeted at Southern Cape manufacturing, freight and logistics, and service industries.
	Blanco CBD	Blanco town centre containing a mix of residential, commercial and public facilities.
<b>Proposed Secondary</b>	Thembaletu CBD	Thembaletu business node to be promoted as a town centre containing a mix of residential, commercial and public facilities.
	Pacaltsdorp CBD	Pacaltsdorp town centre, to be promoted as a civic and business node containing a mix of residential, commercial and public facilities.
<b>Priority Transit Oriented Development Node</b>	Conville / George Industrial Area intersection on Nelson Mandela Boulevard	Urban node on the principal formal public transport/ GoGeorge Nelson Mandela Boulevard mixed use/ activity corridor containing a cluster of public facilities and high concentration of commercial and industrial uses in the George Industrial Area
	Heather / Witfontein Node	Local retail centre on the principal Blanco – CBD formal public transport/ GoGeorge corridor with scope for residential intensification
	26 <sup>th</sup> Avenue / Sandkraal/ nelson Mandela Boulevard Road intersection, Thembaletu	Cluster of public facilities extending from the Thembaletu CBD on the principal formal public transport/ GoGeorge Nelson Mandela Boulevard mixed use/ activity corridor





Map 4: Settlement Hierarchy in the Greater George Area



### 4.2.3 Accessibility and Mobility Network

How easily citizens of and visitors to George are able to access the opportunities, services and amenities it offers is a critical precondition for growth of the economy and development of its communities. The MSDF must promote an effective and efficient accessibility network that supports a productive interaction between the urban (settlement and service centres) and rural environments, and within the settlements.

Ease of access has to do with the functionality of the movement network and in particular the public transport services that run along them. This network follows development and in turn the network can open up development opportunity. If well managed, this network will support a productive and growing economy, if not, it will be a drain on the economy. A well performing network with a high level of connectivity will allow for choice in destination through affordability, convenience and safety - no matter who you are in George or where you live. As such, it is a significant lever for spatial justice.

For the Greater George Area, the regional movement network must support the efficient movement of freight and people. This requires ensuring a clear primary and secondary regional route hierarchy that defines the role of the route and its investment priority and therefore guides how potentially conflicting uses of the route and the land use alongside it are managed to secure efficient mobility. A resilient system requires that there are clear alternative routes that are able to perform the same functions when another route is disrupted. This same network must support the ability of rural dwellers and workers, and those living in smaller rural settlements to be able to access services and amenities within a reasonable time and distance.

The implementation of the Western Bypass is an important improvement to this network and removing conflicts within the George city area in favour of protecting space for local accessibility.

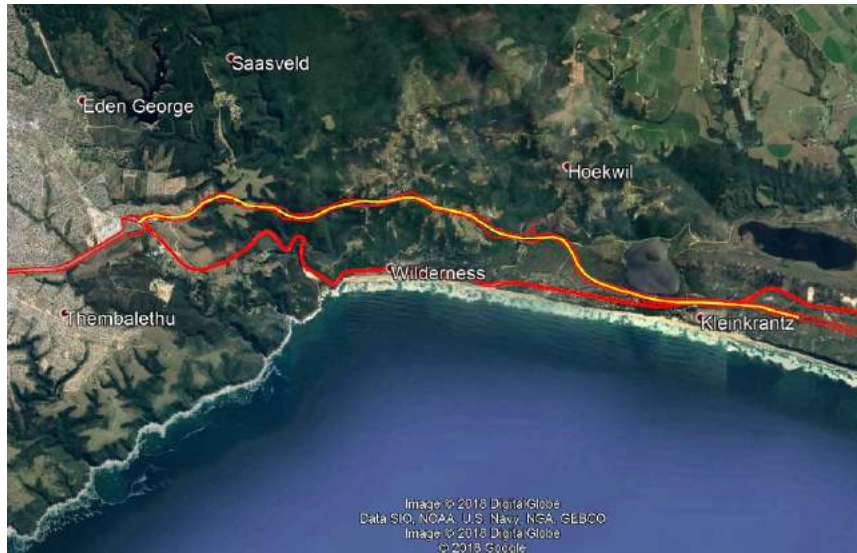
At a broader municipal scale, in order to improve congestion along the N2 (particularly during peak season), it is proposed that the R62 is upgraded to accommodate regional tour buses and freight traffic. This would enhance regional mobility and freight. There are three positive outcomes that could also potentially occur if the R62 were to be upgraded. Firstly, it would provide an alternative to the N2 for freight during peak season. Secondly, it would provide an additional route in the event of the closure of the N2 in a disaster situation (i.e. natural fires). Thirdly, it would provide an economic driver to the towns along the R62.

The R62 is a significant tourism route, the CNN has voted it as one of the top ten road trip destinations in the world (Bremmer & Shadbolt, 2017). It is proposed that in addition to upgrading the R62, land use and mobility tensions should be managed through street design and land use planning as opposed to the implementation of bypasses. This will ensure that the attractive quality of the route is maintained. An example of a tourism route in the Western Cape that accommodates both the scenic and tourism nature of a freight route is the section between Montagu and Barrydale as well as certain sections of the N2.

The N12 'Treasure Route' is also a nationally endorsed tourism route running through five provinces holding tourism development potential.

Longstanding plans to re-align the N2 still stand. The existing N2 is no longer fulfilling the function of providing mobility to the extent that it is expected of a national route. Planning to improve the N2 to provide improved mobility dates back almost five decades. Renewed attention is to be focused on this objective. The basic planning and route determination was completed in the 1970s culminating in the declaration of the road reserve in 1978. As such it provides the basic departure point for the future development. It is however not a foregone conclusion that the road will be developed in full within the 1978 declared road reserve. The required environmental authorisation process may impact the final

design (alignment). In the meantime, an improvement to the existing N2 between George and Wilderness to be implemented in the short term is considered to be the last sensible action before the N2 would have to move into its new position.



**Figure 14: George to Kleinkrantz (red – declared road reserves existing and 1978; yellow – where the road is to be developed into the 1978 declared road reserve) (SANRAL, 2018)**

This process will span beyond the timeframe of this MSDF, it is a project to be implemented in the next 15 – 20 years. However, the vulnerability of communities with only one entrance and exit on the current N2 presents risks as can be seen from the experience of some of the coastal towns in recent wildfires. From a risk management perspective, the opportunity for alternative evacuation routes and for redundancy in the mobility system given the N2's national role cannot be ignored.

In the George city area there are missing linkages in the movement network that need to be introduced to enhance connectivity in the network and provide alternative routes in emergencies (Refer to Map 6). The proposed linkages bridge missing links to create a

legible hierarchy and a 'super-grid' for the urban area. This is identified conceptually in this MSDF and will need to be refined in the update to the CIP and Road Master Plan. These linkages are as follows:

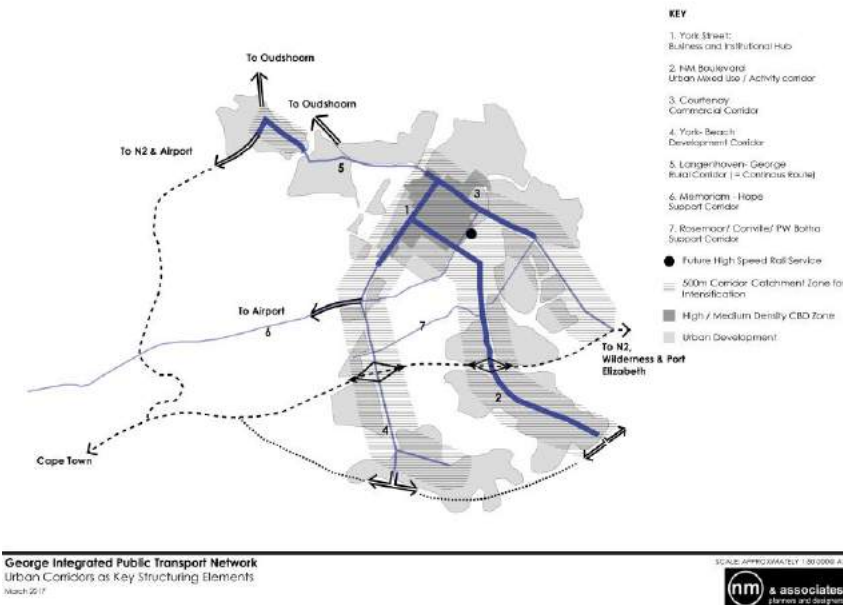
- The Thembalethu LSDF proposes an extension of Ntaka Street (parallel to the N2) to tie in with a future road that would connect the Eastern Commercial Node to the land identified for long term urban growth to the south of this node and to the east of Thembalethu, as an alternative, direct access to employment in the Eastern Commercial Node and on the land to be developed in the long term;
- The Rand Street extension from Rosedale across the N2 linking with the industrial areas to the west and the north will improve access to employment areas from the broader Pacaltsdorp area;
- The Thembalethu LSDF also proposes that a link road from Thembalethu along Nqwenesha Street, past the waste water treatment works, be considered to tie in with the Rand Street extension to improve access to the industrial area from Thembalethu;
- A further pedestrian link, east of the Nelson Mandela Boulevard / N2 bridge;
- A further link between new developments on the south-western edge of Thembalethu to Pacaltsdorp.
- A link between Knysna Road (and the Garden Route Mall) and Nelson Mandela Boulevard (draft Servitude Road proposal)

Building these linkages will serve to formalise informal desire lines, enhance their convenience and safety, and create alternative entry and exit points for these communities currently only accessible through one entry and exit. These more low key but important, developmental connections are considered to be a priority and preferable to the proposed Southern Arterial as they are more feasible from a cost perspective and as a result could be implemented sooner with greater benefit to those without cars.

The performance of the movement network and the viability of the public transport system (be it mini-bus taxis or the Go George bus system), in particular, is highly dependent on settlement form and the distribution, mix and density of land use in these settlements, and a clear road hierarchy with good connectivity.

The priority nodes identified in Table 5 above are located within a network of principal public transport corridors. Both should receive focussed attention both in terms of investment priority and land use management to support the functionality and sustainability of the Integrated Public Transport Network. A 500m walkable land use intensification zone has been identified along the principal public transport corridors, which will also perform the role of the Municipality's Restructuring Zone.

Importantly, international best practice, SPLUMA and the PSDF underscore that the movement network cannot only be a matter of mobility for cars and modes of public transport but the mobility network and the open space network, must also facilitate walkability and the use of non-motorised transport (NMT). It is estimated that walking is the main mode of transport for 45% of the George city area's residents. The settlements in George and parts of George city currently have a high level of walkability. This MSDF seeks to encourage this further. Principal public transport routes, together with the city-wide open space system, should form the basis of the NMT network.



**Map 5: Principal Public Transport Corridors**

There is a real opportunity to integrate the open space network and the non-motorised transport network in George to reinforce the utility and value of the “green fingers” (river corridors) penetrating through the urban areas and connecting communities. The continuity and connectivity of the green and the NMT network can be enhanced through their connections to the principal public transport/ activity corridors and the landscaping of these as complete streets for pedestrians, cyclists, buses and cars alike.

The prioritisation of public transport and walkability in this MSDF is an important contributor to economic development, increasing footfall to enhance the viability of street level commercial activity and reducing movement costs to increase disposable income. This also aids in reducing George's carbon footprint and the resulting contribution to climate change.

This modal hierarchy must define investment decisions. Infrastructure investment decisions must prioritise non-motorised

transport, public transport, freight transport and then the private motor car – aligned to a route hierarchy. This is an equitable approach directly correlated with need in the George Municipal Area. Accessibility and mobility should enable movement 24 hours a day, seven days a week and should not be focussed on dealing with peak hour car based traffic congestion.

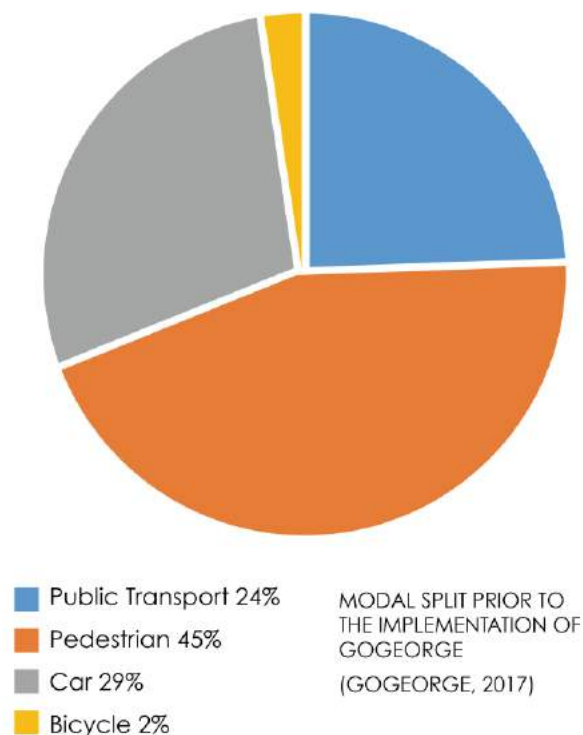
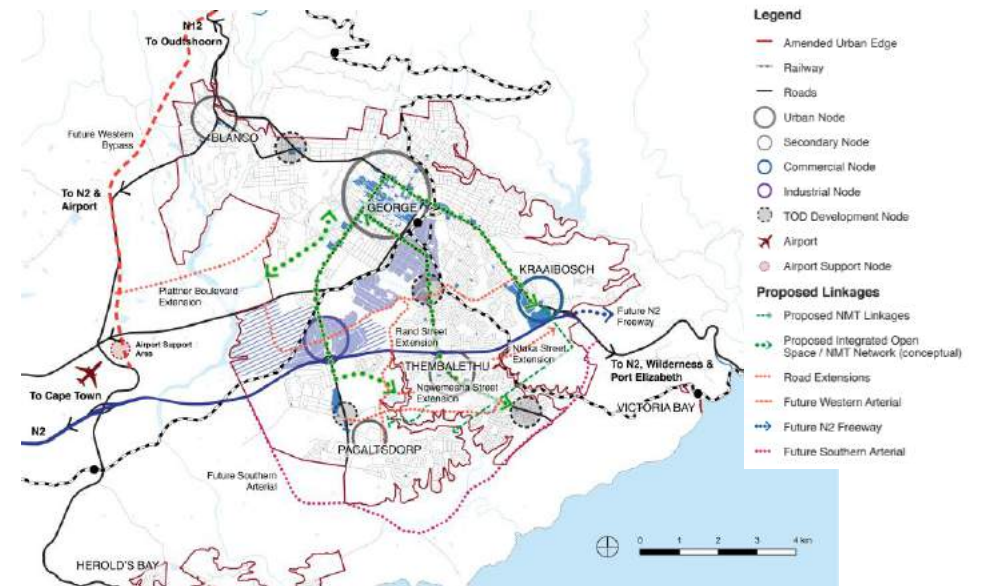
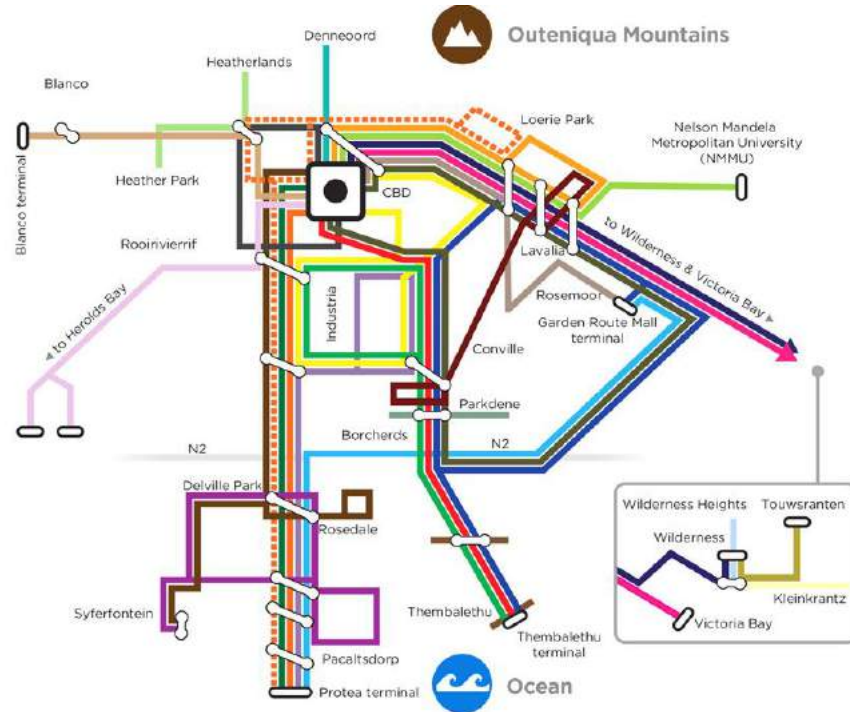


Figure 15: Modal Split Prior to the Implementation of GoGeorge (GoGeorge, 2017)

Table 5: Principal Public Transport / Activity Corridors

Public Transport/ Activity Corridors	Priority Nodes
George CBD – Pacaltsdorp on York Road/ Beach Road	George CBD
	Western/ Gwayang Industrial
	Pacaltsdorp CBD
George CBD – Thembaletu on Nelson Mandela Boulevard / Sandkraal Road	Nelson Mandela Boulevard / Conville / George Industrial Area intersection
	Thembaletu CBD
	Nelson Mandela Boulevard/ Sandkraal Road & 26 <sup>th</sup> Avenue intersection
George CBD – Garden Route Mall on Courtenay Street / Knysna Road	Eastern Commercial
George CBD - Blanco CBD on George Road	Blanco CBD





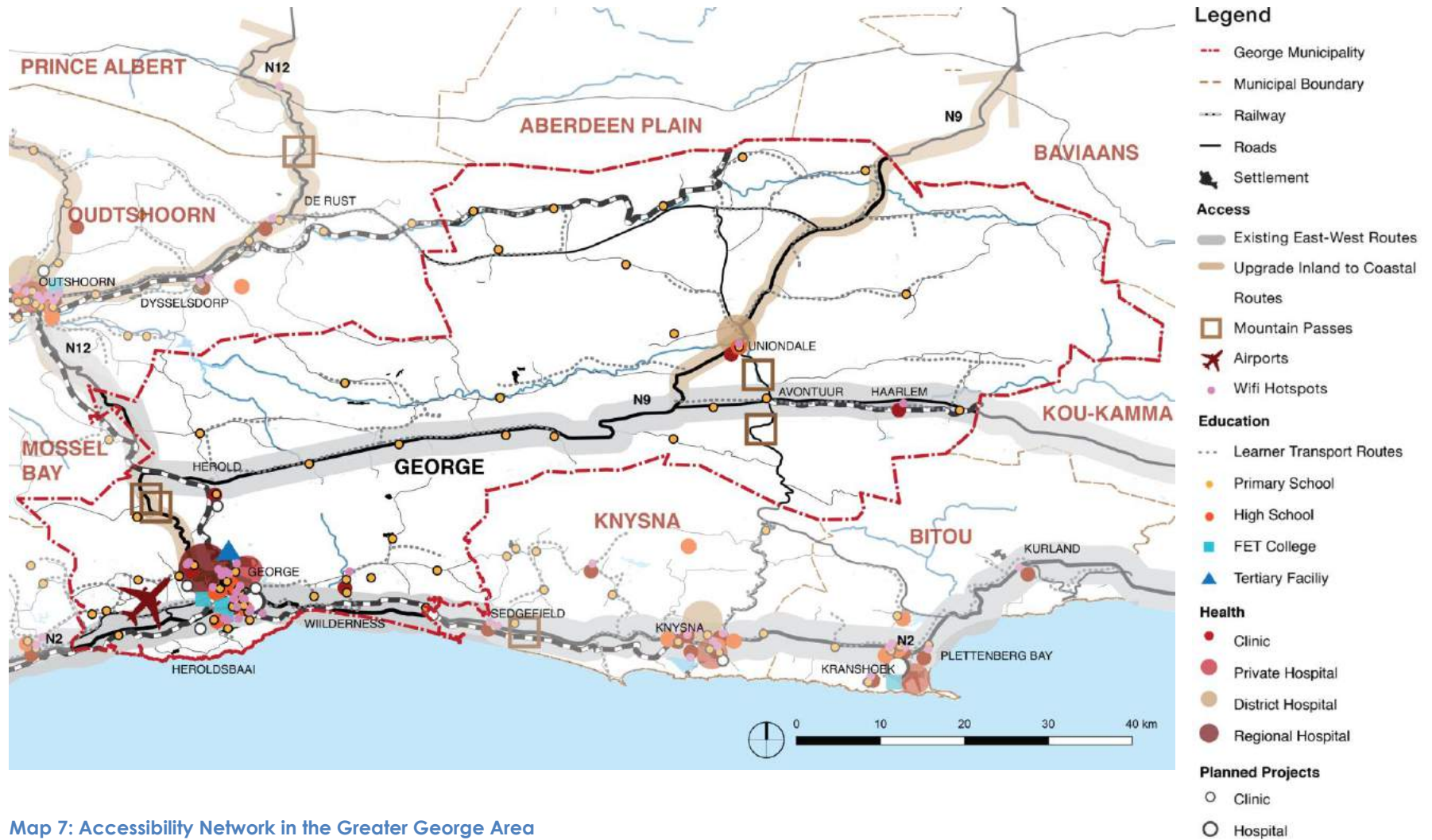
Map 6: Proposed Road Network Linkages in the George City Area

M1A	NEW DAWN PARK - CBD
M1E	PACALTSDORP - GEORGE HOSPITAL
M1B	HARMONY PARK / EUROPE - CBD
M2	BLANCO - CBD
C 3	BLANCO COMMUNITY
M7	WILDERNESS - CBD
M9	INDUSTRIA - CBD
M12	PACALTSDORP - GARDEN ROUTE MALL
C13	CITY LOOP
M14	PACALTSDORP - INDUSTRIA
C24	LOERIE PARK - CBD
C53	ROSEMOOR - CBD
C56	DENNEOORD - CBD
C58	HEATHERLANDS - HEATHER PARK COMMUNITY
C60	SYFERFONTEIN/ROSEDALE - CBD
C61	PACALTSDORP COMMUNITY

Future routes	
M4	THEMBALETHU - CBD
M5	NMMU (UNIVERSITY) - CBD
C8	HEROLDS BAY - CBD
M10	THEMBALETHU - INDUSTRIAL WEST
M11	THEMBALETHU - INDUSTRIAL EAST
M15	PARKDENE/BORCHERDS - CBD & MALL
M16	CONVILLE - ROSEMOOR - LOERIE PARK
C23	WILDERNESS - KLEINKRANTZ
C51	PARKDENE COMMUNITY
C52	WILDERNESS - WILDERNESS HEIGHTS
C54	WILDERNESS - HOEKWIL - TOUWSRANTEN
C57	THEMBALETHU COMMUNITY
C59	VICTORIA BAY - CBD

Figure 16: George Integrated Public Transport Network (Work in Progress)

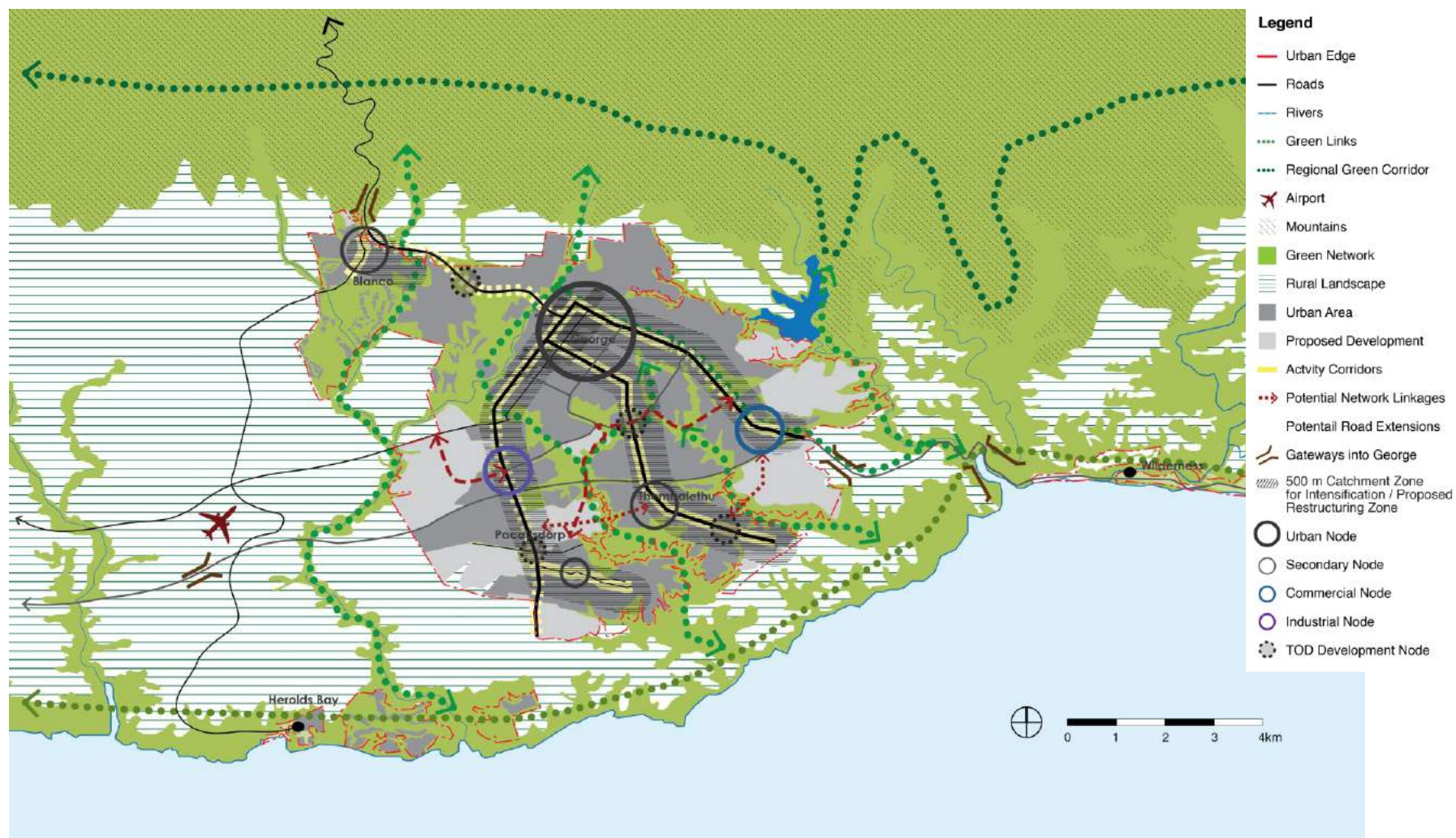






Map 8: The Greater George Area - Spatial Concept





Map 9: Spatial Concept for the George city area

### 4.3 Spatial Strategies and Supporting Policies

Three spatial development strategies support the spatial planning approach to directing and managing development in the Greater George Area and the George city area:

- I. Consolidate: Making what we have work better for our people
- II. Strengthen: Build on George's foundations for growth and resilience
- III. Smart Growth: Invest in catalysts for social and economic prosperity

These strategies are informed by four high level contextual factors:

- While George does experience year on year economic growth, this growth has slowed and the economic growth prospects of the country are a key dependency for George, with a modest outlook in the medium term.
- This impacts on public revenues. Consolidating efficiencies and productive investments that build on what we have is going to be critical.
- The population continues to grow, albeit at a slower rate. Household formation has grown faster, so demand for services continues to increase.
- Extreme environmental events have been felt close to home and municipalities are at the coal face of driving resource management, disaster management and recovery processes.
- Transformation of apartheid urban form has been slow and the imperative to change this has reached a crisis point.

These strategies are based on the rationale that if the settlements and the systems that support these settlements within and beyond the Greater George Area perform for the people of George they will work for anyone and will indeed attract others to live, work, play and invest in George. This is of course already happening. People

across a spectrum of incomes migrate to George in search of the various amenities and opportunities that it offers. However, it should also be acknowledged that George does not work for all of its people equally well - should the settlements and systems work better for the poorer members of society this could play an important role in uplifting the quality of life and social and economic prospects for all. It would also improve George's attraction for job-creating investors.

Focussing on the basics and the quality of services, facilities and amenities provided to its citizen-customers in an equitable way is a precondition for real, inclusive growth that sets up a trajectory where everyone is positioned to progressively be active participants in the economy and less in need of state assistance. In turn, public finances can be released for more catalytic investments.

The less citizens are socially and economically marginalised the less vulnerable they are to extreme events, and again the need for state assistance. At the same time, the less George pushes itself to operate at the extreme of affordability the more able it is to cope with shocks and to support the recovery process, as well as to invest in economic development.

There are a number of ways in which George is a leading intermediate city in South Africa from a resilience perspective giving foundations to build on:

- George has managed to contain its outward growth therefore mitigating the costs of sprawl
- George and the Western Cape Government have, in partnership, designed and implemented an innovative modern public transport system.
- George is able to recycle its wastewater to a potable standard
- Infrastructure master planning is advanced
- Poverty levels have reduced

There are also a number of flags that suggest that, if not carefully managed, George will become more vulnerable and its sustainability will be at risk:

- Public finances are not able to keep up with current infrastructure needs.
- Operating costs are being managed but possibly at the expense of the optimum operation of infrastructure systems.
- Insufficient funds are available for upgrading and maintenance of infrastructure. This is receiving attention but will impact on funds available for new capital investments.
- An increasing number of households are defaulting on their rates and service charges, pointing to affordability thresholds.

These are all directly impacted on by how the MSDF guides the future development of the Greater George Area. There is considerable opportunity for the MSDF to build on George's assets and to guide responsible, smart growth that does not increase but lessens George's vulnerability and viability and enhances its generative potential.

The full potential of George's assets has not been fully realised. George is framed by an extraordinary natural and rural landscape. This landscape is a significant contributor to its economy in the sense that:

- A significant sector of the economy remains the agricultural sector which in turn feeds into its manufacturing sector. Beneficiation of agricultural products particularly in niche areas, many of which are already present in George, is identified in the Rural Development Plan for the Garden Route District and the Integrated Urban Development Framework as an important economic strategy.

- The predominant sector of the economy in George Municipality is the tertiary or services sector – tourism, feeding off the natural environment and cultural heritage is an important role player in this sector. The amenity that George offers as a place to live and work is partly responsible for the growth of this sector.

Fortunately, the George city area can grow without further impinging on the natural and rural environment. There is substantial vacant and under-utilised land within the urban edge of the George city area that can cater for urban growth – optimising the use of existing infrastructure and containing operational costs.

In terms of a simple population projection based on a residential density of 25 du/ha (the overall density sought in this MSDF), housing opportunities required can be understood as follows:

LAND PROJECTIONS (@ 25 du / ha)						
Future land requirements for new housing, assuming a future gross dwelling unit density of 25du/ha:						
Settlement	New households between 2016 – 2020	Land Required by 2020 (ha)	New Households between 2016 - 2025	Land Required by 2025	New households between 2016 2030	Land Required by 2030 (ha)
George	5143	206	12273	491	20273	811
Thembalethu (incl in George)	936	37	2195	88	3558	142
Haarlem	3	0	7	0	10	0
Herolds Bay	22	1	52	2	86	3
Uniondale	34	1	78	3	124	5
Wilderness	353	14	871	35	1492	60
Total new households in urban areas	6491	260	15476	619	25542	1022
George Non Urban	-1021		-2013		-2764	

**Figure 17: Residential land required based on the estimated number of households in the Greater George Area to 2030**

If one adds this to the estimated 16,008 opportunities required to meet the housing backlog in the George city area, an estimated total of 28,281 housing opportunities will need to be developed within the next five years in the George city area. It is important to note that housing backlog figures require verification and the capacity of the private and public sector to meet this demand within this timeframe is questionable.



Nevertheless, recent studies undertaken by the George Municipality indicate an estimated 16,282 residential opportunities could be realised in the short to medium term future on vacant and under-utilised land within the confines of the existing urban edge of the George city area, where growth is concentrated. Densification/ intensification on existing properties is also possible and is not factored into this estimate; for example, second dwellings are permitted in terms of the Integrated Zoning Scheme By-Law.

In addition, there are an estimated 12,166 low cost (subsidy) housing development opportunities in the pipeline to 2023. There is therefore room for the development of 28,448 residential opportunities within the existing George city area to meet demand over the next five years to 2025.

The preferred location for subsequent outward growth in the medium to long term is identified in this MSDF.

Based on an analysis of building plan applications in the last five years, development has been limited and primarily in the residential sector. It would appear that an average of 400 residential units are being developed per year. It is estimated that there are 1,400 vacant erven owned by landowners or developers who own more than two erven. This is land that could be made available to the market.

Similarly, there is approximately 262ha of commercial, industrial and business land available within the urban edge for development. In addition, some private erven mentioned above and the Restructuring sites may be found suitable for mixed use, including commercial and business use.

It is therefore sensible to maintain the existing urban edge around George. At this stage improving George does not require making it spatially bigger, but rather using the existing serviced urban areas

more efficiently and using investment in these areas to upgrade and maintain services.

Similarly, the areas within the urban edges of Haarlem and Uniondale identified to absorb growth and the projects in the housing development pipeline adequately address demand in these settlements within the timespan of this MSDF.

Potential housing projects for Touwsranteen, Hoekwil and Wilderness Heights (Erf 329, Hoekwil) will address demand in these areas. Projects are also in the pipeline to address rural dweller's needs, but require further consideration to ensure affordability and sustainability. While it is assumed that the private sector, primarily, will respond to demand in the Wilderness and Herolds Bay settlements.

The success of places for all sectors of society depends on the quality of the environment. A well-structured, safe and high quality built environment, where all are welcome, is a product of both the public environment and the buildings that define it, as well as its management. The infill development by both the public and private sector of the above-mentioned vacant and under-utilised land can leverage upgrading of the built environment. The urban quality of George needs to "rise to the occasion" of the quality of its surroundings. This landscape, as a backdrop, and George's heritage, should be complemented by an urban quality that is progressive, distinctive, democratic (allows choice) - generating opportunity at the scale of people and not, in particular, cars. The transformation of the urban landscape will itself serve as an attractor for economic investment. In other words, George needs to adopt a smart growth approach to enhancing its urban quality as an explicit economic development strategy. The quality of housing choice, the public realm and urban amenities matters to the services sector.

The strategies are unpacked in the next section. Each strategy is supported by a set of policies and policy guidelines.

### 4.3.1 Consolidate: Making what we have work better for our people

The **objective** of this strategy is to promote city and settlement building that improves liveability and raises prospects - offering all residents access to the services, facilities and opportunities of urban living at the scale of the city, town and village. The challenge is to ensure that social investment not only addresses basic human needs, but also develops human capital and builds community - needed for a thriving and prosperous service economy.

There are three inter-related themes supporting this objective around which the policies are organised:



#### 4.3.1.1 How will we measure our success?

*Indicators to be used to ascertain whether George is making progress towards this objective, will be identified on the basis of the finalisation and acceptance of this MSDF.*

#### 4.3.1.2 Policies

**Policy A:**

*Prioritise infrastructure that invests in people and their socio-economic mobility and resilience*

**Policy A1**

*Maintain, improve and expand basic services*

**Policy Guidelines:**

- a) Prioritise basic residential services for poor households particularly in informal settlements, backyard dwellings and a minimum level of basic service to marginalised rural settlements.
- b) Ensure asset management best practice is followed to retain existing investment and prevent greater replacement costs in future.
- c) Reinforce basic service delivery with good quality urban management to support household and economic asset building.
- d) Develop resource efficient strategies for all municipal services (building on existing work in water services to include, for example, compulsory green energy installations in building development, grey water reticulation, etc.) to enhance resource security.
- e) Broadband is considered a basic service. A broadband policy for George must seek to enhance connectivity and affordable public access in the priority spatial area identified in this MSDF.

**Policy A2**

*Prioritise investment in the roll-out, maintenance and improvement of social infrastructure targeting poor households*

**Policy Guidelines:**

- a) Ensure human settlements planning and implementation is integrated with social facilities planning and public transport services. New settlements development should be located to optimise existing social facilities capacity and where there is potential to expand existing facilities. Facilities should always be within walking distance or within walking distance of public transport.
- b) Cluster public facilities and public space and locate within direct access to public transport routes.
- c) Higher order clusters of facilities should be located on the priority public transport corridors and regional accessibility networks, and planned so as to encourage complimentary private sector investment in the precinct, to support efficiencies and land use and social integration.
- d) Social facilities design should support the MSDF's intent to achieve the efficient use of land, densities that support public transport and walkability, as well as support the performance of the facilities precinct itself as an urban precinct, minimising collective and individual security and maintenance costs.
- e) Provide and maintain a high quality public realm and non-motorised public transport network in higher density residential areas linking to priority public transport corridors and nodes and clusters of social facilities within them, as safe places for community life where social and economic (formal and informal) activity is encouraged.
- f) Reinforce this social infrastructure system with affordable access to WIFI.
- g) Reinforce this investment with a high standard of area based urban management as an incentive for private investment and positive social interaction and activity.
- h) Fewer but better facilities are preferred if this enables the provision and maintenance of a high standard of social infrastructure and there is convenient and affordable access to these facilities.

### **Policy A3**

*Enhance public transport and non-motorised transport connectivity within and between settlements regionally and within the George city area*

#### **Policy Guidelines:**

- a) Support development which emphasises walkability and public transport as opposed to private car use.
- b) Review the Municipal Zoning Scheme's minimum parking ratios to align these to the prioritisation of walkability and public transport use.
- c) Build additional east-west linkages between Pacaltsdorp, Thembaletu and the Eastern Commercial Node that prioritise safe non-motorised transport, public transport and emergency services accessibility. Proposed linkages are indicated in the Composite Spatial Development Framework.

### **Policy A4**

*Provide and maintain a high quality, safe open space system through maintaining the integrity of existing spaces and actively seek to link viable open spaces into a continuous green web that, with the public transport corridors, forms the basis for the non-motorised transport network.*

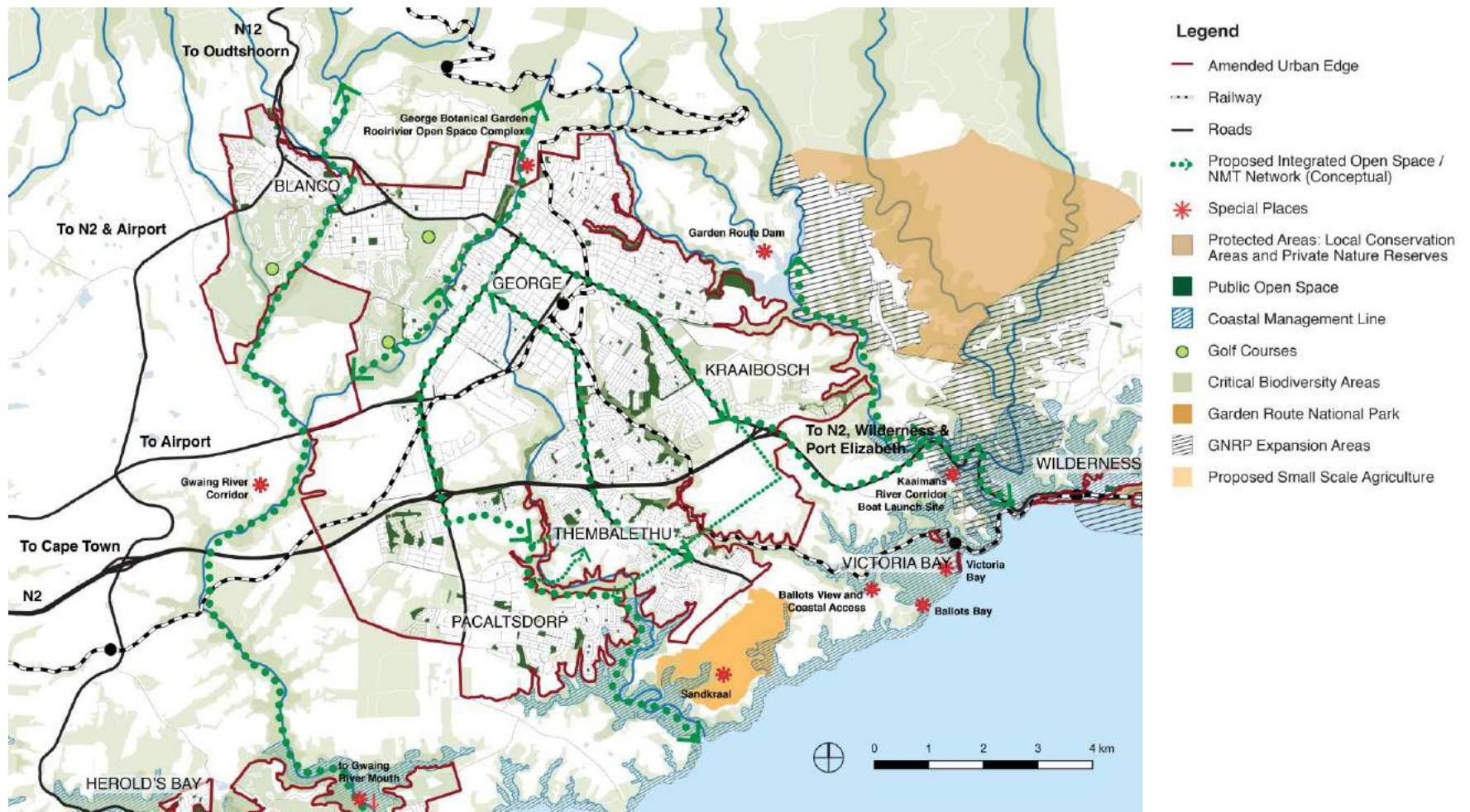
#### **Policy Guidelines:**

- a) Build and create an interactive open space system on an equitable basis prioritising implementation in a manner that focuses on the poor and denser neighbourhoods of the George city area.
- b) Use the natural assets; namely, the river corridors running through the George city area to “anchor” and structure the open space system.

- c) Seek opportunities to consolidate this system - linking the existing and proposed formal open spaces to it so as to expand the ecological functionality and recreational opportunities presented by a network of formal, informal and natural open spaces.
- d) Areas for active and passive recreational facilities (e.g. sports fields, jogging and cycling trails, etc.), should be integrated into the open space system and designed to be appealing to all, legible and safe.
- e) Seek opportunities for the open space system to contribute to the building of a safe pedestrian and non-motorised transport network. A conceptual proposal for this is illustrated in Map 10.
- f) River Corridors in the George City Area should be protected, maintained and sensitively developed to provide a safe open space amenity and NMT connections from Thembaletu and Pacaltsdorp in the south to the edge of the George CBD area.
- g) Seek opportunities to integrate the conservation of critical biodiversity areas into the open space system that allows public interaction in terms of land uses supported by the spatial planning categories.
- h) Define the edges between settlement and open space corridors so as to contain urban expansion and mitigate the effects of storm water run-off by implementing and maintaining recreational tracks and sustainable urban drainage systems. Built edges should define and overlook the open space network to promote activity and passive surveillance by: Establishing positive edges e.g. stoeps, raised terraces and landscaping.



- i) Buildings must face onto, and not away from, rivers, watercourses and public open space corridors and parks. For new urban development, the layout must allow for roads (or at least public walkway or cycle tracks) between the buildings and the watercourse (including the buffer zone).
- j) As far as possible, associate municipal parks with community facilities and schools to secure the safety and maintenance benefits of clustering.



Map 10: Proposed George city area open space and city-wide pedestrian / non-motorised transport network

## Policy B

*Direct public and private fixed investment to existing settlements reinforcing their economic development potential. In this way, the impact of public and private investment is maximised, the majority of residents benefit, and the Municipality's natural and productive landscapes are protected*

### Policy Guidelines:

George remains the primary urban activity and service centre, with a number of small, specialist settlements, predominantly focused on coastal living, tourism and/or recreation, agriculture and forestry. Refer to **Error! Reference source not found.** and Table 6.

- a) Reinforce George city's regional service centre role through attracting higher order, high quality education and health facilities, regional government administration and commercial headquarters.
- b) The settlement functions and hierarchy in the Greater George Area as well as the preferred nature of appropriate development in these settlements is presented in Table 6. Annexure 2 presents more detailed guidelines for the management of growth of the settlements surrounding the George city area; namely, Herolds Bay, Victory Bay / Kraaibosch South and Wilderness - Touwsrante - Hoekwil.
- c) Consolidate growth within the urban edges of Uniondale and Haarlem as set out in the Ward 24 and 25 LSDF (2015).
- d) Where no economic catalyst exists, the emphasis should be on improving access to centres where opportunity does exist.

- e) The focus of investment and resource management in rural settlements should be to:
  - Supply or ensure the supply of basic services
  - Meet local convenience needs with basic social facilities for the surrounding rural communities.
  - Establish complete communities, with an emphasis on improving economic and social inclusion, improving standards of living.
  - Where possible, explore new local economic drivers rooted in the rural agricultural economy and settlement purpose to sustain existing residents before new, expansionary fixed capital investment is made.
  - George Municipality, with the Garden Route District Municipality, should drive innovation in the provision of sustainable rural transport services that promote access to development opportunities for those living in remote rural settlements in the Greater George area through the development of its Comprehensive Integrated Transport Plan (CITP) and exploring precedent and innovation in the use of technology to improve services.
  - Investments that provide reliable and affordable virtual connectivity to media, services and opportunities for remote settlements should be promoted and prioritised by the George Municipality as part of its rural development focus
- f) Where rural development programmes are initiated in the municipal area, the Municipality will support the use of existing settlements as the base from which to deliver basic

services and facilities to rural communities, as opposed to developing new rural settlements.

- g) The PSDF Heritage and Scenic Resources Specialist study (2013) provides guidance in terms of responding to the spatial form and character of existing settlements. Development in a settlement (consolidation or growth) should take existing (and sometimes historic) structure and spatial form into consideration and build on this. The spatial form needs to be compact and respond to the settlement character, as well as the topography of the landscape.
- h) An Airport Support Area has been identified at the George Airport and is further elaborated on in the Gwayang/George Airport Corridor Local Spatial Development Framework. This is not intended as a location for urban expansion but for the uses ancillary to and supportive of the airport's functionality and the convenience of users of the airport.
- i) Land use in the gateways entering and leaving the George city area identified in this MSDF should enhance the gateway function of these local areas and not pursue a form that is essentially urban.

**Table 6: Settlement Hierarchy and Development Approach in the Greater George Area**

	SETTLEMENT	FUNCTION / ROLE	APPROPRIATE DEVELOPMENT	
<b>Regional Services Centre</b>				
Main urban centres in terms of location of new housing, jobs, services and facilities with a focus on development and densification. The urban centres accommodate main health, education, cultural facilities as well as government services. These economic hubs contain industry, services sector and Innovative business environments.				
1	George city (incl. Blanco, Pacaltsdorp, Thembaletu)	Significant regional commercial, service and administrative centre, industrial node, and transport and logistics hub: an emerging “regional” city with well-integrated residential and higher order activity centres.	This MSDF provides extensive direction for appropriate development in the George city area. This is supported by the LSDFs for these areas.  Kraaibosch South: No significant densification given the specific rural character of the area. This is a significant gateway between Wilderness and George and its green character is part of what weaves George into the Garden Route identity and appeal. <i>Refer to Annexure 2.</i>	
<b>Secondary Regional Service Centre (District town)</b>				
Urban centres with a special function (often tourism related) as well as a role in terms of servicing the surrounding areas and containing a mix of economic activities and services (refer to LSDFs in place for these centres)				
2	Uniondale	Rural settlement and service centre. <i>Refer to Annexure 2.</i>	General	Development must be in keeping with guidelines as set in the 2013 PSDF study Scenic and Cultural resources and Local Spatial Development Frameworks.
			Subsidised residential	Discouraged and should be limited, only if economic base and education facilities are present.
3	Wilderness	Coastal residential, tourism, and local business node, recreation area. <i>Refer to Annexure 2.</i>	Services & facilities	Promote and cluster facilities to service the rural areas.
<b>Small (rural) Town</b>				
Urban area with a dominant rural character, a limited and mostly singular economic base (e.g. tourism, agricultural services) and functions as a service centre to its broader environs with thresholds to support the permanent provision of social services				
4	Haarlem	Historic mission station.	Economic activities	Within the urban edge, focus on supports/diversifies agriculture, supports tourism, broadens the value chain.
<b>Rural / Tourism Settlements</b> (refer to LSDFs for the Wilderness, Lakes and Hoekwil and Ward 24 & 25)				
Permanent residential settlement, meeting the local convenience needs with basic social facilities for the surrounding rural communities				
5	Touwsrante	Dormitory residential settlement with local services. <i>Refer to Annexure 2.</i>	General	No extension of municipal reticulation networks or infrastructure. Development must be in keeping with guidelines as set in the 2013 PSDF study Scenic and Cultural resources. Development of social facilities, economic opportunities for the local community and local conveniences is supported.
6	Hoekwil	Dormitory rural residential area and small-holdings with local services.	Subsidised residential	Only farmworkers housing employed in the area.
			Services and facilities	Promote connectivity and provision of remote services as well as self-sustainable facilities.
			Economic activities	Only if it supports/diversifies agriculture, supports tourism, broadens the value chain
7	Victoria Bay	Coastal residential node with recreation area.	No significant densification given the specific built character of the area.	



8	Herold's Bay	Coastal residential settlement (including self-contained resorts), recreation, tourism area. <i>Refer to Annexure 2.</i>	Private residential	
9	Kleinkrantz	Coastal residential node with recreation area.	To be upgraded and formally developed sensitively in an ecologically sustainable way to minimise impact on its surrounds; minimise ongoing operational servicing costs; exploit economic opportunities primarily associated with the surrounding environment and heritage; and to discourage further growth of the settlement.	
10	Erf 329, Hoekwil Wilderness Heights	Small rural informal settlement	To be upgraded and formally developed sensitively in an ecologically sustainable way to minimise impact on its surrounds; minimise ongoing operational servicing costs; exploit economic opportunities primarily associated with the surrounding environment and heritage; and to discourage further growth of the settlement.	
11	Avontuur	Agricultural cluster with residential and community uses held by one land owner.	General	No extension of municipal reticulation networks or infrastructure. Development must be in keeping with guidelines as set in the 2013 PSDF study Scenic and Cultural resources
12	Bergplaas	Remote forestry settlement.	Private residential	No new residential development permitted, unless it is linked to economic activity in the area (agriculture, biodiversity or value chain related economy).
13	Collinshoek	Remote forestry settlement.	Subsidised residential	Only farmworkers housing employed in the area
14	Noll	Agricultural and rural residential area consisting of a number of small holdings.	Services and facilities	Promote connectivity and provision of remote services as well as self-sustainable facilities.
15	Herold	Settlement with local services and potential for tourism attractions linked to agricultural activity and surrounding natural landscape	Private residential	Limited development permitted under condition that it creates long-term economic activities and promotes a walkable, compact urban environment. <i>Refer to Policy E3, Policy Guideline b).</i>



Map 11: Uniondale LSDF - indicating growth absorption potential (Wards 24 and 25 LSDF, 2015)





Map 12: Haarlem LSDF – indicating growth absorption potential (Wards 24 and 25 LSDF, 2015)

### **Policy C**

*Maintain a compact settlement form to achieve better efficiency in service delivery and resource use, and to facilitate inclusion and integration.*

To improve the viability of existing businesses and optimise the use of available infrastructure, the LSDFs promote densification in suitable built-up areas, and target strategically located vacant land for infill urban development.

### **Policy C1**

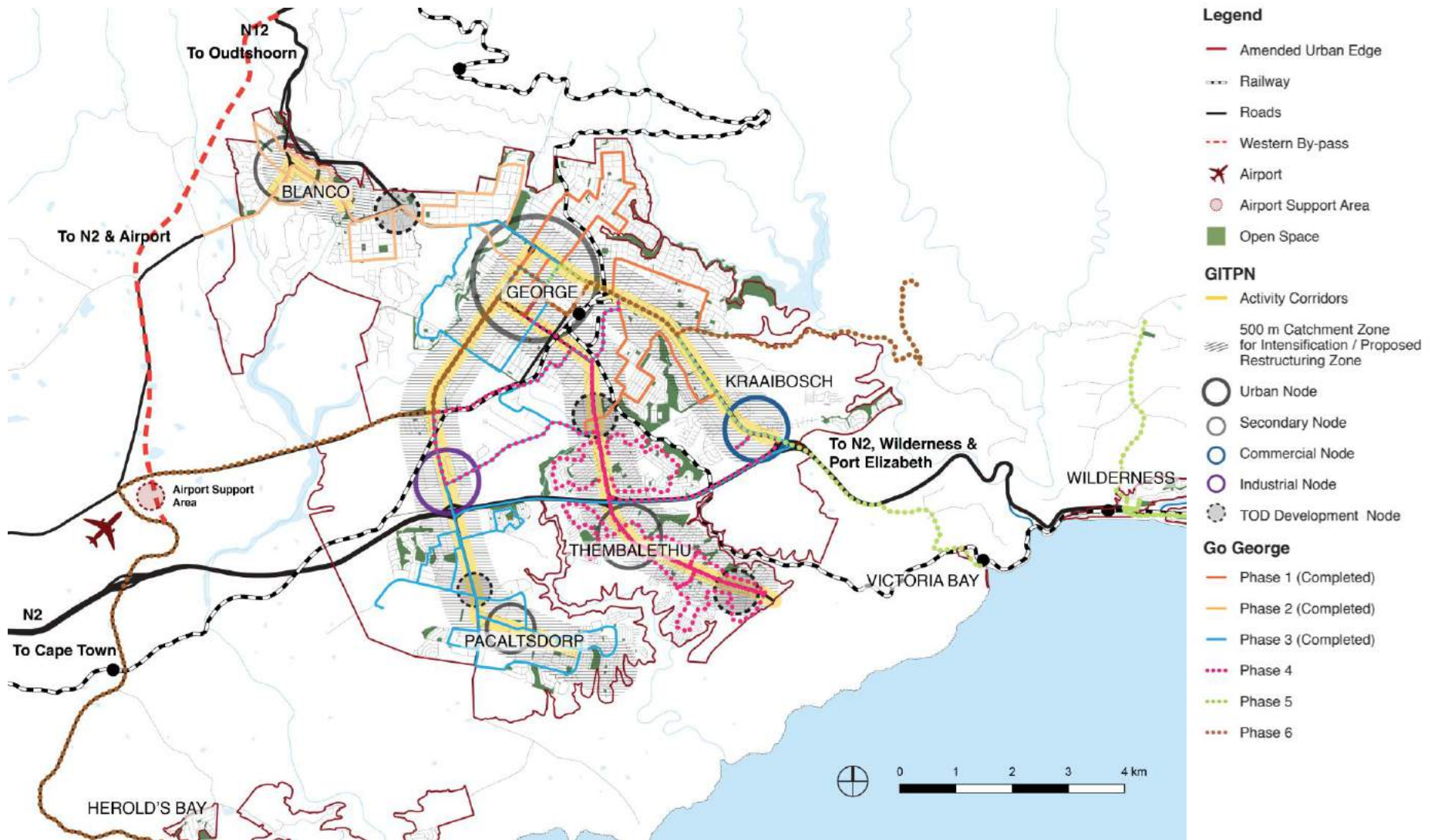
*Within the George city area, direct public investment (public facilities, amenities and services), commercial activity and residential densification, in particular affordable residential opportunities, towards consolidating and reinforcing the principal public transport/ activity corridors and in particular the priority nodal centres identified in Map 14 (as civic and economic destination places).*

George's restructuring zone, identified in terms of the Social Housing Policy, the Guidelines and the Social Housing Act, 2008, has been delineated to align with the 500m zone for intensification of land use along the principal public transport corridors and the priority nodes along these corridors. This is subject to the approval of the competent authority.

### **Policy Guidelines:**

- a) Development in priority nodes should be promoted in accordance with the function of the node and its potential role to create a balance in the land uses within the node and a balance between origins and destinations in the public transport network; i.e. to promote demand for public transport throughout the day in different directions.
- b) The movement of public facilities or services or the location of new facilities or services should be planned in conjunction with the Integrated Public Transport Network to ensure the maintenance of public transport access
- c) Designate public transport zones in terms of the George Integrated Zoning Scheme By-Law to align with and support the priority primary, secondary and TOD nodes identified and the intensification / restructuring zone





Map 13: Public Transport Priority Nodes and Corridor

## Policy C2

*Restructure settlement patterns through infill development of vacant and underutilised land in the settlements in the George Municipal Area*

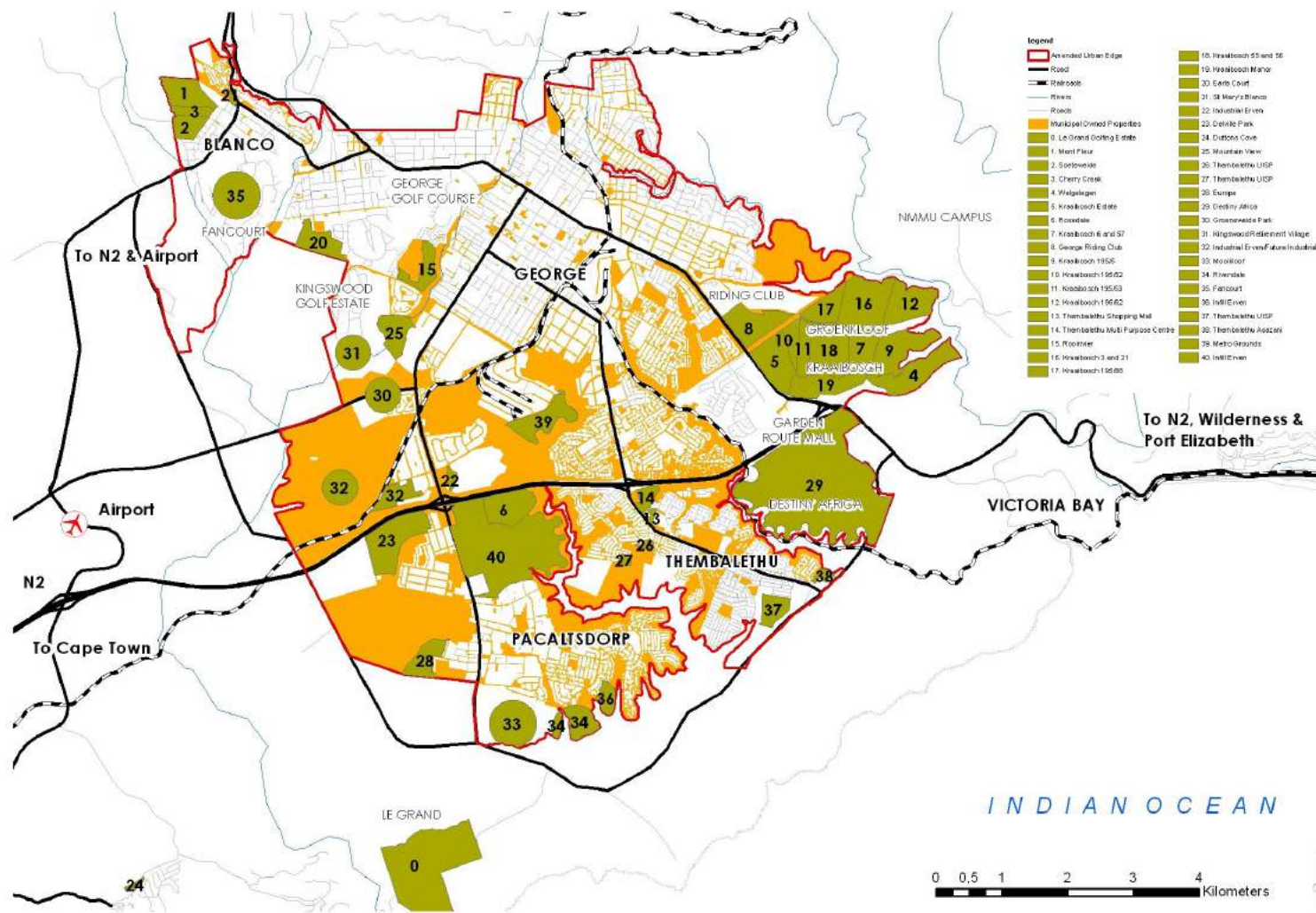
Strategic vacant or under-utilised land parcels suitable for development in the short to medium term are identified in this MSDP (Map 14) and the LSDP's. Suitable strategic land parcels have been prioritised and investigated in greater detail in the George Settlement Restructuring Strategy (2016). The spatial land budget presented in Map 15 demonstrates that there are numerous public and privately owned small and large land parcels suitable for "greenfields" urban development within the urban edge of the George city area.

### Policy Guidelines:

- a) These infill development opportunities should be prioritised for release and development within the human settlement development and private sector pipelines.
- b) Strategic land parcels identified in the George Restructuring Strategy should be prioritised for release for mixed use development that is inclusive of high density social or affordable rental housing and catalytic in nature from the perspective of regenerating the CBD for example.
- c) Promote and direct new affordable residential development to well-located infill and/or vacant or under-utilised land in the intensification zone and priority nodes.
- d) Actively support the reservation and protection of municipally owned land as an asset to assist in achieving social integration and living opportunities closer to existing

facilities, employment opportunities, services and / or amenity sites.

- e) Apply a good urban design guideline to ensure that the impact of infill developments on receiving neighbourhoods is positive.
- f) Promote well designed boundary definition of under-utilised school properties in disadvantaged areas, through infill on the edges of the properties in order to enhance the safety and the quality of the environment around these schools and provide well-located land for housing.
- g) Support the use of underutilised land in proximity to the intersections off the N2 and along the routes linking Pacaltsdorp and Thembalethu to the existing CBD for more intensive mixed-use development.
- h) Promote social and gap housing within the municipality's Restructuring Zone and on sites identified by the George Settlement Restructuring Strategy, within a suitable mix of uses that also harnesses economic development opportunities that will generate employment.
- i) Beyond the WCG's existing human settlement development pipeline, no new housing projects should be located on the periphery of the George city area. This existing pipeline, delivering over 11,000 housing opportunities between 2015 and 2019 is indicated in Map 15.
- j) Put in place an inter-governmental portfolio of land, a preparation programme and a land release strategy and contract this inter-governmentally, starting with land identified in the George Restructuring Strategy



Map 14: George City Area and Spatial Budget (George Municipality, 2013)

### **Policy C3**

*Restructure settlement patterns through densification of the urban areas in the George city area in order to reduce land consumption, deliver services and facilities to households more cost effectively, and to establish the thresholds for viable public transport systems*

*National and provincial government have set municipalities the target of increasing the density of urban areas to an average gross based density of 25 dwelling units / hectare.*

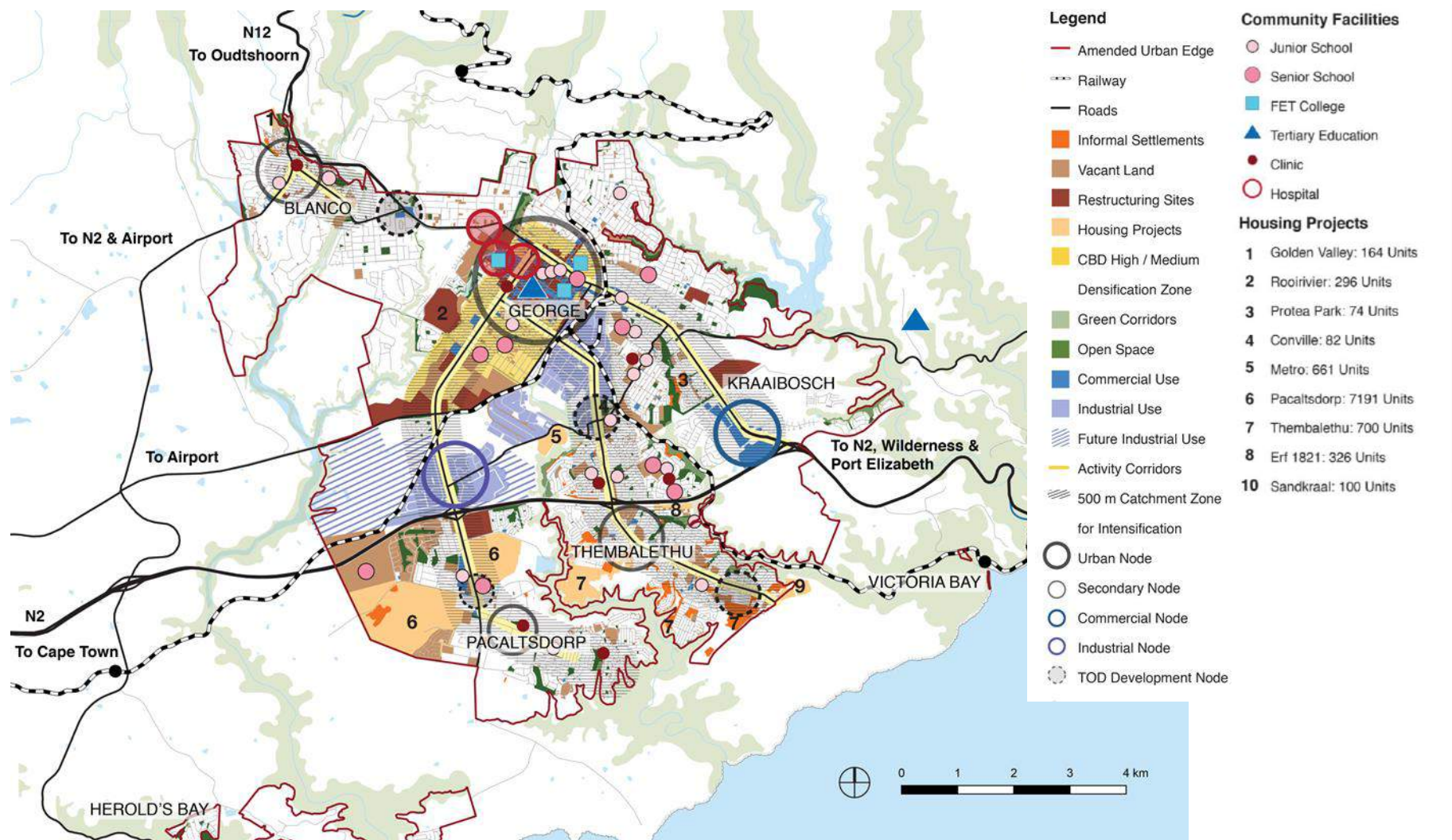
#### **Policy Guidelines:**

- a) The focus of densification is not on residential use alone, a mix of land uses are required to sustainability restructure the urban areas of George
- b) Support increased densities in the identified priority nodes and along the principal formal public transport activity corridors.
- c) The densification focus areas and target densities to be promoted within the George city area are outlined in Table 7.
- d) Combine the repair and renewal of existing infrastructure in well located areas with enhanced capacity to accommodate densification.
- e) Resist gated developments / estates in locations and at a scale that will compromise the walkability of the area and specifically safe, comfortable pedestrian and non-motorised transport access to public transport routes and the non-motorised transport network.
- f) Promote alternative forms of enhanced safety that provide broader public benefit (e.g. security patrols and CCTV cameras).
- g) Backyard/ second dwellings are a legitimate form of densification and means of responding to housing demand. These are also as of right in the George Integrated Zoning Scheme By-Law. Available data suggests that the number of households residing in informal backyard shelters is almost equal to the number of those living in informal settlements.
- h) As of right second dwellings should be planned for in the layout and infrastructure specifications for new low income housing developments where possible.
- i) By-laws and any other regulatory constraints should be reviewed to reduce the barriers and costs to developing suitable second dwellings.
- j) The sustainability of second dwellings should be supported in the planning and prioritisation of utility and social infrastructure provision, upgrading and maintenance.

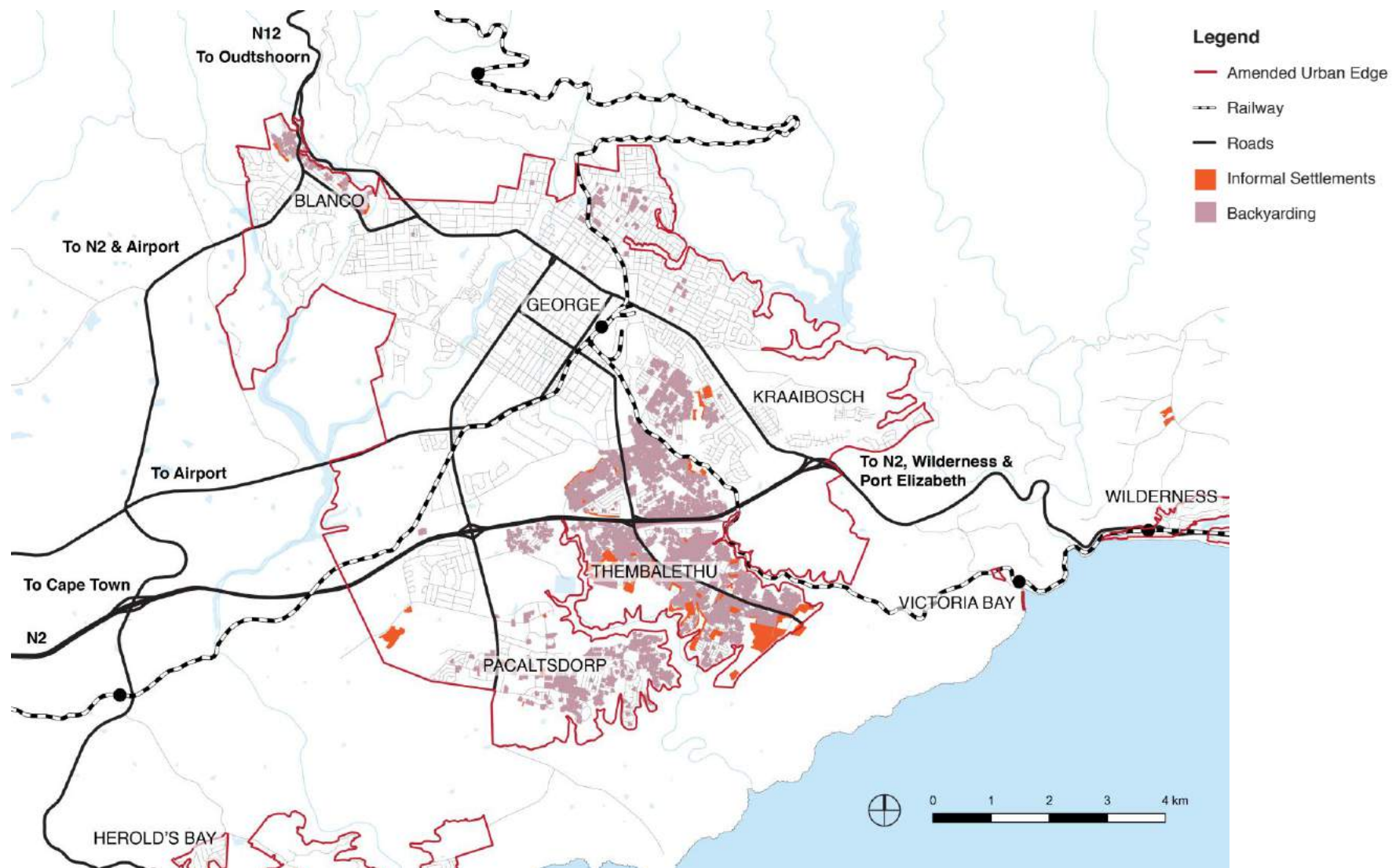
**Table 7: Proposed Density Targets in the Priority Public Transport Corridors and Nodes in the George City Area**

AREA	DENSIFICATION PROPOSALS
CBD	Densification along key CBD routes of up to 80 units/ ha.
Blanco	<ul style="list-style-type: none"> <li>• Sensitive mixed use development and densification along major routes (George Street and Montagu Street)</li> <li>• Infill residential development to densities of 35 units/ ha or higher on identified vacant land parcels.</li> </ul>
George South East	Densities of 60 units/ha for new development at Borchersds, Rosemoor, the cemetery area, and commonage south of the industrial area (and smaller vacant sites).
Pacaltsdorp	<ul style="list-style-type: none"> <li>• An overall density of 25 units/ha is preferred</li> <li>• Densities as high as 80 units/ ha at the commercial centre.</li> </ul>
Thembaletu	<ul style="list-style-type: none"> <li>• An overall density of 25 units/ha is preferred</li> <li>• Higher densities of up to 80 units/ ha is preferred at commercial nodes and along the principal formal public transport/ GoGeorge corridor along Nelson Mandela Boulevard/ Sandkraal Road. Given that Thembaletu is an existing medium –high density residential area within the George city area, with a substantial unemployed population, emphasis should be given to the integration of employment generating land uses into any proposed residential development. Employment generating land uses and social facilities should be prioritised on well-located land along this corridor within Thembaletu.</li> </ul>





Map 15: Human Settlements in the George City Area



**Map 16: Areas Designated for Incremental Upgrading Approaches to Development and Regulation**

### 4.3.2 Strengthen: Build on George's foundations for growth and resilience

The **objective** of this strategy is to strengthen George's natural and built assets that support life and livelihoods, offer the potential for further prosperity, as well as buffer the impacts of climate change to life and property. In other words, to enable George to grow off a sustainable and resilient base.

There are five mutually reinforcing building blocks supporting this objective around which the policies are organised:



#### 4.3.2.1 How will we measure our success?

*Indicators to be used to ascertain whether George is making progress towards this objective, will be identified on the basis of the finalisation and acceptance of this MSDF.*

#### 4.3.2.2 Policies

##### Policy D

*Manage the use of land in the Municipal area in a manner which protects natural ecosystem functioning and values ecosystem services, respecting that these are assets that underpin the economy and settlement and their resilience.*

##### Policy D1

*Support and maintain the functionality of biodiversity areas*

##### Policy Guidelines:

- a) Actively support the consolidation, extension and linkage of the Garden Route's network of formally protected and critical biodiversity areas (through, inter-alia, the roll-out of the Garden Route National Park (GRNP) and recognition of associated buffer zones).
- b) Keep intact natural landscape corridors, as identified by South African National Parks (SANParks), to function as ecological process areas (i.e. enable the migration of plants, animals and birds notwithstanding changing climatic conditions). Examples of corridors are river valleys extending from inland mountains to the sea, along parts of the escarpment (i.e. the step where the inland plateau drops to the coastal plain) and the admiralty zone along the coast. Corridors where intact ecological functionality is very important for biodiversity conservation in the context of the GRNP and GRNP buffer zone and for the provision of ecosystems services to society, are;
  - i. Kaaimans / Silver river corridor
  - ii. Touw river corridor
  - iii. Duiwe-Klein Keurbooms river corridor
  - iv. Diep river corridor

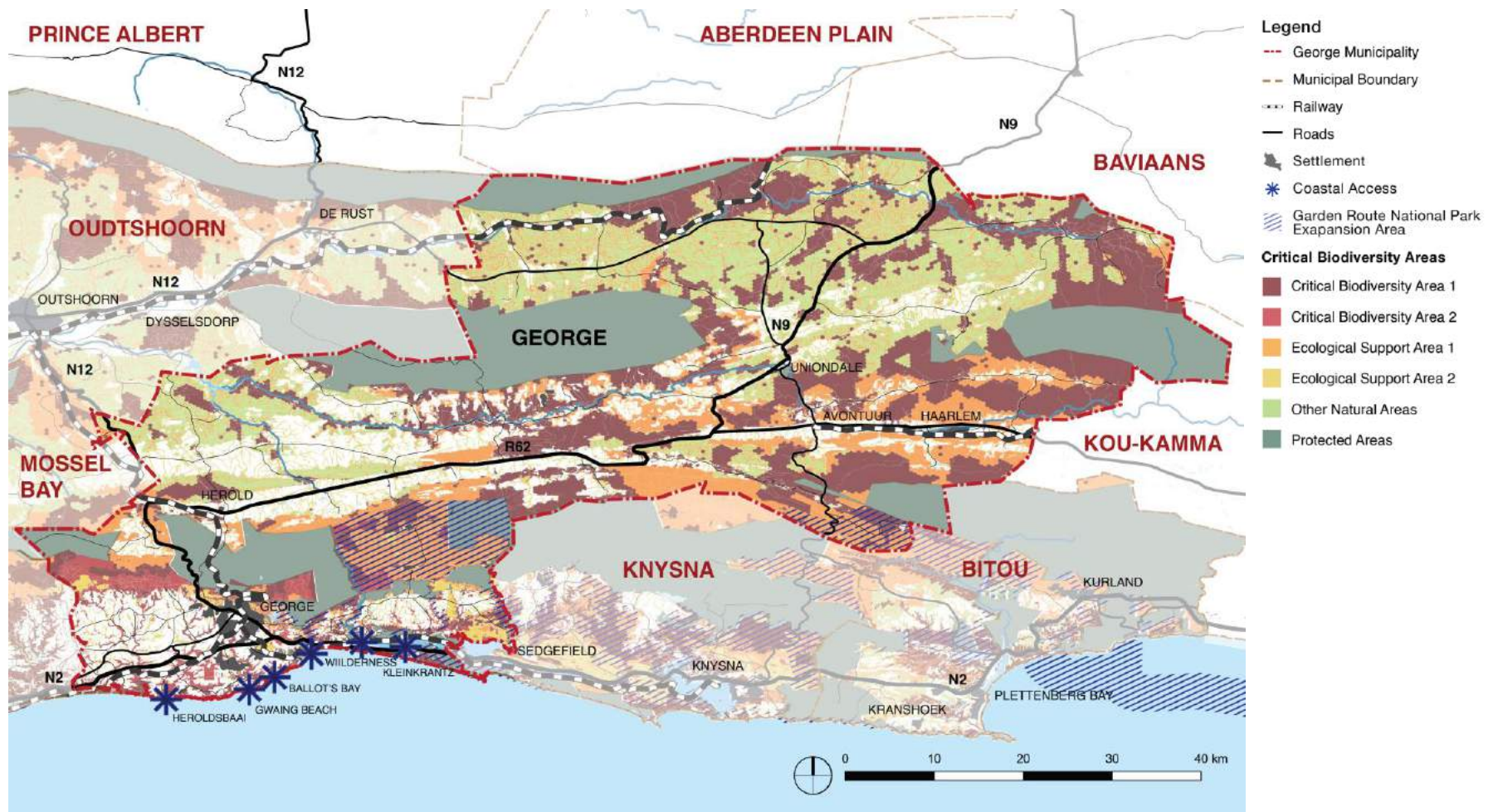
- v. Coastal corridor between the Admiralty Zone and the Lakes Systems (Island Lake and Langvlei)
  - vi. Upper Keurbooms corridor
- 
- c) Further expansion of the urban edge into the Kaaiman's Corridor is not supported.
  - d) Development abutting these corridors must be sensitive and seek to have minimum impact.
  - e) Ensure that landscapes linking, or with the potential to link, critical biodiversity areas can function as ecological corridors (i.e. along the coast and along the rivers that link the coast to the mountains).
  - f) Consolidate as far as possible areas of conservation worth (i.e. critical terrestrial and aquatic biodiversity areas and ecological support areas).
  - g) Support cross-boundary land use, management and conservation initiatives.
  - h) Use the latest landscape-wide Critical Biodiversity Area data and mapping as a primary informant in determining suitability for new development. Refer to Table 8 for a summary of the Critical Biodiversity categories and associated land use management objectives.
  - i) Advocate for "ground-truthing" of this data set to better inform land use decision-making.
  - j) Encourage and support reasonable, manageable public access to nature areas for all citizens and visitors.
  - k) Actively support Cape Nature's stewardship program to secure conservation status for critical biodiversity areas situated on private land that are not currently formally protected, subject to ground-truthing.
  - l) Manage land use so as to avoid further loss of critical biodiversity and promote the rehabilitation of degraded areas.
  - m) Urban growth proposals have been planned to avoid critically endangered and endangered Critical Biodiversity Areas; however, where this is not possible a requirement for a biodiversity offset will be triggered.
  - n) Manage land uses within sensitive ecological areas in terms of the Spatial Planning Categories presented in the WCG's Rural Land Use Development Guidelines.
  - o) Land to the south of the Garden Route Dam can be developed in a manner that promotes integration and inclusivity, ensuring that public access to this asset is secured in perpetuity. Any future development in this area will need to be dealt with sensitively to minimise environmental impact and hazard, ensure compatibility with the surrounding landscape and optimise public amenity. No urban development should be allowed to the north, east or west of the dam or, in other words, beyond the urban edge. This is a hard edge aimed at conservation of biodiversity.



**Table 8: Summary of Critical Biodiversity Categories as set out in the Western Cape Biodiversity Sector Plan, 2017**

CATEGORY	DEFINITION	BROAD LAND USEMANAGEMENT OBJECTIVES
<b>PA:</b> Protected Areas	Long-term protection of important biodiversity and landscape features, formally protected by law in terms of National Environmental Management: Protected Areas Act (NEM:PAA). This includes private Nature Reserves and Protected Environments determined via a stewardship programme.	Must stay in a natural ecological condition, with a management plan focused on maintaining or improving the state of biodiversity. Land use suitable for Environmental Conservation
<b>CBA:</b> Critical Biodiversity Areas	Areas that are required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure. Together with protected areas, ensures that a sample of all ecosystem types and species can be maintained. Categorised into <b>CBA 1</b> (natural condition) and <b>CBA 2</b> (degraded or secondary vegetation).	CBAs are areas of high biodiversity and ecological value and need to be kept in a natural or near-natural state, with no further loss of habitat or species. Degraded areas should be rehabilitated to natural or near-natural condition. Only low-impact, biodiversity-sensitive land uses are appropriate.
<b>ESA:</b> Ecological Support Areas	Areas that are not critical for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often essential for delivering ecosystem services. Split into <b>ESA 1</b> (natural, semi-natural or moderately degraded condition) and <b>ESA 2</b> (severely degraded or no natural cover and require restoration) Categories.	A greater range of land uses over wider areas is appropriate, subject to an authorisation process that ensures the biodiversity targets and ecological functioning is not compromised. Cumulative impacts should also be considered. <b>ESA1s</b> need to be maintained in a functional and natural condition, in order to support the purpose for which they were identified, some limited habitat loss may be acceptable. <b>ESA2s</b> require reduced impact on ecological functioning; especially soil and water-related services.
<b>ONA:</b> Other Natural to Near-Natural Areas	Areas that have not been identified as a priority in the current biodiversity plan, but preserve most of their natural character and carry out a range of biodiversity and ecological infrastructure uses. Although they have not been prioritised for biodiversity, they are still a significant part of the natural ecosystem.	Reduce habitat and species loss and ensure ecosystem functionality through landscape planning. Flexibility is allowed with certain land uses, but some authorisation is still required for high-impact land uses.
<b>NNR:</b> Severely Modified to No Natural Remaining	Areas that have been altered by human activity so that they are no longer natural, and do not contribute to biodiversity targets. These areas may still provide limited biodiversity and ecological infrastructure functions, even if they are never prioritised for conservation action.	Manage in a biodiversity-sensitive manner, aiming to maximise ecological functionality. Flexibility is allowed with regard to potential land uses, but some authorisation may still be required for high-impact land uses.





Map 17: Critical Biodiversity Areas in the Greater George Area (adapted from SANBI, 2017)

## Policy D2

*Manage development along the coastline and wetlands in a sustainable and precautionary manner, no further development should take place seaward of the Coastal Management Line (setback line) as demarcated in this MSDF and delineated by the Protected Areas, sensitive biodiversity in terms of the Western Cape Biodiversity Spatial Plan, 2017), steep coastal cliffs/ primary dunes and a 5 amsl contour.*

New land use developments will be subject to ecological setbacks along the coast and around freshwater systems in order to maintain the economic and ecological functioning of marine and other aquatic ecosystems.

A Coastal Management Line (a development limit) as well as a Coastal Protection Zone (a planning and management zone) is delineated for the Greater George Area in this MSDF, based on a coastal risk assessment for 20 (high risk), 50 (medium risk) and 100 (low risk) year horizons

### Policy Guidelines:

- a. Coastal sensitivities must be integrated into all applicable planning decisions within the coastal region, in order to protect existing property, infrastructure and ecology and ensure that only responsible and sustainable development takes place in areas with a high risk of inundation, coastal erosion and destructive storm surges.
- b. Development along the coast must be managed in terms of a set of development parameters set out in a risk-based overlay zone.
- c. To prevent flooding of vulnerable coastal properties, natural defences in the form of primary dune systems, estuarine mudflats and sand dunes will be safeguarded from further conversion through urban development or agricultural practices.
- d. Natural systems that play a role in mitigating the impacts of sea level rise and the increased frequency and intensity of storms should be rehabilitated.
- e. Where feasible the retreat of at risk infrastructure should be considered in high hazard zones.
- f. No development to be allowed below the 5m contour line around estuaries. This contour encapsulates the most dynamic areas influenced by long term estuarine sedimentary processes. It should provide a buffer zone that can allow the estuary to retreat in the event of sea level rise due to climate change. It also allows for the inclusion of some terrestrial fringe vegetation that contributes to the system and refuge areas for many animal species during floods.
- g. There should be no development of new hard protective structures along the coastline and freshwater systems, adaptation is preferred.
- h. The resilience of settlements in the instance of extreme events is compromised where critical infrastructure serving the settlements is located within flood risk areas and areas at risk of storm surges associated with extreme events:
  - i. The planning and design of new infrastructure, in particular storm water systems, should consider the higher frequency of flooding associated with extreme weather conditions.
  - ii. The retreat of at risk infrastructure should be considered in high hazard zones.
- i. Further coastal, estuarine residential development which is not integrated within existing settlements is not supported.
- j. Infill development of coastal settlements should be carefully managed to ensure that roads and utility infrastructure is able to adequately meet the demand and performance

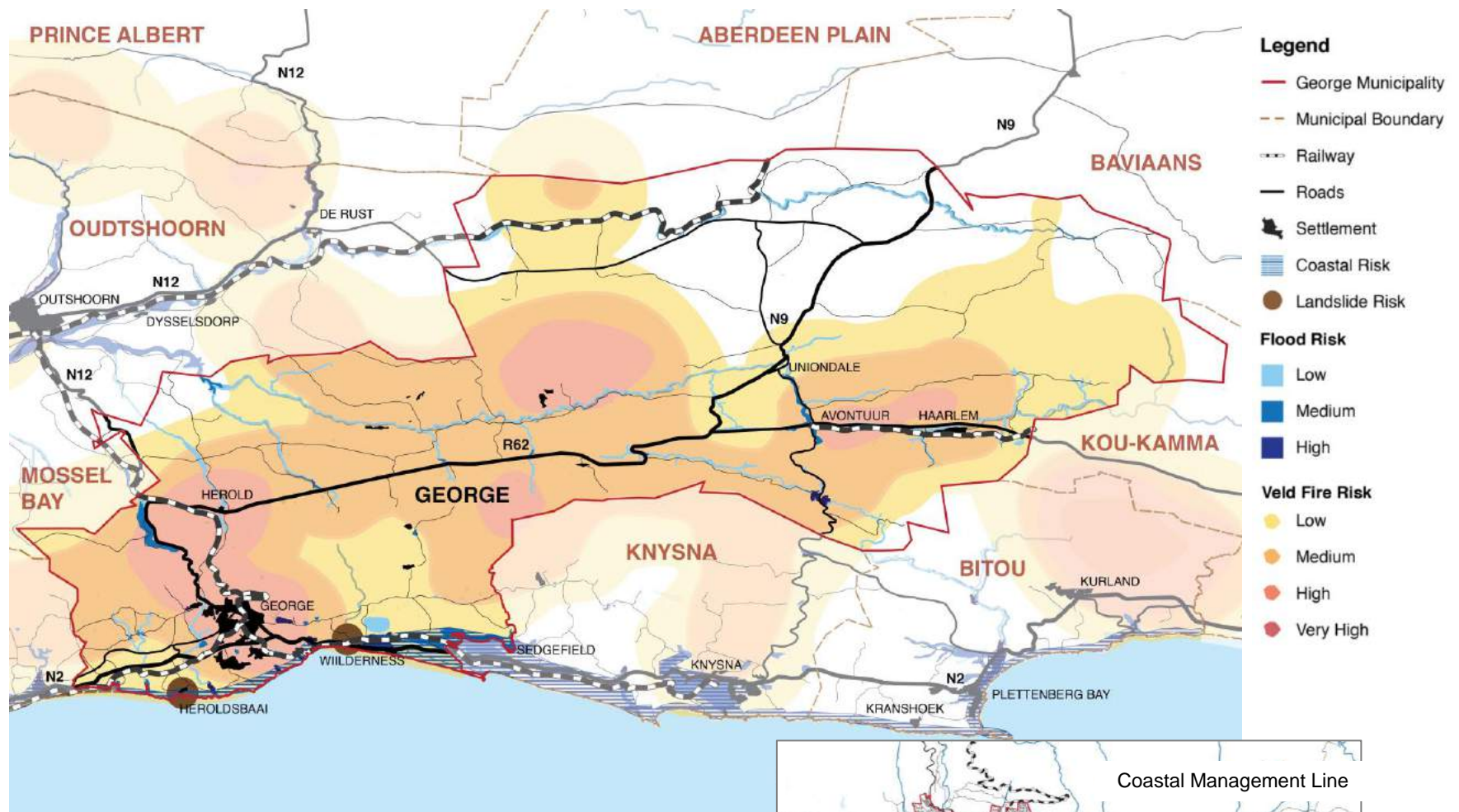
standards in order not to compromise the host environment. Overlay zones should be considered to set additional parameters for development and land use in particularly sensitive and unique environments.

### **Policy D3**

*Facilitate inclusive and equitable, managed public access to the coastline and estuaries at defined points*

#### **Policy Guidelines:**

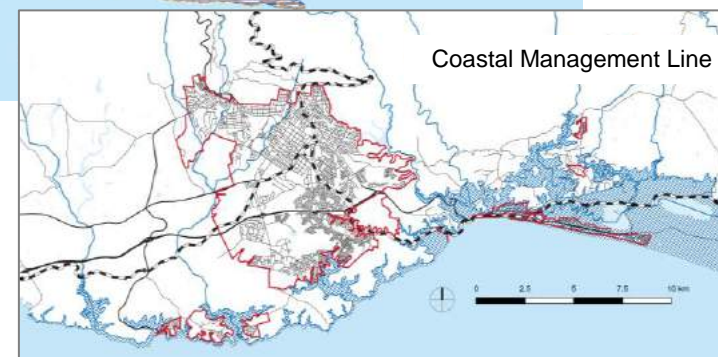
- a) It is critical that access to the coastline is managed consistently across the Southern Cape's coastal municipalities as the coastline performs as an ecological system. The George Municipality must work with the Garden Route Municipality and the Western Cape Government, in terms of the Integrated Coastal Management Act and the Western Cape Coastal Access Strategy, to ensure a coordinated and consistent approach.
- b) Access to the coastline presents opportunities for recreational activity, local economic development, and local tourism which should be sensitively planned and managed in terms of a coastal access bylaw.



**Map 18: Disaster Risk Areas in the Greater George Area**

(Veld Fire Risk adapted from Rylands 2013)

The Coastal Management Line (CML) defines the blue hatched area in the insert map.





- c) The coastline is a public amenity and public access should be secured and managed at ecologically appropriate points, minimising adverse impacts on the environment, public safety and resolving incompatible uses (Draft Eden Coastal Audit, 2017).
- d) Joint ownership entities should protect public access rights/ servitudes in their constitutions
- e) Approved private development on public and private land should not remove historical public access to the coast.
- f) Publicly owned property on the coastal edge, outside of the GRNP, should be used to secure and protect public access to the coastline in perpetuity.
- g) Public coastal access points that should be reinforced, planned and managed in such a way as to provide facilities and unlock sustainable and ecologically sensitive local economic opportunities. The draft Western Cape Coastal Access Strategy sets out minimum requirements for designated coastal access sites/ routes. Coastal Access points have been identified in Table 9.
- h) The Municipality will work with private land owners and the Ballots Bay Homeowners Association to provide for safe and environmentally responsible public access.
- i) Formalise unsafe public access, such as the Fisherman's Path in Wilderness East.
- j) The Municipality should maintain a coastal access audit.

Coastal Access Point	Action required
Fisherman's Path, Wilderness East	Formalise with safe steps
Gwaing Mouth	Maintain
Herolds Bay	Maintain
Victoria Bay	Maintain
Leentjies Klip	Maintain
Kleinkrantz Beach	Maintain
Kaaimans River	Resolve dispute
Wilderness NSRI	Maintain
The Waves of Wilderness	Maintain
Kleinkrantz Paragliding	Enforce by-laws
Ebb and Flow	As per management plan
Buxton Close	Maintain
Ballots Bay	Secure public access
Sands Road parking 1	Maintain
Sands Road parking 2	Maintain
Wilderness Lagoon public access	Maintain
Wilderness Beach Hotel	Maintain
Kleinkrantz	Maintain
Gerickes Point	Enforce by-laws (paragliding launch site)
Map of Africa	Enforce by-laws (paragliding launch site)

Table 9: George Coastal Access Points (Western Cape Government , 2018)



#### Policy D4

*Manage watercourses so that they remain in a natural state or their present ecological status is improved or at least does not deteriorate.*

Protect rivers, estuaries, wetlands and their catchments (George's hydrological system and water resources) - from pollution, increased surface run-off and siltation, unmanaged extraction and the impact of reduced run-off and/or clogging as a result of alien vegetation infestation.

#### Policy Guidelines:

- a) Watercourses must be correctly classified and delineated with the assistance of specialist expertise based on ground-truthing and not only geo-spatial databases.
- b) Watercourses may not be straightened or canalised.
- c) Development in river corridors must incorporate a site specific, proactive approach to storm water management, erosion prevention and alien invasive vegetation eradication.
- d) A precautionary approach supported by strong land use management and enforcement should be applied to activity and development within the catchments of the following priority water resource units:

**Table 10: Prioritised Water Resource Units (Department of Water and Sanitation, 2018)**

River	Estuary	Wetland
Kaaimans Diep	Maalgate Gwaing Kaaimans Wilderness	Wilderness Lakes

- e) Water, sanitation and storm water infrastructure master planning and budgeting must ensure timeous maintenance and upgrading to secure the integrity of the hydrological systems / eco-services and mitigate risk to public health. Poor maintenance or where facilities operate at over capacity can result in the pollution of rivers, which has an adverse impact on human health and the environment and presents a considerable social and economic cost. This can be exacerbated by both drought and high rainfall periods.
- f) Natural riparian zones (river banks) must be retained and protected or restored if degraded or absent.
- g) Infrastructure that needs to cross a watercourse such as pipelines or bridges, must be minimised. If unavoidable, it must cross the watercourse in the shortest distance, i.e. 90° and not diagonally. Consideration should be given to horizontal drilling underneath the watercourse for pipelines. Bridges and culverts must be designed such that it does not form an obstruction in the watercourse, (e.g. not cause an obstruction for the movement of aquatic species, not dam up water during a 1 in 50 year flood, and not be damaged or washed away during 1 in 100 year or bigger floods).
- h) Buildings and structures (other than linear infrastructure that must cross a watercourse) must be set back at least 32m from a watercourse, or outside of the 1 in 100 year flood line, whichever is the greatest.
- i) Sewer lines (except where it needs to cross a watercourse) must be set back at least 32m from a watercourse (river or wetland). This reduces the chance of sewage entering a watercourse and increases the likelihood of a sewage spill being reported.

- j) Where there are existing rights to build within 32m of the edge of a watercourse and it cannot be altogether avoided, development must be minimised and set back as far as possible.
- k) Storm water outlets must be designed to avoid pollution (e.g. via a litter trap), reduce runoff (e.g. retention or detention ponds, permeable paving etc. outside flood lines), reduce chemical and biological pollution (i.e. artificial wetlands to polish water outside flood lines), and avoid erosion.
- l) Storm water must be managed in accordance with Sustainable Drainage Systems (SUDS) principles as far as possible. SUDS optimise storm water detention and infiltration and avoid concentration of storm water runoff. The hardening of surfaces within catchments should be minimised
- m) Legislation governing the control of invasive species on land must be enforced as this contributes to reduced runoff into the rivers, clogging the rivers and /or siltation of rivers and wetlands downstream. Alien vegetation infestations should be removed in accordance with best practice; i.e. without disturbing topsoil.
- n) Public land owners must allocate sufficient resources to ensure the management of their land to remove and prevent alien vegetation infestation.
- o) Settlement alongside rivers and estuaries must use sustainable urban drainage systems to avoid polluted runoff and be managed to mitigate against unsustainable water extraction.
- p) Development alongside watercourses must not block public access.
- q) Watercourses must be protected from informal settlement.
- r) Where Estuary Management Plans are in place, these plans are a reference when making decisions within the catchments of these estuaries.
- s) A plan for the improved management and rehabilitation of priority river corridors in the George city area should be put in place to restore ecosystem function and the value of this natural asset to society.
- t) A set of development permission conditions to improve the sustainability of urban drainage systems and their impact on watercourses should be considered.

#### **Policy D5**

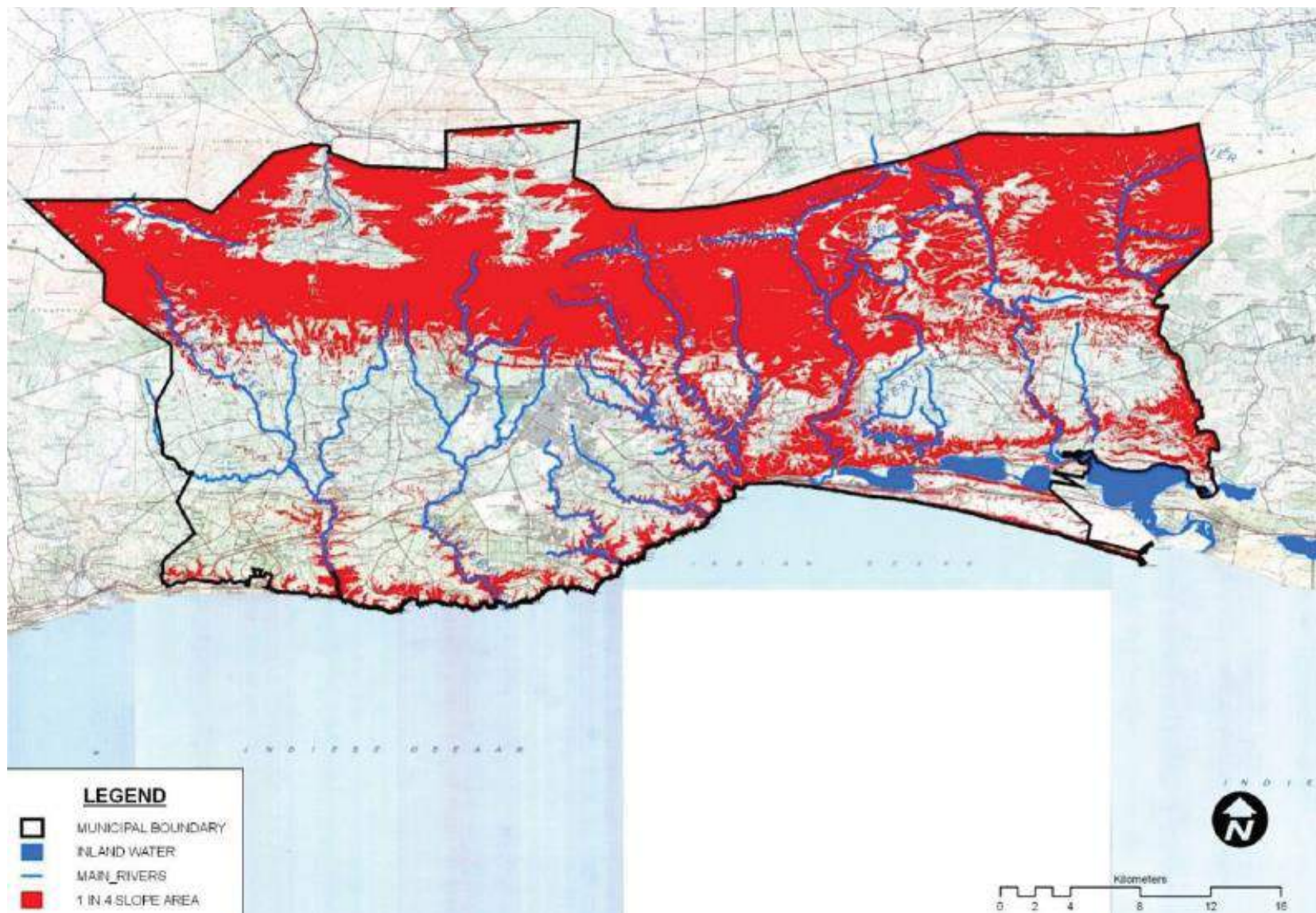
*Land use management mechanisms such as an asset protection overlay zone should be used to assist Disaster Risk Management with the mitigation of veldfire risk on vulnerable urban edges.*

Veldfire is a natural ecological process that occurs in many parts of the region, however if this is not managed or settlement patterns exacerbate the risk of veldfire, it places great risk to life and property in both rural and urban areas at significant economic and social cost.

#### **Policy Guidelines:**

- a) Identify and incorporate high veldfire risk areas and Asset Protection Zones – the zone between the built environment and the hazard area within which modifications are made to protect the built environment – into municipal planning and building control systems.
- b) Condition eco-estates to maintain ecological fire regimes at the correct intervals.

- c) Encourage landowners in fire prone areas to join the Southern Cape Fire Protection Association.
- d) Identify and put in place measures to enhance the management of vacant properties which are poorly managed and present a fire risk.
- e) Building and infrastructure design must consider the risk of higher speed winds and fire associated with more frequent extreme storms.
- f) Promote alien vegetation eradication programmes.



Map 19: 1:4 Slopes along the Garden Route Coastal Belt (George Municipality, 2009)

## **Policy D6**

*Minimise the impact of developments on visual landscapes and corridors*

The George Municipality's Landscape Characterisation Visual Resource Management Analysis (2009) determines visually sensitive areas in the George landscape and must be applied to manage visual impacts of development.

### **Policy Guidelines:**

- a) Valuable view corridors, undeveloped ridge lines, cultural landscape assets and existing vistas should not be compromised by any development proposal or cumulative impact of development proposals. The proportion of urban development up the slope of a prominent hill or mountain should not degrade its aesthetic / visual value.
- b) The southern slopes of the hills north of the Wilderness Lakes areas, as viewed from the current N2, should be safeguarded against development to maintain the green backdrop and 'wilderness' trademark. Only dwelling houses with restricted outbuildings should be allowed in sensitively placed areas on individual properties. Guesthouses which are run from existing dwellings can also be considered.
- c) Prevent development higher than the 280m contour line or on slopes steeper than 1:4.
- d) Employ the guidelines for managing visually sensitive landscapes set-out in the Garden Route Environmental Management Framework (EMF) and Visual Resource Management study.
- e) Gateway precincts must be developed in a visually sound way that attracts visitors to towns and places in the Greater George Area;

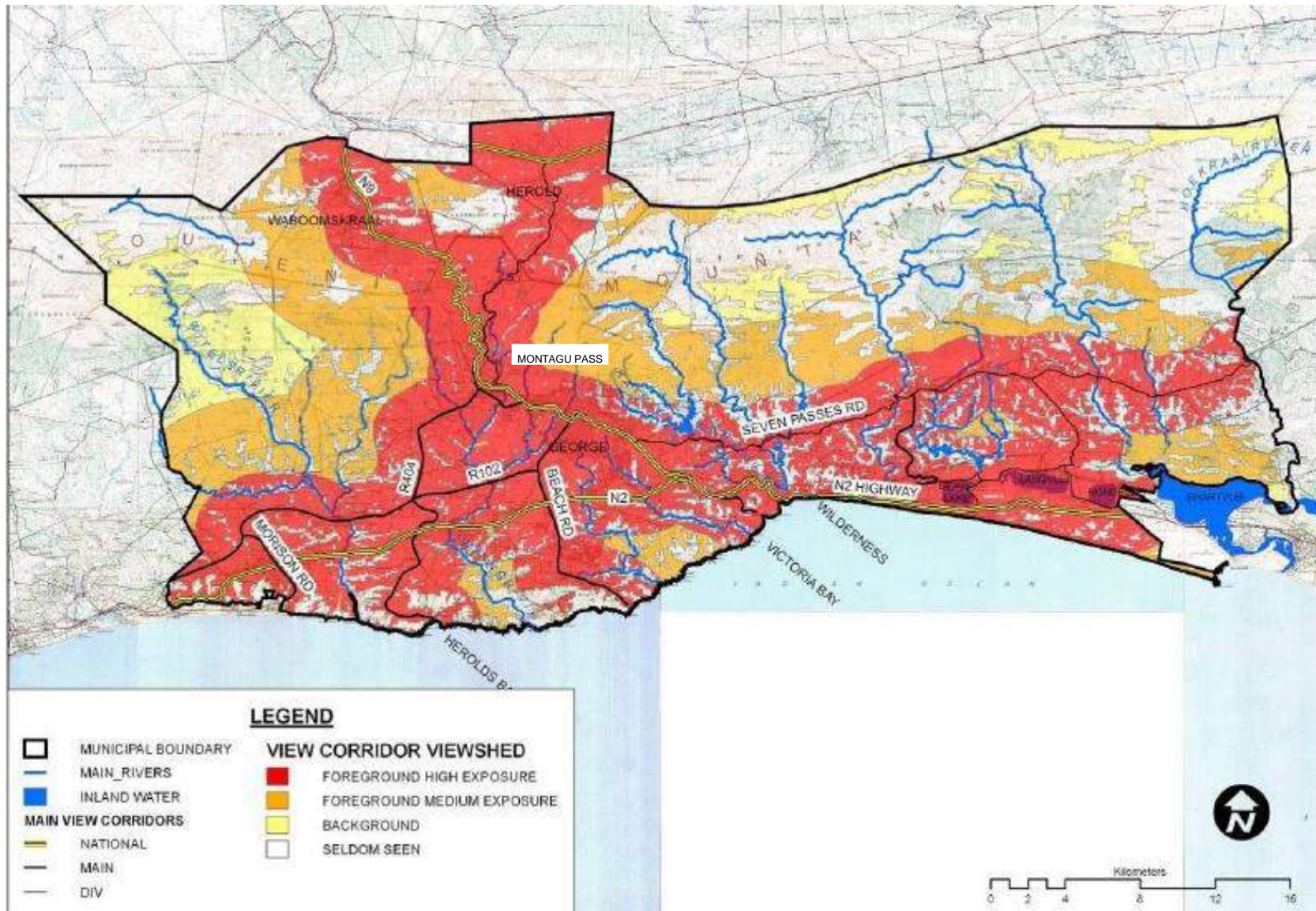
- i. The rural landscape running up to the western urban edge of the George city area is considered to be a significant gateway to the George city area, its rural character should be preserved.
- ii. The Kaaimans River Corridor and the rural landscape to the north of the N2, between this and the proposed new N2 alignment, up to the eastern urban edge of George is also considered to be a significant natural and rural landscape to be preserved as a distinctive gateway to and from the George city area.

- f) Scenic landscapes and features must be safeguarded.
- g) Scenic routes provide public access to the enjoyment of these landscapes. The routes and the land use alongside these routes should be managed in such a way as to not compromise the views offered but to mark and celebrate the landscapes and the origins or nature of their significance. Significant scenic routes in the Greater George Area are as follows:

- Gwaing River Pass
- Maalgate River Pass
- Hoogte Pass
- Voetpadhoogte Pass P1599
- Wolwedang Dam Road
- Montagu Pass
- Outeniqua Pass
- Beveraas Kloof Pass
- Paardepoot (P1646)
- Eseljagpoort
- Matjiesrivier Poort
- Kammanassie Pass
- Kaaimansriver Pass
- Kaaimansgat (7 Passes Road)
- Voortrekker Pass

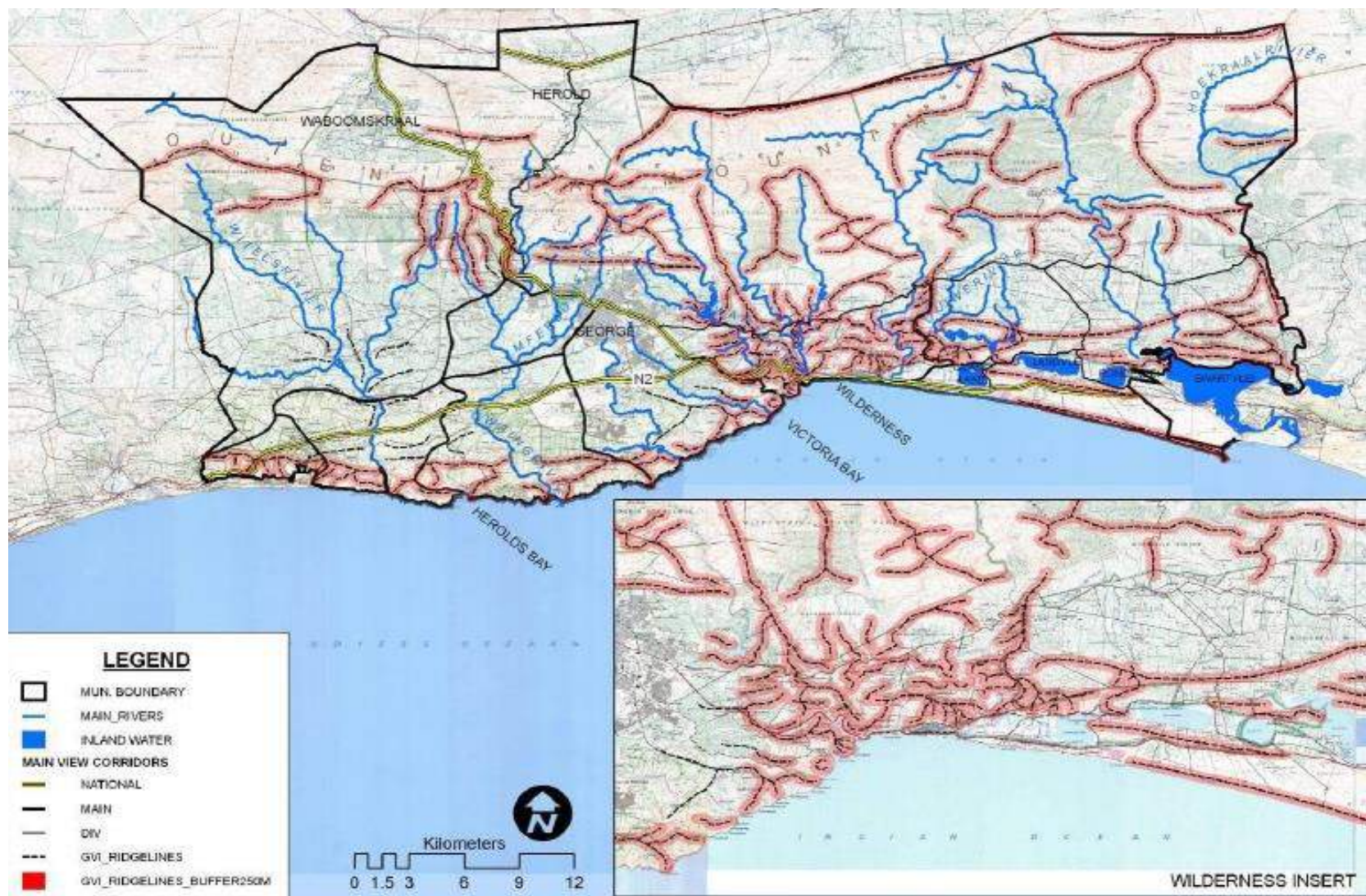


- Touw River Pass
- Hoekwil Pass
- Heights Road Pass
- Victoria Bay Pass
- Rondevlei Pass
- Prince Albert Pass
- Potjieberg Pass
- Uniondale Pass
- Uniondale Heights Pass



Map 20: View Corridors Along the Garden Route Coastal Belt (George Municipality, 2009)





Map 21: Ridgelines Along the Garden Route Coastal Belt (George Municipality, 2009)

**Policy D7**

*Manage the Municipal area in a manner that supports sustainable resource demand and use*

**Policy Guideline:**

- a) Urban development must take place in a manner that does not increase demand for water that is otherwise required for human consumption purposes. Further low density suburban development should be limited.
- b) Rainwater harvesting tanks should be promoted on all properties where possible
- c) The entire rural area and the catchments on the edges of the George city area, as well as the urban river corridors must be managed to sustain ecosystem services (e.g. the environment's ability to supply clean water).
- d) Support rural development that improves food, water and energy (e.g. solar and wind powered) security, and restores natural capital by removing alien plant infestation and adopting conservation oriented farming methods.
- e) Space for the storage of solid waste is limited and competes with other more productive land use demands. Recycling is an important means to reduce the demand for additional land for solid waste landfills and the negative external impacts that these bring along with the transport of waste to and from them, as well as associated ongoing costs.

**Policy D8**

*Support the opening-up and development of destinations at entry points to special, unique places of scenic, heritage and recreational value that provide public access, amenity and activities, and tourist attractions in the rural and natural landscape, designed sensitively and in harmony with their surrounds.*

**Policy Guidelines:**

- a) Such destinations should ensure inclusivity - securing public access, celebrating the natural, rural and heritage value of that particular location and offering local economic development opportunities.
- b) Protect publicly owned land, that would facilitate public access to these destinations, in perpetuity and investigate the development of such destinations on this land: (Map 17)
  - at the Gwaing River Mouth
  - in the Hansmoeskraal area
  - above Ballots Bay
  - at the George Dam
  - at the George Botanical Gardens, linking to the Van Kervel Nature reserve and the Witfontein reserve beyond, and to the Rooirivier river corridor.
  - at the Wilderness Estuary, Beach
  - at Kleinkrantz Beach
  - at Herold

### Policy E

*Safeguard the municipality's farming and forestry areas as productive landscapes, equal in value to urban land.*

Agriculture plays a significant role in the George municipality and Garden Route t municipality more broadly. It provides opportunities to increase un- or low skilled employment and grow products for local and international markets and for beneficiation in the manufacturing sector. It also contributes to the GDP, provides food security or a "bread basket" in close proximity to major settlements and is a base for tourism activities (Laskey, 2013:60). Protecting and promoting the agricultural economy is therefore a priority for the George Municipality and the Garden Route District Municipality.

#### Policy Guidelines:

- a) Support efforts to rejuvenate the agricultural economy based on the assets and resources of the region. Some of these resources include the forest, hops, fruit, livestock, flowers, honeybush and sustainable fynbos harvesting.
- b) Significant rural and agricultural areas to be managed as such in the Greater George Area are understood to be as follows:

Table 11: Significant Rural Places in the Greater George Area

Significant Rural Places in the Greater George Area	
<b>Olifantsrivier Valley:</b>	
- Rooilooop	Railway siding
- Snyberg	Railway Station
- Barandas	Railway Station
- Toorwater	Railway Station
- Nietgenaamd	Church/ Convent
<b>Roorivier</b>	Agri-area
<b>Kammanassierivier Valley</b>	Agri-area
<b>Eseljacht</b>	Agri-area
<b>Ongelegen</b>	Agri-area
<b>Molenrivier</b>	Agri-area
<b>Eensaamheid</b>	Agri-area
<b>Geelhoutboom</b>	Agri-area
<b>Hoogekraal</b>	Agri-area
<b>Sinksabrug</b>	Agri-area
<b>Waboomskraal</b>	Agri-area

### Policy E1

*Promote rural development that enhances the agricultural economy, its value chain into the broader economy and rural livelihoods as crucial to growing and balancing the urban-rural municipal space economy.*

#### Policy Guidelines:

- a) Support the Department of Rural Development and Land Reform (DRD&LR) in their initiatives to open-up new livelihood and business opportunities in the agricultural, fishing, forestry, tourism and conservation sectors as part of the roll-out of land, agrarian and marine reform programmes.
- b) Where relevant, align investment planning to support the establishment of the George city area & Haarlem as Farmer Production Support Units (FPSU) within the Eden Agri-Park as identified by the Eden Rural Development Plan (2017);

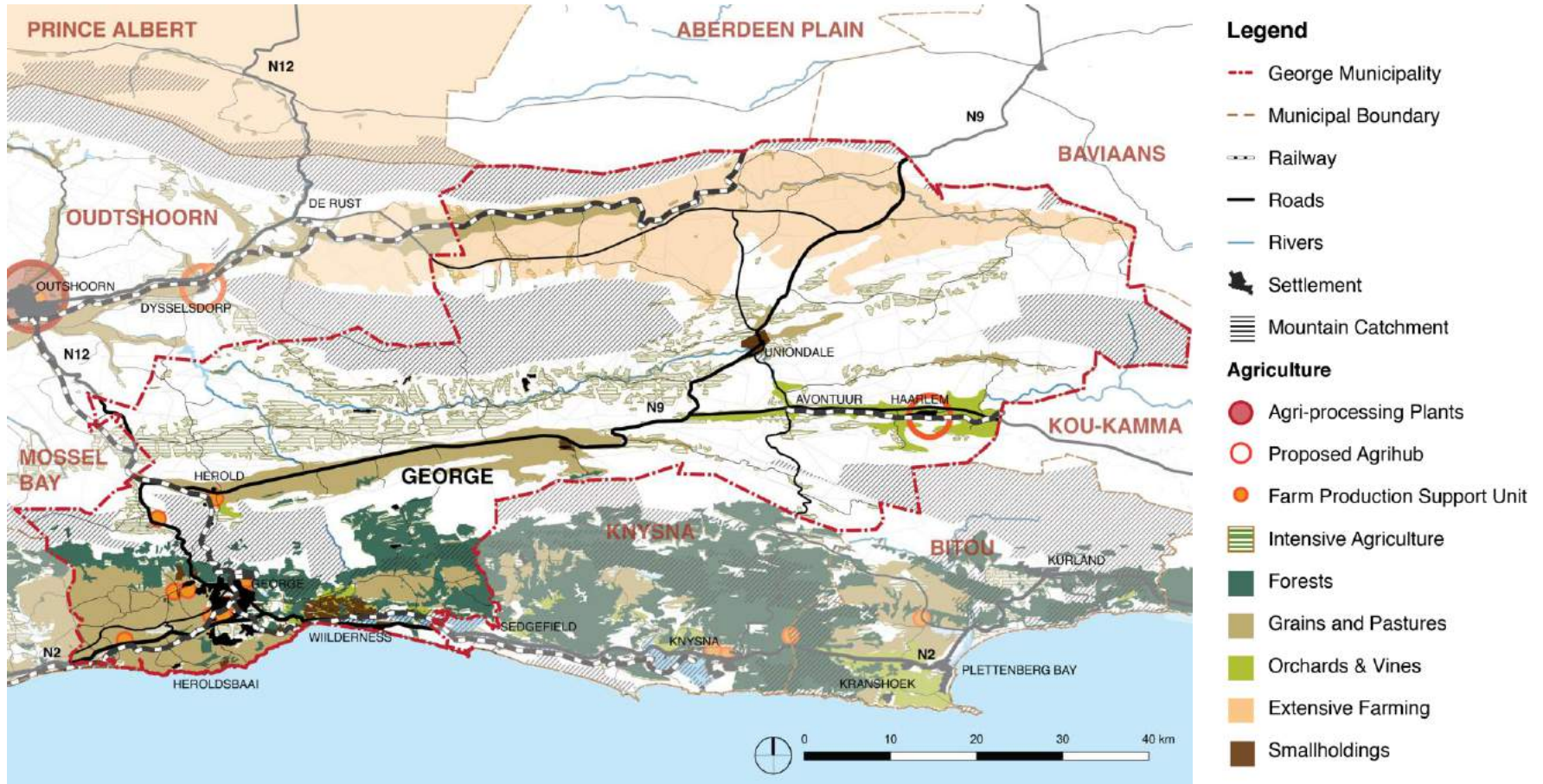


The FPSU is a rural outreach unit connected with the Agri-Hub (Oudtshoorn).

- The FPSU does primary collection, some storage, processing for the local market and extension services including mechanisation
- The RDP endorses key commodities and identifies FPSU infrastructure and support services to be included in each FPSU

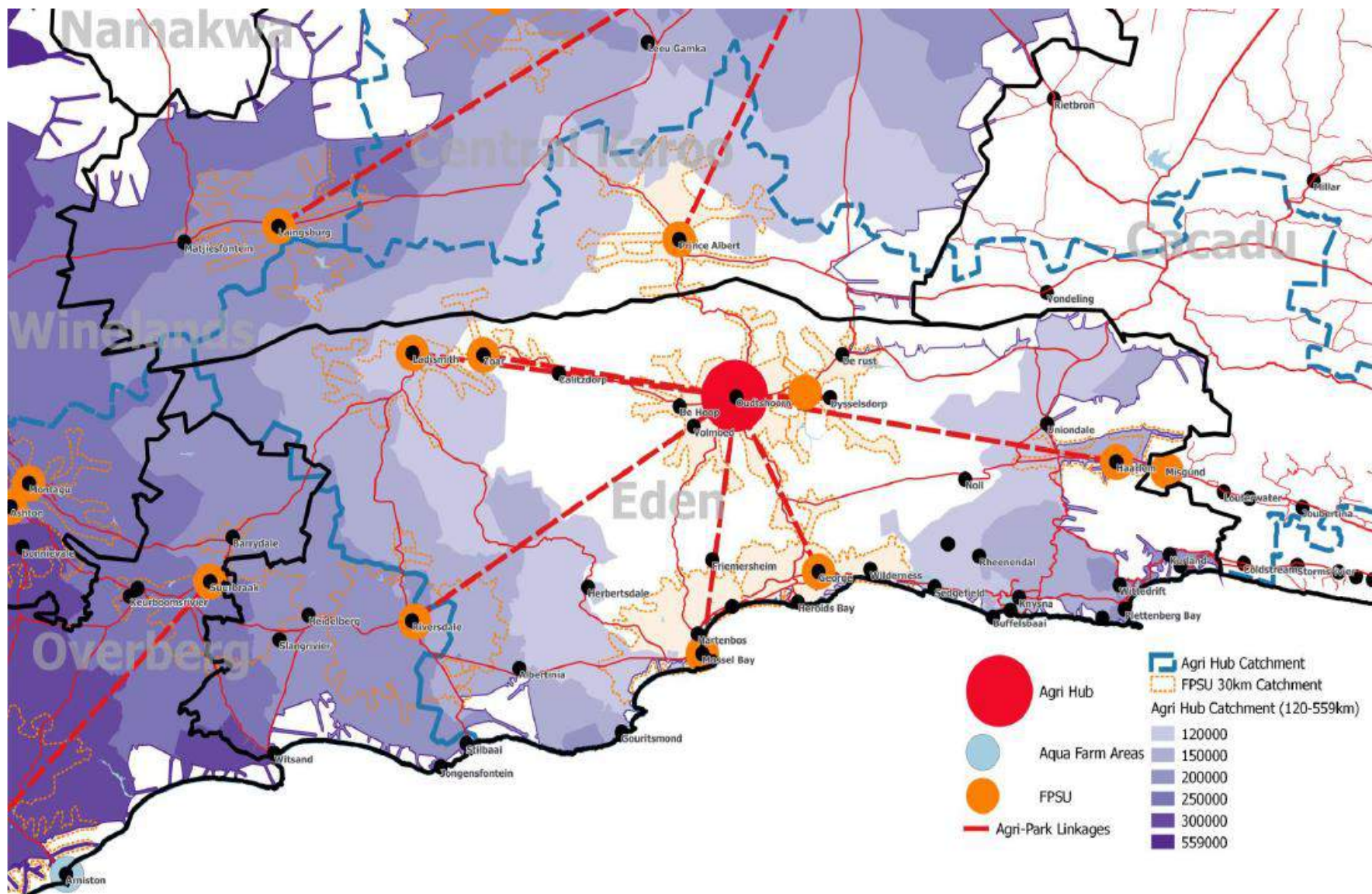
- c) Protect and support the strengthening of current agricultural and forestry activities, and support the introduction of new production technologies and crops (e.g. bio-fuels) in response to climate change.
- d) Prioritise public landholdings immediately to the south of Thembalethu and the urban edge for small scale farming and food production for the communities of the George city area, alternatively for land uses that are consistent with, and will generate employment within the rural / agricultural economy. This land should not be converted to urban housing land.
- e) All areas of agricultural potential must be protected and enhanced.
- f) Conversion of irrigated, arable land is not supported.
- g) Development directed at ensuring water security for the agricultural sector should be a priority.
- h) Development directed at job creation for the inhabitants of the area should be a priority provided that this is rooted in the rural / agricultural economy or activities suitable within this context; i.e. they reinforce the sector and do not compete with it or compete for the same resources with it.
- i) Sustainable farming methods and disaster risk management measures must be implemented in order to protect important agricultural land, resources and

employment that may be lost through flooding, water shortage and wild fires.

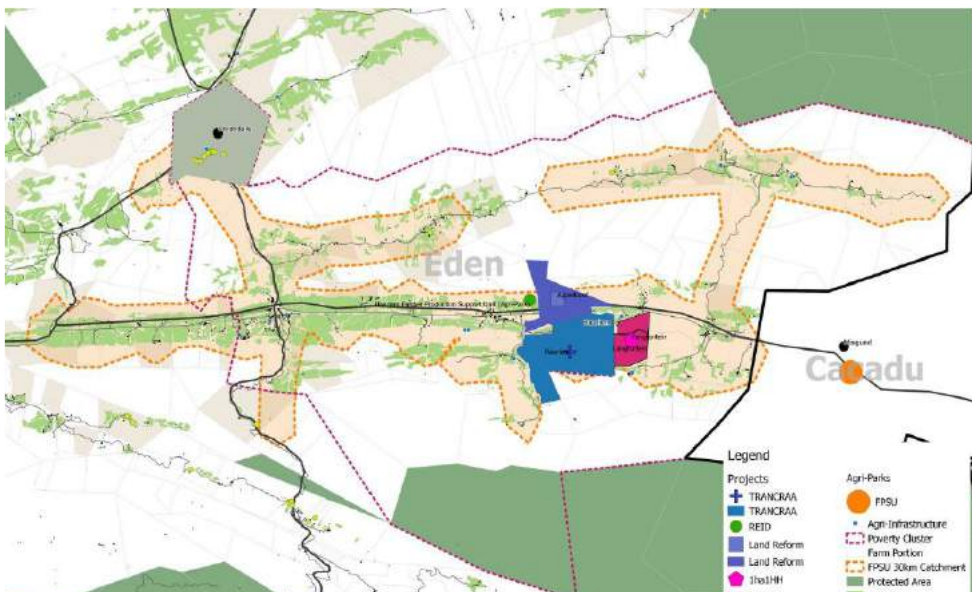
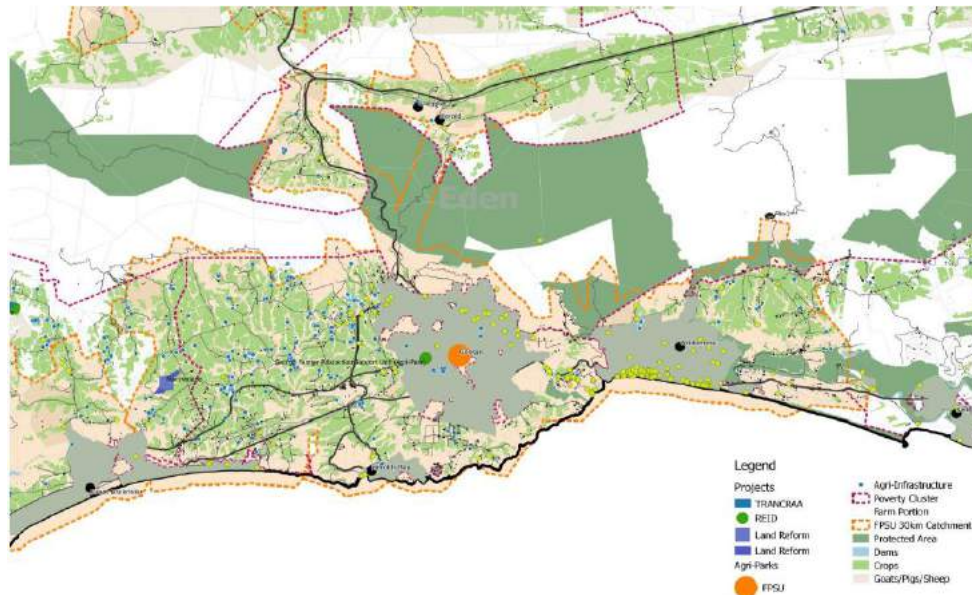


Map 22: Agricultural Resources in the Greater George Area





Map 23: Eden Agri-Hub, Oudtshoorn Catchment (Department of Rural Development and Land Reform, 2017)



Map 24: George and Haarlem FPSU Catchments (Department of Rural Development and Land Reform, 2017)



## Policy E2

*The subdivision of rural land into small holdings is not supported*

### Policy Guidelines:

- Existing Smallholding areas will be managed in terms of the relevant Local Area Spatial Development Framework.
- All properties outside of the urban edge are deemed as agricultural properties whose subdivision is subject to the Department of Agriculture's regulations, the Western Cape Government's Rural Development Guidelines, this Spatial Development Framework and desirability in terms of rural context and character.

## Policy E3

*Manage rural land use in terms of the Western Cape Government's rural development guidelines and the Spatial Planning Categories (SPC) identified therein*

In line with the Provincial Spatial Development Framework (PSDF), the rural component of the Greater George Area is delineated into Spatial Planning Categories (SPCs). These SPCs are not development proposals and do not confer or take away development rights. They are based on identified Critical Biodiversity Areas, and they clarify the inherent land use suitability of different landscapes, defined in terms of the categories of Core, Buffer, Agriculture and Settlement. As such, SPCs are a tool that the Municipality and the Western Cape Government use to assess the suitability of alternative rural land uses in the different SPCs, as well as the appropriate location, form and scale of these activities.

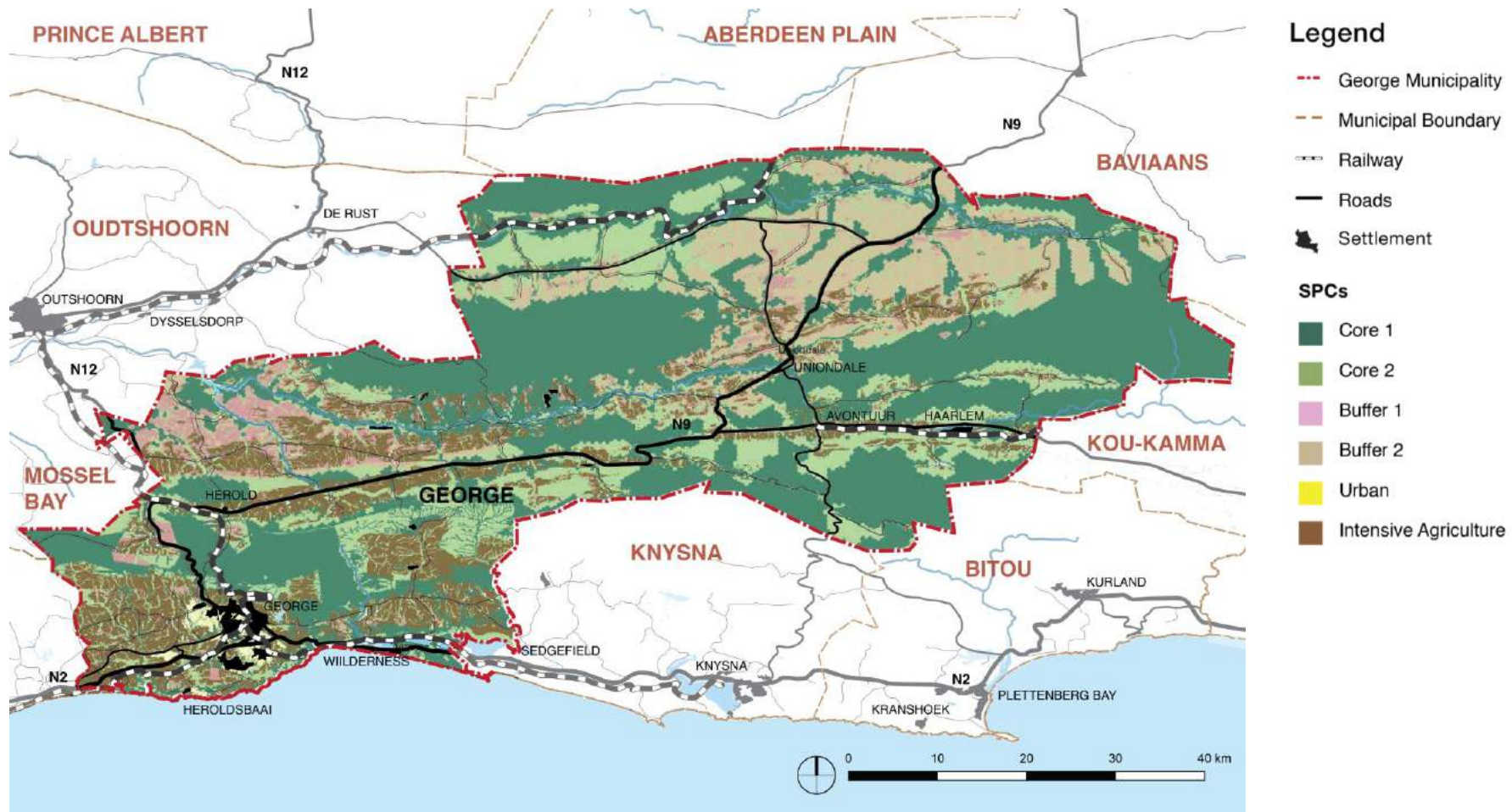
The alignment of Spatial Planning Categories with the Critical Biodiversity Areas Map (Map 17) is summarised in Table 12.

**Table 12: Alignment of CBA Map Categories with Spatial Planning Categories (Western Cape Rural Land Use Guidelines Discussion Document, 2017)**

CBA Map Category →	Protected Areas	Critical Biodiversity Area 1 (Terrestrial/Aquatic)	Critical Biodiversity Area 2 (Degraded)	Ecological Support Area 1 (Terrestrial/Aquatic)	Ecological Support Area 2	Other Natural Areas (Natural to Near-natural / Degraded)	No Natural Remaining
Spatial Planning Category ↓	PA	CBA 1	CBA 2	ESA 1	ESA 2	ONA	NNR
CORE 1	*	*					
CORE 2			*	*			
BUFFER 1					*	*	
BUFFER 2						*	
AGRICULTURE							*
SETTLEMENT							*

### Policy Guidelines:

- In line with Western Cape Government's guidelines for rural land use development, new investment in rural areas should not:
  - Have significant impact on biodiversity;
  - Alienate or compromise unique or high value agricultural land;
  - Compromise existing farming activities;
  - Compromise the current and future use of mineral resources;
  - Be inconsistent with cultural and scenic landscapes within which it is situated;
  - Involve extensions to the municipality's reticulation networks;
  - Impose real costs or risks to the municipality delivering on their mandate; and



Map 25: Spatial Planning Categories in the Greater George Area

viii. Infringe on the authenticity of the rural landscape and heritage assets.

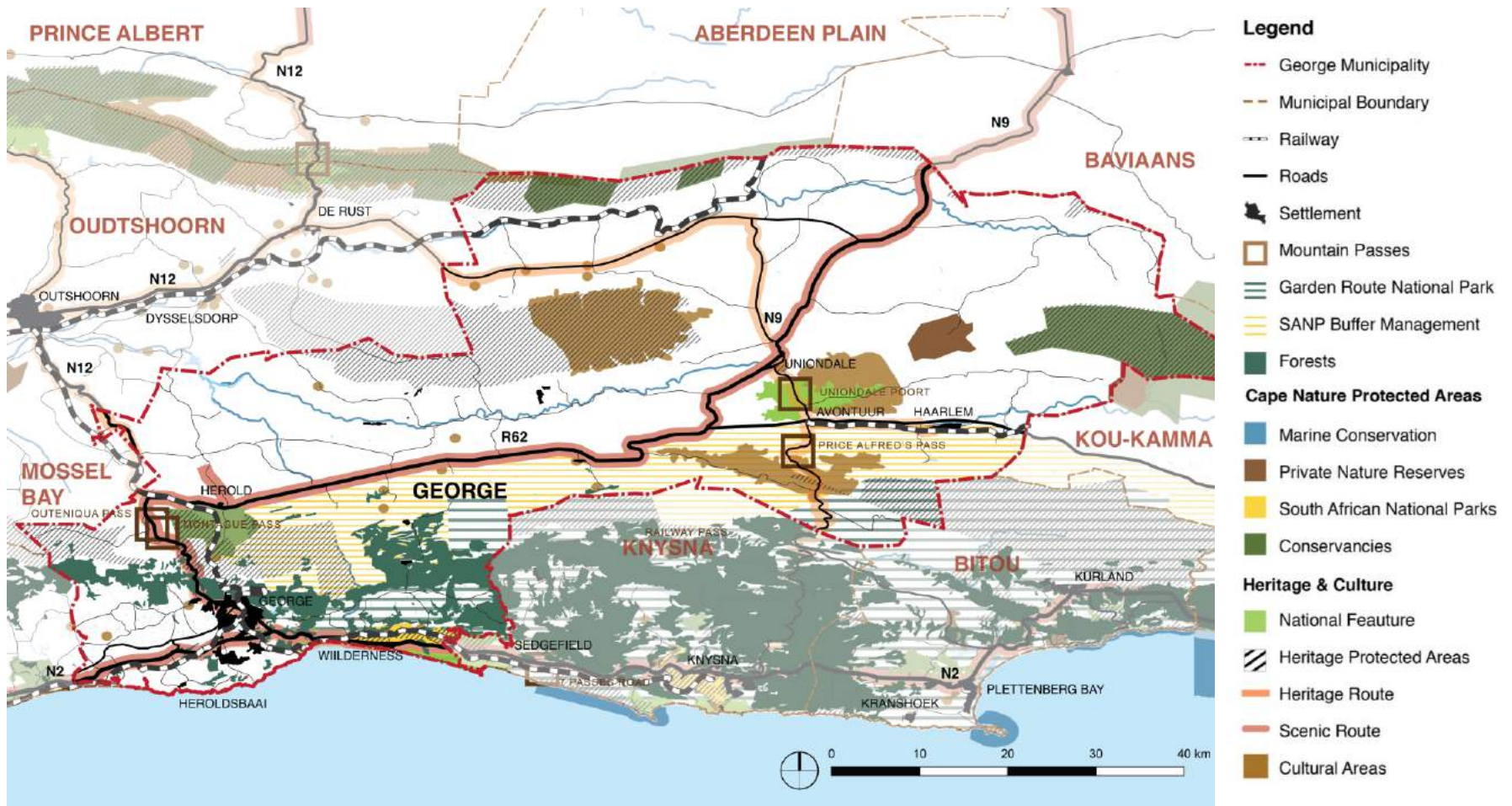
b) New rural settlement outside of existing settlements is not supported. However, circumstances under which a settlement could be consolidated to achieve greater sustainability may be considered as follows:

- i. Proposals must demonstrate tangible net economic benefits for the surrounding farms, farm dwellers and farmworkers, the agricultural economy and the municipal economy more broadly.
- ii. The settlement financial sustainability of the existing settlement in question must be demonstrably enhanced.
- iii. The agricultural purpose of the settlement is retained and intensified. Latent agricultural assets are revitalised.
- iv. Relevant government stakeholders associated with supporting rural development are on board.
- v. Residential development is associated with meeting the demand of existing farm dwellers and farmworkers affordably and is compact to the extent that it does not infringe on agricultural land but is still of a rural nature.
- vi. The distance from the nearest urban centre is too far for a worker to commute.
- vii. There are existing schools and amenities in the area – the self-sufficiency of the settlement would only be enhanced.
- viii. Proposals respond to the opportunity to exploit latent commercial potential associated with the uniqueness of the location's environment and its heritage.
- ix. An agri-village is a privately established and managed settlement situated on private land within a farming area and exclusively accommodates the local

agri worker community. The only circumstances under which an agri-village should be considered include the following:

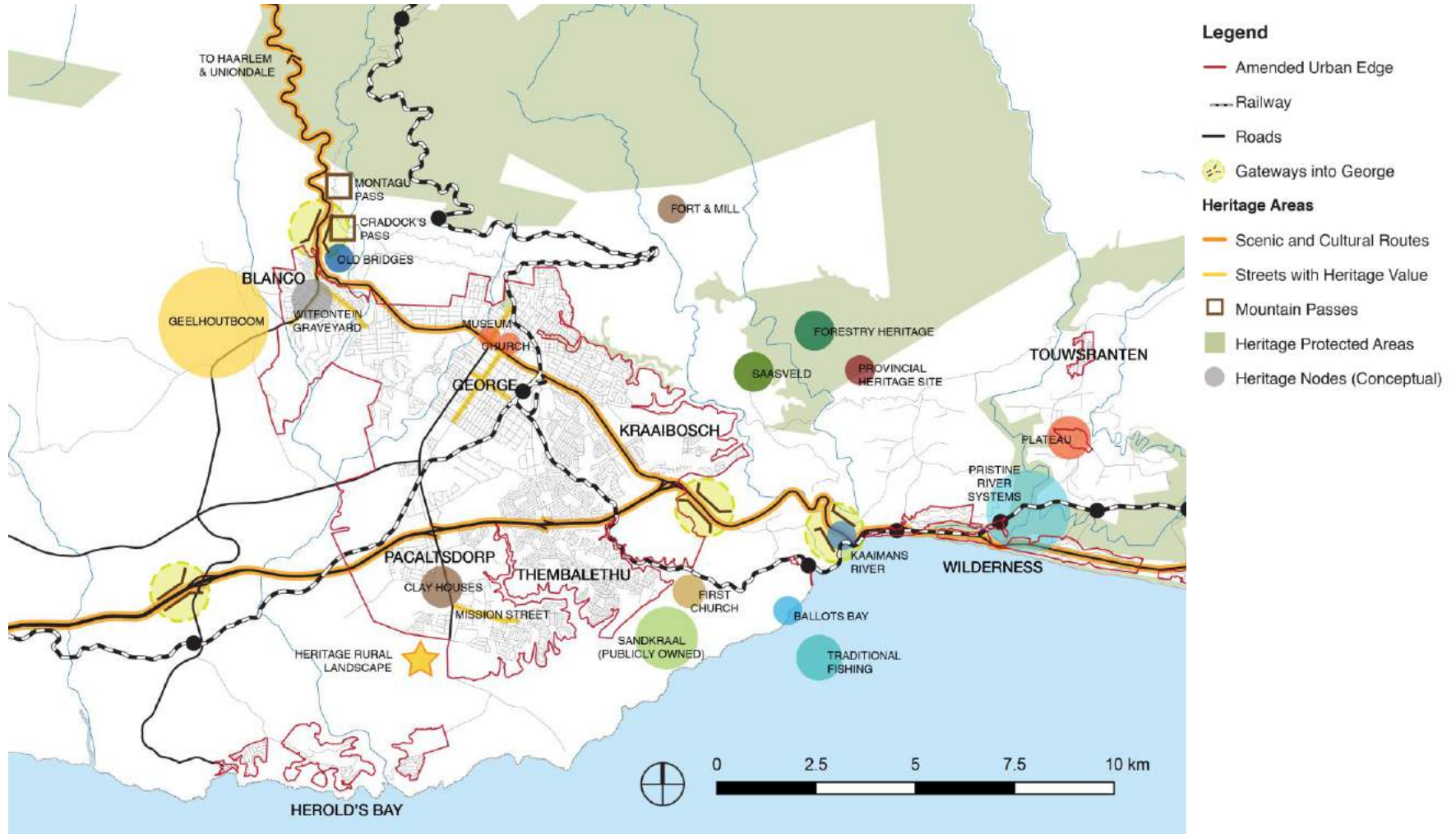
- in a farming area where there is a concentration of agri workers due to the type of agricultural activities and that has a substantial demand for “off-the-farm” settlement;
  - areas where there are no established settlements within practical commuting distance (approximately 30km) and a municipality that has no feasible means of establishing and managing a new town;
  - in light of the substantial managerial and financial resources required to establish and maintain small settlements, and their potential negative impact on the environment and also due to the relatively short distance between settlements in the Western Cape, the establishment of agri-villages or new settlements as “off-the-farm” options both have limited applicability in the Western Cape.
- c) Fragmentation of the agricultural landscape must be avoided
- d) Rural development and activities should be managed so as to take cognisance of and respect cultural landscapes and heritage resources and seek ways to acknowledge and celebrate these. Refer to Map 27 for an indication of the landscapes in the Greater George Area.





Map 26: Preliminary Identification of Heritage Resources and Cultural Landscapes in the Greater George Area





Map 27: Preliminary Identification of Heritage Resources and Cultural Landscapes in the George City Area

## **Policy F**

*Manage the growth of urban settlement in George to ensure the optimum and efficient use of existing infrastructure and resources and in turn, secure the Municipality's fiscal sustainability and resilience, while preventing further loss of natural and agricultural assets.*

## **Policy F1**

*Maintain the urban edge as the development boundary where identified for settlements in the Greater George Area including the George City Area.*

Based on research into the medium term requirements for new urban land, the suitability of surrounding land for urban development, and potential for inward urban growth (i.e. through infill of vacant and underutilised land and densification of existing areas), as well as development trends over the last five years - the urban edges for all urban settlements in George, including the George city area, are being maintained.

### **Policy Guidelines:**

- a) The urban edge should only be reviewed by the George Municipality in the next 5 year review of the MSDF based on:
  - i. The George Municipality's urban growth management strategies
  - ii. The Municipality's fiscal sustainability and Long Term Financial Plan
  - iii. The Municipality's capital infrastructure programme
  - iv. Development trends and the associated rate of consumption of vacant and under-utilised land within the urban edge
  - v. The performance and forecasted performance of the national and regional economy and its impact on the local economy.

- b) Where the urban edge delineation serves to protect natural resources and mitigate risk associated with natural hazards, this should not be amended.
- c) The urban edge serves to maintain a clear "green" edge around all settlements – large and small – in the municipal area to protect the garden-like character of the Garden Route, as well as the character of the Karoo landscape.

## **Policy F2**

*Direct the medium to long term growth of the George city area, when necessary, contiguous to the existing urban footprint in a manner that reinforces existing accessibility and infrastructure networks and minimises impact on natural landscapes and agricultural resources.*

### **Policy Guidelines:**

- a) When available land inside the urban edge has been developed, the George area's medium - long term spatial growth direction, beyond the current urban edge is in two directions:
  - i. The site to the east of Thembaletu and the south of the Garden Route Mall node (commonly known as the Destiny Africa site), is expected to develop into a sub-regional mixed use node. A Guide Plan amendment approval was granted with the understanding that the original concept proposed will be implemented. Whilst the necessary approvals are in place, the development has not yet commenced. Authorisations may lapse. Whilst the area earmarked for Destiny Africa is consistent with the MSDF's medium to long term growth proposals, it is not currently included in the MSDF's urban edge. Once there is certainty that the development with rights is proceeding, the urban edge will be amended to include the Destiny Africa's development footprint. It would nevertheless be prudent

to review the proposed configuration, spatial budget and phasing in light of the surfeit of developable land available inside George's urban edge, but also to ensure certain outcomes are achieved in the development of the site; including, *inter alia* the provision of:

- a movement link between Thembalethu and the Garden Route Mall inclusive of formal public transport services/ GoGeorge and NMT;
- inclusionary housing provisions across a range of incomes;
- mixed uses that generate permanent employment opportunities; and
- bulk infrastructure.

These will be key considerations in the assessment of any fresh applications.

- ii. The MSDF earmarks Hansmoeskraal as a future *long term* special economic development opportunity zone. Properties have been identified as presenting an opportunity to create employment opportunities in close proximity to the previously disadvantaged and primarily residential townships of Pacaltsdorp and Thembalethu. The intention of this long term investment node is not to redirect any potential investment away from the existing Pacaltsdorp or any other area in George. Rather, to attract developments that, due to scale and uniqueness will not "fit" into any other area of George. Such development must positively impact on the space economy of George and have a positive effect for Pacaltsdorp and Thembalethu in particular – bringing improved infrastructure (including improved public access to the Gwaing River Mouth) and employment to the area. It is important that the area is developed in an integrated and coherent manner if the full potential of the envisaged opportunity is to be realised. The

Department of Agriculture, Western Cape Government has identified this area of agricultural significance. Inter-governmental alignment on the long term development opportunity in this location requires resolution, as does feasibility in the context of the changed economic circumstances subsequent to it being proposed and the economic outlook. Ad hoc proposals for this area should be resisted.

- b) The planned Western By-pass linking the airport to the pass to Oudtshoorn, intended to bypass freight traffic from the George CBD, must not be used as the basis to open up land for urban development.
- c) Development of the George Airport precinct is supported in so far as it relates to the development of uses ancillary to the airport's operations and should not include activities already well catered for in the built footprint of the George urban area. An airport support area is identified in this MSDF. Tourism and commercial uses of a rural nature are supported in keeping with the rural landscape along the road connecting the airport to the George city area, as set out in more detail in the Gwayang LSDF.

**Policy F3**

*Proposals for lateral urban growth of the George city area or new remote / isolated settlement of an urban or suburban nature must be reviewed in terms of a framework that assures the Municipality of no short or long term impact on its sustainability, from a capital and operating perspective.*

**Policy Guidelines:**

- a) Any development that proposes to extend the urban footprint of the George city or create a new urban or suburban footprint in the municipal area must be assessed in terms of the Urban Growth Proposals Assessment Framework presented in Annexure 3. This Framework seeks to ensure that such an assessment process adequately engages with the viability, performance and sustainability concerns from the perspective of the overall public good.
- b) Where economic activity is within a reasonable commuting distance from the urban centres of George and within the means of the public transport system to service, it is preferred that settlement takes place within the urban centres to achieve economies of scale and efficiencies. This is also important to ensure that workers have choice of work opportunities based on where they reside and they are not trapped by virtue of where they reside and the transport options available as to what work opportunities are available, given that sources of employment can change.



### 4.3.3 Smart Growth: Invest in the Catalysts for Social and Economic Prosperity

The **objective** of this strategy is to identify the policies that should guide generative and inclusive renewal and growth at the street scale. The focus is on identifying priority investment locations and clarifying how public and private investment should take shape so that settlements offer inclusive, accessible opportunities that support human capital growth. Transforming public spaces into safe, lively places of community and business life that improves attractiveness of George for investors and the whole community is at the heart of this strategy.

This approach (referred to as “Lean Urbanism”) is a global movement that “seeks to bring common sense back into the planning and development process—because great neighbourhoods are built with many hands, often in small increments”. Lean Urbanism is “about incremental development [and] identifying projects in an infill context and short-term opportunism” (Robert Steuteville, 2017). Such an approach makes sense in the economic and fiscal context of George and it also happens to allow for more inclusive development.

*In George informal employment is growing. In the next 15 years, the bulk of economic growth will come from emerging economies (not the A grade economy), this economic energy should be given space in the structure of all towns and cities. For example, Proctor and Gamble’s largest customer base is “high frequency” stores (i.e. Small shops and street traders).*

While Lean Urbanism is about process, the output of smart growth embraces the following principles:

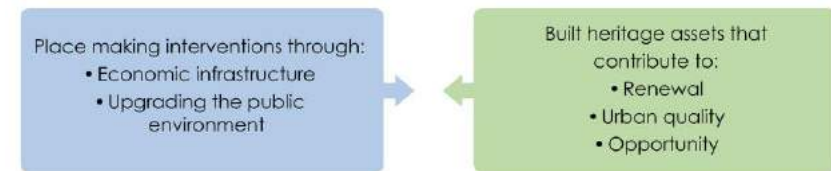


## 10 PRINCIPLES OF SMART GROWTH

- Mix land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair, and cost effective
- Encourage community and stakeholder collaboration in development decisions

SMART GROWTH NETWORK, 1996

Figure 18: 10 Principles of Smart Growth (Smart Growth Network, 1996)



#### 4.3.3.1 How will we measure our success?

*Indicators to be used to ascertain whether George is making progress towards these objectives, will be identified on the basis of the finalisation and acceptance of this MSDF.*

#### 4.3.3.2 Policies

##### **Policy G**

*Support place-making interventions through building economic infrastructure and upgrading the public environment in priority investment locations to promote inclusivity and invite private sector response*

##### **Policy Guidelines:**

- a) In the assessment of land use and building applications and public sector developments, pursue compact and diverse neighbourhoods, offering places to live, work, recreate all within close proximity, served by streets scaled to people so that they are comfortable to walk.
- b) The scale and format of development can also determine whether this development is inclusive and resilient or exclusive and vulnerable. Many small developments/projects rather than dependence on one or two large scale, big bang developments offer opportunities for more inclusive development, empowering emerging contractors, developers and investors.
- c) Focus interventions on the George CBD, Thembalethu and Pacaltsdorp CBD's and the high streets of Uniondale and Haarlem as inclusive, mixed use growth zones. As this promises, under most circumstances, the best prospect for generating a private sector response at a scale commensurate to the public sector intervention.
- d) Upgrade public spaces and streets as public spaces, and establish partnerships to maintain these spaces, to give dignity and priority to the pedestrian and public transport, to promote impromptu gathering and stimulate footfall in support of small businesses at the street scale.
- e) Optimise existing infrastructure in well located nodes through incentives, partnership projects and land use controls that enable viable investment in new residential and commercial development. These instruments should ensure that these investments prioritise inclusive housing and commercial opportunities at the street level in well located areas.
- f) Promote an urban design approach for the provision of public space to ensure alignment with national and international best practice.
- g) The identification of problem areas and urban management solutions should be done in close consultation with the local formal and informal business community.
- h) Go beyond incentives to lure big investments and give special attention to attracting many small scale investments and Small, Medium and Micro-sized Enterprises (SMMEs).
- i) Economic inclusivity should be as much of a concern in planning and design as inclusionary housing; for example, interventions should seek to generate structured small sidewalk spaces (formal and informal) that allow the local service economy to thrive.
- i) Reduce the regulatory burden to unleash the capacity of many small investors and developers to contribute to the transformation of George in targeted restructuring zones. Enabling the concentration of "resources on the task of enabling small-scale, community-centred development and revitalization" (Steuteville, 2017).

## Policy G1

*Promote walkability within the intensification zone and especially within the priority nodes*

Walkable places are inherently more inclusive if the scale and format of development is carefully managed. 70% of the population in the George city area does not have a car (GoGeorge, 2017). Walkable cities are those where the car is an optional instrument of freedom rather than an essential (Speck, 2013). Walkable places need to start with the bones of an urban (rather than suburban) structure or retrofit existing places to accommodate more walkable street systems, land use mixes and transport services. Walkable places are inherently more inclusive if the scale and format of development is carefully managed.

### Policy Guidelines:

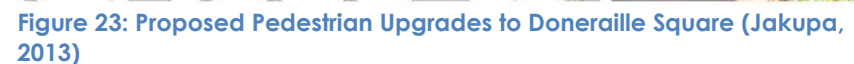
To achieve walkability, places have to offer a walk that is as good as a drive, or better. This means that it is important to:

- a) Get the land use and density right – create a reason to walk and enable walks to be reasonably short and achieve a range of needs.
- b) Make walking safe and comfortable. This is influenced by block size, sidewalk quality, a connected street network and visual interest.
- c) Ensure good edges to streets. Everyone seeks “prospect” and “refuge” – visually attractive and safe – people are “drawn to spaces that have good edges” (Speck, 2013).
- d) Make sure that streets include signs of humanity (active ground floors, cluster social facilities).
- e) Develop an integrated and connected street network, improving pedestrian connections allowing direct connections between places wherever possible.
- f) Promote walkable block sizes of no more than 80-100m.
- g) Incentivise and encourage active ground floor use within mixed use zones.
- h) Promote fine grained development, enabling and incentivising many small developers over large scale, single use developments.
- i) Rationalise streets over time to promote “skinny streets”, narrow streets through infill, wider sidewalks and landscaping or increase height of buildings so that streets have a width to height ratio of less than 6:1. A 2 lane street can take 10 000 cars/day.
- j) Revise the George Zoning Scheme By-Law so that the intensification / restructuring zone has a zero parking requirement. This is an essential ingredient in improving affordability and inclusivity of both residential and commercial development. It is also consistent and supportive of the significant investments in GoGeorge and its long term viability.
- k) Landscape priority corridors with wide road reserves where infill is not proposed to enhance these spaces as public spaces, NMT corridors and green lungs that absorb air pollution from traffic and mitigate the heat island effect



Figure 19: Proposed Pedestrian and NMT Upgrades – Ngcakani Street Intersection (Thembaletu LSDF, 2015)





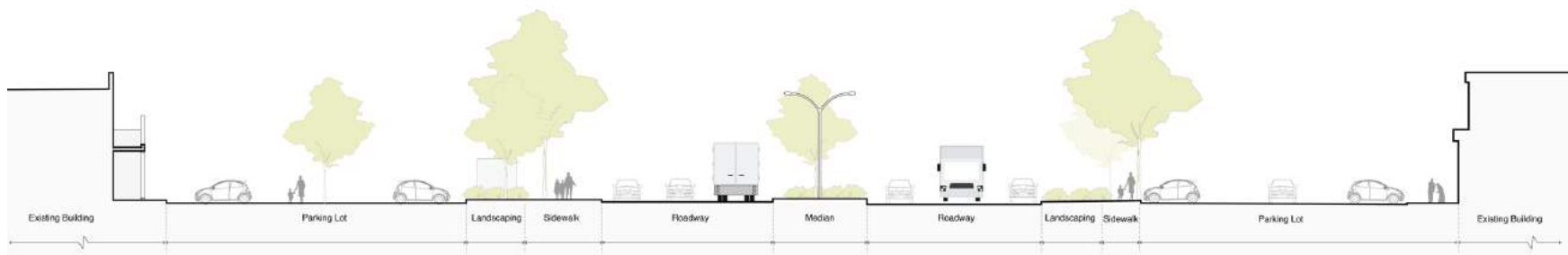


Figure 24: York Street Section Existing

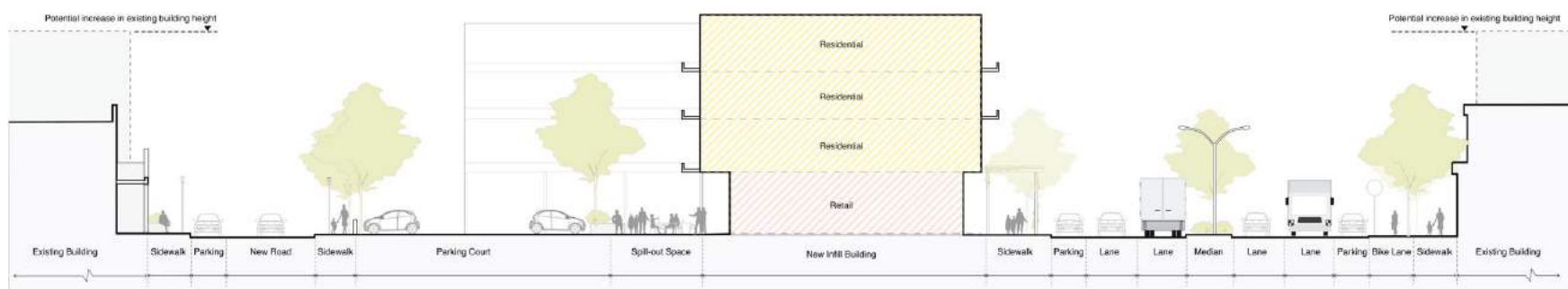


Figure 25: York Street Section Proposed



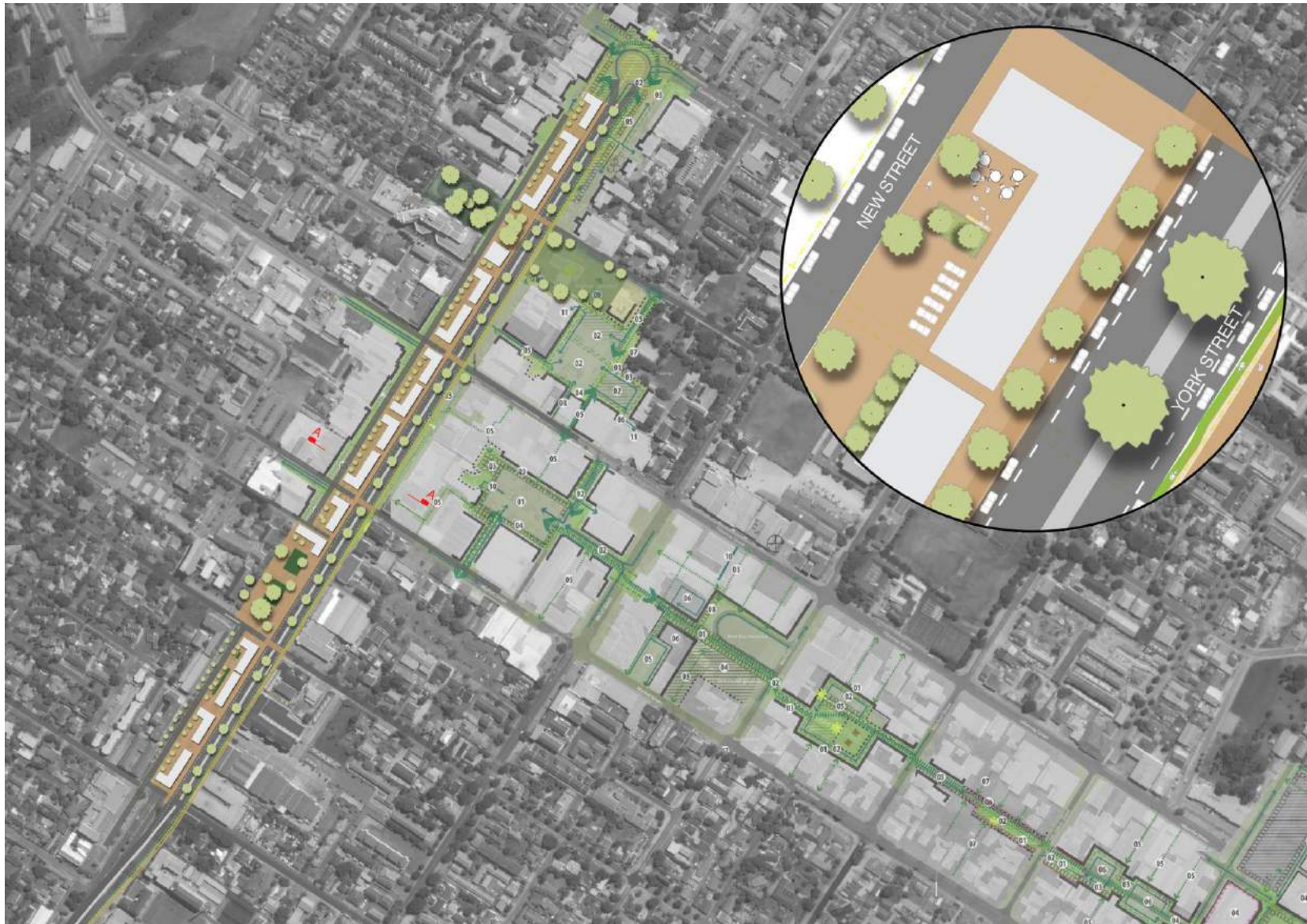


Figure 26: York Street with Proposed Infill and Pedestrian Network Upgrades

**Policy G2**

*Implement a more articulated approach to the development of human settlement opportunities that supports the spatial development vision of the MSDF and stimulates economic development*

**Policy Guidelines:**

- a) Verify housing demand and segment this into affordability bands so that appropriate strategies for housing supply across a spectrum of tenure options can be developed to respond to real need; including, for the GAP market and non-qualifiers.
- b) Prioritise housing delivery in locations with good accessibility to formalised public transport / GoGeorge networks.
- c) Promote affordable / inclusionary housing in well located and well-served areas where opportunities for sustainable livelihoods and jobs are highest and where access to social facilities is affordable.
- d) Initiate social rental housing projects, inclusive of mixed use at the street scale, on public land in the George CBD identified in the George Restructuring Strategy.
- e) Support the consolidation of backyard housing / second dwellings as a legitimate form of housing supply and household income and address infrastructure capacity and tenure issues associated with this process.
- f) Rationalise over-scaled road reserves and streets within the core CBD, starting with York Street and Knysna Road / Courtenay Street as the entrances into the core of George.
- g) Revise parking ratios in the intensification zone to improve affordability in housing development and the quality of the streetscape.



## Policy H

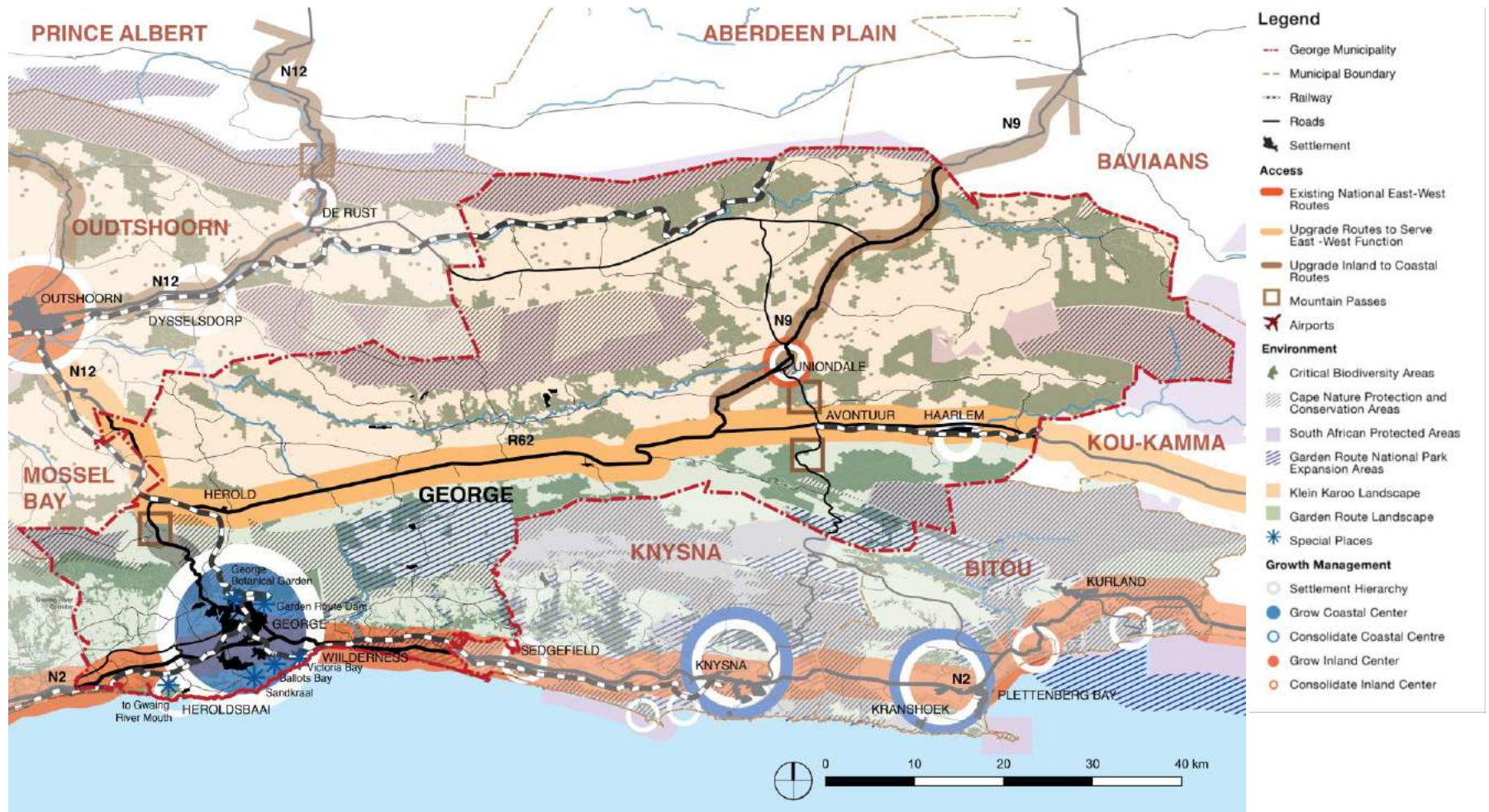
*Celebrate built heritage assets in a manner that contributes to renewal, urban quality and opportunity*

The George Municipal Area is host to extensive built heritage assets and cultural landscapes that must be respected and celebrated as part of the identity of the region and its people.

### Policy Guidelines:

- a) Actively promote the use of the George Architectural and Urban Design Guidelines to ensure development which is appropriate to a “green theme”, “garden city” and the public and natural context, of appropriate architectural form and proportion, and is sensitive to heritage.
- b) Manage heritage places and landscapes in accordance with the findings and recommendations of the Municipality’s Heritage Studies.
- c) Complete the municipal Heritage Inventory as the basis for a comprehensive understanding of the heritage assets including cultural landscapes in the municipal area and to inform how these resources can be protected and inform contextually relevant development proposals that interpret and celebrate this heritage.
- d) Where heritage protection areas are identified by the competent authority, the municipality should consider overlay zones for these areas to align land use management to the objective of identifying these areas for protection.

#### 4.4 Composite Spatial Development Framework



Map 28: Composite Spatial Development Framework for the Greater George Area





Map 29: Herold's Bay Urban Edge



Map 30: Touwsrante Urban Edge

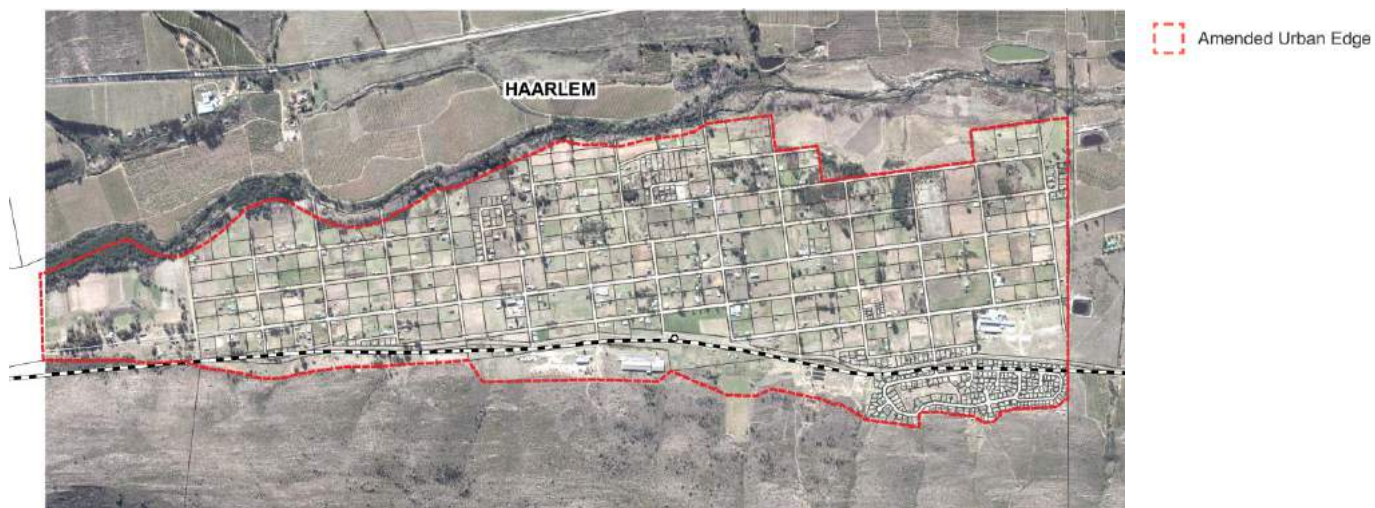


Map 31: Wilderness and Kleinkrantz Urban Edge



Map 32: Victoria Bay Urban Edge





Map 33: Haarlem Urban Edge

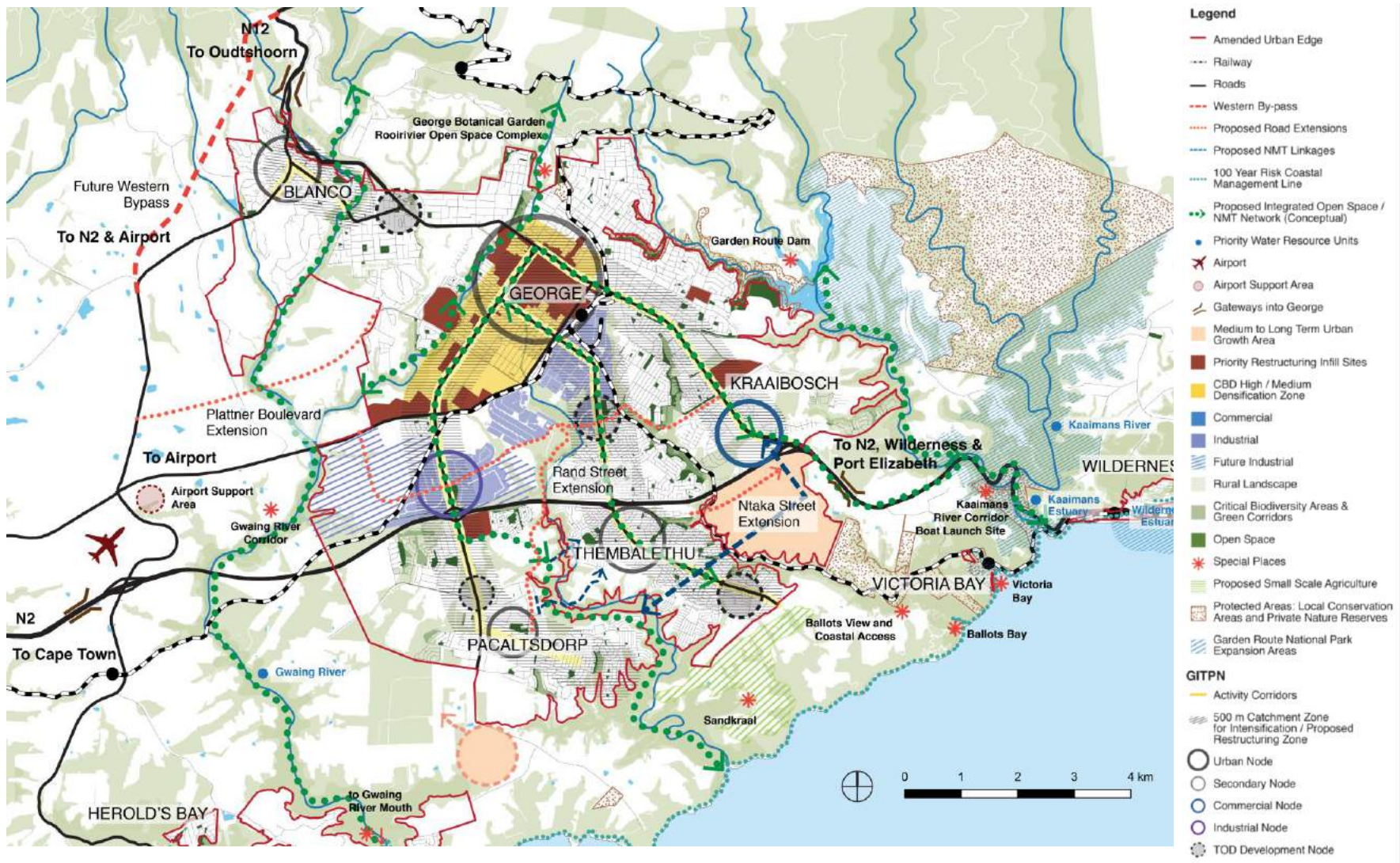


Map 34: Uniondale Urban Edge









Map 36: Composite Spatial Development Framework for the George City Area

## 5 Implementation Framework

### 5.1 Implementation Requirements

SPLUMA requires that MSDF's include an Implementation Framework that contains the following:

- i. Sector requirements, including budgets and resources for implementation
- ii. Necessary amendments to the Municipal Zoning Scheme By-Law
- iii. Specification of institutional arrangements necessary for implementation
- iv. Specification of implementation targets, including dates and monitoring indicators; and
- v. Specification where necessary, of any arrangements for partnerships in the implementation process.

DRD&LR's SDF Guidelines also identify the need for MSDF's to identify further policies and guidelines needed to implement the MSDF.

Implementation Actions associated with each of this MSDF's strategies have been identified, with a focus on municipal-wide or George city-wide priority actions and summarised in a schedule accompanying this MSDF's adoption by the George Municipality's Council.

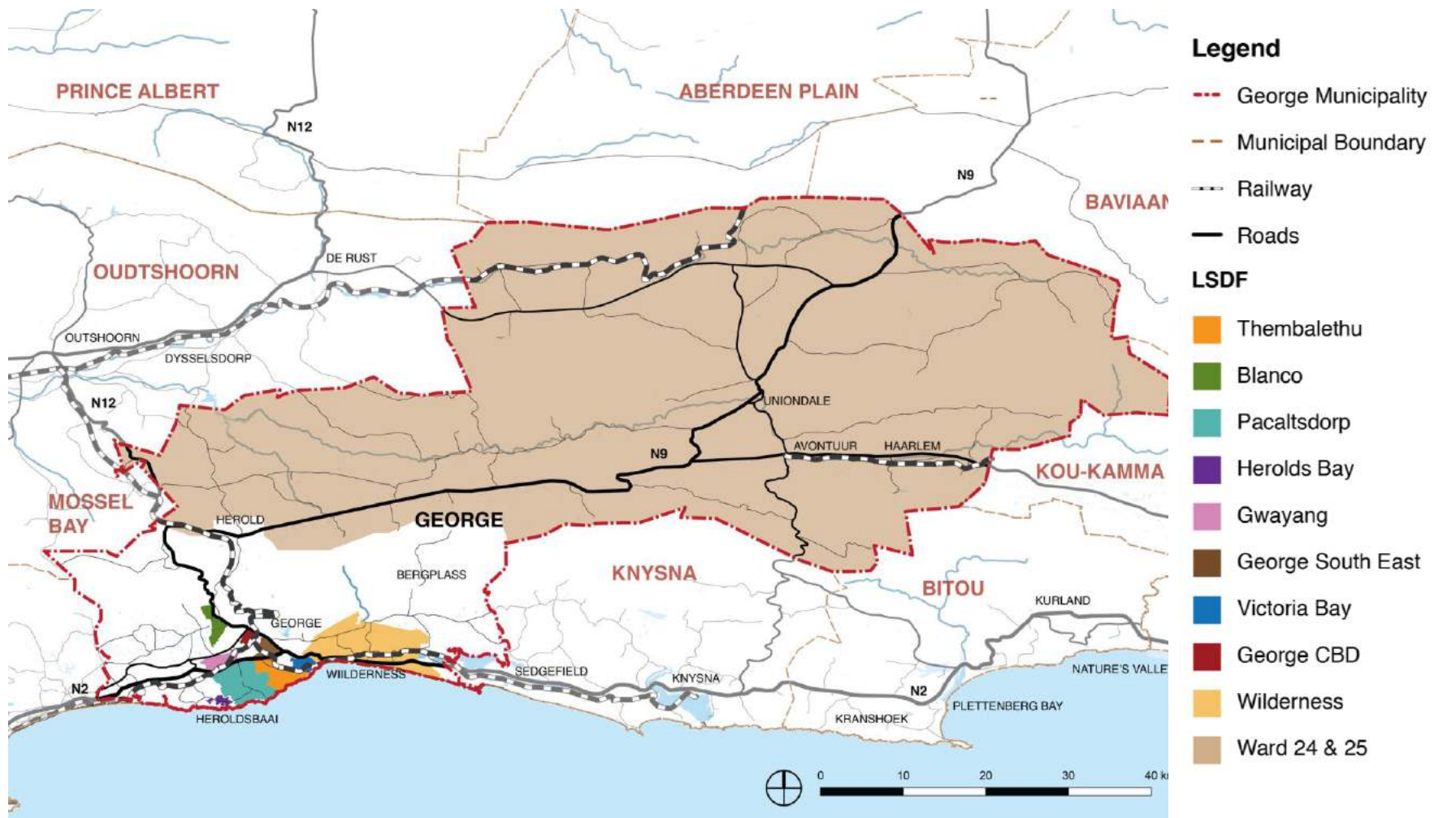
The MSDF's implementation is supported by a series of Local Spatial Development Frameworks currently in place for the following areas of George:

- George CBD LSDF, 2016
- George South East LSDF, 2015
- Blanco LSDF, 2015
- Pacaltsdorp / Hansmoeskraal LSDF, 2015
- Thembaletu LSDF, 2015
- Wilderness, Lakes and Hoekwil LSDF, 2015
- Wards 24 and 25 including Uniondale and Haarlem (ex Eden District Management Area) LSDF, 2015
- Draft Victoria Bay / Kraaibosch South LSDF 2016
- Herolds Bay LSDF, 2015
- Gwayang LSDF, 2015

These LSDF's must take their direction from the MSDF. As all have been developed prior to the preparation of this reviewed MSDF, some may require review and alignment.

Generally there is a wealth of spatial planning undertaken for the Greater George Area. The focus should shift away from strategy and policy towards actions required to implement these plans.





Map 37: Areas with the municipal area subject to Local Spatial Development Frameworks



### 5.1.1 Institutional Requirements

The George Municipality's Planning Department will facilitate implementation of the MSDF in terms of institutional alignment; namely:

- The extent to which the main argument and strategies of the MSDF are incorporated into Annual Reports, annual IDP Reviews, future municipal IDPs.
- The annual review of the MSDF as part of the IDP review process (refer to 5.1.2 Sector Plan Alignment below for guidance on the scope of this annual review).
- The extent to which the main argument and strategies of the MSDF inform sector planning and resource allocation.
- The extent to which the main argument and strategies of the MSDF inform land use management decision-making.
- Alignment with and progress in implementing the Municipality's Human Settlement Plan and Comprehensive Integrated Transport Plan.
- The responsiveness of national and provincial plans, programmes and actions; such as through User Asset Management Plans and Comprehensive Asset Management Plans related to national and provincial assets and facilities.

### 5.1.2 Sector Plan Alignment

The MSDF is a long term, transversal planning and coordination tool and a spatial expression of the George Municipality's IDP. While the MSDF is informed by the Sector Plans, strategically and spatially, the Sector Plans should be led by the MSDF. To this end, with the adoption of this revised MSDF for the George Municipality, when the Municipality's Sector Plans are reviewed, the MSDF must be a key consideration or framework for such a review in order to ensure alignment and for the sector plans to realise their full potential as implementation tools of the MSDF. Table 13 summarises the George Municipality's sector plans, their status and implications of the MSDF for these plans:

Table 13: George Municipality Sector Plans and their implications for the MSDF

SECTOR PLAN	STATUS	SDF IMPLICATIONS
<b>Comprehensive Integrated Transport Plan (CITP)</b>	Under review	The CITP, guided by the principles and objectives of the Provincial Land Transport Framework, should be informed by the MSDF and facilitate the integration of transport planning with spatial planning and land use management. The CITP must reflect the MSDF and demonstrate how the transport planning will contribute to the desired spatial outcomes. For further detail on expectations of the CITP see section 5.1.2.1 below.
<b>Roads Master Plan</b>		The review of this Master Plan should be done to implement the MSDF and the CITP
<b>Human Settlements Plan</b>	Draft	This plan will need to be finalised as an inter-governmental plan guided by the MSDF. For further detail on expectations of this plan see section 5.1.2.2 below
<b>Disaster Management Plan / Disaster Risk Assessment Update</b>	2014/2013	Requires update / review. Key informant to MSDF.
<b>Air Quality Management Plan</b>	2013	An informant to the MSDF to the extent that land use patterns are contributing to diminishing air quality or provision for open space can reduce the impacts of air pollution.
<b>Integrated Waste Management Plan</b>	2014	The review of this Master Plan will need to consider the urban growth direction provided in the MSDF particularly with regard to infill and densification. Implications of its findings on the MSDF should be considered
<b>Bulk Water and Sanitation Master Plans</b>	2012	A review of this Master Plan will need to consider the urban growth direction provided in the MSDF particularly with regard to infill and densification.
<b>Economic Development Strategy/ Local Economic Development Strategy</b>	2012	A review should be framed by the spatial context and strategies set out in the MSDF where relevant. Economic potential in space should be optimised and coordinated with human settlement development planning.
<b>Climate Change Adaptation Plan (for Eden District)</b>	2014	In need of updating at municipal scale. An informant to the MSDF. The MSDF should implement climate change adaptation measures in space in so far as this is appropriate to the purpose of the MSDF.

### 5.1.2.1 Comprehensive Integrated Transport Plan

The integration of spatial, land use and transport planning is a key lever identified in the IUDF to achieve spatial transformation.

George Municipality is reviewing its Comprehensive Integrated Transport Plan (CITP), in terms of the principles and objectives of the Provincial Land Transport Framework, to support the spatial priorities adopted in this MSDF. The CITP must prioritise the infrastructure and operational requirements for public transport, non-motorised transport, freight and private cars, to achieve the objectives of the MSDF. In addition to the minimum requirements for the preparation of a CITP, the elements below should receive special attention.

- a) Prioritisation of the missing links identified in Section 4.2.3.
- b) A high-level strategy for rural transport, based on the provisions, and experiences to date, of the rollout of the PPTIF and international innovations in rural public transport associated with on demand services and technology.
- c) Review road classification to promote land use integration and alignment with the policies and policy guidelines set out in this MSDF.
- d) A travel demand management (TDM) strategy for the George CBD that has the objective of promoting greater intensity and mix of land uses, which is accessible by a greater mix of modes. The proportional allocation of space within the areas dedicated to movement should be reflective of the actual modal share in George. Specific attention should be given to the infrastructure and operational requirements to promote walking and cycling within the greater CBD.
- e) A Non-Motorised Transport Master Plan, integrating the NMT network with the open space system and GIPTN as proposed in this MSDF - to facilitate affordable, convenient

mobility for utility / commuting purposes not only recreational NMT.

- f) In line with the above, but in support of the GIPTN in general, a parking audit should be done and a parking strategy and plan developed for the town centre and other key nodes. This plan should address the needs of commuters, business visitors and tourists, and deal specifically with peak holiday season demand. It should propose a strategy for rationalisation of parking to promote:
  - i. the use of public transport,
  - ii. walking, which in turn creates footfall which stimulates pavement businesses and enhances the safety of streets and public spaces,
  - iii. the efficient use of land,
  - iv. a better quality urban form
- g) Reviewed parking ratios for public transport zones in terms of the Integrated Zoning Scheme By-Law which will promote densification and inclusive development of affordable housing and economic opportunities. In doing so, the relative benefits of minimum or maximum parking requirements, as well as zero parking requirements in appropriate locations should be investigated and a template for accompanying parking management plan(s) should be developed.
- h) The regulation and enablement of technology-driven changes in the transport environment. These include on-demand services like Uber, electric vehicles, self-drive cars, etc.
- i) Establish the drivers of current travel behaviour, and perceptions about and proposed changes through a user travel survey.
- j) The proposed Southern Arterial should be reviewed in the preparation of George's Comprehensive Integrated Transport Plan and a review of the Roads Master Plan, in

order to ascertain its necessity, its likelihood of being implemented and to mitigate any risk that this proposed route might:

- i. Discourage shorter term interventions to improve connections between Pacaltsdorp and Thembalethu and Thembalethu and the Garden Route Mall node.
- ii. Encourage further car use at the expense of GoGeorge.
- iii. Present an opportunity to be used as the basis for motivation to open up coastal land for development.
- iv. Draw activity and people away from the George CBD.
- v. Present a barrier to public coastal access.

- c) Assess projects for their long term fiscal impact on households and the municipality;
- d) Confirm the availability of external and municipal funds required to service the housing units developed;
- e) Identify and match human settlement needs of rural settlers with programmes and tools available from the government role-players in the rural sector (i.e. Department of Rural Development and Land Reform, National and Provincial Departments of Agriculture, Department of Energy);
- f) Be supported by a public land asset management strategy and land release programme.
- g) Present a clear implementation programme that enables proper planning for municipal services and municipal land release where relevant.

#### 5.1.2.2 Human Settlements Plan

Delivery of public sector housing opportunities in George forms a significant proportion of the development taking in place in George and therefore also presents strategic potential to lead the implementation of the MSDF. Human settlement programmes will make or break the credibility and meaningful implementation of this MSDF and the sustainable future of the George Municipality.

The Municipality and Western Cape Government's Human Settlement plans and project pipelines for George must be reviewed to align with the spatial strategies and policies contained in this MSDF – all of which complement the draft *Living Cape: Human Settlements Framework* (2017) for the Western Cape.

Specifically, the Human Settlements Plan for George must:

- a) Be informed by an accurate profile of households on the waiting lists matched with an appropriate product based on the rigorous verification of the waiting lists/ backlogs and the profile of households on the waiting list (i.e. accurately match demand and supply);
- b) Prioritise well located public land within a model of mixed income and mixed use land development;

## 5.2 Capital Expenditure Framework

SPLUMA requires that municipal spatial development frameworks “determine a capital expenditure framework for the municipality’s development programmes, depicted spatially”. The intention is to more effectively link the municipality’s spatial development strategies to one of the primary means with which to implement these strategies, namely the municipality’s budget and the budgets of other government stakeholders. By providing more specific guidance on what investments should be made where, in what order of priority, alignment between the Municipality’s strategies, plans and policies and development on the ground is better maintained and the risk that budget allocations undermine or contradict the MSDF are mitigated.

Over the medium term, George’s Capital Budget ranges from R317,486,000 in 2017/18 to R583,579,000 in 2019/20. In the outer year this budget is not necessarily affordable for George. The lion’s share of this budget is grant funded which will yield limited growth (3%). The grant funding available to George also has limited flexibility relating to public transport network development and operations and electrification programmes, with the Municipal Infrastructure Grant offering the most flexibility within the realm of engineering services. Public transport funding does however present an opportunity to develop public transport routes as complete streets inclusive of high quality pedestrian and NMT facilities. Developer contributions are factored into the Municipality’s financial planning; however, development over the last five years has been limited and the weak economic climate suggests that this will be a limited source of infrastructure funding in the short- medium term.

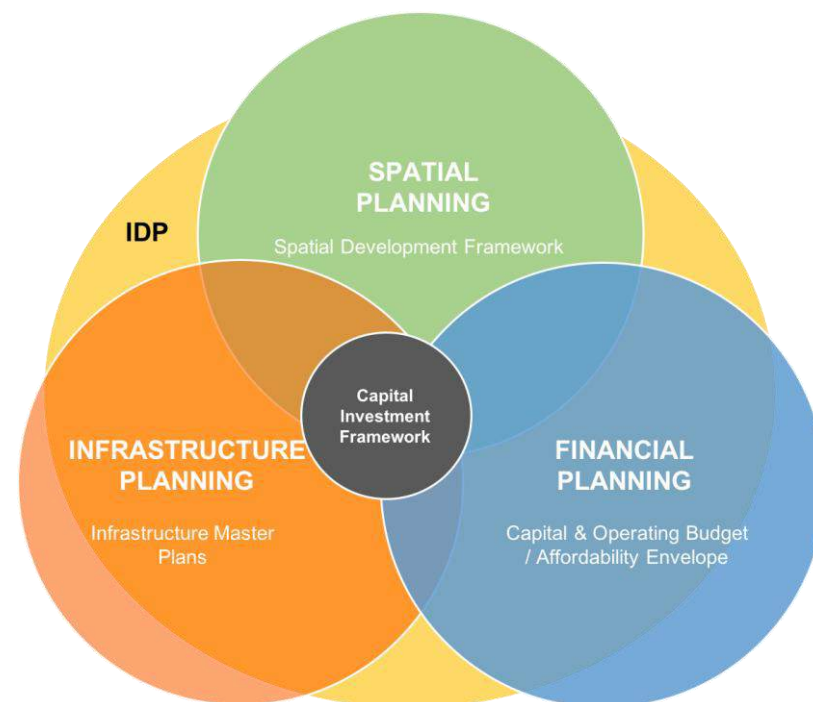


Figure 27: Capital Expenditure Framework



Investment's by other spheres of government, in particular the Western Cape Government, are considerable, but again this is limited primarily to education and health services, and importantly, as discussed throughout this MSDF, human settlements development.

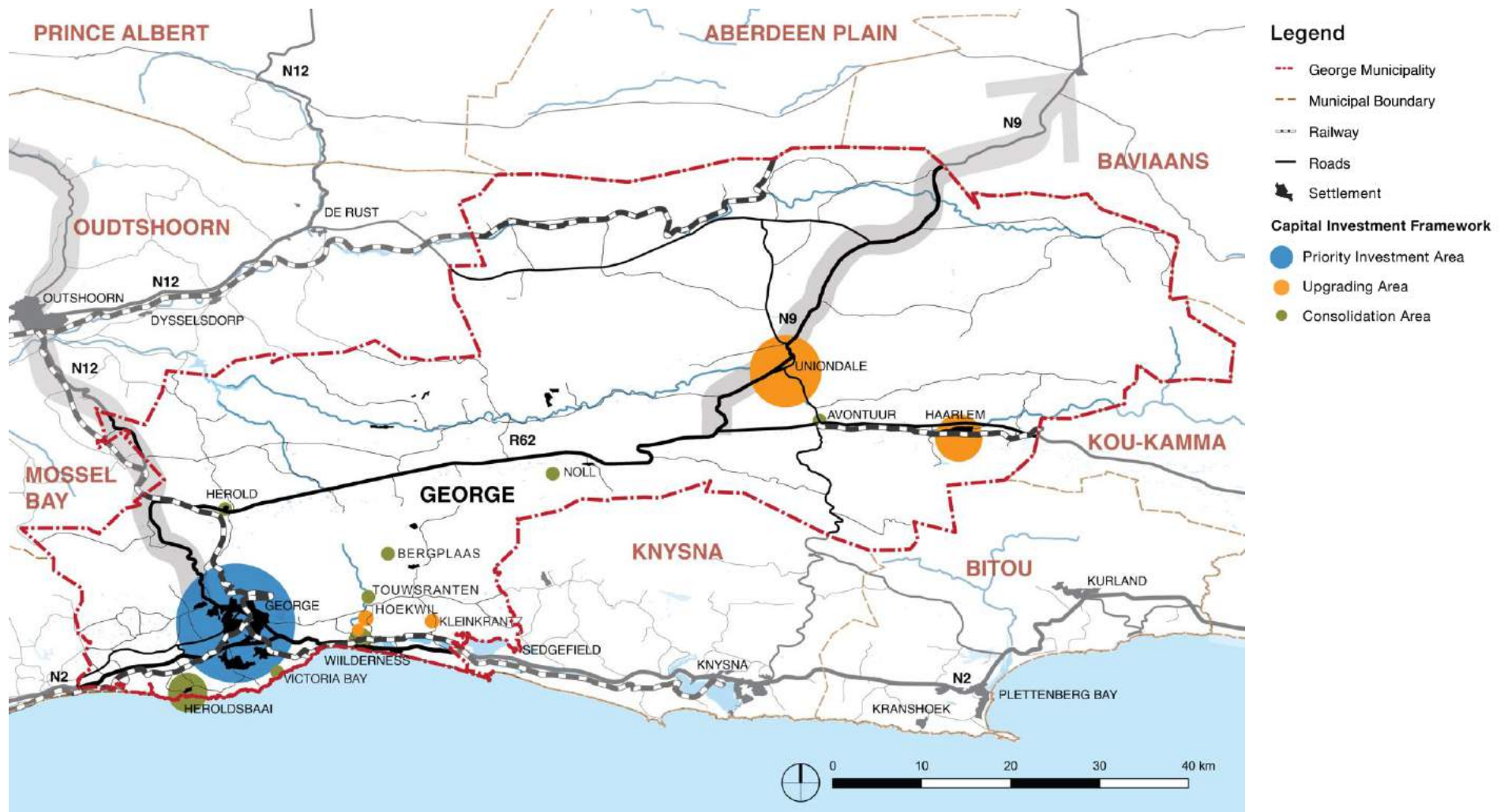
Nevertheless and perhaps because of the constraints faced, it is important that investment is coordinated and concentrated to achieve impacts greater than the sum of the parts, and to free up resources through efficiencies.

The Capital Expenditure Framework for George is illustrated in Map 37 and Map 38.

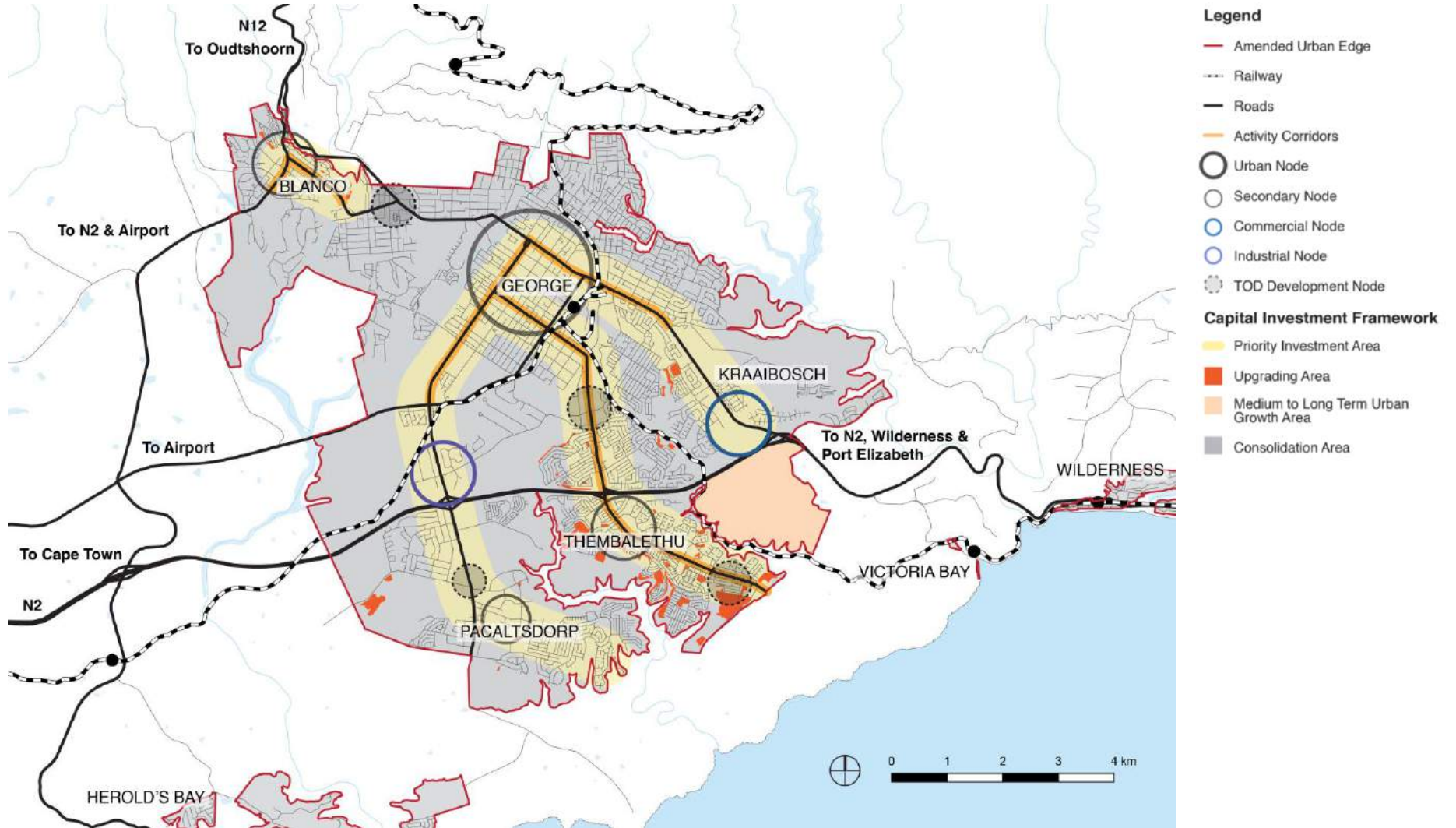
#### **5.2.1 Spatial Categories for Investment Planning and Prioritisation**

There are four spatial categories identified for guiding investment planning:

- i. **Priority Investment Areas (Restructuring Zone):** These are the principal public transport activity corridors and George CBD, the secondary nodes and priority public transport oriented development nodes connected by the corridors. This area is defined by a 500m intensification zone/ restructuring zone on either side of the corridors. These areas must be the focus for getting the basics right as well as adding value through new investment to facilitate social inclusion, attract economic activity and private sector and household investment. There is considerable scope for the absorption of residential, commercial and industrial growth within this zone. These areas and the priority nodes specifically should be the focus of any municipal investment incentives including expedited land use development procedures and/or relaxation of development controls; e.g. parking requirements.
- ii. **Upgrading Areas:** These are areas primarily focussed on informal settlement and marginalised rural settlements that require upgrading and improvement to bring them to an acceptable standard of performance as residential settlements, and in the case of Hoekwil and Touwsranteen, as local service centres.
- iii. **Consolidation Areas:** This area forms the balance of the municipal footprint. In these areas the focus is to ensure the provision and maintenance of services so that the area may perform well within their current functions.
- iv. **Medium – Long Term Urban Growth Area (10 – 20 years):** This area is identified as the desired location for long term growth on the basis that, if appropriately developed, this area can link Thembalethu to an established area of economic activity and retail facilities and provide an opportunity to 'close the loop' in the integrated public transport network by linking two priority corridors, namely, the George CBD – Nelson Mandela Boulevard corridor and the George CBD – Courtenay Street/ Knysna Road corridor.



Map 38: Capital Expenditure Framework for the Greater George Area



### 5.2.2 Housing, Health and Education

The priority public sector projects associated with human settlement development, and education and health facilities for the Greater George Area are set out in Table 14 below, not all of which have allocated budget as yet:

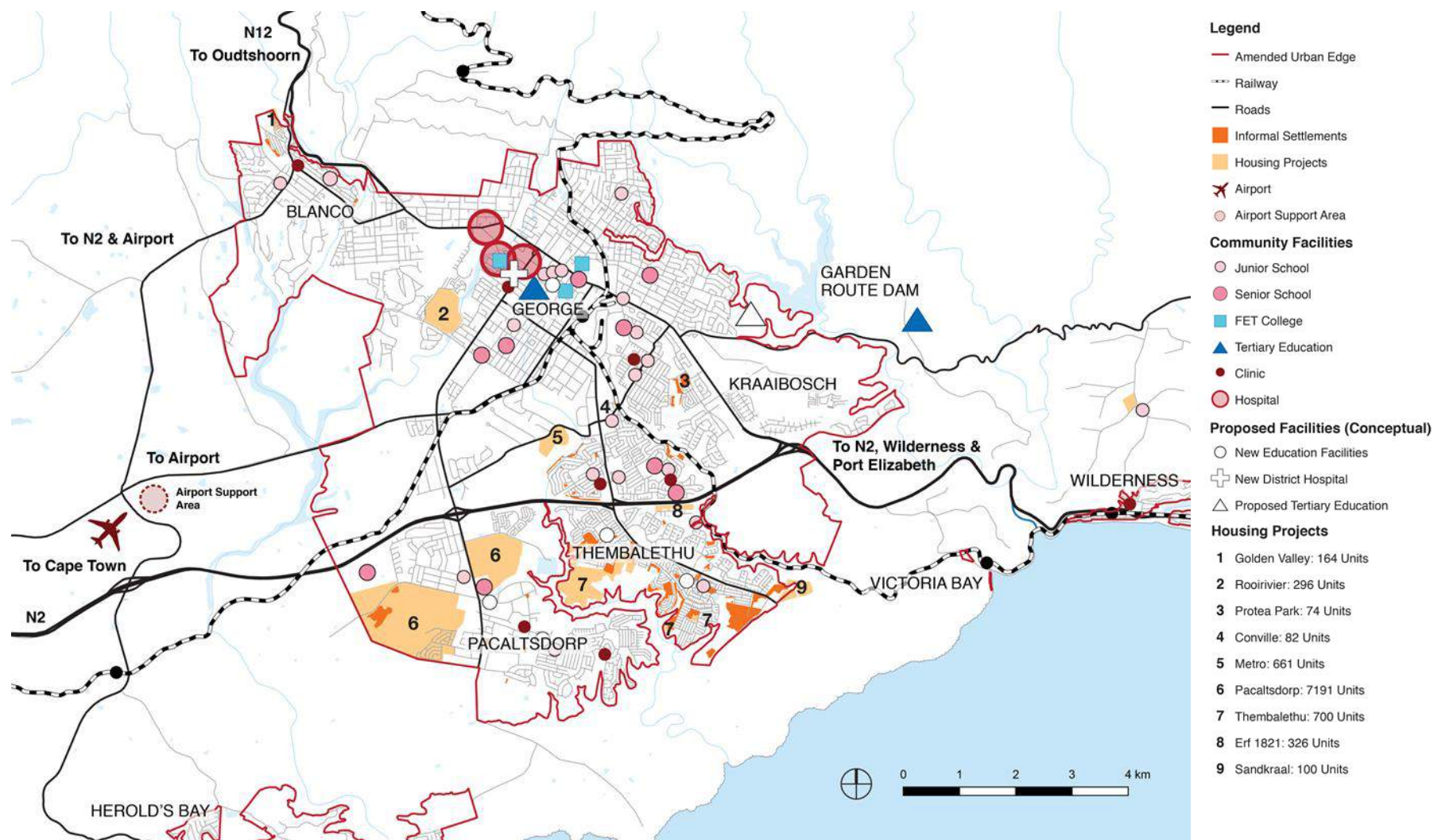
**Table 14: Human Settlements, Health and Education Projects Planned for George over the next Five Years (bold indicates budgeted projects)**

Area	Sector	Type of infrastructure	Current Project Stage	Budget	Number of opportunities	Implementation Period
<b>George City Area</b>						
<b>George</b>	<b>Education</b>	<b>(Die Bult) Heatherlands High School Upgrades and Additions</b>		<b>R21,000,000</b>		<b>2019/20 – 2021/22</b>
	Education	MOD Centre	Maintenance Projects	R18,000,000		2018/19 - 2019/2020
	<b>Education</b>	<b>Secondary School Hostel Upgrades and Additions</b>	<b>Pre-feasibility</b>	<b>R20,000,000</b>		<b>2019/20 – 2021/22</b>
	Health	Centrum Clinic Replacement	Identified / feasibility	R15,000,000		2024 -
	<b>Human Settlement</b>	<b>Metro Grounds IRDP</b>		<b>R35,000,000</b>	<b>1200</b>	<b>2019/20 – 2021/22</b>
	<b>Human Settlement</b>	<b>Europe IRDP</b>	<b>Planning</b>	<b>R31,300,000</b>	<b>505</b>	<b>2019/20 – 2021/22</b>
	Human Settlement	Finance Linked Individual Subsidy Programme- Rooiriver			296	
	<b>Health</b>	<b>George Hospital</b>	<b>Refurbishment &amp; Rehabilitation</b>	<b>R2,501,000</b>		<b>2019/20 – 2021/22</b>
	Health	George District Hospital- New	Identified / feasibility	R580,000,000 (not secured)		2030 –



<b>Thembaletu</b>	Health	CDC Replacement	Under construction	R63,000,000		2017 -
	Human Settlement	PHEP		R51,000,000	700	2019/20 – 2021/22
	Human Settlement	Informal Settlement Upgrading		R27,500,000	1749	2019/20 – 2021/22
	Human Settlement	N2 IRDP	Planning	R15,970,000	329	2019/20 – 2021/22
	Human Settlement	PHP	Top structures	R11,700,000	100	2019/20 – 2021/22
	Education	New School Secondary	Design	R47,091,000		2017/18 - 2019/20
	Education	Primary School		R31,500,000		2019/20 – 2021/22
<b>Pacaltsdorp</b>	Human Settlement	Project Linked Subsidy Project /Finance Linked Individual Subsidy Programme - Erf 325 (East) (Syferfontein)		R259,670,000	3800	2019/20 – 2021/22
	Education	Secondary School - Inappropriate structures - Secondary School	Pre-feasibility	R57,000,000		2019/20 – 2021/22
	Education	New School Primary	Pre-feasibility	R65,000,000		2022/23 - 2026/27
	Education	New School Secondary	Pre-feasibility	R65,000,000		2023/ 24 - 2027/28
	Health	Pacaltsdorp Clinic-Upgrade and Additions	Identified / feasibility	R1,000,000		2019/20 – 2021/22
<b>Blanco</b>	Health	Blanco Clinic-Upgrade and Additions	Identified / feasibility	R800,000		2019/20 – 2021/22
	Human Settlement	Golden Valley IRDP	Top structures	R3,000,000	260	2019/20 – 2021/22
<b>Conville</b>	Health	CDC - Replacement	Identified / feasibility	R70,000,000 (not secured)		2025 -

The Greater George Area						
<b>Touwsranten</b>	Health	Clinic replacement	Identified / feasibility	R14,000,000		2025 -
<b>Hoekwil</b>	<b>Human Settlement</b>	<b>Informal Settlement Upgrading - Wilderness Heights IRDP</b>		<b>R13,520,000</b>	<b>100</b>	<b>2019/20 – 2021/22</b>
<b>Kleinkrantz</b>	Human Settlement	Informal Settlement Upgrading			120	
<b>Uniondale</b>	Human Settlement	Project Linked Subsidy Project			750	
<b>Haarlem</b>	<b>Health</b>	<b>Health Technology</b>		<b>R300,000</b>		<b>2019/20 – 2021/22</b>



Map 40: Existing and Proposed Public Facilities and Housing Projects for the George City Area

Health and Education investments are catching up with existing demand and demand emanating from human settlement projects.

### 5.2.3 Utilities: Water, Wastewater and Electricity

The George Municipality's Long Term Financial Plan 2015 – 2024 identifies new capital investments required:

A synthesis of information obtained from several sources provides an estimate of future new capital demand:

Description	Total	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Roads <sup>7</sup>	105 817	24 410	5 722	1 613	10 582	10 582	10 582	10 582	10 582	10 582	10 582
Electricity <sup>8</sup>	615 203	49 000	65 758	74 951	56 372	61 520	61 520	61 520	61 520	61 520	61 520
Water <sup>9</sup>	501 380	59 512	59 512	59 512	59 512	59 512	40 765	40 765	40 765	40 765	40 765
Sanitation <sup>10</sup>	321 012	45 421	45 421	45 421	45 421	45 421	18 782	18 782	18 782	18 782	18 782
Other Infra <sup>11</sup>	98 314	7 250	1 064	30 000	30 000	5 000	5 000	5 000	5 000	5 000	5 000
Community <sup>12</sup>	249 094	5 359	29 498	29 237	25 000	25 000	25 000	25 000	25 000	30 000	30 000
Other Assets <sup>13</sup>	199 236	22 136	20 713	16 387	20 000	20 000	20 000	20 000	20 000	20 000	20 000
Total Constant 2014 Values		188 677	221 965	255 508	236 305	216 453	171 066	171 066	171 066	176 066	176 066
CPI		1.07	1.13	1.21	1.29	1.37	1.46	1.55	1.65	1.76	1.88
Total Nominal Values	2 951 743	200 942	251 758	308 640	303 998	296 559	249 610	265 835	283 114	310 329	330 501

<sup>7</sup> Roads: In the absence of a master plan we accepted the MTREF amounts but subtracted the public transport related budgetary items. The amounts from 2018 to 2024 are the annual average of the first 3 years.

<sup>8</sup> Electricity: Based on the Thembalethu Master Plan and budgetary estimates for other areas, subject to revision in the MP currently being prepared. Amounts beyond 2018 are the average annual amount of the previous 4 years.

<sup>9</sup> Water: Based on the Master Plan of 2013. Amounts were only recorded in the MP for 2018 and 2023. These amounts were spread equally p.a. for each of the two 5 year periods from 2015 to 2019 and 2020 to 2024.

<sup>10</sup> Sanitation: Based on the Master Plan of 2013. Amounts were only recorded in the MP for 2018 and 2023. These amounts were spread equally p.a. for each of the two 5 year periods from 2015 to 2019 and 2020 to 2024.

<sup>11</sup> Other Infrastructure: Informed by the MTREF 2014/15 to 2016/17 but includes an amount of R30 m p.a. in 2017 and 2018 for the construction of a new municipal office building

<sup>12</sup> Community Infrastructure: Informed by the MTREF 2014/15 to 2016/17 but includes new fire engines in 2023 and 2024 at R5m p.a.

<sup>13</sup> Other assets: Informed by the MTREF 2014/15 to 2016/17



Master planning is in place for the utility (electrical and water and wastewater) services and is updated regularly. Subsequent updates will need to be informed by this MSDF. This master planning informs the annual process of preparing the budget for the Municipality. Typically, planned requirements exceed funds available and existing facilities require upgrading to maintain service standards and accommodate new growth.

Immediate priority water / wastewater projects can be summarised as follows:

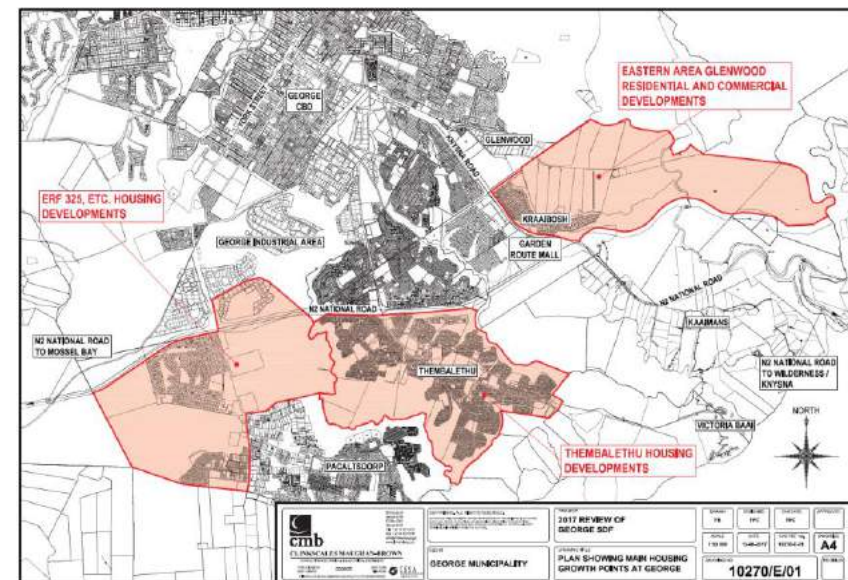
- a) Investigate Uniondale water treatment plant pumps
- b) New Uniondale Site C reservoir
- c) Extension of capacity of the New Water Treatment Plant.
- d) Completion of extension of capacity of Outeniqua WWTW
- e) Raising of the Garden Route Dam spillway

Within the next five years, the following further priorities have been identified:

- a) Bulk Water and link services in Pacaltsdorp
- b) Bulk Water services in Thembalethu
- c) Bulk water and link services in Wilderness Heights (erf 329, Hoekwil)
- d) Extension of the capacity of the New Water Treatment Works
- e) New Main Reservoir
- f) Bulk Sewer and link services in Thembalethu
- g) Bulk Sewer and link services in Pacaltsdorp
- h) Upgrade Meul Street sewer pump station
- i) Extend capacity of Gwaiing WWTW
- j) New 30Ml raw water balancing dam
- k) Bulk infrastructure review of Haarlem and Uniondale

Increasing densification or the incentivisation of densification will involve ensuring that existing reticulation networks are maintained and in undertaking the maintenance, upgrading is done to enhance

capacity. This can be seen as a short term increased cost for long term efficiencies. Significant reticulation network upgrading is required in the CBD area. This is also important from the perspective of retaining existing investment and growing off this base.



**Figure 28: Growth Areas for Electrical Infrastructure (Source: George Municipality, 2010)**

From an electricity service perspective, consumption has become more efficient but is showing an approximate growth of 1,3% p.a.

Eskom is a direct supplier to a significant area of the Greater George Area – it is operating over-capacity at Touwsranteen, Herold, Noll and Waboomskraal.

George does not have sufficient Firm Capacity to present demand and cater for future growth (this is most serious at Glenwood 6kv substation). Non-firm capacity is sufficient in George but upgrading of main feeders is needed to meet future demand. Upgrading to

feeders is required at Thembaletu and the Protea Substations. Spare capacity is needed in the eastern distribution network to supply low cost housing projects. Presently there is insufficient funding available to ensure electricity supply to the stated housing project pipeline of peripheral housing developments.

Priorities in the electricity service is to:

- I. continue to bring electricity to households which it estimates can be done at a rate of 1,000 households annually on the basis of the funding made available from the national Department of Energy – future allocations may be affected by the prioritisation of the needs of Knysna following the wildfire disaster. Typically allocations do not match requests.
- II. meet demand in Thembaletu and associated substation infrastructure required
- III. infrastructure in the Glenwood/ Groenkloof area which should be privately funded
- IV. following Thembaletu, the priority will move to Pacaltsdorp

## 5.2.4 Public Transport and Roads

The immediate priority and for the next five years remains the implementation of the George Integrated Public Transport Network and the roll out of GoGeorge.

The widening of the N2 / Thembaletu Bridge is also a priority for implementation within the next five years.

In the short - medium term period (2019/20 – 2021/22) the Western Cape Government will be investing in refurbishing and rehabilitating the Waboomskraal – Holgaten and Hoekwil – Saarsveld roads, upgrading the Rondevlei gravel road. It will also be resealing the Holgaten – Oudtshoorn and de Rust – Uniondale

roads. In addition, R30,000,000 has been budgeted for the Western Bypass.

## 5.2.5 Priority Investment Areas

### 5.2.5.1 Priority Investment Area: George CBD

The George Municipality is dedicated to maintaining and strengthening the CBD as George's primary economic activity centre. Key spatial actions related to the CBD are;

- To continue to resist the trend of “dispersed” business development in the CBD, specifically the spread of business development into surrounding residential areas:
- Retain office activities in the CBD:
- Capitalize on the work begun in the development of a new central bus terminus as an urban regeneration project to renew the corridor from York Street to the station and between Cathedral and Market Streets:
- Support residential densification along key CBD routes.
- Implement public space upgrades related to GIPTN to ensure a vibrant, integrated and safe pedestrian environment
- Support and better marketing and take up of incentives for private investment in the upgrading and redevelopment of the CBD's buildings.
- Investigate establishing a special purpose agency to assist with the management of the CBD.
- Establish a partnership forum with the private sector to promote development in the CBD
- Promote high quality urban design with the aim of reducing crime and improve the overall appeal of the CBD and confidence for private sector investment.

*Detailed directives for the development and management of the George CBD are contained in the Local Structure Plan for the CBD, 2017 and the George CBD Pedestrian Network Urban Design Framework, 2016*

### 5.2.5.2 Priority Investment Area: York - Beach Road Corridor, Pacaltsdorp

Historically Pacaltsdorp developed as an independent settlement distinct from George. Albeit part of the greater George urban area today, the area remains predominantly residential in nature. There are heritage assets and cultural landscapes in the Pacaltsdorp area that should be carefully understood.

The restructuring agenda for Pacaltsdorp is similar to that pursued for Thembaletu. Specifically:

- Active support for the development of the Pacaltsdorp commercial centre as an activity centre and node. Significant opportunity exists for infill development and higher density development (approximately 70 ha of land is available and densities as high as 80 units/ha are envisaged).
- In the older, more central part of Pacaltsdorp low densities are inhibiting development of the area. Land is primarily in private ownership and in many cases locked in deceased estates or held by families with no capital to develop the land while also not wanting to lose the land as an asset. This is also creating inefficiencies for services including GoGeorge. The feasibility of a land readjustment process should be investigated to unlock densities in Pacaltsdorp along the principal activity corridor in order to unlock development potential in Pacaltsdorp
- Sufficient provision of public- and social infrastructure to accommodate the future growth and development of Pacaltsdorp should receive priority. Significant new housing opportunities are being developed for a range of income groups on the strategically located Erf 325, Syferfontein site.
- Public infrastructure should support the development of Beach Road as a principal public transport activity corridor
- Limited human settlement / industrial expansion up to the urban edge of Pacaltsdorp can take place in support of the corridor.

*Detailed directives for the development and management of Pacaltsdorp are contained in the Pacaltsdorp/Hansmoeskraal Local Spatial Development Framework, 2015.*

### 5.2.5.3 Priority Investment Area: Nelson Mandela Boulevard / Sandkraal Road Corridor, Thembaletu

Thembaletu was originally developed in the apartheid era as a dormitory residential area. The Integration of Thembaletu with the City of George, is vital step in addressing the apartheid spatial character of George and providing an inclusive City.

An Urban Upgrade Precinct Plan for Thembaletu was approved in 2016. This LSDF not only addresses the insufficient level of service but also highlights the following objectives in Thembaletu:

- Housing
- Business and industry
- Leisure and tourism
- Agriculture

The key spatial actions related to Thembaletu are:

- i. Introduction of a transport spine system comprising Nelson Mandela Boulevard, Tabata, and Ngcakani roads as the public transport and non-motorised transport spine respectively;
- ii. Promotion of a mixed use intensification area between Tabata and Ngcakani streets making use of all surplus and underdeveloped land;
- iii. Creation of a public open space network comprising the river valleys lined with a recreational/maintenance track that will help to manage urban encroachment into the river valleys and regulate storm water management;
- iv. Rehabilitation of key sites within Thembaletu such as the Brickfields site to open up land for development

- v. Upgrade informal settlements under the UISP which should see redeveloped towards high urban densities and walkable environments
- vi. Support urban agriculture, small farming and commercial farming activities.

*Detailed directives for the development and management of Thembalethu are contained in the Thembalethu Precinct Plan: Urban Upgrade Report, December 2016.*

#### **5.2.5.4 Priority Investment Area: Blanco Node**

Originally Blanco developed as a distinct settlement from George, but now it is an integral part of the George urban area. Despite significant “estate” type development in the area, it has managed to retain many historic buildings and its unique pastoral village character and ways of life.

The Municipality will maintain the present environmental, rural and settlement character of Blanco. To this end it will:

- Maintain ‘tight’ urban edges to protect the rural character of the area.
- Apply land use management guidelines to protect the human scale and pastoral character of the village (including the placement of buildings close to street boundaries).
- Permit sensitive mixed use development and densification along major routes (George Street and Montagu Street), including tourism-related facilities.
- Review densities allowed for infill residential development on identified vacant land parcels to support formal public transport and to promote inclusionary housing development

*Detailed directives for the development and management of Blanco are contained in the Blanco Local Spatial Development Framework, 2015.*

#### **5.2.5.5 Priority Investment Area: Nelson Mandela Boulevard / Rosemoor / Conville Corridor**

George South East comprises older and newer residential areas, predominantly planned in the apartheid era for the “Coloured” community south and west of the industrial area and north of the N2.

Given the background of the area, it is predominantly residential in nature (with a considerable proportion of informal dwellings), underprovided in places of work and social facilities, and poorly integrated with the rest of George.

The Municipality will promote urban renewal and integration in the area. This includes:

- Focused urban renewal through mixed use development, comprising a range of housing types at Borchersds, Rosemoor, the cemetery area, commonage south of the industrial area and a number of smaller vacant sites. At a density of 30-40 units/ ha 2 000 – 3 400 housing opportunities could be provided in these areas.
- Upgrade roads for better integration with the rest of George and the industrial area.

*Detailed directives for the development and management of George South East are contained in the George South East Local Spatial Development Framework, 2015.*

#### **5.2.5.6 Priority Investment Area: Courtenay Commercial Corridor**

Investment into this corridor should be focussed on promoting the development of the Road as a complete street inclusive of high quality pedestrian, non-motorised transport, public transport and private car travel, within a high quality green landscape that celebrates entry into George and the extraordinary mountain views.



Significant opportunity exists to fill in the very wide road reserve to create development opportunity that creates a greater sense of enclosure, comfort and safety for pedestrians and generates space for inclusive housing and economic development.

## 6 Conclusion

The MSDF presented in this report gives spatial expression to George Municipality's service delivery and development agenda, and directs and guides development and management activities in the Municipality's urban and rural areas. It embraces the principles of SPLUMA and pursues the policy priorities of the IUDF, as well as other sector legislative and policy intent.

As a consequence of public and stakeholder participation in the drafting of this MSDF, this MSDF will represent a compact between the George Municipality and the citizen-customers of George on how the development and growth of George will be directed and managed. The vision, strategies and policies of this MSDF will be honoured in decision making associated with planning, resource allocation and implementation. This is the basis of good governance envisaged by SPLUMA.

On the conclusion of the process to prepare this reviewed MSDF, it will be adopted by Council in terms of SPLUMA, LUPA and the Municipal Planning By-Law, and accordingly will have the full status of a Municipal Spatial Development Framework. It will also be approved in terms of the Municipal Systems Act as a part of the George Municipality's Integrated Development Plan.

### 6.1 Adoption of land within the urban edges as an urban area in terms of NEMA

All land within the urban edges established for settlements within the municipal area of George are to be approved as **urban areas** in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) by the competent authority (as defined in NEMA) in accordance with the Environmental Impact Assessment Regulations Listing Notices of 2014 (GN No. R.983, R.984 & R.985 of 4 December 2014, as amended). These listing notices exempt certain listed activities from requiring environmental impact

assessments where they are to take place within the urban edge or the thresholds that trigger an EIA are different.

In doing this, the appropriate application of NEMA within the urban area, as defined by the urban edges, is streamlined. The intention being to remove an unnecessary administrative burden where the proposed activity is unlikely to have a significant detrimental impact on a receiving environment that is not sensitive; and to incentivise and expedite desirable, compact development.

A key focus is to safeguard water courses and natural areas and for the urban edge to delineate, as far as possible, critical biodiversity areas. To this end, should development applications not be able to comply with Policy D4 and the associated policy guidelines, an impact assessment will be required.

### 6.2 Further development of the Capital Expenditure Framework

Fairly late into this MSDF review, the national Department of Cooperative Government published a draft Guide to preparing a Capital Expenditure Framework (CEF) which is now linked to accessing the new Integrated Urban Development Grant, a new generation of the Municipal Infrastructure Grant, to be made available to intermediate South African cities such as George on a phased basis. The CEF is further defined as follows:

*A Capital Expenditure Framework is a consolidated, high-level view of infrastructure investment needs in a municipality over the long term (10 years) that considers not only infrastructure needs but also how these needs can be financed and what impact the required investment in infrastructure will have on the financial viability of the municipality going forward. (SALGA, 2017)*

This guide sets down a methodology for the preparation of an integrated infrastructure plan based on the MSDF's identification

of functional areas and related demand projections over a period of at least 10 years, which in turn must be modelled in terms of engineering and social infrastructure requirements and costs and then factored into the Municipality's Long Term Financial Plan. Importantly the state of existing infrastructure and its maintenance, renewal and replacement requirements must also be built into this exercise. The CEF would then present scenarios and prioritisation to be taken forward in the selection of programmes and projects to go into the budget.

This is an extensive inter-disciplinary technical exercise that is beyond the means of this MSDF review. It will need to be commenced with by the Municipality so as to allow for a CEF, in the form it is envisioned in the draft Guide, to be brought into the next review of the MSDF.

To assist with this process, functional areas – areas with similar characteristics from a developmental and service demand perspective – for the George city area have been identified. The infill and densification proposals in this MSDF have been quantified based on these functional areas and the priority investment areas that fall within them. This information is presented and explained in Annexure 4.

### 6.3 Outstanding Information

The National Department of Agriculture, Forestry and Fisheries (Land Use and Soil Management) responsible for the Subdivision of Agricultural Land Act, no 70 of 1970 has embarked on a process of demarcating / updating the areas within all municipalities of the Western Cape not subject to the provisions of this Act. At the same time, the Department is developing norms and demarcating areas of “agricultural significance” worth preserving for agriculture in future, which will then be deemed as such by the proposed “new” Act 70 or the Preservation and Development of Agricultural Land Act underway. This will aim to direct development proposals from an agricultural perspective if on agricultural land. When this new

information is available, the extent to which revisions are needed to the MSDF will need to be ascertained and incorporated into the annual IDP Review process.

Associated with this is the need to reconcile the Department's position that it cannot support a land parcel with dual status in terms of whether it is agricultural land or not; i.e. a land parcel that straddles the urban edge, with the purpose and principles underpinning the delineation of an urban edge.

A number of outdated sector plans were in need of or under review at the time of drafting this MSDF review and it was not possible to fully integrate these plans into the MSDF. While this MSDF gives guidance to these sector plans where relevant, their impact on the MSDF itself will need to be considered going forward.

## 6.4 Monitoring and evaluation

***TO BE COMPLETED SUBJECT TO THE ADOPTION OF THE PROPOSALS CONTAINED IN THIS DRAFT MSDF AND WITH REFERENCE TO INDICATOR DEVELOPMENT UNDERWAY FOR INTERMEDIATE CITIES BY THE NATIONAL DEPARTMENT OF COOPERATIVE GOVERNMENT OR IT'S EQUIVALENT IN TERMS OF THE IMPLEMENTATION OF THE INTEGRATED URBAN DEVELOPMENT FRAMEWORK.***

## 6.5 SDF Review Timeframes

The purpose of the MSDF is to provide a medium to long term vision and a set of strategies to attain this vision. SPLUMA requires that this is translated into an implementation framework that takes a 5 year view to inform the municipality's Integrated Development Plan and Budget. As development, whether it be the public sector or the private sector, takes multiple years to be realised, it is not appropriate that the MSDF is substantially reviewed annually. The MSDF must encourage consistency and predictability in planning decisions in order to achieve the desired outcomes. Transformation of the built environment in particular is a long term process that requires determination and persistence.

Processes, including public participation processes, associated with the review of an MSDF are prescribed by SPLUMA, the MSA (and associated regulations), LUPA and the Municipal Planning By-law and any associated policies or regulations.



The George MSDF will be reviewed on the following basis:

TIMEFRAME	NATURE OF REVIEW	PUBLIC PARTICIPATION PROCESS	SUBSTANCE OF THE REVIEW
<b>When required</b>	When required	IDP Public Participation Process	a) Any major review and subsequent amendments to the IDP Strategies and Objectives that impacts on the Strategies and Policies of the MSDF
<b>5 years</b>	Limited Review and Amendment	As prescribed by the legislation and regulations, coordinated with the IDP Public Participation Process	a) Alignment to new term of office IDP b) Update based on trends or shifts in the socio-economic, biophysical or built environments based on a defined set of key variables that indicate the nature of such trends c) Update based on updated master plans or to inform updates to master plans d) Supplementation/ update or adjustment to deal with changes in baseline information, legislation, policy
<b>10 years</b>	Full Re-write	As prescribed by the legislation and regulations, coordinated with the IDP Public Participation Process	Comprehensive in terms of the requirements of SPLUMA.

The MSDF is Council's vision, direction and policies guiding development in the municipal area. Regular application based amendment to the MSDF, outside of municipal planning processes, should be avoided as this will undermine the effectiveness of the MSDF. It also undermines the role of the MSDF as the Council's policy. Should such amendments be considered, it should be noted that the amendment would apply equally to the IDP and the Budget and implies a change in policy on the part of the Council. As such, the impact of this change in policy on the MSDF, IDP Priorities and Programmes and the Budget must be considered holistically. All three planning documents will need to be reviewed and amended to reflect the change in plans and priorities.

An ongoing formal record will be maintained and made available of corrections or site-specific deviations granted by the Municipal Planning Tribunal. These will be incorporated into the five year review of the MSDF.

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## Annexure 1:

### Guidelines for the Management of Growth of the Settlements Surrounding the George City Area

Guidelines for the management of growth of the settlements surrounding the George city area are as follows:

#### i. Herold's Bay

Herold's Bay is a historic coastal recreation and holiday destination. Herold's Bay Lower comprises the old seaside village, while Herold's Bay Upper comprises more recent residential development located along the higher-lying plateau. Four residential estates have been agreed to in this area over the last number of years.

The Municipality will maintain the present environmental, rural and settlement character of the area. To this end it will:

- Permit very limited additional development in Herold's Bay Lower, save for redevelopment and alterations sensitive to the "village-style" of the area, the amenity of adjoining properties and view-sheds.
- Support compact development in areas approved for further residential development that address the need for :
  - a neighbourhood commercial and services centre;
  - a parking study, plan and contribution to adequate provision for the whole Herolds Bay settlement;
  - alleviation of traffic pressure on the settlement;
  - improvement of public transport and non-motorised transport access to and facilities in the area
  - improved services to Herolds Bay
- Resist any form of expansion, densification or development of the buffer zones of residential, eco and golf estates.
- Limit higher density developments as defined in the LSDF.

*Detailed directives for the development and management of Herold's Bay are contained in the Herold's Bay Local Spatial Development Framework, 2016.*

#### ii. Victoria Bay / Kraaibosch South

Victoria Bay is a small seaside resort and well-visited recreational area. Kraaibosch South is predominantly a rural residential area. The area's topography, the Kaaiman's River and built character is unique, and has contributed to its increased popularity as a place of recreation, vacation and permanent living. There are approximately 50 dwellings in the Victoria Bay rural area, 12 dwellings in the seaside settlement and fourteen dwellings/ erven along the Kaaimans River.

The Municipality will maintain the present environmental, rural and settlement character of the area. To this end it will:

- Restrict development in Victoria Bay to existing building footprints and height.
- Manage applications for subdivision and land use in the surrounding area in a manner that maintains the rural and scenic character of the area and do not place an additional burden on service infrastructure.

*Detailed directives for the development and management of Victoria Bay / Kraaibosch South are contained in the Draft Victoria Bay / Kraaibosch South Local Structure Plan (Spatial Development Plan), May 2009. However, this must be reviewed on the basis of this updated MSDF.*

#### iii. Wilderness, Touwsrante and Hoekwil

Wilderness is one of the most popular tourism and residential destinations along the Garden Route, based on its unique terrestrial, aquatic and marine assets, outstanding rural and townscape qualities, and recreational amenity value. Threats to the area include the subdivision of smallholdings, expansion of poorly located and serviced informal areas, and insensitive building development.

The Municipality will maintain the present environmental, rural and settlement character of the area. To this end it will:

- Not permit expansion of residential areas beyond the urban edge, with the exception of Hoekwil (where a node has been identified), and Touwsrante where growth has to be accommodated.
- Prohibit significant densification of existing residential areas (except through group/ town housing and resort development on land available within the urban edge).
- Upgrade and formally develop the two informal residential areas in Kleinkrantz and Wilderness Heights (erf 329 Hoekwil) in a manner that is dignified, ecologically sensitive and sustainable - minimising the impact on their surrounds; minimising ongoing operational servicing costs; exploiting small-scale economic and subsistence opportunities primarily associated with the surrounding environment and heritage. Access to social services and facilities is a key concern that will need to be integrated into any upgrading plan with a financial commitment to address this from all relevant spheres and departments of government.
- Discourage further growth of the Kleinkrantz and Wilderness Heights settlements.
- Support further tourism development in the Village to enhance its role as the primary business node in Wilderness.
- Support nodal development at Hoekwil and Touwsrante.
- No development should impact negatively on the lakes area, crest skyline and green boundaries.

*Detailed directives for the development and management of Wilderness and related settlements are contained in the Draft Wilderness-Lakes-Hoekwil Local Spatial Development Framework, 2016.*

#### **v. Uniondale**

Uniondale is the largest service centre in the Greater George Area outside of the city of George. The Municipality will:

- Maintain the agricultural and natural surround of the town.
- Improve road infrastructure servicing the town.
- Improve basic services delivered to residents.
- Improve the provision of public facilities.

*Detailed directives for the development and management of Uniondale (and Haarlem) are included in the Wards 24 & 25 Local Spatial Development Framework, 2015.*

## Annexure 2:

### George Urban Growth Proposals Assessment Framework

In the context of the priorities identified in the George 2017 – 2022 IDP and the Municipality's Long Term Financial Plan, any new private land development proposals would have to demonstrate that they not only pay for themselves from a long term operational perspective but also enhance George's efficiency, make a net contribution to the economy and ensure that land is used productively from a revenue generation perspective. Any development that proposes to extend the urban footprint of George city or create a new urban or suburban footprint in the municipal area should be deemed satisfactory in terms of these key sustainability concerns before an assessment of desirability can proceed.

It would not be responsible for the MSDF to speculate on opportunities for new settlement outside of a comprehensive assessment of what such settlement would bring to the table from a development perspective versus what the impacts and costs would be and who would meet these short and long term (capital and operating) obligations and/or mitigate or manage impacts. It is not within the means of the process to prepare an MSDF that considers the full lifecycle implications of such development proposals to inform its recommendations and to subsequently apportion responsibility for the costs for such development in its Capital Expenditure Framework, that would then need to be reflected in the George Municipality's Integrated Development Plan and in turn its budget, given that the MSDF is the spatial expression of the IDP. The normal land development and impact assessment procedures must deal with such proposals. Given that the MSDF should, with the IDP, drive the municipality's budget, and spatial form has a direct bearing on the municipality's financial sustainability, an in principle decision on development in an MSDF cannot be separated from its financial implications.

At the same time, recognising that unforeseen economic prospects or opportunities and/ or new information may arise and a compelling case might be made for economic investment that is able to realise a net return on investment for George as a whole, the MSDF does however provide the following framework for decision-makers who may wish to consider proposals for lateral urban growth of the George city area or new remote/isolated settlement of an urban or suburban nature. The burden being on the proponent to provide sufficient evidence in respect of the conditions set out below and on the Municipality to ensure the objectivity of this evidence.

#### A. GENERAL CONSIDERATIONS

- a) Planning and development regulation in the rural areas of the George Municipality will be governed by The Western Cape's Rural Development Guidelines, as well as the Local Area Spatial Development Framework for Wards 24 & 25 of the George Municipality which covers most of the rural area under the jurisdiction of the George Municipality. This framework as far as it pertains to the rural areas, will be an additional regulating tool.
- b) The Provincial PSDF principles and policies as they relate to improving the position of municipal financial sustainability through infill and appropriate densification and the need to prevent commercial decentralisation and the associated decline of central business areas are key policies to inform both municipal spatial frameworks and growth management.
- c) Where the urban edge has been delineated to protect natural resources (e.g. critical biodiversity / the coastlines) it should not be amended.

- d) Arguments regarding poor agricultural conditions will not be accepted as the basis for a review of the urban edge. Arguments regarding the availability of infrastructure will not be accepted as the basis for a review of the urban edge. An agri-village is a privately established and managed settlement situated on private land within a farming area and exclusively accommodates the local agri- worker community. The only circumstances under which an agri-village should be considered include the following:
- in a farming area where there is a concentration of agri workers due to the type of agricultural activities and that has a substantial demand for “off-the-farm” settlement;
  - areas where there are no established settlements within practical commuting distance (approximately 30km) and a municipality that has no feasible means of establishing and managing a new town;
  - In light of the substantial managerial and financial resources required to establish and maintain small settlements, and their potential negative impact on the environment and also due to the relatively short distance between settlements in the Western Cape, the establishment of agri-villages or new settlements as “off-the-farm” options both have limited applicability in the Western Cape.

## B. PERFORMANCE CONSIDERATIONS

Assessing the performance of proposed extensions to the urban footprint of George City, Uniondale, Haarlem and Herold or new remote, isolated settlements of an essentially urban or suburban nature such as agri-villages; eco-estates and other forms of lifestyle residential estates is important to adequately inform decision-makers in order that their decisions:

- a) Do not reinforce / exacerbate or continue segregated settlement patterns

- b) Do not reinforce / exacerbate or continue inefficient settlement patterns through non-contiguous or leapfrog development
- c) Do not trigger costly commuting distances (to work, education and health facilities, amenities and services) for people living or working in these settlements that would rely heavily on private motor vehicle use that would increase carbon emissions and incur prohibitively expensive costs for particularly the poor – effectively leading to economic exclusion or spatial poverty entrapment
- d) Do not trigger unaffordable capital and/or operating cost burdens on the public sector to provide requisite public facilities and/or services in these settlements or to provide the transport for scholars and patients to access facilities elsewhere
- e) Do not exacerbate the Municipality’s risk and the associated disaster management costs associated with such risk in respect of securing life and property in the case of extreme events associated with *inter alia* fire, inundation / flooding, coastal erosion by virtue of their location and/or distance from emergency services
- f) Do not compromise the unique character of an area
- g) Do not compromise the rural economy and/or existing value adding land uses
- h) Do bring opportunity for the whole existing settlement to improve and prosper.
- i) Are not based on providing in a housing need alone (only) but comply with all the guidelines in this framework.
- j) Protect valuable view corridors, undeveloped ridge lines, heritage assets and existing vistas should not be compromised by any development proposal or cumulative impact of development proposals. The proportion of urban development up the slope of a prominent hill or mountain should not degrade its aesthetic/ visual value.
- k) Do realise tangible economic benefits for the municipality



### C. VIABILITY CONSIDERATIONS.

Assessing the viability of proposed extensions to the urban footprint of George City, Uniondale and Haarlem and remote settlements of an essentially urban or suburban nature such as agri-villages; eco-estates and other forms of lifestyle residential estates is important to adequately inform decision-makers in order that their decisions:

- a) Safeguard the fiscal sustainability of the municipality – in the short term in terms of capital costs and in the long term in terms of operating costs – by ensuring that the development is self-funded in terms of bulk and link servicing requirements
- b) Ensure that there is no undue subsidisation of services to and in these areas on the part of the existing ratepayers of the Municipality and or the state where this is not of equitable benefit to those most in need of public resources
- c) Safeguard the long term sustainability of servicing these settlements to the extent that the public sector is responsible or might reasonably be found to be the default responsible party
- d) Demonstrate tangible social and economic benefits for the municipality and existing settlement residents, balancing the provision of live – work - play opportunities, and securing the financial sustainability of the existing settlement being extended.

### D. EVIDENCE REQUIRED

Such development proposals must provide the George Municipality with the following:

- a) Evidence as to why the proposed target market of the proposed development cannot be accommodated within the existing urban edge on existing vacant and under-utilised land

- b) Evidence that the development fulfil the needs and priorities identified in the IDP and does not draw attention and resources away from other priorities
- c) A clear assessment of the impact on bulk services, what bulk services would be required and when these would practically come into operation
- d) Evidence that there is no impact on existing capacity and future capacity being brought on stream by existing infrastructure investment programmes, given service delivery backlogs in the existing built footprint of the city and the need to maintain and upgrade existing infrastructure.
- e) Evidence that landowners and developers within the urban edge, who have acted in alignment with Council policy, with legitimate expectations of obtaining services from the Municipality will not be negatively affected.
- f) Assurance that the development funds the Public Transport Network infrastructure requirements to ensure that access to public transport modes is integrated with the planning and implementation of the development and offered from the outset of occupation of the development
- g) Adequate provision to ensure permanent employment generating activities are part of the development to minimise commuting costs, and that this is not limited to retail which has little local generative impact;
- h) Assurance that such economic land uses are operational from the outset of residential occupation of the development
- i) A signed written agreement committing the applicant (and its successors in title) to the planning, design, construction and full upfront financing of the following all bulk utility and public transport infrastructure external to the site, in addition to development contribution requirements
- j) Any changes to the terms and conditions of this agreement (including the
  - a. signatories) would need Council approval given the possibility that this would impact financially on the George Municipality and as a result impact on its IDP;

- k) An assessment of the operational costs and any other 'hidden costs' of the proposed development to the Municipality and whether these will be retrieved in full by rates and tariff charges based on an understanding of the proportion of landowners within the development that will be liable for such charges and the proportion that will require subsidisation;
- l) Developer commitment to the construction and operation of the full extent of social facilities required by the development, including confirmation on the timing of construction and the period that the social facilities will be operated at the expense of the developer;
- m) Should the development be residential in nature, an inclusive approach must be followed that enables well planned on-site integration. Where state funding is required for housing, an agreement must be in place that specifies:
  - i. subsidies obtained for the development of housing will not be used to fund link infrastructure to market housing;
  - ii. the number of houses that will qualify for the housing subsidy, and the number of houses to be built for the GAP market, the provisions made for the proposed subsidised units on the Municipality's Housing Plan, pipeline and three year capital budget; and the requisite infrastructure. The GAP market is defined as households earning more than R3,500 and less than R22,000.
  - iii. assumptions on subsidies (infrastructure, land and top structure) to be received from the Municipality and discounted development contributions should also be documented;
  - iv. the agreed standard of services to be installed
  - v. the maintenance agreement with respect to state-subsidised housing units which guarantees the

infrastructure and associated services for a minimum of five years at the cost of the developer with performance indicators to ensure prompt service delivery.

- n) Should any green or 'off the grid' infrastructure be proposed – evidence that there is no risk of negative impact on environmental systems and services should there be a break in the functioning of these services
- o) Legal provision that the Municipality will not become obliged by default to service the development in the future should such off the grid systems fail to perform without due provision being made by the land owners to pay the full capital and operating costs of such services
- p) An assessment of fire risk along the wild land – urban interface must be done and satisfactory mitigation actions identified. Provisions for ongoing maintenance of such actions must be documented and it must be clear how these will be complied with in perpetuity.

## E. TOOLS TO ASSIST WITH THE ASSESSMENT

Tools are available to assist the Municipality in these decision-making processes:

- a) The Cities Support Programme's Fiscal Impacts Tool:  
This tool aims to assess the long term operating and capital costs of development to multiple actors. The tool provides a template that can be adapted to cost parameters specific to the Municipality. Importantly, it not only assesses the fiscal impact – the total life-cycle cost incurred by government – but also the financial impact on household budgets and environmental cost
- b) The CSIR have a geospatial assessment procedure for the calculation and mapping of fire risk along the wild land – fire interface.

## **Annexure 3:**

### **Capital Expenditure Framework Preparatory Input**

- **Functional Areas and Priority Development Areas**
- **Projected Yields based on MSDF Densification and Infill Proposals**
- **Method Note**

**Table 15: Functional Area and Priority Development Areas Calculations**

Functional Area	Hectares (ha)	Proposed Density (du/ha)	Development Priority	Proposed Land Use	Developable Area (m2)	Built Footprint 70% Coverage	GLA / Floor	Storeys	Floor Area / BLD	GLA / BLD	Retail / Commercial	Residential	Unit Size (m2)	Units	Scenario 50% GLA (m2)	Scenario 100% GLA (m2)
<b>1. Blanco</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	15,7	25			157176	110023	82517	3	330069	247552	82517	165034	90	1834		247552
Node Densification	80,9	20			323679	226576	169932	3	679727	509795	169932	339863	90	3776	254898	509795
Corridor Densification	85,4	10			341680	239176	179382	3	717529	538147	179382	358764	90	3986	269073	538147
<b>Housing Pipeline</b>																
Golden Valley (UISP)	4,7	25		Housing	30902	21631	16224	3	64894	48671	16224	32447	90	166		48671
Blanco Buffer Strip	6,4	25		Housing	64419	45094	33820	3	135281	101460	33820	67640	90	78		101460
<b>Restructuring Sites</b>																
Blanco Buffer Strip	6,4	25			26229	18360	13770	3	55081	41311	13770	27540	90	78		41311
Blanco Montagu Street	1,4	25			13840	9688	7266	3	29064	21798	7266	14532	90	161		21798
<b>GLS Future Development Areas</b>																
Blanco Densification	2,8	14	10 - 15 years	High Density Residential	26229	18360	13770	3	55081	41311	13770	27540	90	40		41311
Golden Valley Erf 216/3	4,6	32	0 - 5 years	High Density Housing	30902	21631	16224	3	64894	48671	16224	32447	90	150		48671
Heatherpark Ext.2B	10,0	5	5 - 10 years	Med Density Residential	53995	37796	28347	3	113389	85042	28347	56694	90	54		85042
Heatherpark Ext.2A	5,6	9	0 - 5 years	Med Density Residential	56357	39450	29587	3	118350	88762	29587	59175	90	49		88762
Kruispad (portion)	8,5	41	0 - 5 years	High Density Residential	85353	59747	44810	3	179240	134430	44810	89620	90	354		134430
Modderivier (5) (portion)	24,2	7	20 - 25 years	Med Density Residential	179576	125703	94278	3	377110	282833	94278	188555	90	180		282833
Montagu Ridge	2,0	13	5 - 10 years	High Density Residential	19636	13745	10309	3	41235	30926	10309	20618	90	26		30926
Noem Noem	6,2	9	5 - 10 years	High Density Residential	61751	43225	32419	3	129676	97257	32419	64838	90	54		97257
<b>Total</b>	<b>71</b>				<b>630819</b>	<b>441573</b>	<b>331180</b>		<b>1324720</b>	<b>993540</b>	<b>331180</b>	<b>662360</b>		<b>2848</b>	<b>496770</b>	<b>993540</b>
<b>2. Heatherlands</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	6,6	25			65911	46137	34603	3	138412	103809	34603	69206	90	769		103809
Node Densification	46,9	17			187583	131308	98481	3	393924	295443	98481	196962	90	2188	147721	295443
<b>Housing Pipeline</b>																
Rooirivier (FLISP)	37	25		Housing	319476	223633	167725	3	670900	503175	167725	335450	90	300		503175
<b>Restructuring Sites</b>																
Rooirivier	37,7	25		Housing	319476	223633	167725	3	670900	503175	167725	335450	90	300		503175
George Hospital East (Erf 659 )	9,8	25			75542	52879	39660	3	158638	118979	39660	79319	90	189		118979
<b>GLS Future Development Areas</b>																
Forest Walk	1,5	34	5 - 10 years	Multipurpose (floor)	14624	10237	7677	3	30710	23032	7677	15355	90	49		23032
George Erf 20849/R	1,1	22	0 - 5 years	Group Housing / Flats	10760	7532	5649	3	22595	16946	5649	11298	90	24		16946
George Erf 21028-21029	4,3	20	5 - 10 years	High Density Residential	41095	28766	21575	3	86299	64724	21575	43149	90	89		64724
George Hospital East	9,5	20	10 - 15 years	High Density Residential	75542	52879	39660	3	158638	118979	39660	79319	90	189		118979
Kingswood (1)	7,8	10	5 - 10 years	Med Density Residential	78474	54931	41199	3	164794	123596	41199	82397	90	78		123596
Kingswood Portion D	0,4	51	5 - 10 years	Club buildings (floor)	4205	2944	2208	3	8831	6623	2208	4415	90	21		6623
Kingswood Portion A1	1,8	25	5 - 10 years	Hotel (floor)	17785	12449	9337	3	37348	28011	9337	18674	90	45		28011
Kingswood Portion A2	6,0	19	5 - 10 years	Low Density Residential	59870	41909	31432	3	125726	94295	31432	62863	90	114		94295
Rooirivier	31,9	9	0 - 5 years	Med Density Residential	319476	223633	167725	3	670900	503175	167725	335450	90	300		503175
<b>Total</b>	<b>76,1</b>				<b>687740</b>	<b>481418</b>	<b>361063</b>		<b>1444254</b>	<b>1083190</b>	<b>361063</b>	<b>722127</b>		<b>1678</b>	<b>541595</b>	<b>1083190</b>
<b>3. Bodorp</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	7,6				75528	52870	39652	3	158610	118957	39652	79305	90	881		118957
Node Densification	75,9	15			303636	212546	159409	3	637637	478227	159409	318818	90	3542	239114	478227
Corridor Densification	210,2	5			840774	588541	441406	3	1765624	1324218	441406	882812	90	9809	662109	1324218
<b>Housing Pipeline</b>																
Protea Park (UISP)	2,7			Housing	27440	19208	14406	3	57624	43218	14406	28812	90	75		43218
<b>Restructuring Sites</b>																
Erf 6979	8,2				81587	57111	42833	3	171333	128500	42833	85666	90	952		128500
<b>GLS Future Development Areas</b>																
George Erf 1042	0,4	19	0 - 5 years	Group Housing / Flats	4306	3014	2260	3	9042	6781	2260	4521	90	8		6781
George Erf 3400	0,1	84	0 - 5 years	Group Housing / Flats	1428	999	749	3	2998	2248	749	1499	90	12		2248
Loerie Ext.1A	62,1	5	25 - 30 years	Low Density Residential	398762	279133	209350	3	837400	628050	209350	418700	90	320		628050
Loerie Ext.2	8,2	14	10 - 15 years	High Density Residential	81609	57126	42844	3	171378	128533	42844	85689	90	118		128533
Loerie Ext.1B	62,7	5	30 - 35 years	Low Density Residential	424834	297384	223038	3	892151	669113	223038	446075	90	330		669113
Protea Park Erf 17461	2,7	27	0 - 5 years	Informal Upgrading	27441	19208	14406	3	57625	43219	14406	28813	90	75		43219
<b>Total</b>	<b>152,0</b>				<b>1095493</b>	<b>766845</b>	<b>575134</b>		<b>2300534</b>	<b>1725401</b>	<b>575134</b>	<b>1150267</b>		<b>2696</b>	<b>862700</b>	<b>1725401</b>



Table 16: Functional Area and Priority Development Areas Calculations (Continued)

Functional Area	Hectares (ha)	Proposed Density (du/ha)	Development Priority	Proposed Land Use	Developable Area (m2)	Built Footprint 70% Coverage	GLA / Floor	Storeys	Floor Area / BLD	GLA / BLD	Retail / Commercial	Residential	Unit Size (m2)	Units	Scenario 50% GLA (m2)	Scenario 100% GLA (m2)
<b>4. George CBD</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	0,4				3755	2629	1972	3	7887	5915	1972	3943	90	44		5915
Node Densification	237,8	18			951315	665921	499441	3	1997762	1498322	499441	998881	90	11099	749161	1498322
Corridor Densification	218,3	6			873286	611300	458475	3	1833900	1375425	458475	916950	90	10188	687712	1375425
<b>Housing Pipeline</b>																
N/A																
<b>Restructuring Sites</b>																
Crocodile Farm (Erf 464H Portion)	42,4				44609	31227	23420	3	93680	70260	23420	46840	90	112		70260
Correctional Services (Erf 3284 )	117,1				1171306	819914	614936	3	2459743	1844807	614936	1229671	90	13665		1844807
Provincial Road Camp (Erf 3472 )	6,8				43739	30817	22963	3	91852	68889	22963	45926	90	131		68889
Correctional Services (Erf 9129)	11,7				116848	81794	61345	3	245361	184036	61345	122690	90	1303		184036
Moad Street (Erf 25809 )	0,4				4299	3009	2257	3	9028	6771	2257	4514	90	13		6771
<b>GLS Future Development Areas</b>																
Bos en Dal	11,7	11	10 - 15 years	High Density Residential	89066	62346	46780	3	187039	140279	46780	93519	90	134		140279
Central Business District	274,6	1	0 - 5 years	Densification (CBD)	2745648	1921953	1441465	3	5755860	4324395	1441465	2882930	90	276		4324395
Crocodile Farm	4,6	24	5 - 10 years	High Density Residential	44609	31227	23420	3	93680	70260	23420	46840	90	112		70260
Dormehl Ext.	3,1	8	0 - 5 years	Med Density Residential	31134	21794	16346	3	65382	49037	16346	32691	90	20		49037
George Erf 2325-6472	0,5	167	0 - 5 years	Flats Low Cost	5042	3529	2647	3	10568	7941	2647	5294	90	84		7941
George Erf 2401	0,2	50	0 - 5 years	Group Housing / Flats	1612	1129	846	3	3366	2539	846	1693	90	8		2539
George Erf 2533	0,1	89	0 - 5 years	Group Housing / Flats	675	473	354	3	1418	1063	354	709	90	6		1063
George Erf 3472	6,8	19	15 - 20 years	Group Housing / Flats	43739	30617	22963	3	91852	68889	22963	45926	90	131		68889
George Erf 7219 & 1695	0,5	31	0 - 5 years	Group Housing / Flats	5163	3628	2721	3	10885	8164	2721	5442	90	16		8164
George Erf 20209-20210-20211	0,2	67	0 - 5 years	Group Housing / Flats	1765	1257	942	3	3770	2827	942	1885	90	12		2827
George Erf 25809	0,4	30	0 - 5 years	Group Housing / Flats	4299	3009	2257	3	9028	6771	2257	4514	90	13		6771
George Station Precinct	4,1	16	5 - 10 years	Group Housing / Flats	21771	15240	11430	3	45719	34290	11430	22860	90	65		34290
Technical College	37,1	7	5 - 10 years	Multipurpose	371019	259713	194785	3	779140	584355	194785	389570	90	250		584355
<b>Total</b>	<b>473,0</b>				<b>4657503</b>	<b>3260252</b>	<b>2445189</b>		<b>9780757</b>	<b>7335567</b>	<b>2445189</b>	<b>4890378</b>		<b>15450</b>	<b>414037</b>	<b>1035088</b>
<b>5. George Industria</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	69,3				892844	484991	363743	3	1454972	1091229	363743	727486	90	8083		1091229
Node Densification	158,2	17			832881	443024	332288	3	1339071	996803	332288	664536	90	7384	498402	996803
Corridor Densification	258,9	7			1035432	724803	543602	3	2174408	1630806	543602	1087204	90	12080	815403	1630806
<b>Housing Pipeline</b>																
Metro (IRDP)	15,9			Housing	159377	111584	83873	3	334662	251019	83673	167346	90	684		251019
<b>Restructuring Sites</b>																
N/A																
<b>GLS Future Development Areas</b>																
Groeneweide Ext. (1)	59,5	10	5 - 10 years	Multipurpose	595157	416810	312458	3	1249831	937373	312458	624915	90	595		937373
Groeneweide Ext. (2)	242,1	9	15 - 20 years	Industrial	1399641	972748	729561	3	2918245	2188684	729561	1459123	90	2223		2188684
Metrogrond Erf 464	36,9	17	15 - 20 years	Med Density Housing	157924	110547	82910	3	331641	248730	82910	165620	90	645		248730
Pacaltsdorp Industrial	26,9	19	20 - 25 years	Industrial	289351	188545	141409	3	565636	424227	141409	282818	90	431		424227
Tamsui Ext. 1	13,5	2	5 - 10 years	Industrial	17757	12430	9322	3	37290	27967	9322	18645	90	28		27967
Tamsui Ext. 2	53,9	1	10 - 15 years	Industrial	304404	213083	159812	3	639248	475436	159812	319624	90	40		475436
Tamsui Ext. 4	30,8	2	5 - 10 years	Industrial	217383	152168	114126	3	456504	342378	114126	228252	90	50		342378
<b>Total</b>	<b>512,0</b>				<b>3645914</b>	<b>2552140</b>	<b>1914105</b>		<b>7656419</b>	<b>5742314</b>	<b>1914105</b>	<b>3828209</b>		<b>12114</b>	<b>2871157</b>	<b>5742314</b>
<b>6. Ballitsview</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	1,1				11019	7714	5785	3	23141	17356	5785	11570	90	129		17356
Node Densification	0				0	0	0	3	0	0	0	0	90	0		0
Corridor Densification	159,9	2			639471	447630	335722	3	1342689	1007167	335722	671445	90	7460	503583	1007167
<b>Housing Pipeline</b>																
Conville CRU	0,5			Housing	5405	3784	2838	3	11351	8513	2838	5675	90	63		8513
<b>Restructuring Sites</b>																
N/A																
<b>GLS Future Development Areas</b>																
Borchers Erf 4200	0,3	88	5 - 10 years	Group Housing / Flats	3414	2390	1792	3	7170	5377	1792	3585	90	30		5377
Conville	0,5	118	5 - 10 years	Group Housing / Flats	5426	3800	2850	3	11399	8549	2850	5699	90	64		8549
Lawaakamp	1,3	23	0 - 5 years	Informal Upgrading	13228	9260	6045	3	27779	20834	6045	13880	90	30		20834
Sandkraal	6,8	20	5 - 10 years	High Density Housing	68347	47843	35882	3	143529	107647	35882	71765	90	137		107647
<b>Total</b>	<b>10,1</b>				<b>101414</b>	<b>70990</b>	<b>53242</b>		<b>212969</b>	<b>159727</b>	<b>53242</b>	<b>106485</b>		<b>389</b>	<b>79864</b>	<b>159727</b>

Table 17: Functional Area and Priority Development Areas Calculations (Continued)

Functional Area	Hectares (ha)	Proposed Density (du/ha)	Development Priority	Proposed Land Use	Developable Area (m <sup>2</sup> )	Built Footprint 70% Coverage	GLA / Floor	Storeys	Floor Area / BLD	GLA / BLD	Retail / Commercial	Residential	Unit Size (m <sup>2</sup> )	Units	Scenario 50% GLA (m <sup>2</sup> )	Scenario 100% GLA (m <sup>2</sup> )
<b>9. Destiny Africa</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	67,0				268000	187600	140700	3	562800	422100	140700	281400	90	3127		422100
Node Densification	0															
Corridor Densification	0															
<b>Housing Pipeline</b>																
N/A																
<b>Restructuring Sites</b>																
N/A																
<b>GLS Future Development Areas</b>																
Destiny Africa	300,0	5	5 - 10 years	Multipurpose	1200000	840000	630000	3	2520000	1890000	630000	1260000	90	14000		1890000
<b>Total</b>	<b>67,0</b>				<b>268000</b>	<b>187600</b>	<b>140700</b>		<b>562800</b>	<b>422100</b>	<b>140700</b>	<b>281400</b>		<b>3127</b>	<b>211050</b>	<b>422100</b>
<b>10. Kraaibosch</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	1,1				11449	8014	6011	3	24043	18032	6011	12022	90	134		18032
Node Densification	95,0	17			380133	266093	199570	3	798279	598709	199570	399139	90	4435	299355	598709
Corridor Densification	137,3	7			549251	384476	288357	3	1153428	865071	288357	576714	90	6408	432535	865071
<b>Housing Pipeline</b>																
N/A																
<b>Restructuring Sites</b>																
Riding Club (Erven 8259 & 8491)	28,3				283033	198123	148592	3	594370	445777	148592	297185	90	405		445777
<b>GLS Future Development Areas</b>																
Garden Route East Commercial	30,1	18	0 - 5 years	Multipurpose	207288	145102	108826	3	435305	326479	108826	217853	90	853		326479
Glenridge	30,2	14	5 - 10 years	Med Density Residential	294222	205955	154466	3	617866	463399	154466	308933	90	425		463399
Glenwood AH	36,1	2	45 - 50 years	Densification (AH)	361254	252877	189658	3	758632	568974	189658	379316	90	72		568974
Glenwood Ext. (1)	30,0	22	10 - 15 years	High Density Residential	269755	188828	141621	3	566485	424863	141621	283242	90	674		424863
Glenwood Ext. (2)	14,1	23	10 - 15 years	High Density Residential	128462	89924	67443	3	269771	202328	67443	134886	90	321		202328
Glenwood Ext. (3)	49,4	17	20 - 25 years	High Density Residential	343057	240140	180105	3	720420	540315	180105	360210	90	858		540315
Glenwood Ext. (4)	38,2	14	20 - 25 years	High Density Residential	208783	146148	109611	3	438445	328834	109611	219222	90	522		328834
Glenwood Erf R/8259	40,5	10	15 - 20 years	Med Density Residential	404701	283291	212468	3	849873	637405	212468	424936	90	405		637405
Kraaibosch 195/3	32,9	18	15 - 20 years	High Density Residential	233174	163222	122416	3	489666	367249	122416	244833	90	583		367249
Kraaibosch 195/5	32,1	15	10 - 15 years	High Density Residential	249101	174370	130778	3	523111	392333	130778	261556	90	469		392333
Kraaibosch 195/57	11,4	7	5 - 10 years	Med Density Residential	101146	70802	53102	3	212407	159305	53102	106203	90	80		159305
Kraaibosch 195/62	46,8	7	20 - 25 years	Med Density Residential	304159	212911	159683	3	638733	479050	159683	319366	90	345		479050
Welgelegen Village	6,3	18	5 - 10 years	Group Housing / Flats	63467	44427	33320	3	133262	99961	33320	66641	90	115		99961
<b>Total</b>	<b>387,0</b>				<b>3058351</b>	<b>2140846</b>	<b>1605634</b>		<b>6422537</b>	<b>4816902</b>	<b>1605634</b>	<b>3211268</b>		<b>5556</b>	<b>2408451</b>	<b>4816902</b>
<b>11. Rosemore</b>																
<b>Priority Development Areas</b>																
Vacant Land / Infill	0,4				4130	2891	2168	3	8673	6505	2168	4337	90	48		6505
Node Densification	0				0	0	0	3	0	0	0	0	90	0		0
Corridor Densification	0				0	0	0	3	0	0	0	0	90	0		0
<b>Housing Pipeline</b>																
N/A																
<b>Restructuring Sites</b>																
N/A																
<b>GLS Future Development Areas</b>																
N/A																
<b>Total</b>	<b>0,41</b>				<b>4130</b>	<b>2891</b>	<b>2168</b>		<b>8673</b>	<b>6505</b>	<b>2168</b>	<b>4337</b>		<b>48</b>	<b>3252</b>	<b>6505</b>

**Table 18: George Municipality Household Analysis**

George Municipality Household (Geospatial Analysis)								
Functional Area	Formal Housing	Informal Housing	Backyard Dwellings	Total Households	Household Size (WCG 2016)	Population	Functional Area Size (ha)	Density (du/ha)
1. Blanco	2435	107	244	2786	3,3	9194	691	4,0
2. Heatherlands	2302	0	0	2302	3,3	7597	683	3,4
3. Bodorp	5840	23	54	5917	3,3	19526	863	6,9
4. George CBD	3483	0	0	3483	3,3	11494	660	5,3
5. George Industria	347	0	0	347	3,3	1145	1089	0,3
6. Ballotsview	4310	275	2654	7239	3,0	21717	320	22,6
7. Pacaltsdorp	4945	787	1255	6987	3,2	22358	1162	6,0
8. Thembalethu	7372	1787	3164	12323	3,0	36969	745	16,5
9. Destiny Africa	1	0	0	1	0,0	0	300	0,0
10. Kraaibosch	1381	0	0	1381	3,3	4557	637	2,2
11. Rosemore	1696	42	917	2655	3,3	8762	147	18,1
<b>George City Area</b>	<b>34112</b>	<b>3021</b>	<b>8288</b>	<b>45421</b>	<b>2,9</b>	<b>143319</b>	<b>7297</b>	<b>7,8</b>

Information Provided by George Municipality Geospatial Analysis 2019

Household size  
provided by WCG  
2016

Calculations derived  
from GM & WCG data

Table 19: Projected Yields based on MSDF Densification and Infill Proposals

Functional Area	Population	Households	Household Size	Functional Area Siza (ha)	Density (du/ha)	Projected GLA 100% (m2)	Projected Units	Projected Add Population	Projected Total Households	Projected Density (du/ha)
1. Blanco	9194	2786	3,3	691	4,0	993540	2848	8363	5634	8
Node Densification				81		509795	3776	11088	3776	5
Corridor Densification				85		538147	3986	14351	3986	6
2. Heatherlands	7597	2302	3,3	683	3,4	1083190	1678	4928	3980	6
Node Densification				47		295443	2188	6425	2188	3
3. Bodorp	19526	5917	3,3	863	6,9	1725401	2696	7916	8613	10
Node Densification				76		478227	3542	10402	3542	4
Corridor Densification				210		1324218	9809	35312	9809	11
4. George CBD	11494	3483	3,3	660	5,3	1035088	15450	45367	18933	29
Node Densification				238		1498322	11099	32590	11099	17
Corridor Densification				218		1375425	10188	36677	10188	15
5. George Industria	1145	347	3,3	1089	0,3	5742314	12114	35571	12461	11
Node Densification				158		996803	7384	21681	7384	7
Corridor Densification				259		1630806	12080	35471	12080	11
6. Ballotsview	21717	7239	3,0	320	22,6	159727	389	1142	7628	24
Corridor Densification				160		1007167	7460	21905	7460	23
7. Pacaltsdorp	22358	6987	3,2	1162	6,0	9111343	17895	52546	24882	21
Node Densification				50		316673	2346	6888	2346	2
Corridor Densification				420		2644118	19586	70510	19586	17
8. Thembalethu	36969	12323	3,0	745	16,5	1329937	3325	9763	15648	21
Node Densification				145		915382	6781	19910	6781	9
Corridor Densification				211		1329022	9845	35441	9845	13
9. Destiny Africa	0	1	0	300	0	1055250	7817	22954	7818	26
10. Kraaibosch	4557	1381	3,3	637	2,2	4816902	5556	16314	17695	28
Node Densification				95		598709	4435	13022	4435	7
Corridor Densification				137		865071	6408	23069	6408	10
11. Rosemore	8762	2655	3,3	147	18,1	6505	48	141	2703	18
George City Area	143319	45421	2,9	7296,2	7,8	27059197	69816	205006	125996	18
From Stats SA	114291	30702	3,6	3324,8	9,2					
	Population and number of households provided by George Municipality Geospatial Analysis 2019		Household size provided by WCG 2016	GAPP Calculations	Density values - provided by George Municipality 2019		Assumption: 3 Bed Unit = 2,9 person household as per George City Area Average			Projected density of whole functional area
						The node and corridor calculation figures are estimates of the full development potential of George, and does not take into account existing development in these areas. Hence, these calculations are not included in the totals.				
						Rather, they have been included as a separate estimate for reference and indicate the full "unlocked potential" in the George City Area				



## Method Note

The objective of this study is to model the population projections for the George City area against the spatial budget and priority development areas identified in the draft George MSDF which is aimed at infill and densification, in order to support infrastructure costing and budgeting.

This work will support the development of a Capital Expenditure Framework (in terms of the methodology suggested in the draft Guideline prepared by the Department of Cooperative Government) required as part of the MSDF by SPLUMA. The Capital Expenditure Framework will improve the extent to which the MSDF, in its Implementation Framework, meets the requirements of SPLUMA in terms of identifying what infrastructure investments are required where to support the spatial vision set out in the MSDF, to be taken forward by the Municipality's Medium Term Expenditure Framework (budget).

### 1. Methodology

The SDF for the George city area has been divided into functional areas and within these, priority investment/ development areas (nodes and corridors). A methodology for estimating the yield of new development in the form of infill and densification within these priority development areas has been developed and is based on the known state-subsidised housing pipeline, identified restructuring sites, the existing spatial budget (vacant or under-utilised land) compiled by the Municipality and densification (the difference between current estimated average gross densities and the desired density as identified in the draft MSDF).

The boundaries of the functional areas were defined and demarcated by municipal ward boundaries and suburbs with "similar characteristics (homogenic) from a developmental and service demand perspective" (COGTA, 2018). This was required in order to calculate a baseline density of these areas to determine

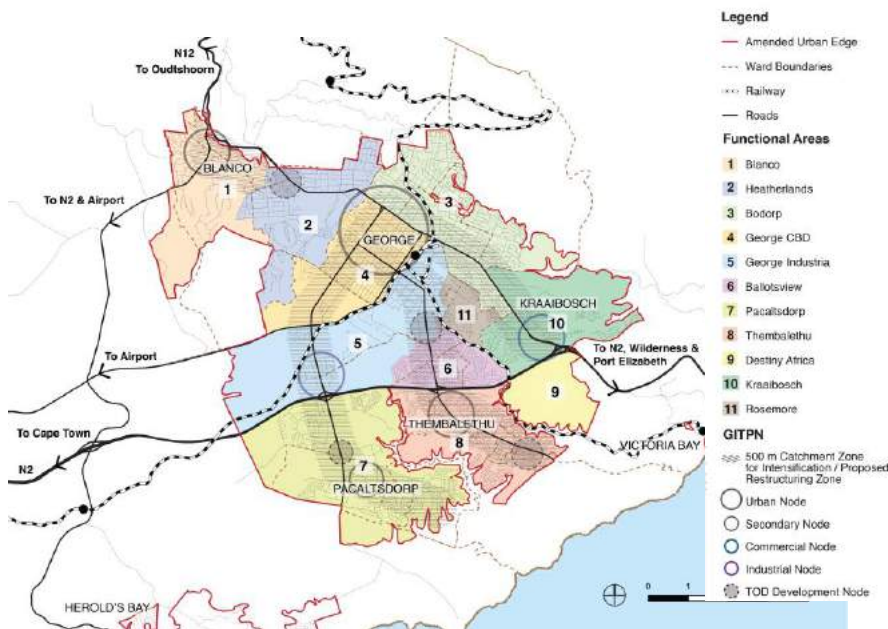
the potential for infill and densification growth proposals. There are 11 identified functional areas in George as shown in Map 41: George Functional Areas.

Within the functional areas there are two key priority development areas, integrated land use and public transport nodal centres and public transport/ activity corridors. Public investment, commercial activity and residential densification, particularly affordable residential opportunities, should be directed towards reinforcing these priority nodes and corridors in the 500m zone for intensification identified in this draft MSDF for the George city area.

The development potential of each functional area has been informed by a number of sources that have identified land for development. These sources include:

- b) Vacant Land Audit (George Municipality, 2018)
- c) Housing Pipeline (Western Cape Government, 2015)
- d) George Urban Area Restructuring Sites (George Municipality, 2016)
- e) George Urban Area Future Development Areas (GLS Consulting, 2018)
- f) George Central Area: Land Use Budget and 3D Modelling (De Kock Associates, 2018)

These studies have undertaken comprehensive research and their associated data and information has been used to populate the George Functional Areas Table. In some instances, these sources have identified the same key sites for development. To ensure accuracy, any sites that have been repeated are highlighted in red and only the most conservative yield estimates have been used to calculate totals.



**Map 41: George Functional Areas**

In order to determine the approximate Gross Lettable Area (GLA) and number of units in each functional area, a number of assumptions have been made. These assumptions were adapted from De Kock Associates “George central area: land use budget and 3D modelling” report and include:

- 30% of developable area deducted for open space and parking
- Maximum floor area = 3 storeys, 1 storey business and 2 storeys residential flats, with the average gross area per flat = 90m<sup>2</sup>
- 75% efficiency factor for circulation and services

The yields generated using these assumptions represent an optimal and best-case scenario for future development. These yields are represented as the “100% Scenario” in the Functional Area Table. A generalised “50% Scenario” has also been included

to represent a more conservative estimate of future development in these areas. It indicates a more realistic representation of what could occur over time. This figure has been calculated as a mathematical half of “100% Scenario”.

A total GLA for each functional area has been tabulated and it includes the total vacant land, land identified for housing, restructuring sites and future development. However, it does not include the yields derived from the nodal centres and public transport nodes. The yields generated from the nodes and corridors are included in the Functional Area Summary Table, as they represent a notional idea of the development potential in these areas. The calculations do not take into account existing residential and commercial development along the transport corridors and nodes and would therefore skew the estimates shown in the Functional Area Table.

Given the budget and time limitations of this study, the yields generated for the nodal and corridor areas are generalised to provide an overall estimate for the development potential in these areas of the George city area. In order to account for movement routes, public facilities and open space a factor of 40% has been applied to these areas. However, in order to accurately calculate the potential GLA for these areas, an erf by erf survey and assessment would be required.

## 2. Density and Population Projections

Data received from Western Cape Government dated 2018 based on the Census 2011 and Community Household Survey 2016 data (household size) and George Municipality (number of households) was used to determine a baseline density for each functional area. This information was then used to populate the Functional Area Summary Table to determine density and population projections for the George city area. Using the average household size of 2,9 people per home, it was calculated that if George city area were to be developed at a 100% Scenario the additional GLA would be

27,059,197m<sup>2</sup> with 69 816 residential units. The total additional population would be 205 006 people and the projected density for the George city area would be 18 dwelling units per hectare (du/ha).

### ***3. Conclusions and Recommendations***

Significant densification of George city area can be achieved if land is developed in line with the strategies and objectives outlined in the George MSDF. Further densification could occur if development is focused along the public transport corridors and nodes. In areas such as the George CBD the existing density is 5 du/ha, the MSDF recommends that key public transport routes can be densified up to 80 du/ha to improve the viability of existing businesses and optimise efficiency, and to facilitate inclusion and integration. Therefore, the estimates in the George Functional Area Table could allow for more units and a larger GLA if sites are developed at higher densities.

Moving forward, it is recommended that a baseline density for the designated nodes and corridors is calculated. This will allow the municipality to determine the full potential of these areas and how best to prioritise development in these sites in the future.