Greater Cape Metro
Regional Spatial
Implementation Framework

Final Report
July 2019
The Western Cape Government calls on us all to give effect to a spatial transformation agenda which brings us closer to the imperatives of growing and sharing economic opportunities wherever we are able to impact upon levers of change. Against the background of changed planning legislation, and greater clarity regarding the mandates of agencies of governance operating at different scales, the PSDF 2014 remained a consistent guide and mainspring, prompting us to give urgent attention to planning in the Greater Cape Metropolitan Region as one of three identified focus regions. (Greater Saldanha and the Southern Cape being the other two identified regions.)

While there is growing clarity regarding the role of Municipal Planning and how intergovernmental relations operate within that space, Provincial and Regional spatial logic is far less defined and, until recently, poorly understood as regards this dominant city region in the Western Cape Province. Added to this, the adaptations necessitated by Climate Change were entirely unanticipated as recently as the late 1980’s which was the last time a legislated planning initiative at a similar scale was undertaken in the form of the Guide Plans relevant to the Greater Metropolitan Area.

It is hard to believe that with regard to water, the Guide Plan stated:

“Owing to the reliable winter rainfall the smallish dams on Table Mountain and dams in rivers from the mountain areas bordering the Metropolitan Area in the east have been able to supply water…..” (Cape Metropolitan Area Guide Plan, Volume1: Peninsula, 1988, p.33)

Clearly, only 30 years later, much has changed, this region is experiencing the effects of climate change compounded by the demographic, socio-cultural, and legislative refinements which have occurred in the intervening years. In combination, this presents us with numerous opportunities to respond in a manner which will advance the spatial transformation of our region towards greater resilience and spatial justice.

The Department was challenged to explore the linkages between planning and implementation and to develop a Greater Cape Metropolitan Regional Implementation Framework (GCM RSIF) rather than “just another plan” which will gravitate to the bookshelf and not act as a real catalyst for the implementation of a regional logic.

This GCM RSIF is the first regional plan to be approved in terms of the Western Cape Land Use Planning Act, 2014. As such it offered the drafters an opportunity (a kind of “laboratory”) to test processes and procedures in the legislation. At the outset, it was understood that challenges regarding the definition of “region”, and hence defining the boundary of the study area, as well as participating municipalities would not be easy, but of one thing we were all convinced, and that was that co-ordination and alignment was essential in order to respond to competing and complementary contexts at the municipal scale. The National Development Plan (NDP) identified the GCM as a “regional node of competitiveness” with potential for higher growth. This required the drafters to overlap with the Greater Saldanha RSIF in order to make provision for a more detailed exploration of the economic opportunities similarly identified in the PSDF 2014. This implementation framework has the task of providing guidance at the inter-municipal level just below Provincial planning at large. As such, it has taken care to exclude issues which are uniquely municipal in order to prevent duplication of the SDF’s of participating municipalities. I am pleased to see that the National Spatial Development Framework identifies the GCM as one of the three national urban regions, placing this RSIF in step with the national recognition of the importance of this city region.

It is a statutory requirement that this plan be reviewed every 10 years. The drafters were challenged to retain the regional focus with a long term time horizon while ensuring that short-term crisis issues (like electricity and water) received appropriate attention. Similarly, it was a challenge to contextualize the GCM region’s global competitive advantages (essentially tourism, food and beverages, and education) while anticipating impacts of technological innovation, climate change and urbanization. Time will reveal the extent to which the dynamic milieu of demographic change, IT advances, the possibility of autonomous electric vehicles and climate change (to name a few) will affect urban and regional morphology. The dynamic environment we find ourselves in is underscored by numerous potential unanticipated impacts. Even as I pen this preface, there are significant issues just beyond the horizon for this Province which include scientific advances in AI, alternative fuel types for transportation (electric vehicles and hydrogen power) and the possibility of an electricity grid which is potentially less coal dependent. What is certain, is that settlements are always required to respond to such factors of change. Successful response and adaptation will require wisdom, a solid regional perspective and reliable frameworks such as this to guide progress and strategic interventions.

Notwithstanding uncertain external forces, the need for the regional integration of plans, and the imperatives of urban efficiency and shared growth will remain as significant in years to come as they are today. This regional spatial implementation framework, drafted as a Provincial Regional Spatial Development Framework in terms of the Western Cape Land Use Planning Act, 2014 represents the distillation of much background investigation with a view to giving users a high level regional perspective which is intended to add value to municipal SDF’s and all other public and private decision-makers and influencers that require such strategic guidance.

ANTON BREDELL
Minister of Local Government, Environmental Affairs and Development Planning
A WORD OF THANKS

The GCM RSIF has come about as a result of the involvement of many committed participants from various agencies whom have all contributed to the successful completion of the framework. I would like to thank all the members of the drafting team, the Intergovernmental Steering Committee and participants from numerous agencies whom all contributed and helped us refine the document during the drafting period which saw the Province draw on its reserves of resilience with regard to environmental and economic impacts. Most significantly, this has been a journey of learning and the emergence of a common understanding of challenges and opportunities in the region.

In order to achieve the spatial transformation outcomes required for growth and shared economic development, there is much further work to be done in developing a data repository for the management of regional economic areas. This is essential if we are to enhance decision-making in all spheres of governance.

This is the first Provincial Regional Spatial Development Framework to be approved in terms of the Western Cape Land Use Planning Act, (Act 3 of 2014) and it is anticipated that this will set the tone for regional plans in this Province in the future. My Department seeks to advance the implementation focus by establishing a Regional Planning Coordinating Forum which, with the support of our partner departments, will have the task of taking this framework forward during this transition to strategic implementation.

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**EXECUTIVE SUMMARY**

**Background**

The Cape Town ‘functional’ region, also referred to as Greater Cape Town, Cape Metro region, or Cape Town city-region, is the Western Cape’s economic power-house and where the bulk of its population will live for the foreseeable future. It is a city-region that extends across the jurisdictions of Cape Town Metropolitan Municipality, 7 surrounding Local Municipalities and portions of 3 District Municipalities.

The Provincial Spatial Development Framework (PSDF) flags the Cape Town functional region as priority for rolling-out Provincial Government’s regional planning and development mandate. To determine the regional agenda and how to implement it, the Department of Environmental Affairs and Development Planning (DEA&DP) in partnership with municipalities prepared this Regional Spatial Implementation Framework (RSIF) for the Greater Cape Metro (GCM) functional region.

The terms of reference define the RSIF as a “plan that provides long term strategic direction and coordination to the overall growth, spatial development, land use management, and conservation” of the functional region. The spatial outcomes sought over the next decade are improvements in the performance of the regional economy and its human settlements so that growth is re-energised, more inclusive and on a sustainable trajectory.

Focusing on economic, human settlement and environmental considerations that cut-across GCM local authority boundaries, the RSIF sets-out the region’s spatial agenda. The GCM’s spatial agenda aligns with national and provincial planning principles and policies. It also informs alignment of the strategic plans and capital investment programmes of government spheres and state owned entities (SOEs) active in the region. It also spells-out provincial government’s roles and responsibilities in carrying-out their regional planning and development mandate.

**Greater Cape Metro Context**

**Global:**

Globally the GCM region’s comparative advantage lies in the tourism, food and beverages, and education and academic research sectors. The RSIF builds on these key sectors. It also places emphasis on the regional infrastructure connecting the GCM to global markets: the ports of Cape Town and Saldanha; Cape Town International Airport; road and rail linkages into Africa; and undersea data cables that land at Melkbostrand and Yzerfontein.

The RSIF takes into account the forces of globalisation, technological innovation, climate change and urbanisation that will influence the region’s spatial development over the next decade.

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**Greater Cape Metro functional region**
National:
The RSIF contributes to implementing the National Development Plan (NDP), which identifies the Greater Cape Metro as a regional ‘node of competitiveness’ with potential for higher growth. The NDP also identifies the Western Cape’s biodiversity assets as a ‘resource critical region’ that underpins economic activity and is essential for the provision of ecosystem services.

Within the region the NDP designates Saldanha Bay and environs as a ‘growth management zone’ where special interventions are required to unlock resource-related port and industrial development prospects. To this end the Saldanha Bay Industrial Development Zone (SBIDZ), targeted at servicing the oil and gas industry, is being developed. The RSIF provides regional input to inter-governmental efforts and takes into account the City of Cape Town’s proposal that Atlantis industrial area should also be designated a Special Economic Zone targeted at green technology industries.

The RSIF provides a regional context to Strategic Infrastructure Projects (SIPs) being rolled-out as part of the NDP’s implementation. In the GCM these include the SBIDZ port and infrastructure upgrading (SIP5), and Square Kilometer Array & Meerkat projects (SIP16) whose data processing facilities are earmarked for the GCM region. The RSIF also provides the regional context for the roll-out of Operation Phakisa, the national programme to unlock the ocean-economy.

Provincial:
The RSIF sets-out a spatial transformation agenda for the Greater Cape Metro region over the next decade, and arrangements for provincial government to oversee implementation of this agenda. As multiple parties are involved in implementation, the RSIF is a provincial instrument for cooperative spatial governance of the region (i.t.o. Provincial Strategic Goal 5). The RSIF focuses on growing and sharing economic opportunities (Provincial Strategic Goal 1) and applying the Living Cape Framework (Provincial Strategic Goal 4).

The RSIF builds-on the PSDF’s strategies to reinforce the Greater Cape Metro as the province’s economic growth engine, unlock the Greater Saldanha’s industrial potential, strengthen the Overstrand as a marine, leisure, lifestyle, holiday and retirement sub-region, and intensify agricultural activity in the upper Breede River valley. It also takes forward Project Khulisa’s programme to boost economic growth and job creation in the tourism, agri-processing, and oil and gas industries.

Spatial Transformation: Status
The 2008 territorial review undertaken by the Organisation for Economic Cooperation and Development (OECD) identified the GCM’s structural deficiencies as:

- perverseness of socio-spatial segregation,
- sprawling and low-density multi-nodal network of settlements,
- mismatches between where people live and work,
- isolated concentrations of poverty severed from economic opportunities, and
- under-investment in public transport and freight infrastructure, making the region inaccessible to most residents and inefficient for business to operate in.

Whilst many of these structural weaknesses are the spatial legacy of apartheid’s ‘separate development’, the OECD noted that since 1994 poorer communities continue to be accommodated on the outskirts of the city and towns. This reinforces the spatial dynamics of economic exclusion.
Since the OECD’s territorial review 8 years ago household incomes have increased, levels of poverty have declined, and the delivery to households has improved. Progress has been made in implementing elements of the regional spatial agenda:

i. Apartheid era land use and planning legislation has been repealed, and replaced with a spatially transformative regulatory system.

ii. The spatial plans of Provincial Government and GCM Municipalities have complementary policies, and give attention to aligning their spatial proposals.

iii. Sustainability frameworks have been introduced across the region.

iv. Roll-out of the MyCiti bus rapid transit system has extended public transport coverage.

v. National and Provincial Treasury factor spatial considerations into their budgets, and spatially target capital investment programmes.

Spatial Transformation: Challenges

Notwithstanding progress made, a number of regional challenges need to be addressed over the next decade:

i. Escalating housing backlogs, wide disparities in living conditions, and the prevalence of informal settlements are key settlement issues moving forward. Applying the Living Cape Framework to the Greater Cape Metro emerges as an implementation priority.

ii. Unemployment levels are stubbornly high, especially amongst the youth, and urban service delivery protests are common. There are regulatory and affordability barriers to entering the formal land market, and high crime levels retard economic activity in the townships.

iii. Apartheid’s spatial legacy endures. The socio-economic benefits of regional economies of scale remain inaccessible and unaffordable to most residents. Low-income public transport users spend on average 45% of their monthly household income on transport, compared to an international norm of between 5 and 10%. The main indirect costs that they bear are flexibility, safety and crime. Transitioning to a transit-orientated network of regional settlements is a key challenge moving forward.

iv. The region’s spatial growth trajectory is unsustainable, particularly with regard to its extensive ecological footprint and its vulnerability to escalating risks (e.g. drought, fires, air pollution, congestion). These diseconomies of scale detract from environmental health, and compromise the region’s comparative advantage in the agricultural and tourism sectors. The RSIF presents a regional agenda for shifting from an ‘outward’ to an ‘inward’ urban growth trajectory.

Spatial Transformation: Vision

The RSIF strives towards the vision of the Greater Cape Metro as a region:

i. Where residents can access dignified, secure and affordable living environments

ii. Where natural capital is safeguarded.

iii. Whose economy is globally competitive, sustainable and inclusive.

iv. Where communities and the formal and informal economies have access to resilient ecological, utility, and transport infrastructure.

v. Where stakeholders (i.e. public, private, academic and community) collaborate in collecting and sharing regional data, and planning responses to common challenges.
Regional Spatial Implementation Framework

The RSIF sets out a road map for the incremental achievement of these spatial outcomes over the next 10 to 20 years. It guides Provincial Government in carrying out their regional planning and development mandate in the Greater Cape Metro. It also provides regional perspective to the strategic plans of municipalities, national government and SOEs active in the GCM.

The RSIF’s regional spatial agenda is a blend of the consolidation of some existing policies, the tweaking of others, and the introduction of transformative change. The RSIF’s proposals are presented as a Spatial Framework for managing development of the GCM region that focuses on the region’s economic spaces, human settlements, and their linkages. It also covers the delivery of regional infrastructure and regional management considerations, and presents a composite RSIF map.

Spatial Framework: Regional Space-Economy

While GCM municipalities have identified their relative economic strengths, the RSIF harnesses the regional potential of their collective urban and rural space economies. To re-energise economic growth it sets out strategies for greater inclusion in urban and rural space-economies, and reducing the cost of doing business in the region.

Cape Town was the catalyst for the region’s development and initially, economic activities concentrated there. Over time the economic primacy of Cape Town reduced as surrounding towns diversified their economies from agricultural service centres into fully-fledged urban economies. Moving forward Cape Town will continue to dominate the GCM space-economy.

The RSIF addresses the dis-economies of spatial agglomeration (e.g. congestion) that inhibit the region’s competitiveness and the workforce’s access to economic opportunities. To mitigate against negative externalities the RSIF recommends reinforcing the GCM’s polycentric (i.e. multi-nodal) network of regional centres. The strategy is to concentrate economic activities and human settlement in the network of complementary regional centres, and to strengthen functional linkages between these nodes.

The RSIF recommends that provincial government should assist GCM municipalities position themselves in a complementary way as opposed to competing with each other. The Department of Economic Development and Tourism (DEDAT) is responsible for Regional Economic Development as part of the roll-out of PSG1, and for the identification of skills requirements and facilitation of skills development (PSG2). The central economic strategy of Project Khulisa has close ties with SIP5, which is coordinated by the Industrial Development Corporation (IDC) on behalf of the Presidential Infrastructure Coordinating Council.

Spatial Framework: Regional Settlement

Municipal planning is an exclusive local government responsibility, and the parameters of urban development are effectively set by municipal SDFs and planning bylaws. The RSIF, a provincial-regional SDF, focuses on settlement considerations that cut across municipal boundaries. The RSIF presents a regional settlement logic and concept, and sets out a regional implementation agenda for incorporation into the SDFs of GCM municipalities. Ultimately national, provincial and regional settlement agendas all need to be reflected in municipal IDPs and SDFs.
Efforts to improve the regional delivery of sustainable human settlements are hampered by the limited availability of empirical data on GCM urbanization patterns (i.e., inter and intra-regional migration flows, as well as urbanization and counter-urbanization dynamics). Whilst the City of Cape Town has baseline data on which to model and cost alternative urban growth scenarios, data is currently not available to do this for the GCM’s network of settlements. The RSIF recommends building capacity to research and apply evidence-based regional urban growth management strategies. The optimum configuration of the GCM’s settlement network to accommodate urban growth (i.e., the ‘smart’ growth option) needs to be determined by modeling urban, transport and infrastructure growth scenarios.

The RSIF builds on the Urban Network Strategy (UNS) to compact and connect cities and towns by way of Transit Oriented Development (TOD). TOD is based on the principles of spatial agglomeration (i.e., densification and intensification of mixed land uses) and connectivity. The RSIF regionally applies the UNS of targeting public investment in the built environment in three urban ‘spaces’, namely: Integration Zones, Economic Hubs (e.g., township business areas and CBDs), and Marginalised Areas (e.g., informal settlements).

The RSIF connects these zones, nodes and areas through an efficient and affordable public transport system. It recommends applying discretionary grant funding to incentivize investment in the transformation of all regional centres. It also recommends building capacity to apply a GCM Built Environment Performance Plan (BEPP) as basis for the regional alignment of capital investment frameworks.

The RSIF’s urban growth management strategy addresses the legacy of formal and informal settlement patterns, avoids further encroachments into hazardous areas, and charts the way forward for transit orientated urban growth. Its regional settlement concept reinforces the GCM’s multi-nodal network of urban centres and strengthens transport connections between them.

GCM municipalities are pursuing urban restructuring, intensification and densification strategies to improve livability and strengthen the economies of their urban areas. The GCM urban management agenda, common to all municipalities, is to channel future growth inside the urban edge of the region’s settlements – primarily in the form of brownfields and infill development. Municipal planning bylaws need to be aligned in common pursuit of this agenda. All new settlement areas need to be close to economic opportunities or along transit routes. The built environment capital investment frameworks of GCM municipalities need to be regional aligned. The RSIF identifies urban and rural hotspots where inter-municipal growth management intervention is needed.

The RSIF highlights that an important aspect of urban growth management is the release of State-owned land. It builds on the IUDF Implementation Plan’s action agenda to develop implementation protocols and streamline processes for the release of all strategic land by government (including municipalities) and State-owned entities. This process is to be led by the national Department of Public Works (DPW) and supported by the national Department of Rural Development and Land Reform, COGTA, DHS, SOEs, municipalities and National Treasury. To date, the national Department of Human Settlements (DHS) has mandated the Housing Development Agency (HDA) with facilitating State land release for human settlement projects with limited success. The RSIF highlights DEA&DP’s important facilitatory role in this regard, particularly through the Land Assembly and Regeneration Programme.

**Spatial Framework: Regional Ecological Infrastructure**

The RSIF is founded on the concept of building and sustaining a network of regional Ecological Infrastructure in the GCM. Ecological Infrastructure...
is the nature-based equivalent of built infrastructure. The concept refers to the naturally functioning ecosystems that deliver valuable services to people and the economy. The RSIF’s spatial strategy for building a sustainable and resilient Ecological Infrastructure network is based on securing the priority areas identified in the Western Cape Biodiversity Spatial Plan. Investing in regional Ecological Infrastructure involves securing and maintaining functioning intact eco-systems, as well as restoring degraded habitats.

**Spatial Framework: Regional Utility Infrastructure**

There are separate planning processes underway investigating how best to deliver the required utility infrastructure to the GCM region. The RSIF does not cover these in detail, but highlights key utility infrastructure issues and options under consideration, and proposes spatial concepts for the configuration of regional networks.

The RSIF flags water as key to the region’s future development. It emphasizes the severity of the Greater Cape Metro’s water scarcity, the region’s reliance on external sources, and the interdependence of municipalities on common sources. The RSIF highlights the regional imperative of pursuing water demand management and conservation measures, re-using water, and protection of ecological infrastructure related to water yield and quality.

The management and quality of wastewater treatment in the GCM region is generally good, but many of the wastewater treatment works are operating at or over their design capacity. The RSIF flags the main issues of regional significance as: minimizing the environmental impact of wastewater treatment; exploring regional sludge management and waste-to-energy options; and re-use of effluent.

In terms of international climate change agreements, the country is committed to reducing carbon emissions. Uncertainty remains over the country’s future energy mix. There is no finality over the proposed nuclear build programme. The drop in the price of oil and gas has disrupted plans to transition from oil to liquid natural gas (LNG), and raises questions over the prospects of shale gas extraction in the Karoo basin. Renewable energy capacity is rapidly growing, with wind and solar farms contributing to the national grid whilst small scale embedded generation such as solar water heaters and rooftop PV is reducing dependence on municipal energy distribution. In terms of new demand areas, substantial growth in load is envisaged in the southern West Coast arising from the development of the SBIDZ and associated urban growth in the sub-region.

The RSIF notes the need for regional landfill solutions, as many existing landfills reach capacity. Consideration is being given to establishing regional sites (e.g. at Kalbaskraal) adjacent to rail infrastructure to reduce operational costs. In addition to commissioning new regional disposal facilities, the RSIF identifies a need to explore integrated waste management facilities such as waste-to-energy public-private partnerships.

**Spatial Framework: Regional Transport & Freight Infrastructure**

The RSIF highlights inefficiencies in the region’s transport, freight and logistics systems as fundamental constraints to the GCM’s economic competitiveness, as well as inhibiting the ability of...
its residents to access the city-region’s economic opportunities and facilities. Integration of transport and freight systems in the city-region is complicated by the range of role players involved. Building on the options under consideration by the Provincial Land Transport Framework and Transport for Cape Town, the RSIF spatially conceptualises an integrated regional freight network.

The GCM’s transport hubs have the potential to catalyse regional development. There is considerable scope to improve their functionality, and in the process reduce the costs of doing business, open up new economic opportunities, and provide a better overall user experience. In this regard the GCM’s ‘game changers’ are: the sea-ports of Cape Town and Saldanha; Cape Town International Airport; an inland container port; and intermodal facilities.

The RSIF considers possible approaches to the challenge.

The RSIF endorses the current upgrading of the N7 and proposed upgrading of the N1 and N2 freeway systems. It prioritises GCM municipalities engaging with SANRAL to regionally align land use and highway upgrading plans.

The RSIF identifies the new Cross Cape cycle network initiative of Provincial Government as having regional applicability. A regional NMT network needs to be configured as a structuring element that serves multiple purposes, including recreation, tourism and regular commuting by bicycle.

**Spatial Framework: Regional Facilities and Amenities**

The RSIF notes a strong concentration of higher order facilities in Cape Town, and a clustering in the network of surrounding regional centres. Regional amenities, however, are geographically dispersed across the GCM’s landscapes and coastline.

The RSIF proposes that DEA&DP, in their support to the municipal SDF and IDP process, should ensure that the regional settlement agenda is carried through in decision making regarding the placement of new high order education, health, sports, recreation, and cultural facilities in the GCM.

**Spatial Framework: Composite RSIF Map**

It is a LUPA requirement that a provincial-regional SDF reflects desired land use patterns. To this end a composite RSIF map is presented that spatially reflects implementation of the Greater Cape Metro’s regional agenda. The composite map consolidates the RSIF’s strategies and portrays the following spatial layers:

i. Desirable land use patterns are reflected in the delineation of Spatial Planning Categories (SPCs). SPCs are derived from the Western Cape Biodiversity Spatial Plan’s classification of biodiversity areas, and sustainable land use activities that can be accommodated in these areas.

ii. A framework for development of the regional space-economy is reflected, that distinguishes between proposals for the GCM’s nodes of economic activity, special economic zones, economic infrastructure, inter and intra regional linkages, and components of the rural and urban space-economies.

iii. The regional settlement hierarchy is also reflected, with attention to the scale, role and function of regional settlements.
Regional Management of Spatial Assets

The RSIF sets out proposals for safeguarding the spatial assets underpinning the GCM’s economy. Managing these assets starts with the assembly and verification of the following regional spatial data-sets:

- State land
- Agricultural use and potential
- Cultural and scenic landscapes, routes, areas and places
- Critical Biodiversity Areas and Ecological Support Areas
- Water resources
- Minerals and construction materials
- Coastal resources and development setback lines
- Air quality

The RSIF makes recommendations on allocating responsibility for managing regional spatial data and providing open access to it.

Regional Disaster and Risk Management

The RSIF sets out guidelines on managing climate change risks and building regional resilience. Regional spatial responses to climate change can be understood in terms of risks to be mitigated and opportunities to be taken advantage of. The RSIF identifies the major mitigation opportunities in the GCM’s ecological infrastructure.

Regional Information, Planning and Management

To move towards evidence-based regional planning, the RSIF sets out proposals for provincial government to oversee:

- Establishment of a GCM data laboratory to build up and share regional spatial data sets.
- Researching data on GCM population migration, settlement patterns and inter and inter-regional freight movement.
- In collaboration with GCM Municipalities, extending the Economic Areas Management Programme (ECAMP) to cover the entire GCM region.
- Establishing a web-based platform to share regional data
- Modeling alternative regional growth scenarios, factoring in demographic, land use, economic and transport variables. Evaluate growth options using multi-criteria decision analysis methodologies.
- Developing regional spatial growth management indicators to monitor and evaluate progress with the RSIF’s implementation.

Implementation Principles

The RSIF’s proposals for implementing the GCM Spatial Framework apply the following principles:

- Avoid the creation of new institutions in an already complex governance system, and in light of capacity and financial constraints.
- Build on current plans and programmes using existing inter-governmental forums and tools.
- Establish less bureaucratic, technical and institutional collaborative mechanisms when necessary.
- Streamline institutional engagements through coordination of the right people around the right issues at an appropriate time.
- Align with the strategic institutional thrust of the Spatial Planning and Land Use Management Act (SPLUMA) and the Integrated Urban Development Framework (IUDF) through a locally led, provincially moderated process.

Integrating the Regional Agenda into other Planning Processes

Planning in the Western Cape has matured to a stage where joint planning and implementation is a fundamental element in ensuring sustainable and integrated service delivery. The RSIF takes this process a step closer on a regional level by applying the concept of cooperative spatial governance. Cooperative spatial governance has a legal basis in the Municipal Systems Act and SPLUMA, and resonates with the spatial alignment goal of PSG 5. The RSIF follows the IUDF Implementation Plan’s guidelines for cooperative spatial governance.

As SPLUMA requires that all spatial plans must align, the incorporation of the GCM RSIF into intergovernmental planning processes is essential. Policy alignment, integrated planning, budgeting and implementation is intended to be achieved through the development of an Integrated Work Plan (IWP), which facilitates the Province-municipal interactions around IDP and related planning instruments, as well as the budgeting process. The RSIF is positioned between the PSDF and municipal SDFs, and provides more detailed guidance to the latter.

No additional institutional platform is proposed for integrating the RSIF into the IWP process. It is simply an additional consideration in assessing and negotiating the alignment of provincial and municipal plans, for example:

- Have municipal SDFs incorporated the regional spatial priorities?
- Have municipal and provincial budgets made provision for the regional projects identified in the RSIF?
- Have municipal and provincial transport plans responded to the regional transport issues highlighted in the RSIF?
- Have municipal and provincial economic development plans considered the economic development plans considered the economic development plans considered the economic
function and competitive advantage of regional nodes?

It is the responsibility of the provincial departments providing oversight in the IWP process to ensure that the RSIF priorities are integrated into the relevant municipal and provincial department plans. In addition, because the RSIF is key to the implementation of the IUDF in the Province, the Joint Western Cape Provincial IUDF Task Team, coordinated by DEA&DP to implement the IUDF, should provide oversight of the implementation of the RSIF. The IUDF Task Team, through the Premier, has access to national stakeholders to influence national issues that need to be resolved to implement the RSIF.

The SoEs are the only stakeholders that currently undertake planning at a regional scale (outside of the RSIF). The RSIF proposes amending the IWP’s institutional arrangements to provide for greater involvement of the SoEs in the IWP process. Their involvement can be secured through the intervention of the Premier, if necessary, as indicated in the IUDF Implementation Plan.

The IWP does not facilitate inter-municipal engagement, except via the mediation of the Province. Inter-municipal spatial governance is better undertaken in one of two ways: either through one of the sector-based platforms (which are also an appropriate place to include SOEs), or through groupings of local municipalities in the region forming ad hoc joint planning committees around particular cross-boundary issues.

**Institutional Arrangements for Implementation**

Implementation of the RSIF takes place through a combination of cooperative spatial governance (through the Integrated Work Plan) and the sector implementation forums identified above. These two streams will take input and feed back into the independent planning that is taking place within municipalities, the provincial departments and SOEs. In addition, the Joint Provincial Task Team is well placed to provide oversight to the implementation of the regional spatial agenda and to feed any issues up to national forums if necessary.

The custodian of the GCM RSIF is the Western Cape Minister of Local Government, Environmental Affairs and Development Planning. DEA&DP is responsible for the roll out, monitoring and updating of the GCM RSIF. The Minister must appoint an ad hoc intergovernmental steering committee in terms of the Land Use Planning Act (LUPA) to review the RSIF every 10 years.
In order to publicise the GCM RSIF and highlight its role in intergovernmental planning, it is recommended that the RSIF be launched by the Western Cape Government at a public event, to which all the stakeholders mentioned in the RSIF are invited.

Implementing Key Strategic Interventions

The RSIF sets out specific recommendations for implementing the following key strategic interventions:

i. **Data:** Set up and resource a regional data laboratory that prioritises: extending the Economic Areas Management Programme (ECAMP) to cover the GCM functional region; collating intra and inter-regional migration data; and disseminating regional data to GCM stakeholders.

ii. **Economy:** Based on ECAMP’s outputs, formulate a GCM regional economic development strategy that consolidates sector based programmes (e.g. Project Khulisa, Operation Phakisa, Green Economy), and rationalises area-based economic development initiatives (e.g. Saldanha IDZ and Atlantis SEZ, Agri-Parks, Aerotropolis, Regional Hubs) and the region’s economic infrastructure (e.g. roles of GCM sea, air and land ports).

iii. **Growth:** Input a coherent urban and rural growth management agenda for the functional region into the SDFs of GCM municipalities, address inter-municipal growth hotspots, and annually monitor regional alignment in terms of spatial performance indicators.

iv. **Transport:** Engage the GCM’s transport and freight authorities in formulating coherent strategies for the development of regional networks serving: freight logistics; public transport; freeway improvements; and NMT.

v. **Infrastructure:** Engage the GCM’s bulk infrastructure authorities in formulating development programmes for the region’s bulk infrastructure (i.e. waste management, energy and electrical grid, water supply and demand; sanitation, and ICT).

vi. **Environment:** Secure and maintain the region’s functioning intact ecological infrastructure, as well as restore degraded ecological infrastructure.

Alignment of these interventions with the PSDF’s policies and arrangements for their implementation are tabulated in the table below.
<table>
<thead>
<tr>
<th>PSDF POLICY</th>
<th>KEY REGIONAL GOALS AND/OR OBJECTIVES</th>
<th>DEFINED STRATEGIES AND/OR PROGRAMMES</th>
<th>PROJECTS/ ACTIONS</th>
<th>PHASING</th>
<th>RESPONSIBLE ACTORS</th>
<th>STAKEHOLDERS</th>
<th>TIMEFRAMES</th>
<th>MONITORING INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy: Sustainable use of provincial assets</td>
<td>GCM’s settlements and economy are served by a resilient and sustainable regional infrastructure networks (i.e. ecological, utility and transport).</td>
<td>Secure and maintain the region’s functioning intact ecological infrastructure, as well as restore degraded ecological infrastructure.</td>
<td>Ensure the western cape biodiversity sector plan is incorporated into the planning of the local municipalities and SOEs in the region.</td>
<td>Short Term</td>
<td>DEA&amp;DP (Ecological Infrastructure for Resilience - PSG4)</td>
<td>Berg-Olfants CMA, DWS, Municipalities SOEs</td>
<td>5 years</td>
<td>Local and regional planning has included critical biodiversity overlay</td>
</tr>
<tr>
<td>Policy: Opening up opportunities in the space economy</td>
<td>A globally competitive, diversified, productive and inclusive regional economy.</td>
<td>Set up and resource a regional data laboratory.</td>
<td>Extend the Economic Areas Management Programme to cover the GCM RSIF functional region.</td>
<td>Short Term</td>
<td>DEA&amp;DP</td>
<td>DEDAT</td>
<td>1 year</td>
<td>Programme is established for the GCM and utilized by provincial and municipal government</td>
</tr>
<tr>
<td></td>
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<td>Collate intra and inter-regional migration data.</td>
<td>Short Term</td>
<td>DSD</td>
<td>All stakeholders</td>
<td>2 years</td>
<td>Report on intra and inter-regional migration</td>
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<td></td>
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<td></td>
<td>Disseminate regional data to GCM stakeholders.</td>
<td>Short to Medium Term</td>
<td>DEA&amp;DP</td>
<td>All stakeholders</td>
<td>3 years</td>
<td>Establish platform for dissemination of regional data</td>
</tr>
<tr>
<td></td>
<td>Based on the Economic Areas Management Programme outputs, formulate a GCM regional economic development strategy.</td>
<td></td>
<td>Consolidate sector based programmes in the region (e.g. Project Khulisa, Operation Phakisa, Green Economy)</td>
<td>Medium Term</td>
<td>DEDAT</td>
<td>SOEs, Provincial Departments, Municipalities</td>
<td>3 years</td>
<td>Produce a Regional Economic Development Strategy</td>
</tr>
<tr>
<td></td>
<td>Rationalise area-based economic development initiatives (e.g. Saldanha IDZ and Atlantis SEZ, Agri-Parks, Aerotropolis, Regional Hubs)</td>
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<td></td>
<td>Confirm the functional roles of the region’s economic infrastructure (e.g. roles of the GCM sea, air and land ports)</td>
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<td>PSDF POLICY</td>
<td>KEY REGIONAL GOALS AND/OR OBJECTIVES</td>
<td>DEFINED STRATEGIES AND/OR PROGRAMMES</td>
<td>PROJECTS’ ACTIONS</td>
<td>PHASING</td>
<td>RESPONSIBLE ACTORS</td>
<td>STAKEHOLDERS</td>
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<td>MONITORING INDICATOR</td>
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<tr>
<td>Policy: Opening up opportunities in the space economy</td>
<td>A globally competitive, diversified, productive and inclusive regional economy.</td>
<td>Compile a consolidated pipeline of major infrastructure projects in the form of a Regional Built Environment Performance Plan.</td>
<td>Consolidate the spatialized budget information of all stakeholders in the region</td>
<td>Short Term</td>
<td>Provincial Treasury</td>
<td>DEA&amp;DP</td>
<td>2 years</td>
<td>Regional BEPP published</td>
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<td></td>
<td></td>
<td></td>
<td>Assess the project list against the PSDF and RSIF to verify alignment</td>
<td>Short to Medium Term</td>
<td>DEA&amp;DP</td>
<td>All stakeholders</td>
<td>2 years</td>
<td></td>
</tr>
<tr>
<td>GCM’s settlements and economy are served by resilient and sustainable regional infrastructure networks (i.e. ecological, utility and transport).</td>
<td>Formulate development programmes for the region’s bulk infrastructure (i.e. water management, energy and electrical grid, water supply and demand, sanitation and ICT) by engaging with the GCM’s bulk infrastructure authorities.</td>
<td>Waste: Explore integrated waste management facilities and opinions such as waste-to-energy PPP (Drakenstein, Stellenbosch) through regional economies of scale</td>
<td>Short Term</td>
<td>DEA&amp;DP</td>
<td>District Waste Managers Forum</td>
<td>GreenCape</td>
<td>2 years</td>
<td>Integrated waste management facilities feasibility study completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Energy: Investigate potential conflict between renewables programme and the scenic and tourism needs of the region, particularly in relation to new transmission lines and wind-farm sites (Nuy, Paternoster)</td>
<td>Medium Term</td>
<td>DEDAT</td>
<td>Eskom</td>
<td>GreenCape</td>
<td>2 years</td>
<td>Investigation report with findings published</td>
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<td></td>
<td></td>
<td>Water supply: Lobby national DWS to conclude regional reconciliation study and allocate water rights</td>
<td>Short Term</td>
<td>Water Managers Forum</td>
<td>WC WSS Strategy Steering Committee</td>
<td>Berg-Olifants CMA</td>
<td>1 year</td>
<td>Revised water use rights allocation for the Berg River Catchment</td>
</tr>
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<td></td>
<td></td>
<td>ICT: Formulate a consolidated broadband roll-out schedule incorporating municipal, provincial and private sector providers</td>
<td>Short to Medium Term</td>
<td>DEDAT</td>
<td>Municipalities</td>
<td>Private Network providers</td>
<td>1 year</td>
<td>Consolidated broadband roll-out schedule published</td>
</tr>
<tr>
<td>PSDF Policy</td>
<td>Key Regional Goals and/or Objectives</td>
<td>Defined Strategies and/or Programmes</td>
<td>Projects/Actions</td>
<td>Phasing</td>
<td>Responsible Actors</td>
<td>Stakeholders</td>
<td>Timeframes</td>
<td>Monitoring Indicator</td>
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<tr>
<td><strong>Policy:</strong> Developing Integrated and sustainable settlements</td>
<td>A region offering dignified, safe, secure, vibrant and varied living environments</td>
<td>Formulate a coherent strategy for the development of regional networks through engaging with the GCM’s transport and freight authorities.</td>
<td>Develop a regional freight logistics strategy</td>
<td>Medium Term</td>
<td>LTB and IPC and DT&amp;PW</td>
<td>TNPA, TFR, SBIDZ, Municipalities</td>
<td>3 years</td>
<td>Regional freight logistics strategy published</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explore the provision of a regional public transportation service.</td>
<td></td>
<td></td>
<td></td>
<td>Municipalities, DoT, NT, SANRAL, Municipalities</td>
<td>2 years</td>
<td>Regional public transport strategy published</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freeway Improvements and upgrades</td>
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<td></td>
<td></td>
<td>Develop a regional NMT strategy</td>
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<tr>
<td></td>
<td>Ensure that a coherent urban and rural growth management agenda for the functional region is reflected in the SDFs of GCM municipalities</td>
<td>Manage urban growth regionally through joint human settlement planning forums and provincial oversight in respect of municipal human settlement plans and SDFs.</td>
<td>Manage urban growth regionally through joint human settlement planning forums and provincial oversight in respect of municipal human settlement plans and SDFs.</td>
<td>Short to Medium Term</td>
<td>DEA&amp;DP, DHS</td>
<td>Municipalities</td>
<td>2 years</td>
<td>Joint human settlement planning forums established</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Initiate inter-municipal urban growth management strategies for regional hotspots</td>
<td></td>
<td></td>
<td>DEA&amp;DP</td>
<td>Municipalities</td>
<td>3 years</td>
<td>Strategies developed for 8 regional growth hotspots</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annually monitor regional alignment in terms of spatial performance indicators</td>
<td></td>
<td></td>
<td>DEA&amp;DP</td>
<td></td>
<td>5 years</td>
<td>Spatial performance report published</td>
</tr>
</tbody>
</table>
Greater Cape Metro Regional Spatial Implementation Framework

Final Report
July 2019

### Glossary of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACSA</td>
<td>Airports Company of South Africa</td>
</tr>
<tr>
<td>APP</td>
<td>Annual Performance Plan</td>
</tr>
<tr>
<td>BAU</td>
<td>Business-As-Usual</td>
</tr>
<tr>
<td>BEPP</td>
<td>Built Environment Performance Plan</td>
</tr>
<tr>
<td>BESP</td>
<td>Built Environment Support Programme</td>
</tr>
<tr>
<td>CITI</td>
<td>Cape Innovation and Technology Initiative</td>
</tr>
<tr>
<td>CoCT</td>
<td>City of Cape Town</td>
</tr>
<tr>
<td>COGTA</td>
<td>Cooperative Government &amp; Traditional Affairs</td>
</tr>
<tr>
<td>CSIR</td>
<td>Council for Scientific and Industrial Research</td>
</tr>
<tr>
<td>CTIA</td>
<td>Cape Town International Airport</td>
</tr>
<tr>
<td>DAFF</td>
<td>Department of Agriculture, Forestry and Fisheries</td>
</tr>
<tr>
<td>DCF</td>
<td>District Coordination Forum</td>
</tr>
<tr>
<td>DCoG</td>
<td>Department of Cooperative Governance</td>
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<tr>
<td>DEA</td>
<td>Department of Environmental Affairs</td>
</tr>
<tr>
<td>DEA&amp;DP</td>
<td>Department of Environmental Affairs and Development Planning</td>
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<tr>
<td>DHS</td>
<td>Department of Human Settlements</td>
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<tr>
<td>DoA</td>
<td>Department of Agriculture</td>
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<tr>
<td>DPME</td>
<td>Department of Planning, Monitoring and Evaluation</td>
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<tr>
<td>DoHS</td>
<td>Department of Human Settlements</td>
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<tr>
<td>DoP</td>
<td>Department of the Premier.</td>
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<tr>
<td>DWA</td>
<td>Department of Water Affairs</td>
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<td>DWS</td>
<td>Department of Water and Sanitation</td>
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<tr>
<td>DPW</td>
<td>Department of Public Works</td>
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<tr>
<td>DSD</td>
<td>Department of Social Development</td>
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<tr>
<td>DTI</td>
<td>Department of Trade &amp; Industry</td>
</tr>
<tr>
<td>DTPW</td>
<td>Department of Transport &amp; Public Works</td>
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<tr>
<td>ECAMP</td>
<td>Economic Areas Management Programme</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>EPWP</td>
<td>Expanded Public Works Programme</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FFC</td>
<td>Financial and Fiscal Commission</td>
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<tr>
<td>GCM</td>
<td>Greater Cape Metro</td>
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<tr>
<td>GCMRSIF</td>
<td>Greater Cape Metro Regional Implementation Framework</td>
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<tr>
<td>GCFR</td>
<td>Greater Cape Functional Region</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Produce</td>
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<tr>
<td>GDPR</td>
<td>Gross Domestic Produce (Regional)</td>
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<tr>
<td>GHG</td>
<td>Green House Gas</td>
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<tr>
<td>GPS</td>
<td>Growth Potential of Towns Study</td>
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<tr>
<td>GSR</td>
<td>Greater Saldanha Region</td>
</tr>
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<td>GSRISIF</td>
<td>Greater Saldanha Regional Spatial Implementation Framework</td>
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<td>HDA</td>
<td>Housing Development Agency</td>
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<td>HIA</td>
<td>Heritage Impact Assessment</td>
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<td>HMC</td>
<td>Heritage Western Cape</td>
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<tr>
<td>ICMA</td>
<td>Integrated Coastal Management Act</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>IDC</td>
<td>Industrial Development Corporation</td>
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<td>IDP</td>
<td>Integrated Development Plan</td>
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<td>IDZ</td>
<td>Industrial Development Zone</td>
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<td>IGR</td>
<td>Intergovernmental Relations</td>
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<td>IPBF</td>
<td>Inter-governmental Planning and Budgeting Forum</td>
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<td>IPC</td>
<td>Intermodal Planning Committee</td>
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<td>IPIN</td>
<td>Integrated Public Transport Network</td>
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<td>IUDF</td>
<td>Integrated Urban Development Framework</td>
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<td>IWP</td>
<td>Integrated Work Plan</td>
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<td>IWMP</td>
<td>Integrated Waste Management Plan</td>
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<tr>
<td>JPI</td>
<td>Joint Planning Initiative</td>
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<tr>
<td>KNPS</td>
<td>Koeberg Nuclear Power Station</td>
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<tr>
<td>KV</td>
<td>Kilo Volts</td>
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<tr>
<td>LTAB</td>
<td>Local Transport Advisory Board</td>
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<tr>
<td>LUPA</td>
<td>Land Use Planning Act</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring &amp; Evaluation</td>
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<tr>
<td>MERO</td>
<td>Municipal Economic Review and Outlook</td>
</tr>
<tr>
<td>MIG</td>
<td>Municipal Infrastructure Grant</td>
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<tr>
<td>MinMay</td>
<td>Ministers and Mayoral Committee</td>
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<tr>
<td>Acronym</td>
<td>Expanded Form</td>
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<td>MSDF</td>
<td>Municipal Spatial Development Framework</td>
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<td>NDP</td>
<td>National Development Plan</td>
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<td>NEMA</td>
<td>National Environmental Management Act</td>
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<tr>
<td>NHRA</td>
<td>National Heritage Resources Act</td>
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<td>NIP</td>
<td>National Infrastructure Plan</td>
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<td>NLTA</td>
<td>National Land Transport Act</td>
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<td>NMT</td>
<td>Non-Motorised Transport</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>ORTIA</td>
<td>OR Tambo International Airport</td>
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<tr>
<td>PAZ</td>
<td>Precautionary Action Zone</td>
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<tr>
<td>PCF</td>
<td>Premier’s Coordinating Forum</td>
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<tr>
<td>PERO</td>
<td>Provincial Economic Review and Outlook</td>
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<td>PLTF</td>
<td>Provincial Land and Transport Framework</td>
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<td>PPP</td>
<td>Public-private Partnership</td>
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<td>PRASA</td>
<td>Passenger Rail Agency of South Africa</td>
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<td>Provisional Restructuring Zone</td>
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<td>Provincial Strategic Goal</td>
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<td>PSP</td>
<td>Provincial Strategic Plan</td>
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<tr>
<td>PTM</td>
<td>Provincial Top Management</td>
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<td>RSDF</td>
<td>Regional Spatial Development Framework</td>
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<td>RSEP</td>
<td>Regional Socio-Economic Programme</td>
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<td>RSIF</td>
<td>Regional Spatial Implementation Framework</td>
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<td>SAHRA</td>
<td>South African Heritage Resource Authority</td>
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<td>SALGA</td>
<td>South African Local Government Association</td>
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<td>SANRAL</td>
<td>South African Roads Agency Limited</td>
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<td>SANBI</td>
<td>South African National Biodiversity Institute</td>
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<tr>
<td>SAPS</td>
<td>South African Police Services</td>
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<td>SBIDZ</td>
<td>Saldanha Bay Industrial Development Zone</td>
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<td>SBM</td>
<td>Saldanha Bay Municipality</td>
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<tr>
<td>SEA</td>
<td>Strategic Environmental Assessment</td>
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<td>Spatial Development Framework</td>
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<td>Strategic Infrastructure Project</td>
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<td>SKA</td>
<td>Square Kilometer Array</td>
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<td>SmartAgri</td>
<td>Smart Agriculture for Climate Resilience</td>
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<td>SMEs</td>
<td>Small and Medium Enterprises</td>
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1. Introduction

1.1. Background

The Provincial Spatial Development Framework (PSDF), approved by the Western Cape Minister of Environmental Affairs and Development Planning in March 2014, sets out Provincial Government’s agenda for the sustainable development and management of its urban and rural areas.

The PSDF gives priority to bolstering the spatial performance of the Cape Town functional region (a.k.a. Greater Cape Town, Cape Metro region, or Cape Town city-region (OECD 2008)). Irrespective of the name used, this ‘functional’ region extends across municipal borders, it is the engine that drives the Western Cape’s economy, and it is where the bulk of its population will live for the foreseeable future.

To unlock economic opportunities in the Cape Town functional region and make the benefits of metro living accessible to all, the PSDF identifies the need for policy and delivery alignment between statutory authorities and state-owned enterprises (SOEs) in their spatial development and management of the region. The Department of Environmental Affairs and Development Planning (DEA&DP) are assigned responsibility for taking the lead in forging a shared spatial agenda between statutory authorities and state-owned enterprises (SOEs) in their spatial development and management of functional regions.

One of the avenues through which the Western Cape Government is pursuing their regional planning mandate is through the Regional Socio-Economic Programme (RSEP). RSEP is a Western Cape intergovernmental initiative, which aims to drive urban upgrading and socio-economic development in targeted urban areas by means of partnerships and transversal integration. RSEP is closely linked to the Violence Prevention through Urban Upgrading (VPUU) programme, and both programmes follow a ‘whole-of-society’ and ‘whole-of-government’ approach in order to build safe and sustainable neighbourhoods and improve quality of life.

While RSEP is mainly being implemented at the local level in partnership with selected local municipalities, the programme is also concerned with developing or improving mechanisms or systems to coordinate planning and alignment at the regional and provincial level. Regional planning through regional projects and research is considered a prominent mechanism in this regard.

The RSEP/VPUU programme is being implemented in six of the municipalities covered by the GCM RSIF. A process is underway, however, to expand the footprint of the programme to additional municipalities.

Regional planning and development, a concurrent national and provincial constitutional competency, is a new feature of the country’s spatial governance system. Legislation provides for National or Provincial Government to prepare and apply a Regional Spatial Development Framework (RSDF), nationally in terms of the Spatial Planning and Land Use Management Act (SPLUMA, 2013) or provincially in terms of the Land Use Planning Act (LUPA, 2014). A RSDF is an instrument National and/or Provincial Government can use (i.e. its preparation is discretionary, not mandatory) in support of the coherent spatial development and management of functional regions.

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The RSEP/VPUU programme is being implemented in six of the municipalities covered by the GCM RSIF. A process is underway, however, to expand the footprint of the programme to additional municipalities.

1.2. Terms of Reference

With funding from the RSEP, DEA&DP in partnership with the Metropolitan Municipality of Cape Town, the District Municipalities of the West Coast, Cape Winelands, and Overberg, and the Local Municipalities of Saldanha Bay, Swartland, Drakenstein, Stellenbosch, Theewaterskloof, Overstrand, and Breede Valley drew up Terms of Reference for the preparation of a RSDF for the Cape Town functional region. DEA&DP subsequently renamed this collaborative regional planning exercise the preparation of a Regional Spatial Implementation Framework (RSIF) for the Greater Cape Metro (GCM) region – the outcome of which is documented in this report.

The Terms of Reference define the RSIF as a “plan that provides long term (i.e. 20 year) strategic direction and coordination to the overall growth, spatial development, land use management, and conservation of a region.” They state the purpose of preparing the RSIF is to:

- “Provide a spatial vision for the Cape Town functional region that balances economic, social and environmental considerations;
- Promote rational and predictable land use planning;
- Facilitate the coordination, integration and alignment of provincial and municipal land use planning policy; and
- Address specific economic, social, natural or unique features.”

Following a procurement process and the adjudication of tender bids, in April 2015 DEA&DP contracted Settlement Planning Services (Setplan), assisted by a team of specialists, to prepare the required RSIF in terms of LUPA Section 7(1).
1.3. Interpretation of the Brief

The terms of reference note that the need for a regional plan was originally identified in the 2008 territorial review of the Cape Town functional region undertaken by the Organisation for Economic Co-operation and Development (OECD), and that the 2014 PSDF repeated this call. The required plan needs to provide strategic direction to the medium to long-term spatial growth of the GCM region. As such it needs to provide a road map for the incremental achievement of new and improved spatial outcomes over the next 10 to 20 years.

The brief frames the ‘functionality’ of the region in economic terms, and calls for strategies to make the city-region more competitive globally and nationally. The outcomes sought are improvements in the performance of the regional space-economy and human settlements so that growth is re-energised and more inclusive.

Notwithstanding that the brief puts the economy as the plan’s central thrust, the region’s strategic direction moving forward needs to be formulated with due consideration of the inter-relationships between the economy, people and place (i.e. the GCM’s environment, human settlements and nodes of business activity). The plan needs to integrate these considerations, and put in place strategies for balancing them.

The RSIF was commissioned to spatially inform and align the medium to long-term capital investment programmes of government spheres and SOEs active in the GCM region. The RSIF aims to bolster the regional economy by strengthening the positive spin-offs of spatial agglomeration and ameliorate negative impacts (e.g. congestion). It complements municipal planning by focusing on those aspects of the environment, space-economy and human settlements that cut across local authority boundaries.

1.4. Process Followed

With the purpose of forging a common spatial agenda for the region’s development (i.e. a ‘planning led budgeting’ initiative), a collaborative approach was taken to the RSIF’s preparation. This involved:

i. Building-on and taking forward the strategic direction set by the National Development Plan (NDP 2012) and the Provincial Strategic Plan (PSP 2015).

ii. Giving regional expression to the spatial agenda of the Integrated Urban Development Framework (IUDF 2016) and the PSDF (2014).

iii. Involving national and provincial departments, municipalities and SOEs in oversight of the RSIF’s preparation by way of an inter-governmental Steering Committee.

iv. Engaging specialists as well as statutory stakeholders in a series of Focus Group workshops to explore key regional spatial considerations.

v. Notifying regional stakeholders that a draft of the regional plan is available for comment, and presenting the plan’s findings and recommendations at Road Shows.

Diagram 1. GCM RSIF Project Process and Deliverables
vi. Consulting with statutory stakeholders on appropriate arrangements for implementing the regional spatial agenda.

Diagram 1 illustrates the process followed preparing the RSIF. To start an Inception Report was produced, and then a baseline status quo assessment was undertaken. The December 2015 Baseline Status Quo Report profiled the GCM’s demographic and socio-economic conditions, as well as the state of the regional economy, natural environment, heritage and scenic assets, built environment, and fiscal and institutional arrangements. Based on the regional spatial agenda emerging from the status quo assessment, spatial development concepts were then explored and focus groups were convened with municipalities. In August 2016 a first draft of the RSIF report was released for comment. Incorporating feedback received, in March 2017 a final draft of the RSIF report was made available for further comment. This final RSIF report addresses inputs received and incorporates the outcome of consultations on implementation arrangements.

1.5. Outcomes and Limitations

This RSIF seeks to build consensus between the spheres of government and SOEs on what spatial outcomes the GCM region should strive for over the next two decades, where in the region these should take place, and how they should be configured. As such the RSIF strives to provide a common spatial framework within which budgeting and implementation actions by diverse stakeholders can take place. Moving forward, collaborative spatial development and management of the region is the outcome sought.

Given the vast geographic extent of the functional region, the diversity of stakeholders involved, and the absence of a regional sphere of governance – the RSIF’s goals are wide ranging. Accordingly, the RSIF provides a strategic framework for spatially aligning the implementation actions of various regional stakeholders. There is a paucity of empirical data available on the functional region, which limits the scope for evidence based planning. In these circumstances the emphasis has been on forging a common strategic approach to the region’s future development, and identifying the data requirements for subsequent detailed plans to be formulated.

1.6. Functional Region Study Area

“...the fundamental urban region requires coordination and planning that typically transcends the boundaries of metropolitan areas and encompasses a wider hinterland connected by commuter flows, economic linkages and shared facilities. Many major strategic challenges thus transcend city boundaries and must be addressed at a more regional scale”. (A Proposed Agenda for Action: An inter-governmental approach to the development challenges of Cape Town; Report of the Inter-governmental Integrated Development Task Team for the Cape Town Functional Region; 2006)

In recent years there has been a resurgence of interest in regional development, both
Globally and in South Africa (see Diagram 2 for a chronology of regional initiatives by national and provincial government). Following a Presidential Imbizo in Cape Town in December 2005 an intergovernmental task team was set-up to align thinking around the Cape Town functional region and its future development. In 2006 the Intergovernmental Integrated Development Task Team gave consideration to a functional region that extended up to 150 kms from the city (i.e. including Saldanha and Worcester). The Task Team’s work was subsequently refined by the OECD in their 2008 Territorial Review.

The Terms of Reference frame the GCM regional study area in terms of the economic, infrastructural, ecological and administrative criteria applied in the OECD’s territorial review. As each of these criteria covers different geographic footprints, the boundaries of the study area were broadly drawn (see Figure 1). The regional study area covers the

---

Figure 1. GCM Study Area (outlined in red) in relation to the Functional Regions (outlined in orange) identified during the 2014 Growth Potential Study

Diagram 3. Conceptual illustration of various functional regions and their interrelationships and overlaps
municipal jurisdictions of Cape Town, Saldanha Bay, Swartland, Drakenstein, Stellenbosch, Breede Valley, Theewaterskloof, and Overstrand.

The study area, referred to hereafter as the Greater Cape Metro (GCM) region, includes the Cape Town and Southern West Coast functional regions as delineated in the 2014 Growth Potential of Towns study, as well as portions of the Breede Valley and Overberg functional regions (see Figure 1). What the Growth Potential of Towns study labeled the Cape Town functional region is referred to in this report as the Cape Metro region. Thus the Greater Cape Metro region extends up to 100 kilometers from Cape Town and includes Saldanha, Worcester, Caledon and Hermanus. The Cape Metro region, on the other hand, extends 50 kilometers from Cape Town and includes the surrounding regional centres of Malmesbury, Paarl/Wellington, and Stellenbosch.

Subsequent to commissioning the GCM regional study, DEA&DP appointed service providers to prepare a RSIF for the Southern West Coast functional region, (renamed Greater Saldanha). As is evident from Diagram 3, there is overlap between the study areas of the two parallel regional planning exercises (i.e. Greater Cape Metro and Greater Saldanha).

1.7. Regional Settlement Morphology

The GCM region has a long history of human occupation spanning the Early Stone Age (700 000 years ago), Middle Stone Age (150 000 – 30 000 years ago) and Later Stone Age (from 25 000 years ago), with communities surviving on its natural resources. During the Later Stone Age people used rock shelters more frequently, coastal groups relied heavily on marine foods, they buried their dead and became skilled in rock painting. About 2000 years ago, Khoekhoe herders moved into the region which they visited seasonally until displaced by early colonial settlement. By the early 18th century, the San hunter-gathers had largely retreated into the higher lying areas.

Since the late 16th century Portuguese, French, Danish, Dutch and English ships regularly stopped over in Table Bay en route to the Indies. The first moves to settle in the Cape, however, were made by the Dutch in 1652, arriving with ships carrying wood for building and some small cannons. The first building to be erected was a small fort at the mouth of the Fresh River - the site where the Grand Parade of Cape Town is located today.

The historic chronological development of the Cape Metro region has since been dominated by early colonial settlement, with the city and its surroundings hosting a wide range of heritage sites and areas of major scenic and historic importance relating to this time period. Settlements located near the base of mountains driven by direct access to water and productive soils of the footslopes. Wine growing areas established on the granites while wheatlands characterised the Malmesbury and Bokkeveld shales.

It is evident that distinctive regional landscape and settlement patterns evolved over time in response to water availability, geology, land form, agricultural soils, marine resources and movement routes, in tandem with social, political, and economic influences.

The following text and accompanying images capture these timeframes in a spatial manner through highlighting key events, impacts and regionally significant settlement patterns.

1. Palaeontological and pre-colonial archaeological periods (5 million to 300 years ago)

The Vredenberg Peninsula (indicated in orange on Figure 2) is of exceptional palaeontological value with the presence of calcareous deposits resulting in a well-preserved fossil record. The West Coast Fossil Park represents a great diversity of 5 million year old fossils. Undeveloped areas along the coastal zone is rich in archaeology with remains occurring within 5km from the coastline typically near rocky shores and promontories (see light blue circles), coastal estuaries (see dark blue circles) and coastal caves. Caves forming part of the Cape Fold Belt often contain archaeological remains including rock art.

2. Early colonial period (1652 - mid 1800s)

17th and 18th century Dutch East India Company (VOC) outposts (indicated as red stars on Figure 3) were scattered across the landscape as well as 17th and 18th century settlements (see red squares). A concentration of 17th and 18th century land grants (seen as grey shaded areas) and early routes to the interior (black arrows) started emerging and characterised the region during this time.

3. Later colonial period (mid 1800s - mid 1900s)

The emergence of mission settlements (indicated in green on Figure 4) started occurring. Agricultural administration centres (shown in purple) as well as church towns (dark blue) and the more speculative towns (pink) and harbour/fishing settlements (light blue) were all established during the 19th and early 20th centuries, when settlement spread through the region and into the inland areas.

4. Apartheid period (mid to late 1900s)

During this period the spatial formation of the City of Cape Town and its sub-regional centres (shown in black circles in Figure 5) were directly impacted by forced removals, racially separated settlement patterns and the creation of dormitory suburbs and towns (such as Atlantis shown in dotted circle). Extensive coastal development also occurred (shown in yellow) especially in sensitive areas high in scenic quality. Today the Cape Metro region’s physical landscape continues to be dominated by Table Mountain and the Cape Peninsula Mountain Chain. The quartzitic sandstone mountains of the Peninsula are a relic outlier of the Cape Fold Mountains, which include the Hottentots Holland Mountains to the east. These peaks and ranges are important for their scenic and tourism value, as well as for their biodiversity, water catchment and recreational significance.
1. Palaeontological & pre-colonial archaeological periods (Sarah Winter, 2016)

2. Early colonial period (Sarah Winter, 2016)

3. Later colonial period - The emergence of settlements during the 19th and early 20th centuries. (Sarah Winter, 2016)

4. Apartheid period (Sarah Winter, 2016)
1.8. RSIF Legislative & Policy Context

Diagram 4 illustrates the legislative and policy framework that informed the RSIF's preparation. Key features of this framework are explained in the sub-sections below.

1.8.1. Legislative Context

New national (i.e. Spatial Planning and Land Use Management Act (SPLUMA, Act 16 of 2013) and provincial (i.e. Land Use Planning Act (LUPA, Act 3 of 2014) spatial planning legislation has introduced a three-sphere system of integrated planning at the national, provincial and local spheres (see Diagram 5). Towards sustainable development and improved service delivery, the system is aimed at facilitating intergovernmental priority setting, and the spatial alignment and coordination of public investment.

DEA&DP commissioned preparation of the RSIF for the Greater Cape Metro as a LUPA Chapter III Part 2 spatial plan (i.e. a provincial regional spatial development framework). LUPA Section 7 (2) states that the purpose of a provincial regional spatial development framework is to:

1. Provide a spatial vision that strives to balance economic, social, and environmental considerations.
2. Promote rational and predictable land use planning.
3. Facilitate the coordination, integration and alignment of provincial and municipal land use planning policy.
4. Address specific economic, social, natural or unique features.

In terms of LUPA Section 3, which sets out the functions of Provincial Government, the Provincial Minister may adopt, amend or review a provincial regional spatial development framework. In addition he/she must monitor provincial land use planning and how it is impacted on by the following matters:

- Disaster management
- Housing;
- Regional planning and development;
- Urban and rural development;
- Provincial tourism;
- Protection of biodiversity, heritage and agricultural resources;
- Main public facilities and services;
- Water and energy services;
- Adaptation to climate change and the mitigation of its impacts;
- Renewable energy production and energy conservation; and
- Economic development.

To inform preparation of a provincial regional spatial development framework an assessment must be made of existing levels of development in the region, and the challenges of provincial land use planning (LUPA Section 7 (3)). In terms of spatial policy, LUPA Section 7(4) stipulates that a provincial regional spatial development framework must be consistent with the PSDF.
Diagram 5. The role of Regional Plans in relation to other local, provincial and national plans and frameworks
1.8.2. Policy Context
1.8.2.1 National Policy Informants

National Development Plan

The National Development Plan’s key objectives to be achieved by the year 2030 are to eliminate income poverty and reduce inequality. The RSIF addresses the following NDP spatial priorities:

i. Urban and Rural Transformation: Spatial transformation is advocated given the enormous costs imposed by existing spatial divides. The NDP recognises that achieving this is a complex long-term process. The NDP’s human settlement targets are: more people living closer to their places of work; better quality public transport; and more jobs in proximity to townships. To achieve these targets it advocates strong measures to prevent further development of housing in marginal places, increased urban densities to support public transport, incentivising economic activity in and adjacent to townships; and engaging the private sector in the gap housing market. The NDP also targets the development of a more inclusive and integrated rural economy. Its rural strategy is based on land reform, agrarian transformation, livelihood and employment creation, and strong environmental safeguards.

ii. Improving Infrastructure: The NDP identifies infrastructure as essential for development and prioritises: upgrading informal settlements on suitably located land; rolling out public transport systems; improving freight logistics; augmenting water supplies; diversifying the energy mix towards gas (i.e. imported liquid natural gas and finding domestic gas reserves) and renewables; and rolling-out broadband access.

iii. Building Environmental Sustainability and Resilience: “South Africa’s primary approach to adapting to climate change is to strengthen the nation’s economic and societal resilience. This includes ensuring that all sectors of society are more resilient to the future impacts of climate-change by: decreasing poverty and inequality; creating employment; increasing levels of education and promoting skills development; improving health care and; maintaining the integrity of ecosystems and the many services that they provide” [NDP 2012, p209]. The long term strategy is to transition to a low carbon economy.

Integrated Urban Development Framework

The 2016 Integrated Urban Development Framework (IUDF) is another key national policy that informed the RSIF’s preparation. The IUDF steers urban growth towards a sustainable model of compact, connected and coordinated towns and cities. The IUDF provides a roadmap to implement the NDP’s vision for spatial transformation – creating liveable, inclusive and resilient towns and cities while reversing apartheid’s spatial legacy.

To achieve this transformative vision, the IUDF sets four strategic goals:

1. Spatial integration - To forge new spatial forms in settlement, transport, social and economic areas.
2. Inclusion and access - To ensure people have access to social and economic services, opportunities and choices.
3. Growth - To harness urban dynamism for inclusive, sustainable economic growth and development.
4. Governance - To enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.

These strategic goals inform the priority objectives of nine policy levers (see Diagram 6), which are premised on the understanding that (1) integrated urban planning forms the basis for achieving integrated urban development, which follows a specific sequence of urban policy actions: (2) integrated transport that informs (3) targeted investments into integrated human settlements, underpinned by (4) integrated infrastructure.
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network systems and (5) efficient land governance, which all together can trigger (6) economic diversification and inclusion, and (7) empowered communities; all of the above will demand effective (8) governance and (9) financial reform to enable and sustain these policy actions.

The IUDF emphasizes improving the planning and implementation of current programmes, as opposed to introducing new interventions. Successful implementation requires a shift from a sectoral approach to one that is driven by a common vision and spatial agenda. In the case of city-regions the IUDF advocates plans to forge a shared vision and spatial agenda. Provincial government, specifically the Office of the Premier, is targeted with the responsibility of facilitating collaborative planning and intergovernmental delivery. The RSIF for the GCM region has been prepared in accordance with this mandate.

1.8.2.2 Provincial Policy Informants

Provincial Strategic Plan

The RSIF builds-on the Provincial Strategic Plan (PSP 2015) and gives regional expression to achieving the Western Cape’s Provincial Strategic Goals (PSGs), namely:

PSG 1: Create opportunities for growth and jobs.
PSG 2: Improve educational outcomes and opportunities for youth development.
PSG 3: Increase wellness, safety and tackle social ills.
PSG 4: Enable a resilient, sustainable, quality and inclusive living environment.
PSG 5: Embed good governance and integrated service delivery through partnerships and spatial alignment.

The PSP gives highest priority over the next five years to economic growth and job creation (i.e. PSG1). The RSIF is a planning and budgeting guide towards the achievement of PSG5 with regard to spatial alignment. Its proposals focus on opening-up opportunities in the regional space-economy (PSG1) and improving living conditions (PSG4) in the GCM region.

Provincial Spatial Development Framework

The Provincial Spatial Development Framework (PSDF 2014) gives spatial expression to the PSP and takes the Western Cape on a path towards:

- More inclusivity, productivity, competitiveness and opportunities in its urban and rural space-economies;
- Better protection of its “place-based” (i.e. spatial) assets;
- Strengthened resilience of its natural and built environments; and
- Improved effectiveness in spatial governance and on-the-ground delivery of public services, facilities and amenities.

The PSDF gives priority to bolstering the spatial performance of the GCM region, and to this end recommended preparation of this RSIF.

Western Cape Infrastructure Framework

The RSIF also builds-on the Western Cape Infrastructure Framework (WCIF 2013), a long-term strategic framework that sets out the required changes and development agendas relating to infrastructure provision. Given the sector-based and institutionally fragmented history of infrastructure planning, the WCIF defines a new approach to coordinated and strategic infrastructure planning.

The WCIF quantifies the scale and nature of the infrastructure requirements, how and where infrastructure provision needs to evolve to satisfy a new agenda in a changing world, and who will be responsible. The framework also sets out high-level transitions required to achieve the Western Cape’s development agenda, and differentiates between sub-infrastructure sectors.

The RSIF explores the regional implications of taking forward this agenda for optimizing and aligning of Provincial planning policies with infrastructure delivery.

Provincial Land Transport Framework

The draft Provincial Land Transport Framework (PLTF 2016), which is aligned with the PSP, PSDF and WCIF, provides the transport and freight policy context for the RSIF’s preparation. The PLTF’s goals are to:

- establish and operationalize a Provincial Transport Management Forum to coordinate trans-modal and transversal transport access;
- develop a safety and security plan for rail, road and non-motorised transport;
- promote integrated transport systems;
- develop transport plans that respond to the Western Cape’s rural challenges;
- develop trans-modal strategies to improve economic efficiency; and
- roll-out the PLTF to all transport entities and optimize funding.

Western Cape Human Settlement Framework

Recognising that the current human settlement paradigm is not working, the Department of Human Settlements are currently finalising the Western Cape’s first long term human settlement strategy. The Human Settlement Framework clarifies roles and responsibilities, forges a shared vision, and defines implementable delivery programmes. The following strategic transformations are strived for:

- from the provision of houses to the development of sustainable human settlements;
- from low value production to realizing urban dividends; and
- from the state as provider to the state as infrastructure provider and enabler of housing.
The RSIF explores the regional implications of this new strategic direction.

**Western Cape Climate Change Response Strategy**

The Western Cape Climate Change Response Strategy (WCCCRS 2014) is a coordinated climate change response for the Western Cape Province aimed to guide the collective implementation of mitigation and adaptation response actions. The Strategy prioritises the following climate change adaptation outcomes for the Western Cape Province:

- well-managed natural systems that reduce climate vulnerability and improve resilience to climate change impacts;
- significantly increased climate resilience and coping capacity within communities which reduces climate-related vulnerabilities; and
- an actively adaptive and climate change resilient economy which unlocks new markets and economic growth opportunities arising out of climate change.

In order to give effect to these outcomes, the Strategy prioritises the following actions:

- recognition and prioritisation of scaled and unprecedented climate response mechanisms as an integral component of provincial transversal growth and development programmes;
- institutionalisation of and mainstreaming climate change response into government and other stakeholder structures, strategic plans and action plans; and
- ongoing collaborative research in order to:
  - monitor changing conditions and provide and improve implementable local climate solutions;
  - develop innovative ways, funding mechanisms and partnerships to effectively and pro-actively respond to changing climatic conditions; and
  - better understand the complexities inherent in these conditions.

1.8.2.3 Municipal Policy Informants

The December 2015 GCM RSIF Baseline Status Quo report presented a contextual analysis of the municipalities that make up the GCM. The SDFs of these municipalities, which are aligned with the PSDF, provide local spatial policy informants to the RSIF. Whereas regional planning is a concurrent national and provincial competency, municipal planning is the exclusive responsibility of local government.

The RSIF’s primary focus is on spatial considerations that cut-across local authority boundaries. The trans-boundary regional spatial agenda was determined by engaging individually and collectively with all GCM municipalities. As such the RSIF complements municipal planning by framing the regional context of municipal SDFs.

1.9. **Purpose of Regional Spatial Investment Framework**

Municipal IDPs are meant to encapsulate the development programmes of all government spheres and SOEs. The NDP Diagnostic Report found that IDPs have not managed to achieve this objective, notwithstanding the interdependence and interrelatedness of the three spheres of government. The IUDF established that the misalignment of public investment is most acute in city-regions as they transcend municipal jurisdictions.

It is within this inter-municipal space of functional regions that the RSIF has its purpose. It fits in between the PSDF and Municipal SDFs (see Diagram 5). It serves to frame the inter-municipal (i.e. regional) spatial agenda, as input to municipal planning as well as the strategic plans of provincial and national government, and SOEs.
1.10. Principles and Conceptual Approach

1.10.1. Founding Principles

Drawing on the legislative and policy informants outlined above, the RSIF’s preparation was founded on the following spatial principles (see Diagram 8):

1. **Spatial Justice**: A socially just society is one that embraces the qualities of equity, unity and inclusion. Whilst equal opportunity targets everyone in the community, social justice targets marginalised and disadvantaged groups. Inclusionary settlements focus on the public realm rather than on private enclaves; support civic interaction and equitable access throughout the public environment; and make urban opportunities accessible to all – especially the poor. Spatial justice must create a safe and welcoming space for all, and not expose people to natural or health risks through their spatial location. Inclusionary economies have low barriers to entry, do not discriminate between the formal and informal sectors, and take active measures to empower those previously restricted in their access to the means of production. Past spatial imbalances are redressed by improving access to, and use of, land.

2. **Spatial Sustainability**: Land development should be spatially compact, resource-frugal, compatible with cultural and scenic landscapes, avoid alienating productive landscapes, and not compromise the functionality of ecosystems.

3. **Spatial Resilience**: Resilience is about reducing risk through advance planning, the capacity of regions to withstand shocks and disturbances such as climate change or economic crises, and to use such events to catalyse renewal, novelty and innovation. The focus is on creating complex, diverse and resilient spatial systems that are sustainable in all contexts.

4. **Spatial Efficiency**: Efficiency relates to the form of regional settlements and use of resources - compaction as opposed to sprawl; mixed-use as opposed to mono-functional land uses; residential areas close to work opportunities as opposed to dormitory settlement; and prioritisation of public transport over private cars. When a settlement is compact, higher densities provide thresholds to support viable public transport, reduce overall energy use, and lower user costs as travel distances are shorter and cheaper. Spatially efficient economies are more productive as they minimise business transaction costs and maximise outputs. Spatially compact city-regions provide for the fluid exchange of ideas, goods and services, which establishes an enabling environment for businesses and households to operate in.

5. **Spatial Governance**: Effective governance of city-regions is based on collaboration and coordination, integration and alignment, and transparency. Planning is evidenced based, informs the budgeting process, and spatial targets are incorporated into public investment programmes.

1.10.2. Conceptual Approach

Taking these principles as points of departure, the approach to the RSIF’s preparation was informed by the following lessons learnt from international experience in the development of city-regions (OECD, 2009):

- To promote regional growth “policy-makers should develop a comprehensive regional policy that not only links regions through infrastructure investments, but that also fosters human capital formation and facilitates the process of innovation” (OECD, 2009, What makes Regions Grow?).
- Greater growth occurs when regions are able to mobilise their own local assets and resources, rather than depending on support from national government.
- Provincial government has an important role to play in promoting economic development, but it needs to complement the market and foster decentralised economic activities.
- Where the capacity exists, local governments should drive their own development process.

The RSIF agenda lies in the nexus of people, place and economy (see Diagram 7).

To make sense of the complex interrelationships between people, place and economy, a conceptual framework was developed for functional economic regions (see Diagram 9). The framework is an adaption of the conceptual approaches of the OECD (What makes Regions Grow? 2009) and the Brookings Institute’s Metropolitan Policy Program (2015).

The conceptual framework was used as basis for:

- contextualizing the GCM functional region;
- undertaking an analysis of its spatial performance;
- assessing if current policy interventions are helping;
Diagram 8. Linking national and provincial principles, illustrating correlation and consistency throughout to ensure alignment of approach.
Diagram 9. Functional economic regions: the conceptual framework (adapted from OECD & Brookings Institute)
exploring a vision and specifying the spatial outcomes to be achieved over the next 10 to 20 years; and

formulating a spatial framework for the region’s development and management.

The conceptual framework distinguishes between the ‘drivers’ of competitive city-regions (i.e. economic activity, innovation and entrepreneurship, and human capital and talent) and the ‘enablers’ (i.e. infrastructure and connectivity, and governance and management). The spatial outcomes of these drivers and enablers are the region’s space-economy and settlements. These concepts are explained and applied in the balance of this report.

1.11. This Report

Diagram 10 illustrates how this report has been structured. Following-on from the introduction, Section 2 frames the regional agenda by: contextualising the GCM region; assessing the challenges it faces; setting goals and objectives; formulating a vision and spatial development concept; and outlining the GCM’s new spatial agenda. Section 3 presents the regional spatial framework for the implementation of this agenda, with respect to the: Regional-space Economy; Regional Settlement; Infrastructure delivery; and Regional Management. Section 4, which concludes the report, sets-out implementation arrangements.


2. Framing the Regional Spatial Agenda

This section explores key considerations in drawing-up the spatial agenda for the GCM region. The section draws on the findings of the December 2015 GCM Baseline Status Quo Report, details of which are not repeated here. It also builds on the interpretation of the RSIF’s terms of reference and conceptual approach taken, as presented in Section 1.

Towards framing of a regional spatial agenda the following topics are covered:

- The GCM region is contextualised from global, national and provincial perspectives (2.1)
- Key spatial challenges that the region faces are unpacked (2.2)
- The spatial goals and objectives strived for are specified, and the spatial principles underpinning the RSIF are explained (2.3)
- The spatial vision aspired to is described, and the regional spatial development concept is presented (2.4)
- Finally the regional spatial agenda is set out (2.5)

2.1. Development Context

2.1.1. Global

“For those places that can offer competitive environments that allow firms and people to successfully plug-in to the global economy, the returns are high”.

(South Africa’s Global Gateways; The Brookings Institution Metropolitan Policy Program, 2015)

2.1.1.1 Global Significance

The GCM region is strategically located in the global space-economy. In terms of international trade, its origins were as a replenishment station for European seafarers exploring new routes to the east. Dutch and English colonial powers fought over occupation of the Cape, given its importance as the southern hemisphere gateway to east-west trading routes.

Notwithstanding the opening of the Suez Canal, the Cape’s global gateway status has not diminished in the post-colonial era. GCM businesses operate in the same time zone as Europe, the region’s largest export market. The region is well positioned for future trade with South Africa’s new economic alliance partners, the so-called BRIC nations, particularly Brazil. The GCM region is also a gateway to African markets.

In terms of its niche positioning in the global economy, the GCM’s regional comparative advantage lies in the following sectors:

- Tourism: Whilst Cape Town is the iconic global ‘brand’, the GCM’s natural, scenic and heritage attractions are what makes the region a sought-after international tourism destination (PERO 2015). What gives the region a comparative advantage is that it has world-class tourism assets (i.e. World Heritage Sites and Landscapes, global biodiversity hotspot, and one of the scenic wonders of the world). These assets, a moderate climate and a favourable exchange rate have contributed...
to the GCM region emerging as a preferred venue for the shooting of international films and advertisements.

- Food & Beverages: The GCM region is one of the world’s leading fruit export regions. The region also specializes in processing its agricultural outputs into food and beverage products that are sold on national and international markets. As the linkages between the region’s food, wine, tourism and hospitality industries have strengthened, the GCM has gained international recognition for its gastronomy.

- Education & Academic Research: On account of its quality universities and their teaching and research programmes, the GCM region is the intellectual hub of sub-Saharan Africa. The region ranks top amongst global peers in terms of its share of publications in the top 10% most cited papers [Brookings Institution, 2015].

2.1.1.2 Global Connections

Key regional infrastructure connecting the GCM to global markets includes:

**Ports of Cape Town and Saldanha:**

From its ports, which compete with the ports of Walvis Bay and Luanda, the GCM region trades with countries along the west coast of Africa. Its ports are well located to service the oil and gas offshore extraction industry operating in the southern Atlantic Ocean.

In terms of global competitiveness, according to the Ports Regulator South Africa’s port charges are expensive by international standards (Business Day, 8 July 2016). Port terminal handling charges in 2015-16 were reportedly 56% above the global average. Charges for container handling, which in the GCM takes place primarily at Cape Town port, were 267% above the global average. On the other hand the handling charges for iron-ore export and crude oil imports, which in the GCM takes place exclusively through Saldanha port, were lower than global averages. Transnet National Ports Authority’s (TNPA) capital development programme provides for upgrading and expanding the region’s ports.

**Cape Town International Airport (CTIA):**

Whilst OR Tambo International Airport (ORTIA) is the country’s global passenger and air-freight hub, CTIA is the fastest growing in passenger usage (i.e. 10% growth in Airports Company of South Africa’s (ACSA) 2015/16 financial year, comprising just short of 10 million passengers). It is Africa’s third busiest passenger airport and winner of most awards on the continent. Currently only 35% of arriving international visitors fly directly into CTIA, but ACSA and the Western Cape Provincial Government are actively promoting more direct flights. To leverage off the business opportunities associated with the global aviation gateway to the GCM region, ACSA is developing CTIA to be a catalyst for economic growth in the region and is eliciting the support of stakeholders for the development of a Cape Town aerotropolis.

**Road and Rail Linkages into Africa:**

The N7, which is currently being upgraded within the GCM, is the region’s principal road trade route to Namibia and markets further north. The N1 road and rail freight routes through Gauteng provide access to markets in the SADC region.

1 An aerotropolis is a metropolitan subregion where the layout, infrastructure, and economy are centered on an airport which serves as a multimodal “airport city” commercial core.

**Information and Communication Linkages:**

Southern Africa is linked to the digital world through undersea cables that land at Melkbostrand and Yzerfontein (see Figure 8). As part of its strategy to develop the GCM region as a global technology hub, the Western Cape Provincial Government are investing in the establishment of a high performance facility to process and store data emanating from the Square Kilometer Array (SKA) international project. This facility is known as the Cape Big Data Facility and the cost of its...
development is estimated at R453 million. Analysts forecast that when the SKA radio telescope is operational in 2020 it could generate more data per day than the internet (Business Day Live, 23 May 2016).

### 2.1.1.3 Global Forces

City-regions need to adapt to continuously changing global forces, thus the need to understand and enhance their economic competitiveness and connections. Whilst there is no certainty as to the outcome of the current fluidity in global markets, the future spatial development of the GCM region will be influenced by the following trends:

#### Globalization:

The forces of globalization are intensifying, although some commentators interpret the outcome of the Brexit referendum and the election of Donald Trump as president of the United States as signs of ‘push-back’ by British and USA voters. Intensifying globalization and the growth of international trade are inextricably linked. Spatial disparities between and within city-regions are one of the consequences of the increased mobility and openness of the global economy. Income inequality inhibits broadly shared growth and reduces the durability of economic growth (Brookings Institution, 2015).

Global trade is an important driver of the GCM’s prosperity and competitiveness as a result of the multiplier impact that trade has on the region’s economy. The GCM’s traditional trade links with European markets are not under threat, notwithstanding current depressed market conditions. New south-south trading blocks (e.g. BRICS) are emerging and could strengthen in future, as is the case with trade links with African markets. The functionality and capacity of the GCM’s global connections (e.g. sea and air ports) will be key to realizing these new economic opportunities.

#### Economic Stagnation & Depressed Commodities Markets:

Markets are currently depressed across the world and there are no clear indications that the downturn in the economic cycle may be bottoming out. With the slowdown in growth of the Chinese economy, the price of commodities has tumbled. As South Africa is a commodity-based economy, the overall impact has been negative. The volume of iron-ore exports from Saldanha has declined and, as is the case with steel producers around the world, the sustainability of the Saldanha steel plant is under threat (Sunday Times Business, 7 February 2016).

Operation Phakisa’s strategy to develop Saldanha into an industrial hub servicing the international oil and gas industry was formulated when the price of crude oil was over $100 per barrel. If the current lower prices per barrel endure, the nascent Saldanha oil and gas hub may take longer to realize than envisaged (MERO 2016). Crude oil imports and storage in Saldanha are unlikely to be negatively impacted on, but the forecast energy transition from oil to liquid natural gas (LNG) may also be delayed, or not take place if the cost of renewable sources continues to decline and the capacity to store renewables increases.
Technological Revolution:

Technological advancements, also referred to as the 4th Industrial Revolution, are rapidly changing how economies across the globe produce and distribute goods and services, and how they communicate. Technological innovation is also radically changing how and where work takes place. Overall its impact on regional space-economies is significant, particularly with respect to information and communication technologies as well as transport (e.g. self-drive vehicles).

The ‘internet of things’ is mooted to be a new ‘disrupter’ that will allow for new forms of connectivity and functionality between geographically remote devices, vehicles, infrastructure and production units. The fundamental risk associated with the technological revolution relates to the displacement of traditional jobs. For those with the necessary skills, however, there is a range of new income earning opportunities on the horizon.

Climate Change:

Changes to both weather patterns and long-term climate will induce changes to how land can be used across the globe, and how exposed economic activities and people will be to climate and weather related risks. The global response is the pursuit of economic, social and environmental strategies that reduce greenhouse gas emissions, build resilience and respond to the inevitable effects of altered climatic patterns. City-regions are emerging as the geographic focus of these efforts due to the inherent concentration of people and capital, and the associated elevated exposure, sensitivity and anthropogenic air pollution.

Urbanization:

The continued shift of people to towns and cities in search of better livelihood opportunities is changing the geography of growth and economic activity around the world. City-regions, the engines of the global economy, are at the forefront of these shifts.
in settlement patterns. Besides presenting more income earning prospects, the GCM’s unique lifestyle offering makes it an attractive destination to move to.

2.1.2. National Context

2.1.2.1 Regional Performance Indicators

Built on a mining legacy, the Gauteng city-region is the country’s economic powerhouse that generates approximately one-third of economic activity. The GCM region is the country’s secondary economic hub, contributing some 12% of GDP. Whilst the Gauteng and GCM regions compete for investment, there are functional differences in their local economies.

In terms of the drivers and enablers of competitive economic regions (see conceptual framework Section 1.10), indicators of the GCM’s positioning, performance and prospects in the national economy are presented below.

Economic Activity, Trade & Investment:

Between 2003 and 2013 economic growth in Gauteng and GCM regions averaged approximately 3.4% per annum, consistently outpacing the rest of the country and demonstrating that their economies of scale give them a comparative advantage in expanding economic opportunities (MERO 2015).

Economic growth across the country has rapidly tapered-off, with South Africa technically now in a recession given two quarters of declining economic growth. Statistics SA’s Labour Force Survey for the first quarter of 2016 indicates that all metros recorded job losses, with the exception of Cape Town and Nelson Mandela Bay where marginal increases were recorded (Business Day Live, 9 May 2016). The growth prospects for 2017 are not promising, with the International Monetary Fund forecasting a 0.1% economic growth rate for the country.

With global markets under pressure, South African trade is also in the doldrums with all freight indicators trending negative. Road and rail freight volumes are down, port break bulk volume had the largest drop ever recorded as a result of the slump in commodities markets, and container volume has declined by 15.3% over the last year (Moneyweb, 26 April 2016).

In 2015 foreign direct investment (FDI) into South Africa plunged to US$ 1.8 billion, a drop of 69% and the lowest achieved in a decade (BizNews.com, 14 July 2016). Gauteng attracts three times more FDI than Cape Town metro (The Brookings Institution, 2015). Compared to 8 global city-region peers surveyed, the Brookings Institution found that Cape Town attracted the highest share of FDI in value-added industries (e.g. communications, software, information technology).

Innovation and Entrepreneurship:

Whilst Gauteng outstrips Cape Town in terms of the number of patents registered, Cape Town ranks higher than Gauteng in terms of patents registered per worker (The Brookings Institution, 2015). The Brookings Institution’s survey also showed a significantly higher level of entrepreneurial activity in Gauteng, but that venture capital investment per capita in Cape Town is nine times that of Gauteng.

Human Capital & Talent:

In both Gauteng and Cape Town demographic growth and in-migration add to those in the economically active age cohort. On the demand side the slowdown in the economy has lead to low negative worker absorption rates. As a result unemployment is extensive in both Gauteng and Cape Town, especially amongst the youth (i.e. those leaving school or tertiary education and training facilities).

On the supply side there is a mismatch between the skill levels of those seeking employment, and the skill-sets needed by industry and commerce. Whilst the workforce in Gauteng and Cape Town have similar tertiary education levels (i.e. some 16% have a tertiary qualification), there are significant educational achievement gaps between racial groups, notwithstanding that these gaps are closing (The Brookings Institution, 2015).

Infrastructure & Connectivity:

Accommodating South Africa’s passenger air and freight hub, the Gauteng city-region has a comparative advantage over the GCM region. The proximity of Durban port to Gauteng makes it the country’s maritime freight and cargo hub. As a result the Gauteng – eThekwini corridor is the primary national corridor and country’s busiest freight route.

National freight flows reflect the economic linkages between regions (see Figure 9). The GCM region’s national competitiveness is constrained by its distance from the country’s economic heartland, which inflates transport costs. Three main corridors connect the GCM to national markets (Havenga JH, et al, 2015), namely:

- the N1 corridor to Gauteng along which 50% of the 85 million Western Cape freight tonnes flow annually, predominantly by road and comprising mainly fast moving consumer goods (FMCG - the bulk of which is processed foods), beverages, and other agriculture;
- the N2 corridor to the Eastern Cape along which 15% of Western Cape freight tonnes flow, predominantly by road; and
- the N7 corridor to the Northern Cape and Namibia along which 10% of the Western Cape freight tonnes flow, again predominantly by road.

The remaining 25% of Western Cape freight flows are along rural routes and the GCM’s road network.

Notwithstanding national policy to shift freight transport from road to rail, “the steady decline of rail market share on all three corridors over the past decade is alarming” (Havenga JH, et al,
Overall only 7.9% of freight movement in the Western Cape is by rail (draft PLTF, 2016). Excluded from these Western Cape freight flows are the 56.1 tonnes of iron-ore conveyed by rail from Northern Cape mines to the port of Saldanha.

**Governance:**

In terms of governance the Gauteng city-region has a comparative advantage over the GCM region, as the area of jurisdiction of its provincial government correlates relatively closely with the geographic extent of its functional economic region. Jurisdictionally the GCM context is a lot more complex. Notwithstanding the 2008 OECD territorial review’s recommendation that priority be given to strengthening governance arrangements in the GCM functional economic region, to date little progress has been made on this score.

2.1.2.2 **National Development Initiatives**

“National spatial policy needs to support the major centres of competitiveness where jobs can be most efficiently produced” (National Development Plan, 2012, p 278).

**National Development Plan**

In the context of the national space-economy (see Figure 10) the NDP targets the GCM region as a ‘node of competitiveness’ that has the potential for higher growth. Unlocking the region’s potential for higher economic growth forms part of the GCM spatial agenda.

The NDP also identifies the Western Cape’s biodiversity assets as a ‘resource critical region’ that is vital for the provision of ecosystem services, underpins economic activity, and requires specific policies to ensure their sustainable use. The application of specific policies for the sustainable use of biodiversity assets also forms part of the GCM region’s spatial agenda.

**Special Economic Zones**

To achieve the NDP’s spatial policy objectives the Department of Trade and Industry (DTI) introduced legislation for the promulgation of Special Economic Zones (SEZ). A SEZ is a geographically designated area set aside for specifically targeted economic activities, supported through special arrangements (e.g., tax incentives) and systems different to those applied in the rest of the country (GreenCape, 2014).

Following the NDP’s identification of Saldanha Bay and environs as a ‘growth management zone’ where special interventions are justified on account of its resource-related port and industrial development prospects, DTI designated the Saldanha Bay Industrial Development Zone (SBIDZ). The SBIDZ is a specific type of SEZ that is targeted at servicing the oil and gas industry.

In June 2018 the Department of Trade and Industry (DTI) confirmed the designation of the Atlantis Special Economic Zone (ASEZ). The designation sees the entire Atlantis Industrial area being declared a Special ‘Green-tech’ Economic Zone. The Atlantis SEZ capitalises on the province’s already booming renewable energy and green technology
sector. It supports the manufacturing sector to become suppliers and component manufacturers for the renewable energy sector. In particular, independent power producers in the government’s Renewable Energy Independent Power Producers Programme (REIPPPP) benefit from this. The ASEZ has already attracted investments of R680 million.

**National Infrastructure Plan**

Towards implementation of the NDP the National Infrastructure Plan (NIP, 2012) incorporates the following Strategic Infrastructure Projects (SIPs) that need to be factored into the GCM regional spatial agenda:

- SIP 5: The development of the Saldanha Bay--Northern Cape corridor through rail and port expansion, increasing back-of-port industrial capacity by the development of the SBiDZ for minerals beneficiation and servicing the maritime oil and gas industry.
- SIP 7: Integrated urban space and public transport programme, which is currently being rolled-out in Cape Town and could be extended into the GCM’s other regional centres.
- SIP 8: Support to sustainable green energy initiatives (region wide)
- SIP 11: Development of agricultural infrastructure and logistics (region wide)
- SIP 12: Provision of social infrastructure, including revitalization of public hospitals and facilities (region wide)
- SIP 15: Rolling-out broadband coverage to all households by 2020 (region wide)
- SIP 16: Square Kilometre Array & Meerkat, whose data processing facilities are earmarked for the GCM region
- SIP 18: Upgrading of water and sanitation infrastructure (region wide)

**Operation Phakisa**

Operation Phakisa, which was launched in 2014 as one of the measures taken to implement the NDP, is a national development programme under the auspices of the National Department of Environmental Affairs. It focuses on unlocking the economic potential of South Africa’s oceans. The programme has four components, all of which have relevance to the GCM region’s spatial agenda:

- Marine transportation and manufacturing
- Offshore oil and gas
- Fisheries and aquaculture
- Marine protection services

**2.1.2.3 Key National Issues**

South Africa is a small open economy and we are impacted by events in the global economy. World growth is now expected to slow, constraining South Africa’s export growth forecast. These macroeconomic conditions have led to a weaker economic outlook which will impact on government expenditure. Our determination to regain our fiscal prudence will form the basis of our economic recovery in the coming years. (Finance Minister Tito Mboweni, Budget Speech 2019)

The following national considerations have a bearing on the framing of the GCM regional spatial agenda:

**Fiscal Consolidation**

As a resource-based developing economy whose currency is widely traded on foreign exchange markets, South Africa’s economic prospects are closely tied to global forces. As there are no signs of an imminent recovery in world markets, in the short to medium term this will impact negatively on the domestic economy, trade and investment. In a climate of low or stagnant economic growth it will be difficult to reduce high unemployment levels and increase government revenue.

Compounding the situation is the downgrading of the country’s investment rating to ‘junk status’ by the international ratings agencies. The downgrading will raise borrowing costs, increase interest expenses, and constrain capital investment by the public and private sectors. Fiscal consolidation measures are likely to prevail until there is an upturn in the domestic economy, or if the economy remains in the doldrums austerity measures may be introduced. In either scenario state subsidisation of the built environment will in all probability be curtailed, and more public-private partnerships are likely.

**Drought**

Whilst the drought has been broken in the rest of the country, the Western Cape remains drought stricken with dam levels in the GCM region well below historic norms. The GCM is heavily dependent on water in its economy, not only in relation to agriculture but regarding all sectors as well as food security.

Sharing common surface water sources, there is competition between the region’s domestic and business water users. There are also trade-offs between allocating water to new (e.g., Saldanha) or established (e.g., Cape Town) development areas. Water emerges as a key national and regional development consideration. Water security and climate change resilience are thus key considerations on the region’s spatial agenda.

**Energy Transitions & Uncertainties**

The energy sector in South Africa is undergoing fundamental change. Despite long periods without load-shedding, there are still capacity constraints in the country’s baseload electricity supply. This impacts negatively on the national economy, and remains a constraint to future growth. Reduced energy demand is ascribed more to the slow down in the economy than improved energy efficiency.

Uncertainty remains over the country’s future energy mix. In terms of international climate change
agreements, the country is committed to reducing carbon emissions. Renewable energy sources are established as an important and growing segment of the market. There is no finality over the country’s proposed nuclear build programme or its financing. The significant drop in the price of oil and gas has disrupted plans to transition from oil to liquid natural gas (LNG), and raised questions over the prospects of shale gas extraction in the Karoo basin.

Regionalism

Both national and provincial government are giving priority to unlocking the potential of city-regions, the engines of economic growth. The IUDF highlights the importance of collaborative approaches to regional development, recognizing the complexity of overlapping statutory jurisdictions.

2.1.3. Provincial Context

2.1.3.1 Provincial Role

Accommodating the overwhelming majority of the provincial population (i.e. 81% or some 4.71m people in 2011) and as the ‘engine’ that drives the provincial economy (i.e. generating approximately 85% of real value added), the GCM region dominates the Western Cape space-economy.

On account of the range of income earning opportunities the GCM offers, there is migration into the region from the rest of the Western Cape (66%), the Eastern Cape (12%), outside South Africa (8%), Gauteng (5%) and the rest of the country (Census 2011). As a result between 2001 and 2011 the region’s population grew faster than the rest of the province. It is forecast to continue to do so, albeit at a slower rate, according to official provincial population projections (PWC, 2014).

As previously noted, between 2001 and 2011 regional economic growth outpaced population growth, thereby providing a basis for improving standards of living in the GCM. With the recent slowdown in the economy, however, the short-term population growth is likely to outpace economic growth.

Irrespective of short-term trends, medium to longer-term provincial forecasts indicate that the economic and demographic primacy of the GCM region will endure.

2.1.3.2 Provincial Development Initiatives

The Provincial Strategic Plan (PSP, 2014 - 2019) sets out the initiatives being undertaken to deliver on the Provincial Strategic Goals (PSGs) presented in Section 1. The PSDF sets the spatial framework within which the PSP is being implemented. This RSIF, which refines the PSDF, focuses on putting in place a spatial framework for opening-up opportunities for growth and jobs (i.e. PSG 1) and improving living conditions (i.e. PSG 4) within the GCM region.

The PSDF’s strategy for the development of the Western Cape space-economy (see Figure 11) has four key components:

Figure 11. Western Cape Province - Space-Economy Synthesised and Consolidated Framework (Adapted from PSDF, 2014)
i. Reinforcing the performance of the province’s economic growth engine (i.e. Cape Metro region);

ii. Unlocking the potential of emerging regional industrial nodes in the West Coast (i.e. Saldanha/Vredenburg and environs) and the Southern Cape (i.e. Mossel Bay/George and environs);

iii. Strengthening the Overstrand and Garden Route coastal belts as leisure, lifestyle, holiday and retirement regions; and

iv. Intensifying rural development along the upper Breede River and lower Olifants River corridors.

As is evident from Figure 11, elements of all four of the provincial spatial development strategies are being implemented within the GCM region. As a result these urban and rural programmes need to form part of the regional spatial agenda.

Project Khulisa is the central thrust of the Western Cape Government’s economic development strategy. Khulisa Phase 1 runs from 2015 to 2019 and focuses on what government and the private sector can do together to improve economic growth and job creation in the tourism, agri-processing, and oil and gas industries.

A Special Purpose Vehicle (SPV) programme has been initiated to facilitate public-private partnerships in priority industrial sectors. These SPVs include: Business Process enabling South Africa and call centres; GreenCape, supporting the green economy and renewable energy sector; the Southern African Oil and Gas Alliance, for the upstream oil and gas servicing sector; and the Cape Innovation & Technology Initiative (CITI), targeted at developing globally competitive tech and innovation solutions (Accelerate Cape Town, 2014).

Tourism is a vital sector in the Western Cape economy contributing R17 billion in 2013 and supporting 204 000 formal jobs (many of these medium to low skilled jobs). Project Khulisa is being rolled-out to grow and share tourism opportunities in the Western Cape. The GCM region, as premier tourist destination, is the market with the greatest potential. Wesgro are targeting development of regional markets by streamlining tourism marketing and development activities, and generating additional revenue for businesses and municipalities. Project Khulisa’s tourism development initiatives include developing cultural and heritage tourism, niche marketing, and marketing the region as an all-year round destination. As the GCM is the country’s premier visitor destination, managing and developing its tourism assets forms part of the regional spatial agenda.

Agri-processing is Project Khulisa’s second pillar. Notwithstanding that the Western Cape is a services based economy (i.e. the tertiary sector is the largest contributor to GDP), the agricultural sector remains its ‘backbone’ (PERO, 2015). The Western Cape agricultural sector contributes 23 per cent of value added nationally (R14.7 billion of R64 billion). Agricultural value chains permeate the provincial economy (i.e. backward and forward linkages), particularly in the GCM region. Project Khulisa leverages off the comparative advantage that the Western Cape has by targeting the further development of agri-processing. As the GCM region is the source of most agricultural products, and where they are processed, packed and distributed, this is an important consideration on the regional spatial agenda.

The third pillar of Project Khulisa is to promote the Western Cape oil and gas industry, spatially targeted in Mossel Bay and Saldanha Bay. This sector generated 35 000 formal jobs in 2013 (PERO, 2014), and has been identified as a sector in which further jobs can be created for artisans in midstream services such as rig repair. In the GMC context Project Khulisa sets out to facilitate implementation of SIP 5 (i.e. development of port of Saldanha, SBIDZ and associated local and regional economic infrastructure), upgrade the local skills base (i.e. PSG 2), provide facilities and services for the wellness and safety of the community (i.e. PSG 3), and enable sustainable, resilient, and inclusive living environments (i.e. PSG 4).

In accordance with PSG 5 (i.e. cooperative governance and integrated service delivery through partnerships and spatial alignment), the Western Cape Government has commissioned a parallel RSIF process focusing on greater Saldanha. It is also supporting the municipality with the preparation of its new IDP and SDF. Part of the GCM spatial agenda is exploring functional linkages between Saldanha and the Cape Metro.

2.1.3.3 Key Provincial Issues

Provincial considerations that need to be factored into the GCM regional spatial agenda stem from the functions of Provincial Government as specified in Section 3(5) of LUPA. As Municipal Planning is the exclusive responsibility of local government, the regional spatial agenda needs to focus on matters that cut-across municipal boundaries.

This section has flagged a number of provincial economic development, and urban and rural development initiatives as being of regional significance. At the RSIF Focus Group workshops GCM municipalities identified the following additional considerations that need to be factored into the regional spatial agenda:

i. Management of regional risks and disasters, including climate change mitigation and adaptation.

ii. Protection of the region’s biodiversity, heritage, scenic, and agricultural assets.
iii. Provision of essential regional utilities (i.e. water, energy, sanitation, waste, information and communications technology) and transport networks.

iv. Regional data research to establish a baseline for evidence based planning and monitoring progress in achieving the desired spatial outcomes.

2.2. **Spatial Challenges**

“The challenge is not to reinvent the NDP but to be decisive about what we should stop doing”

(Ex Finance Minister Pravin Gordon address to KZN Institute for Architecture conference – ‘Calling for a national spatial revolution’, 8 July 2016)

The spatial challenges facing the GCM region have long been recognized, but so far limited progress has been made in addressing them. The territorial review undertaken by the OECD in 2008 was insightful. It provided compelling evidence that the spatial structure of the GCM region inhibits its competitiveness. The review identified the following structural deficiencies:

- pervasiveness of socio-spatial segregation,
- sprawling and low-density multi-nodal network of settlements,
- mismatches between where people live and work,
- isolated concentrations of poverty severed from economic opportunities, and
- under-investment in public transport and freight infrastructure, making the region inaccessible to most residents and inefficient for business to operate in.

The OECD acknowledged that the spatial legacy of ‘separate development’ reinforced these structural weaknesses, but found that since 1994 “Apartheid’s land use framework continues to shape urban planning…” (OECD, 2008). By continuing to locate poorer communities of the outskirts of the city and towns, the spatial dynamics of economic exclusion have been reinforced (E Pieterse, 2008).

The OECD highlighted that the region’s spatial growth trajectory was unsustainable, particularly with regard to its large ecological footprint and its vulnerability to escalating risks (i.e. air pollution, flooding, fires). These detract from environmental health, and compromise the region’s comparative advantage in the agricultural and tourism sectors.
BOX 1: REGIONAL SPATIAL TRANSFORMATION: PROGRESS SINCE 2008

1. Household incomes have increased, levels of poverty have declined, and the level of service delivery to households has improved (State of South African Cities Report, 2016).

2. Land use and planning legislation emanating from the Apartheid era has been repealed, and replaced with a spatially transformative regulatory system that spans all spheres of government.

3. Spatial policy is now aligned across all spheres. The spatial plans of Provincial Government and GCM Municipalities now have complementary policies, and SDFs are giving more attention to unraveling the complexities of the people/place/economy nexus.

4. Sustainability frameworks are being introduced across the region. Climate change adaptation and mitigation strategies have been formulated. Coastal development setback lines and management zones have been delineated.

5. Public transport coverage has extended with the roll-out of the initial phases of the MyCiti bus rapid transit system in Cape Town. Transport for Cape Town (TCT) is now looking beyond municipal borders through its recently established functional region sub-committee.

6. National and Provincial Treasury are now factoring spatial considerations into public investment programmes, and applying spatial targeting,
BOX 2: REGIONAL SPATIAL TRANSFORMATION: CURRENT CHALLENGES

1. Vast income disparities have not narrowed, no significant progress has been made in reducing housing backlogs, and informality is still widespread (State of South African Cities Report, 2016).

2. Unemployment levels remain stubbornly high, especially amongst the youth. Regulatory and spatial barriers to entering the formal economy are still in place, and high crime levels continue to retard economic activity in the townships (David Lipton, IMF deputy MD, Fin24, 19 July 2016).

3. The opportunities that city-regions offer to their residents remain inaccessible and unaffordable to most. Low-income public transport users spend on average 45% of their monthly household income on transport, compared to an international norm of between 5 and 10%. The main indirect costs that they bear are flexibility, safety and crime (TCT, 2015).

4. The region’s spatial growth trajectory remains outward and of a low settlement density, in direct contradiction to accepted policy. The majority of low-income households are still being located in far-flung areas, at distances of 45 to 70 kilometres from work opportunities (TCT, 2015).

5. The viability of the current MyCiti service and its further expansion is under threat, on account of the prevalence one-directional regional movement flows and a reluctance to commit public investment to an inward urban growth agenda. The net result is that settlement density thresholds remain insufficient to sustain public transport services.

6. Cape Town now rated the most congested city in South Africa and 47th in the world (Business Day Live, 24 March 2016). Transport of freight by road more prevalent (e.g. 95% of freight to Cape Town port is by road), notwithstanding policy to shift from road to rail (TCT, 2015). The Cape Town Aerotropolis is dependent on good ground connectivity to, from and around CTIA.
The OECD found that the region's land use regulatory system was unclear, cumbersome and ineffective. This increased business and household transaction costs, and inhibited the development of more compact and integrated settlements. The OECD also noted coordination failures between the region’s institutional stakeholders in responding to challenges and unlocking development potential.

So what’s changed since the OECD’s territorial review 8 years ago? There are a number of positives to report (see Box 1). Notwithstanding this progress, fundamental challenges remain (see Box 2).

2.3. Goals & Objectives

Since the 2008 OECD territorial review there is growing awareness of the economic logic of functional regions and buy-in to the call for a shared strategic approach to unlock the GCM’s potential. More and more stakeholders recognize that if action is not taken soon a crisis will unfold, and that continuing to do the same things will not result in different outcomes. They appreciate that commitment and bold action (i.e. transformative change) is needed to move away from business as usual. The expectation is that this RSIF, the first regional plan to be prepared since the OECD review, will chart a new way forward.

The RSIF is not a plan that will instantly fix the challenges of yesterday or today. Whilst its preparation has been informed by the need to redress past injustices and address present challenges, its primary goal is the incremental achievement of new and improved spatial outcomes over the next 10 to 20 years (i.e. delivering on tomorrow's challenges). In line with the Province’s strategic priorities, the outcomes the RSIF strives to achieve are:

- a competitive regional space-economy that re-energises and shares growth;
- an integrated network of regional settlements that provide resilient, sustainable, quality and inclusive living environments for a growing population.

The RSIF’s central concern lies with the nature of future growth, not the rate of demographic or economic growth - which it has no control over.

To enable these spatial outcomes the RSIF strives to ensure that sustainable regional infrastructure networks (i.e. ecological, utility and transport) and collaborative regional management and governance arrangements are put in place.

Collectively this is the RSIF’s chart towards a Greater Cape.

**Box 3: Regional Space-Economy - Vision, Spatial Logic & Development Concept**

A globally competitive, diversified, productive and inclusive regional economy where:

1. new entrants to the job market all have the basic skills that business is looking for, or are needed for self-employment;
2. there are low barriers to entry into the formal and informal economies;
3. the informal economy is recognized and actively promoted as a generator of wealth and incubator of entrepreneurs and talent;
4. livelihood, income earning, and career advancement opportunities are available in the region’s traditional business centres, suburbs, townships, and informal settlements;
5. resilient economic infrastructure networks connect and supply services to the region’s established and newly developed business nodes in townships and informal settlements;
6. all business nodes are safe and secure working environments;
7. the costs of doing business are low on account of spatial efficiencies in the provision of regional utilities, transport and freight infrastructure networks;
8. working and living environments are in close proximity, and there are affordable, reliable and safe public transport links between them;
9. the Greater Cape excels globally as Africa’s preferred tourist destination and producer of quality food and beverages;
10. greening of the economy has been mainstreamed;
11. a culture of innovation prevails, there is digital connectivity across the region, low and high-tech solutions are used in the formal and informal economies, and Silicon Cape is Africa’s tech hub.
1. Decentralise
2. Secure
3. Manage
4. Safeguard

Strengthened Space-Economy
BOX 4: REGIONAL SETTLEMENT - VISION, SPATIAL LOGIC & DEVELOPMENT CONCEPT

A region offering dignified, safe, secure, vibrant and varied living environments where:

1. households can access a secure form of tenure (rental or ownership) and basic services, and are empowered to take responsibility for building or upgrading their accommodation;

2. land is available for settlement in close proximity to work opportunities, targeted at communities who cannot afford a car;

3. informal settlement is accepted as part of urban living environments, and priority is given to upgrading slums using partnerships between communities and the public and private sectors;

4. disparities in the living conditions of rich and poor are reduced, social integration is more commonplace, and the Cape lifestyle is shared by all;

5. new household formation and in-migration are accommodated by inward settlement growth;

6. settlements are spatially compacted through land use densification, integration and intensification along transit routes and around economic nodes;

7. settlements are connected by a regional public transport network that gives residents access to facilities and amenities; and

8. outward growth of the region’s settlements is curtailed, they retain their unique individual identities, settlement is avoided in hazardous and risk areas, and urban encroachment onto farmlands are avoided.
1. Intensify + 2. Contain + 3. Avoid Risks = Sustainable Settlement
BOX 5: REGIONAL INFRASTRUCTURE - VISION, SPATIAL LOGIC & DEVELOPMENT CONCEPT

GCM’s settlements and economy are served by resilient and sustainable regional infrastructure networks (i.e. ecological, utility & transport). It is a region where:

1. functional ecological infrastructure networks reliably deliver essential services (e.g. water, clean air, flood attenuation) to communities and economic activities, provides protection against climate change risks, and safeguards natural capital;

2. water supplies are reconciled with the demands of a growing regional economy and population, and surface and ground water resources are safeguarded;

3. reliable, affordable and low-carbon sources of electricity are supplied, there are smart energy grids, and energy efficient settlements, transport systems, and economic activities;

4. bulk utility facilities (e.g. waste and waste water treatment) are shared, and smart technologies applied;

5. an integrated and inter-modal regional freight and logistics network is in place, and in-land port/s lead to greater use being made of rail to move freight to and from Gauteng;

6. twin sea ports serve as global export and import hubs, the increased use of the port of Saldanha for freight handling frees-up Culemborg land for CBD development;

7. low-carbon regional public transport networks make the region accessible to residents; and

8. commuter and recreational cyclists use the NMT routes linking the region’s centres.
1. Connect

2. Reconcile

3. Manage

4. Protect

Secured Ecological Infrastructure
2.4. **Vision & Development Concept**

“Open-opportunity society for all”

(Vision of the Western Cape Government, Provincial Strategic Plan 2014-2019)

To this end it is envisaged that over the next 20 years the GCM will make progress in becoming:

i. A globally competitive, diversified, productive and inclusive regional economy (see Box 3).

ii. A region offering dignified, safe, secure, vibrant and varied living environments to all its residents (see Box 4).

iii. A region where all communities and the formal and informal economies are served by resilient and sustainable infrastructure networks (see Box 5).

iv. A region where public, private and community stakeholders collaborate in the development, management and overall governance of the GCM.

Boxes 3 to 5 present details of the regional vision aspired to, as well as the spatial logic and development concept formulated towards achievement of these outcomes.

2.5. **Towards a New Regional Spatial Trajectory**

“The agenda demands a greater awareness that space matters, and that how we configure things in space determines where economic opportunities concentrate in relation to where people reside, and this affects access and costs to specific parts of society”.

(Dr Geci Karuri-Sebina, South African Cities Network, Daily Maverick, 8 July 2016)

Regional space is the scale at which economic activities and natural processes occur. As this RSIF is all about improving the performance of the GCM functional economic region, it focuses on the regional nexus of people/place/economy.

The regional spatial agenda is to reconfigure the region’s economic spaces and human settlements to achieve the outcomes strived for. The agenda is about putting in place that will enable more inclusive, productive, efficient, sustainable and resilient regional growth to take place.

The regional agenda is a road map to the incremental achievement of these improved spatial outcomes over the next 10 to 20 years. It aligns the spatial initiatives of government spheres and state owned companies active in the GCM. By clarifying the state’s regional strategy, it also provides a platform for involving civil society and the private sector in its implementation.

The regional spatial agenda is a blend of the consolidation of existing policies, tweaking different aspects of the region’s current growth direction, and transformative change (i.e. fundamentally rethinking current paradigms and policies). For the GCM the following blend is proposed:

i) **Regional Space-economy**:

- **Consolidate:**
  - Economic development initiatives of government spheres and SOEs in the strategic sectors they are targeting (i.e. Project Khulisa; Green Economy; Operation Phakisa; rural development; Treasury’s Urban Investment Strategy)
  - Management of the spatial assets that underpin the regional economy (i.e. agricultural resources; terrestrial and coastal natural resources; cultural and scenic landscapes; surface and ground water sources; minerals and construction materials; air quality)
  - Regional infrastructure networks (i.e. ecological; public transport; water (supply and demand reconciliation); waste management; ICT; SIPs)

- **Tweak:**
  - Regional application of area-based interventions in the GCM (i.e. Special Economic Zones; Agri-Parks; other regional hubs).
  - Shared regional utilities (e.g. waste water treatment works).

- **Rethink/New Paradigms:**
  - Review PSG 1’s current emphasis on developing the formal economic sectors with the expectation that benefits accruing will ‘trickle down’ to those economically marginalized. Give greater attention to strengthening the role of the GCM’s small, medium and micro-enterprise sectors, especially in township economies, as growth catalyst and entrepreneurial incubator.
  - Review current reliance on an up-turn in the oil and gas sector to kick-start West Coast industrial development in Saldanha. Consider pursuing a broader-based industrial development strategy here that strengthens economic linkages between Greater Saldanha and the Cape Metro.
  - Reconfigure inter and intra regional freight and logistics networks to reduce externalities and the costs of doing business. Give attention to catalysing the regional development potential of CTIA, Cape Town and Saldanha ports, harbours, and inland ports.
ii) Regional Settlement Network:

- **Consolidate:**
  - GCM’s urban growth management programmes (e.g. Urban Network Strategy; RSEP’s Reconstruction Model, municipal urban edge and densification strategies)
  - GCM’s urban upgrading programmes (NPDG urban hubs), VPUU, Informal settlement and backyard shack upgrading, township upgrading
  - Coherent regional approach to municipal implementation of transit orientated development (TOD) and the delivery programmes of the Living Cape Framework.

- **Tweak:**
  - Area based interventions (i.e. Integration Zones; Restructuring Zones; Urban Development Zones) to ensure their integration across the GCM region

- **Rethink/New Paradigms:**
  - Decisions on municipal proposals for accommodating urban growth (i.e. land release and bulk infrastructure investment) needs to factor-in ‘lifecycle’ economic costs and benefits to the region.
  - Regional initiative for the release and assembly of strategically located land within the GCM.
3. Regional Spatial Framework

To align implementation of the agenda framed in Section 2, in this section the Regional Spatial Framework for the GCM is presented (see Diagram 12). The following components of the Regional Spatial Framework are covered in Section 3:

3.1 The Regional Space-economy
3.2 Regional Settlements
3.3 Regional Enablers:
   3.3.1 Ecological Infrastructure
   3.3.2 Utility Infrastructure
   3.3.3 Transport & Freight Infrastructure
   3.3.4 Facilities & Amenities
   3.3.5 Spatial Asset Management
   3.3.6 Disaster & Risk Management
   3.3.7 Information Management

Diagram 11. Chapter 3 structure
Towards a Greater Cape 2029

Diagram 12. Spatial framework for GCM Region: Components and Elements
3.1. **Regional Space-Economy**

“The barriers between the township and mainstream economies remain firmly in place to the extent that economic apartheid is in reality stunting the opportunities to advance available to the average citizen. Hence, this flag is the most important one of all in giving an indication of whether South Africa will break the present mould of one nation/two economies positively or negatively”.

(Clem Sunter; The Latest South African Flags and Scenarios, News24; 1 August 2016)

The regional space-economy comprises the diversity of economic activities that take place in the Greater Cape Metro region’s urban centres and rural areas, and the relationship of these places and spaces to the infrastructure that connects and supports them. It represents the network of workplaces across the region and their linkages with local, regional, provincial, national and global markets. The regional space-economy’s components and connections covered in this sub-section are illustrated in Diagram 13.

3.1.1. **Key Regional Space-Economy Issues**

Based on an assessment of the performance of the GCM regional space-economy measured in terms of the spatial principles underpinning the RSIF, Table 1 presents key regional issues identified.

The overriding priority emerging is the need to re-energise economic growth in the region by promoting greater inclusion and job creation. It is government’s responsibility to promote the interests of the quarter of the labour force who are excluded from the formal economy.

“This approach should focus not just on leveling the playing field, but opening up the playing field – for individuals and businesses” (David Lipton (IMF Deputy MD); Fin24; 20 July 2016).
Diagram 13. Regional space economy components and connections
### Table 1. Regional space economy performance assessment

<table>
<thead>
<tr>
<th>Land Use Principles</th>
<th>Regional Space-Economy Issues</th>
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</thead>
<tbody>
<tr>
<td><strong>SPATIAL JUSTICE:</strong></td>
<td>• Separation between work &amp; living environments persists, unequal sharing of urban “dividend”</td>
</tr>
<tr>
<td>- Equity</td>
<td>- Old &amp; new formal business nodes remain exclusionary, informal economy marginalised</td>
</tr>
<tr>
<td>- Redress &amp; integration</td>
<td>- Formal land markets still unaffordable to most, unrealised potential of informal markets</td>
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<tr>
<td>- Opportunity &amp; inclusivity</td>
<td>- Public investment in township LED neglected, negative private investor perceptions</td>
</tr>
<tr>
<td>- Accessibility</td>
<td>• Separation between work &amp; living environments persists, unequal sharing of urban “dividend”</td>
</tr>
<tr>
<td>- Affordability</td>
<td>• Expensive direct &amp; indirect (congestion, emissions, accidents) transport costs</td>
</tr>
<tr>
<td><strong>SPATIAL EFFICIENCY:</strong></td>
<td>• Road based freight prevails, no shift to rail</td>
</tr>
<tr>
<td>- Productivity</td>
<td>• CT port expansion limits CBD’s development</td>
</tr>
<tr>
<td>- Optimal resource use</td>
<td>• Constrained access to/from CTIA</td>
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<tr>
<td>- Cost effectiveness</td>
<td>• One-directional intra-regional movement flows</td>
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<tr>
<td>- Competitiveness</td>
<td>• Erosion of place-based economic assets (i.e. agri, coastal, biodiversity, cultural &amp; scenic)</td>
</tr>
<tr>
<td><strong>SPATIAL SUSTAINABILITY:</strong></td>
<td>• Water, energy &amp; food insecurities</td>
</tr>
<tr>
<td>- Future options</td>
<td>• Compromised ecosystem services</td>
</tr>
<tr>
<td>- Outcomes orientation</td>
<td>• Unsustainable municipal financial sustainability</td>
</tr>
<tr>
<td>- Consistency &amp; balance</td>
<td>• Climate change economic risks, especially agri value-chains &amp; coastal activities (e.g. harbours)</td>
</tr>
<tr>
<td>- Reliability &amp; viability</td>
<td>• Economy dependent on vagaries of global markets</td>
</tr>
<tr>
<td><strong>SPATIAL RESILIENCE:</strong></td>
<td>• Limited data on regional economic linkages</td>
</tr>
<tr>
<td>- Flexibility &amp; Adaptability</td>
<td>• Disparate public investment programmes creates business uncertainty &amp; increases risk</td>
</tr>
<tr>
<td>- Ability to bounce back &amp; absorb shocks</td>
<td>• Restrictive business regulations &amp; cumbersome approval processes increase transaction costs</td>
</tr>
<tr>
<td>- Risk/vulnerability reduction</td>
<td></td>
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<tr>
<td><strong>SPATIAL GOVERNANCE:</strong></td>
<td></td>
</tr>
<tr>
<td>- Evidence based</td>
<td></td>
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<tr>
<td>- Integration &amp; alignment</td>
<td></td>
</tr>
<tr>
<td>- Collaborative/partnerships</td>
<td></td>
</tr>
<tr>
<td>- Certainty &amp; transparency</td>
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</table>

Given its focus on the spatial dimensions of the regional economy the RSIF has a limited, but nonetheless important, role in shaping the future economic landscape. The approach taken builds on PSG1 and involves mobilising the competitive advantage of the GCM’s placed-based assets to the benefit of all. To this end spatial strategies for the development of the GCM’s urban and rural space-economies are presented in the sub-sections below.

### 3.1.2. Urban Space-Economy Strategies

Historically, Cape Town was the catalyst for the region’s development and economic activities concentrated there. Overtime the economic primacy of Cape Town reduced as surrounding towns diversified their economies from agricultural service centres into fully-fledged urban economies. Whilst Cape Town still dominates the GCM space-economy, the city-region now functions as an interdependent network of regional centres. Cape Town metro is, and will remain, the region’s core economic hub. However the dis-economies of agglomeration highlighted in Section 2 (i.e. congestion, one-directional movement flows) inhibit the region’s competitiveness and the workforce’s access to economic opportunities.

To address these structural deficiencies it is important that the GCM’s polycentric (i.e. multi-nodal) regional settlement network is reinforced and strengthened (see Figure 12 and Diagram 14). The regional spatial strategy is to concentrate economic activities and human settlement in the network of complementary regional centres, and to ensure functional linkages between these nodes.

In terms of daily economic interaction the functional region (i.e. Cape Metro) comprises Cape Town as core hub and the surrounding regional centres of Atlantis, Malmesbury, Paarl/Wellington, Stellenbosch and Helderberg (Somerset West/Strand/Gordons Bay). In terms of weekly economic interaction the functional region (i.e. Greater Cape Metro) extends to include the outlying regional
centres of Saldanha/Vredenburg, Ceres, Worcester, Caledon and Hermanus.

It is recommended that the City of Cape Town’s Economic Areas Management Programme (ECAMP) be extended to cover the GCM region, in order to establish an empirical base to regional economic linkages. Pending the availability of this data, Table 2 explores the complementary roles and functions of the GCM’s network of regional centres.

Applying this multi-nodal regional concept, Table 3 presents strategies for the development of the urban space-economy, and associated spatial targets and implementation levers. Arrangements for implementing these urban strategies are presented in Section 4. The spatial framework for the development and management of the GCM’s urban space-economy is presented in Figure 12.

<table>
<thead>
<tr>
<th>Regional Node</th>
<th>Role &amp; Function in Regional Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPE TOWN</td>
<td>Globally connected city (air and sea ports), gateway to international and Southern African markets, economic hub of GCM region, diversified economic base, well-developed services economy (tourism and hospitality, film, media and advertising), specialist and high-order facilities (health, educational, entertainment, etc) and amenities, evolving network of intra-city economic nodes reducing primacy of CBD. Very High Growth Potential</td>
</tr>
<tr>
<td>HELDERBERG (SOMERSET WEST, STRAND &amp; GORDONS BAY)</td>
<td>Geographically and functionally separate regional centre east of Cape Town, manufacturing and diversified economic base, decentralized facilities and amenities, daily commuter flows to Cape Town. Undeveloped Land, Very High Growth Potential</td>
</tr>
<tr>
<td>STELLENBOSCH</td>
<td>Southern Winelands service &amp; admin center, tertiary education &amp; research, agri processing, multi-national HQs, tourism destination, tech industry. Very High Growth Potential</td>
</tr>
<tr>
<td>PAARL / WELLINGTON</td>
<td>Northern Winelands service &amp; admin center, tertiary education, agri processing &amp; distribution, tourist destination, tech industry. Very High/High Growth Potential</td>
</tr>
<tr>
<td>ATLANTIS</td>
<td>Industrial centre, Green Technology Special Economic Zone complements SBIDZ, decentralized facilities and amenities, linkages with Cape Town, Malmesbury and Saldanha/Vredenburg. Undeveloped Land, High Growth Potential</td>
</tr>
<tr>
<td>MALMESBURY</td>
<td>Swartland service and logistics center, admin center, N7 southern gateway on SB-CPT freight routes, grain &amp; dairy processing &amp; distribution. Very High Growth Potential</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>Northern Boland service center, admin center, N/S &amp; E/W regional logistics hub, specialist disability treatment, tertiary education, agri processing &amp; distribution. High Growth Potential</td>
</tr>
<tr>
<td>CALEDON</td>
<td>Overberg services &amp; admin center, agri processing &amp; distribution. High Growth Potential</td>
</tr>
<tr>
<td>HERMANUS</td>
<td>Overstrand services, commercial &amp; admin center, tourism &amp; leisure hub, marine center (Aqua-Hub). Very High Growth Potential</td>
</tr>
<tr>
<td>VREDENBURG / SALDANHA</td>
<td>South West Coast admin, commercial &amp; services center; iron ore export and oil impact, developing IDZ, marine &amp; fishing, tourism, deep water port. Very High/High Growth Potential</td>
</tr>
<tr>
<td>CERES</td>
<td>Agricultural regional service centre, regional gateway to Koue and Warmbokkeveld, administrative center, linkages to N1. High Growth Potential</td>
</tr>
<tr>
<td>Strategies for Developing Urban Space-Economy</td>
<td>Spatial Targets</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1. Improve the performance of existing business nodes by infrastructural upgrading, improved connectivity, and enhancing urban management, safety and mobility.</td>
<td>Existing: Regional, urban, and local business nodes Possible New Regional Nodes: Kraaifontein N &amp;/or Klapmuts</td>
</tr>
<tr>
<td>• For existing commercial nodes, improve their performance by promoting land use intensification and diversification (live/work/play)</td>
<td>• GCM RSIF, GS RSIF • Municipal IDPs, SDFs &amp; LEDs</td>
</tr>
<tr>
<td>• For well-located industrial nodes, improve their competitiveness by upgrading infrastructure.</td>
<td>• Consolidate SIPs, Operation Phakisa &amp; Project Khulisa</td>
</tr>
<tr>
<td>2. Consolidate, spatially align and target implementation of sector specific regional development programmes (SIPs &amp; PSG1):</td>
<td>Agriculture: Regional centres, Agri-Parks &amp; Hubs, Tourism: region’s settlements and tourism areas Oil &amp; Gas: Saldanha Marine: Aqua-Parks &amp; Hubs, ports and harbours Green economy: Atlantis SEZ, all settlements</td>
</tr>
<tr>
<td>• Agriculture</td>
<td>• GCM RSIF, GS RSIF</td>
</tr>
<tr>
<td>• Tourism &amp; hospitality</td>
<td>• Municipal IDPs, SDFs &amp; LEDs</td>
</tr>
<tr>
<td>• Oil &amp; gas</td>
<td>• Municipal Planning By-law reform</td>
</tr>
<tr>
<td>• Aquaculture and marine economy</td>
<td>• GreenCape reconciliation studies</td>
</tr>
<tr>
<td>• Green economy</td>
<td>• GreenCape reconciliation studies</td>
</tr>
<tr>
<td>3. Diversify and widen W Coast industrial development strategy from focus on oil and gas sector in Saldanha to promote all industrial sectors in Saldanha/Vredenburg, Atlantis, Malmesbury and Piketberg.</td>
<td>SBIDZ and surrounds Atlantis SEZ Malmesbury &amp; Piketberg</td>
</tr>
<tr>
<td>4. Proactively target development of the region’s emerging and informal economies as regional growth catalysts by: lowering barriers to entry (i.e. regulations, red tape); making trading sites available at strategic locations; developing infrastructure and services in underdeveloped and emerging business nodes (especially access to digital connectivity); and prioritizing investment in safety, security &amp; public space improvements (see Box 6)</td>
<td>Townships Informal settlements Modal interchanges Trading &amp; public spaces</td>
</tr>
<tr>
<td>5. Invest in augmenting regional utility infrastructure capacity, prioritising sustainable water &amp; energy supplies, and extending broadband coverage.</td>
<td>Saldanha/Vredenburg, West Coast, GCM settlements</td>
</tr>
<tr>
<td>6. Research and develop integrated inter-modal regional freight and transport network to lower cost of doing business and improve regional competitiveness. Investigate twin cargo sea port strategy and development of inland port’s</td>
<td>Regional freight network Cape Town &amp; Saldanha ports Inland ports: along N1 &amp; N7</td>
</tr>
<tr>
<td>7. Facilitate further development of region’s global hubs as catalytic game-changing economic diversification models using PPP approach</td>
<td>CTIA Aerotropolis, Cape Town &amp; Saldanha ports, Cape Big Data Centre</td>
</tr>
<tr>
<td>8. Build economic resilience and sustain region’s comparative advantages by securing region’s ecological infrastructure and safeguarding its placed-based assets</td>
<td>CBAs &amp; ESAs, coastal ecology Natural, cultural &amp; scenic landscapes, air quality</td>
</tr>
<tr>
<td>9. Build, maintain and share empirical data base on regional economic linkages</td>
<td>GCM economic nodes</td>
</tr>
</tbody>
</table>
BOX 6: DEVELOPING ECONOMY OF TOWNSHIPS & INFORMAL SETTLEMENTS - CATALYTIC REGIONAL INTERVENTION

Extracts from article: Andrew Chamman & Leif Peterson (Sustainable Livelihoods Foundation); “The Layout of the Township Economy: the surprising spatial distribution of informal township enterprises”; March 2015; www.econ3x3.org

Research observations from small-area census of 5 Cape Town townships & informal settlements:

1. There are broadly similar patterns in the occurrence of micro-enterprises in the five sites. Most township businesses respond to the local population’s needs for food (groceries and takeaways), liquor, household necessities, airtime, hair-care services and entertainment. A much smaller proportion of businesses respond to needs relating to home improvement, furniture or other types of goods and services.

2. In terms of absolute numbers, retail sales of liquor and grocery shops are the most common micro-enterprise sectors in the sites surveyed - respectively 20% and 15% of businesses are in these two categories. Together, the top three categories (liquor, spaza shops and house shops) make up 46% of the identified enterprises. Hair care, takeaway food, religious services, street traders, mechanical repair services, green grocers and recycling follow in that order; other notable sectors are educare and healthcare services.

3. Overall, the results indicate higher rates of informal business activities in informal settlements than in more formally established settlements (such as Delft South and Vrygrond). The reasons are not related only to the degree of (in)formality of a settlement, but include socio-cultural influences and factors linked to the settlement’s location.

4. In typical ‘first-world’ cities and towns, one observes a fairly clear demarcation of residential areas, core commercial areas (city centre or mega-mail areas) and shops and shopping centres along major roads (‘high streets’) that feed into residential areas. Industrial areas constitute another category. As Plate 1 illustrates, in the township economy there is likely to be much less spatial differentiation: informal enterprises are found throughout the township, not just in commercial areas or along the ‘high street’. Typically there is a mild degree of spatial differentiation that is seen in the form of a clustering of enterprises around one or more ‘high streets’ (while there rarely is a ‘township centre’ as such). The prevalence of enterprises in residential areas is one of the most pertinent characteristics found in the ‘layout’ of the townships; it has many implications for policies intended to promote township economic development.

5. Amidst the overall low spatial differentiation, there is a second layer of differentiation. This regards the types of enterprises found mostly in residential areas versus in the ‘high street’. The high streets are identified as arteriial roads and streets in which much activity takes place, but excluding local residential streets. High streets sustain different kinds of business in scale and scope compared to the overall distribution. On average, (only) 23% of the total number of businesses are found on the high street. In the five sites surveyed, more than three-quarters of enterprises were located outside the high-street areas in other streets and in broadly residential areas as demonstrated in the picture of Brown’s Farm (Plate 1). Simply put: the township enterprise economy - i.e. the township’s informal business sector - is everywhere in the township.

Policy Implications:
Efforts to ‘streamline’ the township economy into resembling that of a ‘first-world’ town - by driving enterprises from residential areas – are likely to be counterproductive and will greatly disrupt the lives of township consumers as well as owners and employees of informal enterprises. Rather, policy efforts to support informal enterprises in townships should fully take into account the way that various demand, supply and other factors determine the locational choices of entrepreneurs.
Figure 12. Urban Space-Economy Framework
3.1.3. **Rural Space-Economy**

The GCM’s economic value-chains transcend rural and urban areas. Recognising these overlaps, Table 4 presents strategies for the development of the rural space-economy, and associated spatial targets and implementation levers. Arrangements for implementing these rural strategies are presented in Section 4. Spatial frameworks for the development and management of the GCM’s rural space-economy are presented in Figure 13 (forestry, fishing and mining), Figure 14 (agriculture) and Figure 15 (tourism and natural resource management).

<table>
<thead>
<tr>
<th>Strategies for Developing Rural Space-Economy</th>
<th>Spatial Targets</th>
<th>Implementation Levers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Safeguard the sustainable use of spatial assets underpinning regional economy (i.e. natural capital; high value, unique and significant agricultural land; water resources; cultural &amp; scenic landscapes; minerals &amp; construction materials)</td>
<td>As per spatial assets maps</td>
<td>Regional &amp; Municipal SDFs, Municipal DNS Overlay Zones, W Cape Biodiversity Sector Plan</td>
</tr>
<tr>
<td>2. Strengthen resilience of agricultural economy by restoring &amp; maintaining functional ecological networks, and applying “climate smart agriculture” and “conservation agriculture” methods</td>
<td>• Alien infested river courses  • Degraded floodplains  • Riverine setbacks &amp; buffers  • Catchments</td>
<td>W Cape Biodiversity Sector Plan, W Cape Smart Agri Framework, Replication of Berg River Improvement Programme</td>
</tr>
<tr>
<td>3. Increase the security, quality and quantity of region’s irrigation water through: “water-wise” irrigation methods; improving the ecological functioning of rivers; and augmenting irrigation allocations</td>
<td>• Inter-basin transfers  • Increased dam storage  • WWTW outflows (e.g. Potsdam)</td>
<td>W Cape Smart Agri Framework, Replication of Berg River Improvement Programme</td>
</tr>
<tr>
<td>4. Intensify production within commercial agricultural footprints, and extend footprints to support new farmer development, food security and subsistence farming</td>
<td>• 4000 to 5000 ha new irrigation in Worcester – Robertson valley  • Urban agriculture  • Urban fringe smallholdings</td>
<td>DRDUR’s Rural Economic Transformation Model, DRDUR’s Fetsa Tlala Programme</td>
</tr>
<tr>
<td>5. Improve accessibility &amp; efficiency of rural freight movement &amp; logistics</td>
<td>GCM freight &amp; logistics network</td>
<td>Integrated inter-modal planning</td>
</tr>
</tbody>
</table>
| 6. Strengthen value-chains in rural economy by developing product handling, processing, packaging & distribution facilities and enabling infrastructure.  
  • Agricultural beneficiation: Agri-Parks & Agri-Hubs  
  • Marine transport & manufacturing, fisheries and aquaculture, marine protection services: Aqua-Parks & Aqua-Hubs  
  • Minerals beneficiation  
  • Forestry beneficiation: Plantations & sawmills  
  • Natural resource management: CBAs, ESAs, PAs | • Agri-Hubs: Abbotsdale-Kalbaskraal-Riverlands-Chatsworth, Grabouw-Elgin Valley, Lower Berg River (Portugeesfontein & environs), E of Worcester  
  • Aqua-Parks/Hubs: Hermanus, Saldanha, Gansbaai, St Helena, Paternoster, Buffelsjag | PSG1, DRDUR Agri-Parks Programme, Project Khulisa’s Agri-products Programme, Operation Phakisa, W Cape Biodiversity Spatial Plan |
| 7. Develop consolidated platform for export of processed agri-food products (e.g. inland packaging and containerisation port) | Paarl-Klapmuts; Kraaifontein north of N1; CTIA & environs, N7 (Halal Foods Processing Hub) | Project Khulisa’s Agri-products Programme |
| 8. Broaden the rural development agenda beyond commercial agriculture through promoting development of rural enterprises & industry, agri/eco & adventure tourism and hospitality | • Rural settlements  
  • On farms | DRDUR’s Rural Economic Transformation Model, Municipal IDP, SDF & LED strategies |
| 9. Fast-track land reform (i.e. restitution, redistribution & tenure reform). Secure the tenure (on- and off-farm) of displaced farm workers and other rural dwellers through provision of farm-worker neighbourhoods/ suburbs in rural settlements, as well as applying the Extension of Security of Tenure Act (Act 62 of 1997) (ESTA) | • Commonages (e.g. Mamre, Pella)  
  • Irrigation farms (NDP 30% target)  
  • Rural settlements | DRDUR’s Rural Infrastructure and Development Project (nodes), Project Khulisa’s Agri-products Programme, Proactive Land Acquisition Strategy, Area Based Plans (ABPs) |
Figure 13. Fishing, Forestry and Mining - Rural Space Economy Framework
Figure 14. Agricultural Space Economy Framework
Figure 15. Tourism and Natural Resources Framework
3.2. **Regional Settlements**

The regional settlement network is the distribution of places where GCM residents live and work, and the interrelationships and connectivity between these places. As illustrated in Figure 16, the region’s human settlements are underpinned by nodes of economic activity, linking transport and infrastructure, and landscapes and natural capital that extends across municipal boundaries.

The GCM functional region spans eight municipal jurisdictions, which complicates provincial government efforts at fulfilling their regional planning responsibilities. Municipal planning is an exclusive local government responsibility, and the parameters of urban development are effectively set by municipal SDFs and planning bylaws. The RSIF, a provincial-regional SDF, focuses on settlement considerations that cut-across municipal boundaries. The RSIF articulates a regional settlement logic and concept, and sets out a regional implementation agenda for incorporation into the SDFs of GCM municipalities. Ultimately, national, provincial and regional settlement agendas all need to be reflected in municipal IDPs and SDFs.

3.2.1. **Key Regional Settlement Issues**

Assessing the performance of the GCM’s settlements in terms of the spatial principles underpinning the RSIF, Table 5 presents key regional issues that have been identified.

As reported in the 2008 OECD study, the region retains its legacy of inefficient and inequitable settlement patterns. There are still vast distances between where people work and live, especially for...
Table 5. Regional settlement: Key issues and challenges

<table>
<thead>
<tr>
<th>Land Use Principles</th>
<th>Regional Settlement Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPATIAL JUSTICE:</strong></td>
<td>• Legacy of dormitory peripheral settlement continues, high household transport cost impact</td>
</tr>
<tr>
<td>- Redress &amp; integration</td>
<td>• Social &amp; spatial disparities endure, poor remain marginalized</td>
</tr>
<tr>
<td>- Opportunity &amp; inclusivity</td>
<td>• Exclusionary formal markets (land &amp; housing)</td>
</tr>
<tr>
<td>- Accessibility</td>
<td>• Entrenched informality &amp; housing backlogs</td>
</tr>
<tr>
<td>- Affordability</td>
<td>• ‘Rights to the city’ income dependent</td>
</tr>
<tr>
<td><strong>SPATIAL EFFICIENCY:</strong></td>
<td>• Resource consumptive settlement patterns (i.e. low density sprawl, monofunctional land use)</td>
</tr>
<tr>
<td>- Productivity</td>
<td>• Movement intensive settlement structure</td>
</tr>
<tr>
<td>- Optimal resource use</td>
<td>• Inadequate densities to support regular public transport services &amp; cost effective service delivery</td>
</tr>
<tr>
<td>- Cost effectiveness</td>
<td><strong>SPATIAL SUSTAINABILITY:</strong></td>
</tr>
<tr>
<td>- Competitiveness</td>
<td>• ‘One size fits all’ settlement model unresponsive to community needs &amp; environmental impacts</td>
</tr>
<tr>
<td><strong>SPATIAL SUSTAINABILITY:</strong></td>
<td>• Municipalities unable to sustain financing of services and facilities to dispersed settlements</td>
</tr>
<tr>
<td>- Future options</td>
<td><strong>SPATIAL RESILIENCE:</strong></td>
</tr>
<tr>
<td>- Outcomes orientation</td>
<td>• Escalating fire, drought, flooding &amp; coastal inundation risks, informal settlements most vulnerable</td>
</tr>
<tr>
<td>- Consistency &amp; balance</td>
<td>• Declining safety &amp; security of living environments</td>
</tr>
<tr>
<td>- Reliability &amp; viability</td>
<td><strong>SPATIAL GOVERNANCE:</strong></td>
</tr>
<tr>
<td><strong>SPATIAL GOVERNANCE:</strong></td>
<td>• Limited regional migration and settlement data</td>
</tr>
<tr>
<td>- Evidence based</td>
<td>• Slow spatial transformation, business as usual prevails</td>
</tr>
<tr>
<td>- Integration &amp; alignment</td>
<td>• Poor spatial alignment of government and state owned companies built environment capital investment programmes</td>
</tr>
<tr>
<td>- Collaborative/partnerships</td>
<td>- Certainty &amp; transparency</td>
</tr>
</tbody>
</table>

In most areas settlement densities remain too low to support viable public transport systems. Current regional settlement patterns continue to negate the efficiencies of spatial agglomeration, inflate costs to households and businesses, compromise the environment, and generate unnecessary travel demand.

Settlements in the GCM region are also experiencing rapid population growth. This is ascribed to in-migration of work seekers from other provinces, as well as those moving to the Cape for lifestyle reasons. Escalating housing demand exceeds the current rate of housing delivery and land release. As a result levels of housing affordability are declining, no real progress is being made with eliminating housing backlogs, informal settlement remains widespread, and spatial concentrations of poverty endure. The challenge is to ensure that the development of land, housing and transport within the GCM region improves access to urban opportunities and the efficiency of land use.

Efforts to improve the delivery of sustainable human settlements are hampered by the limited availability of empirical data on GCM urbanization patterns (i.e. inter and intra-regional migration flows, as well as regional urbanization and counter-urbanization dynamics). The reasons for this are that city-regions are relatively new and under researched, and that the GCM functional region does not correlate with administrative boundaries. Whilst the City of Cape Town has baseline data on which to model and cost alternative urban growth scenarios, data is currently not available to do this for the GCM’s network of settlements. The RSIF makes recommendations on building capacity to research and apply evidence based regional urban growth management strategies.

Notwithstanding the 2008 OECD study’s call for a shared vision and coordinated implementation agenda for the GCM, the 3 spheres of government and state owned enterprises are still pursuing disparate approaches to the development and management of human settlements.
BOX 7: REGIONAL URBAN GROWTH MANAGEMENT

Response to Settlement Legacies

Avoiding Settlement Hazards

Transit Orientated Urban Growth

Synthesis
3.2.2. Building on National Initiatives

Urban Network Strategy and Spatial Targeting

Both the NDP and IUDF advocate the need for coherent approaches between government spheres and SOEs to the development and management of city-regions. The PSDF picks up on this theme and prioritizes growing and sharing what the IUDF refers to as the ‘urban dividend’ (i.e., the socio-economic benefits accruing from spatial agglomeration).

National Treasury, through its City Support and Neighbourhood Development Programmes, are assisting metros with the preparation of Built Environment Performance Plans (BEPPs). BEPPs respond to value chains in the built environment and their spatially targeted interventions are known as the Urban Network Strategy (UNS). The UNS seeks to deliver ‘urban dividends’ to economically marginalised communities by growing the economy and creating liveable places with good access to job opportunities, affordable shelter and services.

The UNS is to compact and connect cities and towns by way of Transit Oriented Development (TOD). TOD is based on the principles of spatial agglomeration (i.e., densification and intensification of mixed land uses) and connectivity. The UNS targets aligning public investment in the built environment in three urban ‘spaces’, namely: Integration Zones, Economic Hubs (e.g., township business areas and CBDs), and Marginalised Areas (e.g., informal settlements).

The strategy is to connect these zones, nodes and areas through an efficient and affordable public transport system. Discretionary grant funding is available to incentivize investment in settlement transformation, and the BEPPs set-out the necessary capital investment frameworks.

BOX 8: LIVING CAPE: A HUMAN SETTLEMENTS FRAMEWORK

March 3, 2017. Prepared jointly by the African Centre for Cities and Western Cape Department of Human Settlements

The Living Cape Framework aims to support a departure from the current housing delivery model through setting out a long-term strategy which elaborates and substantiates the human settlements ideals spelled out in national, provincial and regional guiding documents. The focus of the Living Cape Framework is explicit on improving the quantity and quality of human settlements as holistic spaces, in urban areas. To this end, the Living Cape Framework seeks to articulate what needs to be done differently and how it can be achieved.

In seeking to address the current and future human settlements’ needs in the Province, the Framework identifies three interlocked challenges which must be addressed:

1. The delivery challenge: the inability of the prevailing human-settlements model to address the scale of demand
2. The modality challenge: the outcome which the prevailing human-settlements model has had on urban and spatial forms of towns and cities
3. The governance challenge: the complexity of the decision-making frameworks which underpin the prevailing human-settlements model

The Framework unpacks these challenges and sets out a vision for 2040 stating that: “By 2040, human settlements in the Western Cape will support the social and economic needs and empowerment of people and communities. Communities, the private sector, NGOs and the state will work collectively and effectively to realise this vision.”

A key aim of the Framework is shift the state’s focus from housing delivery to the development of human settlements. The Framework also emphasizes that it is necessary to ensure that investments and contributions of the state, the private sector, and communities catalyse value-creation through different investments and contributions made at different scales. In support of these goals it is imperative that the state shift its role through ensuring that the investments which the state makes in urban infrastructure and subsidies, as well as in the regulatory and development frameworks it puts in place, work to enable households, communities, and the private sector.

For the Core Imperatives and Conceptual Framework set out in this document towards a clear implementation framework a series of steps are identified towards achieving the goals and vision for the future of the Province’s sustainable human settlements:

- Coordinated public investments (investing in the public sphere of urban areas)
- Demand-driven approaches (allow for households to participate in and make decisions which affect them, outside of conventional and now-tired participatory channels)
- Working with informality (focussing on the ingenuity of low-income households and communities within systems which have failed to respond to their needs, desires, and capabilities)
- Using land as a strategic asset (using land which is available to meet a range of often competing strategic objectives; social function of land to be balanced with financial and ecological/environmental values)
- Building partnerships (commitment on the part of the state to value the contribution of non-state actors in development processes)
- Social learning (New modalities of operation require testing new ways of working and documenting the lessons learned: transparency and integrity)
3.2.3. Building on Provincial Initiatives

Living Cape: A Human Settlement Framework

Provincial Strategic Goal 4, which is to enable resilient, sustainable, quality and inclusive living environments, frames the RSIF’s human settlement mandate. The recently released Living Cape Framework, prepared by the Western Cape Department of Human Settlements and the African Centre for Cities (March 2017 draft), introduces a new settlement paradigm (see Box 8). It breaks from past supply-driven approaches and puts in place strategies for shifting the province to demand-driven human settlement programmes. The rollout of the Living Cape Framework is timely, as GCM stakeholders agree that it can no longer be 'business as usual'.

The GCM RSIF builds on the new strategic direction set by the Living Cape Framework.

3.2.4. Building on Municipal Initiatives

The RSIF is also informed by and builds on the SDFs of municipalities in the GCM, as well as the progress made with the Built Environment Support Programme (BESP) and VPUU/RSEP initiatives.

3.2.5. Regional Settlement Strategies

Towards the settlement transformations desired for, Table 6 applies the planning and delivery strategies of the Living Cape Framework to the network of GCM settlements. It presents strategies for the development and management of the region’s settlements with associated spatial targets and implementation levers.

3.2.6. Regional Settlement Concept

The RSIF’s settlement strategies build capacity for evidence based regional planning. The optimum configuration of the GCM’s settlement network to accommodate urban growth (i.e. the ‘smart’ growth option) needs to be determined by modeling urban, transport and infrastructure growth scenarios. Regional data needs to be collected to extend the City of Cape Town’s growth modeling across the GCM region.

Urban growth management of the region needs to address the legacy of formal and informal settlement patterns, avoid further encroachments into hazardous areas, and chart a new way forward for transit orientated urban growth (see Box 8). The regional settlement concept, illustrated in Figure 18, is to reinforce the GCM’s multi-nodal network of urban centres and strengthen transport connections between them. This multi-nodal settlement concept applies within the City of Cape Town as well as across the functional region.

GCM municipalities are pursuing urban restructuring, intensification and densification strategies to improve the livability and strengthen the economies of their urban areas. The GCM urban management agenda, common to all municipalities, is to channel future growth inside the urban edge of the region’s settlements – primarily in the form of brownfields and infill development. All new settlement areas need to be close to economic opportunities or along transit routes. The built environment capital investment frameworks of GCM municipalities need to be regional aligned.
### Planning and Delivery Strategies for GCM’s Settlement Network

<table>
<thead>
<tr>
<th>1. Regionally align settlement plans and built environment investments by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Extending the scope of the BESP to incorporate the GCM regional settlement framework into municipal SDFs.</td>
</tr>
<tr>
<td>b) Further extending the BESP to assist municipalities incorporate the capital investment frameworks (CIF) of government spheres and SOCs into their IDPs/SDFs.</td>
</tr>
<tr>
<td>c) Once capacity in place, preparing a BEPP for the GCM region that consolidates and aligns the City of Cape Town’s BEPP with the settlement plans and capital investment frameworks of surrounding municipalities.</td>
</tr>
<tr>
<td>d) To incentivise regional investment in settlement transformation, making discretionary grant finance accessible to all GCM municipalities.</td>
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</table>

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<thead>
<tr>
<th>2. Change from a project-based to an area-based approach to human settlement interventions in the GCM region by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Rationalising system of area-based ‘zones’ and regional alignment of their application</td>
</tr>
<tr>
<td>b) Prioritising regional centres for investment in higher density, mixed-use development</td>
</tr>
<tr>
<td>c) Extending the RSEP and VPUU programmes into all GCM regional centres to accelerate the spatial integration of settlements and improve the safety of vulnerable neighbourhoods.</td>
</tr>
<tr>
<td>d) Municipal adoption and implementation of area-based human settlement plans incorporating a range of typologies that are responsive to local circumstances</td>
</tr>
<tr>
<td>e) Review GCM municipal planning bylaws to facilitate integration and restructuring, and incentivise inclusionary development.</td>
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<thead>
<tr>
<th>3. Promote and prioritise brownfields and infill projects in GCM settlements by:</th>
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<tbody>
<tr>
<td>a) Repurposing the GCM’s housing subsidy system to allow investment in well-located land</td>
</tr>
<tr>
<td>b) Regional portfolio management of strategic GCM land assets (i.e. acquisition, allocation and delivery assembly; as well as optimising underutilised public land (e.g. school sites)).</td>
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<tr>
<td>c) Shifting provincial housing budget allocations to GCM municipalities from supply-side to demand-driven housing subsidies including provision for rental market.</td>
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<tr>
<td>d) Setting-up a regional special purpose vehicle/support-unit to facilitate implementation of ‘game-changer’ brownfields settlement projects.</td>
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<tr>
<th>Spatial Targets</th>
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<tr>
<td>Municipal jurisdictions within GCM</td>
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<tr>
<td>GCM Region</td>
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<tr>
<th>Implementation Levers</th>
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<tbody>
<tr>
<td>RSIF</td>
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<tr>
<td>BESP</td>
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<tr>
<td>Municipal IDP/ SDF</td>
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<tr>
<td>LG MTEC &amp; PG MTEC</td>
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<tr>
<td>CIF</td>
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<td>BEPP/ UNS</td>
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<td>IUDF</td>
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<tr>
<th>GCM regional centres</th>
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<tr>
<td>Apartheid township legacies</td>
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<td>Impoverished &amp; high crime neighbourhoods</td>
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<th>UNS</th>
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<tr>
<td>RSEP/VPUU</td>
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<thead>
<tr>
<th>Urban Development Zones, Restructuring Zones, Integration Zones</th>
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<tbody>
<tr>
<td>Municipal HSPs &amp; By-laws</td>
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<tr>
<td>BEPPs</td>
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<tr>
<th>Integration Zones</th>
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<tr>
<td>Economic Hubs</td>
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<tr>
<td>Marginalised Areas</td>
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<td>Transit corridors</td>
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<tr>
<th>Regional Land Asset Register</th>
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<tr>
<td>Housing Pipelines</td>
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<tr>
<td>Municipal IDP/ SDF/ HSP</td>
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<tr>
<td>BEPP</td>
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<tr>
<td>RSIF</td>
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<tr>
<td>PSDF/ Living Cape Framework</td>
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</table>
## Planning and Delivery Strategies for GCM’s Settlement Network

<table>
<thead>
<tr>
<th>4. Build resilience into the GCM’s network of settlements by:</th>
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<tbody>
<tr>
<td>a) Safeguarding the sustainable use of the region’s spatial assets (i.e. ecological, agricultural, water, cultural, scenic)</td>
</tr>
<tr>
<td>b) Preventing urban encroachment into hazardous and risk areas.</td>
</tr>
<tr>
<td>c) Securing and rehabilitating the region’s biodiversity network</td>
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</tbody>
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<tr>
<th>5. Capacitate GCM communities in the management and maintenance of human settlement services, and the small-scale building sector as contractors for the upgrading of informal settlements and development of top structures in site and service schemes by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Broadening scope of Extended Public Works Programme to include community based maintenance</td>
</tr>
<tr>
<td>b) Skills development</td>
</tr>
<tr>
<td>c) Developing the second hand building materials supply chain through public/private/CBO partnerships</td>
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<tr>
<td>d) Facilitating financing for incremental development</td>
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<tr>
<th>6. Develop the GCM region as an ‘innovation hub’ for human settlement by:</th>
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</thead>
<tbody>
<tr>
<td>a) Building public/private/NGO/university partnerships as basis for developing a GCM regional laboratory</td>
</tr>
<tr>
<td>b) Commissioning regional data collection (e.g. migration and settlement patterns)</td>
</tr>
<tr>
<td>c) Modeling regional settlement, transport and infrastructure growth options</td>
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<tr>
<td>d) Introducing open-source knowledge systems</td>
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<tr>
<td>e) Piloting up-scalable new building technologies/projects.</td>
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<table>
<thead>
<tr>
<th>Spatial Targets</th>
<th>Implementation Levers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural, productive, cultural &amp; scenic landscapes and coastlines</td>
<td></td>
</tr>
<tr>
<td>Municipal SDFs, RSIF, PSDF, Biodiversity Spatial Plans, EMFs, Disaster Management Plans</td>
<td></td>
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<tr>
<td>Townships, Informal settlements, Backyard shacks, Site &amp; service projects</td>
<td></td>
</tr>
<tr>
<td>PSG 1 &amp; 4, Living Cape Framework, LGMT &amp; PGMTEC, Municipal IDP/HSP/LED</td>
<td></td>
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</tbody>
</table>

| GCM Region |
|------------|------------|
| IUDF, PSG 4 & 5, Living Cape Framework, LGMT & PGMTEC, EDP |
3.2.7. Urban and Rural Growth Management Priorities

In the course of the RSIF’s preparation GCM municipalities identified various urban growth ‘hotspots’ on their boundaries, which they prioritised for inter-municipal planning and management interventions (see Table 7 and Figure 17). They also flagged the N1, N2 and N7 gateways as strategic regional corridors that are subject to intense development pressures. They prioritised the commissioning of inter-municipal planning studies of these regional gateways to inform management interventions. Furthermore, the Paardeberg sub-region was identified as a rural ‘hotspot’ that also requires inter-municipal planning and management intervention.

Figure 17. Inter-municipal urban and rural growth management priority areas
Figure 18. Regional Settlement Concept

Legend
- Regional Centre
- District Centre
- Growth Pressure
- Proposed Restructuring Zones (as identified by local municipalities)
- Dense Centre
- Integration Zone / UIZ
- Township Centre
- Protected Areas
- Contain Growth
Urban Growth Issue

1. Chatsworth-Riverlands-Atlantis-Mamre-Kalkbaskraal

The rural settlements of Kalkbaskraal, Chatsworth and Riverlands, located on the metro-periphery and in proximity to the regional centres of Atlantis and Malmesbury, are subject to urban growth pressures. Uncontrolled growth of peripheral dormitory settlements here detracts from the performance of the region’s economic centres as well as its rural areas.

- The RSIF proposes concentrating and consolidating urban growth within the regional centres of Malmesbury and Atlantis, retaining the character and functionality of surrounding rural settlements, and protecting their agricultural (i.e. Groenrivier-Malmesbury N7 intensive agricultural corridor) and natural hinterlands.
- Proactive management of urban growth pressures is required in the sub-region as a collaborative initiative between the City of Cape Town and Swartland Municipalities.
- Accordingly it is recommended that a sub-regional growth management spatial framework is jointly prepared by the City of Cape Town and Swartland Municipality.

2. Velddrif - Saldanha

While Velddrif has traditionally served as a residential area for those working in Saldanha-Vredenburg, the upgrading and expansion of the port and the development of the SBIDZ will significantly increase urban development pressure in Velddrif and environs.

- Uncontrolled urban growth pressures will threaten sensitive natural environments to the west (i.e. west bank of the Berg River Estuary, Flaminka Vlei and the coastal area between Laingville and the Berg River Mouth), to the east (i.e. the coastline between Laaiplek and Dwarskersbos) and the upper Berg River Estuary south of Velddrif.
- As part of the parallel GSRSIF study that is underway it is recommended that Saldanha Bay and Berg River Municipalities collaborate in jointly planning for and managing urban growth pressures arising from the development of Saldanha/Vredenburg as an industrial regional centre.

3. De Novo

Uncertainty regarding the future function and development of Provincial land (De Novo) located off Old Paarl Road (R101) in the Stellenbosch municipal area, directly abutting the Stellenbosch-CoCT municipal boundary east of Bloekombos. Historically the land was farmed but it is subject to escalating urban development pressures.

- There is increasing urban growth pressures in the north-eastern metro-corridor. As the De Novo land is in close proximity to the Paarl-Cape Town commuter railway line, the R101 and N1, it is subject to escalating development pressure. In making a decision on its future consideration needs to be given to its past use for intensive agriculture, especially as favourable soil types and access to the Stellenbosch (Theewaterskloof) Irrigation Scheme underscore its agricultural significance.
- Its location abutting the City of Cape Town-Stellenbosch municipal boundary and in close proximity to the Bloekombos settlement necessitates that the two municipalities collaborate in assessing the optimum and sustainable use of the De Novo land. Such assessment needs to be informed by amongst others, the clarification of the land’s agricultural potential to determine the extent, if any, to which agriculture can contribute to its future utilisation (e.g. community food security).
4. Klompunts

Both Stellenbosch and Drakenstein Municipalities have identified Klompunts as a prospective sub-regional urban node along the N1. Residential and industrial development opportunities have been identified north and south of the N1, and the area has also been identified as having potential to serve as a regional freight logistics hub.

- To take development proposals forward, the following needs to be considered:
  - Existing infrastructure (i.e. N1, R101, R44 and the Paarl-Bellville railway line and station) which dictate the location of certain transport, modal change or break-of-bulk land uses.
  - Existing development footprint of Klompunts as well as potential development land parcels including land north of the N1 and the N1-R101-railway line corridor east of Klompunts, the latter extending up to Paarl South Industria and including a proposed green logistics hub.
  - Potential for an in-land port and agri-processing, packaging and dispatch platform.
  - Avoiding daily movement across the N1 between place of work and residence or social facilities.
  - Achieving an appropriate metro gateway.

- Addressing the Klompunts development issue clearly requires a collaborative sub-regional growth management spatial framework between the Stellenbosch and Drakenstein Municipalities in order to avoid unsustainable ‘twin developments’.

5. Simondium / Groot Drakenstein

Threat of ribbon-development along the DR45 between Simondium and Groot Drakenstein impacting on both a scenic tourism route and significant heritage and agricultural working landscapes.

- The close proximity of Simondium and Groot Drakenstein either side of the Drakenstein and Stellenbosch municipal boundary requires co-ordination of their respective municipal urban upgrading programmes in order to ensure the following:
  - Limiting ribbon development along the DR45 and restricting settlement footprint along such route.
  - Containing growth of the settlements through infill, densification and strict management of urban edges.
  - Appropriate development abutting the DR45.
  - Appropriate usage of underdeveloped tracts of land between the two settlements (e.g. Bien Donne Provincial land) in order to retain/ reinforce the natural, heritage and agricultural working landscapes.

- Achieving co-ordination between the two urban upgrade programmes and management of non-urban land between the two settlements requires that an inter-municipal planning forum be established for such purpose between the Drakenstein and Stellenbosch Municipalities.

6. Zevenwacht/ Bottelary Hills

Threat to the visual amenity of the Bottelary Hills within the eastern visual envelope of the metro area.

- Increased demand for residential development extending northwards from Polkadraai Road (M12) to Bottelary Road (M23) including Zevendal, Zevenwacht, Klein Zevenwacht and Haasendal given the following:
  - Metropolitan access via the Stellenbosch Arterial/ Polkadraai Road (M12), as well as east-west linkages (e.g. Saxdowns Road).
  - Up-slope localities (e.g. Langverwacht Road) enjoying panoramic views of the Peninsula.
  - Close proximity to world-renowned vineyards and wineries (Zevenwacht, Hazendal).

- Such urban growth is eroding the visual amenity of the Bottelary Hills, impacting on the agricultural working landscape and prompting demand for developments within adjacent areas in the Stellenbosch municipal area enjoying similar locational advantages.

- Accordingly, cross-border urban growth management collaboration is required jointly by CoCT and the Stellenbosch Municipality to ensure maintaining the visual, natural and agricultural integrity of the Bottelary Hills.
Development threat to “winelands” in the Faure Hills.

- Residential development within the CoCT municipal boundary between Faure and Firgrove including Croydon Vineyard Estate, Croydon Olive Estate, Kelderhof Country Estate and the currently under construction Sitari Fields is prompting demand for similar residential developments to the north of the CoCT municipal boundary and urban edge within the Faure Hills. The location of such demand within the Stellenbosch municipal area is motivated by developers given the following:
  - Convenient linkages to bulk services within the downslope CoCT developments.
  - Access to potable water given the nearby Faure water-works and reservoir.
  - Being highly accessible given the proximity of the N2 and R102.
  - A location enjoying panoramic views of False Bay and the Peninsula.
  - Being within a viticulture area with access to renowned wineries (e.g. Vergenoegd) and within close proximity to Dreamworld.

- Such development outside the CoCT urban edge will impact directly on the “winelands” within the Stellenbosch municipal area. Accordingly, a collaborative urban edge/municipal boundary assessment jointly undertaken by CoCT and Stellenbosch Municipality is required to “soften” the CoCT urban edge, especially where such edge coincides with the municipal boundary and directly abuts vineyards. This would serve to lessen the threat to the adjacent viticulture areas and address the misperception of developers regarding extending the urban edge within the Faure Hills to benefit from its locational advantages.

Settlement model roll-out threat to agricultural working and heritage landscapes between Stellenbosch and Helderberg.

- Settlement types, their roll-out and management within the Stellenbosch-Helderberg rural interface area demonstrates the following settlement policy disparities:
  - A CoCT settlement policy underpinned by strict settlement growth management (i.e. containment) and limited non-agricultural and new settlement development in its rural area.
  - A Stellenbosch Municipality settlement policy focussing on “inter-connected nodes” with existing rural and urban settlement transformation through densification and extension.

- The roll-out of the “inter-connected node” settlement model within the Stellenbosch-Helderberg interface rural area raises concern in the following respect:
  - Various urban settlement forms, architectural styles and land use components not compatible with the existing heritage and agricultural working landscape (e.g. Jamestown/ De Zalze node).
  - Promotion of ribbon development along the R44 (e.g. Jamestown/ De Zalze node).
  - Development or extension of inter-connected nodes in close proximity to the CoCT urban edge (e.g. Raithby, De Wynlanden Estate) with such developments prompting similar development demand outside the CoCT urban edge.

- Ensuring the integrity of heritage and agricultural working landscapes that comprise the Stellenbosch-Helderberg rural interface requires a joint CoCT-Stellenbosch Municipality collaborative planning forum to achieve synergy between the disparate settlement policies.
3.3. Transversal Regional Interventions

To achieve the economic and settlement transitions strived for, a number of cross-cutting (i.e. transversal) regional interventions are required. These regional ‘enablers’ are dealt with below. Initially, regional infrastructure and transport networks are covered, followed by regional facilities and amenities. Thereafter, regional management requirements related to spatial assets, disasters and risks, and information and planning are dealt with.

Regional infrastructure and facilities were contextualized in Section 2, high-level challenges were flagged, and the vision aspired to explained and illustrated. Assessing the performance of the GCM’s regional infrastructure in terms of the spatial principles underpinning the RSIF, Table 8 summarises key regional issues identified.

Independent of the RSIF process there are a number of parallel national and provincial infrastructure planning studies underway that are responsible for formulating specific recommendations. The RSIF highlights the options these studies are considering to deal with regional issues, and presents associated spatial concepts.
3.3.1. Regional Ecological Infrastructure

Whilst the Cape Floral Kingdom is a globally significant asset in its own right, it has a very specific value for residents of the GCM region. The key resources of biodiversity, water and land, and the ecosystem services derived from these resources, support its population and underpin its socio-economic development.

The RSIF is built around the concept of building and sustaining a regional Ecological Infrastructure. Ecological Infrastructure is the nature-based equivalent of built infrastructure. The concept refers to the naturally functioning ecosystems that deliver valuable services to people (e.g. fresh water, climate regulation, soil formation and disaster risk reduction). Ecological Infrastructure does this by providing cost effective, long-term solutions to service delivery that can supplement, and sometimes even substitute, built infrastructure solutions. These areas include healthy mountain catchments, rivers, wetlands, coastal dunes, nodes and corridors of natural habitat, which form a

Table 8. Regional infrastructure key issues and challenges

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Regional Infrastructure Issues</th>
</tr>
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<tbody>
<tr>
<td><strong>SPATIAL JUSTICE:</strong></td>
<td>Access to natural capital &amp; delivery of ecosystem services still unequal</td>
</tr>
<tr>
<td>- Redress &amp; integration</td>
<td>Slow progress in reducing historical disparities in levels of utility services and facilities delivered to households</td>
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<tr>
<td>- Opportunity &amp; inclusivity</td>
<td>Low income households pay higher proportion of income on transport</td>
</tr>
<tr>
<td>- Accessibility</td>
<td>Slow progress in reducing historical disparities in levels of utility services and facilities delivered to households</td>
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<tr>
<td>- Affordability</td>
<td>Low income households pay higher proportion of income on transport</td>
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<tr>
<td><strong>SPATIAL EFFICIENCY:</strong></td>
<td>Fragmentation of ecological networks and degradation of natural assets</td>
</tr>
<tr>
<td>- Productivity</td>
<td>Capacity shortfalls in bulk utilities (e.g. water, energy), maintenance backlogs</td>
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<tr>
<td>- Optimal resource use</td>
<td>Unconnected regional transport &amp; freight networks &amp; limited modal integration</td>
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<tr>
<td>- Cost effectiveness</td>
<td>Escalating demand for utilities and supply constraints necessitates new approach</td>
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<tr>
<td>- Competitiveness</td>
<td>Escalating reliance on vehicular based movement, limited modal change</td>
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<tr>
<td><strong>SPATIAL SUSTAINABILITY:</strong></td>
<td>Threats to reliability of ecosystem services supply impacts on economy &amp; households</td>
</tr>
<tr>
<td>- Future options</td>
<td>Escalating demand for utilities and supply constraints necessitates new approach</td>
</tr>
<tr>
<td>- Outcomes orientation</td>
<td>Escalating reliance on vehicular based movement, limited modal change</td>
</tr>
<tr>
<td>- Consistency &amp; balance</td>
<td>Compromised ecological infrastructure susceptible to climate change risks</td>
</tr>
<tr>
<td>- Reliability &amp; viability</td>
<td>Aging utility infrastructure, redundant technology, and intractable backlogs</td>
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<tr>
<td><strong>SPATIAL RESILIENCE:</strong></td>
<td>Truck &amp; car reliant transport system</td>
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<tr>
<td>- Ability to bounce back</td>
<td>Paucity of empirical regional data negates scope for evidence based planning</td>
</tr>
<tr>
<td>- Ability to absorb shocks</td>
<td>No shared vision or alignment in the management and development of regional infrastructure networks</td>
</tr>
<tr>
<td>- Adaptability &amp; flexibility</td>
<td>Evidence based planning</td>
</tr>
<tr>
<td>- Risk/vulnerability reduction</td>
<td>Integration &amp; alignment</td>
</tr>
<tr>
<td><strong>SPATIAL GOVERNANCE:</strong></td>
<td>Collaborative/partnerships</td>
</tr>
<tr>
<td>- Evidence based</td>
<td>Certainty &amp; transparency</td>
</tr>
<tr>
<td>- Integration &amp; alignment</td>
<td>Regional governance and policy integration</td>
</tr>
<tr>
<td>- Collaborative/partnerships</td>
<td>Regional infrastructure planning and development</td>
</tr>
<tr>
<td>- Certainty &amp; transparency</td>
<td>Regional infrastructure management and operation</td>
</tr>
</tbody>
</table>

3.3.2. Utility Infrastructure

3.3.3. Transport & Freight Infrastructure

3.3.4. Facilities & Amenities

3.3.3. TRANSPORT & FREIGHT INFRASTRUCTURE

- WATER
- SANITATION
- ENERGY
- WASTE
- ICT
- CRITICAL BIO-DIVERSITY AREAS
- ECOCLOGICAL CORRIDORS
- ECOCLOGICAL BUFFERS
- CATCHMENTS

3.3.4. FACILITIES & AMENITIES

- TERTIARY EDUCATION
- SPECIALIST HEALTH
- STADIUMS
- ARTS & CULTURE
- RESORTS AND RECREATION
- TERTIARY EDUCATION
- SPECIALIST HEALTH
- STADIUMS
- ARTS & CULTURE
- RESORTS AND RECREATION
SANBI has developed a framework for investing in Ecological Infrastructure (SANBI, 2014). This framework highlights how investments in ecological infrastructure:

- supports South Africa’s economy by providing essential services and reducing risk;
- involves devoting time, effort, finances and making decisions that support the maintenance of a functioning ecological network, and restoring priority degraded areas;
- supports development objectives of poverty alleviation, rural development and job creation;
- needs to be integrated into the planning and implementation of a range of government departments; and
- applies the principles of: focusing on achieving clearly defined outcomes in specific areas; optimizing its contribution to job creation, poverty alleviation and rural development; participatory and socially sensitive implementation; and appropriate monitoring and evaluation.

Ecological Infrastructure provides services either directly to society (e.g. a coastal dune system can protect an urban area from storm surges linked to climate change and sea level rise), or it can function as an integrated part of the overall infrastructure network (e.g. a mountain catchment area, wetlands and intact riparian zones responsible for delivering a secure supply of high quality water are as much a part of the regions’ dams and pipelines that deliver that water to urban areas).

A key advantage of Ecological Infrastructure is that it does not need to be built, as it already exists in the landscape. Unfortunately, in many areas past land use and management practices have negatively impacted on the key Ecological Infrastructure assets, and have degraded their ability to deliver services to society. A key similarity between Ecological Infrastructure and other forms of infrastructure is the Ecological Infrastructure needs to be maintained and managed, and where it is in poor condition it may need to be restored.

Society and all economic sectors rely to some extent on services delivered by Ecological Infrastructure. The most obvious example is the system of mountain catchments, wetlands and rivers which deliver reliable supplies of high quality water, which is a key limiting resource supporting the GCM’s urban areas, industry and agriculture. If this Ecological Infrastructure is damaged or lost, the delivery of services (in this case reliable water supplies in a changing climate) will be impacted and the economic sectors dependent on this supply will be impacted. Investing in Ecological Infrastructure improves the flow of services to society, thereby improving human wellbeing.

Table 9 highlights some examples of benefits flowing to society from investing in a regional Ecological Infrastructure network. Some key linkages between Ecological Infrastructure and socio-economic development are highlighted below:

**Water** is a critical limiting resource for the GCM region, and it is vital for sustainable economic growth. It supports domestic use, agriculture, industry and forestry. Climate change is expected to place a significant additional pressure on the water resources of the region, as the winter rainfall region is predicted to experience a significant reduction in water availability. Overall water supply and quality of the supply (e.g. nutrients and sediment) are impacted by catchment condition. Invasive alien trees such as wattles and gums use large quantities of water, and have the potential to dramatically reduce water supply in heavily invaded catchments if they are not managed. Degraded vegetation can result in soil erosion and siltation of dams. Where wetlands have been damaged and riparian vegetation has been removed, these areas can no longer play a role in filtering pollutants out of the water. Hence, investing in priority Ecological Infrastructure within catchments can potentially improve water supply, improve dry season flows, improve water quality, reduce flood risk, lengthen the lifespans of dams and reduce maintenance costs (e.g. costs for water treatment).

Ecological Infrastructure plays a key role in **disaster risk reduction**. A catchment that is in good condition can significantly reduce flood damage. Intact natural vegetation slows runoff and increases infiltration, while wetlands and intact riparian vegetation can help reduce food peaks. Ecological Infrastructure along coastlines (e.g. intact dunes) helps buffer settlements from storm surge events linked to climate change and sea level rise. Restoring dunes and preventing further inappropriate development in coastal setback zones increases the ability of Ecological Infrastructure to reduce risk from sea storms. Dense infestations of alien invasive trees such as wattles, is a key driver of fire risk. Controlling and or eradicating these trees should be a critical component of securing Ecological Infrastructure and thereby managing fire risk.

Ecological Infrastructure supports agriculture and ensures **food security**. Natural land supports pollinators, which play a critical role in many agricultural industries such as deciduous fruit production. Well managed rangelands support sustainable grazing. Water related Ecological Infrastructure contributes to supporting production of irrigated crops.

Ecological Infrastructure is critical for **climate change adaptation**. Naturally functioning ecosystems assist with society adapting to climate change, an approach known as Ecosystem-based Adaption. Ecological infrastructure provides protection from more frequent and intense disasters (e.g. floods, storm surge, fires and droughts).

Ecological Infrastructure provides the direct resource base for the key tourism sector of the Western Cape. The natural fynbos, rivers, mountains and beaches all provide the critical **scenic**
resource which draws people to the Western Cape from all over the world.

3.3.1.1 Regional Strategies

The spatial strategy for building a sustainable and resilient GCM Ecological Infrastructure network is directly based on securing the priority areas identified in the Western Cape Biodiversity Spatial Plan (WCBSP) (Pool-Stanvliet et al., 2016). This plan provides a single integrated layer of environmental spatial priorities for the region (i.e. a set of Critical Biodiversity Areas and Ecological Support Areas). Importantly, it integrates the spatial products of Cape Town and surrounding municipalities and eliminates current inconsistencies. The WCBSP has been developed at a relatively fine spatial scale (under 1:50 000) that can be used for planning at local, district and provincial levels. It supports the principles of integrated development planning and integration with IDPs and SDFs has been addressed in consultation with stakeholders in government, civil society and the private sector. As the WCBSP replaces all the earlier systematic biodiversity planning products for the Western Cape and should be used as the official reference for biodiversity priority areas to be taken into account in land use planning and decision-making in the province, it is appropriate to use it as the single Ecological Infrastructure and biodiversity informant for the RSIF.

The WCBSP incorporates the full range of areas required to deliver a robust system of Ecological Infrastructure and meet all biodiversity targets. The specific implementation levers for securing Ecological infrastructure are addressed in Section 3.3.1.3.

3.3.1.2 Spatial Framework

The spatial framework for the RSIF is based directly on the priority areas identified in the Western Cape Biodiversity Spatial Plan (WCBSP) (Pool-Stanvliet et al., 2016). The WCBSP Map differentiates between three broad priority categories of area which are important for Ecological Infrastructure:
• **Protected Areas (PAs):** Areas that are formally protected by law and recognized in terms of the NEM:PAA (this includes gazetted private Nature Reserves and Protected Environments).

• **Critical Biodiversity Areas (CBAs):** Areas that are required to secure Ecological Infrastructure and meet biodiversity targets for species, ecosystems or ecological processes. These include:
  - All areas required to meet biodiversity pattern (e.g., species, ecosystems) targets;
  - Critically Endangered (CR) ecosystems (terrestrial, wetland and river types); and
  - All areas required to meet Ecological Infrastructure requirements, which are aimed at ensuring the continued existence and functioning of ecosystems and delivery of essential ecosystem services especially under climate change, including key areas for supporting water supply (e.g. Strategic Water Source Areas and other important mountain catchment areas) and areas important for disaster risk mitigation (e.g. important wetlands and floodplains to reduce flood impacts). Specific areas important for climate change adaptation included areas of climate change resilience, areas of large intact ecosystems, critical corridors to maintain landscape connectivity, and areas important for disaster risk mitigation such as coastal setbacks and key wetlands and floodplains.

CBAs are areas of high Ecological Infrastructure, biodiversity and ecological value and need to be kept in a natural or near-natural state, with no further loss of habitat or species, or further degradation in condition. Degraded areas should be rehabilitated to natural or near-natural condition. Only low-impact, biodiversity-sensitive land uses are appropriate.

On the Biodiversity maps (see Box 9), a distinction is made between CBAs that are likely to be in a natural condition (CBA 1) and those that are potentially degraded or represent secondary vegetation (CBA 2). This distinction is based on best available land cover data, but may not be an accurate or current reflection of condition. This distinction is very important from a biodiversity perspective, but may be less so from an Ecological Infrastructure viewpoint.

• **Ecological Support Areas (ESAs):** Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services. These areas support landscape connectivity, encompass the Ecological Infrastructure which delivers ecosystem goods and services, and strengthen resilience to climate change. They may in fact be as important as CBAs in terms of Ecological Infrastructure in many areas. They include features such as regional climate adaptation corridors, water source and recharge areas, and riparian habitat surrounding rivers or wetlands. Ecological Support Areas need to be maintained in at least a functional and preferably a natural state, to support the purpose for which they were identified, but some habitat loss may be acceptable. A greater range of land-uses over wider areas is appropriate, subject to an authorization process that ensures the underlying biodiversity objectives and ecological functioning are not compromised. In the maps, a distinction is made between Ecological Support Area 1 which are still likely to be functional (i.e. which

<table>
<thead>
<tr>
<th>MAP CATEGORY</th>
<th>DEFINITION</th>
<th>DESIRED MANAGEMENT OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected Area</td>
<td>Areas that are proclaimed as protected areas under national or provincial legislation.</td>
<td>Must be kept in a natural state, with a management plan focused on maintaining or improving the state of Ecological Infrastructure and biodiversity.</td>
</tr>
<tr>
<td>Critical Biodiversity Area 1</td>
<td>Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.</td>
<td>Keep natural, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, Ecological Infrastructure and biodiversity sensitive land-uses are appropriate.</td>
</tr>
<tr>
<td>Critical Biodiversity Area 2</td>
<td>Areas in a degraded or secondary condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.</td>
<td>Keep natural, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, Ecological Infrastructure and biodiversity sensitive land-uses are appropriate.</td>
</tr>
<tr>
<td>Ecological Support Area 1</td>
<td>Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.</td>
<td>Maintain in a functional, near-natural state. Some habitat loss is acceptable, provided the underlying Ecological Infrastructure and biodiversity are not compromised.</td>
</tr>
<tr>
<td>Ecological Support Area 2</td>
<td>Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.</td>
<td>Restore and/or manage to minimize impact on Ecological Infrastructure functioning; especially soil and water-related services.</td>
</tr>
</tbody>
</table>

Table 9. Key categories of the WCBSP Map and relevance for the RSIF. Adapted from (Pool-Stanvliet et al., 2016)
are in a natural, near-natural or moderately degraded condition), and Ecological Support Area 2 which are severely degraded or have no natural cover remaining and require restoration.

In addition, the WCBSP Map identifies two categories which are unlikely to have significant remaining value in themselves as Ecological Infrastructure, and for clarity we have not shown them on the summary map. Nevertheless, their management has some implications for the Ecological Infrastructure network, and hence these are briefly discussed below:

- **Other Natural Areas (ONAs):** These are areas that have not been identified as a priority in the current biodiversity spatial plan but still retain most of their natural character. Two issues are important in these areas. Firstly, although they are lower priority areas, they nevertheless are an important part of the natural ecosystem and may perform a range of Ecological Infrastructure and biodiversity functions, and could provide potential alternate areas should parts of the core network be lost. Hence, where possible, development should be avoided in these areas. Secondly, activities in these areas should be carefully managed to ensure they do not have major negative impacts on adjacent and downstream CBAs and ESAs.

- **Severely Modified to No Natural Remaining (NNR):** Areas that have been modified by human activity to the extent that they are no longer natural, and largely do not contribute to biodiversity and Ecological Infrastructure functions. Activities in these areas should be carefully managed to ensure they do not have major negative impacts on adjacent and downstream CBAs and ESAs.

### 3.3.1.3 Implementation Levers

Investing in a regional Ecological Infrastructure network involves securing and maintaining functioning intact Ecological Infrastructure, as well as restoring degraded Ecological Infrastructure. The key implementation levers to secure the regional Ecological Infrastructure network in the GCM are built on securing and better managing the most important areas (particularly Critical Biodiversity Areas and Ecological Support Areas) identified in the WCBSP via a range of implementation mechanisms (Pool-Stanvliet et al., 2016). The most important mechanisms are:

- **Building Ecological Infrastructure into land-use planning and decision-making (including the Greater Cape Metro RSIF).** This includes:
  - Proactive forward-planning (state): including the incorporation of CBAs, ESAs and the land use guidelines into IDPs, SDFs, SEAs, EMFs, Land Use Management Schemes, Zoning Schemes, and other forward-planning under SPLUMA;
  - Proactive forward-planning (developers and state entities): including the incorporation of CBAs, ESAs and the land use guidelines into their own planning processes to avoid important Ecological Infrastructure early in their own planning processes; and
  - Development applications: such as environmental impact assessment (EIA) processes under the National Environmental Management Act (NEMA), agricultural land use decisions (e.g. cultivation licenses) under the Conservation of Agricultural Resources Act (CARA), water-use licensing under the National Water Act, authorizations for prospecting and mining under both the Mineral and Petroleum Resources Development Act and NEMA, and land use planning decisions in terms of the Spatial Planning and Land Use Management Act (SPLUMA) and the Land Use Management Act (LUPA).

- **Establishing and maintaining protected areas and conservation areas, particularly through robust and well-resourced biodiversity stewardship programs.** Issues include:
  - Ensuring appropriate resources are available: CapeNature, SANParks and local authorities need appropriate levels of resourcing to allow them to optimally expand and manage or support the network of protected areas and conservation areas in areas of important Ecological Infrastructure;
  - Prioritizing areas for proactive conservation: such as identifying land of high value Ecological Infrastructure for the expansion and consolidation of protected areas, either through biodiversity stewardship agreements, land acquisition or other tools that may be developed; and
  - Offset receiving areas: where developments require biodiversity offsets, CBAs should be prioritized as receiving areas.

- **Restoration and improved management of important ecological Infrastructure (e.g. alien vegetation clearing).** These areas should be prioritized when identifying areas requiring restoration or other action to improve the condition of the environment and restore biodiversity pattern and ecological processes. The actions should include:
  - Clearing invasive alien plants from mountain catchments and riparian areas;
  - Rehabilitating degraded wetlands in priority catchments for delivering water to people; and
  - Maintaining or restoring buffers of natural vegetation in riparian areas and coastal setback areas (e.g. restoring dune systems).
• Active and strategically focused management of the Ecological Infrastructure network. Ecological Infrastructure networks should be managed strategically, whether it is part of a mixed system of built and Ecological Infrastructure (e.g. clearing alien invasive vegetation in key mountain catchments for the main dams), or as Ecological Infrastructure that provides a direct service (e.g. securing riparian zones and floodplains in key catchments with high flood risk).

Table 10: Examples of benefits flowing to society from investing in a regional Ecological Infrastructure network. (Adapted from SANBI, 2014)

<table>
<thead>
<tr>
<th>EXAMPLES OF INTERVENTIONS</th>
<th>EXAMPLES OF SERVICES DELIVERED</th>
<th>IMPROVED HUMAN WELLBEING</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clear invasive alien plants, especially in mountain catchments and riparian areas</td>
<td>• Increased water yield</td>
<td>• Decreased exposure to natural disasters (fire, floods, sea surge, etc.)</td>
</tr>
<tr>
<td>• Rehabilitate wetlands</td>
<td>• Flood risk reduction</td>
<td>• Improved food security</td>
</tr>
<tr>
<td>• Regenerative coastal foredunes</td>
<td>• Improved water quality through filtering of pollutants and toxins</td>
<td>• Improved health</td>
</tr>
<tr>
<td>• Implement prescribed burning for fuel load reduction and fire belts to improve livelihood security</td>
<td>• Improved soil water retention and nutrient status</td>
<td>• Safe and plentiful drinking water</td>
</tr>
<tr>
<td>• Restore degraded/denuded land</td>
<td>• Buffering against sea storm surge</td>
<td>• Improved livelihood security</td>
</tr>
<tr>
<td>• Reinstall buffers of natural vegetation between agricultural crops and rivers</td>
<td>• Increased base flow in dry season – assurance of water supply</td>
<td>• Adaptation to climate change</td>
</tr>
</tbody>
</table>

Active and strategically focused management of the Ecological Infrastructure network. Ecological Infrastructure networks should be managed strategically, whether it is part of a mixed system of built and Ecological Infrastructure (e.g. clearing alien invasive vegetation in key mountain catchments for the main dams), or as Ecological Infrastructure that provides a direct service (e.g. securing riparian zones and floodplains in key catchments with high flood risk).
### 3.3.2 Regional Utility Infrastructure

#### 3.3.1 Ecological Infrastructure

- Critical biodiversity areas
- Ecological corridors
- Ecological buffers
- Catchments

#### 3.3.2 Utility Infrastructure

- Water
- Sanitation
- Energy
- Waste
- ICT

#### 3.3.3 Transportation & Freight Infrastructure

- Sea, air & inland ports
- Rail networks
- Road networks
- Public transport networks
- NHI networks
- Pipeline networks
- Intermodal facilities

#### 3.3.4 Facilities & Amenities

- Tertiary education
- Specialized health
- Seabaths
- Arts & culture
- Resorts and recreation

### 3.3.3 Transversal Interventions (Enablers)

- Ecological infrastructure
- Critical biodiversity areas
- Ecological corridors
- Ecological buffers
- Catchments

### Regional Water Issues & Options

The December 2015 GCM Status Quo assessment documented regional utility infrastructure considerations, which are not repeated here. There are separate planning processes underway that are investigating how best to deliver the required utilities to the GCM region. Drawing from these parallel planning processes, key regional utility infrastructure issues and options are recorded below.

#### Regional Water Issues & Options

Various options and scenarios are being investigated in the latest Western Cape Water Supply System (WCWSS) assessment (DWS 2015a), known collectively as the Intervention Implementation Programme (7-13 years). These interventions are in different stages of development, with the Berg River-Voëlvlei Augmentation Scheme (BRVAS) being most advanced. The raising of the Voëlvlei Dam (an off-channel dam located adjacent to the Berg River) by two metres will only provide further supply by 2021, and is the only confirmed project. Other possible interventions, which are at various planning and feasibility study stages, are as follows:

- Berg River-Voëlvlei Augmentation Scheme (phase 1)
- Desalination of seawater (Koeberg site most likely in City of Cape Town (CoCT); also Saldanha proposal)
- Large-scale water reclamation
- Other possible interventions to be considered for implementation at a later stage include:
  - Large-scale Table Mountain Group (TMG) aquifer development
  - Langebaan Road Aquifer Artificial Recharge Scheme (although the first pilot study did not produce the desired results)
  - Cape Flats aquifer development
  - Mitchells Pass Diversion
  - Raising of Steenbras Lower Dam
  - Development of the Lourens River Diversion.
- The CoCT has further developed their strategic focus with regard to water augmentation schemes, including the use of desalination plants (both local and regional derivatives), water reuse through wastewater reclamation and groundwater extraction. Further policy development and implementation of these programs will assist in securing a more secure regional water outcome. The recent West Coast Industrial Plan concluded that if water re-use in the Saldanha area is pursued, the need for phases 2 and 3 of the desalination options shown are delayed to beyond 2040, if not indefinitely.

While it won’t affect the Berg Water Management Area (WMA) or regional water allocations, the proposed raising of the Brandvlei dam will allow for irrigation of approximately 5000 additional hectares in the Breede Valley Municipal area.

The main regional implication is the recognition of regional water scarcity and interdependence. This highlights the following regional implications:

- Continued pursuit of water demand management and water conservation measures;
- Investigation of water re-use;
- Protection of ecological infrastructure related to water yield and quality.

### Waste Water Issues & Options

The management and quality of the water and wastewater treatment in the GCM region is generally good. Many of the wastewater treatment works in the region are, however, operating at or over their design capacity. Inadequate treatment of wastewater along with runoff from settlements has negatively affected the water quality in rivers, especially in the urban areas within the CoCT. Rivers in the Breede and Berg WMAs face water quality problems due to intensive irrigation and sub-standard return flows from agricultural use. Effective management of wastewater effluent, agricultural return flows and runoff in urban areas is crucial to improve the water quality within the GCM Region.

There are three main issues of regional significance with regard to waste water:

**i. Minimizing the environmental impact**

The primary regional concern is the impact of waste water treatment works (WWTW) effluent and environmental impacts. This applies across the region, but is primarily a municipal operational issue. The main regional component is the supportive use of green infrastructure (both man-made and ecological) to reduce pressure on the system, and thereby improve regional environmental quality as a whole.

As the region’s settlements densify so sustainable urban drainage systems will become more
necessary, to reduce the required peak capacity of the stormwater system and polluted urban runoff into sensitive downstream areas.

ii. Exploring regional sludge management and waste-to-energy options

While regional waste water infrastructure plans are limited to the possibility of Stellenbosch and Drakenstein Municipalities sharing a new sub-regional WWTW in the lower Berg River valley, the main regional opportunities are related to regional solutions for sludge as a feedstock for a waste-to-energy project.

Historically, dried sludge has been stockpiled or buried on site of the treatment works, sent for formal disposal to landfill, land farmed or applied to agricultural land. As discussed below in the section on waste, landfill disposal is unsustainable given the limited availability of landfill space in urban areas.

Consideration should be given to centrally located sludge handling facilities where dried sludge can be burnt and the energy recovered. Such a plant would have to be near major roads or railway lines as sludge will have to be transported from the different treatment works. Centrally located sludge handling facilities have been implemented very successfully in other parts of the world.

The City of Cape Town and Stellenbosch have also indicated interest in waste-to-energy schemes using both the organic portion of municipal solid waste, and sewage sludge to produce biogas.

iii. Re-use of effluent

Re-use of WWTW effluent is proposed in Cape Town, Stellenbosch and Saldanha Municipalities. The extent to which this is possible will free up scarce water resources in the region.

Stellenbosch is actively investigating the re-use of effluent for agricultural purposes, while the City of Cape Town currently has numerous treated-effluent reuse schemes in place at their WWTWs. The treated-effluent infrastructure will be expanded to protect natural resources, prevent current and future potable-water shortages, return the city’s streams to seasonal water conditions, and enable unrestricted irrigation during water restrictions.

Green Cape is in the process of investigating the possibility of water reuse and a possible water exchange network in the Saldanha Municipal area, which is particularly water-constrained as it has exceeded its current water allocation from the Berg WMA. The demand for treated effluent, or second class water, currently exceeds the volume of water available from the main Saldanha WWTW.

Energy Issues and Options

Notwithstanding South Africa’s commitment to reducing carbon emissions, there remains policy uncertainty regarding the optimum energy mix the country will pursue. Renewable energy capacity in the region is rapidly growing, with wind and solar farms contributing to the national grid whilst small scale embedded generation such as solar water heaters and rooftop PV is reducing dependence on municipal energy distribution.

Regional Demand

Future electricity demand is forecast to emanate from increased consumption in the GCM’s existing economic hubs and urban centres. This will be driven by growth of the residential, commercial and light industrial markets, as well as densification of existing residential areas. In terms of new demand areas, substantial growth in load is envisaged in the southern West Coast arising from the development of the SBIDZ and associated urban growth and economic activity in the sub-region.

Regional Power Generation

The GCM region draws power from the national grid. Local power generation is currently limited to:

i. A baseload power station, Koeberg Nuclear Power Station (KNPS), comprising Koeberg Unit 1 and Koeberg 2.

ii. Four peaking plants:

- Acacia Power Station: gas turbine engine generation primarily to regulate voltage, but also to provide emergency electrical supply to KNPS.
- Ankerlig Power Station: open-cycle gas turbines (diesel fuelled) in Atlantis to meet increasing demand in the Eskom grid, as well as voltage regulation.
- Palmiet Pumped-storage Scheme: underground hydro-electrical power station as part of a inter-catchment water transfer project.
- Steenbras Pumped-storage Scheme: underground hydro-electrical power station as part of the Steenbras Dam water supply network.

iii. Renewable energy plants which are integrated into the transmission network. Respectively wind - i.e. Darling, Hopefield, Caledon, Vredenburg, as well as Eskom’s Klipheuwel Wind Energy Demonstration Facility, and solar – Aurora, Vredendal, Swartland, Touwsrivier & Paleisheuwel.
There is no finality on the mix of the GCM’s future generation sources, with the following options under consideration:

**Nuclear**

Bantamsklip (east of Gansbaai) and Duynefontein (immediately north of KNPS) are sites in the GCM that may form part of Eskom’s proposed nuclear build programme. For the time being Bantamsklip environmental impact assessment (EIA) process is on hold, given difficulties experienced in securing routes for transmission grid connections. Duynefontein, however, is still under consideration as a new build site.

The National Nuclear Regulator (NNR) has not yet determined what the extent of the new-build (i.e. Duynefontein) safety zones will be. However, the EIA has applied the following European Nuclear Facilities Requirements zones:

- **800m** (all land to be under ownership of the power station utility)
- **3,0km** (so called food barring zone) with restricted new development

KNPS’s existing safety zones (i.e. Precautionary Action Zone (PAZ) 0-5km; Urgent Protective Action Planning Zone (UPZ) 5-16km) will remain in place while KPNS is in commission and for 5 to 10 years after closure. New safety zones will only be implemented on depletion or removal of all nuclear fuel material at KNPS. The spatial implications are that within the RSIF’s 20 year planning horizon, KNPS safety zones will continue to be a restriction on new urban development in the sub-region.

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1 Based on 14 July 2016 telephone conversation with Deon Jeannes, Nuclear Environmental Manager, Koeberg Operating Unit, Melbosstrand.

**Diagram 15. Existing and Proposed (2022) 400kV and 765kV Transmission Lines (Eskom, 2014)**
Gas

Two new gas to power projects may be located within the Saldanha area. At this stage the siting of these gas-powered plants remains uncertain. The Department of Energy has issued a request for expressions of interest to be submitted “for development, financing, construction, operation and maintenance of a 600MW gas-fired power plant located in one of the major ports, i.e. Coega, Richards Bay or Saldanha Bay”. Both Atlantis and Saldanha are targeted for the onshore processing of the Ibhubesi gas fields off the Namaqualand coastline.

Renewables

The Western Cape has shown a huge potential for renewable energy due to its climate and proximity to the coast. To date, 330 MW of renewable energy plants have been integrated into the Western Cape. Given that the Western Cape has been identified by Eskom as a prime site for wind energy generation (Eskom 2015a), the following regional challenges have been identified:

- Ensuring that sufficient transmission capacity is available when needed.
- The scenic and tourism needs of the region require that new transmission lines and wind-farm sites are sensitively located, with Breede Valley and Saldanha Municipalities expressing concerns about Nuy and Paternoster respectively.

Regional Power Grid

Delays in upgrading the region’s power grid pose a major threat to future growth of the GCM, particularly with regard to prospective new industrial developments in Saldanha and environs. Eskom’s Transmission Development Plan 2016-2025 (Eskom, 2015) proposes the installation of two new 765kV transmission lines (i.e. Cape Transmission Power Corridor) to strengthen the region’s connections with the national grid. These serve to offset the deficit between KNPS generation capacity and GCM demand.

In 2015 one of these lines was installed from Victoria West to Touwsrivier, and completion of its extension to the GCM’s new regional Sterrekus substation (Omega) located between the R27 and N7 has been delayed. Further grid extensions planned include links from Sterrekus to Ankerlig power station (Atlantis) and Aurora sub-station (feeding the Saldanha sub-region); and additional links between KNPS and Muldersvlei and Acacia sub-stations (Cape Metro).

Waste Issues & Options

There is wide-spread agreement on the need for regional landfill solutions, with many existing landfills reaching capacity. Consideration is being given to establishing regional sites adjacent to rail infrastructure to reduce operational costs and energy requirements associated with the need for road freight (e.g. at Kalbaskraal). In addition to regional disposal facilities, there is also a need to explore integrated waste management facilities and options such as waste-to-energy public-private partnerships (PPPs), which are receiving attention in the Drakenstein and Stellenbosch Municipalities. The challenge for the establishment of thermal facilities and introduction of waste-to-energy technologies is securing enough waste, which suggests that municipalities should seek regional economies of scale through collaboration. Options in this regard include:

- The proposed Kalbaskraal site near Atlantis/ Malmesbury in the Swartland Municipality appears to be one of the most likely solutions. The proposed site consists of already badly degraded land due to sand mining activities, with little indigenous vegetation. The new site will deal largely with household waste, which would ultimately be transported mostly by rail. It will cover 890 hectares including a buffer zone. (This site was the result of an earlier investigation into 75 possible sites, which resulted in the identification of 2 possible sites, namely Atlantis and Kalbaskraal (CCA, 2012). The Atlantis option is generally accepted as politically impossible.
- The Highlands site in Malmesbury is already being used as a regional solution. The potential for it to be used more broadly should be investigated.
- Drakenstein Municipality is investigating a regional waste to energy site near Wellington to potentially serve Drakenstein, Stellenbosch and the City of Cape Town. This should be investigated as part of the regional waste solution. Not only will this provide a source of energy, but it can assist in reducing road-traffic related to waste, and better utilise existing rail infrastructure. The main challenge for the Drakenstein thermal facility will be securing enough waste to run both an AD and thermal facility unless additional waste is imported from neighbouring municipalities. Stellenbosch Municipality is considering feeding into this scheme. (Stellenbosch Municipality, 2016)
- Breede Valley Municipality is investigating the potential for creating a regional landfill adjacent to their existing Worcester landfill, intended to serve the whole Cape Winelands region.

While Bergrivier Municipality lies just beyond the GCM region, it has recently closed several town landfills and is currently transporting their waste to transfer stations from where it is transported to licenced landfills in Swartland and Saldanha Bay in accordance with agreements concluded with these Municipalities. Berg River Municipality waste should therefore be included in any solid waste regional planning.
In Section 2, inefficiencies and deficiencies in the region’s transport, freight and logistics systems were flagged as fundamental constraints to the GCM’s economic competitiveness, as well as inhibiting the ability of its residents to access economic opportunities and the city-region’s amenities and facilities.

Integration of transport and freight systems in the GCM city-region is complicated by the range of role players involved (i.e. National, Provincial and Local Government departments, State owned Enterprises), and the fact that some of their mandates overlap. This poses a serious challenge to integrated planning and infrastructure delivery, as highlighted in the NDP, IUDF, draft PLTF, and various Transport for Cape Town (TCT) reports.

In support of the calls from the PLTF and TCT’s Functional Region Sub-committee for the undertaking of integrated inter-modal regional transport planning, GCM transport and freight options and spatial concepts are covered below.

### 3.3.3. Regional Transport and Freight Infrastructure

#### 3.3.3.1. Ecological Infrastructure
- Critical Biodiversity Areas
- Ecological Buffers
- Ecological Corridors
- Catchments

#### 3.3.3.2. Utility Infrastructure
- Water
- Sanitation
- Energy
- Waste
- ICT

#### 3.3.3.3. Transport & Freight Infrastructure
- Sea, Air & Inland Ports
- Rail Networks
- Public Transport Networks
- Road Networks
- Pipeline Networks
- Intermodal Facilities

#### 3.3.3.4. Facilities & Amenities
- Tertiary Education
- Specialist Health
- Stadiums
- Arts & Culture
- Resorts and Recreation

#### I) Regional Freight Network

The freight network is what connects places of supply and demand within regional economies, and links it with external markets. The efficiency of the network has a major bearing on the costs of doing business, and in turn the national and global competitiveness of the GCM region. Besides its economic significance, regional freight systems are also of social and environmental significance because of the externalities involved (e.g. congestion, emissions, accidents, etc). These costs are not factored into market prices, but are borne by society.

As noted in Section 2, recent research undertaken by Stellenbosch University’s Logistics Department confirms the findings of the 2008 OECD territorial review. Their message is that the GCM’s current freight system detracts from the region’s competitiveness and impacts negatively on the environment and society. Their call is for the establishment of an integrated regional freight network.

The 2016 draft PLTF takes up this call and states that “the effectiveness of the network relies on logistics interfaces such as intermodal hubs and the quality of the transport system, which in turn has an effect on port performance. Dedicated freight corridors and important logistics hubs that connect the hinterland to the ports should be identified and included in a dedicated freight network plan. The plan should include differentiation between freight modes based on the transportation suitability of commodities”.

In a similar vein TCT’s 2015 draft Freight Management Strategy proposes “transforming existing rail facilities into intermodal facilities / hubs to form a freight rail hub-and-spoke system, linking rural areas with significant freight volumes with the dry port”.

Building on the options considered by the PLTF and TCT for a regional rationalisation of freight movement and logistics, Diagram 16 conceptualises an integrated regional freight network. The concept, which reinforces RSIF’s strategies for the regional space-economy and settlements, has the following features:

- An upgraded rail freight network and designated road freight routes connecting the region’s economic centres, export/import hubs, and external markets.
- Road-rail freight transfer hubs in the regional centres.
- Twin sea-ports sharing the handling of the region’s exports and imports.
- A new dry-port (i.e. inland intermodal container terminal with associated warehousing and distribution facilities) on the rail network and outside the built-up area and located either along the N1 or N7. An inland port serves to relieve pressure on Cape Town port, reduce congestion on the City’s roads, and facilitate shifting freight from road to rail.
- CTIA serving as the region’s air travel and freight hub as well as an industrial and business node (i.e. ACSA’s Aerotropolis concept). Alternative freight airport sites are earmarked along the West Coast.

In general freight does not mix well with other activities en route (e.g. interferes with tourism) but better utilisation of fleets may require solutions that increase mixing of passengers and goods. As compliance with designated freight routes is a concern, it will be important to identify strategies that will encourage compliance.

To increase adherence to designated freight routes, municipal planning and by-laws can be used to encourage appropriate locational decisions related to industrial supply chains that make use of heavy vehicles. Businesses that use smaller vehicles can be more widely distributed, which is beneficial to small business investment and labour. Allowing small businesses the freedom and incentive to locate...
II) Shifting Freight from Road to Rail

If Metrorail achieves operational improvements for better integration and efficiency of services, this would assist with shifting freight from road to rail. To make a significant impact, however, this will need to address the needs of domestic traffic, not only port-related imports and exports. It is assumed in the PLTF that enhanced transport hubs will assist with this, but there needs to be consultation with industry stakeholders to confirm geospatial requirements related to production, distribution and warehousing.

Research in 2015 by JH Havenga et al of Stellenbosch University Logistics Department found that there is significant potential to shift freight from the N1 corridor between Cape Town and Gauteng onto rail, considering the nature and volume of that freight. This is a dense, long distance corridor carrying 50% of total Western Cape provincial freight flows, a third of which are fast-moving consumer goods that could be containerised. A multimodal service proposed by Transnet Freight Rail would use ports as intermodal gateways and inland terminals as transhipment hubs.

According to the research, an intermodal solution could prevent a potential 143% increase in road transport volumes to and from the Western Cape by 2043. It is noted that the Cape Town Freight Management Strategy proposes that TCT will assess the business case and logistics in the promotion of intermodal solutions, which implies that the case has not yet been made.

The Cape Town Freight Strategy also notes that corridor flows on the province’s three national roads will increase by 250% by 2042, and that 20% of vehicles on the N1 are heavy trucks, and that this will increase to 40% if there is not a marked shift to rail. The envisaged shift from road to rail would require an efficient service with appropriate technology at a competitive rate, as well as policy
interventions. It is not stated whether mainline rail corridors would require upgrading (e.g., conversion to standard gauge as recommended in the Green Paper on National Rail Policy).

A focus on small business development in the GCM’s rural areas may enhance opportunities for combining passenger and freight transport, but this will require regulatory changes to the carriage of paying passengers. There is scope to include both road and rail operators in carrying goods with passengers.

III) Regional Transport Hubs

The GCM’s transport hubs have the potential to catalyse regional development. There is considerable scope to improve the functionality of the region’s transport hubs, and in the process reduce the costs of doing business, open up new economic opportunities, and provide a better overall user experience. In this regard the GCM’s ‘game changers’ are seen as follows:

a) Ports of Cape Town and Saldanha

Cape Town port is being developed as a multi-functional national asset. Its container and general freight handling capacity is scheduled to be significantly increased, its role as passenger terminal and visitor destination is being enhanced, it is earmarked to accommodate a greater variety of marine related businesses and services, and its spatial and functional integration with the abutting CBD is an on-going challenge.

To these ends inter-disciplinary planning of this national asset should be undertaken by TNPA in partnership with the CoCT. The planning of future port expansion and freight logistics requirements needs to be reconciled with sub-regional environmental, transport, land use and urban design requirements. A sustainable business model is needed for the port’s future development that applies PPP principles.

Cost benefit studies are needed to determine the long term returns of alternative land use scenarios, and land use decisions should be based on the optimum long term outcomes for the region. As far as possible the proposed inland port should accommodate Cape Town’s back of port logistics and storage facilities, thereby potentially freeing up portions of Culemborg to be developed as a mixed-use extension of the CBD. In this scenario the integrated development of the port and environs has the potential to make a significant contribution to spatially transforming the inner city.

Although the port of Saldanha is in its early development stages, the same development principles recommended for Cape Town are applicable here. The port’s development should not be restricted to servicing the oil and gas industry, and the import of crude oil and export of minerals. Preferably, its role should be diversified to serve the broader regional economy. In line with the proposed twin regional ports strategy, over time the port of Saldanha should be developed to complement the port of Cape Town’s cargo handling.

b) Cape Aerotropolis

ACSA’s aerotropolis proposal for CTIA and its Metro SE surrounds is also a regionally significant economic development initiative that should be supported. ACSA’s strategy of partnering with government and surrounding communities to unlock economic opportunities, is a model that TNPA should replicate in planning for the future development of Cape Town port/CBD.

The aerotropolis can contribute to spatially transforming the Metro SE from dormitory sub-region to one of economic opportunity (e.g., proposed Halal food processing export hub). Good regional public transport connectivity and road accessibility are prerequisites to realising these opportunities. This underscores the priority of integrated land use and transport planning for the region and its priority nodes.

c) Cape Inland Intermodal Container Port

To improve the operational efficiency of the region’s freight system, facilitate freight shifting from road to rail, and relieve pressure on the port of Cape Town and its access roads, the PLTF and TCT recommend that freight capacity is created at a new inland intermodal container port.

Of 11 sites assessed in a 2012 Stellenbosch University study, Ysterplaat, Belcon and Kraaifontein, north of the N1 were identified as preferred options (Havenga, J, et al, 2012). From a regional development perspective, a decentralized location with good rail and road access is desirable, thus narrowing these options to Kraaifontein and Belcon. The Belcon site has also been identified as key to the implementation of the Voortrekker Road Urban Restructuring Zone, suggesting that Kraaifontein maybe the preferred option. Subsequent to the 2012 study, a site along the N7 south of Malmesbury in the Vissershok area has been proposed, which meets the regional locational criteria. Pre-feasibility studies are required to decide on the N1 and N7 proposals.

Prospective developments associated with the dry port include warehousing, distribution, storage, food processing and packaging facilities as proposed in Project Khulisa.

d) Intermodal Transport Hubs

The location and design of Intermodal regional transport hubs, whatever the size, needs to meet a variety of needs, including operator viability (ensuring that hubs are actually used), passenger convenience and support of social and economic opportunity. This could include various kinds of markets and government services at the hubs - possibly mobile services where there is insufficient justification for permanent facilities.

With Metrorail refocusing on general freight, improved port logistics and long term possibility of network upgrades, larger hubs could be around rail stations, but this is only one of many criteria. The aim should be to create activity at hubs in order to
improve security and to attract people to public transport by making it easier to reach multiple destinations on one journey.

Hubs should also seek to create value - not necessarily in the form of increased land value, but by supporting social and commercial enterprise. In some cases, increased land value might be an objective, as part of a strategy to attract investment that could help finance infrastructure. An example of activity associated with hubs is bicycle repair and training, and potentially labour-intensive manufacturing of non-motorised vehicles. Cargo bicycles for last-mile delivery are an example of adding to the transport function of local hubs while creating economic opportunity.

IV) Land Use and Transport Planning

The RSIF’s point of departure is “an inter-connected multi-nodal network of regional centres…” From a transport perspective an important question here is balancing connectivity with containment. The former improves access to opportunity by benefiting from connectivity to a larger geographic area (but with increased travel cost), while the latter tries to provide for most needs locally (which reduces travel but may limit opportunities). The issue then is when to connect, and when not to.

Small towns will not be self-contained as functional transport areas, and functional sub-regions should be defined that allow for spatial planning that links small towns to their service centres (based on regular travel needs rather than month-end shopping). Investment can then be focused on regional service centre towns, as the PLTF suggests, while still providing public transport for people in smaller towns.

The Cape Winelands NMT Framework (2016) provides a useful approach to this, which could be applied regionally. This can help reduce the risk of urban sprawl or the growth of dormitory towns, particularly to the north of Cape Town where land is less intensively farmed than in the Cape Winelands.

Functional sub-regions should be identified that can be self-contained in terms of opportunities for residential, employment, educational, health, shopping and other activities that generate travel.

A subsidiary issue is that small towns with low growth present very little opportunity to create structural change, since this requires a shift in the physical form of towns. Therefore the focus of efforts to create change needs to be on areas of growth, ensuring that the form of growth supports effective operations of public and freight transport.

V) Regional Public Transport

The RSIF spatial concept is to establish intermodal public transport hubs in regional centres. The PLTF recommends targeting the next level of towns for public transport. It is not clear whether this means internal town systems, or connections with other towns, or both. All towns are served, to a greater or lesser degree, by minibus taxis; and some are served by intercity coaches, but very few rural towns have subsidised public transport.

As most towns are too small to support a high level of public transport service, there are two possible approaches to the challenge. One is to only target the regional centres. The other is to base a sub-regional public transport network on identified functional areas (including small towns) as mentioned in the previous point. The choice of vehicle and service type will depend on the nature of travel demand, but a key factor in planning is to provide a level of service and certainty that will influence investment decisions so that public transport begins to restructure towns. TCT are taking the lead planning for an integrated regional public transport network.

VI) Regional Road Network

“Applying the user pays principle to road infrastructure is essential in guaranteeing sustainable long-term viability of the provincial road network” (draft PLTF 2016).

At the RSIF Focus Groups municipalities endorsed the proposed upgrading of the N1 and N2 highway system, but some expressed concerns as to how the user pays principle will be applied. They prioritised the need for GCM municipalities to engage with SANRAL to regionally align land use and highway upgrading plans.

VII) Regional NMT Network

The new Cross Cape cycle network initiative of Provincial Government has regional applicability. A regional NMT network should be considered for the West Coast as a structuring element that serves multiple purposes, including recreation, tourism and regular commuting by bicycle. The route(s) and phasing should be based on providing contiguous sub-networks that are functionally coherent. This may require reprioritising of NMT funding, beyond tackling NMT projects onto road upgrade projects, to create a “game-changer” in terms of travel behaviour and affordable transport.

Design standards for NMT are not consistent across the region, and need to be applied with greater consideration of the nature of NMT movement, bearing in mind that different users have different needs. Learners and commuters require safe, direct networks that are highly accessible. The PLTF recommends that NMT routes be incorporated in all road upgrades for the first 5km out of rural towns, but it is suggested here that road upgrade cycles are not frequent enough to create rapid transformation.
3.3.4. Regional Facilities and Amenities

There is a strong concentration of higher order facilities in Cape Town, and a clustering in the network of surrounding regional centres. Regional amenities, however, are not concentrated in the region’s urban centres but geographically dispersed across the GCM’s landscapes and coastline.

The RSIF proposes that DEA&DP, in their support to the municipal SDF and IDP process, should ensure that the regional settlement agenda set out in Section 3.2 is carried through in decision making regarding the placement of new high order education, health, sports, recreation, and cultural facilities in the GCM.

A recent study compiled as part of the Greater Saldanha RSIF process focused on the accessibility of social facilities in the West Coast District. Evident from this report and associated focus group discussions is that a new approach is required to the way in which public facilities are implemented. Proposals include:

- Innovative, more flexible building designs and provision standards through temporary uses, low impact designs and materials, promoting multi-functionality and diversification of regional social facilities and centres and incorporating public spaces in facility provision to ensure for more vibrant public realms.
- Alignment of investment vs alignment of service provision - better use of infrastructure and facilities through encouraging clustering, consolidation and multi-functionality with facilities and amenities that are spatially situated in proximity or on the same premises to make more efficient use of public investment.
- Establishing the appropriate institutional arrangements towards achieving these principles and recommendations through an in-house “task team” consisting of WCG department representatives that can work towards project implementation and develop public and/or private partnerships for the sharing resources while coming up with strategies to address maintenance and security issues.

A more practical, implementation driven approach is also proposed which can be initiated through Province / DTPW’s policy and strategy directorate to lead brainstorm process around ways to better enable interaction around activities and place making, discussing the leveraging of public spending, finding solutions with municipal planners and community services, setting up an innovative think tank with aforementioned role players and DEADP spatial planners.

![Figure 20. The Social Accessibility Study includes mapping of regional facilities and access through centre-line measurements along transport routes. This provides a regional perspective on areas of concentration of facilities vs areas where mobile services or additional interventions are required.](image-url)
3.3.5 Regional Spatial Asset Management

Proposals for safeguarding the spatial assets underpinning the GCM’s economy are recorded in Section 3.1 (Regional Space-Economy). Managing these assets starts with the assembly and verification of the following regional spatial data-sets:

- State land
- Agricultural use and potential
- Cultural and scenic landscapes, routes, areas and places
- Critical Biodiversity Areas and Ecological Support Areas
- Water resources
- Minerals and construction materials
- Coastal resources and development setback lines
- Air quality

Systems need to be put in place and responsibility allocated for managing regional spatial data. Open access to the data is preferable. Provincial Government should support municipalities to incorporate the data as overlay zones in their SDF and Development Management Scheme. They should provide guidance on using and interpreting the data for land use planning and management purposes.

Guidelines for managing the GCM’s cultural and scenic landscapes are presented below.

**Cultural & Scenic Landscapes**

The authenticity and integrity of the region’s heritage and scenic landscapes are threatened by a number of development trends and management challenges that cut across municipal boundaries.

**Palaeontological and archaeological landscapes:**

The most threatened archaeological landscapes are those located within undeveloped unprotected coastal areas along the West Coast and the Overstrand, and which are under development pressure.

The West Coast calcretes around Saldahna, rich in palaeontological resources, are under pressure from mining activities.

**Rural landscapes:**

Suburban sprawl on the edges of major urban areas erodes rural landscapes of significance with agriculture being reduced to ‘islands’. This is the case on the edges of Cape Town, Stellenbosch and Paarl where the lateral spread of urban development has eroded landscapes of the Cape Winelands.

The high degree of the accessibility of the Cape Winelands from Cape Town and its role in providing green spaces on the urban fringes of the city makes them desirable tourism and weekend recreational destinations. The growing trend of establishing commercial tourism facilities can have negative impacts on landscape and scenic route character if not carefully managed.

The growing diversification of agricultural activities is changing the character of the region’s rural landscapes, particularly in the Cape Winelands, and can have negative visual impacts, e.g. tunnel farming.

The gentrification of the region’s rural landscapes through lifestyle ‘rural’ gated residential estates is a major threat to their authenticity and integrity.

![Figure 21. Trends and challenges in heritage and scenic landscape protection and management](image-url)
The upgrading of regional and sub-regional road infrastructure with the emphasis on creating high mobility corridors through the Cape Winelands has significant implications for settlement patterns, traffic flows and landscape and scenic route character (e.g. R310 and R44 upgrade projects).

There are a number of significant cultural landscapes within the region that derive their significance from a combination of wilderness and rural landscape qualities. GCM cultural landscapes that cut across municipal boundaries and require an integrated management strategy are as follows:

- The N1 regional gateway to the Cape Winelands and the Cape Metro.
- The N2 regional gateway to the Cape Metro and Overberg via Sir Lowry’s Pass.
- The Franschhoek Pass regional gateway to the Cape Winelands and Overberg.
- Du Toits Kloof Pass gateway between two major valley systems.
- The Paardeberg Slopes which fall between the Swartland, City of Cape Town and Drakenstein municipalities.
- The Drakenstein Valley which falls between the Drakenstein and Stellenbosch municipalities.
- The Botterlary Hills and Eerste River Valley which falls between City of Cape Town and Stellenbosch municipalities.

Coastal landscapes: The region’s coastal landscapes are under increasing development pressure with a pattern of suburban sprawl that diminishes their natural scenic value. Impacting their scenic and public amenity value is the proliferation of gated settlements along the coastline, adjacent to scenic routes and around estuaries. There is also a tendency for development to encroach on higher mountain slopes overlooking the coastline.

Historical settlements: The trends and challenges facing the region’s historical settlements are diverse. Poverty and limited economic opportunities have impacted the historical and social fabric of mission settlements. Only a handful a historical towns and villages have heritage related zoning scheme controls and guidelines for new development. Recent housing developments have negatively impacted the built environment and landscape setting of historic towns and villages with a tendency to reinforce apartheid spatial patterns.

### 3.3.5.1 Regional Strategies

Regional intervention concepts and strategies required to protect and manage the region’s heritage and scenic landscapes are identified below. At a provincial level, these concepts and strategies should be developed and implemented as a collaborative between the Department of Environmental Affairs and Development Planning (DEA&DP) and Heritage Western Cape (HWC) in consultation with the relevant local municipalities.

Archaeological and Palaeontological Landscapes:

- In accordance with the objectives of the Western Cape Coastal Management Programme for cultural resources, there is a need to explore the designation of Special Management Areas in terms of the ICMA, e.g. West Coast archaeological and palaeontological landscapes.
- Similarly, there is a need to explore the designation of coastal Protected Areas in terms of the Protected Areas Act as identified in the Western Cape Protected Area Expansion Strategy, e.g. Cape Columbine and Danger Point archaeological landscapes.
- The integration of the designation of coastal management (set-back) lines with the identification and protection of coastal archaeological resources needs to be carefully monitored at a provincial level.
- In accordance with the objectives of the Western Cape Coastal Management Programme for cultural resources, there is a need to prioritise the development of Conservation Management Plans for provincial heritage sites, e.g. Paternoster shell midden and Elandsfontein.
- Similarly, there is a need to develop and implement a programme to enhance public awareness and the educational value of these resources.

Rural landscapes:

Urban edges are not the most effective way of preventing urban sprawl from destroying significant rural landscapes, especially where these cut across municipal boundaries. The diminishing rural landscapes of the region, particularly those located on the edges of Cape Town, Stellenbosch and Paarl, require an integrated regional management strategy that deals with the following critical components:

- The formulation of a strong structural argument for development within peri-urban intensive agricultural areas; where it should be considered and where it should not; and the form of development. A conceptual approach to regional and sub-regional settlement structure needs to be adopted, where a consolidated pattern of settlement occurs in relation to emerging, hierarchical, regional and sub-regional corridors and zones of intensive agriculture, and is thus confined to the periphery of working farmland and areas of extensive agriculture.
- The formulation of an interdisciplinary conceptual approach to regional transport planning with particular emphasis on developing an appropriate design philosophy to the regional scenic route network that seeks to provide transportation facilities in keeping with the cultural landscape setting.
- The formulation of a management strategy for regional gateways to address the need for development and signage controls and guidelines within the scenic corridor, and the
The heavy use of historic passes by freight traffic.

- The formulation of a rural management strategy for landscapes of regional significance to address integrated economic, social, environmental and heritage challenges related to sustainable agricultural production and diversification including impacts associated with commercial tourism and gentrification. The rural management strategy, in the process of being formulated for the Stellenbosch Municipality, is a potential driver in this regard.

- A critical review of appropriate mechanisms and best practice options for landscape rural protection taking into account different initiatives across the region in Overstrand, Drakenstein, Stellenbosch and Cape Town.

- Hotspot areas that cut across municipal boundaries need a co-operative governance strategy.

- The integration of the designation of coastal management (set-back) lines with the identification and protection of coastal scenic landscapes need to be carefully monitored at a provincial level.

Cultural Landscapes:

- The undeveloped coastal landscapes that fall within the Overstrand, City of Cape Town and West Coast municipal area are a regional scenic landscape resource.

- Consistent with the Western Cape Coastal Management Programme for cultural resources there is a need to explore the designation of scenic coastal landscapes as Special Management Areas or Protected areas.

- Scenic coastal landscapes that cut across municipal boundaries, e.g. West Coast, require a co-operative governance strategy.

- The integration of the designation of coastal management (set-back) lines with the identification and protection of coastal scenic landscapes need to be carefully monitored at a provincial level.

Historical Settlements:

From a regional perspective the municipalities of Overstrand, Swartland, City of Cape Town, Drakenstein and Stellenbosch have made significant progress towards the identification of historical settlements worthy of formal protection and making provision for the designation of conservation/heritage areas in terms of their respective integrated zoning schemes. Different approaches to the implementation of these protection measures are being followed. In providing provincial and regional support to municipalities, it is recommended that a review of different approaches and best practice options be undertaken.
3.3.6 Regional Disaster and Risk Management

Guidelines on managing climate change risks and building regional resilience are presented below.

Climate Change

Anthropogenic climate change has been described as a ‘wicked problem’ – amongst other things implying that any response will be imperfect and dependent on various other determinants. If one takes a step back though, and regards the idea holistically, we can see that it is not more or less ‘wicked’ than the developmental problems that South Africa, and the GCM region, faces. In fact, it becomes painfully obvious that climate change threats and the subsequent need for appropriate responses, are directly linked and closely integrated with socio-economic issues such as pervasive poverty and societal inequality.

At a global level, we know now that climate change responses, both in the form of mitigation and adaptation, must address three main things: 1) a decoupling of our daily activities from carbon-intensive sources of energy, 2) poverty and inequality, and 3) reduction of vulnerability to climate induced risks. Above all, there needs to be a focus on pre-emptive action with the understanding that the earlier a no-regrets intervention is initiated, the higher the rate of return.

The RSIF has an important role in determining not only risk areas for the region, but vital responses to climate change. Existing and future development, economic activity, agricultural potential and planning, and growth nodes will all be impacted by climate change in various forms. Spatial planning considerations can either set the region up to increase its GHG emissions, thereby further entrenching activities that contribute to dangerous climate change. Or it can assist the region to leapfrog such spatial planning practices to more efficient and less costly practices in the long term. Spatial and development planning also has a role to play in determining how base assets such as productive land and critical infrastructure (harbours, railways, etc.) are likely to be affected by the multi-dimensional pressures and risks brought about by climate change.

Effective spatial planning offers a way of proactively addressing long-term climate change adaptation responses. It should enable locally effective resilience and adaptation action in order to be proactively prepared for unavoidable climate change impacts in all sectors. This may require cross-cutting programmes and partnerships across the region. Guidance in this respect can be taken from the Western Cape Climate Change Response Strategy (2014).

In light of this, the following RSIF objectives have been set with regards to climate change adaptation for the region:

- Create opportunities for growth and jobs by spatially aligning both public and private investment programmes with climate change appropriate growth and development, especially focusing on low-carbon energy, efficient public transport, quality open spaces and avoidance of at-risk spaces.

- Enable a resilient, sustainable, quality and inclusive living environment:
  - Provide spatial expression of the types of climate change risks and extent thereof within the region
  - Identify ecosystem networks and nodes, critical for climate change resilience
  - Identify urban and rural areas in need of enhanced land management and better living conditions, to improve climate change resilience

- Promote good governance and integrated service delivery by:
  - Identifying cross-cutting climate change mitigation and adaptation strategies
  - Promoting the co-ordination integration and alignment of partnerships
  - Promoting spatial alignment
  - Using the Western Cape Climate Change Response Strategy to inform service delivery performance standards

3.3.6.1 Regional Strategies

Regional spatial responses to climate change can be understood in terms of risks to be mitigated and opportunities to be taken advantage of – as shown in Table 11. A spatial representation of these risks and opportunities (Figure 23) shows how risks, especially, concentrate towards the urban centre, but that the region’s major mitigation opportunities lie in regional scale green infrastructure (i.e. mountains, rivers, protected areas etc.).
### Table 11: Risks and opportunities for regional disaster risk and management (RHDHV, 2016)

<table>
<thead>
<tr>
<th>Risk</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooding</td>
<td>Critical Biodiversity Areas &amp; Ecological Support Areas are sensitive and necessary to preserve the remaining functioning natural systems within the region. In addition to intrinsic value, these areas are vital to the region’s resilience and adaptability.</td>
</tr>
<tr>
<td>Heat</td>
<td>Mountain Ranges in the study area play an important role in the water cycle.</td>
</tr>
<tr>
<td>Fire</td>
<td>Rural &amp; agricultural areas are vulnerable to the range of changing climatic states. Settlements (and their crop choices) must be planned appropriately, so that inefficiencies in infrastructures and inappropriate location are avoided.</td>
</tr>
<tr>
<td>Wind</td>
<td>Integrated transport networks planned in concert with settlements will be a key determinant of the mitigation and adaptation capacity of the region.</td>
</tr>
<tr>
<td>Coastline</td>
<td>Urban areas will become increasingly vulnerable to climate change impacts, but also offer great opportunities for efficient human settlement.</td>
</tr>
</tbody>
</table>

Figure 23. Managing Climate Change Risks – Spatial concept (RHDHV, 2016)
3.3.7. Regional Information Planning and Management

3.3.7.1 Regional Strategies

- Build empirical data base for undertaking integrated regional planning in the GCM, capacitate regional data laboratory:
  - Research GCM population migration and settlement patterns, capturing geo-referenced data
  - In collaboration with GCM Municipalities, extend ECAMP to cover the entire GCM region
  - Survey GCM inner and inter-regional freight movements, capturing geo-referenced data
  - Establish web-based platform to share regional data

- Model alternative regional growth scenarios, factoring in demographic, land use economic and transport variables. Evaluate models using multi-criteria decision analysis methodologies.

- Compile integrated regional growth management plan with regional stakeholders and role players.

- Undertake cost-benefit studies for alternative uses of strategic regional land parcels (e.g. Culemborg, Wingfield, Ysterplaat, Belcon).

- Develop regional growth management indicators, apply the indicators to monitor and evaluate progress in achieving spatial outcomes, manage and report on findings.

3.4. The Composite RSIF

Besides articulating a vision of the spatial future aspired to, it is a requirement of LUPA that a provincial-regional SDF reflects the desired land use patterns in a region. To conclude the framework, desired land use patterns are presented in the format of a RSIF composite map (see Figure 24). The RSIF map takes as its point of departure the GCM’s spatial agenda as defined in Section 2, with priority given to establishing a sustainable basis for growing the regional economy. It consolidates the strategies and policies proposed in Section 3. The RSIF map comprises the following layers:

i. Desired land use patterns across the region are reflected in the delineation of Spatial Planning Categories (SPCs), namely Core, Buffer, Intensive Agriculture and Settlement SPCs. SPCs are derived from the Western Cape Biodiversity Spatial Plan, and within each biodiversity area there are a range of land use activities that are desirable.

ii. The regional space-economy is reflected, and a differentiation is made between regional economic infrastructure, inter and intra regional linkages, and components of the rural and urban space-economies. Existing economic nodes and proposed economic development focus areas are also annotated.

iii. The regional settlement hierarchy is also reflected, with attention to the scale, role and function of regional settlements.
Figure 24. Composite RSIF Map
4. Implementation Arrangements

4.1. Principles of Implementation

The GCM RSIF Baseline Status Quo Report highlighted the need to breach the ‘institutional divide’ between municipalities, and between municipalities and SoEs, as well as outline a clear role for provincial government in undertaking its regional planning and development mandate.

This requires a combination of clearer and simpler intergovernmental planning and budgeting processes, coupled with a shift in the fiscal framework that promotes, or even requires, coordinated investment in space. This thrust is articulated clearly in the Integrated Urban Development Framework (IUDF) Implementation Plan (COGTA, 2016), and specifically the proposed action to “Develop institutional model(s)/mechanisms to facilitate regional development”.

In addition, the issues of regional significance that have been highlighted in the GCM RSIF require a champion and institutional platform in order to be adequately addressed.

The following principles should apply to the institutionalisation of the GCM RSIF:

1. Avoid the creation of new institutions in an already complex system and in light of capacity and financial constraints.
2. Build on existing plans and programmes using existing IGR forums and tools.
3. Establish less bureaucratic technical and institutional collaborative mechanisms when necessary.
4. Streamline institutional engagements through coordination of the right people around the right issues at an appropriate time.
5. Align with the strategic institutional thrust of SPLUMA and the IUDF through a locally led, provincially moderated process.

4.2. Current Institutional Context

The challenge of addressing regional spatial issues is primarily an institutional one. Given that there is no sphere of government that operates at this scale, the issues that affect multiple stakeholders are usually the direct responsibility of none. However, there are a number of inter-governmental forums and structures that currently operate at the regional scale, and that could be used, or improved upon, to implement the RSIF.

The Western Cape has a well-established framework for inter-governmental relations, which includes the Premier’s Coordinating Forum and the various political and technical forums that feed into it. PSG5, as defined in the Provincial Strategic Plan (PSP) 2014 – 2019 aims to “Embed good governance and integrated service delivery” and serves as a coordinating framework to provide impetus for inter-governmental collaboration.

The Integrated Planning and Budgeting Framework as endorsed by the Provincial Cabinet outlines the key components of Integrated Management, which includes:

- Policy Alignment;
- Monitoring and Evaluation;
- Integrated planning and budgeting;
- Spatial Governance and Alignment;
- Integrated planning between Provincial and Local Government; and
- Partnering and Partnerships

Coordinated efforts within and across these components aim to strengthen collaborative planning and alignment between processes and structures of Government and other key role-players to improve impactful service delivery.

The Integrated Workplan (IWP) gives guidance to this process and is led by PT, DEA&DP, DLG, DOTP and EDP.

![Diagram 17. Integrated Planning and Budgeting Framework of the WCG](image-url)
From a spatial planning perspective, the drive to achieve coordination of effort, along with the integration of planning and budgeting, is informed by the PSDF, and is the basis on which the Greater Cape Metro RSIF was compiled.

The other institutions, forums and initiatives that can be used to implement the GCM RSIF are discussed under the key themes emerging out of the GCM RSIF.

4.3. Regional Space Economy

While municipalities have identified their relative economic strengths, there is opportunity to harness the regional economic potential of urban and rural space through a higher level of economic planning and support. The Western Cape Government therefore has a role in assisting municipalities position themselves in a complementary way as opposed to competing with each other. The Department of Economic Development and Tourism (DEDAT) is responsible for Regional Economic Development as part of the roll-out of PSG1 and for the identification of skills requirements and facilitation of skills development (PSG2). The central provincial economic strategy of Project Khulisa and the national Operation Phakisa strategy both have close ties with SIP5, which is coordinated by the Industrial Development Corporation (IDC) on behalf of the Presidents Infrastructure Coordinating Council (PICC).

In terms of the rural space economy, the Smart Agriculture for Climate Resilience (SmartAgri) project is a collaboration between the DOA, the DEA&DP, and UCT. SmartAgri provides guidance on prioritised initiatives for a climate change-resilient agricultural sector. In addition, the Department of Rural Development and Land Reform has a number of relevant programmes, including the Rural Economic Transformation Model, the Fetsa Tlala Programme (Food and Nutrition Security), the Agri-Parks Programme and the Rural Infrastructure and Development Project.

4.4. Regional Settlement

Urban growth management is currently undertaken by municipalities individually, but requires a larger scope to capture the regional dynamics. Regional urbanisation studies, such as the Growth Potential Study and the specialist studies undertaken for the PSDF have successfully been managed by the DEA&DP. The DHS is also a key stakeholder given the dynamics of human settlement demand and the allocation of resources, and has recently developed the Living Cape Human Settlement Framework and an Informal Settlements Support Plan. Human settlement projects and the provision of public facilities by the departments of Health and Education are the public sector drivers of urban growth.

An important aspect of urban growth management is the release of State-owned land. The IUDF Implementation Plan includes an action to develop implementation protocols and streamlined processes to govern release of all strategic land by government (including municipalities) and State-owned entities. This process is to be led by the National Department of Public Works (DPW) and supported by the national Department of Rural Development and Land Reform, COGTA, DHS, SOEs, municipalities and National Treasury. To date, the National DHS has mandated the Housing Development Agency (HDA) with facilitating State land release for human settlement projects with limited success. The DEA&DP currently also plays an important facilitatory role in this regard, particularly through the Land Assembly and Regeneration Programme.

4.5. Transversal interventions / Regional enablers

4.5.1. Regional Ecological Infrastructure

A current process is underway between the City of Cape Town, CapeNature and SANBI for a Western Cape Biodiversity Spatial Plan, including Land Use Guidelines based on Critical Biodiversity Area mapping, indicating an existing, functional intergovernmental process.

4.5.2. Regional Utility Infrastructure

Water

The Western Cape Water Supply System (WCWSS), which involves raw water supply to the City of Cape Town and the greater region, is jointly managed by the WCWSS Strategy Steering Committee. This committee has representatives from all provincial government departments and other key stakeholders involved in water resources management, including organised agriculture, the Breede-Olifants proto-CMA, the City of Cape Town, relevant District and Local Municipalities, and the DWS regional and national offices. Potable water supply is managed by the respective local municipalities as the Water Services Authorities, except in the case of the West Coast District, where the district municipality acts as a bulk Water Services Provider to the local municipalities. The GreenCape currently represents an important independent voice to water debates in the region. DEA&DP also convenes a Water Managers Forum, which involves all municipal water managers, as well as other stakeholders in the sector.

Sanitation

Sanitation is currently managed individually by municipalities as Water Services Authorities. Regional issues are elevated to regional and national offices of the Department of Water and Sanitation.
Energy

Regional electricity generation and transmission are the domain of Eskom and tend toward national generation and energy security issues. DEDAT are currently coordinating investigations around the regional implications of landing natural gas in Saldanha Bay.

Waste

Waste regionalisation responsibilities are currently split between local and district municipalities, and DEA&DP. Waste Management Planning is legislatively coordinated, but technical investigations around regionalisation appear to fall outside of this process. DEA&DP is well placed to coordinate waste regionalisation through the existing Waste Managers Forum. DEA&DP and GreenCape provide independent perspectives to ensure that regional objectives outweigh municipal priorities. National DEA retains significant legislative and regulatory power in approval of IWMPs and waste licenses.

ICT

ICT infrastructure is predominantly provided by the private sector, although important public sector initiatives in the region have been coordinated by the DEDAT, through the Connected Cape strategy, Cape Information and Technology Initiative (CITI) and by the City of Cape Town.

Regional Spatial Asset Management

Regional spatial assets are currently maintained by a number of institutions. State land holdings have been catalogued by the Housing Development Authority (HDA) as part of a national initiative, but databases are also maintained by DEA&DP, SOEs and individual municipalities. Cultural and scenic landscape data has been compiled for the PSDF and vests with the DEA&DP, as well as Heritage Western Cape. The Critical Biodiversity Areas and Ecological Support Areas have been mapped by SANBI and CapeNature as part of the Western Cape Biodiversity Spatial Plan. Data on agricultural use and potential is maintained by the DoA, while the other spatial data is maintained by the DEA&DP.

Regional Disaster & Risk Management

Regional disaster management and environmental health functions are currently undertaken at a District level, although LUPA gives the Provincial Minister responsible for land use planning oversight authority for disaster management in terms of how it affects local and provincial planning.

Implementation strategy

The implementation strategy is guided by the provincial spatial agenda as expressed in the 2014 PSDF. The PSDF provides a spatial framework within which coherent and consistent sector- and area-based plans can be formulated and rolled out by the spheres of government and SOEs operating in the Western Cape. It also provides communities and the private sector with greater certainty over public priorities for spatial development within the Province. As such the PSDF promotes cooperative spatial governance as well as partnership-based development.

The purpose of the RSIF is the framing of the regional spatial agenda as input to municipal planning as well as the strategic plans of provincial and national government, and SOEs. The RSIF exists at the scale of the Province and operates as part of the Province-wide M&E system with intergovernmental reporting.

Within this output is a proposal for a Provincial and Local Spatial Data Observatory. However, a wide range of data that is potentially useful for regional planning currently resides with municipalities, SOEs and the private sector.
programmes, or the resolution of problematic issues, that are of regional significance.

4.6.1. Integration of Regional Issues into Other Planning Processes

The WCG has explored ways of fostering intergovernmental planning and implementation. This process has evolved and is set to enable the implementation of the NDP, on the one hand, and to enhance the development and implementation of the PSP, on the other. Planning in the Province has matured to a stage where joint planning and implementation is a fundamental element in ensuring sustainable and integrated service delivery. The RSIF takes this process a step closer to coordinate efforts on a regional level as integrated management is most successful at a project level and particularly where a project is focused in a spatial area or around a particular issue.

The integration of regional issues into other planning processes is incorporated into the concept of cooperative spatial governance, one of the implementation priorities of the PSDF. Cooperative spatial governance has a sound and comprehensive legal basis in the Municipal Systems Act and SPLUMA, and resonates with the spatial alignment goal of PSG 5. In addition, the Integrated Urban Development Framework (IUDF) is focused on achieving spatial transformation in urban areas, and particularly where a project is focused in a spatial area or around a particular issue.

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The IUDF Implementation Plan (CGO/TA, 2016) provides the following institutional guidance for the implementation of cooperative spatial governance:

- The hierarchy of spatial plans should be acknowledged and adhered to;
- Municipal IDPs are the expression of all of government and its partners in a local space;
- National and provincial government, and state-owned entities (SOEs), should engage with municipalities before deciding where capital investments will be located;
- Municipalities should ensure that their spatial and sectoral plans are aligned to the provincial and national development priorities and goals;
- No governmental infrastructure or service provision (water, energy, roads, housing, transport, etc.) planning should occur outside the statutory planning process;
- The agreed spatial vision and targeting should inform strategic public sector investments, coordinated primarily at the local government sphere;
- If a municipality does not have sufficient capacity to coordinate and align such investments, the Office of the Premier and the provincial department responsible for local government should support and facilitate the process;
- All major investments by the SOEs need to be aligned to municipal plans; and
- Municipalities need to establish mechanisms for engaging with key SOEs and relevant partners in their spaces.

Given that SPLUMA (Section 22(3)) states that these spatial plans must align, the incorporation of the GCM RSIF into the intergovernmental planning process is essential. This process is relatively mature in the Western Cape, with the PSDF concept of cooperative spatial governance now being institutionalised through PSG 5.

Policy alignment, integrated planning, budgeting and implementation is intended to be achieved through the development of an Integrated Work Plan (IWP), that facilitates the Province-municipal interactions around IDP and related planning instruments, as well as the budgeting process. The IWP is in the process of being rolled out in a phased manner and aims to provide a guide toward improving strategic and technical engagements related to planning, budgeting and governance between Province and Municipalities (Diagram 18).

The relationship between the RSIF and planning at other scales, as well as the IWP and IUDF processes, is illustrated simply in Diagram 19. The RSIF is positioned between the PSDF and individual MSDFs, providing more detailed guidance to MSDFs than the PSDF, as well as informing future iterations of the PSDF.

The IWP is specific to the budget cycle, but provincial-municipal engagements also take place in between the Integrated Municipal Engagements in order to coordinate Spatial and Infrastructure Planning (PSG4). In order to ensure integrated, coordinated and spatially targeted planning and delivery of development, a strategy for spatial development and infrastructure support was agreed to. This strategy sets out to improve the resilience, sustainability, quality and inclusivity of urban and rural settlements through the improved integration of and improved implementation of Municipal Spatial Development Frameworks, Integrated Transport Plans, Integrated Human Settlement Plans, Integrated Waste Management Plans (including Waste Infrastructure Planning) and Infrastructure and Growth Plans. The aim is to improve the planning process, the substantive content of the plans, and the implementation of the plans. The adopted approach included the creation of a ‘Spatial and Infrastructure Planning Intergovernmental Steering Committee’ where representatives responsible for and/or involved in the drafting and/or amending of the sector plans listed above come together and discuss any areas of conflict, duplication, and/or opportunities for synergy. However, the output of sector plans, in the form of the SDF, the IDP and the municipal budget, are the subject of the IWP interactions, and thus the IWP should represent the official point of alignment.

The RSIF is only a small component of the IWP, which also deals with local- and provincial-scale planning. The RSIF only highlights an additional layer of regional priorities to be introduced into local and provincial plans.
No additional institutional platform is proposed for integrating the RSIF into the IWP process. It is simply an additional consideration in assessing and negotiating the alignment of provincial and municipal plans, for example:

- Have municipal SDFs incorporated the regional spatial priorities?
- Have municipal and provincial budgets made provision for the regional projects identified in the RSIF?
- Have municipal and provincial transport plans responded to the regional transport issues highlighted in the RSIF.

It is the responsibility of the provincial departments providing oversight in the IWP process to ensure that the RSIF priorities (see next section) are integrated into the relevant municipal and provincial department plans. In addition, because the RSIF is key to the implementation of the IUDF in the Province, the Joint Western Cape Provincial IUDF Task Team, coordinated by DEA&DP to implement the IUDF, should provide oversight of the implementation of the RSIF. The IUDF Task Team, through the Premier, has access to national stakeholders to influence national issues that need to be resolved to implement the RSIF.

The one institutional amendment to the IWP that is proposed to fully implement the RSIF, is the greater inclusion of the SoEs into the IWP process, given the importance of the services that these stakeholders provide at a regional scale. The SoEs are also the only stakeholders that currently undertake planning at a regional scale (outside of the RSIF). As this was a major challenge identified in the RSIF Status Quo report, the inclusion of SoEs in the IWP process is strongly supported. Their involvement should be secured through the intervention of the Premier, if

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**Diagram 19. Location of the RSIF in relation to other scales of planning**

**Diagram 20. GCM RSIF Input into Spatial Targeting and Alignment of the Planning and Budgeting Process**
necessary, as indicated in the IUDF Implementation Plan.

The IWP does not facilitate inter-municipal engagement, except via the mediation of the Province. Inter-municipal spatial governance is better undertaken in one of two ways: either through one of the sector-based platforms (which are also an appropriate place to include SOEs), or through groupings of local municipalities in the region forming ad hoc joint planning committees around particular cross-boundary issues. In the latter case, it may be necessary for these committees to be facilitated by the District Municipality or the Province, if there is a risk of the interests of one municipality dominating the discussion.

4.7. Implementation of the main strategic interventions in the GCM region

The GCM RSIF has proposed a number of interventions and strategies towards implementing the regional spatial agenda. However, there are a number of recommendations contained in the GCM RSIF that fall outside of the scope or mandate of existing processes or forums, and which need to be highlighted here, together with a responsible authority and relevant stakeholders, in order for them to be taken forward.

What are the main strategic interventions?

1. **Data**: Set up and resource a regional data laboratory that prioritises: extending the Economic Areas Management Programme (ECAMP) to cover the GCM functional region; collating intra and inter-regional migration data; and disseminating regional data to GCM stakeholders.

2. **Economy**: Based on ECAMP’s outputs, formulate a GCM regional economic development strategy that consolidates sector based programmes (e.g. Project Khulisa, Operation Phakisa, Green Economy), and rationalises area-based economic development initiatives (e.g. Saldanha IDZ and Atlantis SEZ, Agri-Parks, Aerotropolis, Regional Hubs) and the region’s economic infrastructure (e.g. roles of GCM sea, air and land ports).

3. **Growth**: Input a coherent urban and rural growth management agenda for the functional region into the SDFs of GCM municipalities, address inter-municipal growth hotspots, and annually monitor regional alignment in terms of spatial performance indicators.

4. **Transport**: Engage the GCM’s transport and freight authorities in formulating coherent strategies for the development of regional networks serving: freight logistics; public transport; freeway improvements; and NMT.

5. **Infrastructure**: Engage the GCM’s bulk infrastructure authorities in formulating development programmes for the region’s bulk infrastructure (i.e. waste management, energy and electrical grid, water supply and demand; sanitation, and ICT).

6. **Environment**: Secure and maintain the region’s functioning intact ecological infrastructure, as well as restore degraded ecological infrastructure.

How should they be dealt with?

It is proposed that the responsibility for implementing the above interventions be given to specific stakeholders, through a combination of existing and new inter-governmental sector implementation forums. The RSIF provides these forums with a specific regional mandate, as listed in the Action column of Table 12.
<table>
<thead>
<tr>
<th>PSDF POLICY</th>
<th>KEY REGIONAL GOALS AND/OR OBJECTIVES</th>
<th>DEFINED STRATEGIES AND/OR PROGRAMMES</th>
<th>PROJECTS/ ACTIONS</th>
<th>PHASING</th>
<th>RESPONSIBLE ACTORS</th>
<th>STAKEHOLDERS</th>
<th>TIMEFRAMES</th>
<th>MONITORING INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy: Sustainable use of provincial assets</td>
<td>GCM’s settlements and economy are served by a resilient and sustainable regional infrastructure networks (i.e. ecological, utility and transport).</td>
<td>Secure and maintain the region’s functioning intact ecological infrastructure, as well as restore degraded ecological infrastructure.</td>
<td>Ensure the western cape biodiversity sector plan is incorporated into the planning of the local municipalities and SOEs in the region.</td>
<td>Short Term</td>
<td>DEA&amp;DP (Ecological Infrastructure for Resilience – PSG4)</td>
<td>Berg-Olifants CMA, DWS, Municipalities, SOEs</td>
<td>5 years</td>
<td>Local and regional planning has included critical biodiversity overlay</td>
</tr>
<tr>
<td>Policy: Opening up opportunities in the space economy</td>
<td>A globally competitive, diversified, productive and inclusive regional economy.</td>
<td>Set up and resource a regional data laboratory.</td>
<td>Extend the Economic Areas Management Programme to cover the GCM RSIF functional region.</td>
<td>Short Term</td>
<td>DEA&amp;DP</td>
<td>DEDAT</td>
<td>1 year</td>
<td>Programme is established for the GCM and utilized by provincial and municipal government</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Collate intra and inter-regional migration data.</td>
<td>Short Term</td>
<td>DSD</td>
<td>All stakeholders</td>
<td>2 years</td>
<td>Report on intra and inter-regional migration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disseminate regional data to GCM stakeholders.</td>
<td>Short to Medium Term</td>
<td>DEA&amp;DP</td>
<td>All stakeholders</td>
<td>3 years</td>
<td>Establish platform for dissemination of regional data</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Based on the Economic Areas Management Programme outputs, formulate a GCM regional economic development strategy.</td>
<td>Consolidate sector based programmes in the region (e.g. Project Khulisa, Operation Phaksa, Green Economy)</td>
<td>Medium Term</td>
<td>DEDAT</td>
<td>SOEs, Provincial Departments, Municipalities</td>
<td>3 years</td>
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<td></td>
<td></td>
<td></td>
<td>Rationalise area-based economic development initiatives (e.g. Saldanha IDZ and Atlantis SEZ, AgriParks, Aerotropolis, Regional Hubs)</td>
<td>Confirm the functional roles of the region’s economic infrastructure (e.g. roles of the GCM sea, air and land ports)</td>
<td>SOEs, Municipalities</td>
<td>3 years</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SOEs, Municipalities</td>
<td>3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSDF POLICY</td>
<td>KEY REGIONAL GOALS AND/OR OBJECTIVES</td>
<td>DEFINED STRATEGIES AND/OR PROGRAMMES</td>
<td>PROJECTS’ ACTIONS</td>
<td>PHASING</td>
<td>RESPONSIBLE ACTORS</td>
<td>STAKEHOLDERS</td>
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<tr>
<td>Policy: Opening up opportunities in the space economy</td>
<td>A globally competitive, diversified, productive and inclusive regional economy.</td>
<td>Compile a consolidated pipeline of major infrastructure projects in the form of a Regional Built Environment Performance Plan.</td>
<td>Consolidate the spatialized budget information of all stakeholders in the region.</td>
<td>Short Term</td>
<td>Provincial Treasury</td>
<td>DEA&amp;DP</td>
<td>2 years</td>
<td>Regional BEPP published</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assess the project list against the PSDF and RSIF to verify alignment.</td>
<td>DEA&amp;DP</td>
<td>Short to Medium Term</td>
<td>All stakeholders</td>
<td></td>
<td>2 years</td>
<td></td>
</tr>
<tr>
<td>Policy: GCM’s settlements and economy are served by resilient and sustainable regional infrastructure networks (i.e. ecological, utility and transport).</td>
<td></td>
<td>Formulate development programmes for the region’s bulk infrastructure (i.e. water management, energy and electrical grid, water supply and demand, sanitation and ICT) by engaging with the GCM’s bulk infrastructure authorities</td>
<td>Waste: Explore integrated waste management facilities and opinions such as waste-to-energy PPP (Drakenstein, Stellenbosch) through regional economies of scale</td>
<td>Short Term</td>
<td>DEA&amp;DP</td>
<td>District Waste Managers Forum Municipalities GreenCape</td>
<td>2 years</td>
<td>Integrated waste management facilities feasibility study completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waste supply: Lobby national DWS to conclude regional reconciliation study and allocate water rights.</td>
<td>Energy: Investigate potential conflict between renewables programme and the scenic and tourism needs of the region, particularly in relation to new transmission lines and wind-farm sites (Nuy, Paternoster)</td>
<td>Medium Term</td>
<td>DEDAT (Energy Security Game Changer – PSG1)</td>
<td>Eskom GreenCape</td>
<td>2 years</td>
<td>Investigation report with findings published</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water supply: Lobby national DWS to conclude regional reconciliation study and allocate water rights.</td>
<td>ICT: Formulate a consolidated broadband roll-out schedule incorporating municipal, provincial and private sector providers</td>
<td>Short Term</td>
<td>Water Manager’s Forum</td>
<td>WC WSS Strategy Steering Committee Berg- Olifants CMA</td>
<td>1 year</td>
<td>Revised water use rights allocation for the Berg River Catchment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICT: Formulate a consolidated broadband roll-out schedule incorporating municipal, provincial and private sector providers</td>
<td></td>
<td>Short to Medium Term</td>
<td>DEDAT (connected Citizens – PSG1 and Broadband Roll out – PSG5)</td>
<td>Municipalities Private Network providers</td>
<td>1 year</td>
<td>Consolidated broadband roll-out schedule published</td>
</tr>
<tr>
<td>PSDF POLICY</td>
<td>KEY REGIONAL GOALS AND/OR OBJECTIVES</td>
<td>DEFINED STRATEGIES AND/OR PROGRAMMES</td>
<td>PROJECTS/ ACTIONS</td>
<td>PHASING</td>
<td>RESPONSIBLE ACTORS</td>
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<tr>
<td>Policy: Developing Integrated and sustainable settlements</td>
<td>A region offering dignified, safe, secure, vibrant and varied living environments</td>
<td>Formulate a coherent strategy for the development of regional networks through engaging with the GCM’s transport and freight authorities.</td>
<td>Develop a regional freight logistics strategy</td>
<td>Medium Term</td>
<td>LTAB and IPC and DT&amp;PW</td>
<td>TNPA, TFR, SBIDZ, Municipalities</td>
<td>3 years</td>
<td>Regional freight logistics strategy published</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Explore the provision of a regional public transportation service.</td>
<td></td>
<td></td>
<td>Municipalities, DoT, NT, SANRAL, Municipalities</td>
<td>2 years</td>
<td>Regional public transport strategy published</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Freeway Improvements and upgrades</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Develop a regional NMT strategy</td>
<td></td>
<td></td>
<td>Municipalities</td>
<td>3 years</td>
<td>Regional NMT strategy Published</td>
</tr>
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<td></td>
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<td></td>
<td>Ensure that a coherent urban and rural growth management agenda for the functional region is reflected in the SDFs of GCM municipalities</td>
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<td></td>
<td>Manage urban growth regionally through joint human settlement planning forums and provincial oversight in respect of municipal human settlement plans and SDFs.</td>
<td></td>
<td></td>
<td>DEA&amp;DP, DHS, Municipalities</td>
<td>2 years</td>
<td>Joint human settlement planning forums established</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Initiate inter-municipal urban growth management strategies for regional hotspots</td>
<td></td>
<td></td>
<td>DEA&amp;DP, Municipalities</td>
<td>3 years</td>
<td>Strategies developed for 8 regional growth hotspots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Annually monitor regional alignment in terms of spatial performance indicators</td>
<td></td>
<td></td>
<td>DEA&amp;DP</td>
<td>5 years</td>
<td>Spatial performance report published</td>
</tr>
</tbody>
</table>
### 4.8. A Programme for Implementation

Matters of regional significance deserve to be attended to within the milieu of the most appropriate institutional platform. One of the most significant aspects of achieving a regional focus, (emanating from the development of this GCM RSIF) is the understanding that in the absence of a governance structure which matches the footprint of the Framework exactly, financial and executive responsibility for any proposed strategic interventions and outcomes must, by definition be embedded within the current (often overlapping) institutional systems of governance. This is proposed with a view to streamlining implementation and institutional engagement as well as to ensure that the GCM RSIF leverages the existing Intergovernmental relationships and systems for project execution.

#### 4.8.1. Implementation Mechanisms

As indicated above, the implementation of the GCM RSIF will take place through a combination of existing implementation agencies and mechanisms. These are to be found within all three spheres of government and include:

- Cooperative spatial governance (through the aforementioned Integrated Work Plan [IWP])
- Sector implementation forums such as the PSG 4 and PSG 5 along with other established IGR forums.
- The Joint Provincial IUDF Task Team (which provides a link to National Forums and Stakeholders)
- As shown in diagram 21 below, each strategic intervention will find implementation through one of the three implementation streams which have a presence in all spheres of governance.

#### 4.8.2. An Institutional Framework for Implementation

Each action identified in the preceding section 4.6 of GCM RSIF as strategic interventions are linked to a responsible actor to drive the implementation thereof. These interventions will be subject to further refinement by the individual planning and implementing ‘actors’ to identify the scale and scope of the interventions. Thereafter, it is anticipated that these interventions will be institutionalized into their respective IDPs, SDFs, KPIs and APPs. For GCM RSIF interventions that focus on cooperative spatial governance, it will be the responsibility of the lead ‘actor’ (department) to ensure that the RSIF priorities are integrated into the relevant municipal and provincial department plans through the IWP process. This implementation mechanism utilizes the existing engagement cycle of the IWP to ensure that the regional spatial logic put forward in the GCM RSIF carries through into the provincial and municipal planning and budgeting process from a policy perspective. Some key outputs to ensure effective implementation of the GCM RSIF strategic interventions include the

![Diagram 22. The GCM RSIF Implementation Mechanisms](image-url)
development of regional questions linked to these interventions to test whether the GCM RSIF spatial intentions are reflected in provincial and municipal investment decisions.

Interventions that focus on sector implementation forums such as the Western Cape Government PSG 4 and PSG 5 forums, amongst others, are deliverable based, seldom with budget implications. These interventions seek to utilize the collective expertise and IGR nature of these forums to drive the GCM RSIF regional agenda through the development of aligned and integrated planning documents. Key actions crucial to the implementation of this document in this sector include investigations into regional policy along with sectoral regional strategy development.

While none of the GCM RSIF strategic interventions have identified a responsible ‘actor’ at a national government level, the Joint Provincial IUDF Task Team is well placed to provide oversight to the implementation of the regional spatial agenda and to feed any issues up to the national forums if required.

4.8.3. Mainstreaming the GCM RSIF

Creating awareness of the GCM RSIF and its outcomes and highlighting the process and procedure undertaken in its compilation are key to its implementation. As part of mainstreaming the GCM RSIF there are several key factors that should be considered:

**Communication**

In order to publicise the GCM RSIF and highlight its role in intergovernmental planning, it is recommended that the RSIF be launched by the Western Cape Government at an event, to which all the stakeholders mentioned in the RSIF are invited. In addition, presentations relating to the GCM RSIF regional spatial logic and the outcomes thereof should be made at appropriate forums, outlining how the GCM RSIF is intended to be incorporated into each municipal SDF and mainstreamed within respective spheres of governance. Some of the key forums identified include:

- PCF
- MinMay
- MinMayTech
- Western Cape Joint Provincial IUDF Task Team
- PTM
- PG MTEC
- LG MTEC
- Integrated Municipal Engagements
- IDP Managers Forum

**Engagement**

Maintaining awareness through participation and engagement is pivotal to the success of the GCM RSIF. In this regard, outcomes-based roadshows with the key stakeholders in each participating municipality and provincial department should be considered as an appropriate catalyst for engagement and collaboration. Some key stakeholders include senior municipal planning and IDP managers, WCG Heads of Department, and Senior Regional Managers of SOEs. These roadshows should highlight applicable aspects of the GCM RSIF and the importance of regional planning in their annual performance plans. Attention should also be given to the strategic interventions and outcomes and the impacts of these regional-scale issues on their respective spheres of governance.

**Responsibility**

As the custodian of regional planning in the Western Cape, the DEA&DP will play a leading role in ensuring that the GCM RSIF is implemented effectively. Significantly, each identified ‘actor’ (be that provincial or municipal) tasked with implementing one of the strategic outcomes of the GCM RSIF must be made aware of their mandate. In addition to the aforementioned roadshows, official communication from the DEA&DP should specifically convey the strategic intervention and associated project action that must be pursued by that ‘actor’.

This should be as detailed as possible and include briefings around the GCM RSIF phasing of the project, the supporting stakeholders identified who will be able to provide assistance in the deliverable along with the anticipated timeframes associated with the project. Further details around the monitoring indicators that DEA&DP will use to measure the project’s implementation should also be conveyed, should they be available.

Internally, the DEA&DP should identify the most appropriate internal responsible ‘actor’ for all DEA&DP strategic interventions and associated project actions that the GCM RSIF has identified. Through internal engagement, similar to the external one described above, the DEA&DP must ensure that all project actions are appropriately delegated and that the same procedure of detailing the project and its deliverables to the responsible internal ‘actor’ is completed.

4.8.4. Performance Monitoring and Review

The custodian of the GCM RSIF is the WC Minister of Local Government, Environmental Affairs and Development Planning. DEA&DP is responsible for the roll out, monitoring and updating of the GCM RSIF. Furthermore, it is legislated that the Minister must appoint an ad-hoc Intergovernmental Steering Committee in terms of LUPA to review the GCM RSIF every 10 years.

The monitoring of the individual actions and strategic interventions identified and tasked to responsible ‘actors’ as listed in Table 12 of this document should, as far as possible, be monitored as part of their implementation mechanism. As part of the IWP, the annual LG MTEC and PG MTEC Spatial Governance and Budget Assessment Frameworks evaluate the PSGs Mid Tems Reports and associated departmental draft Annual Performance.
Plan’s (APP’s) for subsequent alignment and responsiveness to the spatial planning imperatives of the Province. By incorporating the GCM RSIF and associated strategic interventions into this process (where possible), an annual responsiveness to the regional spatial agenda will be facilitated.

In order to review the effectiveness of the GCM RSIF and the regional planning approach in general, a performance-based assessment can occur by referring back to the initial goals and objectives identified in the RSIF and measuring whether they have been met. Naturally, as the custodian of the GCM RSIF, the DEA&DP is suitably placed to undertake this.

Critical evaluation of progress regarding the implementation of strategic interventions will require engagement with the participating municipalities and other stakeholders in order to measure the achievement of priorities, key actions and interventions. This will inform future iterations of the GCM RSIF.
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