SPATIAL DEVELOPMENT FRAMEWORK

By 2030, eThekwini will be a socially equitable, environmentally sustainable and functionally efficient Municipality that bolsters its status as a gateway to Africa and the world".

Review 2015-2016
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EXECUTIVE SUMMARY

This document represents the revised 2015/16 eThekwini Spatial Development Framework (SDF) a summary of which is also included as an Annexure in the 2015/16 eThekwini Integrated Development Plan (IDP). The adoption of this SDF is a legal requirement, and as such fulfils the requirements as set out within the Municipal Systems Act (MSA), No. 32 of 2000. This SDF also seeks to comply with the new Spatial Planning and Land Use Management Act (Act No.16 of 2013) for which regulations are currently being drafted and which will come into effect in July 2015.

This SDF is an integral component of the Integrated Development Plan (IDP); it both informs and translates the IDP spatially and guides how the implementation of the IDP should occur in space. The SDF therefore guides the overall spatial distribution of land uses within a Municipality in order to give effect to the spatial vision, goals and objectives of the Municipality. This SDF is also aligned with provincial and municipal sector plans and strategies as a way of ensuring that the desired spatial form and outcomes of the Municipality are achieved.

The first metropolitan Spatial Development Framework (SDF) was adopted in 1997. A review of the 1997 SDF was done in 2002. There have been tremendous changes in the Metro since the 2002 SDF was prepared, both institutionally and sectorally. Institutionally, the year 2000 saw the formation of a single unitary metropolitan local authority (eThekwini) responsible for the planning and development of the entire municipal area. Prior to this the metropolitan area comprised of numerous local authorities each responsible for planning and delivery in their own area of jurisdiction. A new Package of Plans for eThekwini subsequently emerged, with the Long Term Development Framework (setting out the city strategy and long term vision); the IDP (setting out the medium-term city development strategy, vision and goals) and SDF (providing spatial guidance to the IDP) as the corporate strategy plans; and the Spatial Development Plans (SDPs) (detailed sub-metropolitan plans providing strategic multi-sectoral planning guidance for each planning region; Local Area Plans (LAPs); Functional Area Plans (FAPs), Special Projects and Schemes as the policy and planning implementation tools that translates the spatial intentions of the SDF). The Built Environment Performance Plan (BEPP) elaborated on in Chapter 8, is also required to be adopted by Council at the same time as the IDP and SDF and is a pre-requisite for the receipt of performance based Integrated Cities Development Grant (ICDG) funding. The BEPP and ICDG funding support and facilitate the integrated and spatially targeted implementation of the cities spatial priorities and catalytic projects and close the gap between the strategic policy intent of the IDP and SDF and the budgeting and implementation of catalytic projects.

As the SDF is strategic, it does not provide definitive statements on all aspects of spatial development in the Municipal Area as such it is advisable that this SDF be read in conjunction with other sector plans and local area plans. Most importantly the SDF must be read in conjunction with the Council approved Spatial Development Plans (SDPs), Local Area Plans (LAPs), Functional Area Plans or
Special Projects as these translate the strategic and spatial intentions of the SDF into detailed and cadastrally based land use and implementation plans and facilitate the translation into Schemes. The Package of Plans and the different roles they play are explained in detail in Chapter 1 Section 1.4 and Chapter 7 Section 7.2 and Annexure 2 of this report. The detailed plans can also be viewed or downloaded from the Council’s website:

The 2015/16 SDF Review Process

The approach that has been used in preparing the eThekwini Municipality SDF Review (2015/16) complies with the Municipal Planning and Performance Management Regulations of 2001 and is working towards compliance with the Spatial Planning and Land Use Management Act (SPLUMA No. 16 of 2013). The drafting of this SDF Review also adhered to the Guidelines for the Development of Spatial Development Frameworks, introduced by the Department of Rural Development and Land Reform as well as the COGTA Spatial Planning Guidelines. The approach used in this review was as follows:

a) Development of a process plan

The purpose of the process plan was to set out in writing the approach of the eThekwini Municipality to the review of the IDP for 2015/2016. The preparation of the IDP is based on the IDP Process Plan that was adopted by the eThekwini Municipality in terms of the Municipal Systems Act of 32, of 2000 at the beginning of the review process. The 2015/2016 SDF Review Process Plan was developed in conjunction with the IDP Process Plan. The plan established a firm foundation for the alignment of the IDP, SDF and Budget. As such an all-encompassing process plan was prepared and adopted by the Council to ensure the proper and collective management of the IDP, SDF and Budgeting planning process. In addition, cognisance was taken of the need to have the Draft SDF ready for submission to COGTA by end March 2015 along with the IDP.

b) Desktop Review

The SDF attempts to align with the national, provincial and municipality’s strategic plans, as well as those of neighbouring municipalities and employs these to inform appropriate responses to our local spatial development challenges. Documents that were reviewed as part of this process could be categorised as follows:

• KZN strategic spatial plans including the Provincial Growth and Development Strategy (PGDS), development programmes as implemented by different government departments; etc.
• ETekwini Municipality’s Long Term Development Framework, IDP, SDF and Sector Plans.
• The IDP’s and SDF’s of neighbouring municipalities
• Research reports and papers dealing with spatial planning and environmental management.

c) Spatial Planning and Sector Plan Updates and Reviews

• This SDF is revised based on updated spatial planning and sector information. Addressing changes within these plans involved reviewing and updating the status quo as well as proposals as a way of ensuring alignment with the current SDF.
• In addition, reference is made to the current status, challenges and opportunities arising from the proposed re-demarcation process.

d) The Use of GIS and mapping improvements

• A Geographic Information System (GIS) is used to overlay information and generate options for land use activities.
• The eThekwini Municipality is constantly striving to make mapping improvements. In addition to the use of revised digital criterion developed by the eThekwini Municipality and participation in the provincial norms and standards forum, the municipality is also in the process of undertaking a separate mapping project to standardise the mapping topology and to simplify and improve mapping legibility.

e) Addressing the MEC for COGTA’s Comments on the Final SDF Review 2014/15

In the SDF assessment based on the May SDF 2014/2015 (Final Report), the MEC for COGTA commended the municipality for its improved alignment to and application of National and Provincial imperatives. The Municipality was also commended for its continued work on cross border planning, the development of a detailed Capital Investment Framework and the MTEF Capital Budget Spatial Analysis. The Municipality was especially commended for initiating an exercise to map the Medium Term Expenditure Framework (MTEF) Capital Budget as well as past expenditure, in support of the Capital Investment Framework (CIF). The capital expenditure should be guided by the strategic focus of the SDF and the municipality is commended for acknowledging this intent in its Package of Plans.

The strong emphasis on striving for spatial equity is acknowledged. However, the municipality is required to address the disjuncture between the location of current capital expenditure and the focus of the SDF so that capital expenditure is in keeping with the SDF vision and strategic focus.
In addition the municipality was advised to address the following:

- Improve the focus on the rural scheme guidelines
- Include the applicable elements of the SIP 1-18 of the National Infrastructure Plan of 2012
- SPLUMA (16 of 2013)
  - Ensure compliance with the Principles and Content of SPLUMA
  - Address the institutional arrangements and budget requirements for its implementation
  - Plan and budget for the implementation of SPLUMA noting that by August 2019 the eThekwini Municipality will be required to formulate and adopt a municipal wide Scheme, informed by the scheme guidelines from the SDF and IDP.
- High Value Agricultural Land
  - It was noted that the Situational Analysis of the IDP lacks a dedicated Section for Agriculture which identifies and prioritises high value agricultural land. The situational analysis must identify all high value agricultural land and take cognisance of the KZN DARD Land Categories data set and Draft Policy Guidelines of 2013
  - The SDF Mapping in relation to agricultural potential is commended; however the land potential as mapping does not take consideration of the recent KZN DARD Land Categories data set and Draft Policy Guidelines of 2013.
  - The rural agricultural policy and agricultural development framework plans need to be updated where applicable,
  - Soil and vegetation surveys need to be conducted in strategic areas. Threats to production must also be identified.
  - Agricultural sector goals and opportunities should be aligned more accurately to updated spatially prioritized agricultural areas
- Urbanisation:
  - Information on migration or urbanisation issues needs to be included and mapped in the next SDF review process.
- Environmental Issues:
  - A Strategic Environmental Assessment (SEA) is not covered in the environmental chapter but the SOS study is acknowledged as the start of such a process.
  - The Municipality is commended for having all the environmental institutional arrangements in place for environmental management. The National and Provincial priorities have been adequately expressed and Goal 5 Environmental Sustainability has been expressed as an priority in each of the Spatial Development Plans for each region
- Disaster Management Plans
  - The Municipal IDP and SDF must reflect applicable Disaster Management Plans and the goal, objectives, strategies, programmes and budgets must be represented spatially.
In response to the MEC comments above it should be noted that:

- The disjuncture between the location of current capital expenditure and the focus of the SDF is being addressed through the integrated and spatially targeted implementation strategies outlined in the Built Environment Performance Plan (BEPP) and supported by the performance based Integrated Cities Development Grant. The eThekwini Municipality has identified Integration Zones and catalytic projects to facilitate spatial targeting of municipal budgets in priority areas across the city, details of which are outline in Chapter 8 of this report. Pipeline Planning and programme management is currently being addressed as part of the BEPP process.

- Furthermore, the eThekwini Municipality has completed a project to map and analyse in detail the MTEF capital budget including the past and future expenditure to further inform budget allocations and align delivery with spatial planning priorities. Details of this analysis are contained in Chapter 8, Capital Investment Framework.

- Updated rural information is addressed in Chapter 2. Details of the Umnini Rural Scheme are being finalised and will be inserted in the final report.

- SIP 1-18 of the National Infrastructure Plan of 2012 is addressed in Chapter 2

- Status of SPLUMA readiness is highlighted in the report in Chapter 1 and Annexure 4.

- Reference has been made to the relevant DARD (DAEA) reports and engagement with the Department of Agriculture (KZN) is on-going. (Refer to Chapter 2)

- The spatial analysis of the SDF has been updated and reviewed to incorporate the comments raised by the MEC in particular the issues relating to urbanisation and migration (Refer to Chapter 2)

- Reference is made in Annexure 2 to the Disaster Management strategy of the Municipality.

- Noted further that a mapping project is currently underway to address mapping defects and improve mapping legibility in response to previous comments raised by the MEC COGTA.

f) Addressing COGTA’s Comments on the Draft SDF Review 2015/16

Each year COGTA assess the draft SDF before it is submitted for final adoption. Each assessment is based on the documents submitted to COGTA and on the self-assessment undertaken by the municipality. Broadly, the assessment considers the documents submitted, the extent to which the MEC comments have been addressed, legal compliance and gaps and areas where support might be required. A summary of the comments raised and responses thereto are listed under Annexure 7. Notwithstanding the gaps identified, COGTA has also commended the city for adopting several good practices.
The Public Participation Process

Participation is an important component of the IDP and SDF process. The comments raised in the consultation process to be undertaken in April-May 2015 will be collated and incorporated into the Final SDF 2015/16 and will be submitted to Council in May 2015 and then COGTA in June 2015. The public participation process followed in the SDF Review will be detailed in Annexure 1 of the final report.

The limitations of this SDF are identified as follows:

The Local Government: Municipal Planning and Performance Management Regulations (2001) require that SDF’s must contain a strategic assessment of the environmental impact of the spatial development framework. The eThekwini Municipality has initiated a ‘Safe Operating Space’ study for the city in order to better understand the environmental thresholds which define the “safe operating spaces”. It is anticipated that the output of the study will be a combination of spatial data and a decision-making framework which together will provide the structure needed to assess the environmental sustainability of the city’s spatial plans. The proposed ‘Safe Operating Space’ study will provide a critical starting point for the municipality to undertake a SEA.

The SDF presents a long term vision of the desired spatial form of a Municipality, and thus is a critical informant for bulk infrastructure planning which normally has a 5-20 year planning horizon. As such the SDF is indicative of a preferred development scenario against which there is still a need for more detailed investigations of the cost implications and capacity requirements for the provision of bulk infrastructure. To this end the IDP and SDF has informed the Built Environment Performance Plan 15/16 in an effort to further integrate spatial priorities and bulk infrastructure resource allocations.

The way forward: towards a major SDF review

Programmes and projects that will feed into the major review of the SDF:

a) City Wide Densification Strategy and Corridor Densification Studies

The city wide densification strategy adopted in 2013 identifies actions needed to implement the densification strategy for the Municipality. The Strategy guides efficient use of our limited infrastructure, natural resources and urban space, and creates a city that is more efficient, safe and sustainable, and offers high-quality public spaces, and access to good, efficient public transport, services and recreation opportunities, facilitates the agglomeration of economies for business and industry and clearly expresses the budgetary advantages to investing in strategic densification initiatives. Recommendations emerging from this study include a need for densification of the urban core as a priority with a particular spatial focus on densification alongside and within 400m of the Integrated Rapid Public Transport Network (IRPTN). Both the North and South Public Transport
Corridor studies have since been completed and have informed land uses and densities within the SDF indicating that there is already strong spatial alignment between the detailed studies and the SDF. Current work being undertaken on the Inner City Local Area coupled with the identification of the National Treasury's Integration Zones will have a significant impact on the city's future spatial form.

b) Managing the urban and rural transition around the Urban Development Line / Urban Edge

The Urban Development Line (UDL) line indicates the outer limit to which urban development will be permitted, however, not all the areas outside the UDL are rural in nature and character. There is a need to outline the urban rural interface and define the type of development, densities and the service levels and standards that will apply as a way of sustainably managing the transitional peri-urban area. This process may lead to the refinement of the UDL and ultimately the review of the SDF. It is anticipated that this review will be undertaken as part of the major review of the SDF in 2016/17.

c) Service/Infrastructure Delivery and Phasing Line

In the context of the constrained resources and existing infrastructure capacity limitations it is important to establish upfront the availability of excess infrastructure capacity and the areas in which development opportunities can be provided in the short term while new infrastructure is being built. Infrastructure to new areas will need to be carefully assessed and phased within the context of whether they are cost effective, sustainable, and in the best interest of the Municipality. A study addressing the phasing of services to new areas has been undertaken by the Water and Sanitation Department. The service/infrastructure phasing line will assist in the articulation of a phased development approach for the SDF as well as identification of realistic programmes and help prioritise the implementation of projects.

d) Implementation of the Durban Climate Change Strategy (DCCS)

In acknowledgement of the need for Durban and all of its residents, from big industry to the poorest communities, to prepare for the impacts of climate change, the eThekwini Municipality has engaged in an inclusive participatory process to develop a combined mitigation and adaptation climate change strategy for Durban. The development of this strategy has been completed and is being considered by the Council for approval.

The DCCS covers 10 themes: water, sea level rise, biodiversity, food security, transport, energy, waste and pollution, and health. In addition it covers economic development as well as knowledge generation and understanding as cross-cutting fields.

The DCCS will have important implications for the SDF that are highlighted in this document and that will influence its implementation once the DCCS has been adopted.
e) Municipal Adaptation Plans

In order to improve the effectiveness of climate change adaptation planning, sector specific municipal adaptation plans have been developed for three priority high risk sectors: Health, Water and Disaster Management. These plans have been accepted by sector representatives and by the Council. The Water sector, in particular, has engaged enthusiastically with the plans since 2010. The Municipal Adaptation Plans have undergone a Benefit-Cost Analysis by a team of resource economist experts, with the aim of prioritising the Municipality’s adaptation options on the basis of economic efficiency and the benefit to people, while being cognisant of governance and capacity issues that might facilitate or hinder the implementation of the interventions. This Benefit-Costs Analysis has resulted in a consolidation of the original 47 Municipal Adaptation Clusters into a reduced set of 16 Municipal Adaptation Clusters, which is greatly easing the implementation and tracking of the interventions.

f) Urban Resilience Strategy

EThekwni’s leadership role in the climate change adaptation arena at both a local and global level has also positioned the city well to advance its thinking and action around the increasingly important concept of ‘urban resilience’. ‘Resilience’ is the ability of a system, entity, community or person to withstand shocks while still maintaining its essential functions, and recovering effectively to a state better prepared to cope with both extreme and slow onset events. These shocks and stresses could be environmental (e.g. climate change) or socio-economic (e.g. local and global economic meltdowns, persistent poverty and unemployment etc). Building resilience is therefore about making people, communities, infrastructure and ecosystems better prepared to withstand catastrophic events – both natural and manmade – and about planning in new and innovative ways in order to bounce back more quickly and more strongly. In December 2013, Durban was selected as one of the first cohort of 33 cities to be inaugurated into the Rockefeller Foundation’s 100 Resilient Cities Centennial Challenge. This programme aims to build urban resilience in cities around the world by providing relevant technical and financial support for the development of a ‘Resilience Strategy’ in each of the selected cities. EThekwini’s involvement in the 100 Resilient Cities Programme will help to better coordinate resilience-building initiatives across the municipality and to contribute to the resilience agenda at both a local and global level.

The municipality’s spatial planning is a critical contributor to the city’s resilience and will contribute to, and be influenced by, the Resilience Strategy that is produced as part of this programme.

g) Built Environment Performance Plan 2015/16-17/18 and Integrated City Development Grant

The Integrated City Development Grant (ICDG) provides incentives for participating municipalities to identify and establish integration zones within cities, including the establishment of measurable performance objectives, indicators and targets. The objective of the ICDG is to support the development of more inclusive, liveable, productive and sustainable urban built environments in metropolitan municipalities. The grant provides a financial incentive for metropolitan municipalities to
integrate and focus their use of available infrastructure investment and regulatory instruments to achieve a more compact urban spatial form. The eThekwini Municipality, as a recipient of the Integrated Cities Development Grant (ICDG) has identified a number of integration zones across the municipal area within which to spatially target investments. Through the preparation of the Built Environment Performance Plan, the municipality must highlight the financial and other strategies for investment in the integration zones and catalytic projects. Further details regarding the Built Environment Performance Plan and Integration Zones can be found in Chapter 8 of this report.
### DEFINITION OF SPATIAL TOOLS AND CONCEPTS

<table>
<thead>
<tr>
<th>SPATIAL TERM</th>
<th>DEFINITION</th>
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<tbody>
<tr>
<td><strong>Nodes</strong></td>
<td>Nodes are areas where a higher intensity of land uses and activities are supported and promoted. Typically any given municipal area would accommodate a hierarchy of nodes that indicates the relative intensity of development anticipated for the various nodes, their varying sizes, and their dominant nature.</td>
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<tr>
<td><strong>Corridors</strong></td>
<td>Corridors are links between nodes, along which an increased intensity of development may be encouraged. Corridors provide efficient access to a higher level of economic and social opportunities than would generally be the case in less structured space or where activities are dispersed. They typically include public transport routes.</td>
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<tr>
<td><strong>Densification</strong></td>
<td>Densification refers to an increase in density. Density is defined as the number of units per hectare or number of people per hectare and is achieved through the increased use of space both horizontally and vertically within existing areas / properties and new developments. Densification is a measure of the compactness of cities and is the hallmark of a qualitative urban environment which supports efficient and cost effective service delivery with good access to public transport and social and economic opportunities.</td>
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<td><strong>Efficiency</strong></td>
<td>Development that maximises development goals such as sustainability, integration, accessibility, affordability, and quality of living, relative to financial, environmental, and social costs, including ongoing and future costs.</td>
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<td><strong>Infill development</strong></td>
<td>Development of vacant or under-utilised land within existing settlements in order to optimise the use of infrastructure, increase urban densities and promote integration.</td>
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<td><strong>Integrated development plan</strong></td>
<td>A 5 year strategic municipal development plan, reviewed on an annual basis, required by the MSA (Act 32 of 2000) which guides municipal decisions and budgets.</td>
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<tr>
<td><strong>Mobility Routes</strong></td>
<td>These are routes of national significance that connect the Municipality at a national and provincial scale. Examples of these routes include the N2 and N3.</td>
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<td><strong>Sector Plans</strong></td>
<td>Sector Plans are municipal plans for different functions such as bio-diversity conservation, housing, transport, local economic development and disaster management. They may also be geographically based, for example a sub-region, settlement within a local Municipality or a component of a settlement.</td>
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<tr>
<td><strong>Urban Sprawl</strong></td>
<td>Urban Sprawl is the expansion of urban areas across the landscape and the conversion of forested, wetland and agricultural areas to urban areas. Urban sprawl includes the expansion of major roadways, not just housing and commercial areas. It is usually associated with increased private car usage, water and air pollution, under utilisation of infrastructure and land use segregation.</td>
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<tr>
<td><strong>Urban Core</strong></td>
<td>The urban core consists of the inner core areas of the Municipality including the traditional CBD area and surrounds. The planning within the urban core mainly focuses on redevelopment and regeneration where land uses are unlikely to change significantly but will increase densities and provide more residential opportunities.</td>
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<tr>
<td><strong>Urban Development Line (UDL)</strong></td>
<td>The SDF uses the term Urban Development Line and not Urban Edge or Development Edge. The UDL is a line demarcating the extent to which urban development will be permitted to be established within an urban development corridor or urban node. It is a line that will promote efficient, equitable and sustainable settlement form. The line indicates the outer limit of urban development within a corridor or node. The UDL implies that there is a rural hinterland different in character and servicing needs, and which supports different lifestyles and densities.</td>
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<tr>
<td><strong>Development Services Line / Phasing Line</strong></td>
<td>The Development Services Line is a line located within the urban development corridor or node indicating the limit to infrastructure availability and capacity. This line may coincide with the UDL or may fall within the UDL boundary. The metropolitan area may have a number of development services phasing lines related to future servicing capacity and infrastructure indicating where and when future development can be serviced.</td>
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<tr>
<td><strong>Integration Zones / Urban Network</strong></td>
<td>Integration Zones are sub-metropolitan areas where opportunities exist for public intervention to promote more inclusive, efficient and sustainable forms of urban development. They the focus of the National Treasury's spatial targeting initiative is the identification of the CDD, townships, other townships, and the connections between these three types of spaces or elements and an integration Zone. The entire system is termed the Urban Network.</td>
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<td>ACRONYMS AND ABBREVIATIONS</td>
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<tr>
<td>ABM : Area Based Management</td>
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<td>ASGISA : Accelerated and Shared Growth Initiative for South Africa</td>
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<td>BoP : Back of Port</td>
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<td>CMPR : Central Municipal Planning Region</td>
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<td>CSIR : Council for Scientific and Industrial Research</td>
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<td>CIF : Capital Investment Framework</td>
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<td>DCOGTA : Department of Cooperative Governance and Traditional Affairs</td>
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<td>DFA : Development Facilitation Act</td>
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<td>D'MOSS : Durban Metropolitan Open Space System</td>
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<td>DSW : Durban Solid Waste</td>
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<td>DTP : Dube Trade Port</td>
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<td>DWA : Department of Water Affairs</td>
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<td>EDS : Economic Development Strategy</td>
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<td>EBA : Ecosystem-based adaptation</td>
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<td>EGS : Ecosystem Goods and Services</td>
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<td>EM : EThekwini Municipality</td>
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<td>EMA : EThekwini Municipal Area</td>
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<td>EMF : Environmental Management Framework</td>
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<td>ETA : EThekwini Transport Authority</td>
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<td>EWS : EThekwini Water Services</td>
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<td>FAP : Functional Area Plans</td>
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<td>FAR : Floor Area Ratio</td>
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<td>HDA : Housing Development Agency</td>
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<td>IRPTN : Integrated Rapid Public Transport Network</td>
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<td>HPPTN : High Priority Public Transport Network</td>
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<tr>
<td>ICDG : Integrated Cities Development Grant</td>
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<td>ICT : Information and Communications Technology</td>
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<td>IDP : Integrated Development Plan</td>
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<td>INK : Inanda Ntuzuma KwaMashu</td>
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<tr>
<td>IZ : Integration Zone</td>
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<td>KSIA : King Shaka International Airport</td>
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<td>KZN : KwaZulu-Natal</td>
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<tr>
<td>KZNPGDS : KwaZulu-Natal Provincial Growth and Development Strategy</td>
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<td>LED : Local Economic Development</td>
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<td>LEFTEA : Less Formal Township Establishment Act</td>
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<td>LUF : Land Use Framework</td>
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<td>LUMS : Land Use Management System</td>
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<td>MSA : Municipal System Act</td>
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<td>MCP : Municipal Climate Protection Programme</td>
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<td>MFMA : Municipal Financial Management Act</td>
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<td>MTRF : Medium Term Revenue and Expenditure Framework</td>
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<td>NDP : National Development Plan</td>
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<td>NEMA : National Environmental Management Act</td>
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<td>NHRA : National Heritage Resource Act</td>
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<td>NMT : Non-Motorized Transport</td>
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<td>NMPP : Northern Municipal Planning Region</td>
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<td>NPC : National Planning Commission</td>
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<td>NSDP : National Spatial Development Perspective</td>
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<td>SOE's : State Owned Entities</td>
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<td>SDF : Spatial Development Framework</td>
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<td>SDP : Spatial Development Plan</td>
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<td>SMME's : Small, micro and medium enterprises</td>
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<td>SMPR : Southern Municipal Planning Region</td>
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<td>UDL : Urban Development Line</td>
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<td>UE : Urban Edge</td>
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<td>UNS : Urban Network System</td>
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<td>WMPR : Western Municipal Planning Region</td>
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CHAPTER 1
INTRODUCTION TO THE SPATIAL DEVELOPMENT FRAMEWORK (SDF)

Synopsis: Chapter 1 of this document outlines the purpose and role of the SDF by linking it to the legal and policy directives that informs the SDF. This chapter also outlines the planning approach adopted by the eThekwini Municipality in the preparation of this SDF and its translation to a Land Use Scheme.
1. INTRODUCTION: THE SPATIAL DEVELOPMENT FRAMEWORK (SDF)

The Municipal Systems Act, Act No. 32 of 2000 (MSA) requires that each Municipality prepare an Integrated Development Plan (IDP) to serve as a tool for transforming local governments towards facilitation and management of development within their areas of jurisdiction. The eThekwini Municipality’s SDF serves as a strategic spatial framework that guides the spatial distribution of land uses within a Municipality in order to give effect to the vision, goals and objectives of the municipal IDP. The Municipality's SDF represents a long term (+20 years) plan, and is revised in line with the IDP 5 year cycles.

This report represents a revised SDF for the eThekwini Municipality. The information contained in this report is informed by the current realities of the Municipality, the key spatial issues and trends and how they relate to each other. The information presented in this SDF informs key strategic choices and interventions especially regarding the future growth and development of the Municipality.

1.1 Role and Purpose of the SDF

The SDF is a primary spatial response to the development context, needs and development vision of the municipality. It is a key land use management tool at a strategic level that has an important role to play in guiding and managing Municipal decisions relating to the use, development and planning of land. It is a legislative requirement and should resonate with the national and provincial spatial development priorities.

The SDF is also a transformation tool. With its focus on spatial restructuring, it guides the location of future development in a manner that addresses the imbalances of the past. It enables the municipality to manage its land resources in a developmental and sustainable manner. It provides an analysis of the spatial needs and issues and provides strategies and programs to address these challenges. In summary, the SDF has the following benefits:

- It facilitates effective use of scarce land resources.
- It facilitates decision making with regard to the location of service delivery projects.
- It guides public and private sector investment.
- It strengthens democracy, inclusivity and spatial transformation
- It promotes intergovernmental coordination on spatial issues.
- It serves as a framework for the development of lower order plans and a detailed scheme and is the basis for various Land Use Management Systems.
- It guides and informs the spatial location of municipal infrastructure investment and spatial priorities;
- Provides visual representation of the desired urban form of the municipality in the short, medium and long term.
Ultimately, the SDF and accompanying Package of Plans, defines and facilitates a progressive move towards the attainment of an agreed upon desired spatial form within the municipality’s area of jurisdiction.

1.2 Policy and Legislative Context

Since the mid-1990s, spatial planning has become an integral part of development aimed at redressing the imbalances of the past in South Africa. The Constitution (Schedule 4 Part B) bestows this responsibility on local municipalities.

Municipalities currently give effect to this spatial planning mandate through the Municipal Systems Act, (MSA) Act No. 32 of 2000 and its regulations. Chapter 5 of the MSA (Act 32 of 2000) provides for the preparation of SDF’s as a core component of the IDP. In terms of the MSA, the SDF, as part of the IDP, prevails over any other plan as defined in Section 1 of the Physical Planning Act.

Section (2)4 of the Local Government Municipal Planning and Performance Management Regulations, 2001 requires that an SDF should:

- Give effect to the principles outlined in the Development Facilitation Act
- Set out objectives that reflect the desired spatial form of the municipality
- Contain strategies and policies to achieve the objectives and which should indicate desired pattern of land use.
- Address the spatial reconstruction and provide strategic guidance regarding the location and nature of development
- Set out basic guidelines for a land use management system in the municipality
- Set out a capital investment framework for the municipalities development programs
- Contain a strategic assessment of the environmental impact of the SDF
- Identify programs and projects for the development of land within the municipality
- Be aligned with the spatial development frameworks reflected in the integrated development plans of neighbouring municipalities
- Provide a plan of the desired spatial form of the municipality which should indicate where public and private land development and infrastructure investment should take place, indicate the desired or undesired utilization of space in a particular area, may delineate the urban edge, should identify areas of strategic intervention and should indicate priority spending areas.

1.2.1 National Spatial Planning Policy & Legislation

The National Planning Commission has developed a National Development Plan which focuses on enabling sustainable and inclusive development. The objectives include the need for a strong and
efficient planning system integrated across the spheres of government. The plan seeks to eliminate poverty and reduce inequality by providing South Africans with a secure foundation from which they can expand their capabilities and improve their life opportunities. Some directives towards achieving this include:

- developing people’s capabilities to be able to improve their lives through education and skill development, health care, better access to public transport, jobs, social protection, rising incomes, housing and basic services and safe communities. One of the critical actions identified in this plan is the need for “New Spatial Norms and Standards – densifying cities, improving transport, locating jobs where people live, upgrading informal settlements and fixing housing market gaps (NDP Vision for 2030).

The National Development Plan (NDP) introduces the long-term vision for the future development of South Africa. It acknowledges the spatial inefficiencies that characterizes existing settlements and commits the national government to developing a National Spatial Framework. It also identifies the need to activate rural economies through the stimulation of small-scale agriculture, tourism and mining investments (NDP 2011: 117).

National policy on spatial planning currently focuses on the rationalization of a fragmented system of land use and related laws. The current fragmented spatial pattern of human settlement and the associated urban sprawl is a direct consequence of the skewed and inappropriate planning legislation of the past.

The national government has gazetted the Spatial Planning and Land Use Management Act, 2013 (SPLUMA, Act No. 16 of 2013), as a means of providing an enabling law on spatial planning, land use management and land development. The new law will prevail over provincially applicable planning laws. It will lay down national policy, norms and standards as well as frameworks on land use, and therefore fall within the ambit of Section 146 of the Constitution. At a local level, it provides a new framework for the preparation of area specific SDFs and Schemes.

The government has identified 10 priority areas in its programme of action, with an intention to turn around the global economic slowdown, whilst at the same time ensuring that the needs of all its citizens are met. The priority areas developed are intended to do the following:

1. Speed up economic growth and transform the economy to create decent work and sustainable livelihoods;
2. Introduce a massive programme to build economic and social infrastructure;
3. Develop and implement a comprehensive rural development strategy linked to land and agrarian reform and food security;
4. Strengthen the skills and human resource base;
5. Improve the health profile of all South Africans;
6. Intensify the fight against crime and corruption;
7. Build cohesive, caring and sustainable communities;
8. Pursue African advancement and enhanced international cooperation;
9. Ensure sustainable resource management and use;
10. Build a developmental state, improve public service and strengthen democratic institutions.

The National Government is now implementing a number of sector based development programmes with serious implications for spatial planning at a local level and this includes the introduction of a Comprehensive Rural Development Programme (CRDP) which seeks to create vibrant, equitable and sustainable rural communities through a three-pronged strategy based on:

- a coordinated and integrated broad-based agrarian transformation;
- strategically increasing rural development; and
- an improved land reform programme.

The eThekwini Municipality embraces the principles of the CRDP and strives towards the attainment of its vision as part of its spatial and development planning program. This includes the identification of target areas for rural development, ensuring that rural areas and peri-urban areas are clearly defined and ensuring developmental outcomes of the rural development programmes. An eThekwini Rural Development Strategy is also underway to inter alia help define spatially what is rural in the eThekwini context as well as formulating policies and strategies to protect rural and agricultural land.

1.2.2 Kwazulu-Natal Provincial Growth and Development Strategy (PGDS)

The Provincial Growth and Development Strategy (PGDS) emanates from a Vision for KwaZulu Natal (Vision 2030) which says: “By 2030, the Province of KwaZulu-Natal should have maximized its position as a Gateway to South and Southern Africa, as well as its human and natural resources so creating a safe, healthy and sustainable living environment.”(PGDS 2011) This strategy feeds into the National strategy, and its highlights are economic growth and improvement of the quality of life for citizens of KwaZulu-Natal.

The PGDS responds to and focuses on growth and development, in particular: to create sustainable jobs that will improve the people’s lives and build on growing integration of the economies across the board. It further plans to ensure that the citizens, especially the youth, have education as well as skills to take up job opportunities created for them. It also identifies ways of addressing social ills that will ensure that the quality of life of citizens is improved. Crime, violence and corruption are amongst the causes of social ills which the strategy plans to eradicate.

The strategy should also find means and ways to better utilize the natural resource base and land that is still available to improve agricultural production as well as development, whilst ensuring that sustainable environmental planning principles are applied.
The plan further focuses on improving the way government works so as to ensure integration as well as fighting corruption, maladministration as well as effective and efficient financial management.

Food security programmes should be efficiently managed both in urban and rural areas, and there should be a positive response to climate change including innovative ways that are driven by the needs of sustainability such as production and use of renewable energy.

The strategy further encourages partnerships between the communities, government as well as relevant stakeholders so that strategies to eradicate poverty and inequality should be owned and championed by its own people, and should not merely be seen as government initiatives.

The eThekwini Municipality influences and responds to the Provincial Growth and Development Strategy as follows:

- Job creation, through the automotive, tourism, agriculture, chemicals, creative industries, construction, textile, wood, pulp and paper sectors.
- Human resource management, through various skills development programmes. The Municipality’s graduate’s internship programme, as well as skills enhancement programs for councillors and the officials.
- Human and Community Development, through the provision of community halls, stadiums, swimming pools, parks, cemeteries, schools and police services (Metro). The Municipality has also provided opportunities through the expanded public works programmes in the form of pipe renewal, road maintenance, sewer upgrade and other human settlement activities as part of community development programmes.
- Strategic infrastructure, such as The Dube Trade Port, on-going Point precinct development, Cato Ridge industrial development, Bridge City development, Port expansion programme and public road networks.
- Spatial equity through the Municipality’s Spatial Development Framework. In terms of our Municipal SDF, spatial equity and integrated Land Use Management guide the allocation and utilisation of human and environmental resources towards sustainable growth and development.

1.2.3 Legislative Context

The Planning Environment is directed by a plethora of legislation emanating from National, Provincial and Local legislation. The legislative environment is a vibrant one and, decisions and interpretation arising from court rulings and judgments steer the Municipality in new and different directions. Section 156 (1)(a) of the Constitution provides the municipality with executive authority in respect of and the right to administer matters listed in Schedule 4 Part B. This includes the function of municipal planning. In the case of City of Johannesburg Metropolitan Municipality v Gauteng Development
Tribunal and Others\(^1\), municipal planning was considered to be ‘planning’ in the context of municipal affairs a term which has assumed a particular, well-established meaning which includes the zoning of land and the establishment of townships. In that context, the term is commonly used to define the control and regulation of the use of land. In the Constitutional Court case of Minister of Local Government, Environmental Affairs and Development Planning Western Cape v The City of Cape Town & Others\(^2\) it was stated that Municipalities are best suited to make zoning and subdivision decisions, and that certain matters are best left for municipal determination. Further, Municipalities were said to be the frontiers of service delivery. Section 5 of SPLUMA endeavours to provide more clarity as to what constitutes municipal planning. The Bill of Rights, lays down for all, rights and responsibilities and it is at this stage, that planning takes a lead in, including but not limited to, delivering sustainable housing, rights to services, and quality healthy environments.

Over the past two years, considerable time has been spent both at National and Provincial Spheres of Government. This time has been spent translating the Spatial Planning and Land Use Management Act, 2013 into a set of Regulations. These regulations form the backbone for Planning in the country. To date, two sets of regulations have been produced; and the Regulations are yet to be adopted and promulgated. The go-live date for SPLUMA across the country is envisaged to be 1 July 2015, although the regulations are still to be finalised.

At a Provincial level, many Provinces across the country have already promulgated framework planning legislation in line with their mandate to monitor and support Municipalities, together with many Municipalities promulgating By-laws to give greater effect to their constitutional mandate. In KwaZulu-Natal, the Planning and Development Act, 2008 remains in force and effect. Coupled with that, components of the Town Planning Ordinance, 27 of 1949 remain in effect. For example, the Ordinance provides for Section 67: Special Consent Applications which in itself is problematic, causing confusion to practitioners, users and of course ratepayers. Over the past year, attempts have been made to re-work the current Planning and Development Act (PDA); and hence a Bill (PD”B”) is in the making. The Province has over the past month also now commenced with preparing a draft Standard By-law for the Province, which is still in its embryonic phase.

EThekwinini Municipality as a Metropolitan Municipality has opted to give full effect to its Constitutional mandate. In that regard, the municipality has prepared a Daft Planning By-law. Section 156(2) of the Constitution provides that a Municipality may make and administer by-laws for the effective administration of the matter which it has the right to administer, which includes municipal planning. Section 32(1) of SPLUMA provides that a municipality may pass By-laws to enforce its land use scheme. The By-law will allow the municipality to direct planning more efficiently in terms of its

\(^1\)City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal and Others\(^2\)CCT 89/09[2010] ZACC 1
\(^2\)Minister of Local Government, Environmental Affairs and Development Planning Western Cape v The City of Cape Town & Others [2014] ZACC 9
Strategic Plans, Schemes and workflows. The By-law is modelled on the Development Principles as contained in SPLUMA, which are the principles of:

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

It is the Municipality's responsibility to build the same principles into all its planning tools. The Department has also undertaken to formulate Standard Operational Processes and new workflows. Training manuals are being prepared and all staff and stakeholders will be trained accordingly. The SDF, all lower order spatial plans and Land Use Schemes will also need to comply with the Development Principles and such alignment has already begun. The programme of activities currently being undertaken to ensure SPLUMA compliance and readiness is contained in the SPLUMA Process Plan attached at Annexure 4.

These Development Principles are applicable to all land parcels within the Municipality's area of jurisdiction and includes the land under Traditional Authority. In that regard the preparation of a Traditional Planning Scheme continues and is modelled on safe sustainable spaces.

The seven R293 Townships have since been consolidated and form the Primary Schemes. The four consolidated Schemes have been adopted some 2 years ago and it is the intention of the Department to review such Schemes annually. In that regard, the 4 Schemes have since been reviewed twice. The Durban Planning Scheme is the last of the schemes to be reviewed and adopted. Such will occur prior to June 2015, the end of the 2014/2015 financial year. All LEFTÉA’s in the City have been identified and a single Scheme within each land use management region has been prepared. Those Schemes too will be adopted at the end of financial year 2014/2015. All applications lodged in terms of the DFA, have now been received and a project to incorporate them into the Schemes has begun. This project has a 24 month time period due to the large number of applications.

The final stage of the Scheme Consolidation work that will be undertaken will include collapsing the Primary Scheme and the LEFTA Scheme; then collapsing the DFA into the Scheme, and then finally to investigate whether a single Scheme in each region is the appropriate planning tool. Land Use Management commits itself to delivering a sustainable and efficient Planning System within its area of jurisdiction.

At a strategic level, this SDF review aims to ensure SPLUMA compliance in time for its implementation in June 2015 as well as complying with the currently applicable legislation notably, the Municipal Systems Act, Act No. 32 of 2000 and its regulations.
In addition to the planning policy and legislative context outlined above, the SDF is also guided by a wide range of other national and provincial policies and legislation and departmental sector plans.

Sector Plans are municipal plans for different functions such as bio-diversity conservation, housing, transport, local economic development and disaster management. They may also be geographically based, for example a sub-region, settlement within a local Municipality or a component of a settlement. Kindly refer to Annexure 1 for a summary of the relevant National and Provincial policies and legislation and Annexure 2 for a summary of the eThekwini Municipality Sector Plans that inform (and are informed by) the SDF.

1.2.4 Cross-Municipal Boundary Planning and Alignment

As per the National and Provincial policies and legislation, (MSA-S26 (d), MSA Regs S2 (4) (h)), Municipalities are required to provide a clear indication of how the SDF is aligned with the planning of neighbouring municipalities.

The eThekwini Municipality has a mandate to ensure that its IDP is in compliance with planning legislation and policies and that it gives effect to the development of an SDF as the spatial representation of the IDP. The municipal SDF, in turn, directs and guides strategic sector investments that are developmental and beneficial within eThekwini and across neighbouring municipalities.

The Department of Co-operative Governance and Traditional Affairs (COGTA) is coordinating and facilitating the cross boundary planning and alignment issues as well as the spatial implications between eThekwini Municipality and the affected neighbouring municipalities.

For the past four years meetings have been held with the neighbouring municipalities to resolve areas of non-alignment. The municipalities have agreed that joint planning and alignment is needed on an on-going basis to address the following issues: the IDP, SDF, Mapping alignment (GIS), Development Applications and Proposals, environmental considerations, infrastructure sharing as well as better understanding of cross border development trends and pressures.

1.2.5 Municipal Horizontal and Vertical Alignment

The eThekwini Municipality has used alignment as an instrument to synthesize and integrate the top-down and bottom-up planning process between different spheres of government. There are two types of alignment procedures that eThekwini Municipality has initiated in the planning process i.e. vertical and horizontal alignment.

Vertical alignment is between eThekwini Municipality and neighbouring municipalities as well as other spheres of government (Provincial, National Departments, Private Sector and other stakeholders such
as Eskom, Telkom). The aim of this alignment is to ensure that the IDP is in line with National and Provincial policies and strategies so that it is considered for the allocation of departmental budgets and conditional grants. It also guides the private sector in terms of highlighting areas of strategic investment and critical spending. The COGTA initiated Provincial IDP Forum brings together all the relevant provincial and municipal stakeholders in an effort to achieve this desired vertical alignment.

Horizontal alignment occurs within municipality sector plans to ensure that the planning process is integrated, issues are co-ordinated and addressed jointly. The Municipal IDP Forum, SDF engagement process and more recent, municipal ICDG Forum are multi-sectoral processes that help facilitate this horizontal sectoral alignment from the high level strategic plans (IDP and SDF) through to the identification and implementation of catalytic projects and programmes in the Built Environment Performance Plan (BEPP). These on-going engagements with key sector departments have helped foster a more consensus-based and synergistic approach to city development.

1.3 Background to the eThekwini Municipal Area’s (EMA’s) Planning Context

In addition to national, provincial and local policies, our Municipal SDF is also informed by previous planning initiatives of the Municipality including initiatives that came about as a result of the local government restructuring process. In December, 2000 a new Council for the eThekwini Municipality (Unicity) was established as part of the Developmental Local Government Agenda that required that one local government body be responsible for the overall strategic planning and management of the EMA. The New Council involved the amalgamation of seven councils administered by the old Durban Metropolitan Area, the Umkomaas Traditional Local Council and portions of ILembe and Ndlovu Regional Councils.

Due to the multiplicity of local authorities, institutional fragmentation and poorly coordinated and uneven spatial and economic development pattern the restructured local government provided a window of opportunity to address the historical lack of strategic spatial guidance, as well as a more cooperative approach to manage shared resources and introduce an approach to land use management that is more flexible and responsive to development. This change enabled the eThekwini Municipality to move beyond just the delivery of services and goods administration to strategically turning the Municipality into a globally competitive and attractive Municipality.

Out of the restructuring process, eThekwini Municipality embarked on the following initiatives:

1.3.1 The Long Term Development Framework (LTDF)

In 2001 eThekwini Municipality embarked on a process to develop a LTDF and Integrated Development Plan for the eThekwini Municipal Area. The LTDF process was intended to assist the newly formed eThekwini Municipality to identify challenges that it faced as a result of the
amalgamation that needed to be addressed in both the short and long term. The LTDF mapped out the developmental challenges and strategic vision for the eThekwini Municipality over a period of twenty years and strategic priorities over the first five years. The vision statement as identified in the LTDF was as follows:

“By 2020 Durban Unicity will enjoy the reputation of being Africa’s most caring and liveable city, where all citizens live in harmony. This vision will be achieved by growing its economy and meeting people’s needs so that all citizens enjoy a high quality of life with equal opportunities, in a city that they are truly proud of”.

The vision was informed by the developmental challenges that were identified and needed to be achieved, namely:

- Have ease of movement in the Municipality
- Enjoy a safe environment in all parts of the municipal area
- Afford what the Municipality offers
- Enjoy a clean and green Municipality
- Have access to economic opportunities
- Enjoy homely neighbourhoods
- Have access to services, in particular municipal, health and education services

With delivery of these, the people of eThekwini should be able to:

- Live in harmony
- Be proud of their Municipality
- Feel protected
- Feel their basic needs are being met

The following diagram represents the Municipality’s sustainable growth path as represented in the LTDF.

The IDP had a similar five year timescale with detailed management plans for the Municipality including programmes, projects, budgets and performance indicators.
1.3.2 Imagine Durban Long Term Development Plan (LTDP)

In 2010 the LTDF was revised through the Imagine Durban Long Development Term Plan project. The main purpose of this project was to develop a visionary plan that can inspire citizens, non-governmental organizations, businesses and government to work together to refine the vision statement and key strategies. The revised vision statement as outlined in the Imagine Durban process and as adopted by the 2010 and beyond IDP reads: “By 2020 eThekwini will be Africa’s most caring and liveable city”.

This vision will be achieved by growing its economy and meeting people’s needs so that all citizens enjoy a high quality of life with equal opportunities, in a Municipality that they are truly proud of. The Imagine Durban Long Term Plan outlined the following key strategies through the development framework:

- Creating a Safe Municipality;
- Promoting an Accessible Municipality;
- Creating a Prosperous Municipality where all enjoy Sustainable Livelihoods;
- Celebrating our Cultural Diversity, Arts and Heritage;
- Ensuring a more Environmentally Sustainable Municipality; and
- Fostering a Caring and Empowering Municipality.

1.3.3 The IDP’s Eight Point Plan

In line with the refined long term plan’s vision, strategies and outcomes, the eThekwini Municipality’s IDP’s Eight Point Plan outlined the short term strategies and outcomes intended at addressing the key challenges and achieving the long term vision. The eight point plans are the Municipality’s delivery plan, which despite being separate plans are supportive of each other to ensure effective delivery. The eight plans are:

1. Develop and Sustain our Spatial, Natural and Built Environment.
2. Developing a Prosperous, Diverse Economy and Employment Creation.
3. Creating a Quality Living Environment.
4. Fostering a Socially Equitable Environment.
5. Creating a Platform for Growth, Empowerment and Skills Development
6. Embracing our Cultural Diversity, Arts and Heritage.
7. Good Governance and Responsive Local Government.

Given the fact that the Spatial Development Framework is a spatial translation of the Municipality’s IDP, and hence the eight point plans, the spatial vision, strategies and outcomes are also linked to both the short and long term strategies as outlined within the IDP and the Long Term Development Plan.
1.3.4 Current Planning Approach in the eThekwini Municipality

The eThekwini Municipality has developed a comprehensive land use management system for the entire Municipal area to give effect to the requirements of Section 26 of the Municipal Systems Act (2000). A key aspect of this system is the preparation of a “Planning and Development Management Toolbox” which will include a Package of Plans.

The establishment of the system includes a range of planning activities all running in parallel with each other with the common purpose of updating, refining and establishing appropriate mechanisms for managing land use and development in the Municipal area.

This Package of Plans is a cyclic, integrated and iterative process and shows the move from Municipality wide strategic level plans to detailed local level plans and land-use schemes. It is important therefore to consider the entire Package of Plans as part of the IDP / SDF as, together, this communicates the strategic intent through to the detailed land use guidelines as required in terms of the Municipal Systems Act. A list of the Council Approved Plans as well as the Plans in Progress are attached at Annexure 6 of this report and can be downloaded from the municipal website: http://www.durban.gov.za/Resource_Centre/reports/Framework_Planning/Pages/default.aspx

The diagram below indicates the package of plans concept while Table 1 identifies the purpose and scope of each level of plan:

1.3.4.1 Package of eThekwini Plans
Table 1: Purpose and Scope of Existing Municipal Plans

<table>
<thead>
<tr>
<th>PLAN TYPE</th>
<th>SCOPE</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Development Framework</td>
<td>Strategic: Economic Social and Environmental Objectives</td>
<td>Strategic Development Direction for the Municipality</td>
</tr>
<tr>
<td>IDP</td>
<td>Strategic: Operational Implementation</td>
<td>Strategic Implementation Direction and Imperatives for the Municipality</td>
</tr>
<tr>
<td>Spatial Development Framework</td>
<td>Strategic: Spatial Development</td>
<td>Strategic Spatial Development Intentions for the Municipality based on the LTDF, Imagine Durban and IDP</td>
</tr>
<tr>
<td>Spatial Development Plan</td>
<td>Strategic: Spatial Development</td>
<td>Translation of Spatial Development Intentions into Land Use, Transport, Environmental, Infrastructure implications Broad based Land Use Directives to guide Local Area Planning and LUMS, Bulk Infrastructure and Transportation Planning Directives for the Municipality</td>
</tr>
<tr>
<td>Local Area Plan</td>
<td>Detailed Physical Plan</td>
<td>Detailed Physical Planning Directives for the Municipality - Refining Land Use, Transport, Environment and Infrastructure to a level that informs the preparation of a Land Use Scheme. Also includes Urban Design Directives for Public and Privately owned Land. May include implementation proposals</td>
</tr>
<tr>
<td>Functional Area Plan</td>
<td>Detailed Physical Plan for special areas</td>
<td>Detailed Physical Planning Directives for the Municipality for areas with special environmental, economic, heritage etc characteristics. Detailed Urban Design Directives and / or Proposals. May include implementation proposals</td>
</tr>
<tr>
<td>Land Use Schemes</td>
<td>Legislative and statutory component focused on implementation.</td>
<td>Drive and direct development TheSDF gives effect to the intentions of the IDP and provides a framework for the formulation of an area and even site specific land used controls depending to the size of SDF area. Since eThekwini is a metro, its SDF could not be directly translated into a scheme level.</td>
</tr>
</tbody>
</table>

Below is the typical example of spatial representation of the eThekwini Package of Plans showing how plans are translated from an SDF level to a level of detail.

Package of Plans Concept

The table below illustrates the nature of the sector information required for each level of plan.
### Table 2: Nature of Sector Information Required for Each Level of Plan

<table>
<thead>
<tr>
<th>Package of Plans</th>
<th>Environmental</th>
<th>Economic</th>
<th>Social</th>
<th>Infrastructural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Function</strong></td>
<td><strong>Type</strong></td>
<td><strong>Environment</strong></td>
<td><strong>Economic</strong></td>
<td><strong>Social</strong></td>
</tr>
<tr>
<td><strong>Strategic Plan</strong></td>
<td>LTDF</td>
<td>Environmental Policy</td>
<td>Economic Development Policy</td>
<td>Housing Policy</td>
</tr>
<tr>
<td><strong>IDP</strong></td>
<td>Targets Programmes Standards</td>
<td>Targets Programmes Standards</td>
<td>Targets Programmes Standards</td>
<td>Budgets</td>
</tr>
<tr>
<td><strong>SDP</strong></td>
<td>Metro Level Spatial Plan</td>
<td>Metro Level Spatial Plan</td>
<td>Metro Level Spatial Plan</td>
<td>Metro Level Spatial Plan</td>
</tr>
<tr>
<td><strong>LAP</strong></td>
<td>Project Location Plan</td>
<td>Project Location Plan</td>
<td>Facilities Plan</td>
<td>Local Bulk Infrastructure Plan</td>
</tr>
<tr>
<td><strong>FAP</strong></td>
<td>Project Location Plan</td>
<td>Project Location Plan</td>
<td>Facilities Plan</td>
<td>Local Bulk Infrastructure Plan</td>
</tr>
<tr>
<td><strong>Scheme</strong></td>
<td>Use Zones Development Controls Landscape Controls</td>
<td>Use Zones Density Controls Built Form Controls</td>
<td>Use Zones Density Controls Built Form Controls</td>
<td>Use Zones Density Controls Built Form Controls</td>
</tr>
</tbody>
</table>

**Notes:**
- **Environment** includes Use Zones Development Controls, Landscape Controls, and Use Zones Density Controls Built Form Controls.
- **Economic** includes SDF Spatial Intentions Economic Development Framework, SDP Metro Level Spatial Plan, LAP Project Location Plan, and FAP Project Location Plan.
- **Social** includes SDF Spatial Intentions Housing Development Framework, SDP Metro Level Spatial Plan, LAP Project Location Plan, and FAP Project Location Plan.
- **Infrastructural** includes Use Zones Density Controls Built Form Controls, LTDF Environmental Policy, IDP Targets Programmes Standards Budgets, and SDF Spatial Intentions Economic Development Framework.
Synopsis: The role of this chapter is to introduce the reader to the local and provincial context, issues and challenges including the planning issues and challenges relating to cross border planning with surrounding municipalities. The spatial development team has initiated a working stream with neighbouring Municipalities to discuss proposals particularly those with cross border implications in order to foster greater cross border alignment and planning.

From a local context eThekwini’s planning background and current planning is explored with a particular focus on the four Municipal Planning Regions, namely, the North, Central, South and Outer West Planning Regions. The Municipal Land Use Management Framework (Land Use Schemes) has also been reviewed under the local context.
2. INTRODUCTION TO ETHEKWINI MUNICIPAL AREA (EMA)

2.1 ETekwini Contextual Framework

The eThekwini Municipality is located on the east coast of South Africa in the Province of KwaZulu-Natal (KZN and is bordered by three district municipalities, namely, iLembe in the north, UGu in the south and uMgungundlovu in the west as shown in Map 1 below. The eThekwini Municipal Area (EMA) spans an area of approximately 2297km², extending from Tongaat in the North to Umkomaas in the South and from the coastline in the East to Cato Ridge in the West and is characterized by coastal plains and steep and dissected topography. Map 2 below shows the spatial extent of the EMA as well as the administrative extent of the municipal planning regions.

Figure 1: Location of eThekwini Municipality Provincially and Spatial Regions

2.1.1. ETekwini Demographic Profile

Population

The total population of eThekwini is currently approximated at 3.4 million, just over one third of the population of KwaZulu-Natal (Stats SA 2011).

In terms of population spread, the greatest population concentrations occur in the central and north planning regions. The Outer West Region which represents the largest extent of the Municipality (approximately 78 438ha) actually comprises of just 11% (approximately 338 000 people) of the total population of the Municipality. The northern region which represents approximately 26% of the total extent of the Municipality has approximately 1.15 million people which represent 33% of eThekwini’s
The majority of the population of approximately 1.18 million people (34% of the total population) is located in the Central region which is the second largest in extent in the municipality. The South makes up 23% (760 000 people) of the total Municipal population. The figures below depict the total population and race profile and the population breakdown per region in the Municipality.

![Figure 2: Total Population and Profile by Race](image1)

![Figure 3: Demographic Breakdown per Region](image2)

The people who reside within the municipal area consist of individuals from different ethnic backgrounds. The majority of the population come from the African community (74%) followed by the Indian community (17%), White community (7%), Coloured community (2%) and other nationals (0.4%).

**Population Projection**

The population number is projected to rise to approximately 3.8 million by 2021 (eThekwini Municipality IDP Review 2014/2015). According to Stats SA (2011) eThekwini has experienced an average annual growth in population of 1.13% from 2001 to 2011 as against 2.34% from 1996 to 2001. The growth of the population is likely to be driven by the general trend of migration and natural growth.

The eThekwini Demographic Projections for the period 2012 to 2021 are depicted in the Table 3 below.
### Table 3: eThekwini Demographic Projections

<table>
<thead>
<tr>
<th>Year</th>
<th>Population estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3 446 447</td>
</tr>
<tr>
<td>2013</td>
<td>3 480 726</td>
</tr>
<tr>
<td>2014</td>
<td>3 517 157</td>
</tr>
<tr>
<td>2015</td>
<td>3 555 868</td>
</tr>
<tr>
<td>2016</td>
<td>3 596 543</td>
</tr>
<tr>
<td>2017</td>
<td>3 638 918</td>
</tr>
<tr>
<td>2018</td>
<td>3 682 524</td>
</tr>
<tr>
<td>2019</td>
<td>3 727 032</td>
</tr>
<tr>
<td>2020</td>
<td>3 772 097</td>
</tr>
<tr>
<td>2021</td>
<td>3 818 499</td>
</tr>
</tbody>
</table>

Source: eThekwini Transport Authority

### Gender Profile

The gender profile of the eThekwini Municipality is typical of the trend in most other municipal areas. There are a greater number of females totalling to 1759956 as opposed to males which are 1682408. The diagram below presents the gender profile.

![Gender Profile Diagram](image)

*Figure 4: Gender Profile*

### Age Profile

The majority of the population in eThekwini Municipality is still very young falling within the 0-29 year age category. The 60-70 and above year category constitutes a small percentage of the entire population.

A relatively young population implies a high dependency rate on the working population to meet the needs of this young population. As such there is significant pressure on the working population to take care of the youth and the elderly. To further exacerbate the problem, not all the people within the economically active category are employed.
Vulnerable Groups

Within the eThekwini Municipality, reside groups of people with specific needs. These groups are referred to as Vulnerable Groups. The eThekwini Municipality recognised and acknowledged that these groups of people should be treated with the dignity that they deserve and as such has initiated the Vulnerable Groups Programme. The IDP has identified the following groups as vulnerable:

- People with disabilities
- Children
- Elderly
- Homeless
- Refugees
- People suffering from incurable diseases like HIV/AIDS
- Youth
- Women

As part of this programme and in line with Plan 4 of the IDP, a vulnerable groups policy has been developed. The Vulnerable Groups Policy aims to create a framework for social integration that serves to develop a society and workplace that addresses human diversity and participation for everyone.

Education Profile

29% of the eThekwini Municipal population has some secondary education, 19% of the population has some primary education, 4% has no schooling and 4% is unspecified meaning they are functionally illiterate in that they either do not have school-based education or have not received sufficient school-based education to acquire marketable skills and engage in serious business ventures. 26% of the population has secondary education (grade 12/standard 10) while only 8% of the population have tertiary level education.
An extremely high percentage of the population is not economically active. This also means high dependency ratios on household heads with low income levels. Despite the diversified nature of the local economy, unemployment in the municipal area is of concern as only 992560 of the total labour force are employed. The unemployment rate is currently estimated at 430319 of the population while 873583 of the total labour force are not economically active.

<table>
<thead>
<tr>
<th>Highest Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Schooling</td>
</tr>
<tr>
<td>Some Primary Education</td>
</tr>
<tr>
<td>Primary Education Completed</td>
</tr>
<tr>
<td>Some Secondary Education</td>
</tr>
<tr>
<td>Grade 12 Complete</td>
</tr>
<tr>
<td>Higher Education</td>
</tr>
<tr>
<td>Education NA</td>
</tr>
<tr>
<td>Education Unspecified</td>
</tr>
</tbody>
</table>

**Individual Monthly Income**

The majority of the population earn below R800 per month.
Migration and Urbanisation Trends

The eThekwini Municipality (EMA), like all developing world cities, is subject to high rates of immigration from rural areas and small towns in KZN, other parts of South Africa and other parts of Southern Africa. This has resulted in a rate of urbanisation and population increase that is difficult to project, and a large number of new residents requiring housing and services.

The eThekwini City Density Strategy (2013) estimated that “at a growth rate of 1.1% p.a, the population of the EMA will grow to 4.4 million by 2030, an additional 775,000 people. However, global trends indicate that a projection of 1.1% annual growth might be too low. “Cities across the world now accommodate 3.5 billion people or fifty percent of the world’s population. By 2050 they will accommodate 6.4 billion people or over 70% of the world’s population.” (City of Melbourne, 2010; quoted in the Built Environment Performance Plan, eThekwini 2015)

African Cities are generally dynamic and have fast-growing populations, and eThekwini is no exception: With such rapid growth, city development will need to be significantly accelerated to cover in 14 years what it would have developed in 200, 500 or 1000 years. Such explosive growth represents a huge challenge, particularly in Africa where a number of African cities are not responding to the challenges with the result that up to two-thirds of development in many African cities are slums.” Prof Pedro B. Ortiz, World Bank; from an interview by Amy Fallon published on 24/11/2014 http://www.urbanafrica.net/news/development-urbanization-case-regenerative-african-cities/

Migration of population to eThekwini is an important contributing factor to population growth. The table below reflects the extent of in-migration and out-migration within Durban from 2001 to 2011.

Table 3: Extent of Migration 2011 (adapted from Posel, D. 2015: Micro-data analysis of patterns and trends in eThekwini Municipality (Durban))

<table>
<thead>
<tr>
<th>Individual Monthly Income</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No_Income</td>
<td>1422547</td>
<td></td>
</tr>
<tr>
<td>&lt; R400</td>
<td>430088</td>
<td></td>
</tr>
<tr>
<td>R400 - R800</td>
<td>107411</td>
<td></td>
</tr>
<tr>
<td>R800 - R1600</td>
<td>346933</td>
<td></td>
</tr>
<tr>
<td>R1600 - R3200</td>
<td>245723</td>
<td></td>
</tr>
<tr>
<td>R3200 - R6400</td>
<td>179939</td>
<td></td>
</tr>
<tr>
<td>R6400 - R12800</td>
<td>152459</td>
<td></td>
</tr>
<tr>
<td>R12800 - R25600</td>
<td>105004</td>
<td></td>
</tr>
<tr>
<td>R25600 - R51200</td>
<td>41668</td>
<td></td>
</tr>
<tr>
<td>R51200 - R102400</td>
<td>10898</td>
<td></td>
</tr>
<tr>
<td>R102400 - R204800</td>
<td>4733</td>
<td></td>
</tr>
<tr>
<td>&gt; R204800</td>
<td>2890</td>
<td></td>
</tr>
<tr>
<td>Income Unspecified</td>
<td>356777</td>
<td></td>
</tr>
<tr>
<td>Income NA</td>
<td>35285</td>
<td></td>
</tr>
</tbody>
</table>

Figure 8: Individual Monthly Income
### IN-MIGRATION

| Percentage of the City's population who are in-migrants | 8.1 |
| Number of in-migrants | 276,988 |

### OUT-MIGRATION*

| Percentage of all migrants who migrated from the City | 3.4 |
| Number of out-migrants | 193,222 |

### NET MIGRATION*

| Number of net migrants into the City | 83,766 |


Notes: The data have been weighted to represent the South African population. Migration is defined as changing the municipality of residence. *The extent of out-migration is considerably under-estimated in the table because 34 percent of individuals identified as migrants did not specify their previous municipality of residence. As a result, the extent of net migration is also only a very approximate estimate.

In-migrants are those individuals who were not living in the City in 2001 but are now residing there. Out-migrants are those individuals who were previously living in the City but have since moved out of the Municipality. According to Posel (2015), the extent of migration to Durban (8.1%) is relatively low in comparison to Johannesburg and Cape Town which has experienced in-migration of 19% and 12% respectively.

According to Census 2011 the province that provided most migrants to eThekwini was KwaZulu-Natal. Considering other sources besides KwaZulu-Natal, the largest source of migrants (39,500) was from outside the country. The next largest source was the Eastern Cape (38,500) followed by Gauteng (24,300). Many of the migrants are taking up residence in informal settlements and in the case of migrants from outside South Africa 15% reside in informal settlements and as many as 35% of the migrants from the Eastern Cape live in informal settlements. Migration has implications for the labour force, social services, infrastructure, housing and basic household services backlogs.

Growth in the north of the EMA reflects the trend of the physical divide between employment and population density: “Most jobs in the manufacturing, warehousing and transport industry are located in the centre, south and west of the municipality but a large number of workers live in the north. Vacant land for low-income settlements has predominantly been identified in the north. The long distances between residences and employment need to be addressed”. (Built Environment Performance Plan, eThekwini 2015).

Future economic and residential growth in the North of eThekwini has been planned for around the Dube Trade Port, however it is also critical that growth anticipates and align with the needs of the city’s immediate municipal neighbours to the north; Ndwedwe and KwaDukuza. A significant component of the northern labour pool exists in the form of migrant labour from these municipalities,
and the co-dependencies between Ndwedwe, KwaDukuza and eThekwini should be carefully and cooperatively managed. The same is true of many residents of the city's southern and western neighbours, many of whom have secondary economic dependencies on the metro or are migrating between a rural home and the city of Durban on a weekly basis.

The Rural Development Strategy that is underway suggests that due to urbanisation and in migration, people commute to the city centre to access job opportunities. This is due to easy access to affordable land and free services. The influx of people in rural areas has led to urbanisation in areas that were deemed rural and were serviced as rural settlements. The assumption was that these areas use on site sanitation because of the large site sizes and were therefore only provided 300 litres of water in a standpipe per household. The current reality has changed for a number of areas that are still regarded as rural in eThekwini with densities of up to 30 dwelling units per hectare. This phenomenon is increasing pressure on the existing infrastructure and impacting on quality of life.

All of these considerations must be built into the spatial, economic and social planning for the eThekwini Municipality to ensure a realistic approach to managing its migration and urbanisation challenges.

2.2 Spatial Context of eThekwini Municipality

2.2.1 Major Land Uses, Settlement Pattern and Urban Form

The eThekwini Municipality accommodates a wide range of land uses including formal and informal, urban and rural settlements and these are complimented by economic, transport, public and social infrastructure. Other prevalent land uses include agriculture and traditional settlement. A large part of the municipal area is also designated as part of the metropolitan open space system.

About 68% of the Municipal area is considered rural, with pockets of dense settlement. About 10% of the rural areas comprise commercial farms and metropolitan open space and about 90% of the rural area is defined by its geospatial features, such as hilly, rugged terrain, dispersed settlement patterns in traditional dwellings and communal land holdings under the Ingonyama Trust. This institutional arrangement is unique to the eThekwini Metropolitan Municipality and presents a number of challenges particularly with respect to land, planning and urban management. The remainder of the municipal area, approximately 32%, is urban and is dominated by residential, commercial/office and industrial land uses. The economic land uses, located in closer proximity to the N2 and N3 are unevenly distributed throughout the Municipality and separated from the higher density residential uses.

The concentration of dense residential uses in the Central (Umlazi) and North regions (INK) and the significant economic and residential uses in the Central Metropolitan Region has resulted in the urban
form with a clear separation of residential uses from economic uses. This implies that there are few employment opportunities where people live, and that economically active residents must commute. There is a concentration of more intense uses in the Central and North planning regions, and by comparison, relatively low-intensity of use in the Outer West and Southern Planning Regions. The Central Region represents the urban core of the EMA. It has significant economic, residential and servicing capacity and thus presents an opportunity for densification and because of its servicing capacity can support thresholds for a range of services, industry and public transport. While the Northern Region is seen as the growth path of EMA, portions of the South and Outer West regions also offer, albeit limited, opportunities for expansion and growth.

In addition, large numbers of informal settlements are scattered across the city, many in peripheral locations or on steep land or flood plains, placing them at higher risk of erosion and flood damage. This requires that urgent attention be given to addressing the housing backlog and a key spatial challenge is to identify residential opportunities on land that is well located, serviced and with good access to public transport as well as social and economic opportunities.

The region therefore shares an urban and rural landscape with a wide range of settlement types ranging from formal urban to rural settlements, with the rural areas also experiencing a significant amount of residential growth in the last few years.

Figure 9: Major Land Uses
2.2.2 Current Density Distribution/Settlement Patterns & Trends

International trends show that the level of population density tends to decline from the City Centre. The pattern in South African cities and eThekwini is no exception, runs counter to this trend, with population densities rising with distance from the city centre (as the figure below demonstrates) resulting in the poor and marginalised being located at some distance from the city centre. The current distribution of density in eThekwini reflects the Apartheid spatial planning legacy and the distribution pattern is similar to other South African cities:

- a fragmented city;
- limited variations in density levels across the metropolitan area;
- large areas of low density in central, well-serviced locations;
- large areas of high density on the urban periphery

The overall metropolitan density of the eThekwini Municipality is 4du/ha. Densities in excess of 40du/ha are located in scattered pockets across the city and these are limited to the Durban CBD/Beachfront; Cato Manor, Umlazi and KwaMashu/Inanda. Density is concentrated within the former townships of KwaMashu, Ntuzuma, Inanda and Phoenix in the north, Umlazi, Lamontville and Chatsworth to the South, Clermont/KwaDabeka and Marianridge in the West and the Durban CBD/Beach, Glenwood, Berea, Cato Manor in the Central areas. The remainder of the metropolitan area is settled at densities less than 15du/ha. This includes areas such as Durban North, Westville, Pinetown, Mpumalanga, Tongaat and Verulam. The settlement pattern also reflects the
rural/traditional periphery of eThekwini where residential densities are below 5du/ha. The following map represents the key characteristics of residential densities within eThekwini Municipality:

![Map of Settlement Density Pattern](attachment:map.png)

*Figure 10: Settlement Density Pattern*

These density characteristics have important implications for where people may wish to settle, (whether formally or informally); commuting patterns; public transport and the provision of basic services and social facilities. The existing fragmented urban form of the Municipality coupled with low density dramatically affects the access which residents can enjoy to places of residence, employment and social facilities. Fragmentation of the metropolitan area can threaten its potential as an economic engine, and social and environmental problems in any one part of the urban area can stunt overall metropolitan growth. Because of the self-reinforcing nature of this kind of spatial pattern, fragmentation and low density settlements can both be attributed to and result in the following:

- Long commuting times (average for the majority of eThekwini commuters is 2 hours return). This in turn impacts negatively on labour productivity and results in high transport costs.
- High infrastructure costs associated with extending infrastructure to new locations resulting in high costs per dwelling for pipe runs, road lengths; high costs per dwelling for maintenance and operations. Developing outside existing areas results in unused infrastructure capacity in existing areas.
• Impacts on higher order social and economic facilities require large geographic catchments, the consequence with developing in fragmented locations results in new facilities being located far away from much of the population.
• Underused public space in existing areas, which contributes to security and urban quality issues.
• Environmental degradation through high energy requirements of transport.
• Challenge to quality of life and to long-term sustainability.

Overcoming fragmentation and low density would work towards diminishing or reversing these negativities, and assist in achieving spatial integration, social inclusion and increased diversity of class and urban form.

2.2.2.1 Density Trends

It is evident in comparing the EMA density pattern of 2001 to that of 2011 that there has been a change in the distribution of density. As the following map which shows the percentage change in gross density for metropolitan area illustrates:

• Density within the traditional suburbs of Berea, Montclair, Pinetown, Phoenix, Westville (inner core) etc has remained stable.
• Density in the rural periphery has doubled
• Density has increased threefold in greenfield development areas such as Hillcrest, Mt Edgecombe, Umhlanga and Welbadacht.
• Density along the backbone of the IRPTN has either decreased, or is stable.

*Figure 11: Density Trends (2001-2011)*
An interrogation of the reasons for this pattern provides invaluable insight for the preparation of a strategy to manage density.

- The rural areas in particular offer a “soft” landing for migrants into the municipal system. Here the barriers to acquiring land to settle on, and the regulations regarding the development of land, are far less onerous than within the formal urban system where available land is not readily available. There is also anecdotal evidence of residents choosing to invest in rural areas where property taxation and servicing costs are minimal compared to land under formal land legal administration. Also developing in these areas is a cultural choice.

- Municipal investment in servicing backlogs has been directed into these areas on the past decade.

- Corporate decisions by major land owners e.g. Tongaat Hullet Developments and Luke Bailes etc to transform former sugar cane land to urban development have resulted in a plethora of new housing opportunities, with a particular emphasis on high quality managed and secure neighbourhoods that are under threat in existing neighbourhoods. This has resulted in a push of residents to emerging edge cities.

- The municipality’s housing programme has been unable to secure well-located land at reasonable prices and has been forced to deliver large-scale greenfield housing projects on the periphery of existing settlements.

A number of density patterns, both current and in terms of trends, are evident in eThekwini, each of which is a product of a number of constraints and/or incentives. These constraints and incentives are either implicit (hidden) or explicit (clear).

2.2.3 EThekwini Spatial Regions

New and emerging planning and development requirements, as determined through various pieces of national and provincial legislation, require that planning systems within local municipalities are regularized and are updated in a manner that will result in an improved spatial re-organisation of the municipal area. Specifically, the systems and approaches adopted should begin to redress the adverse effects of apartheid and separate areas planning, as well as social, economic and environmental sustainability.
As such it has been necessary for the eThekwini Municipality to develop a spatial planning approach that is consistent with legislation but also which is appropriate to the management requirements of a metropolitan Municipality. As part of the Municipal planning process and system, the Municipal area has been divided into four functional areas, namely, the Central Municipal Planning Region (CMPR), South Municipal Planning Region (SMPR), West Municipal Planning Region (WMPR) and North Municipal Planning Region (NMPR). The functional boundaries of these regions are defined by the Umgeni River, the Umlazi River and the Kloof Ridge and are catchment based. The following map represents the abovementioned spatial planning regions.

![Figure 12: eThekwini Spatial Regions](image)

The regions and their respective roles are summarised below:

### 2.2.3.1 Northern Spatial Planning Region

The Northern Municipal Planning Region (NMPR) stretches from the northern banks of the Umgeni River in the South up to and including Tongaat in the North, from the coast line in the east to UMzinyathi, Inanda and border with the Ilembe District Municipality in the West and North. This is a total area of 59, 764 ha which represents approximately 26% of the EMA. The role of this region within the broader municipal area is as follows:

- it provides a logistics support
- it has significant residential, commercial & services function
- specializes in coastal tourism & recreation
- it is a trade and industrial investment centre
The spatial challenges which can be identified from the North SDP include the following:

- **Protection of Environmental Asset**
  The limited extent and fragility of the natural assets base require that they are vigorously protected, integrated into a sustainable environmental system and appropriately managed in order to adequately support the levels of anticipated development in the NMPR. In particular the coastal assets will need to be prioritised for protection and management as a vital element of the tourism and recreation base of the Municipality.

- **Protection of Coastal Assets : Sea Level Rise**
  The Coastal Risk Zone (CRZ) is defined as the combination of the most inland edge of the 1m sea level rise line and the slope failure line associated with 1m of sea level rise. This demarcated the Coastal Risk Zone from natural and climate change impacts and provides a broad identification of the risk area. The coastal risk zone will be refined through the process of more detailed work through the Shoreline Management Plans (SMP's) which are a legal requirement for our coastline.

- **Prevent Uncoordinated Urban Sprawl**
  The extent and type of growth and development anticipated in the north requires that clear directives to urban expansion are set so that sustainable urban development footprints can be established and or consolidated and that viable well located agricultural development can be promoted. It is acknowledged that the development of a Northern Urban Corridor will be key to containing urban sprawl in the North.

- **Protect Lifestyle Options**
  Given the levels of growth in residential development there is a need to encourage and accommodate a range of lifestyles and landscape character that will provide a choice for future residents.

- **Provide New Major Transport Infrastructure**
  Levels of accessibility and mobility at both the metropolitan and local level will need to be improved through expanded capacity of infrastructure and services for both public transportation and private vehicular modes of transport. The North is acknowledged as a priority area for public transportation and this is reflected in the IRPTN phasing.

- **Provide Employment Opportunities in the North**
  Land use patterns and location of employment zones that promote a more balanced flow of trips between home and work across the NMPR and across the metropolitan area as a whole need to be encouraged. Appropriate economic responses to the growth area around the King Shaka International Airport and the Dube Trade Port need to be prioritized.

- **Protect Agricultural Assets**
  Under performing agricultural areas that result in pressure for land use change need to be supported and promoted as important and viable economic and employment generators.

- **Provide New Bulk Infrastructure**
  Expanded capacity for waste water treatment, and for the provision of bulk water is critical.
2.2.3.2 Central Spatial Planning Region

The boundaries of the Central Municipal Planning Region (CMPR) extend from the Umgeni River, in the North, along the coast through to the Umlaas Canal in the South and extend to the escarpment in the west. The region extends over an area of 677km² (67772.33 ha). The role of the Central region is as follows:

- It is the urban core of Metro (commercial, retail, financial & administrative hub),
- Centered on transport activities and logistics port,
- Contributes 56% of the EMA’s total GDP,
- Key Industrial hub,
- Events, Tourism and Logistics hub,
- Largest employment generator,
- Major economic sectors: Industrial, logistics, warehousing, business, commercial, retail and financial services and tourism,
- Has significant coastal resources and service nodes, and
- Offers a range of lifestyle options.

Opportunities

The major physical assets of the Central Spatial Region include its highly accessible CBD’s, its well established transport infrastructure (road, rail, and port) that provide strategic national and regional linkages, an extensive industrial and commercial infrastructure, and a range of attractive physical attributes including an attractive cityscape, a favourable climate, several rivers, the sea and beachfront (golden mile), the harbour and the bay.

This region forms the cornerstone of three regional axes which lead northward to Richards Bay, southward to Port Shepstone and westward to Pietermaritzburg. As host to a key trade hub and due to the regions coastal location this arguably provides the region with a comparative advantage for the location of export-orientated activities.

Regional development corridors linking Durban northwards to Richards bay and onwards to Maputo, and westward to Pietermaritzburg and onwards to Johannesburg are key regional spatial planning tools that build up the competitive advantage of the CSR by exploiting the manufacturing, trade and tourism resources found within this region.

Infrastructurally this region has the most capacity to extend services and promote further development in regard to densification and redevelopment initiatives within the context of sustainability. Being the largest employment generator within the EMA, this region’s also contributes to the largest percentage (56%) of the EMA’s GDP. The region also has a large reservoir of manpower in terms of its current labour force and could potentially provide opportunities for further job creation.
Challenges
The constraint on land in the central area, particularly for residential development, has resulted in a significant thrust for development in the north (and to a certain extent in the west). This growth has manifested in a push for the location of commercial and key community facilities in the adjacent regions where access to or availability of commercial and major community facilities is limited.

Residential densities in the Central Spatial Region have largely been characterised by low density settlements which have been informed by apartheid planning which created a spatial form that was racially structured, highly fragmented and poorly integrated. Urban sprawl as manifest in this region only exacerbates an inefficient public transport system largely due to low thresholds resulting from low densities around the core areas (CSR) and outward sprawl that makes it difficult to provide affordable and effective commuter transport systems. Furthermore due to the excess infrastructure capacity available in this region, opportunities for densification present a challenge due to limited space actually available for development.

Many of the natural resources within the Central Spatial Region are under threat from the continuous development growth and pressures. A disregard for environmental systems reduces opportunities for creating a system of open space which supplies important ecosystem goods and services to the citizens of Durban.

In areas such as the South Durban Basin the ability of such an ecosystem to assimilate pollution is being exceeded. The lack of basic services (water, sanitation and electricity) in informal areas has also put strain on the natural resources. (Durban South Basin SEA: Fully Integrated Report: August 1999 (CSIR ENVIRONMENTTEK))

The limited extent and extreme fragility of the natural assets base require that they are vigorously protected, integrated into a sustainable environmental system and appropriately managed in order to adequately support the levels of anticipated development in the CSR. In particular the coastal assets will need to be prioritised for protection and management as a vital element of the tourism and recreation base of the Municipality.

Infrastructure limitations in the Central Spatial Region as it relates to the Port capacity may arrest economic expansion which translates spatially into pressure between the interface of the port and the city.

2.2.3.3 Southern Spatial Planning Region

The Southern Municipal Planning Region (SMPR) extends from the northern boundary consisting of the Umlazi River and the Umlaas Canal to the UFudu Escarpment and the EziMbokodweni River in the north-West to the Western and Southern boundaries of the eThekwini Municipality. The southern region is in extent of 510km². It abuts in the north onto both the central and western metropolitan
planning regions. In the west the South MPR shares a common border with UMgungundlovu and UGu District Municipalities. The South MPR is made up of the previous South Local Council area, containing a series of earlier local municipalities, and significant areas added to EThekwini during the recent re-demarcation. The latter areas formed previously part of the KwaZulu homeland structure. The role of this region is as follows:

- it has a large residential population,
- it has some of the Provinces leading economic sectors,
- has existing Coastal Tourism and has potential for expansion,
- has potential to diversify/intensify existing agricultural uses,
- has the largest tribal areas within the Councils area of jurisdiction.

Landscapes and developments consist of a continuum of components and therefore separating lines, such as the identification of a South Metropolitan Planning Region, represents an artificial separation acceptable only as a convenience in terms of manageability.

While therefore the South MPR forms an integral part of the Metro and while it contains significant components of metropolitan significance, it also accommodates unique developments, and even more so, unique opportunities for future development.

Opportunities
The initial strategic assessment suggests in broad terms inter alia major development opportunities in terms of:

- Major tourism and recreation opportunities both in coastal as well as unique inland areas
- Significant agricultural development opportunities in the rural western parts of the South,
- Providing a progressive “ladder” of accommodation, activities and opportunities for the entire income range of the population,
- Providing opportunities for the expansion of a range of economic development necessary to support the growing population.

Challenges
There are however also significant challenges for the development of the South MPR including issues such as:

- Finding ways of better integrating the rural communities of the area occupying over 50% of the South,
- Creating a better balance between the built and the natural environment,
- Protecting, rehabilitating and appropriately managing the natural resources of the South,
- Improving significant portions of the existing built environment, in particular conditions in lower income communities,
- Improving pre-conditions for the better integration of large population groups into the economic development opportunities of the area,
Facilitating the creation of significantly more employment opportunities for the population of the South,

Providing better physical linkages between the South and the remainder of the Metro

In addition, the southern region is going to receive four wards of Vulamehlo Local Municipality. Wards one, two, three and ward four will form the new eThekwini boundary. The southern region will inherit an area of social investment need. This will mean planning for and streamlining the current disparities of levels of basic services in areas previously under Vulamehlo Municipality. Vulamehlo Municipality is characterised by a predominantly rural settlement pattern and is under traditional authority. The landscape of Vulamehlo is characterised by valleys and river systems; rugged; steep and hilly terrain. This fragmented topography has influenced the extent of development expansion and has also dictated the scattered pattern of settlements found in the area.

![Figure 13: Areas of Proposed Demarcation](image)

2.2.3.4 Outer West Spatial Planning Region

The Outer West planning region is approximately 78 438ha in extent, representing 34% of the municipal region. A large part (50%) of the Outer West region comprises traditional areas. A major portion of the metropolitan open space system (50%) which requires protection is found within this region.

The role of this region is as follows:

- it is an Environmental Management Priority Area
- provides opportunity for strategic Industrial Expansion and hence employment opportunities
- has potential for tourism related opportunities.

The existing spatial structure of the Outer West can be summarised as follows:
- Extent and quality of natural assets make the area a high priority environmental management area
- Fragmented and un-articulated open space system will reduce ecological viability
- Poor inter linkages between different settlements and communities resulting in inefficient and inconvenient travel patterns
- Under provision of community and commercial facilities in rural areas resulting in inconvenience and lack of productivity
- Dominant land owners are drivers for new developments that are not always consistent with municipal priorities.
- Large under serviced informal settlements and developments on traditional land resulting in poor living conditions and pressure on the natural environment and social and health challenges.
- High risk generated by informal settlements being in vulnerable locations, could result in the municipality refusing to provide services that will consolidate a settlement, but leads to prolonged situations of poor environmental standards if alternative land is not immediately available.
- Low densities and fragmented settlement pattern with low thresholds for efficient service delivery
- Low densities, fragmented settlement pattern and low incomes with resultant low thresholds for viable commercial nodes and service points
- Poor linkages from rural and informal settlements to metropolitan transport links and to metropolitan facilities and services resulting in inefficient costly travel patterns, inconvenience, lack of productivity, social/family impacts.
- Diminishing capacity of major road transportation corridors to serve the metropolitan area from an economic point of view.
- Under-performing agricultural areas resulting in pressure for land use change and impacts on food security.
- Property Rates Policy encourages uniform development of the City.
- Imbalance between availability of and location of employment opportunities in relation to economically active population.
- Short term market pressures and rapid development may prejudice long term sustainable planning objectives.
- Inadequate and outdated policies and zoning will encourage the illegal use of land which will further negatively affect infrastructure capacity

2.2.4 Neighbouring Municipalities

The eThekwini Municipal Area (EMA) is bordered by three district municipalities, namely, iLembe in the north, UGu in the south and uMgungundlovu in the west. These are shown in Map1 below:
The eThekwini Municipality is a key growth point that serves the region. It therefore needs to be aligned with the spatial development frameworks of neighboring municipalities. The alignment with neighboring municipalities is necessary in order to:

- prevent conflicting initiatives and land uses to be implemented on opposite sides of a boundary
- ensure an aligned regional vision with regards to the region's infrastructural development to allow governments to take advantage of comparative advantages offered within an area. This also refers to cross border provision of services such as education facilities which can be utilized by communities residing in two municipalities. This allows for cost effective provision of services and is applicable to the provision of civil services, social services and economic opportunities.

2.2.4.1 Cross- Municipal Boundary Planning Engagements

The eThekwini Municipality has a mandate to ensure that its IDP is in compliance with the planning legislation and policies and to give effect to the development of an SDF as a spatial representation of the IDP. The municipal SDF directs and guides strategic investments that are developmental and beneficial both within eThekwini and across neighbouring municipalities. The Department of Cooperative Governance and Traditional Affairs (COGTA) is coordinating and facilitating the cross boundary planning alignment meetings to ensure that the spatial implications of planning initiatives between the eThekwini Municipality and the affected neighbouring municipalities are addressed. To this end, a number of cross border planning and alignment meetings have been held on an ongoing basis the purpose of which is to discuss cross border planning and alignment issues.

The municipalities have agreed that the areas that need joint planning and alignment include the IDP, SDF, GIS, environmental frameworks and joint consideration of Development Applications and
Proposals in addition to the need for sub-regional planning and entering into agreements for the sharing of infrastructure services and resources.

A summary is given below of municipalities bordering eThekwini with their key planning issues as they relate to the eThekwini Municipality:

Table 4: Summary of planning issues with municipalities Bordering eThekwini

<table>
<thead>
<tr>
<th>DISTRICT MUNICIPALITY</th>
<th>LOCAL MUNICIPALITIES THAT SHARE A BORDER WITH EMA</th>
<th>CROSS BORDER ISSUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ilembe Municipality</td>
<td>Ilembe Municipality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The Regional Spatial Development Plan (RSDP, 2013) is a thirty year plan that will influence the Ilembe SDF</td>
<td>• Lack of water and sanitation resources and infrastructure identified. IM considers a Service Level Agreement with EM as the solution</td>
</tr>
<tr>
<td></td>
<td>• 2015 focus is on the rural towns of Ndwedwe, Maphumulo and Bamshela</td>
<td>• The Western Bypass will open up the area to development and concentrates on the P253 and P100 as linkages into the interior.</td>
</tr>
<tr>
<td></td>
<td>• 2016 focus is on Compensation Flats Industrial and addressing bulk water availability</td>
<td>• Proposes 2km development on both sides of the R102</td>
</tr>
<tr>
<td></td>
<td>• The EM immediate neighbours are KwaDukuza and Ndwedwe Local Municipalities.</td>
<td>• The RSDP identifies fertile land for food security</td>
</tr>
<tr>
<td></td>
<td>• Mapping is done in GIS format. Agreed to share shapefiles on mapping of the SDF. IL requires an agreement to share shapefiles with EM. KwaDukuza Municipality is initiating this process.</td>
<td>• D’Moss will be taken into account in planning</td>
</tr>
<tr>
<td></td>
<td>• Need to look at costs of development i.e. rates, infrastructure etc. within a 5km strip abutting the municipal boundaries.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>KwaDukuza</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Is the strongest local municipality in Ilembe economically,</td>
<td>• Vision of an economic corridor along N2 &amp; R102,</td>
</tr>
<tr>
<td></td>
<td>• Houses the towns of Ballito and KwaDukuza (Stanger),</td>
<td>• Degree of unregulated economic and residential development may lead to conflict and competition between the municipalities.</td>
</tr>
<tr>
<td></td>
<td>• Within the development parameters of the Aerotropolis</td>
<td>• The southern Local Area Plan underway will respond to aerotropolis planning.</td>
</tr>
<tr>
<td></td>
<td>• Has a mix of coastal tourism, commercial, light industrial and agricultural activities. Shares northern border with EM.</td>
<td>• Proposals at Compensation for 500ha of industrial development. This may not align with the land use planning on the EM boundary.</td>
</tr>
<tr>
<td></td>
<td>Ndwedwe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• One of the rural/traditional/</td>
<td>• Large proportion of residents in Ndwedwe</td>
</tr>
</tbody>
</table>

Local municipalities that are within Ilembe include the following:
- KwaDukuza
- Ndwedwe
- Maphumulo
- eNdondasuka
**agricultural Local Municipalities**
- Has poor level of services and infrastructure,
- Has high unemployment,
- Tongaat Hulett Developments is buying tracks of land in Ilembe
- shares north western border with EM

employed in EM and cross boundary issues almost inseparable.
- Need to consider how the raising of the Hazelmere Dam wall will affect Nwedwe. Nwedwe is awaiting a response from Umgeni Water.
- P100 offers potential for development as it can connect directly with Dube Trade Port
- Poverty, unemployment, unregulated development all threatens the UDL and the environmental sensitivity of EM’s northwestern border.
- Identified the need for a cooperative agreement on the sharing of infrastructure and services.

**General planning issues to emerge:**
- The need to establish a common communication and co-ordination platform
- The need for alignment of a common development concept at a regional scale and translate this into a binding spatial planning document
- Establish a cross border urban-rural management committee to address a wide range of issues include climate change with the private sector involved where applicable
- Enter into MoU regarding servicing, socio-economic and any other pertinent issues that may arise resulting from Cross Border Spatial Planning
- Factor in political leadership and buy-in for cross border planning issues
- Factor in geo-political aspects inclusive of socio-economic aspects which can and may influence development realized
- Cross border mapping (to include terminology of nodes, corridors and uniform colour coding)
- To consider the areas proposed for demarcation
- To hold special meetings to discuss development applications and proposals with specific reference to:-

**a) Conservation Areas**: KDM Biodiversity and Open Space Plan and eThekwini DM OSS; Future developments in eThekwini to consider KDM and iLembe environmental layers as development proposals in eThekwini may have adverse effect on KDM and iLembe natural environment and vice
b) **New Planned Projects:** The provision of bulks could influence influx of PDA submissions to the south of KDM where Tongaat Hullet is a major land owner.

c) **Infrastructure Development:** Alignment of land use planning to iLembe services provision. Possible scenarios where for example major WTW or WWTW plants are located on either municipality but service the other. This could also have an effect as such infrastructure could be susceptible to development pressures in either municipality.

d) **Role of settlements:** Housing plans vs housing subsidies.

e) **Key Development Proposals:** Weve Driefontein Mixed Use Development and Tongaat Hullet Compensation Area.

f) **Influence of Catalytic Projects:** Dude Trade Port at its current state of development, DTP at 2035 and 2060 development horizon and rail transport.

g) **Corridors and Linkages-PSEDS and PGDS:** Role of the North South corridor in the context of the eThekwini-Umhlatuzhe corridor. Influence on space economy with regard to release of industrial. Need to ensure the sustainable management of industrial and residential land development between eThekwini and KwaDukuza Municipalities as well as R102. Need to strengthen East West Corridors.

<table>
<thead>
<tr>
<th>UMgungundlovu Municipality</th>
<th>uMkhambathini</th>
<th>uMkhambathini</th>
</tr>
</thead>
</table>
| Local municipalities within uMgungundlovu include the following: | - Has always been considered as rural and traditional Municipality.  
  - Mainly focusing on agriculture and tourism development.  
  - Between the years 1996 and 2007 this Municipality has experienced an increase in population mainly because of its proximity to Pietermaritzburg and Durban which are the main centers of economy.  
  - Unauthorised industrial development has taken place along the eastern boundary of Mkhambatini. | - The eastern boundary of Mkhambatini is set aside as commercial farms and agri.ecotourism which reflects the actual land use and is compatible with the proposed land uses on the western extremity of the eThekwini Municipality.  
  - Cognisance needs to be given to the Big 5 Mayibuye Game Reserve on the north western boundary of Cato Ridge. Development which impinges on the skyline of this resource requires monitoring.  
  - Greater emphasis needs to be placed on the Umbumbulu region with its rapid urbanisation and impact on the R603 which serves as an alternative major route through the region.  
  - Further ad hoc meetings are proposed to engage around development applications that may impact on both municipalities. |
| uMshwathi | uMngeni | uMsunduzi |
| Mooi Mpofana | Impendle | uMshwathi |
| Richmond | uMngeni | uMsunduzi |
| uMkhambathini | uMkhambathini | uMsunduzi |
| uMkhambathini | uMkhambathini | uMsunduzi |
and is the subject of High Court action for demolition.

- The Umlaas Road development has adequate water supplies from the Umgeni Water pump station and reservoirs in that area.
- Although a sewage works has already been constructed to accommodate immediate development pressures in Umlaas Road, a new works of R60 million has been funded (in part), designed and reticulations plans finalised to accommodate the developable area identified in the SDF expansion plans which commences in the Camperdown locality.
- Development approved to date centres on Provincial main roads and are considered sufficient. ESKOM has not placed any restrictions on the supply of electricity to any proposed projects.

- Need to collaborate on the SIP2 N3 Corridor Planning Initiative. N3 is the primary economic corridor to Gauteng, need for coordinated and integrated development.

**General planning issues to emerge**

- The need to establish one forum: consisting of the IDP, SDF and GIS representatives from Department of COGTA and relevant municipalities.
- The need for a Terms of Reference for the forum
- Cross border Mapping (to include terminology of nodes, corridors and uniform colour coding)
- Special meetings needed to discuss development applications and proposals along N3 corridor and/or encroaching the boundary of the municipalities. Specific emphasis is on Umlaas Road, Camperdown, Cato Ridge and Umbumbulu. This will also consider housing and bulk infrastructure projects as well as act 70 of 70 agricultural land.
- It is also proposed that joint site inspections be undertaken on the identified strategic projects that could be a point of integration between the two Municipalities, with the aim of analysing and making possible land use adjustment to ensure sustainability and also to ensure that these projects will benefit the wider communities. It will also be important to also look at how the linkages between the two Municipalities can be improved to facilitate better access to the economic and social services between the communities of the two Municipalities.
- To consider the areas proposed for demarcation

<table>
<thead>
<tr>
<th>UGu Municipality</th>
<th>Local municipalities within UGu include the following</th>
</tr>
</thead>
</table>
| uMdoni | Vulamehlo  
| | uMdoni  
| | Umzumbe  
| | Umuziwabantu  
| | Ezingolweni  
| | Hibiscus Coast |

The methodology for this alignment has been the collection of data through meetings held with the neighbouring municipalities. The meeting was held on the 27th of February 2015, with Vulamehlo and Umdoni Municipalities. The municipalities have agreed that joint planning and alignment is needed on the following issues: the IDP, SDF, GIS, and project Proposals.

**uMdoni**

- The Municipality is located about 50 km from Durban, which makes it have both competitive and comparative advantage with EM
particularly in terms of tourism.
- Umdoni has an approximate coastline of 40 km and stretches inland as far as Umzinto.
- Umdoni has established tourism infrastructure and an existing tourism market for coastal, golf and diving adventure tourism.

Vulamehlo
- Predominantly rural in nature
- Has limited services and infrastructure
- Has high levels of unemployment

Vulamehlo
- There are disparities in densities. The EM proposes low densities with a level of services to match low density areas in order to maintain and promote rural and agricultural activities. On the other hand Umdoni is proposing high income housing developments. This creates non alignment in term of densities and service requirements.
- In follow up meetings it has emerged that development in the northern portion of Umdoni is dependent on a services level agreement with eThekwini.
- There are potential synergies from tourism and agricultural development that will be explored.

Vulamehlo
- There are disparities in services in areas towards the border of EM and areas towards the boundary of Vulamehlo.
- There is alignment in terms of proposed uses as both municipalities have low density rural housing developments at their boundaries.
- There is a issue in terms of access routes for the areas that are within the boundary (eThekwini and Vulamehlo), making it difficult for the municipalities to share services and opportunities. This will be a challenge in future hence these areas will be under eThekwini and should be linked.
- There is a strong alignment of environmentally sensitive areas; the border between eThekwini and Vulamehlo also indicates an alignment potential of areas considered to be traditional agriculture (Vulamehlo) and future residential (eThekwini).
- There is alignment in terms of land uses, eThekwini has rural residential which aligns with the Vulamehlo rural residential.

General planning issues to emerge:
- The need to establish one forum: consisting of the IDP, SDF and GIS representatives from Department of COGTA and relevant municipalities.
- A forum has been established between eThekwini, Vulamehlo, Ugu and Umdoni.
Cross Border Mapping (terminology, colour coding etc.) COGTA has convened a meeting to highlight their concerns and will make their analysis available on the website. They are also in a process of standardizing the mapping and colour coding requirements.

- To identify the areas proposed for demarcation that are functionally linked to eThekwini and currently serviced by EM
- To consider all areas proposed for demarcation
- To hold special meetings to discuss development applications and proposals with specific reference to:
  - Agricultural areas in decline
  - Land reform issues
  - Use of rail for commuting and tourism purposes
  - Umbumbulu and the COGTA process for the formalization of towns

The Municipality has engaged neighboring municipalities, other key government departmental sectors and parastatals. These include the Department of Water and Environment Affairs (DWEA), Umgeni Water, ESKOM, Department of Transport (DOT), Public Rail Association of South Africa (PRASA) as well as ILembe, KwaDukuza, Ndwedwe, UGu, UMKhambathini and UMsunduzi local and district municipalities.

In addition there is currently a demarcation process underway of which eThekwini Municipality is the recipient of four wards from Vulamehlo Municipality. As part of the process of incorporating these wards into the Municipality planning structures a study has been undertaken to determine the level of planning that has been done and to identify available information for further planning. The available information was insufficient; hence eThekwini Municipality and Umdoni Municipality through number of engagements collaborated to have a detailed ward profiling for the demarcation areas. The main aim of the survey is to gain an understanding in terms of the status of each ward, so that eThekwini Municipality and Umdoni Municipality will have an understanding of the nature of the areas that they are inheriting, and be able to plan for those wards.

A steering committee between eThekwini Municipality, Umdoni Municipality and Vulamehlo Municipality has been formulated where constant engagements, planning and decisions regarding the way forward will be taken.

Other initiatives within the eThekwini Municipality that have addressed planning alignment between adjacent municipalities was the establishment of an inter-municipal forum, chaired by the eThekwini Municipality and represented by local and district municipalities from eThekwini Municipality, westwards, to Howick for the preparation of N3 Corridor Plan. This has been superseded by the
National SIP2 process (Strategic Infrastructure Plan), which involves the preparation of an N3 corridor plan from Durban to Gauteng and includes representation of all local and affected municipalities along this route to ensure that planning and development along the N3 corridor will occur in a coordinated and integrated manner.

**SIP2 KZN Combined Focus Group**

The purpose of the SIP2 KZN Combined Focus Group is to ‘produce a co-ordinated and consensus provincial position and input on all matters related to SIP2’. This involves the interaction and co-ordination of planning from various Municipalities along the SIP2 Corridor of which eThekwini is a significant role-player. On-going participation in the SIP 2 Focus Group facilitated at a Provincial Level helps contribute towards closer cross border planning and collaboration that could result in significant reviews of existing municipal plans to align with provincial and national priorities.

**2.2.5 EThekwini Rural and Traditional Authority Areas**

The National Development Plan (NDP: chapter 6) requires all municipalities in South Africa to prioritise development in rural areas. The NDP 2030 vision for rural areas is to have access in economic opportunities, through agriculture, mining, tourism, fisheries and agro-processing where applicable and high quality basic services. The NDP also requires all municipalities to include a chapter in the IDP/SDF to demonstrate the approach in rural development within their areas of jurisdiction. The eThekwini Spatial Development Framework is also expected to incorporate the rural development strategy to reflect how the municipality is responding to National Development Plan (chapter 6)’s call for prioritising rural development.

The KwaZulu Natal Provincial Growth and development Strategy has identifies the KZN province as having high percentage of rural areas in comparison with the other provinces. The PGDS also highlight the KZN province as the highest contributor in the agriculture sector (58%) in the past 5years. Therefore the PGDS emphasises the need for municipalities in KZN to prioritise rural development in their areas of jurisdiction. The Minister of Cooperate Government and Traditional Affairs (COGTA) in the 2014/2015 SDF review comments also raised concerns that eThekwini SDF do not reflect its intention to develop rural areas.

The eThekwini municipality has also realised the need to pay more attention in undertaking planning for the rural areas due to a number of spatial challenges. The “rural” areas in eThekwini Municipality comprises approximately 68% of the municipality which largely falls beyond the urban development line with communal land tenure under the ownership of Ingonyama Trust Board and Traditional Authorities. It is characterised by hilly, rugged terrain, varied settlement patterns, commercial farms and small holdings. These areas support different lifestyles and densities. There is a lack of land use
management in these areas which has resulted in some of the households in rural areas being located in environmentally sensitive land and within road reserves.

The rural areas in eThekwini Municipality are undergoing rapid change as the existing rural settlements are sprawling and transforming to peri-urban settlements which is attributed to the absence of land management and haphazard land allocation. In other areas these settlements have reached densities of up to 30 dwelling units per hectare which is similar to those of urban areas (eThekwini Rural Development Strategy, Status Quo Report: 2015). The current level of services provided in rural areas is the urine diversion toilet, and the water supply is limited to a household standpipe which provides a maximum supply of 300 litres per day. This was in line with the conventional rural densities that allowed for large site size at a minimum of 1800 m².

The eThekwini Municipality is facing a challenge with the land allocation process in the rural areas as the nature of indigenous system is flexible, context specific and not documented. The municipality has a mandate to do planning in these areas but has no control on land management. Another challenge relates to Human settlements provision where the nature of the subsidy dictates on the type of housing to be provided. This is problematic in the areas that are densifying outside of the urban development line as these are categorised as rural but have increased in densities and have a different character to the typical rural area.

In response to the challenges highlighted the eThekwini Municipality Rural Development Strategy seeks to clearly define rural areas within eThekwini and develop an overall vision and role of these areas. These will give effect to appropriate service level to support land uses identified by the strategy and develop Land Use Management guide lines to inform the schemes. The strategy will also suggest appropriate institutional arrangement mechanism to engage with Traditional leaders. The Study will inform the rural development chapter that will be incorporated in the next SDF review.

![Figure 15: Rural Areas](image)
2.2.6 Coastal Land Use and Management

The eThekwini Municipality has 35 km of coastal area that extends from Clansthal in the south to Westbrook in the north. Large sections of the coast are developed with some pockets of agricultural use. The coast offers prime residential and recreational opportunity.

Some of the challenges that the coastal areas face are; pollution from industry, development pressures, informal settlement areas, and risk to shoreline developments from raised sea levels and increased storm surges, a high energy coastline resulting in erosion and loss of land, loss of coastal habitats and ecosystems and a limited capacity of coastal environment to sustain the high demand for recreational access and use.

In an effort to protect, enhance and expand the coastal amenity, character, environmental service and resource base and maximise the economic and social development potential of our coastal asset, the Municipality has undertaken extensive planning to guide development and recreation along our high value coastline. As far back as November 1999, the Coastal Tourism Development Plan was adopted by the then Durban Metro and Sub-Structure Councils. This plan, established the role and functionality of the coastline in a metropolitan context and informed the earlier Metropolitan Spatial Development Framework prepared in 1998/1999.

Increasing pressure for additional coastal recreational facilities in the North Region in particular and increasing damage to municipal facilities along the coast from storm-water flooding and sea damage necessitated that the Municipality investigate innovative ways of managing land use and storm water disposal along the coastline to further protect the sensitive coastal environments and costly municipal infrastructure. To this end an Innovative Coastal Tourism Research Project (North Local Council, September 2000) was undertaken. This study identified the role and functionality of micro-catchments as a basis for informing appropriate land use and storm water management. Further detailed planning initiated in 2007, culminated with the adoption of the Ohlanga – Tongati Local Area Plan and Coastal Management Plan in February 2010, an innovative study combining land uses and coastal management and which extensively influenced the land uses included in subsequent reviews of the North Spatial Development Plan and Spatial Development Frameworks.

The work done in the North region was mirrored in the South Region. In considering the impact of coastal land use and storm damage on coastal tourism opportunities and coastal assets, in particular the internationally acclaimed Aliwal Shoal, the Umkhomazi Local Area Plan, 2010 recommends land uses and strategies that minimise the risk to effective coastal managements. Similar intentions to protect coastal assets in areas under extreme pressure for development have been addressed through the Umgababa Coastal Management Plan and an Estuary Management Plan for Isipingo.
It is important to note that the detailed proposals contained in all of the aforementioned plans have informed all relevant higher order plans (Spatial Development Plans and Spatial Development Frameworks) as part of the iterative process in which the package of plans is undertaken. Details of the proposed land use guidelines within the aforementioned plans can be obtained from the Municipal website on http://www.durban.gov.za/Resource_Centre/reports/Framework_Planning/Pages/default.aspx

2.2.7 EThekwini Land Use Management Framework

Land Use Management Schemes, more commonly known as Schemes, are statutory planning tools used to manage and promote development. A land use scheme is a critical component of the integrated spatial planning system and deals with zoning and built form controls. The intent embodied within the package of spatial plans must be translated into the most appropriate zones and land uses within the schemes. Schemes are the tangible tools in the package of plans as it is this level that development rights become important proponents for development. Schemes enable statutory decisions to be made and this in turn allows building plans to be considered. Schemes are required by law to be reviewed on an annual basis in line with the IDP and SDF reviews.

Land Use Schemes are planning tools used to deliver quality environments. This results in integrated responses which allows for the establishment and creation of robust and vibrant environments; while at the same time contributing to sustainable environments. Planners over the years have grown to realise that Planning is far more than a planning response to applications; rather the emphasis is now on environmental issues, infrastructural capacities and equally on the impact of development. Schemes also provide a mechanism for effective protection of ecosystem services through the creation of specialized environmental land use zones.

Schemes are the mechanisms that drive the Municipality's income as it relates to development and informs building plans, a variety of land uses such as mixed use developments such as Umhlanga Ridge and KwaMashu Town Centres; it creates quality work environments such as the La Lucia Office Park; and robust Industrial parks such as River Horse Valley and the emerging Cornubia Industrial Area; not to mention quality recreational spaces such as the Umhlanga Promenade.
Within the Council’s area of jurisdiction, there are land parcels that are contained within Schemes areas; land contained outside Scheme areas; land parcels that are under the jurisdiction of the Ingonyama Trust Board. (See Map below):

While Council in 2003 resolved to include all areas under its jurisdiction, the Department of Agriculture has yet to consent to numerous applications; identifying sustainability of agricultural land into the future as their primary concern. This is a critical issue as strategic land parcels cannot be released for development.

Schemes within eThekwini Municipality are currently being reviewed to include and address climate change issues, energy efficiency and sustainable environments. Past planning has left huge gaps in managing and directing development. Old order legislation has to some extent allowed some ‘peripheral townships’ to develop in exactly the same way as formal areas. Townships such as uMnini have had huge capital infrastructure injection making them different from other areas. However, in the absence of a Scheme, development has not been managed in a sustainable way.

To date all previous R293 townships now have a formal scheme implemented. This allows for managing development in these areas. It also allows infrastructure departments to plan for these areas thus enhancing service delivery and broadening the rates base of the council. It encourages investment and reduces poverty, but most of all it improves people’s lives.

Approximately 68% of the Municipality falls outside of scheme areas and these include areas under Traditional Authority and commercial farms. The land use management in these areas is a challenge as the municipality does not have authority in these areas and land allocation occurs haphazardly. There is no proper planning for the allocation of bulk services and social facilities as a result some areas are densely populated and the level of services provided in rural areas is no longer sufficient. The eThekwini Municipality has undertaken a rural development strategy in order to address these
challenges and has also undertaken the Umnini Rural Scheme pilot project details of which are outlined in Chapter 8. The rural scheme project will be rolled out in all rural areas within the municipality in order to achieve the following:

- Efficient and effective use and management of land particularly regarding provision and management of services and public facilities
- Efficient and effective management of environmental resources
- Certainty for potential investors.

2.3 Environmental Planning Issues and Trends

2.3.1 Ecosystem Services Proved by Durban’s Natural Environment

The eThekwini Municipality (EM) is situated at the centre of the Maputaland-Pondoland-Albany Region, an area described by Conservation International as a “Biodiversity Hotspot”, one of only 34 in the world. Hotspots are areas that contain high levels of endemism (species specific to an area and not occurring naturally anywhere else) and threats. Over 50% of the world’s plant species and 42% of all terrestrial vertebrate species are endemic to the 34 global biodiversity hotspots, despite these areas covering only 2.3% of Earth’s land surface (Conservation International, 2013).

![Source: Conservation International 2013
Figure 17: The Global Biodiversity Hotspots](image)
The Maputaland-Pondoland-Albany biodiversity hotspot region is home to more than 7,000 species of vascular plants, 25% of which are restricted (endemic) to this area (van Wyk & Smith, 2001). Durban is situated at the centre of this region in a transitional zone of the warm tropical and cooler temperate elements. Varied topography, climatic conditions and Durban’s unique biogeographical position have resulted in a wide range of terrestrial and aquatic ecosystems that play host to a rich diversity of organisms.

The open spaces in Durban can be categorised into four distinct entities: terrestrial, freshwater, estuarine and marine. Durban also contains three of South Africa’s eight terrestrial biomes, namely Savanna, Forest and Indian Ocean Coastal Belt (which contains a mosaic of grassland and forest), and eight nationally recognised vegetation types. These are: Eastern Valley Bushveld, KwaZulu-Natal Coastal Belt, KwaZulu-Natal Hinterland-Thornveld, KwaZulu-Natal Sandstone Sourveld, Ngongoni Veld, Scarp Forest, Northern Coastal Forest and Mangrove Forest. Freshwater ecosystems are numerous and varied, ranging from small inland seeps to major perennial rivers, all of which terminate at estuaries where the marine and terrestrial environments converge. Marine ecosystems in Durban exist seaward of the high-water mark and include sandy beaches, rocky shores and the in-shore marine environment.

2.3.2. The Durban Metropolitan Open Space System (D’MOSS)

2.3.2.1. What is D’MOSS?
D’MOSS is a system of open spaces incorporating areas of high biodiversity value (private and public owned) linked together in an ecologically viable network of open spaces and is composed of a variety of habitat types. The first municipal version of the Durban Metropolitan Open Space System (D’MOSS) plan was prepared and approved in 1989 by the then Durban City Council. For many years D’MOSS existed purely as a policy directive of Council and was implemented in terms of this directive. Due to uncertainty on its status with respect to the existing zoning under the planning schemes and often the undertaking of work unaware of the existence D’MOSS, it was decided to integrate D’MOSS into planning schemes as a control area or overlay. D’MOSS was finally integrated into the original 54 eThekwini Municipality schemes following its formal adoption by Council in December 2010.

The following map represents the key environmental assets as represented by D’MOSS that should be conserved and protected. D’MOSS is mapped using an expert-based approach to identify areas for inclusion into the layer. The current approved D’MOSS layer covers an area of ~74,500 ha, representing approximately 33% of the total municipal area.
2.3.2.2. How is D’MOSS used in municipal planning?
DMOSS is a municipal planning tool that seeks to protect natural environments and the ecosystem services they provide. Should a landowner wish to develop their property, and if the property contains D’MOSS, a more detailed investigation of the site to be developed will be conducted to assess potential environmental impact of the development. This assessment will be in terms of the town planning schemes but possibly also in terms of the National Environmental Management Act 1998, (NEMA, Act No. 107 of 1998). The outcome of this investigation will be either:

i. No impacts are expected and the activity may proceed,

ii. Significant impacts are expected and an environmental assessment prepared by a suitably qualified practitioner will be required in order to fully assess the application. Approval may be subsequently granted with or without conditions or,

iii. The activity is not supported because the impacts are significant and cannot be mitigated.

2.3.2.3. Ecosystem services provided by D’MOSS
Ecosystem services are the benefits provided by healthy biodiversity to all living things. There is a growing recognition of the value of ecosystem services to human wellbeing in terms of health, social, cultural and economic needs. In 2010, the international initiative called ‘The Economics of
Ecosystems and Biodiversity (TEEB) indicated that investment into ecosystem conservation and restoration must be made to support key development goals such as food and water security, wastewater treatment as well as climate change mitigation and adaptation. Ecosystem services, and their associated biodiversity, provide probably the most significant buffering effect against the negative impacts of climate change for local communities and infrastructure. Ecosystem services provided by D’MOSS were valued at ~R3.1 billion per annum in 2003, excluding the contribution made to the tourism sector.

These ecosystem services include soil formation, erosion control, water supply and regulation, climate regulation, cultural and recreational opportunities, raw materials for craft and building, food production, pollination, nutrient cycling and waste treatment. Importantly the protection of our natural environments will make a significant contribution to our ability to adapt to climate change impacts (known as ecosystem-based adaptation or EBA), which are predicted to include higher temperatures, sea level rise and more intense rainfall. In order for the D’MOSS to continue to deliver these services it needs to be sensitively integrated and effectively managed within the metropolitan area.

2.3.3. Key environmental challenges facing the EMA

Notwithstanding their value, the EMA’s natural environments have been severely impacted by landscape change, habitat fragmentation, invasive alien species, over exploitation and pollution. Climate change is a significant and increasing threat. Many people have benefited over the last century from the conversion of natural ecosystems to human-dominated ecosystems and from the exploitation of biodiversity. This has occurred because of the lack of regard for the value of these systems, which makes greenfields development an attractive option. At the same time, however, these gains have been achieved at growing cost in the form of losses in biodiversity, degradation of many ecosystem services, and the exacerbation of poverty for other groups of people (Millennium Ecosystem Assessment, 2005). The situation in eThekwini Municipality is no different to the global assessment and suggests that current policy, law, governance and environmental management efforts have been inadequate to prevent this degradation.

High levels of transformation (Figure 2) and fragmentation (Figure 3) of Durban’s landscape mean that the ability of species and ecosystems to retreat and adapt to climate change is severely compromised. This has implications for the ecosystem services that D’MOSS can provide. For example, high levels of development on Durban’s beaches prevent the natural migration of dunes resulting in severe damage to the coastline during storm surges, increased wave intensity and sea-level rise (Govender, 2009). These are all factors that are predicted to increase in frequency due to climate change. Beach biodiversity is lost when beaches lose sand through erosion from the increased energy of the coastline during storm events, reducing the ability of beach ecosystems to provide essential services. Similarly, fragmentation of natural areas due to degraded landscapes isolates one habitat patch from others, thereby dividing previously large, continuous areas into
separate, smaller fragments. This reduced connectivity could have adverse effects on the ability of species to retreat and re-establish in other areas when climatic conditions become unsuitable at existing locations.

Invasive alien plants in South Africa now infest over 20 million hectares, as reported by the Agricultural Research Council (ARC). The report, released in July 2010, was commissioned by the Department of Water Affairs. A recent survey by the EM found that as much as 48% of selected conservation areas were infested with invasive alien plants. Many alien plant species are predicted to expand their density and distribution under climate change scenarios, thereby impacting further on local biodiversity. The implication of an increased distribution of invasive alien species implies transformation of indigenous vegetation, a possible decrease in ecosystem function with reduced diversity and thus a decrease in the provision of ecosystem services.

At present a mere ~10% of the D’MOSS area is protected (e.g. through proclamation as a protected area, appropriate conservation zoning, conservation servitudes and land acquisition) whilst only ~7% of D’MOSS is managed for conservation. Increasing the total area of D’MOSS that is protected and managed for conservation is critical if the biodiversity of the EMA, and its associated ecosystem services, are to be protected. This is a huge challenge considering the rapid urbanisation and transformation that is taking place within the city in order to meet development and service delivery goals, as well as growing threats such as invasive alien species and climate change.

2.3.3.1. Why crossing environmental boundaries matters

The research on planetary boundaries and a “safe operating space for humanity” initially published in 2009 (Rockström et al., 2009) and recently revised (Steffen et al., 2015) has brought to the fore serious concerns around thresholds beyond which the world becomes an increasingly unsafe place for the human species. Four of nine planetary boundaries have now been crossed at a global level as a result of human activity (Figure 5). These four are: climate change, loss of biosphere integrity (loss of biodiversity), land-system change (transformation of natural areas resulting is loss of forests, wetlands etc.), and altered biogeochemical cycles (phosphorus and nitrogen loading to the environment as a result of agricultural and industrial pollution). Two of these, climate change and biosphere integrity, are what scientists call “core boundaries.” Significantly altering either of these decreases the ability of humans to develop and thrive. In such a high-risk world, everyone is negatively impacted, but it is the poor and the vulnerable that are most likely to be worst affected because they have the least ability to adapt to and protect themselves from extreme events and slow onset disasters, and because they are the most reliant upon natural systems for their survival. This is particularly relevant to African cities, like Durban, where a large percentage of the population live below the poverty line.

In Durban, performance against scientifically derived targets for 14 vegetation types that occur in the eThekwini Municipal Area show alarming statistics (Table 1). These targets set by Ezemvelo KZN
Wildlife for the protection of different vegetation types (given as a percentage of the original extent) have already been exceeded for three vegetation types in the EMA: KZN Sandstone Sourveld, and North and South Coast Grasslands i.e., they are in all likelihood beyond the natural threshold required for long-term survival (Table 1). This has and will continue to lead to abrupt and irreversible environmental changes all of which will be detrimental to the citizens of Durban. However, this research (both globally and locally), can provide an opportunity to change the dangerous trajectory that we are heading in. Opportunities exist to fundamentally change the framework for action to reduce risk, while developing sustainably and promoting resilience.

Table 5: Scientifically derived targets for 14 vegetation types that occur in the eThekwini Municipal Area

<table>
<thead>
<tr>
<th>Vegetation Type</th>
<th>Conservation Status</th>
<th>Original Extent (ha)</th>
<th>Transformed</th>
<th>Protected Statutorily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SA</td>
<td>EMA</td>
<td>%EMA</td>
</tr>
<tr>
<td>Dry Ngongoni Veld</td>
<td>Vulnerable</td>
<td>1005320</td>
<td>18109</td>
<td>7</td>
</tr>
<tr>
<td>Moist Ngongoni Veld</td>
<td>Vulnerable</td>
<td>1005320</td>
<td>12394</td>
<td>3</td>
</tr>
<tr>
<td>Eastern Valley Bushveld</td>
<td>Least Threatened</td>
<td>996568</td>
<td>20080</td>
<td>2</td>
</tr>
<tr>
<td>KZN Hinteland Thornveld</td>
<td>Vulnerable</td>
<td>113341</td>
<td>6924</td>
<td>6</td>
</tr>
<tr>
<td>KZN Sandstone Sourveld</td>
<td>Endangered</td>
<td>160819</td>
<td>15681</td>
<td>10</td>
</tr>
<tr>
<td>North Coast Bushland</td>
<td>Endangered</td>
<td>88811</td>
<td>32758</td>
<td>37</td>
</tr>
<tr>
<td>South Coast Bushland</td>
<td>Endangered</td>
<td>89103</td>
<td>1953</td>
<td>2</td>
</tr>
<tr>
<td>North Coast Grassland</td>
<td>Endangered</td>
<td>291877</td>
<td>82979</td>
<td>28</td>
</tr>
<tr>
<td>South Coast Grassland</td>
<td>Endangered</td>
<td>153568</td>
<td>24184</td>
<td>16</td>
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<tr>
<td>Southern Coastal Scarp Forest</td>
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<td>33750</td>
<td>8878</td>
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<tr>
<td>KZN Coastal Forest</td>
<td>Least Threatened</td>
<td>21089</td>
<td>2193</td>
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</tr>
<tr>
<td>KZN Dune Forest</td>
<td>Least Threatened</td>
<td>12396</td>
<td>1287</td>
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<tr>
<td>Mangrove Forest</td>
<td>Critically Endangered</td>
<td>2393</td>
<td>65</td>
<td>3</td>
</tr>
<tr>
<td>Voacanga thouarsii Swamp Forest</td>
<td>Critically</td>
<td>2022</td>
<td>55</td>
<td>2</td>
</tr>
</tbody>
</table>

Original extent (not calculated for forest, current extent given), level of transformation, and protection status of vegetation types from an EM, provincial and national perspective. Vegetation types are a key landcover mapping unit used to map areas of homogenous habitat.


For aquatic systems, results from bio-monitoring programmes focusing on the rivers and estuaries of Durban have revealed that these ecosystems are in a particularly poor state. Using aquatic bio-monitoring methodologies, the EM found in 2010 that 71 of 175 (or 40%) of its monitoring sites on its rivers were considered to be in a poor condition and only six (or just over 3%) were classified as near natural. Rivers were found to be experiencing multiple impacts including spills and illegal discharges, solid waste dumping, wastewater treatment works not operating to specification or license conditions, sand mining, realignment of watercourses, flow reduction through dams, removal of riparian flora, and infestation by alien flora and fauna.
In a survey of the 16 estuaries in the EMA published in 2010, only three, together making up 10% of the total municipal estuarine area, were classified as in good condition (none were classified as excellent). Because of the condition of the larger systems such as the uMngeni and Durban Bay, a total of 50% of the municipal estuarine area must be considered highly degraded. The lack of national and provincial data prevents a direct comparison being made. Expert opinion, however, would suggest that based on the current ecological condition of Durban’s aquatic ecosystems, they are amongst the lowest ranked systems in the country. This has major implications for communities depending directly on water from these systems, and also undermines tourism opportunities on municipal beaches.

Water quality covers a broad spectrum of parameters, which are largely influenced by the activities of the EM. Eutrophication as a result of nutrient enrichment is having a detrimental impact on rivers and estuaries in the EM. Reducing nutrient loading, particularly at treatment works across the Municipality, will go a long way towards addressing this threat.

Sand mining, both legal and illegal, is also having a major impact on aquatic ecosystems and the delivery of sediment to the coast. Controlling the damage caused by sand mining represents a serious challenge for the EM. The CSIR was commissioned in 2008 to undertake a study of the sand supply from rivers and the implications for coastal sand budgets. The 18 rivers within the EM’s jurisdiction supply sediment (an ecosystem service) to the coastal zone, which is important in replenishing sand lost from beaches and coastal dunes through coastal erosion processes. Therefore the sand is important for _inter alia_ buffering the impacts of high seas and making beaches attractive to tourists – further ecosystem services. Sediment yields have been increased through poor land management practices, but overall supply to the coastline has decreased by two-thirds of “natural” yields due to sand mining and the 12 large dams that have been constructed on Durban’s rivers which act as sediment traps. Given that discharge of sediment from rivers dominates sand supply, it is predicted that the reduction in sand supply could result in mean coastal erosion of > 1 m/yr. The report found that the combined impacts of sea level rise and increased sea storminess are likely to have severe consequences in terms of coastal erosion, initially similar to and eventually exceeding the erosion suffered in KZN during 2007.

Quantitative targets set by Ezemvelo KZN Wildlife for the protection of different vegetation types (given as a percentage of the original extent) have already been exceeded for three vegetation types in the EMA: KZN Sandstone Sourveld, and North and South Coast Grasslands.

### 2.3.4. Opportunities for innovation

The EM has made some progress in reversing the loss of natural areas by using various instruments such as controlled development areas, environmental servitudes, environmental special rating areas, environmental rates certificates, environmental land acquisition and including environmental
considerations in preparing the municipal valuation roll. Furthermore, several steps toward improved natural asset management have been initiated, including active reforestation of certain open spaces (e.g. the Buffer Zone surrounding the Buffelsdriai Landfill Site), and improved management and restoration of other areas (e.g. through the Working on Fire and Working for Ecosystems programmes).

It is acknowledged that current indigenous biodiversity will be a critical lifeline to humans should the various predicted climate change scenarios unfold. As such, the EPCPD has engaged in various research programmes, including a research partnership with the University of KwaZulu-Natal, in order to gauge if an adequate natural resource base will be secured over time. These works includes a variety of ecosystems-based research, as well as monitoring and reporting on the state of key biodiversity indicators. For example, see the annual publication of a State of Biodiversity report. Research on novel ecosystems, restoration ecology, reforestation, as well as human ecological systems are also ongoing. Below is an example of how ecosystem-based adaptation is being implemented in Durban.

2.3.4.1 Ecosystem-based adaptation (EBA) and the Green Economy
Given the current threats to biodiversity, and the pending impacts anticipated as a result of climate change, the EM must urgently invest in protecting, restoring and managing ecosystems to enhance adaptive capacity in a cost-effective and sustainable manner. Ideally, this will be achieved by transitioning to a “green” economy, primarily through the building of a new economy based on bio-infrastructure, which increases the supply of ecosystem services. The use of bio-infrastructure represents a strategic opportunity as it can be expanded without straining already limited natural resources. In fact, the use of bio-infrastructure can actually increase the supply of these resources.

In this regard, two large, municipal-funded implementation programmes, namely the Working for Ecosystems Programme and the Working on Fire Programme have been established. Both offer not only EBA advantages (through Invasive Alien Plant control and ecosystem management) but also employment and skills development opportunities for previously unemployed members of local communities. In addition, reforestation of transformed areas, either previously cleared for agriculture (sugarcane) or, in forests damaged by fire and resource harvesting, is in progress. The Community Reforestation Programme has demonstrated a holistic approach to biodiversity conservation, climate change mitigation and adaptation, as well as rural development and poverty alleviation.

2.3.5 Resource Management Plans for the Protection of Dams
The Department of Water and Sanitation (DWS) has identified that Resource Management Plans should be developed for all dams to fulfil the purpose of the National Water Act i.e. the protection of water resources. A Resource Management Plan (RMP) is the legal management tool that should balance the primary function of a dam with the economic opportunities that may be harnessed from
that dam. An RMP is restricted to the dam and the property over which is it located i.e. an RMP is undertaken for the dam and the dam’s “purchase line” (Umgeni Water 2013). There are four key dams located in eThekwini Municipality:

- Hazelmere Dam which supplies water to the North Coast;
- Inanda Dam which supplies water to the Central Area;
- Nungwane Dam which supplies water to the South Coast; and
- Shongweni Dam which is a recreational dam.

All four dams are operated by Umgeni Water. eThekwini Municipality, in partnership with DWS developed RMPs for Hazelmere Dam and Inanda Dam in 2008 but these RMPs were never gazetted as required by DWS. A process to review and gazette these two RMPs was initiated by DWS in 2013 and is due for completion sometime soon. Umgeni Water is planning to commence with the development of the RMP for Nungwane Dam in the 2016/2017 financial year. A RMP for Shongweni Dam has not been identified as this dam is a recreational dam.

2.4 Climate Change

Climate change is recognized as the global major environmental challenge of the 21st century. It is a significant and increasing threat to Durban’s communities, biodiversity, infrastructure and systems. When coupled with other biodiversity stressors at increasing risk. Escalating greenhouse gas emissions contribute towards climate change and eThekwini municipality’s per capita emissions are equivalent to cities with developed economies. There is a need to pursue mitigation focused activities. Climate change will ultimately impact on human health.

Climate change is likely to cause a number of challenges for eThekwini Municipality, linked to global impacts such as increased temperatures, extreme weather events (e.g. flooding and drought), sea level rise and climate variability. As such, climate change runs the risk of undoing all of the development gains of the last one and a half decades, and for a Municipality such as eThekwini climate change adaptation in all sectors will have to become one of the Municipality’s top development priorities.

Temperatures in Durban are likely to increase by 1.5°C and 2.5°C by 2065 and by 3.0°C and 5.0°C by 2100. Projected annual rainfall changes are likely to include an increase in aggregated rainfall by 2065 with an increase of up to 500 mm by 2100. This increase is likely to be manifested as an increase in extreme rainfall events and stream flow intensity across the municipal area with prolonged dry spells between rainfall events. Sea level rise along Municipality’s coastline is already occurring at 2.7 cm per decade and may accelerate into the future.

Climate change impacts for the EM may include:
• An increase in the frequency and intensity of floods and droughts;
• A decrease in water availability due to changed rainfall patterns and increased evaporation; this will affect subsistence dry land farmers the most.
• An increase in erosional capacity of river courses, resulting in the loss of more top soil, thus decreasing the agricultural value of land and increasing siltation in dams.
• Infrastructural damage as a result of extreme weather events causing flooding, affecting human well-being and safety as well as insurance costs;
• An increase in erosion of coastal areas due to sea-level rise;
• Higher energy consumption due to increased cooling load for air-conditioning and cold storage;
• An increase in economic losses due to property damage and decreased tourism revenue;
• An increase in heat-related vector-borne (e.g. malaria) and water-borne (e.g. cholera) illnesses;
• An increase in heat stress, leading to dehydration, particularly for those that reside in the city, as well as children and the elderly;
• Higher temperatures increase the formation of polluting chemicals such as (ground level ozone which results from the interaction of NO\textsubscript{X} and VOC’s in the presence of sunlight ) this with the increased temperatures may increase morbidity and mortality from respiratory diseases
• Changes in the geographical distribution of plants and animals with extinction of species that are unable to move and an increase in the prevalence of alien invasive species. This will negatively affect the biodiversity of the eThekwini Municipal Area and the associated goods and services;
• Further loss of critically endangered grassland habitats as they are outcompeted by woody species able to utilize the higher concentrations of CO\textsubscript{2} in the atmosphere.
• A reduction in yield of staple food crops, such as maize;
• Changes in the optimal planting and harvesting dates for crops as well as land suitable for crop production;
• Heat stress increasing livestock and poultry mortality rates;
• Deterioration of foods leading to increased incidents of food-borne diseases;

The areas particularly vulnerable to sea-level rise are developed beach front properties, estuaries and coastal dune ecosystems. The majority of coastal land is developed in Durban, and sea level rise puts this infrastructure at risk. Modeling sea level rise has indicated that shoreline developments could be at risk from raised sea levels and increased storm surge. In response to this risk Shoreline Management Plans are being prepared to determine what adaptation interventions if any are required or will be required into the future.

To respond to these changes EM initiated the Municipal Climate Protection Programme (MCPP) in 2004. This is a phased programme, which has focused on climate change adaptation and enhancing the city's ability to cope with climate change impacts. The likely climate change impacts have been assessed and plans, programmes and projects have been developed to assist the Municipality in dealing with these impacts.
The mitigation and adaptation work streams of the MCPP are located in the Energy Office and the Environmental Planning and Climate Protection Department respectively. This latter office has advanced the adaptation agenda with the development and approval of the Durban Adaptation Charter during United Nations Framework Convention on Climate Change COP 17/CMP 7 in December 2011. The Charter which is currently has over 1000 signatory cities from 45 countries globally, promotes ten key local government adaptation interventions, and marks a milestone in the advancement of the adaptation agenda in the international climate change debate.

The two offices have jointly developed the Durban Climate Change Strategy as an integrated mitigation and adaptation strategy in a participatory process. The vision of the Durban Climate Change Strategy is:

“To transform Durban’s governance, social, development and economic systems in order to effectively respond to climate change.”

The following mission statement has been developed to support the Vision:

“By 2020 there must be a fundamental change in Durban's governance, social, development and economic systems in order to contribute to the goal of limiting global average temperature increase to less than 2°C\(^3\), minimising dangerous climate change and adapting to climate change impacts. This will be achieved by increasing the adaptive capacity of the city, enhancing the integrity of the city's environment and building a low carbon economy that provides sustainable livelihood opportunities and ensures well-being for all. All organisations and residents of Durban should be empowered to respond to climate change causes and its impacts.”

The strategy is being developed around ten interrelated themes: Biodiversity, Sea Level Rise, Water, Health, Food Security, Energy, Transport, Economic Development, Waste & Pollution as well as Knowledge Generation and Understanding. For these themes objectives as well as responses have been developed. Many of these responses have spatial implications.

The next steps of the DCCS are approval by Council and the development of an Implementation Plan. This Plan will indicate spatial implications and will inform the SDF.

Other climate change initiatives include a focus on developing a robust community and ecosystem based adaptation programme, developing and implementing the densification strategy land use management.

\(^3\) Current target set by the United Nations Framework Convention on Climate Change (UNFCCC).
2.5 The Movement Network System

EThekwini Municipality has a comprehensive road network comprising of municipal, provincial and national roads. The road and rail network are well developed, despite the significant topographical challenges. The network has a well-articulated hierarchy, the challenge however, is to ensure maximum accessibility of goods, services and destination points to all residents of the Municipality largely by linking land use and transport. This is to enable people and goods to be moved more efficiently and promote greater integration and accessibility. The elements of the transport system are described below:

2.5.1 Public Transport System

The primary mode of travel by residents of eThekwini is public transport namely, rail, bus and taxi. The taxi and bus route system provides extensive coverage throughout the metro area. There are approximately 1400 bus service routes which are serviced by approximately 200 operators in a mix of subsidised contracts and unsubsidized services. There are approximately 120 taxi associations serving the municipal area.

Overall, the current public transport system is economically inefficient with many services in direct competition with each other, resulting in unprofitable rail and bus trips and in taxis competing fiercely on some routes for passengers. There has, however, been good progress over the last 5 years in the recapitalisation of rolling stock with the new taxis, municipal buses and particularly, with the commuter rail fleet. Against this background, proposals have been developed to rationalise and restructure the public transport system and services in order to address some of the fundamental issues.

2.5.2 Freight Transport System

One of the goals for transport in eThekwini, is to develop an efficient and integrated freight transport system that will ensure regional economic stability. The region’s transportation system requires the optimum integration of the different modes of transport that includes road, rail, aviation, maritime and pipeline with the appropriate modal balances.

To this end and in line with legislative provisions, the eThekwini Transport Authority (ETA) is in the process of developing an Integrated Freight and Logistics Plan for the entire eThekwini Municipal area. This plan will focus on the port-city interface, industry requirements and how each of these connect with the broader economy of South Africa and the world, while still ensuring efficiency and ease of doing business within the municipal area.

The elements of the Integrated Freight and Logistics Plan will comprise: a thorough Status Quo Analysis of freight and logistics sectors in the city; a strategic framework that would guide the future
development and strategy surround future freight development; and an implementation plan that will incorporate interventions that will address the following:

- Infrastructure: freight routes and roads;
- Operational: operational interventions that can ease the port-city-private sector interfaces and breaks in the logistics chain;
- Regulatory: legislative and enforcement that would promote compliance in the logistics and freight sector;
- Communication and network: IT solutions, as well as stakeholder interactions that would ensure information sharing and ongoing management.

The formulation and implementation of this plan will involve a number of stakeholders and agencies in government and the private sector. It is anticipated that much of the work will also revolve around trying to secure a commitment on the implementation of the various elements of the plan from relevant agencies.

2.5.3 Air Transport

The King Shaka International Airport (KSIA), is located approximately 30 kilometers north of Durban. Adjacent to the King Shaka International Airport is the Dube Tradeport. The primary objective of the Dube Tradeport is to provide long haul international flights to and from Durban (KSIA) to cater for the increasing air freight demands.

The Trade Zone is linked to the airport’s freight component that provides dedicated space for the imports and exports of high value goods. It is envisaged that the Trade Zone will capture local freight currently utilising the OR Tambo Airport. In addition, it is forecasted that the freight handling capabilities of the development will attract industries such as motor components, electronics, clothing, textiles and perishables, all of which are dependent on time sensitive travel. The Dube Tradeport is a strategic investment which intends to serve as a major stimulus for regional economic growth. The following map represents the key transport routes within the Municipality.
2.5.4 Passenger Rail System

The Municipality is fairly well serviced with commuter rail services which comprise of the following:

- North-south line following the coastal plain;
- Mainline into the hinterland;
- Circuitous line between Pinetown Central Business District (CBD) and Rossburgh Station;
- Three spur lines into Umlazi, Chatsworth and KwaMashu;
- Spur line to the lower Bluff;
- Section of single line adjacent to North Coast Road.

Source: eThekwini Municipality Development Planning and Environment
Currently there are 52 train sets operating on the current rail network serving passenger rail with ongoing projects to improve the rail service and customer experience. PRASA has already invested a significant amount of money on station upgrades in Rossburgh, Isipingo, Durban, KwaMashu, KwaMyandu and Moses Mabhida.

Going forward, PRASA has now embarked on a modernization strategy, with specific focus on renewal and replacement of rail infrastructure rather than refurbishment. Key components of this modernisation drive include the procurement of new rolling stock over the next 20 years, new rolling stock depots resignalling programmes, station modernisation and infrastructure such as track and electrical substation upgrades. In the KZN region, the KwaMashu-Durban-Umlazi (including extension to Bridge City) has been identified as the priority corridor where the modernisation programme and projects are being implemented. This rail corridor forms part of the city’s C2 IRPTN network. Some key stations forming part of the station modernisation programme include Duffs Road, Umlazi, Berea Road, Merebank, Rossburgh and Reunion stations.

Some other projects in the region include station improvement programmes (minor and major upgrades at a number of stations located throughout in the municipal area) and operational maintenance of the rail corridors.

A number of commercialisation projects have also been identified to enhance PRASA’s ability to generate revenues from key strategic property assets. In this regard, the implementation of the Durban Station Masterplan has commenced which entails development at Durban Station for more retail, office, educational and other investment opportunities.

PRASA through its subsidiary Intersite Asset Investments (SOC) Ltd, has also embarked on other property development initiatives that focus on partnerships with private developers to develop PRASA properties for commercial purposes. These developments are planned to harness transit orientated developments and will not only generate substantial revenue and capital growth for PRASA but also contribute to city economic regeneration. The recently completed KwaMnyandu Mall at KwaMnyandu station is a case in point of this initiative. Other ongoing projects include the proposed Umgeni Business Park, Umlazi Mall and Berea Mall developments.

**Bridge City Rail Link**

The Bridge City Rail link, originally proposed in 2001, has been completed and train services officially commenced in February 2014. This R1.3billion project included the construction of a new station building, which is located under the Bridge City Shopping Mall and a 3.5km rail line which ties in at Duffs Road station. The Bridge City project is part of PRASA’s overall integrated approach to passenger rail service, in bringing communities closer to integrated public transport solutions, investing in the modernisation of passenger rail services and positioning rail as the backbone for public transport.
The rail link also forms part of the Integrated Rapid Public Transport Network (IRPTN) and Bridge City intermodal hub which will include the various taxi ranks and the Bus Rapid Transit System.

**Proposed commuter rail stations along the South Coast Rail corridor**
PRASA is currently undertaking a planning study to investigate the south coast rail corridor between Isipingo and Kelso, to identify the need for and location of possible new stations, with specific focus in the areas of Galleria, Mnini and Rocky Bay.

**KZN Northern Rail Linkages study**
PRASA has also been undertaking a feasibility study for a possible new rail link to King Shaka International Airport, including connectivity between various northern rail links, Cornubia, Umhlanga and the CBD. Discussions have been held with the ETA and other key stakeholders in the various rail alignment and technology options to agree on the preferred solution/s. The study will be concluded shortly.

### 2.5.5 Non-Motorized Transport (NMT)

The NMT plan has been developed to encapsulate the City's commitment towards NMT, by giving prominence to NMT as an integral part of the City's overall transport system. The plan defines NMT policies, strategies and NMT guideline standards, together with the network development process for implementation for over the next five years.

These key elements have been consolidated into four themes or "Pillars of Ideology" which are:

**CONNECTING:** talks to meeting the basic needs of people, i.e. providing access to goods, services, people and work opportunities, either directly or via other forms of transport.

**ENHANCING:** is about improving the quality of life, reducing transportation costs by creating viable alternatives, creating safe environments that support and enhance human interactions as well as promoting healthy lifestyles by proving access to social and recreational activities.

**GROWING:** is about stimulating regeneration of our ailing Cities and economic growth via *inter alia* tourism and other opportunities that ultimately result in the general increase in prosperity of the population.

**SUSTAINING:** is about ensuring long term viability and sustainability of our City and the environment and includes issues of land-use development, emissions reduction, alignment to other sustainable practices and programmes as well as influencing behavioural changes.

The NMT strategies are a set of programs, aligned to the ideology, defining how the objectives are to be met and seeks to address the gap between where we are and where we want to be. The
development of a NMT network plan is based on meeting the demands of all existing NMT users as well as promoting the use of all forms of NMT by new users. However, NMT utilisation, whilst overall quite significant, is predominantly focused around pedestrian activity, with other forms like cycling, skateboards and push-scooters, animal powered transport, and human powered goods transport occurring on a very small scale.

Thus, in developing a network plan, the focus has been in the short term to identify key nodes within the Municipality and to provide mixed-used NMT facilities that link these key nodes into the surrounding area. The development of mixed-use facilities (as opposed to dedicated facilities) allows the Municipality to develop a more comprehensive network plan in the short term within its limited funding pool. As demand for other forms of NMT grows, it is anticipated that these networks would be expanded into the wider area surrounding these key nodes, with segregated facilities as demand rises. Once NMT activity across all forms has reached a significant level, the intention is to then create a network that has connectivity across the entire Municipality, with dedicated facilities for the different types of NMT users.

The City has already established a series of cycling routes in and around the Inner City and is currently expanding its network to accommodate both professional and recreational cyclist. The routes have also taken into account those residents that wish to commute using bicycles. The Municipality will also roll-out a staff bicycle programme that will encourage staff to use bicycles as a mode of transport between municipal centers.

In terms of the five year implementation plan a total of 88 corridors have been identified, of which 31 have been prioritized to have a high rate of usage benefitting large numbers of existing and potential NMT users distributed across the municipal area. The corridors provide connections between schools, public transport interchanges, commercial centres and residential areas.

2.5.6 Summary of Transport Issues and Trends

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>UNDERLYING CAUSE</th>
<th>SPATIAL IMPLICATIONS</th>
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| 1. The current Municipal structure results in high social and economic costs especially in terms of Residential Pattern/Housing | • High degree of segregation of places of work and home due to past planning practices that promoted land use and racial zoning. | • Gives rise to long commuting times (between home to work) and imposes travel costs upon commuters  
  • Has largely precluded the development of mixed use environments |
|                                                                       | • Poor or no planning with respect to optimizing efficiency for the majority of the population. | • Unsustainable use of resources : Urban sprawl raises the unit cost of servicing and infrastructure  
  • Reinforces the need/ urgency to commute |
2.6 Overview of eThekwini Economy

The eThekwini Municipal region is the economic powerhouse of KwaZulu-Natal and also makes a significant contribution to the South African economy. It is a vital link between the regional economies of Pietermaritzburg (and onward to Gauteng) and Richards Bay. EThekwini ranks as the second largest economic centre and is the second most significant industrial region in South Africa. It is a promising global competitor with a world-class manufacturing sector.

EThekwini is home to Africa’s first multimodal logistics platform and international passenger airport, Africa’s busiest port, and a global conferencing, sporting and tourist destination. It is also a substantial administrative centre, providing key public services within the Metropolitan area as well as to the wider region. It is both a centre for low cost production, as well as a key logistics hub in the national economy. It is home to 10% of all employment opportunities in South Africa.

The key issues relating to the economy in eThekwini (as elaborated below) include:

1. Persistently high unemployment;
2. 41.8% of population subject to conditions associated with poverty;
3. Need for greater diversity in the economy.
4. Declining resource base and the impacts of climate change
5. Unreliable electricity supply through Eskom (frequent load shedding)

2.6.1 Future Economic Growth and Development

Major development projects planned in the eThekwini municipal region are poised to have a positive impact on the economy during the next ten to fifteen years. Expansions at the Durban Port, the mixed-use development at Cornubia, the Dig-out Port at the old airport site, the major shopping Centre development at Shongweni and industrial development in Cato Ridge in the Outer West, new developments at Dube Trade Port and surrounding area are all expected to play an effective role in placing the city on a firm growth trajectory especially for the local economy and job creation. All of these initiatives are expected to create a substantial number of temporary and permanent jobs. The development at Cornubia project alone will create approximately 60,000 permanent jobs when complete.

The National Government’s New Growth Path 2010 aims to grow the economy by 7% and create 5 million additional jobs by 2020. The main indicators will be jobs (the number and quality of jobs created), growth (the rate, labour intensity and composition of economic growth), equity (lower income inequality and poverty) and environmental outcomes. Accordingly, eThekwini must also target an economic growth of 7% and contribute towards the national employment target by creating approximately 45,000 jobs per annum (projection based on current trends and the fact that eThekwini’s employment share of national is about 8%).
The Economic Development and Job-Creation Strategy 2012-2017 was compiled by the eThekwini Municipality for the City of Durban and will be executed via a comprehensive Implementation Plan by the Economic Development and Investment Promotion Unit, in partnership with all other relevant Units in the Municipality, as per the local government mandate with the intention of providing for the core principles, mechanisms and processing necessary to enable municipalities to move progressively towards social and economic upliftment of local communities.

The municipality is poised for steady economic growth from several major catalytic projects over the next 20 years creating in excess of 400,000 construction jobs and 200,000 permanent jobs, respectively. Major construction projects such as the Cornubia mixed-use commercial-residential development, the port expansion plans, Dig-Out Port, Kings Estate, Inyaninga Industrial Estate, ongoing economic opportunities at Dube Trade Port and the development of the dedicated freight route are all expected to contribute towards this growth. Furthermore, the Dube TradePort / King Shaka International Airport, Tongaat CBD and portions of La Mercy Sub Area forms part of the potential Aerotropolis for the Northern Municipal Region. The Dube TradePort / Tongaat Inyaninga sub region is also proposed as a Special Economic Zone that will act as a trigger for potential investment opportunities that will extend to neighbouring Municipalities such as Ilembe and KwaDukuza Municipalities.

The Strategy seeks alignment with the relevant Strategies amongst the three spheres of government – most notably the New Growth Path, National Development Plan and the Industrial Policy Action Plan from National government, all of which have identified specific Sections of the economy with job-creation potential. The KwaZulu-Natal Provincial Industrial Development Framework and the Growth and Development Strategy also guide the local government initiatives. In compiling the regional Integrated Development Strategy, the Spatial Development Framework and others, the eThekwini Municipality has ensured that the essential principles and focus areas resonate with these reports.

South Africa’s invitation to join a group of countries now calling itself BRICS (Brazil, Russia, India, China, South Africa) means that South Africa is now sharing a platform with a hugely significant bloc having tremendous clout to influence tangible outcomes at the global level. On the regional front it gives eThekwini the opportunity to explore or strengthen economic gateways to the Southern African Development Community (SADC) and with the other members within BRICS as the City embarks on its ambitious plans to develop it's freight corridor and expand operations at the existing- and the new Dig-Out Ports.

These lofty goals, however, may be hampered by various socio-economic and other threats such as the lack of appropriate job skills, poor political will, unspectacular economic- and employment growth, inadequate foreign direct investment, high cost of doing business, poor infrastructure and a lack of serviced industrial land.
The Strategy examines trends in the detailed sub sectors in manufacturing noting the comparative and competitive attributes for each after which a choice of industries are selected. These priority sectors include automotive, chemicals, clothing and textiles, food and beverage, furniture, metals, electronics and electrical machinery and green industries. In the services sector tourism, ICT, creative industries (Film and Media; Crafts; Fashion), finance and professional services and transport and logistics were identified.

The eThekwini’s GDP (in constant 2005 prices) amounted to R206, 9 billion in 2012. It is forecasted to grow by 3, 1% to R213, and 2 billion during 2013. Presently it comprises 65, 5% of KwaZulu-Natal’s GDP and 10, 7% nationally.

GDP growth in the eThekwini Municipal region increased by 2.0% between 2011 and 2012 while KwaZulu-Natal and South Africa grew by 2.5% and 3.0% respectively.

Frequent interruptions in electricity supply through Eskom load shedding constitute problems for the eThekwini economy that may result in lower than estimated growth. Frequent power interruptions have only started in January 2015 and their impact on the local economy has not been quantified yet. According to the DG of the Department of Energy, the supply constraints are expected to continue for 20 to 30 months.

The above chart shows the percentage contribution to GDP by broad sectors during 2012. The eThekwini economy was dominated by tertiary industries that included (1) finance (22%), (2) manufacturing (22%), (3) community services (18%), trade (16%), transport (16%) and construction (3%). Apart from the tertiary sector fulfilling a major role within the context of eThekwini’s economy, manufacturing (which is classified within the secondary sector) constituted 22% of the total economic

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4 http://www.bdlive.co.za/business/energy/2015/02/18/department-plans-to-tap-new-power-sources
activity. It was particularly the production of food and beverages, as well as fuel, petroleum, chemical and rubber products that contributed towards the magnitude of manufacturing within eThekwini.

The tertiary sector continued to provide the majority (74%) of the Gross Value Added (GVA) in eThekwini, with the majority of the tertiary GVA coming from the finance and business sector. With respect to the secondary sector, the construction sector became, for the first time since 2011, more important in terms of GVA contribution than the ‘fuel, petroleum, chemical, and rubber products’ sector or the ‘food, beverages, and tobacco products’ sector. The sector with the greatest comparative advantage in the City is transport, storage, and communications, with a location quotient of 1.65, then manufacturing with a location quotient of 1.31. The eThekwini economy is becoming more diverse, but is still less diverse when compared to KZN or South Africa.

A key trend is the increasing amount of labour remuneration assigned to the community services sector (32%). The two sectors that hold eThekwini’s comparative advantage, ‘transport, storage, and communications’ and ‘manufacturing’ contribute 9% and 22% of all local labour remuneration respectively. Additionally, these two sectors were once growing strongly in the economy, but have not yet recovered from the 2008 economic downturn. This feature of the economy is unsustainable due to the high amount of wages and salaries being paid from the public sector.

The eThekwini population makes up 33% of KZN and 7% of South Africa’s total population. Census 2011 records the population as 3,442,361. The yearly population growth rate from 2006 to 2011 averaged 1.0% per annum, which is 0.1% higher than KZN on average, and equal to the national average. This rate shows a steady decrease from its 2006 levels, which was 1.1% per annum. In 2011, the population growth rate was 0.8% per annum.

Literacy and education have been improving over the last five years in eThekwini and, when compared to the averages of KZN and South Africa, eThekwini performs the best. However, in comparison to the other metro municipality averages, eThekwini ranks fifth in the percentage of the population over the age of 15 with a matriculation level of education (42%) behind the City of Tshwane (52%), the City of Johannesburg (49%), Cape Town (44%) and Ekurhuleni (44%), and then also ranks fourth in literacy rates (87.0%) behind the City of Cape Town (94.3%), Nelson Mandela Bay (93.2%), and the City of Johannesburg (89.7%).

According to Census 2011, there were 956,713 households in eThekwini, 65.2% of which were African, 18.7% Asian, 13.5% White, and 2.6% Coloured. In 2011, 38% of the eThekwini population was economically active, decreasing by 2.0% from the economically active population in 2006. ETHekwini showed significant improvement with respect to the municipality’s unemployment rate, decreasing from 31.4% in 2006 to 20.4% in 2011. When compared to the other metro municipalities in 2011, only the City of Tshwane performed better with a 13.2% unemployment rate. Despite the decrease in unemployment, a more representative figure is the percentage of people employed from
2006 to 2011 as it includes the effect of discouraged workers. ETekwini still outperformed other metros with an employment increase percentage of 3.8% during the five year period. These gains are essentially not as great as the reduction of unemployment rates portray.

The majority of the unemployed in ETekwini in 2011 were from the African population (85%), followed by the Asian population (11%), and the Coloured and White populations (2% each). In the last five years, all population groups have experienced a decrease in their unemployment levels. Females constituted 47% of the ETekwini's unemployed in 2011, while males made up the majority of those unemployed with 53%. ETekwini comprised 54% of KZN's total unemployment in 2011.

The tertiary sector accounted for 73% of employment in ETekwini in 2012, while the secondary sector made up 26% and the primary sector made up 1%. With respect to the 10 broad economic sectors in ETekwini, trade accounted for 23.5% of employment, while manufacturing accounted for 18.6% and community services for 20.7% in 2012. The community services sector percentage composition increased in the past five years, while the trade and manufacturing sectors decreased in their percentage composition over the same time frame.

In 2011, formal employment comprised 76% of total employment, whilst informal employment made up 24% of total employment. The informal sector employed 262,758 people in 2011, up from 233,104 people in 2006. Approximately half of these labourers worked in the trade sector (131,737). Real disposable income grew by an average of 3.6% per annum from 2006 to 2011, despite dipping to a negative growth rate of 0.9% in 2009. From 2006 to 2011, the percentage of lower income households decreased by 18.6%, the middle income group increased by 7.3% and the affluent category increased by 9.3%. The number of households living on less than R72, 000 per year (R6, 000/month) in 2011 was 411,236; this is down from 569,371 in 2006 and 447,270 in 2010. This accounts for roughly half of ETekwini's households. 98% of these households were African in 2011. In 2011 the per capita income for ETekwini was R472 221/annum (R3, 935/month). ETekwini has the 6th highest per capita income when compared with other metros; the highest of which being Tshwane with R76 349 per capita. The overall gini-coefficient in ETekwini is 0.61 in 2011, down from 0.64 in 2006. This is equal to the national average.

Total household expenditure in ETekwini in 2011 amounted to R164 billion, up from R148 billion in 2009. The majority of household expenditure was on ‘food, beverages and tobacco’ (23%), with 16% on ‘transport and communication’ and 15% on ‘accommodation and catering’. With regard to detailed product categories, 14.1% is spent on accommodation, while 12.3% is spent on taxes.

Total retail sales amounted to R54 billion in 2011, up from R36 billion in 2006. By far the most retail sales (34.9%) were experienced in the ‘perishable and processed products’ category. ETekwini accounts for 56.6% of KZNs total retail sales. In 2011, of the total buying power of the country (100), ETekwini’s share (index of buying power) amounted to 8.4%, down from 8.6% in 2009.
The percentage of people living in poverty has reduced from 34% in 2006 to 31% in 2011. The percentage of people in poverty in KZN was substantially higher than eThekwini in 2011 at almost 49%. Over the previous 5 years all population groups have reduced in poverty except the Asian population group which increased by 2.7% on average annually but this is largely due to a very high 13.7% increase between 2007 and 2008 (global economic downturn). Between 2010 and 2011 all population groups’ number of people living in poverty was reduced by at least 3.1%.

Of eThekwini’s 1,093,372 people living in poverty, 92.4% of those are African, while 6.3% are Asian, 1.2% are coloured and 0.1% are white. 42% of the African population is living in poverty, while 15% of the coloured population, 10% of Asian population and 0.3% of the white population are living in poverty. The poverty gap in eThekwini amounted to R 1.9 billion (current prices) in 2011 - of which R 1.8 billion was required by the African population group. EThekwini has the lowest Human Development Index of all the metros at 6.1, while Cape Town has the highest HDI of 0.73.

In eThekwini, imports have grown at a faster rate than exports (nominal growth of 8% and 7% respectively), therefore, the trade balance has remained negative, and spiked in 2011 due to a large increase in imports driven by renewed local consumer spending. EThekwini’s contribution to South Africa’s merchandise exports has decreased from 7.2% to 5.9% in 2011, while eThekwini’s contribution to national imports has decreased by 0.4% to 9.8% in 2011. The majority of exports (31.1%) were in the ‘metal, products, machinery and equipment’ sector, followed closely by the ‘transport equipment’ sector (30.8%). More specifically, ‘motor vehicles, parts & accessories’ and ‘basic iron & steel’. The majority of imports are in the transport equipment sector (31.2%) followed by the ‘fuel, petrol, chemical, rubber and plastic products’ sector (17.4%). More specifically, ‘motor vehicles, parts & accessories’, ‘food’ and ‘basic chemicals’. With regard to trade blocs, the majority of exports are to the EU with 36% of all exports; however, this is down from 45.6% in 2009. The majority of imports (60%) are from the APEC countries. With regard to geographic areas, the majority of exports are destined for African countries (36%) and the majority of imports are from Asia (58%). The number one export partner remains the United Kingdom, while the top import partner remains to be Japan in 2011. A large 51% of eThekwini’s imports come from China and Japan.

EThekwini’s share of the national total tourism spend has increased from 5.7% in 2006 to 8.5% in 2011. Total tourism spend in 2011 for eThekwini was R14, 647 million, up by 323 million from 2010 (current prices). In 2011, tourism contributed 4.8% to EThekwini’s GDP. This has declined by 0.5% since 2006.

The total number of trips in eThekwini in 2011 was 2,751,342. This has decreased by 2.2% on average annually for the previous 5 years. The most severe decrease in trips was in 2011 (-7.7%).
69% of trips in 2011 in eThekwini were visiting friends and relatives, leisure trips were 16%, while the contribution of business trips was 9%. The only purpose that has shown growth over the previous 5 years has been leisure trips (1.5%).

While the number of domestic trips to eThekwini has decreased over the previous 5 years, the number of bed nights has increased by 2.4% on average annually, which means that while domestic tourists are making lesser trips, they are staying for longer when they do come. The number of bed nights did also decline in 2011, however (by 1%). The number of bed nights spent in eThekwini in 2011 by domestic tourists was 14,633,403 and the number spent by international tourists was 2,635,884. This is an 85% to 15% split.

2.6.2 The Spatial Economy

The spatial distribution of economic activity in the EMA is heavily skewed towards the Durban City Centre, the Durban South Basin, the Port of Durban and the Pinetown and New Germany areas. The EMA has uneven distribution of economic opportunities with most employment and consumption opportunities concentrated in the central core areas.

There is also a separation of residential uses from economic ones. Higher densities are found in townships and informal settlements on the periphery but these are not supported by the provision of amenities. These poor resource areas have high unemployment rates, low household incomes, poor levels of education and low levels of access to areas of economic opportunity. This implies that there are few employment opportunities where people live, and that economically active residents must commute between work and home.
The spatial economy of EMA is analyzed below under the following categories:

- Industrial development
- Freight and Transportation Logistics
- Commercial / Retails and business development
- Informal economy
- Agricultural development
- Tourism and recreation

2.6.3 Industrial Development

The EMA has five main industrial areas as shown in the figure below. These are Durban Central, South Durban Basin, Inner West, Outer West and North. Manufacturing is the most dominant sector of industrial activities and as can be expected it occupies the most amount of land in the Municipality. Patterns of clustering have occurred usually in mature industrial areas. The following significant clusters appear in the Municipality:

- Logistics and Transport – highly concentrated around the Port and in Pinetown
- Chemical sector – Pinetown and South Durban Basin
- Furniture and Bedding – Pinetown, Hammarsdale and Umbilo Road
- Textiles, Clothing, Footwear and Leather – Hammarsdale, UMngeni Road and Pinetown
- Other Industrial areas within the EMA include uMngeni, Phoenix, River Horse Valley, Tongaat, Canelands and Ottawa.

Source: eThekwini Industrial Strategy

![Figure 23: Industrial Areas](source.png)
2.6.4 Freight and Transportation Logistics

The freight and transport logistics is the type of infrastructure that is needed to support, maintain and grow economic activity. This service infrastructure includes rail linkages, port efficiency, back of port operations (to enhance capacity and range of business), intermodal transport hub in ports and inland and the newly planned dug out port are projects which will give life to KZN, positioning the province as a gateway to Africa.

At the center of the transport industry is the Port of Durban. The Port of Durban is the busiest on the African continent as it handles the largest number of vessels per annum in comparison to all other African ports. The port offers a combination of port facilities and services. Transnet Ports Authority, formerly known as the National Ports Authority (NPA), is the custodian of all the national ports, managing the most vital conduits of the country’s imports and exports.

2.6.5 The 18 Strategic Integrated Projects (SIPs)

Having recently celebrated 20 years into our democracy, South Africa still faces major challenges of poverty, unemployment and inequality at all spheres of Government. The National Development Plan (2012) was developed in response to the abovementioned challenges and aims to eliminate poverty and reduce inequality by 2030. It identified infrastructure as a critical element to facilitate economic growth and job creation. In line with this and to support and stimulate service delivery, job creation and economic transformation the National Infrastructure Plan (NIP) was adopted in 2012 and the Presidential Infrastructure and Coordinating Commission (PICC) was established to integrate and oversee its implementation. The PICC announced 18 Strategic Integrated Projects (SIPs) which represent corridors of proposed infrastructural development, as support to achieving the goals of the NIP.

The SIPs cover social and economic infrastructure across all nine provinces.

**Table 6: The 18 Strategic Integrated Projects (SIP)**

<table>
<thead>
<tr>
<th>STRATEGIC INTEGRATED PROJECT (SIP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIP 1 Unlocking the Northern Mineral Belt with Waterberg as the Catalyst</td>
</tr>
<tr>
<td>SIP 2 Durban- Free State– Gauteng Logistics and Industrial Corridor</td>
</tr>
<tr>
<td>SIP 3 South Eastern Node &amp; Corridor Development</td>
</tr>
<tr>
<td>SIP 4 Unlocking the economic opportunities in North West Province</td>
</tr>
<tr>
<td>SIP 5 Saldanha-Northern Cape Development Corridor</td>
</tr>
<tr>
<td>SIP 6 Integrated Municipal Infrastructure Project</td>
</tr>
<tr>
<td>SIP 7 Integrated Urban Space and Public Transport Programme Plan</td>
</tr>
<tr>
<td>SIP 8</td>
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<tr>
<td>SIP 9</td>
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<tr>
<td>SIP 10</td>
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<td>SIP 11</td>
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<td>SIP 12</td>
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<td>SIP 13</td>
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<td>SIP 14</td>
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<td>SIP 15</td>
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<td>SIP 16</td>
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<tr>
<td>SIP 17</td>
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<tr>
<td>SIP 18</td>
</tr>
</tbody>
</table>

The nationally driven Strategic Integrated Projects have a significant impact on the eThekwini Municipality, in particular, the SIP2 Logistics and Industrial Corridor as it forms the backbone of South Africa's freight network.

The main components of the freight corridor are the Port of Durban, well established road, rail and pipeline links to Gauteng, and inland freight terminals to service the broader Gauteng area and countries to the north of our border. The Bay of Natal is a regionally significant estuary and home to Africa's busiest port, handling a wide range of high value cargoes. It plays a critical role in servicing
the import and export needs not only of Durban and its extensive KZN hinterland, but also of Gauteng and the Southern African region. Two thirds of South Africa’s containers move through Durban, as well as a majority of liquid fuel and automotive cargoes. In addition, Durban handles significant break bulk, dry bulk and chemical cargoes, and provides facilities for cruise liners, the SA Navy, and for fishing, service vessels and recreational craft.

Durban is the premier gateway port in the South African ports system, with the lowest logistics costs. Durban handles high-value cargoes in a complementary relationship with the Port of Richards Bay, which focuses on bulk exports of minerals. Together the ports service the maritime needs of South Africa’s eastern seaboard. As the South African economy grows, the capacity of the port needs to be increased. Over the past ten years, the growth in container traffic through Durban has been three times the national GDP growth rate. There is already pressure on the port, the roads, and in back of port areas, despite recent expansion projects. At an 8% annual container growth forecast the existing transportation infrastructure will reach its limits in 2019. Unless significant expansion takes place, South African economic growth will be constrained, and freight will be forced to relocate to more distant ports, increasing already high transport logistics costs, and compromise South Africa’s global competitiveness. The development of the freight corridor and related projects will reduce the cost of doing business and improve productivity, which will create employment and generate wealth locally, regionally and nationally.

The vision covers port, rail, road and land-use plans, and focuses on national and local economic growth, social upliftment for affected communities, and environmental sustainability.

Investment in infrastructure capacity will exceed a quarter of a trillion Rand, making this one of the most significant projects in the history of South African freight transportation. The contributions to the local, region and national economies are expected to be significant during construction and operations. The anticipated number of jobs are 62 000 construction jobs and 54 000 permanent jobs locally, and another 22 000 permanent jobs in port related industries elsewhere in KZN. The project will stimulate local and regional economic growth. A growth of R4 billion per year in KZN GDP is projected during the construction phase. During the operational phase the growth is significantly larger and estimated GDP at local level is R12.5 billion per year. Cognisance has been taken of other freight expansion projects to accommodate growth in break bulk, dry and liquid bulk, and automotive volumes, and on other non-freight projects. Provision has been made for port and non-port related growth on the transportation corridors, as well as for expansion of passenger numbers on road and rail.

The Port of Durban currently experiences congestion, especially around port operations. In order to alleviate the situation, Transnet proposes to improve throughput capacity by reconfiguring and rationalising the existing precincts of Durban Container Terminal (DCT), Point, Maydon Wharf and Islandview. Transnet also proposes to utilise the Bayhead rail precinct for Back of Port commercial
logistics development, in the medium to long term. Transnet plans to supplement the medium to long term capacity by developing the old Durban International Airport site to the proposed Durban Dig Out Port.

2.6.6 Commercial / Retails and Business Development

The constraint on land in the Central Spatial Region has led to a significant thrust of development outward toward the adjacent regions particularly toward the North and Western regions within the EMA. The decentralization of commercial development (including office and retail activities), particularly higher order activities, from the Durban and Pinetown CBD’s to more affluent suburbs such as Umhlanga in the Northern Region has resulted in spatial restructuring (including the changing commercial role of these CBD’s with the relative establishment of new nodes).

As a consequence of commercial and retail decentralization, these CBD’s have experienced high vacancy rates as well as declining property values. (EThekwni Property Market Review 2006/2007, Viruly Consulting (Pty) Ltd) The loss of critical mass of economic activities within the core Durban and Pinetown CBD’s in the form of decentralization to shopping malls as suburban models of development is being perpetuated. There is also a tendency towards expanding suburban office nodes and new office park developments which are attracting offices out of these CBDs.

2.6.7 Informal Economy

The management of the informal economy, especially street trading and retail markets, is a demanding task involving demarcation of trading areas, the issuing of permits, organising traders into area committees that feed into a citywide forum, and the ongoing collection of rentals. Coupled with this is the necessary enforcement of regulations and by-laws in conjunction with the Metro Police, as well as negotiations and dispute resolution where the interests of residents, traders and the formal economy come into conflict.

In order to provide a first step up for budding entrepreneurs and traders, a number of local incubator factories and storage facilities have been set up where workshop space or storage is available at a minimal rental. For entrepreneurs showing promise, there is a selection process whereby enterprises can advance to the entrepreneurial support centre, and where additional facilities are available, including training and support.

2.6.8 Tourism and Recreation

Tourism remains one of the most significant components of the metropolitan economy. Recreation opportunity is considered to be the main tourist resource within EMA and is based largely on the natural qualities of the coast. The coastline and beaches are significant tourist anchors for
accommodation, commercial and entertainment development. Durban’s central beachfront is arguably the most important tourism and recreation resource in the EMA.

According to SA Tourism, research conducted in 2005, the value of foreign tourist to KZN was R6.9 billion with the eThekwini Municipality attracting 1.1 million foreign tourists (equivalent to 78% of foreign tourist to KwaZulu-Natal or 16% of foreign tourists to South Africa). The Durban Beachfront was found to be the most popular attraction among foreign tourists, and was visited by approximately 875,000 foreign tourists (64% of tourism to KZN). Accordingly, the KwaZulu-Natal Tourism Authority analysis of the value of KZN’s regional tourism markets concluded that Durban captures around 33% of foreign consumer spending in the province.

### 2.6.9 Summary of Economic Trends and Issues

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>UNDERLYING CAUSE</th>
<th>SPATIAL IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobless growth in the formal economy</td>
<td>Decline in labor intensive industrial sector, associated with shedding of jobs</td>
<td>Decline and blight associated with closure of business in industrial areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land demand for expansion, and associated infrastructure requirements</td>
</tr>
<tr>
<td>Infrastructure limitations to economic expansion</td>
<td>Capacity limitations for port to expand</td>
<td>Pressure upon interface between port and city</td>
</tr>
<tr>
<td></td>
<td>Aging and obsolete industrial infrastructure</td>
<td>Relocation of business from aging industrial areas to newly established areas</td>
</tr>
<tr>
<td></td>
<td>Growth in road-based traffic, notably for container transport</td>
<td>Congested transportation routes, mixing of industrial and residential traffic</td>
</tr>
<tr>
<td></td>
<td>Poor transport linkage between certain economic zones and installations</td>
<td>Certain forms of development are precluded from economic zones where water, waste disposal, waste water treatment and energy supplies are inadequate to meet requirements of the Municipality</td>
</tr>
<tr>
<td></td>
<td>Infrastructure is inadequate to cater for growth</td>
<td>Development is focused along North, South and west growth path with limited development in adjacent hinterland</td>
</tr>
<tr>
<td>Changing locational patterns</td>
<td>Outward expansion of industry</td>
<td>Relocation of service industry and light manufacturing to decentralized business parks along north, south and west growth path</td>
</tr>
<tr>
<td></td>
<td>Growth in suburban retail markets</td>
<td>Relocation of higher income retailing functions to suburban locations</td>
</tr>
<tr>
<td></td>
<td>Emergence of specialist, bulk retailing activities</td>
<td>Emergence of specialist/value retail parks outside CBD’s</td>
</tr>
<tr>
<td></td>
<td>Growth in suburban high grade office space</td>
<td>Decentralization of office (especially A-Grade) to suburban office parks</td>
</tr>
<tr>
<td>Changing nature of economic markets</td>
<td>Emergence of informal/small scale economy</td>
<td>Growth of economic activity around commuter hubs, public nodes and</td>
</tr>
</tbody>
</table>
In the coming years the City has a number of priorities that it will pursue, most of which align with national government’s focus on infrastructure development and job creation. These include:

1. The development of the Northern Urban Development Corridor. This includes the development of Cornubia and support for development around Dube Trade Port/ Aerotropolis.

2. In the Outer-West, development is to support the national Durban-Gauteng Corridor. This corridor is more than just a logistics route and there are significant development opportunities that these routes will make possible, including developments in Pinetown, Shongweni and Cato Ridge. The City will work with the Province and other Municipalities in proactively planning and opening up opportunities in this corridor.

3. In the Central area of the city (from the Durban Inner City to Pinetown), there will be further investments to support the inner city and entrench its role as a services center incorporating offices, sport and tourism uses, the civic heart and a residential community. It is also an area that supports the micro enterprises and all of these aspects will be strengthened. The planning in the back of port area will also be finalized. Pinetown is a key manufacturing node as well as an important CBD that needs to be revitalized.

4. In the Southern part of the city, the new dig-out port will be prioritized as well as the development of a logistics park in Illovo to support the automotive sector. The development of a dedicated freight route is also being investigated.

5. The City has a rural development programme and energy programme that focuses on key rural nodes, energy projects as well as agricultural projects to stimulate the economies of the rural areas.

6. The City accessed about R700 million from National Treasury in terms of the Neighbourhood Development Partnership Grant (NDPG) to facilitate investments in the township areas. The programme has been progressing well and investments have been made at Bridge City, the...
Mpumalanga New Town Centre, Umlazi, Clermont-KwaDabeka and KwaMashu. The City will continue to support these initiatives.

7. There are programmes aimed at revitalizing the secondary CBDs, as well as projects aimed at developing tourism nodes and corridors. These include uMhlanga; iNanda Heritage Route, Hazelmere Dam, uMgababa, Kingsway Tourism Corridor as well as many others.

8. The planning and implementation of public transport programmes in conjunction with Province and National Government will receive significant attention.

9. The investment climate will improve with improved procedures announced by National Government and the City should support this by ensuring simplified and expedient local processes to support investment. The Municipality is reviewing the first Best Practice City Commission (BPCC) and in addition – assess the current institutional mechanisms promoting and facilitating investment, with particular emphasis on the roles of the eThekwini Municipality. A BPCC Project manager has been appointed. The study is expected to inform the City leadership and officials about the current and new obstacles to investment in the municipal area, and provide a suite of recommendations and an implementation plan as a response. The City has experienced an increased level of interest in investments, however, a key challenge for many of the developments are around sanitation infrastructure and transport.

10. The Premier recently announced the establishment of the Provincial Human Resource Development Council aimed at guiding skills development. The City plans to become involved in this to ensure the interests of our young people seeking employment are supported through various programmes anticipated from this initiative.

However, there are numerous local challenges which if addressed and implemented may ensure a steady growth path towards the magic 5-7% with many additional benefits such as increased employment, investment and a more inclusive economy where all citizens of eThekwini enjoy equal access to the opportunities to come. The City intends to undertake initiatives in the various priority sectors that directly create jobs or support those that do. The Industrial Strategy currently under review in the City will spell out which sectors we should be focusing on and where to locate same.

The City will also attempt to play a meaningful role in the major projects recently announced by national government for example the Dig-Out Port, Corridor development and expansions in the existing port need to be fast-tracked to ensure that we are able to reach GDP growth that exceeds 3%.
2.7 eThekwini Housing Sector

The housing sector is a major investor into the built environment. The role of this plan for the housing sector, is to help guide the type and location of housing investment, to restructure the Municipality towards integration of different land uses and to align the development objectives of housing with planning and other sector plans.

In 2011, eThekwini had approximately 3.75 million in some 946,000 dwellings. This is expected to increase to 4 million citizens by 2020 and by 2035 to 4.4 million citizens. The majority - 86% - of eThekwini’s citizens are urban - i.e. 3.240 million, and rural citizens numbered 0.511 million. There are presently no projections on how the distribution might change, but it seems likely that the urban periphery will continue to be a major destination for newly urbanising citizens, unless active steps are taken to promote a different pattern of urban growth.

Currently there are approximately 946 000 households in the eThekwini Municipality divided as follows:

Table 7: eThekwini 2011 Dwelling Count

<table>
<thead>
<tr>
<th>Type</th>
<th>Sub Type</th>
<th>Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>Houses</td>
<td>414,357</td>
</tr>
<tr>
<td></td>
<td>Flats</td>
<td>110,225</td>
</tr>
<tr>
<td></td>
<td>Sub Total</td>
<td>524,582</td>
</tr>
<tr>
<td>Informal</td>
<td>Single Dwelling (&quot;Shack&quot;)</td>
<td>265,542</td>
</tr>
<tr>
<td></td>
<td>Backyard</td>
<td>48,975</td>
</tr>
<tr>
<td></td>
<td>Formal Informal</td>
<td>3,096</td>
</tr>
<tr>
<td></td>
<td>Sub Total</td>
<td>317,613</td>
</tr>
<tr>
<td>Rural</td>
<td>Cluster (&quot;Umuzi&quot;)</td>
<td>70,317</td>
</tr>
<tr>
<td></td>
<td>Single Dwelling</td>
<td>26,949</td>
</tr>
<tr>
<td></td>
<td>Formal Informal (Formal houses in rural areas)</td>
<td>6,449</td>
</tr>
<tr>
<td></td>
<td>Sub Total</td>
<td>103,715</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>945,910</strong></td>
</tr>
</tbody>
</table>

The table below shows the housing delivery since 1994, and its impact on the 2007 backlog.\[^{[5]}\]

\[^{[5]}\] eThekwini Housing Unit, data supplied in July 2011
### Table 8: HOUSING BACKLOG AND DELIVERY SCENARIOS 2007 & 2011 Dwelling Counts

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Houses Cumulative</td>
<td>Houses built pa</td>
<td></td>
</tr>
<tr>
<td>Housing Delivery 1994 - 2007</td>
<td>114 943</td>
<td>16 253</td>
</tr>
<tr>
<td>2007/08</td>
<td>133 092</td>
<td>18 149</td>
</tr>
<tr>
<td>2008/09</td>
<td>149 607</td>
<td>16 515</td>
</tr>
<tr>
<td>2009/10</td>
<td>158 994</td>
<td>9 387</td>
</tr>
<tr>
<td>2010/11</td>
<td>163 746</td>
<td>4 752</td>
</tr>
<tr>
<td>2011/12</td>
<td>167 135</td>
<td>3 389</td>
</tr>
<tr>
<td>2012/13</td>
<td>171 316</td>
<td>4 181</td>
</tr>
<tr>
<td>2013/14</td>
<td>178 139</td>
<td>6 823</td>
</tr>
<tr>
<td>2014/15</td>
<td>181 603</td>
<td>3 464</td>
</tr>
</tbody>
</table>

**Note:** No Growth Rate factored in since 2011 until next dwelling count.

The table above indicates the estimated housing backlogs based on the 2007 and 2011 aerial survey photograph dwelling counts. The backlog is comprised of informal dwellings in informal settlements, backyard informal dwellings, and traditional dwellings. From the table above it can be deduced that since 1994 over 180,000 new houses have been delivered, however, the backlog is only decreasing at a nominal rate.
The Comprehensive Plan for the Development of Sustainable Human Settlements (August 2004) provides detailed information on the programmes identified by the National Department of Human Settlements. The new “Human Settlements Plan” promotes the achievement of a non-racial, integrated society through the development of sustainable human settlements and quality housing. This program seeks to use housing delivery as a means for the development of sustainable human settlements in support of spatial restructuring. It moves beyond the provision of basic shelter towards achieving the broader vision of integrated, sustainable and economically generative human settlement systems at both local and regional scales. The following are fundamental tenets and underlying principles of this new approach:

- progressive informal settlement upgrading;
- promoting densification and integration in urban centres;
- enhancing spatial planning in both urban and rural contexts;
- enhancing the quality and location of new housing projects;
- supporting urban renewal programmes; and
- developing social and economic infrastructure.

2.7.1 Housing Supply Trends

In terms of the predominant housing supply trend the formal market is not spontaneously providing dwellings in sufficient number of adequate quality or in the optimal locations for the poor or affordable markets. The degree to which the formal market fails the low-income sub-market is extreme. The focus of publicly funded housing has been on the low-income sub-market. The main outcomes have been free standing houses coupled with individual freehold title, transfer of state owned rental stock to tenants, and some hostel upgrades coupled with rental tenure.

Over 80% of new housing projects have been implemented within the Urban Development Line (UDL). These include rural projects and upgrades for community’s who had occupied land outside the UDL. The market is spontaneously providing dwellings in sufficient number, of adequate quality and in the optimal locations for the upper-middle and upper income markets. Mid-market and up-market developments tend to be at the urban periphery often in the form of gated communities coupled with individual freehold title or Sectional title, such as those in Hillcrest. A significant exception is the development on Umhlanga Ridge.

All spheres of government recognize the necessity and desirability of having housing markets that work for all the segments of the market, and consequently are willing to avail resources to address market shortcomings and failures. There is significant demand for rental stock. Research estimates are that 33% of households in eThekwini live in rented accommodation, many of them in inadequate human settlements.
The following housing sub-markets are applicable to eThekwini Municipality:

<table>
<thead>
<tr>
<th>HOUSING SUB-MARKETS IN ETHEKWINIMUNICIPALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low-income Housing</strong></td>
</tr>
<tr>
<td>(also known as Housing for the Poor or Pro-poor Housing)</td>
</tr>
<tr>
<td><strong>Affordable Housing</strong></td>
</tr>
<tr>
<td>Rental or individual ownership tenure over fully serviced dwelling units by households with incomes from R 3,500 to R 15,000 p.m. It includes the so-called “Gap market”, of households who earn from R 7,500 to R 15,000 p.m. The term ‘gap’ derives from the absence of subsidies for these households, the virtual absence of available housing stock, and the low availability of bond finance.</td>
</tr>
<tr>
<td><strong>Mid-market and Up-market Housing</strong></td>
</tr>
<tr>
<td>(also known as Upper-middle Income Housing or Upper Income Housing)</td>
</tr>
<tr>
<td><strong>Social Housing</strong></td>
</tr>
<tr>
<td>Subsidised rental tenure over fully serviced dwelling units for households with incomes from R 1,500 to R 7,500 p.m. There are differing views as to whether social housing is a housing program or a housing market. In this document, the term is used for the housing program that addresses the low-income and affordable rental markets.</td>
</tr>
</tbody>
</table>

**2.7.2 Rural Housing**

The rural low-income demand is significant, and is expected to grow. The demand in 2011 was estimated at 97,266 (eThekwini dwelling count 2011). The estimate however treats all traditional dwellings as being inadequate shelters, in contrast to the common perception that traditional homesteads are often a better shelter solution than newly-built subsidised housing, although clear incidences of inadequate shelters exist. There is not sufficient information on rural shelter to clarify the situation.

Currently, rural settlements are addressed via the Rural Housing Subsidy Programme and are largely a reactive response. The provision of top structures is not a major shortfall in such areas, with the demand more on the provision of services. As such, initiatives such the Water and Sanitation Unit’s rural sanitation programme and to an extent Eskom’s electrification programme are in place to address these areas.
The Rural Programme applies outside of the Urban Development Line. Large parts of these areas are owned by the Ingonyama Trust. In areas under traditional authority the legal tenure is likely to remain a long-term lease. The program can be applied based on functional tenure. All projects funded under the Rural Programme are in-situ upgrading projects.

The Rural Housing Programme provides subsidies to beneficiaries on the basis of functional tenure. The program currently provides a VIP, a house and access road per homestead. The Sustainable Human Settlements Strategy (SHSS) however aims to change this approach towards greater emphasis on housing at well-accessible Rural Service Nodes. The Cost Surfaces Model is influenced by locating rural housing projects where services capacity is presently available (nodes) rather than locating projects in areas where new services need to be provided at higher costs to the Municipality.

In the eThekwini context this programme currently receives a major share of the provincial budget. Access to social facilities such as schools, food gardens and clinics as well as provision of road linkages to markets must begin to inform the manner in which human settlements are designed in the near future.

The current rural service standards:
- One ground tank per household supplied with 300l per day;
- Urine diversion toilet;
- Electrification only of densely clustered pockets;
- All weather surface to all public transport routes and roads within communities having a density greater than 15 persons per Ha.

The map on the right shows the proposed rural housing projects.

Figure 25: Approved and Proposed Rural Housing Projects
2.7.3 Peri-Urban Settlements outside the Urban Development Line (UDL)

The primary focus of the Housing Programme is largely on addressing urban informal settlements either through upgrades, relocations, interim services and/or the implementation of greenfields projects.

Dense peri-urban settlements and those in particular which are located just outside the UDL will be considered for interim services. Interim services are provided to settlements earmarked for upgrade which will not be addressed via the housing programme in the short term. The package of services will include water, sanitation (communal ablations, UD scheme, Dewats system), roads, footpaths, stormwater controls and electricity. Depending on the location and density of settlements, the full package of services may be altered or reduced.

It is anticipated that interim services will emerge as a key programme which could well overtake the housing delivery programme in terms of breadth i.e. reaching a far higher number of households. It is in line with the Outcome 8 Presidential target and very much supported by both National and Provincial Departments of Human Settlements.

2.7.4 Informal Settlements

Since 1994, public investment in eThekwini Municipality has provided in excess of 180,000 new housing opportunities. Many more households still live in inadequate human settlements, either because their shelters are inadequate, and-or they do not have access to basic infrastructure, social facilities and economic opportunities. The problem is most visible in informal settlements.

The problem of eThekwini’s informal settlements is large, and is set to become more so as the province’s population urbanizes. As the largest and most economically active Municipality in the province, eThekwini is likely to attract more than a proportionate share of the province’s urbanising citizens, and from elsewhere in the country and beyond the borders. Informal settlements tend to have higher densities, especially within the inner core. Informal settlements with lower densities tend to be located to the west and on the urban periphery.

The following map shows the location of existing informal settlements and their densities:
The Informal Settlement programme is the major focus of eThekwini Housing. The principal intention is to upgrade informal settlements wherever possible and to only relocate residents if upgrading is impossible for health, safety or technical reasons. Social and economic amenities to enhance the sustainability of the upgraded settlements may also be provided, or existing ones expanded.

Informal settlements must be integrated into the broader urban fabric to overcome spatial, social and economic exclusion. This will require a range of short- and long-term responses, including interim relief, incremental upgrades, planning and management of informal settlements, greenfields, and sustained, long-term upgrading programs.

A key challenge for these areas is to ensure that the physical development of the EMA addresses areas of needs with opportunities in a manner that ensures that the relationship between physical elements, activities and people function in an efficient, equitable and sustainable manner.
2.7.5 Addressing Housing Demand

The total target for greenfields related projects is approximately 120,000 units which translate to vacant land requirement of approximately 6,000 hectares assuming a density of 20 dwellings per hectare as per conventional housing delivery. If the current intentions of achieving gross densities of greater than 20 dwellings per hectare are achieved, then the land assembly target could be reduced. For instance producing attached or row style double-story units at a density of 60 units per hectare could reduce the amount of Greenfield land required to 2,000 hectares.

If the demand for greenfields sites increases as a result of an unanticipated increase in the number of relocations required from informal settlement interventions, the amount of vacant land required for greenfields projects will increase as well. Greenfields projects require well-located land ideally in proximity to the informal settlements the residents lived in before relocation. Land acquisition and assembly is a critical aspect of Upgrading projects and of Greenfield projects. In the context of National Government imperatives as well as IDP objectives, the focus will be on increasing housing densities in appropriate locations thus reducing the amount of vacant land required. This shift towards eliminating urban sprawl and towards more sustainable settlements is acknowledged and accepted as it also drastically reduces the amount of funding that the Municipality will require to budget for extending bulk infrastructure and providing new community facilities.

Land availability and land demand for low income housing has been addressed to an extent in the Housing Unit’s Strategic Housing Framework. However, a number of constraints to land acquisition need to be acknowledged. These include amongst others, poor geo-technical conditions, high land values, competing land uses, environmental restrictions, land claims, conflicting interests especially with adjoining communities. In addition the acquisition of land, particularly in cases where there is mixed land ownership, i.e. a combination of either Municipal, State, private and unregistered owners, has resulted in the need for different approaches to negotiations and different procedures for acquisition. This has resulted in unnecessary delays and often frustration.

Availability of well-located land for public housing remains a serious challenge especially because the sustainability of settlements depends strongly on their location and accessibility. Well-located land is generally expensive and subject to competition from other uses. In the past the cost of land acquisition was capped by the limit imposed by the housing subsidy but this no longer applies. Consequently the acquisition of land for human settlements has suffered.

The Department of Land Affairs (DLA) reports that it does not have sufficient budget for land acquisitions in eThekwini. The Housing Development Agency (HDA) has a mandate to acquire land for human settlements but is currently only involved in land acquisitions in the Cornubia project in eThekwini. Land supply is challenging. Land owned by the Municipality can and often has been used for housing purposes, but is usually subject to intense competition for other uses.
The processes to use land owned by other spheres of government for housing tend to be complicated and time consuming. In addition land owned by State Owned Entities (SOEs) is being treated as a balance sheet asset and consequently sold or let at market prices. At market price, acquisition of private land is often the faster option. Despite the difficult context in which housing officials have had to operate, the identification and assessment of land for housing continue

The Housing Sector Plan approved by Council in December 2011 alluded to the workings of a project prioritisation model. The model principally prioritises housing projects according to location. It should be applied to all types of housing projects namely Greenfields and Upgrading Projects, but not to Rural projects. The following criteria have been developed to assess the locations of future projects:

- Within the Urban Development Line
- In walking distance of Public Transport Trunks
- In Existing Urban Settlements whose current densities promote sustainability
- At low investments in new Bulk Infrastructure
- Close to Selected Public Transport Interchanges
- Close to Basic Social Facilities.

Improved locations of housing and improved accessibility, especially of low-income housing, is therefore a major goal of the Housing Spatial Plan. More recently the model was revised to include an additional two criteria viz. Personal Travel Costs and Proximity to Employment and Economic Opportunities.

The following map represents the housing plan reflecting the Human Settlement Projects planned and being implemented during the MTEF period for the Municipality:
2.7.6 Challenges to Housing Delivery

In the last two years the delivery targets of 13,000 and 8,500 units respectively have not been achieved. Obstacles to delivery included:

Regulatory Obstacles:
The most often mentioned regulatory obstacles or delays for housing delivery are:
- Environmental Impact Assessments (EIA) rarely stop housing projects but frequently delay them because long and complicated processes need to be followed before permission from the Province (Department of Agriculture, Environment and Land Reform) can be obtained.
Town planning requirements are principally township establishment. This often requires rezoning of the land. The new KZN Planning and Development Act (PDA) enables the Municipality to carry out rezoning and township establishment in its own right without engagement with Province. The Municipality would be interested to explore a streamlined town planning process, with cadastre being formally defined only for commercial and social sites and for roads, and with a less formal process for the definition of individual residential sites.

Land Acquisition Obstacles:
The scarcity of well-located land is often highlighted. EThekwini has a very low density with significant infill areas. The problem is not that there is no vacant land, but rather that well-located land is expensive and a subject of competition from other users. The problem of scarcity of land could be addressed through higher density developments but these have their own obstacles, as indicated below. The Municipality is interested to investigate if the apparent scarcity of funds for land acquisition can be resolved. If it could be resolved, the Municipality would be interested to establish a Municipal Strategic Land Fund.

Obstacles to Densification:
The main obstacles to densification are:

- Higher construction costs of the top-structure
- The apparently entrenched perception that low-income housing should be detached houses on individual plots.

Funding Constraints:
Funding constraints are experienced for:

- Land assembly
- Bulk infrastructure
- Local infrastructure
- Top-structures, particularly for medium- and high-density housing typologies.

2.7.7 Summary of the Built Environment, Housing and Land Availability Issues and Trends

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>UNDERLYING CAUSE</th>
<th>SPATIAL IMPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Socio Economic Conditions including: High levels of unemployment Increasing immigration Spatial concentrations of low income households</td>
<td>Rapid urbanization Skills mismatch Peripheral residential developments located far from employment opportunities</td>
<td>Rapid urbanization give rise to: Growth of informal settlements Pressure for provision of social facilities Pressure for development and delivery of basic needs such as water, electricity, sanitation, waste removal and social amenities</td>
</tr>
</tbody>
</table>
2. The current Municipal structure that results in high social and economic costs especially in terms of Residential Pattern/Housing

- Location of incompatible land uses adjacent to each other
- Environmental and social conflict arising from poor planning

3. Constraints associated with restructuring city form

- National Housing Subsidy Scheme constraints higher density, multi-storey housing options for assisted housing
- Constraints: the building thresholds to support higher levels of services, facilities and public transport.

- Availability of well-located land is a serious challenge especially because the sustainability of settlements depends strongly on their location and accessibility. Well-located land is generally expensive and subject to competition from other uses.
- Location of public housing beyond the urban development line = urban sprawl

- insufficient information on rural housing
- No clear direction on rural housing development in relation to provision of subsidised housing

2.8 Social Facilities at eThekweni Municipality

Social facilities are publicly and privately owned and operated properties and/or services which are publicly accessible, which deal with social development and socio-economic development, and which are necessary components of sustainable human settlements. Social facilities include:

- Health
- Fire Protection and Emergency Services
- Police
- Education
- Sports and Recreation
- Social Grants
- Cemeteries
- Government Offices

Improved quality of life for eThekweni citizens means that they are able to enjoy equitable opportunities to participate in culture, leisure and education, such as those that are available through community facilities. Ensuring full service provision of community facilities needs to be closely guided by service standards, and requires the necessary operating funds to sustain these facilities on a day to day basis.
The provision of community facilities and services is guided by the standards developed by municipal line departments and are based on a combination of national norms and the ability to sustain these standards given municipal budget constraints.

An Access Model has been developed to match the demand for facilities, based on population numbers and income and age profiles, with the supply and capacity of facilities geographically. The social services currently included in the Access Model are Primary Health Clinics, Community Health Centres, Primary Schools, Secondary Schools, Libraries, Fire Services, Community Halls, Sports Fields, Indoor Sports Halls, Sports Stadia, Swimming Pools, Cemeteries, Parks, and Police.

This assessment shows the nature and extent of facility backlogs across the Municipality and all requests for the construction of new facilities are currently being assessed within this context.

2.8.1 Service Levels and Backlogs

According to the Access Model, the current levels of service for social facilities are as shown alongside. A capital development program is in the design phase to respond to the most critical under-provisions of service. Overcoming under-provision in security, fire protection, health care, education (including libraries), cemeteries and basic recreation are likely to be prioritised.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Current service coverage as % of the 2006 population.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police</td>
<td>No figures at present</td>
</tr>
<tr>
<td>Clinics</td>
<td>56%</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>Not measured as %</td>
</tr>
<tr>
<td>Primary schools</td>
<td>83%</td>
</tr>
<tr>
<td>Secondary schools</td>
<td>77%</td>
</tr>
<tr>
<td>Libraries</td>
<td>70%</td>
</tr>
<tr>
<td>Fire Stations</td>
<td>72%</td>
</tr>
<tr>
<td>Sports fields</td>
<td>91%</td>
</tr>
<tr>
<td>Parks - local</td>
<td>Under Review</td>
</tr>
<tr>
<td>Indoor Sports Halls</td>
<td>71%</td>
</tr>
<tr>
<td>Sports Stadia</td>
<td>80%</td>
</tr>
<tr>
<td>Swimming Pools</td>
<td>70%</td>
</tr>
<tr>
<td>Parks - regional</td>
<td>Under Review</td>
</tr>
<tr>
<td>Community Halls</td>
<td>79%</td>
</tr>
</tbody>
</table>

2.8.2 Reconsidering the Basic Approach to meeting Community Facilities Backlogs

About R 4.5 billion would be required for the construction costs of all facilities proposed by the Access Model. Additional funds would be required for land acquisition, equipment, staffing, and other operating costs. For the MTEF period ending 2011/12, eThekwini Municipality committed R 83 million for a pilot program for essential social facilities.

Social facilities are either funded by the Municipality or Provincial Line Departments. For some types of facilities such as libraries and clinics there are overlapping funding responsibilities. The pricing of the Optimal Locations compared to the Capital Environment prompted the need to reconsider the basic approach.
Some of the new thinking to emerge was to:

- Distinguish Essential Services from Desirable Services, and by applying different accessibility levels for Essential Services and Desirable Services, reduce the capital requirements.
- Through the cataloguing process, discover “hidden” facilities – hidden either because they had not been recorded at all or their sizes had been under-estimated (both of which seems to be the case for local and regional parks), or hidden because they have not until now been regarded as social facilities (which is the case for school sports fields, though with many notable exceptions where school fields also already serve as community fields). The discovery of hidden facilities ought to lead to a revision of the current accessibility, and consequently a smaller backlog than originally thought.
- Reduce the space standards and-or planning thresholds for some facilities, particularly basic recreation.
- Rather than build new facilities or expand existing ones, increase the operating capacity at existing facilities, through increased opening hours, increased opening days, equipment improvements, and process improvements.
- Expand existing facilities rather than build new ones.
- Only consider building new facilities after the possibilities of increasing operating hours and-or building extensions at existing facilities would not be enough or nearly enough to meet local backlogs.
- If a new facility was indeed required, then consider building adjoining an existing facility.
- If a new facility was required and it could not be adjoined to another facility, then find a site adjacent to the existing facility, and if this was not possible, then find a site within close proximity (less than 400m).
- Only consider building stand-alone facilities on their own sites and isolated from other social facilities as a last resort.

Based on the distinction of Essential Facilities and Desirable Facilities, the funding requirements of social facilities are as shown below.

**Table 10: Funding Requirements of Essential Social Facilities**

<table>
<thead>
<tr>
<th>ESSENTIAL FACILITIES</th>
<th>Current accessibility</th>
<th>Accessibility after new 'big impact' facilities</th>
<th>No. of proposed new 'big impact' facilities</th>
<th>Average Total Costs 2011 Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinics</td>
<td>56%</td>
<td>93%</td>
<td>19</td>
<td>No.</td>
</tr>
<tr>
<td>CHCs</td>
<td>56%</td>
<td>93%</td>
<td>7</td>
<td>No.</td>
</tr>
<tr>
<td>Fire Stations</td>
<td>72%</td>
<td>85%</td>
<td>8</td>
<td>No.</td>
</tr>
<tr>
<td>Primary schools</td>
<td>83%</td>
<td>100%</td>
<td>20</td>
<td>No.</td>
</tr>
<tr>
<td>Secondary schools</td>
<td>77%</td>
<td>99%</td>
<td>21</td>
<td>No.</td>
</tr>
<tr>
<td>Libraries</td>
<td>70%</td>
<td>92%</td>
<td>11</td>
<td>No.</td>
</tr>
<tr>
<td>Sports Fields</td>
<td>91%</td>
<td>91%</td>
<td>0</td>
<td>No.</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Ha</td>
</tr>
<tr>
<td>Police Stations</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>86</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11: Funding Requirements of Desirable Social Facilities

<table>
<thead>
<tr>
<th>DESIRABLE FACILITIES</th>
<th>Current accessibility</th>
<th>Accessibility after new 'big impact' facilities</th>
<th>No. of proposed new 'big impact' facilities</th>
<th>Average Total Costs 2011 Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Sports Halls</td>
<td>71%</td>
<td>71%</td>
<td>3 No.</td>
<td>66</td>
</tr>
<tr>
<td>Sports Stadia</td>
<td>80%</td>
<td>80%</td>
<td>4 No.</td>
<td>202</td>
</tr>
<tr>
<td>Swimming Pools</td>
<td>70%</td>
<td>70%</td>
<td>8 No.</td>
<td>227</td>
</tr>
<tr>
<td>Local Parks</td>
<td>Under Review</td>
<td>100%</td>
<td>687 Ha</td>
<td>1,731</td>
</tr>
<tr>
<td>Regional Parks</td>
<td>Under Review</td>
<td>100%</td>
<td>188 Ha</td>
<td>710</td>
</tr>
<tr>
<td>Halls (A, B, C)</td>
<td>79%</td>
<td>79%</td>
<td>8 No.</td>
<td>60</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>898</strong></td>
<td></td>
<td></td>
<td><strong>2,996</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>984</strong></td>
<td></td>
<td></td>
<td><strong>4,644</strong></td>
</tr>
</tbody>
</table>

2.8.3 Spatial Distribution of Proposed Additional Capacity of Selected Essential Social Services

Figure 28: Proposed Additional Social Facilities
2.9 Infrastructure Services

The Municipality has substantial excess capacities in central areas for certain engineering services and most social services. However, developments have tended to happen in the outskirts of the Municipality where there is limited bulk infrastructure and services. The property boom of the last few years has placed significant pressure on road and sewer infrastructure particularly in the northern and western regions and the inability to expand these systems ‘ahead of the growth’ has to some extend retarded this growth. The slowdown is now providing the city with an opportunity, within its resource capacity, to address bottlenecks over the next few years to resume more efficient and more equitable growth through the timeous supply of infrastructure in key growth areas.

The challenges with regards to bulk infrastructure cost and availability has a direct relationship to the provision of housing especially low income housing. Over the years the trend with housing development and location in the Municipality has mainly been based on the availability and cost of land rather than infrastructure costs. This has led to infrastructure backlogs which are associated with high infrastructure cost as these developments are built in inaccessible peripheral locations outside the urban /services edge. Development beyond the ‘infrastructure/services edge’ is also outstripping current infrastructure capacity budgets. This causes delays in development and also results in development occurring in inappropriate areas.

For financial sustainability more housing projects should be encouraged inside the infrastructure services edge. Developing inside the infrastructure services edge and within the urban core will promote densification in accessible areas while creating thresholds for Public Transport. The following map shows the comparison costs of developing within and outside the infrastructure services edge:
Source: eThekwini Municipality: Engineering Unit

Figure 29: Infrastructure Development Cost
2.9.1 Water

The water supply to the KwaZulu-Natal Coastal Metropolitan Area is experiencing serious difficulties. Poor long term infrastructure planning and decline in investment in bulk infrastructure over the last 20 years and above average rainfall over the last few years has led to a false sense of security regarding the water supply situation.

A below average rainfall period will result in the need for water restrictions with their associated impacts on the local economy. The continued economic growth and development of the KwaZulu-Natal Coastal Metropolitan area requires an assured water supply in line with DWA's policy of water for growth and development.

The Springrove Dam was commissioned in November 2013 and notwithstanding the additional capacity that will be available once completed, eThekwini will continue to suffer from a water supply shortage. Water recycling may, if all the approvals are received, come on stream in 2016 but more efficient utilisation of the existing resource is a priority. From the point of view of current water supply, there is insufficient supply to deal with any further development as envisaged in the SDF and SDPs.

With the commissioning of Spring Grove Dam the level of assurance of the Mgeni System is above 95% but is still less than 99%. The situation is sufficiently severe that water restrictions are inevitable once rainfall returns to normal and the Head: Water and Sanitation has reported this to the eThekwini Council with a recommendation that a senior political delegation request a meeting with the Minister of Environment and Water Affairs to unblock the obstacles around bulk water supply and the finalisation of river reserve determinations.

In the area of current water delivery, 91% of households have water available within 200m of their dwelling. To cater for the indigent, the Municipality as part of its welfare package provides a basket of free basic services which include water, sanitation, and electricity and refuse removal for informal and rural settlements in accordance with a defined level of service. In addition, those consumers living in formal properties having a maximum property value of R120000 are considered to fall in the indigent category and therefore also benefit from free service delivery. The statistics recorded in the 2011/12 municipal scorecard already reflect the above but a new set of KPIs has been introduced to clearly reflect the percentage of estimated indigent households with access to free basic services.

In respect of the provision of water, sanitation and electricity to schools and clinics, the role of the Municipality is to ensure that either bulk infrastructure is available to allow connections, or that acceptable levels of service are defined to enable appropriate action to be taken by the provincial Education and Health authorities.
Section 3.1.3 explained that there are three potable water supply dams located in eThekwini Municipality: Hazelmere Dam; Inanda Dam and Nungwane Dam. However, as shown in Figure 29, the primary water supply for eThekwini Municipality is obtained through the Mearns Weir and the Spring Grove Dam located on the Mooi River and the Midmar Dam, Albert Falls Dam, Nagle Dam and Inanda Dam located on the uMngeni River.
2.9.2 Sanitation

The central and suburban regions of EMA are serviced with a water-borne sewerage system that transports sewage to a number of sewage treatment plants for treatment prior to final discharge in the Indian Ocean. There is spare capacity in the Central core area of the Municipality (approximately 100Ml/day, less in the North and South and very limited capacity in the Outer West (less than 2Ml/day). In line with the planned growth trajectory to the North, the Municipality is planning upgrades and a new regional works on the UMdloti River.

The outer peri-urban and rural areas, as well as informal settlements, are provided with on-site sewage disposal. The supply of basic sanitation to the poor households (ventilated improved pit latrines for dense settlements and urine diversion (UD) toilets for less dense settlements) is founded by national government. The UD toilet is the Municipality’s preferred method of sanitation in less dense settlements.

The following map represents the existing sewerage network for the Municipality:
Providing a sewerage service for further development can necessitate expanding existing sewage treatment works and/or building new works. Under the National Water Act, to undertake either of these activities an application for a water use license must be made. Before a license application is assessed by the Dept of Water Affairs (DWA) the ecological reserve of any affected water resource must be established.

Although the ecological reserve determination studies have been completed for a number of the eThekwini estuaries - and submitted to DWA by the specialists - these studies have not been finalized by DWA.

However, it already seems to be clear from a sewerage planning perspective that, if the intentions of the ecological reserve process are to be met, and the current land uses in the SDPs remains unchanged, a combination of direct re-use of treated sewage effluent for potable water supply and some quite extensive and expensive, cross-catchment pumping, will have to form the basis of future sewerage planning.

### 2.9.3 Solid waste

The dominant method of disposal at the EMA is done through landfills. Over 1 million tons of waste per annum is accepted by the four main landfills in the municipal area. EThekwini Municipality's waste management agency, Durban Solid Waste (DSW) has been responsible for ensuring that the waste sector is one of the most active in initiating actions that contribute towards a reduction in carbon emissions. DSW has promoted a number of options for recovering materials that would otherwise end up on a landfill. These include:

- Separation at source with curbside collection (also known as the Orange bag system)
- Material recovery facilities where recyclables contaminated by other waste are recovered. These include drop off centers, buy back centers and mixed waste materials recovery facilities.

The Municipality runs 3 landfills: Bisasar, Mariannhill & Buffelsdraai. This will change in the near future where Bisasar landfill will close and a new site in the south at Lovu will open. The landfill at Bul-Bul, owned by Wasteman is closed at this time but they are attempting to get the site reopened. The only other private landfill is that owned by Enviroserv at Shongweni. Technically Durban only has 4 operational landfills taking in some 1,4m tons of waste. In the medium term Mariannhill will close and be replaced by a new site also at Shongweni (probably around 2018/2019). DSW is also looking to introduce waste to energy projects (i.e. converting waste directly to energy). DSW are also investigating if building rubble can be used more effectively but these are not yet reality.

2.9.4 Electricity

EThekwini Electricity (EE) purchases from Eskom, the national generator and transmitter of electricity, with six infeed points viz. Klaarwater, Ottawa, Durban North, Durban South, Lotus Park and Kingsburgh. Electricity is purchased at 275 kV and 132 kV at these points and are transformed and transmitted to end customers at voltages of 132 kV, 33 kV, 11 kV, 6.6 kV, 400/230 V.

The bulk of electricity in South Africa is produced from coal, with generating stations situated in Mpumalanga, Limpopo and Gauteng. Electricity is generated at the City's landfill sites at Bisassar Road (6 MW) and Mariannhill (1 MW). 500 kW of electricity are generated through photovoltaic cells in Hazelmere. EE’s electricity demand is presently 1.67 GW. Currently there is a constraint on Eskom’s generation and this has led to load-shedding. EE’s customers’ experience load-shedding in blocks of 2 hours. At present new generating stations are being built with the first due to be commissioned in June 2015. Customers are advised to incorporate energy efficiency within their development.

EE’s electrical networks have sufficient bulk capacity, with localized constraints in the Westmead, Springfield and Assagay/Shongweni areas. Plans are in place to rectify these. However, the process is quite elaborate and this constraint will remain a challenge until 2019 for Westmead and 2023 for the Shongweni and Assagay areas.

The electrical master plan for eThekwini was completed in 2011. This study included the long-term demand and energy forecast and the associated financial cash flow requirements to support the infrastructure strengthening and renewal. This study focuses on the eThekwini area of supply within the eThekwini municipal boundary with the objective of the study being to provide eThekwini Municipality a clear view and plan to develop the electrical infrastructure to support the envisaged...
future demand. The 20 year load forecasts are currently being revised and will then be used to update the current masterplan, an exercise that will be completed by 2016.

Load Forecast

![Graph showing Ethekini Municipality's Electricity demand from 2014 to 2019](image)

*Figure 33: The Five Year Demand Forecast*

Existing electrical networks are indicated in the map below:

![Map of existing electrical networks](image)

*Figure 34: Existing Electrical Networks*
Proposed Network (Y2029). The map below indicates the future expansion plans:

*Figure 35: Proposed Electricity Network*
2.9.5 Combined Infrastructure Backlogs

The provision of acceptable basic services is a critical element in the national developmental agenda. Water, electricity, sanitation, waste removal and social amenities are key critical services which have been identified by communities that are required to meet their basic needs. Limited funding and exponential growth in the Municipality has increased the levels of backlogs. The current existing backlogs within the Municipality and as contained in the IDP are shown are summarised in table 12 below:

Table 12: Utilities and Services

<table>
<thead>
<tr>
<th>Basic Service</th>
<th>Existing Backlog (Households) as at 30 June 2011</th>
<th>Timeframe to address based on current funding/delivery levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>74481</td>
<td>37 years</td>
</tr>
<tr>
<td>Sanitation</td>
<td>231387</td>
<td>14 years</td>
</tr>
<tr>
<td>Electricity</td>
<td>323000</td>
<td>32 years</td>
</tr>
<tr>
<td>Refuse removal</td>
<td>0</td>
<td>0 years(^4)</td>
</tr>
<tr>
<td>Roads</td>
<td>1 136 kms</td>
<td>103 years</td>
</tr>
<tr>
<td>Water</td>
<td>74481</td>
<td>37 years</td>
</tr>
</tbody>
</table>

The following map highlights the various service backlogs within the Municipality:

Figure 36: Infrastructure (combined) Services Backlogs

\(^4\)History has shown that this backlog grows every year as new needs are uncovered through modelling of the network as well as new backlogs arising due to storm events.
Vast strides have been made by the Municipality to address the service delivery backlogs and specific strategies have also been put in place to deal with the existing backlogs. The achievements to date include:

- 15 000 new customers having access to electricity each year;
- 852 000 customers having access to water;
- Desludging of 30 000 VIP pit latrines;
- 100% refuse removal coverage;
- 33 pedestrian bridges and 320kms of sidewalks constructed

The eThekwini Municipality is committed to ensuring that all backlogs in the provision of infrastructure are removed and as such has embarked on a Municipal Infrastructure Investment Framework for the Municipality. In line with the Investment Framework, the EMA can make best use of existing resources and infrastructure can be achieved by building upon existing concentrations of activities and existing infrastructure.

A number of water plans have been produced by the eThekwini Water Service (EWS) to address the backlogs in water supply and to meet future demand. These include:

- A pre-feasibility study to determine potential of hydro-turbine projects in Hillcrest, Wyebank Road and Inanda. The estimated potential is 9mW and is anticipated that they will be commissioned in 2013.
  
  There are plans in place for EWS to generate power, investigation and feasibility has been done on mini-hydro power stations on the Western Aqueduct that will initially produce 2MegWattHr and increase to 6MegWattHr when the full capacity of the pipeline is realized. There is also a pilot project looking at mini-hydro and pico power stations located at the inlets of our reservoirs.

- Mini-turbines at a water reservoir. Total generation capacity is 600-700kW and they have a potential to be replicated at other Reservoirs.
  
  There is a pilot project where we will be installing 2 pico-power stations producing 100kiloWattHr.
  
  There is also a feasibility study being conducted looking at potential hydropower stations throughout the city.

Investigation of the potential of pico-turbines on the water reticulation system down-stream of water reservoirs:

- Pre-feasibility study of a large scale desalination plant with a projected capacity of 450ML/day. This would result in the availability of a new water source but it is recognized to be energy-intensive.
  
  UW has carried out a feasibility on two desalination plants; one in the north at La Mercy Beach and one in the south at Illovo. Both these plants will have a capacity of 150ML. A 1ML trial plant
will be installed at Scottsburg to understand and test the water for its characteristics and to look at different methods of processing desalinated water.

- Feasibility of recycling domestic waste-water to potable drinking standard.
  EWS has carried out a feasibility study for reuse of water and has started the Environmental Impact Assessment process but this was brought to a halt due to an objection of 5000 signatories from the community. We are still await approval from city council to proceed with the project.

- Water recycling for industrial use.
  EWS has a 45ML plant in the southern basin servicing different industries. This plant is operated and maintained by a private public partnership.

The status of the projects Umgeni Water is implementing to ensure assurance of water supply for eThekwini Municipality is summarised in Table 13 below.

**Table 13: Status of Umgeni Water Projects**

<table>
<thead>
<tr>
<th>SERVICE DELIVERY PLANS (CATALYTIC PROJECTS)</th>
<th>Progress to Date</th>
<th>BUDGET</th>
<th>LOCALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upgrade of Hazelmere System</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade the Hazelmere System to meet the growing demands in the northern area of eThekwini Municipality, southern region of Ndwedwe Municipality and KwaDukuza Municipality.</td>
<td>Hazelmere WTP: Upgrade - 90% complete. Hazelmere WTP Pump Station Upgrade - 84% complete. Anticipated completion is December 2014.</td>
<td>Total Project Cost: R248,615,000 (subject to review). Budget (subject to review): 2014/2015 - R39,095,000 2015/2016 - R6,169,000</td>
<td>Wards 58, 60 and 61 in eThekwini Municipality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maphephethwa WTP Upgrade</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase the capacity of the WTP from 2.7ML/day to 5ML/day to meet the increase in demand.</td>
<td>Project in snag-list. Anticipated completion is March 2015.</td>
<td>Total Project Cost: R56,000,000 (subject to review).</td>
<td>Ward 2 of eThekwini Municipality</td>
</tr>
</tbody>
</table>
## SERVICE DELIVERY PLANS (CATALYTIC PROJECTS)

<table>
<thead>
<tr>
<th>Progress to Date</th>
<th>BUDGET</th>
<th>LOCALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed Feasibility Studies are currently being conducted on the various components of the scheme. The project is divided into three components: - Module 1: Technical Feasibility Study: Raw Water (Appointment by Department of Water Affairs); - Module 2: Environmental Impact Assessment (Joint appointment by Department of Water Affairs and Umgeni Water) - Module 3: Technical Feasibility Study: Potable Water (Appointment of PSP by Umgeni Water) DWA has recently initiated a detailed feasibility investigation of the water resource components of this scheme (Module 1). Umgeni Water has initiated a detailed feasibility level investigation of potable water component (Module 3). The draft feasibility report is anticipated to be completed by end Nov 14. The earliest possible commissioning for Phase 1 is 2023.</td>
<td>Total Project Cost for Infrastructure Component: R2,703,707,000 (subject to review). Budget (subject to review): 2014/2015 - R299,000 2018/2019 - R20,000,000 Cashflows Beyond 5 Years 2018/2019 - 2041/2042 - R2,680,000,000</td>
<td>Ingwe, Richmond, Mkhambathini and Impendle Municipalities. The beneficiary is eThekwini Municipality.</td>
</tr>
<tr>
<td>Award of tender is anticipated to occur in February 2015. Anticipated date of completion is April 2016.</td>
<td>Total Project Cost: R90,132,000 (subject to review). Budget (subject to review): 2013/2014 – R2,868,000 2014/2015 – R21,271,000 2015/2016 – R80,000,000 2016/2017 – R81,661,000 2017/2018 – R59,000,000</td>
<td>Ward 12, uMgeni Local Municipality but raw water into the regional WTP therefore entire PMB-Durban region benefits.</td>
</tr>
</tbody>
</table>

### The uMkhomazi Water Supply Project

Current water demand from the Mgeni System has already exceeded the 99% assurance of supply level that will be achieved with the commissioning of the MMTS-2. Further augmentation of the Mgeni System is therefore already required. Water resource development on the uMkhomazi River has been identified as the next likely major project to secure long-term water resources for the Umgungundlovu and eThekwini municipal areas. The purpose is therefore to augment the water resources.

### '251 Raw Water Pipeline: Midmar Dam to Midmar WTP

The current raw water pipeline is the only raw water supply into the Midmar WTP and this therefore is a risk to the entire region. The installation of a second raw water pipeline will mitigate this risk.

### Midmar Water Treatment Plant Upgrade

To upgrade the current WTP to meet increasing demands and to match the available water resources once MMTS-2 is commissioned.
### 2.10 Agriculture

The National Department of Agriculture, Forestry and Fisheries (DAFF) together with the Provincial Department of Agriculture and Environmental Affairs (KZN DAEA) are critically concerned about the food security challenge threatening South Africa as well as the drastic decrease of available land for agriculture. This is as a result of climate change, poor management of agricultural land, urbanisation and pressure for development of non-agricultural land uses amongst others. Only 12.2 million hectare of South African land is currently under cultivation to support population growth estimated to be 52 million people in the country. This translates to only 0.23ha of agricultural land per person, which is not adequate to provide for healthy livelihood and sustain the nation. The development pressures on agricultural land are intensifying the problem.
Strategic Integrated Project (SIP 11) is one of the eighteen flagship infrastructure projects, managed by the Presidential Infrastructure Coordinating Commission (PICC). It is a response to the national development goal of an Integrated and Inclusive rural economy. The main objective of the SIP 11 is to improve investment in agricultural and rural infrastructure that will support expansion of production and employment creation, small-scale farming and rural development, including facilities for storage; transport linkages to main networks; fencing of farms, irrigation schemes, improved Research and Development on rural issues (including expansion of agricultural colleges), processing facilities, aquaculture incubation schemes and rural tourism infrastructure. Focus is on the eight different value areas, namely Crops, Irrigation, Livestock, Horticulture, Fisheries, Forestry, Biosecurity and Research and Development. SIP 11 focuses on maximising the use of communal land and productivity of land reform projects; Expanding irrigated agriculture and support for agricultural sectors and regions with high productive potential.

The map below shows SIP 11 projects throughout the country.

![SIP 11: Anchor Projects Locations: per value chain element](http://pmg-assets.s3-eu-west-1.amazonaws.com/141021sip_11.pdf)


Figure 37: SIP11 - Anchor Projects Locations: per value chain element

### 2.10.1 State of Agriculture in KwaZulu-Natal

Agriculture is one of the major economic sectors in the KZN province. KwaZulu-Natal province has exported 58% of agricultural products outside the KZN province via the Durban port of which citrus fruit was the largest export. The department has acknowledged that agriculture is providing job opportunities, a source of income and sustains a number of households in KZN especially in rural
municipalities. About 2.694 million tons of grain was imported in 2014; about 812% of these went through KZN; and All KZN exports and imports are taking place in the eThekwini Local Municipality.

The KwaZulu-Natal Department of Agriculture and Environmental Affairs (KZN DAEA) has now prioritised systems to closely manage and preserve agriculture land through policy framework. KZN DAEA introduced different strategies and interventions to effectively manage the high agricultural potential land. Both KZN DAEA and National DAFF resolved that this cannot be viable if is done in isolation, hence there is a need to work through other government departments particularly the Department of Cooperative Government and Traditional Affairs (COGTA) as well as local governments. The KwaZulu-Natal Department of Cooperative Governance and Traditional Affairs (KZN COGTA) has now put Agriculture strategy as a requirement to all municipalities. This strategy is required to be submitted as part of Spatial Development Plan (SDF) so that it will be implemented. Both DAEA and DAFF further requires all municipal SDF to capture agriculture as a land use, identify Agriculture potential areas as well as municipal agriculture strategy to manage and develop agricultural sector. This approach has directly put agriculture under municipal planning domain and there is an expectation that the strategy will cascaded to all level of plans prepared by the municipal planning departments from spatial plans to land use schemes.

The KZN DAEA has developed a number of tools and strategies in alignment with policies (Act 70 of 1970 and PGDS) to ensure compliance of municipalities and developers to retain and protect high agriculture potential areas within their areas of jurisdiction, these include:

a) **KwaZulu-Natal Agricultural Land Potential Categories Demarcation**, designed to analyse and define agricultural potential of each area in KZN to guide the local government or developers in areas where act 70 of 70 could be uplifted for non-agricultural use and the areas that need to be retained (no go areas). It also define the agricultural potential of a specific area, from an arable as well as a grazing perspective.
b) **Agro-Ecological Zone (AEZ)**, defined in terms of grouping similar characteristics in relation to land suitability, production potential as well as environmental impact, climate, landform and soils and/or land cover, specific range of potential and constraints for land use.

c) **Agricultural Protected Area (APA)**, defined the potential agricultural categories across varying and diverse natural resources rather than for individual land parcels in isolation. This is aimed at protecting and managing a larger unit or an area across both provincial and national levels. APA recognises the value of agricultural land as an economic and natural asset, and thus should be supported through necessary infrastructure and development plans and relevant legislation.

**2.10.2 State of Agriculture in the eThekwini Municipality**

EThekweni like any municipality within the KZN province has the best/ high agricultural potential areas. However there is minimal agricultural activities that are occurring in eThekwini Municipality. This is qualified by the following maps received from DAEA:
Figure 39: ETekwini Agricultural land categories 2015
Figure 40: EThekwini Agricultural Land Use
EThekwini Municipality has a significant amount of land that falls within high potential agriculture categories and these areas are under pressure for development. The map shows areas for agricultural land use which is minimal in comparison to the areas identified as suitable for agriculture. Almost 60% of the municipality is permanently transformed or developed to none agricultural uses. The Municipality has identified Dube Trade Port and surrounding areas a major municipal investment area, whereas on the other hand it is identified as primary agricultural land. This is a challenge for both municipality and DAEA because the municipality wants to release this area amongst others from Act 70 of 1970, while the DAEA does not give approval for the development of areas falling within the areas designated as having primary agricultural potential. See map below
It is clear that there is no alignment between eThekweni Municipality SDF with the DAEA agriculture land category; the municipality has committed resources for development in areas identified as high agriculture potential. The eThekweni Municipality and DAEA are engaging on an on-going basis in trying to resolve and obtain alignment of the SDF Intentions with DAEA intentions. The identified high
potential agricultural land category presents a number of challenges on the eThekwini Municipality to realise its SDF intentions, namely:

a) In as much as the eThekwini municipality has areas highlighted as the high agricultural potential land as reflected on the map above, This cannot be realised to its full potential because the eThekwini Municipality is the economic and industrial hub of KZN and there is an expectation to provide for job opportunities to alleviate poverty in KZN as well as associated housing and high order social facilities’ demand to accommodate migration.

b) Agriculture as an economic sector contributes very little to the eThekwini GDP by only 1%, it is difficult for the Municipality to treat agriculture as a critical economic sector and give attention in the same manner as the local municipalities where agriculture is the largest contributor to the GDP. Most of KZN Agriculture exports and imports occur within eThekwini Municipality.

c) The DAEA indicates that grazing land and agricultural land in general needs to be protected by the municipalities but does not provide resources to undertake land banking for agriculture protected areas (APA), also there is no defined scope for urban municipalities to introduce other methods to provide for food security.

The eThekwini Municipality’s large percentage of agricultural land has already been lost to non-agricultural land uses, but the eThekwini municipality does provide for agricultural activities such as grazing land through commercial agriculture and has introduced different means/strategies and systems to deal with climate change, urbanisation and food security challenges. It is noted that an internationally recognised food security programme (UMbumbulu Agricultural Hub) resides within the Municipality as a viable strategy for urban agriculture. Further food security programmes and urban agriculture should be explored.

2.10.3 ETHekwini Municipality’s approach to Agriculture

The greatest challenge facing communities in the municipal area is poverty and food insecurity. Agriculture and food security is considered a national and provincial priority. The Municipality is becoming more urbanised and the reliance on primary sector is decreasing. ETHekwini’s agricultural potential is being reduced by the rate of urbanization, which restricts expansion. It is anticipated that climate change will have a significant impact on the weather variability and agricultural production, which will in turn impact on the most vulnerable rural communities.

In the ETHekwini Municipality, the greatest and available high potential agricultural land exists in the Outer West mainly within the rural stretch from Assagay to Hammarsdale which includes areas such as parts of Shongweni, Summerveld, Alverstone, Clifffdale, Pinetown Rural and Monteseel. Currently 36% of the Northern area is under agriculture, of which 31% is sugar cane. Sugar cane occurs predominately within the coastal plain and in Buffelsdraai and mixed agriculture around Hazelmere Dam. High value agricultural land is located at Cornubia, west of the R102, between Tongaat and
Verulam and within the Buffelsdraai area. Other good agricultural opportunities exist in the Southern Municipal Planning Region within parts of Inwabi, Magabheni/ Umnini and Amahlongwa Rural area.

The protection of agricultural and scenic land abutting the urban areas adjacent to the rural landscape is particularly important. This is often the most valuable land from an agricultural or tourism point of view because of its close proximity to an urban area. It should not be disturbed by piece-meal or leap-frog urban development. Where possible, sufficient arable land within the municipality should be reserved for agriculture in the event of an energy or transport crisis as well as to promote local economic development and land reform.

Through initiatives such as shifting to new crops which are more resilient to climatic conditions and can meet the demands of an ever growing population, maintaining agricultural land so as to keep it arable, introducing mitigation methods to fight climate change, promotion of sustainable agricultural production, ensuring reasonable food costing as well as introducing and managing community gardens, the Municipality could play a major role in ensuring food security.

A multi-pronged approach is necessary to improve the lives of the people. The key challenges faced include land shortages and ability to identify appropriate opportunities for local production of food. The Municipality has initiated a number of programmes to assist in the alleviation of food insecurity. These include the creation of dedicated structures to drive agriculture, aqua and poultry farming; soya bean projects, 20 community support farms; 423 community gardens, mushroom vs hydroponics project, One Home One Garden project, etc. Support in the form of seedlings and compost together with expertise is provided to communities to assist them in ensuring their food security.

In terms of urban and peri-urban agriculture, the Municipality has an Agro-ecology Programme in place which complements other municipal policies which focus on poverty and unemployment. The peri-urban agro-ecology strategy and programmes put in place by the eThekwini Municipality aims at promoting appropriate and sustainable approaches to the way in which agriculture is planned and implemented. Six agricultural support hubs have been established or under development which contain demonstration sites of agro-ecology techniques, a research and development centre on agro-ecology, training sites, a packing and marketing hub and a future seed bank. The hubs are as follows: Northdene Agro-ecology research & development Centre, Newlands-Mashu Permaculture Centre, Inchanga, Scorpio Place in Mariannridge, Mariannhill Monastery and Umbumbulu. The programmes primary targets are those with greatest need and where the most impact can be made with limited resources.

There are a number of agri-processing facilities in eThekwini which includes the abattoir at Cato Ridge, the Maidstone Sugar Mill, and the Sappi-Saiccor plant in Umkomaas. The Municipal Fresh Produce Market is located in Clairwood with Farmers Markets located in Tongaat, Verulam and Isipingo. There are three Agri-Hubs in eThekwini Municipality and these are:
- UmbumbuluAgriHUB (South)
- SterkspruitAgriHUB (Hammersdale/Shongweni)- Outer-west
- TongaatAgriHUB (Hambanathi/Greylands) - North

The following map reflects the eThekwini Agriculture Zonal Budget Gardens:
Figure 42: eThekwini Agriculture Zonal Budget Gardens
CHAPTER 3
SYNTHESIS OF KEY ISSUES, CHALLENGES AND DEVELOPMENT TRENDS WITHIN ETHEKWINI MUNICIPALITY

Synopsis: This chapter represents a synthesis of the key issues coming out of this analysis as a basis for informing the Municipal Vision, Principles, Strategies and Conceptual Framework proposals in Chapter 4 and 5. The synthesis also provides an overview of the spatial issues and opportunities within the Municipality and gives direction to the spatial proposals as outlined in Chapter 6.
3. SYNTHESIS OF KEY ISSUES, CHALLENGES & DEVELOPMENT TRENDS

The future development pattern of EMA is informed by the current realities of the Municipality as has been analysed in the previous chapters. Developing spatial guidance for the Municipality requires an understanding of the current situation in terms of challenges and key issues being faced by the Municipality and the opportunities available to address these. Together with an assessment of underlying causes and impacts, this understanding has provided a basis on which to utilize opportunities and to direct future development toward common goals. This chapter presents a summary of these issues to help develop spatial guidance for the Municipality. A summary of key issues as identified in the plan include the following:

a) The current urban form

The spatial structuring elements analyzed in the plan not only determine the structure of the Municipality but also contribute to the sustainability, efficiency and legibility of the Municipality. It is proposed in the plan that for the Municipality to perform optimally the overlapping systems of movement and activity need to be accessible to all communities, they need to operate efficiently and be sustainable. However, the current reality of the EMA (as influenced by previous planning ideologies) has resulted in some areas performing better than others due to their interconnectedness with other areas and due to their ability to support human activity adequately at the local neighbourhood level. The current reality is also that of segregation of people and activities which has resulted in a mismatch between workers and jobs reflected in the high levels of commuting between home and work especially for the poor.

The current spatial form of EMA is also fragmented with low densities. The spatial fragmentation and low density dramatically affect the access which residents can enjoy to places of residence, to employment, and to social facilities. The fragmentation of the metropolitan area can threaten its potential as an economic engine, and social and environmental problems in any one part of the urban area can stunt overall metropolitan growth. It has been established that the current national housing policy subsidy has a major contribution to low density sprawling city. The housing subsidy offered through the housing policy allows for a single house on one plot and an increasing search for cheap, large new land parcels beyond the urban edge and far from centres of economic opportunities. The housing sector is recognized in the spatial development framework (SDF) as a major investor into the built environment. Based on this, the housing plan has a major role to play in facilitating sustainable urban growth provided housing is built in more appropriate locations whilst ensuring that basic needs/services provision is prioritized in areas with backlogs.
Poverty, Inequality and Unemployment

Poverty, inequality and unemployment are the crucial challenges facing the entire country and are issues that need to be addressed within our Municipal area and beyond our borders. A sustainable increase in employment will require a faster-growing labour intensive economy and the removal of structural impediments, such as poor-quality education or spatial settlement patterns that exclude the majority. These are essential to achieving higher rates of investment and competitiveness, and expanding production and exports. Business, labour, communities and government will need to work together to achieve faster economic growth.

b) Environmental Management

It has been identified in this plan that climate change and the pressure of development on natural resources are key environmental factors affecting the EMA. Climate change will have a significant effect on the land and its people in the form of extreme weather conditions, storms, drought, floods and rising sea levels. For new growth and development the SDF suggests that a comprehensive response to the challenge of climate change is needed in the EMA. The SDF further proposes compact city form to curb low density settlements and urban sprawl. This can be achieved through appropriate densification of existing and well located settlements to maximize the use of existing services and infrastructural capacity, and ensuring that development concentrates along specific public transport / mixed use corridors and within existing nodes, that densification is promoted at strategic locations, that environmental conservation areas and areas of high ecosystem services delivery are demarcated and protected and areas of agricultural importance are identified and protected.

c) The Movement System

The movement system is a key structuring element within the Municipality. Cities are to a large extent ‘movement economies’ and the efficiency of the urban system is directly related to the efficiency of the movement system. The eThekwini municipal area has a comprehensive transportation network comprising of road, rail, air and maritime linkages. The network has a well-articulated hierarchy the challenge however, is to ensure maximum accessibility of goods, services and destination points to all residents of the Municipality largely by linking land use and transport planning. This is to enable people and goods to be moved more efficiently and promote greater integration and accessibility. It is also crucial for eThekwini to develop an efficient and integrated public transport and freight system that will ensure local and regional economic sustainability.

d) Rural Planning

The rural areas of eThekwini have limited access to physical and social services and contain limited economic development and as such are highly dependent on the urban centers/areas for resources and income. The SDF recognizes there is a need to provide appropriate guidance to Council policy and establish relevant development programmes and projects for rural areas. This will involve the facilitation of social, economic, institutional, and physical integration and promote integrated
development in rural and urban areas. Future plans need to address the uneven access to land and economic and social opportunities, between urban and rural areas and to ensure these are addressed in a more holistic manner.

Presenting the way forward

The IDP 2012/13 introduced a number of key strategic priority areas targeted at achieving the vision and addressing the development challenges outlined above. The IDP strategy recognized that the Municipality had to make hard choices, not in a vacuum, but within a spatial framework. This will be done by connecting actions, resources and expenditure across the metropolitan area to unlock sustainable growth, whilst ensuring that inequitable, inefficient and unsustainable consequences of past development patterns are addressed over a period of time. The key strategic priority areas identified in the IDP for achieving the Municipality’s vision are summarized below and provide the basis for the Spatial Vision and conceptual framework SDF proposals in Chapter 5 and 6 respectively.

The Strategic Priority Areas as identified within the IDP are as follows:

**Strategic Priority Areas**

- **STRATEGIC PRIORITY ONE: Creating Sustainable Livelihoods**
  
  **Goal:** All citizens in a prosperous eThekwini earn a decent living and support a sustainable lifestyle.

  **Value Statement:**
  
  Ensure that initiatives undertaken by the Municipality contributes to strong economic growth, sustainable job creation, poverty alleviation, improved skills and promotes a Green Economy.

- **STRATEGIC PRIORITY TWO: Socially Cohesive City**
  
  **Goal:** eThekwini has well rounded and caring citizens who act to support the common well-being of eThekwini and embrace mutual respect, tolerance and compassion for those in need.

- **STRATEGIC PRIORITY THREE: A Financially Sustainable City**
  
  **Goal:** To maximize the Municipality’s financial resources to ensure long-term financial viability and sustainability, thus improving service delivery.

- **STRATEGIC PRIORITY FOUR: Creating a Safer City**
  
  **Goal:** All those who live, work, play and invest in eThekwini feel and are safe in private and public spaces.

- **STRATEGIC PRIORITY FIVE: Promoting an Accessible City**
  
  **Goal:** All citizens of eThekwini can easily and affordably access the facilities and services that they require for a sustainable lifestyle.

- **STRATEGIC PRIORITY SIX: Environmentally Sustainable City**
  
  **Goal:** The environment of eThekwini protects and promotes the health of its citizens and its biodiversity.
CHAPTER 4

THE SPATIAL VISION

is to have

“by 2030 a socially equitable, environmentally resilient, sustainable and functionally efficient Municipality that bolsters its status as a gateway to Africa and the world”.

This vision is expanded upon in the development principles (Mainstreaming and Coordinating Environmental Planning, Promoting Spatial Concentration / Efficiency, Enhancing Economic Potential, Coordinated Planning and Implementation, Promoting Balanced and Sustainable Urban and Rural Development) as discussed in this Chapter. The principles in turn lay the foundation for the SDF proposals and strategies that give direction to a range of spatial outcomes relating to growth and development of the EMA.
4. THE SPATIAL VISION

The SDF translates the current municipal vision, namely, “By 2030 eThekwinwi will be Africa’s most caring and livable city”, to have a spatial focus. The envisaged SDF spatial vision is to have “by 2030 a socially equitable, resilient, environmentally sustainable and functionally efficient Municipality that bolsters its status as a gateway to Africa and the world”.

4.1 Spatial Vision and Principles informing eThekwinwi Municipal SDF

This above vision is expanded upon in the development principles discussed below. The SDF spatial vision and principles have been informed by the National Development Plan, Vision for 2030 (National Planning Commission, 2011), the Provincial Growth and Development Strategy (PGDS, 2011) and the IDP. The principles in turn lay the foundation for the SDF proposals and strategies that give direction to a range of spatial outcomes relating to growth and development of the EMA. The underpinning spatial principles are as follows;

4.1.1 Mainstreaming and Coordinating Environmental Planning

The principle of Mainstreaming and Coordinating Environmental Planning is intended to protect and conserve environmentally sensitive areas and prime agricultural land within the Municipality and encompass the integration of social, economic and ecological factors into planning, decision making and implementation in order to:

- build resilience to extreme weather events, and enable long term adaption to climate change;
- reduce greenhouse gas emissions to mitigate climate change;
- promote positive environmental quality and introduce environmentally sensitive management of development;
- promote a spatial form that supports the EMA as a world class/globally competitive region;
• promote an inherent value of the natural and built environment and an understanding of the environment’s role in providing natural resources to underpin sustainable socio-economic development;
• alleviate environmental and pollution related health hazards;
• retain and enhance natural qualities and assets of the EMA.
• build urban resilience in response to a future that is increasingly uncertain

4.1.2 Promoting Spatial Concentration / Efficiency

The principle of Spatial Concentration / Efficiency is aimed at ensuring the optimal use of existing resources and infrastructure, discouraging urban sprawl, encouraging residential & employment opportunities in close proximity, streamlining development application procedures and decision-making procedures aimed at sustainable development. Based on this principle the EMA must strive to:
• promote a more compact development by encouraging higher densities where appropriate to reduce the need to travel and increase accessibility;
• reduce the separation between places where people work and live;
• optimize development in areas of greatest opportunities encourage efficient use of infrastructure and facilities;
• promote optimal use of remaining land opportunities by encouraging urban infill;
• foster a socially equitable environment where the resources, opportunities and amenities offered by the Municipality are easily accessible to all
• promote effective public transport and non-motorised transport in support of a more efficient spatial form

4.1.3 Enhancing Economic Potential, Co-ordinated Planning and Implementation to support economic growth

This principle is aimed at improving productivity and closing economic performance gaps, promoting sustainable economic growth and ensuring the alignment of projects. This principle not only aims to improve productivity but also recognizes that infrastructure planning and delivery has a direct impact on the quality of household and community life as well as impact on how efficiently the economy functions and on the utilization of a region’s potential.

In order for eThekwini to maintain its status as a gateway to Southern Africa and the world, particular attention to its infrastructure planning and delivery is needed. The Municipality must invest in building modern infrastructure, particularly freight and logistics, that reduces business costs, enhances competitiveness and creates employment firms. In line with this principle the Municipality needs to:
• promote Dube Trade Port as a key transport, logistics and communication hub
• promote development of Information and Communications Technology (ICT)
• invest and maintain tourists nodes
• ensure energy production capacity while reducing greenhouse gas emissions at the same time
• invest in public infrastructure to support people in social and work life
• regenerate key economic nodes and corridors especially in townships
• support greater industrial land
• promote investment in key sectors and create a diverse economy and
• reduce the cost of doing business and simplifying development procedures

4.1.4 Promoting Balanced and Sustainable Urban and Rural Development

In the South African context, the concept of equity is an extremely important component of society as it emphasizes the need to re-dress unequal planning of the past. As with other South African cities, eThekwini has been shaped by the political ideologies of apartheid and post-apartheid class divisions, in which racial groups are separated and buffered from each other with the poorer groups located on the periphery of the Municipality.

Few formal job opportunities exist within these dormitory suburbs and accessing employment means long daily commuting to larger centers. Commuting distances range from 12–25 km to more than 40 km. In this context, balanced development promotes the linking of areas of economic opportunity with areas of greatest needs and promoting a mixture of land uses in support of each other at various spatial urban and rural scales.

This principle brings to attention the development of rural areas which have largely been neglected in planning and have been addressed as completely separate entities to urban areas. The plan advocates for the integration of rural and urban areas so there is equality in decision making associated with general planning and land use management across the entire Municipality area. To this end, this principle of an equitable city is adopted and translated as an informant to:
• create quality and safe living environments for all residents of the Municipality (urban and rural).
• address spatial imbalances ensuring that basic needs/services provision is prioritized in areas with social and servicing backlogs
• reduce infrastructure and service disparities
• redressing imbalances in the location of employment opportunities
• promote integration by linking and reducing distances between people, places and activities
• make rural areas productive
• build greater resilience to social and economic climatic shocks particularly in areas of need
CHAPTER 5
THE SDF CONCEPTUAL FRAMEWORK

Synopsis: This Chapter presents the SDF Spatial Conceptual Framework. The Spatial Conceptual Framework indicates how the municipal vision along with the key issues, challenges and trends outlined above can be translated spatially to direct, guide and inform municipal decisions relating to the use, development and planning of land.
5. THE SPATIAL CONCEPTUAL FRAMEWORK

The SDF is intended to guide and inform municipal decisions relating to the use, development and planning of land and bulk infrastructure. The Spatial Development Concept outlines the key spatial tools used to protect both the built and natural environment and guide the direction of growth and the delivery of social services by outlining areas in which particular types of land uses should be encouraged or discouraged and areas in which the intensity of land development could either be increased or reduced.

The Key Spatial Concept Tools include:

- **An Urban Core**, being the urban centre, which generally has servicing capacity and thus opportunity for densification and can support thresholds for a range of services, industry and public transport;

- **An Urban Development Corridor bounded by an Urban Development Line (UDL)**. The UDL is used not only to demarcate the extent to which urban development will be permitted to establish within the metropolitan area in the long term, but more specifically to promote a more accessible, compact, efficient, equitable and sustainable settlement form. Whist the line indicates the outer limit to which urban development will be restricted there will be areas within the UDL that will not be permitted to be developed (i.e. environmentally sensitive areas);

- The Cost-Surface Model, prepared by the Council for Scientific and Industrial Research for the eThekwini Municipality, indicates where it is cost effective to extend municipal services. As indicated in the diagram below, this study was one of the key informants of the UDL. The UDL therefore implies that there is a rural periphery or hinterland that is different in character and which has different servicing needs and servicing constraints and which supports different lifestyles. The UDL is therefore important for enforcing density targets and managing the growth patterns of the municipality over time but also for protecting agricultural resources beyond the UDL, ensuring food security and ensuring the municipality’s resilience to climate change. As not all areas within the proposed Urban Development Corridor or UDL are currently serviced, it is anticipated that development will be permitted in accordance with infrastructure availability and capacity and/or its planned incremental expansion.

- **A Rural Hinterland** with a different character, lifestyle and development intensity and where access is poor and servicing costs are high. Such areas are seen as important for protecting agricultural resources, ensuring food security, addressing social needs and building the resilience of communities.
The Spatial Development Concept highlights specific areas that require targeted intervention to assist in guiding sustainable growth throughout the Municipality by:

- Identifying areas that need to be protected. These include natural, heritage and environmental key assets as well as agricultural and rural assets;
- Identifying areas of need where integration and restructuring is needed;
- Identifying areas where economic growth and investment will be pursued, and those where social investment will take preference;
- Identifying areas where infill, densification and urban renewal should be pursued;
- Identifying new growth areas and areas for future development;
- Identifying hierarchy of roads, transport corridors and nodes; and
- Identifying areas with existing infrastructure capacity to support integration, densification, as a way of ensuring sustainable development.

Figure 43: Urban Development Line
Figure 44: Spatial Development Concept

The spatial conceptual framework informs the SDF’s spatial proposals. The spatial proposals are discussed in detail in the next chapter.
CHAPTER 6
THE SDF KEY SPATIAL PROPOSALS

**Synopsis:** This chapter applies the Conceptual Framework into a detailed Spatial Development Framework. The proposals outlined in this Chapter will inform a variety of stakeholders of the future growth and nature of development that is envisaged for the municipality.
6. KEY SPATIAL PROPOSALS

The SDF proposals, centered on the key spatial structuring elements, essentially indicate the following:

- shows areas to be protected, including natural, agricultural and heritage resources and urban open spaces.
- Identifies a hierarchy of roads, transport corridors and nodes to promote accessibility and efficient movement of people and goods
- restructures the Municipality into a compact city to ensure that access to opportunity and amenity at the local and metro scale is equally available to all communities
- identifies future growth areas and where to direct growth in a sustainable manner and ensure that people are well located with respect to employment and social and recreational services;
- Identifies well located land, close to urban opportunities, areas where infill densification and urban renewal should be pursued
- Identifies areas where economic growth and investment will be pursued, and those where social investment will take preference.

Critical to achieving these objectives is a single integrated Land Use Management System (LUMS) that provides a clear direction and fosters a sense of security and confidence in the Municipality to its citizens, landowners, developers and businesses.
The spatial proposals are discussed around the following broad topics:

**ANALYSIS LAYER (see chapter 3)**

**GUIDING PRINCIPLES**

**SPATIAL PROPOSALS (as discussed in chapter 6)**

<table>
<thead>
<tr>
<th>#</th>
<th>ENVIRONMENT</th>
<th>PRINCIPLE OF ENVIRONMENTAL PLANNING</th>
<th>SPATIAL PROPOSALS</th>
<th>INTENDED OUTCOMES</th>
</tr>
</thead>
</table>
| 1. | 6.1 Open Space System | Principle of environmental planning | 6.1 Open Space System | Protect and manage important environmental areas.  
Supply a broad range of high quality ecosystem services to our residents.  
To contribute to human well-being and quality of life.  
Promote Sustainable Environmental Management  
Create a network of green open spaces.  
Support sustainable catchment management and stormwater practices.  
Increase the adaptive capacity of the city. |
| 2. | 6.2 Improving Accessibility | Principle of Spatial concentration (efficiency) | 6.2 Improving Accessibility  
Road Hierarchy  
Public Transport Nodes and Corridors  
Infill and Densification  
Mixed use nodes and corridors | Supporting an Efficient Movement System in an effort to Support a viable public transport and integrate historically disparate areas  
Restructure the spatial form and promote accessibility of communities to employment, recreation and social opportunities.  
Protect the mobility function of major roads (such as the N2 and N3)  
Promote appropriate densities at Strategic Locations such as the IRPTN corridors  
Enable access to social and economic services in existing nodes to reduce the need to travel long distances |
| 3. | 6.3 Areas of need | Areas of need | 6.3 Areas of need | Managing Urban Growth  
Combat urban sprawl and support infill development  
Facilitating Sustainable Housing location  
Promote adequate provision of social and economic amenities |
| 4. | | | | |
| 5. | Strategic Infrastructure Planning  
&  
Strategic Investment Areas | Strategic Investment Areas  
Economic Nodes and Corridors | 6.4 Strategic Investment Areas  
Economic Nodes and Corridors | Facilitate utilisation of municipal resources in an efficient manner  
Ensure adequate provision of services infrastructure to support densification and infill.  
Promoting balanced development  
Ensure strong viable nodes  
Clustering of various activities at appropriate locations  
Reduce Unemployment  
Reduced income and spatial inequality and poverty  
Creating sustainable economic growth and development  
Becoming a global metropolis over the next 20 years |
| 6. | | | | |
6.1 Sustaining our Natural and Built Environment

In line with national legislation and international agreements, the Municipality is committed to a sustainable development path that strives to balance social, ecological and economic priorities.

Our natural systems provide ecosystem services that are often impossible, or extremely costly, to substitute. These include clean air, climate stabilization, rainfall, flood attenuation, marine resources, leisure and recreation areas, fertile and stable soils, food, building materials, amenity and heritage. These ecosystem services are critical in meeting the growth and development needs of the Municipality and all its residents and visitors. In both urban and rural areas, low income people are dependent on these critical and free services provided by natural resources.

It is recognised that natural resources provide the platform for sustainable growth and development for all of eThekwini’s residents, poverty alleviation opportunities for the Municipality’s most vulnerable households, and help to buffer the negative impacts associated with climate change. The eThekwini Municipality is therefore committed to ensuring the long term sustainability of the natural resource base through concerted efforts in a number of key areas.

By protecting the Municipality’s natural environment we ensure that costly replacement interventions, such as storm water protection measures and beach sand replenishment schemes are minimized as much as possible. The economic value of services supplied by eThekwini’s ecosystems was estimated at R3.1 billion per annum (2003 estimate), excluding the contribution to the leisure industry. The economic value of the eThekwini coastline (estuaries and beaches) has recently been valued at over R5 billion per annum (2008 estimate).

The eThekwini Municipality seeks to protect specific natural environments, terrestrial and aquatic, within the eThekwini Municipal Area (EMA), in order to secure a sustained supply of ecosystem services (ES) for its residents and visitors. This contributes to sustainable development in the EM’s jurisdiction and to give effect to its Constitutional obligations and the requirements of other legislation e.g., the National Environmental Management Act (NEMA) (1998) and the Municipal Systems Act (2000).

The Durban Metropolitan Open Space (D’MOSS) plan identifies those environmental service assets that require protection and management. These assets include rivers, wetlands, estuaries, grasslands, forests and coastal zone resources. To ensure the sustained functioning of ecosystems that provide services, it is essential that we conserve and manage the biodiversity (simply defined as plants, animals and micro-organisms) that live in and shape these ecosystems. The D’MOSS implementation strategy that has been prepared, therefore, has a specific biodiversity focus. The protection and management of Durban’s Metropolitan Open Space System will need the sustained and co-ordinated efforts of a range of role-players in order to secure the sustained supply of high
quality ecosystem services for our residents and visitors. The following environmental planning proposals are highlighted as way of ensuring sustainable growth and development:

6.1.1 Managing the Drainage Catchments

The terrestrial and aquatic elements within drainage catchments are linked through complex processes. The condition of these systems are felt downstream and where degraded will impact on the coastal plain. It is vital therefore that the adverse impacts of urban land are minimised and managed.

6.1.2 Conserving the Riverine Systems

A vital component of drainage catchments are the main rivers and their tributaries. These need to be conserved in order to protect the ecological viability of the open space system. The main rivers run in a general west/east direction and their tributaries run in a general north/south or south/north direction. There are various Acts in place that provide guidance for the protection the riverine systems such as NEMA, the Water Act and the integrated Coastal Management Act.

6.1.3 Conserving Functional Ecosystems

There are a number of major open space areas that contain functional ecosystems and which act as key conservation areas “feeding” the open spaces elsewhere in the EMA. Examples of these are as follows:

- Krantzkloof Nature Reserve (associated with the Molweni River)
- Giba Gorge (associated with the Giba Stream)
- Alverstone Conservancy (associated with the watershed between the Sterkfontein and uMhlathuzana Rivers)
- Hammarsdale, Nungwane and uMzinyathi Falls (associated with the Sterkfontein, Nungwane and uMzinyathi Rivers)
- Shongweni Dam and Resources Reserve (at the confluence of the uMlaas, and Sterkfontein inland of this on the uMlaas River.
- Inanda Dam and Resources Reserve (on the Inanda Dam)
- Kloof escarpment above Pinetown and including municipal land, the Nkonka Trust and Tanglewood Nature Reserve Matabetule Plateau adjacent to the Shembe settlement at Ebuhleni.
- Matata or Inanda Mountain,
- KwaZini on the upper parts of the UMdloti River,
- UFudu and Inwabi Plateaus on the Umlaas River,and
- The upper parts of the EzIMbokodweni River.
6.1.4 Maintaining Smaller Open Space Fragments

Fragments of open space that may not be directly connected to the broader open space network should be conserved and linked, where possible, to provide critical “stepping stones” for the dispersal of flora and fauna between larger open spaces. These fragments include:

- local parks, sports fields and public gardens,
- private gardens, and
- undeveloped land with ecological significance.

6.1.5 Incorporating High Priority Undeveloped Land

Land with high conservation value should be afforded legal protection and managed to enhance its contribution to the ecological viability of the broader system.

6.1.6 Conserving Visual Features

The visual amenity and character of the within the municipality closely associated with highly visible natural features. These should be conserved for residents and tourists and include components such as:

- Cliffs and escarpments,
- Hilltops and ridgelines,
- Large water bodies,
- Rivers and waterfalls,
- Marine (beaches and rocky shores) and estuarine environments, and
- Coastal dune forests and mangroves.

6.1.7 Eco-tourism and the Green Economy

The D’MOSS and in particular the 18 river valleys in the EMA present an opportunity to achieve greater community awareness of environmental protection, local environmental management partnerships and associated job creation and economic opportunities. Development of eco-tourism within these spaces offers a Green Economy synergy. The Durban Green Corridor Project is an example being developed within the uMngeni Catchment. Initiatives of this sort should be investigated as to means of spatially dispersing economic opportunities throughout the EMA.

6.1.8 Managing Development Impacts

Land uses adjacent to, or upstream from, open spaces can have major impacts on sensitive ecological systems. Activities therefore need to be carefully assessed and controlled to ensure that they do not undermine the ecological viability of the open space system.
6.1.9 Incorporating Climate Change Considerations

At this point it is extremely difficult to incorporate climate change considerations into planning because of the difficulty in representing climate change impacts accurately at a spatial level. In this regard the city wide risk assessment that has just been commissioned provides a possible mechanism of beginning this process through the proxy of risk identification. The recently completed densification strategy and the development of sustainability criteria for spatial planning are current initiatives that will significantly assist with taking climate change considerations into spatial and land use planning. The DCCS will provide further input into spatial planning guidance once the Council has approved it.

6.1.10 Threats to D’MOSS and Mitigation

The key environmental assets represented by D’MOSS layer need to be conserved and protected. DMOSS needs to be sensitively integrated with other municipal planning and effectively managed as a way of ensuring environmental sustainability. The SDF review process has allowed for an assessment of threats and impacts to DMOSS to be undertaken and where possible develop mitigation measures as well as literature and research to establish the impacts of development e.g. development guidelines to address these impacts. Consideration will also need to be given to determine how D’MOSS can contribute towards a more socially inclusive lifestyle.

6.1.11 Biodiversity Protection and Socio-Economic Development

Investigate and implement opportunities to link biodiversity protection and socio-economic development. Develop projects where biodiversity protection and socio-economic development take place simultaneously.

6.1.12 Towards a Strategic Environmental Assessment (SEA) for the eThekwini Municipality

The Local Government: Municipal Planning and Performance Management Regulations (2001) require that a Spatial Development Framework (SDF) must contain a strategic assessment of the environmental impact of the spatial development framework. In 2009, eThekwini Municipality initiated its first effort to undertake this Strategic Environmental Assessment (SEA) and appointed a team of local and international experts to work with officials from the municipality to develop a framework and methodology that would allow the sustainability of the municipality’s spatial plans to be assessed according to their impacts on the provision of ecosystem services. Since the preparation of the methodology, thinking in the field of global environmental change has advanced significantly and it is felt that the approach suggested needs to be modified to accommodate this.
Recent international work in the environmental sciences (Rockström et al., 2009) highlights the scale of global human impact on the natural environment and points to the fact that in many cases, environmental thresholds are being exceeded. These natural thresholds (also referred to as ‘planetary boundaries’) define the ‘safe operating spaces’ within which global planning and development can take place sustainably.

The ‘planetary boundaries’ work described above also provides a useful conceptual starting point to guide the work that needs to be done by eThekwini Municipality in articulating environmental baseline information and environmental thresholds so that the sustainability of the city’s spatial plans can be assessed. For this reason, eThekwini Municipality has initiated a ‘Safe Operating Space’ study for the city in order to better understand these issues. It is anticipated that the output of the study will be a combination of spatial data and a decision-making framework which together will provide the structure needed to assess the environmental sustainability of the city’s spatial plans. The proposed ‘Safe Operating Space’ study will provide a critical starting point for the municipality to undertake a SEA.

6.2 Spatial Development Strategy

The inability to access well-located land for low-cost housing perpetuates continued outward expansion and sprawl and the inability to escape poverty. Densification of established, well-located areas (including areas around nodes and along corridors) will promote more efficient use of existing infrastructure and help create a threshold for public transport. The densification strategy to be adopted by the municipality is dependent on the spatial context of development, the site specific characteristics, the capacity of existing infrastructure and what impact that development will have on the environment. Within the densification strategy it is acknowledged that there has to be a balance between compactness and the retention of significant open space to satisfy other social and environmental needs.

The Municipality is striving to ensure that people are brought closer to where they live, work, study and relax. While the Council is committed to bringing people closer to areas of economic activity, the principle of sustainability will be the driver to ensure that people are living in harmony with the environment. Using the Municipal Spatial Development Framework (SDF) and supporting Package of Plans, the Municipality is committed to the zoning of land in appropriate areas in order to increase densities and reduce urban sprawl. The Municipality will also limit urban sprawl and associated development costs through the prioritization of infrastructure provision to support new growth areas.

The spatial strategy to achieve the above is to:-

- Limit and contain the urban development footprint within the Urban Development Line.
- Promote higher “net” residential densities in targeted areas (both greenfields and brownfields) especially within core areas, new growth areas, areas prioritised for infrastructure development and promote densification where feasible along public transport routes.
• Create new residential development opportunities that connect fragmented areas and consolidate urban form around high accessibility routes and spines.
• The “Urban Development Line” concept is used as a tool to curb urban sprawl, promote compaction and achieve associated efficiencies, secure agriculture and upper catchment environmental assets.

6.2.1 The Desired Spatial Form and Growth Path

The economic growth of the eThekwini is mostly based on the port and related activities. The Port Expansion and Back of Port redevelopment are key investment priorities not only to the municipality but to the country as a whole. The expansion of the port is one of the ways the eThekwini can maximise future investment and strengthen its comparative and competitive advantage over other port cities both locally and internationally.

Other key municipal priority projects are proposed in this SDF to include: the implementation of the IRPTN, the development of Dube Trade Port and surrounding areas including Cornubia, Cato Ridge industrial area and Mpumalanga/ Hammarsdale. The development activities within these priority investment areas are linked to support for the port development through a number of economic actions, which includes logistic, tourism and trade.

6.2.2 Infill, Urban Renewal and Densification

The key elements of densification are the promotion of compact, integrated and efficient city form. This can be achieved by limiting urban sprawl, by promoting higher densities, infill and re-development in and around the urban core and other activity nodes and by the promotion of mixed use activity corridors linking otherwise isolated and nonfunctional areas with a focus of public transport.

Infill refers to development of vacant or under-utilized land within the existing urban areas. In order to promote a more compact urban development, attention should be given to those areas that are not densely developed but are well serviced and centrally located. These gaps within the urban fabric should be identified for priority projects. Vacant land within the central area provides infill opportunities to make use of existing services and to strengthen internal development. Vacant land beyond the central area provides opportunities for linking and integrating peripheral areas.

The different methods for achieving densification can occur through:
• Infill development on vacant or underutilized parcels of land at higher densities. A range of infill processes may include transfer of development rights, land swops, land consolidation, public housing projects and so forth.
• New development on vacant or under-utilized land at higher densities
• Cluster development on large parcels of land through a consolidation process
• Conversion of existing building (sometimes vacant/derelict) to other uses
• Subdivision of large pieces of land to encourage higher densities
• Allowing additional units to be developed on a single piece of land
• Redevelopment of poorly functional areas to encourage and facilitate infill

Infill and densification as proposed above are key strategies contributing to the restructuring of urban environment.

Other key interventions include the following:
• Promote efficiency by curbing low-density sprawl
• Spatial restructuring and promotion of the generation of income-earning opportunities in appropriate places.
• Improving basic infrastructure, provision of supporting infrastructure and services including housing opportunities and adequate facilities.
• Upgrading of existing informal settlements
• Creating of social services, with a clustering of activities in accessible places
• Redressing spatial marginalization through improved transport linkages, creation of public transport hubs and enhanced accessibility to centers of employment
• Maximizing job opportunities/creation through the promotion of local economic development,
• Create appropriate trading areas that are conducive to promoting marketing opportunities for emerging as well as established businesses.
• Attract new investment by creating robust and crime controlled environments
• Promote urban agriculture as part of land use policy

6.2.2.1 Densification Strategy for the eThekwini Municipality

The eThekwini Municipality (EM) has developed a city wide densification strategy and is seeking to shift the growth trajectory of the city in a more efficient, equitable and/or sustainable direction. A specific strategy that has been developed for the direction and management of one of the most important characteristics that influences the quality and performance of, and the efficiency and sustainability of human settlements i.e. urban and rural settlement density. The eThekwini Municipality is faced with having to manage the challenges associated with a scarcity of natural resources, high population growth and rural to urban migration whilst at the same time, enhancing the sustainability and liveability of the area under its jurisdiction. In developing this strategy the focus has been to:

• Identify and consolidate ideas, concepts and definitions relating to density in the EM into a widely accepted policy statement and also a management framework for density within the EM;
• Begin to align key planning and development stakeholders in the public and private sector around these ideas, concepts and definitions and the manner in which it can be effectively implemented;
• Understand the contextual and management dynamics that underpin density targets, patterns and trends in the EM context;
• Identify practical and realistic implementation interventions and tools that can be inserted into the existing (and proposed new) policy, operational and urban management environment of the Municipality so as to unlock impediments to achieving density targets and / or the creation of quality living environments;
• Identify areas within the city that are suitable for densification and the appropriate mix of interventions and tools for achieving targets in these areas.

The City Densification Strategy recommends that net residential density and net population density should form the sector-wide basis for setting density targets in eThekwini, rather than any other use of density measurement. In this regard, it makes use of the number of net residential dwellings per hectare as the unit of measurement (du/ha).

The strategy has also made use of existing planning and development tools, policies and plans within the Municipality, to ensure that densified development is:
• Located along Integrated Rapid Public Transport Network
• Located within identified Nodes and Corridors
• With urban densities within the Urban Development Line (UDL) and rural densities without
• Within available services and close to social facilities
• In proximity to economic/employment opportunities.

In densifying the Municipal area there will need to be a focus on Brownfield rather than Greenfield development. Creative land assembly strategies and the rethinking of restrictive housing typologies are critical to the success of sustainable densification. Innovation in design that reduces the environmental impact of densified development (energy efficiency of buildings e.g. building orientation, recycled water systems, solar water heating etc.) and to create integrated, healthy and safe communities is essential.

6.3 Improving Accessibility

The hierarchy of roads identified, is to facilitate movement within the Municipality and to ensure that people have access to jobs and other opportunities within the municipal area. In order for the Municipality to perform optimally the overlapping systems of movement and activity need to be accessible to all communities, they need to operate efficiently and be sustainable. To achieve this, the municipality needs to implement a fully integrated and efficient public transport system. The road
classification as shown below has been developed and is indicative of the appropriate functions different the roads play.

6.3.1 Road Classification

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Design</th>
<th>Route no.</th>
<th>Access to property</th>
<th>Parking</th>
<th>Speed limit</th>
<th>Inter-section control</th>
<th>Typical cross section</th>
<th>Roadway lane width</th>
<th>Road reserve width</th>
<th>Pedestrian footways (constructed)</th>
<th>Cycle lanes</th>
<th>Animal drawn vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Principal arterial</td>
<td>Expressway</td>
<td>Yes (N)</td>
<td>Not allowed*</td>
<td>No (off road rest stops allowed)</td>
<td>120</td>
<td>Grade separate or priority to through</td>
<td>2 / 3 / 4 lane; surfaced shoulders, climbing lanes</td>
<td>3.5 - 3.7 m</td>
<td>60 - 60 m (62 m)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Major arterial</td>
<td>Highway</td>
<td>Yes (R: 2 or 3; digit. or N)</td>
<td>Not allowed**</td>
<td>No (off road rest stops allowed)</td>
<td>100 - 120</td>
<td>Priority or grade separate</td>
<td>2 / 3 lane; surfaced shoulders, climbing lanes</td>
<td>3.5 - 3.7 m</td>
<td>40 - 70 m (44 m)</td>
<td>As required</td>
<td>Isolated</td>
<td>Recreational on shoulder</td>
</tr>
<tr>
<td>3</td>
<td>Minor arterial</td>
<td>Main road</td>
<td>Yes (R: 3 or 2+ digit)</td>
<td>Not allowed***</td>
<td>No (off road rest stops allowed)</td>
<td>60 - 100</td>
<td>Priority, roundabout</td>
<td>2 lane surfaced; gravel shoulders</td>
<td>4.0 m</td>
<td>30 - 50 m (50 m)</td>
<td>As required</td>
<td>Isolated</td>
<td>Recreational, wider roadway by 1.3m both sides</td>
</tr>
<tr>
<td>4</td>
<td>Collector road</td>
<td>Collector road</td>
<td>Allowed, T (round) or O (dashed)</td>
<td>Yes</td>
<td>No (off road edge or in lay-byes / viewpoints)</td>
<td>60 - 100</td>
<td>Priority</td>
<td>2 lane surfaced; gravel; gravel shoulders</td>
<td>3.5 m</td>
<td>25 m</td>
<td>As required</td>
<td>Rare, Isolated</td>
<td>Widen roadway</td>
</tr>
<tr>
<td>5</td>
<td>Local road</td>
<td>Farm road</td>
<td>Allowed, T (round) or T (local)</td>
<td>Yes</td>
<td>No (on verge or shoulder)</td>
<td>60 - 80</td>
<td>Priority or none</td>
<td>1 / 2 lane gravel, 600 mm concrete stops in environmental areas</td>
<td>20 m</td>
<td>As required</td>
<td>Rare</td>
<td>Use roadway</td>
<td>Use roadway</td>
</tr>
<tr>
<td>6</td>
<td>Walkway</td>
<td>Track or pathway</td>
<td>No</td>
<td>Yes</td>
<td>n/a</td>
<td>Not constructed, formed by use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Access to properties sufficiently large to warrant a private intersection / interchange can be considered if access spacing requirement met and there is no future need for a public road.
** Low volume farm gate and tourist access (less than 10 vehicles per day) can be considered if no alternative exists.
6.3.2 Proposed Transport Linkages

The spatial focus in relation to the movement system is to improve transport linkages at a, metropolitan and local level by identifying future network linkage opportunities. Improving transport linkages includes upgrading existing links, constructing new links and integrating different modes of transport (rail, bus, taxi, and non-motorised transport). Some of the proposed linkages (as identified below) help to integrate areas of need to wider metropolitan opportunities. Proposed linkages for the EMA are as follows:

- R102 bypass at Tongaat;
- Network linkages to Cornubia;
- The MR577 from Duffs Road to KwaDabeka providing a much-needed crosslink from the north to the Pinetown area;
- The MR579 will connect Umlazi with Pinetown south and MR577 providing an outer Outer ring road
6.3.3. Major Road Infrastructure Proposals for Port of Durban and Dig Out Port

The following map reflects the proposed major road proposals for Port of Durban.

Legend

- **Legend**: 2012-2017 : Implementation
- **Phase 1a**: 2012-2017 from Port to N2 with new Interchange
- **Phase 2**: 2015-2035+ East West freight route from Port to Mariannhill
- **Phase 3**: 2019-2035+ East West freight route from Port to
- **Phase 1b**: 2014-20125 North South freight route to Dig-Out Port

Figure 45: Conceptual Proposals Major Road Infrastructure Proposals for the Port of Durban and the Dig-Out Port

6.3.4 Integrated Public Transport Network (IRPTN)

The overall goal for transport in eThekwini is to implement an effective, efficient, sustainable and safe public transport system. To this end and in line with legislative provisions, the eThekwini Transport Authority (ETA) has developed an Integrated Rapid Public Transport Network (IRPTN) plan for the entire eThekwini Municipal area. The IRPTN “wall to wall” plan defines the ultimate (2025) public transport network for the Municipality to ensure that the incremental implementation of the IRPTN achieves the following established objectives:
• Equity of Access to Opportunity:
   All inhabitants of the Municipality regardless of income levels, disabilities, etc. should have and enjoy quality access to various opportunities (live, work, play) within eThekwini;

• Reduce the overall impact of transport on the environment:
   The IRPTN should aim to have a net reduction in carbon emissions related to motorised travel;

• Promotion of a liveable city:
   Apart from providing a transport solution that aims to offer all commuters an escape from congested roadways, the infrastructure of the IRPTN as well as the precincts the network servers are to be designed in a manner that accommodates non motorised transport modes and achieves urbanity;

• Spatial Structure:
   The IRPTN is intended to be a major structuring element of the eThekwini Municipality. Integrated land use-transportation planning ensures that the IRPTN would help rectify the imbalances created by historic apartheid type planning practices;

• Quality of Service that is Acceptable to Car Users:
   Apart from catering for the needs of captive public transport users, the IRPTN should be of a quality that private vehicle users would find acceptable;

• Have a Positive Impact on the City’s Economy
   Apart from being operationally efficient to ensure sensible operational expenditure, the various secondary economic opportunities created by the system should contribute to the city’s economy.

Systems Concept: The integrated network comprises a system of trunk, feeder and complementary routes that have been designed to respond to the resultant demand of the existing and forecasted activity patterns in accordance with the Municipality’s Spatial Development Plan. This network will be complemented by connecting bus/minibus services and local services to key nodes on the trunk alignments.

This system will include, in terms of a defined programme, various forms of priority infrastructure for bus trunk services including: transfer stations; park and ride facilities; information, communication technologies; fleet; non-motorised transport facilities; and depots and control centres.

The ultimate IRPTN plan for the Municipality comprises some 250km of trunk public transport corridors of which some 60km are rail based. The full IRPTN network will be within 800m (10-15min walk) of more than 85 percent of the Municipality’s population.

The trunk corridors are described below and are shown in Figure below:

• Corridor C1: Bridge City to CBD via KwaMashu:
   C1 provides capacity between two major centres of employment and other activity. This high frequency BRT service provides connections into the CBD to widen access to employment. C1 forms part of the Phase 1 network in view of its strategic importance.
- **Corridor C2: Bridge City and KwaMashu via Berea Road to Umlazi and Isipingo:**
The main rail route will be upgraded to enable a more intensive, reliable and higher capacity service to be operated. Infrastructure improvements will allow headways of up to three minutes to be operated with new trains being capable of carrying 2,000 people. A number of stations are in place, many of these stations will also be served by other IRPTN services, enabling interchange and a wide range of journey opportunities. Rail services continue further south to Isipingo and beyond.

The branch serving Zwelethu, KwaMnyandu, Lindokuhle and Umlazi is well used and would form part of C2. In contrast, the branch to Havenside, Bayview, Westcliff, Chatsglen and Crossmoor is lightly used, it is planned to provide new services in C5 to address demand in this corridor. To the north of C2, the line continues to Phoenix, Mount Edgecombe, Tongaat and beyond but is relatively lightly used. The loop serving Avoca, Red Hill, Greenwood Park and Briardene is a single track line which supplements the main line from KwaMashu.

- **Corridor C3: Bridge City to Pinetown**
C3 provides new connections between two major centres in a corridor that is not easily traversed at present. Interchange opportunities will be important both in the Pinetown area (with C6 and C7 or east-west movements) and at Bridge City (C1, C2, C4 and C9). C3 forms part of the Phase 1 network.

- **Corridor C4: Bridge City to Mobeni and Rossburgh**
C4 offers new services from Bridge City via the N2 avoiding the need to transfer at Warwick Interchange with the route splitting to serve both Rossburgh and Mobeni.

- **Corridor C5: Chatsworth to CBD**
C5 provides direct services from the CBD and Warwick to Chatsworth town centre. This will be a high frequency BRT service although there is an option to provide light rail services using former heavy rail alignments and platforms and on-street Sections to access Chatsworth town centre. This would serve the area more effectively than the current heavy rail alignment.

- **Corridor C6: Hammarsdale and Pinetown to Warwick**
C6 provides east-west services linking Pinetown to Warwick Interchange with possible variants to serve more than one route within the corridor. Some services will be extended to Hammarsdale in the west as an improved means of accessing Mpumalanga and the rural area with appropriate feeder services.

- **Corridor C7: Hillcrest to Chatsworth**
C7 was originally conceived as part of C5 but separating this part of the network reduces the operating distance and links Hillcrest with Pinetown (connecting with C6 to Warwick) and Chatsworth town centre as.
• **Corridor C8: Tongaat and Airport to Umhlanga and Warwick**

Rail services are available to Tongaat but an alternative route would be provided by C8. This would divert to serve the airport and Umhlanga town centre and provide direct access into Durban. This corridor is expected to experience considerable growth as development takes place and also presents a strong public transport presence for airport users and workers.

• **Corridor C9: Bridge City to Umhlanga**

C9 links the growth areas of Umhlanga and Bridge City. C9 forms part of the Phase 1 network in that it links key employment and expanding development areas.

Source: eThekwini Municipality, Procurement and Infrastructure Cluster

*Figure 46: IRPTN Trunk Corridors*
6.3.5 IRPTN Phasing Plan

The intended trunk route phasing plan is shown diagrammatically in the Figure below:

<table>
<thead>
<tr>
<th>Phasing</th>
<th>% Trunk - Feeder Trips</th>
<th>Planned Operational Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C5</td>
<td>25%</td>
<td>2016</td>
</tr>
<tr>
<td>C1</td>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>C9</td>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>C2 (Rail)</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Phase 2</td>
<td>C5, C7</td>
<td>20%</td>
</tr>
<tr>
<td>Phase 3</td>
<td>C4, C6</td>
<td>9%</td>
</tr>
<tr>
<td>Phase 4</td>
<td>C6</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: eThekwini Transport Authority

Figure 47: IRPTN Trunk Route Phasing

Phase 1: Of the 190km of road based trunk corridors, 60km are planned for the Phase 1 implementation of the network by the first quarter of the 2015 financial year. Phase 1 will comprise of 3 Bus Rapid Transit (BRT) routes and 1 rail corridor. The 3 BRT routes are: C1 Bridge City to Warwick, C3 Bridge City to Pinetown, C9 Bridge City to Umhlanga Corridor and the rail corridor: C2: Bridge City and KwaMashu via Berea Road to Umlazi and Isipingo.

The Phase 1 network will accommodate approximately 25% of the Municipality’s total trunk public transport demand on road based IRPTN services with a further 40% being accommodated by the trunk rail network as part of Passenger Rail Association of South Africa (PRASA) implementation plans. This approach ensures recognisable benefit to the maximum number of users in the shortest period of time for the given level of investment required.

The following steps will take the public transport initiatives on a sustainable trajectory;

- Firstly, building on restructuring proposals to date, by developing a programme for the phased implementation of an Integrated Rapid Transit Network (IRTN) with public transport service and support system plans across the whole of the eThekwini Municipality;
• Secondly, to develop a comprehensive business plan and corporate structure plan with documentation for pro forma public transport service contracts and related support systems, service contracts;

• Thirdly, to take the corridors adopted as part of the first phase of the implementation programme and develop the proposals in adequate detail to provide firm cost estimates for infrastructure and support systems;

• Funding for both the infrastructure and operating the system has been motivated for via National, Provincial and Municipal budgeting provisions. The Public Transport Infrastructure System Grant (PTIS) will no doubt be the key source of the majority of the funding;

• Preliminary work suggests that Phase 1 IRPTN projects can be operational by 2015 if the requisite funding is secured.

Land use strategies that support the development and performance of an effective and sustainable transport system are focused around the major IRPTN corridors and include the following:

• Protecting existing employment opportunities within these corridor areas;

• Maintaining the quality of high value investment, office, retail, residential and tourist areas within the corridors;

• Discouraging the development of major employment opportunities outside the corridor areas - at least in the short term until the corridor investment has gained momentum;

• Stimulating higher employment and residential densities within these corridors in particular, as well as the promotion of residential densification within the core urban area in general;

• Renewing areas around major stations and modal interchanges as high density residential, office and retail uses.

6.3.6 Public Transport Activity Nodes and Corridors

Nodes are places of high accessibility usually located at important transport interchanges and characterized by a concentration of mixed uses. Sometimes, transport interchanges generate a node, and other times a node may encounter transport development.

The main transport /interchange nodes include the following:

a) Warwick ,
   • Major public transport node

b) Pinetown CBD
   • Major public transport node
   • Hub of transport activity

c) Bridge city
   • major transport node
Accessibility corridors are linear mixed-use areas containing a concentration of facilities such as retail, office, work, residential, entertainment and community facilities. Mobility corridors are primarily high speed routes to access different areas.

**Existing activity corridors include:**

- The north-south rail corridor extends from Isipingo in the south to the northern residential areas of KwaMashu, Ntuzuma, Inanda and Phoenix in the north.
- The east-west corridor extends from the Port of Durban to the Old Main Road in Westville-Pinetown Kloof and Hillcrest areas right through to Cato Ridge and Mpumalanga areas.
- Umbilo & Sydney Roads, Umgeni Road, Stamford Hill, Florida Road, Spine Road and North and South Coast Roads, Essenwood Road and Musgrave Road

The extension of these corridors provides opportunities around which to attract investment.

**6.3.7 Development Corridors**

Corridors of development are viewed as growth or development axes that spatially structure development. Development corridors comprise of a mix of activity making them intense robust and diverse environments that service the Municipality. Corridors of development also lead to the establishment of links between districts and neighbourhoods that ensure cohesiveness and integration of activity and communities. Development corridors within the Municipality include:

- Urban Service Nodes and Corridors supporting mixed use urban activities;
- Rural Service Nodes and Corridors supporting local level services;
- Coastal Corridor consist of high quality natural coastal assets and consist of mixed uses including mixed density residential, recreation, entertainment and tourist oriented activities;
- Tourism Corridors supporting tourism activities;
- Industrial Corridor supporting primarily industrial activities;
- Agriculture Corridor ; and
- Airport Noise Zone.
6.4 Economic Development Nodes and Corridors

The identification of economic nodes and corridors is to help provide an effective distribution network for a range of economic opportunities and to identify areas which may serve varied catchments of people for different purposes. The hierarchy of investment nodes as identified below has a range and variety of functions to achieve the accommodation of community needs and services. The following type of nodes is identified;

6.4.1 Metropolitan Node

The Metropolitan node is the key economic centre where all of the varieties of economic sectors are prevalent and perceived to have good potential to be further expanded on. The nodal area is visibly linked to high accessibility areas with existing bulk infrastructure and relatively high population densities which would both contribute to the economic expansion and benefit from interventions in these areas.

<table>
<thead>
<tr>
<th>Description: Metropolitan Node</th>
<th>Nodal Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scale of node</strong></td>
<td></td>
</tr>
<tr>
<td>• Provides services at a National, Provincial and Local area</td>
<td>Durban CBD/Inner City</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td></td>
</tr>
<tr>
<td>• accessible at a metro-wide scale</td>
<td></td>
</tr>
<tr>
<td><strong>Characteristic of node</strong></td>
<td></td>
</tr>
<tr>
<td>• Offers a wide variety of mixed uses including recreation, formal and informal residential, businesses, tourism and its CBD role</td>
<td></td>
</tr>
<tr>
<td>Also characterized by port operations and associated transport activities which service the region and beyond as a multi-modal transport hub</td>
<td></td>
</tr>
</tbody>
</table>

6.4.2 Sub-Metropolitan Node

Sub-metropolitan nodes provide accessible day to day business, transport and social services for existing and future local communities. These nodes serve sub-metropolitan areas of large districts and are well connected to metropolitan public transport systems and to their adjacent residential areas. They are generally situated on mobility spines supported by mobility roads and have access to urban freeways offering a full variety of higher order uses with a sufficient mix that may be in tight competition with other such nodes.

<table>
<thead>
<tr>
<th>Description: Sub-Metropolitan Node</th>
<th>Nodal Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scale of node</strong></td>
<td></td>
</tr>
<tr>
<td>• These are nodes of a sub-metropolitan significance</td>
<td>Existing Sub-metropolitan Nodes</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td>Umhlanga town centre</td>
</tr>
<tr>
<td>• accessible at a metro-wide and local scale</td>
<td>Pinetown town centre</td>
</tr>
<tr>
<td><strong>Characteristic of node</strong></td>
<td>Emerging Sub-Metropolitan Nodes</td>
</tr>
<tr>
<td>• provide economic support at a metro wide and local scale</td>
<td>Dube Trade Port</td>
</tr>
<tr>
<td>• nature of these nodes can vary from having a variety of mixed uses (residential, retail, commercial, business public transport interchange, specialize logistics services and have potential for densification opportunities</td>
<td>Potential Sub-Metropolitan Nodes</td>
</tr>
<tr>
<td></td>
<td>Shongweni</td>
</tr>
<tr>
<td></td>
<td>Cornubia</td>
</tr>
</tbody>
</table>
### 6.4.3 Urban Node

Urban nodes are existing and new and are well located lower order nodes serving the needs of local areas. These nodes are located at transport interchanges and or at the intersections of development spines. Their role is to provide essential ‘day to day’ commercial needs and social and commercial services to immediately adjacent communities.

<table>
<thead>
<tr>
<th>Description of Urban Node</th>
<th>Nodal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scale of node</strong></td>
<td><strong>Existing Urban Nodes</strong></td>
</tr>
<tr>
<td>These are lower order nodes serving the needs of local communities</td>
<td>Verulam</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td>Tongaat</td>
</tr>
<tr>
<td>Are easily accessible by high order transit, a good road network</td>
<td>KwaMashu Town Centre</td>
</tr>
<tr>
<td>New urban nodes ideally to be located at transport interchanges and / or at easy access or intersections of major public transport</td>
<td>Phoenix Town Centre</td>
</tr>
<tr>
<td><strong>Characteristic of node</strong></td>
<td>Newlands Town Centre</td>
</tr>
<tr>
<td>The nodes provide essential ‘day to day’ commercial needs, social and commercial services to immediately adjacent communities.</td>
<td>Inanda Town Centres</td>
</tr>
<tr>
<td>These local nodes are varied in activity mix and are determined by the thresholds which they serve.</td>
<td>Bridge City</td>
</tr>
<tr>
<td>Contain a mix of low, medium and high residential densities</td>
<td>Umlazi</td>
</tr>
<tr>
<td>Characterized mainly by pedestrian activity</td>
<td>Isipingo/Prospecton</td>
</tr>
<tr>
<td>Non-Motorised Transport should be prioritized in this nodes</td>
<td>Amanzimtoti</td>
</tr>
<tr>
<td></td>
<td>Craigieburn</td>
</tr>
<tr>
<td></td>
<td>Chatsworth, Malvern, Westville, Musgrave and Glenwood/Berea</td>
</tr>
<tr>
<td></td>
<td>Cato Ridge Village</td>
</tr>
<tr>
<td></td>
<td>Hillcrest</td>
</tr>
<tr>
<td></td>
<td>Botha’s Hill, Kloof and Waterfall</td>
</tr>
<tr>
<td></td>
<td>Cato Ridge (Town Centre)</td>
</tr>
<tr>
<td></td>
<td>Kloof (neighbourhood Node)</td>
</tr>
<tr>
<td></td>
<td>Waterfall (Neighbourhood Node)</td>
</tr>
</tbody>
</table>

### Potential Urban Nodes

- Illovo
- Clermont/ KwaDabeka
- Molweni Node
- Mpumalanga Town Centre

### 6.4.4 Investment Opportunity Areas

<table>
<thead>
<tr>
<th>Description Investment Opportunity Areas</th>
<th>Investment Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>These areas provide opportunities for new investment</td>
<td>Cornubia</td>
</tr>
<tr>
<td>These areas need to be supported by public investment</td>
<td>Inyaninga</td>
</tr>
<tr>
<td>Must be targeted for the encouragement of private sector involvement.</td>
<td>Canelands</td>
</tr>
<tr>
<td>Must have or be easily accessible to major public transport routes</td>
<td>River Horse Valley</td>
</tr>
<tr>
<td>Available infrastructure capacity needs to be investigated in these areas</td>
<td>Phoenix Industrial Park</td>
</tr>
<tr>
<td></td>
<td>Tongaat North</td>
</tr>
<tr>
<td></td>
<td>Springfield Park</td>
</tr>
<tr>
<td></td>
<td>Umlazi</td>
</tr>
<tr>
<td></td>
<td>Isipingo/Prospecton, Umbongintwini industrial area</td>
</tr>
<tr>
<td></td>
<td>Hammersdale</td>
</tr>
<tr>
<td></td>
<td>Mpumalanga</td>
</tr>
<tr>
<td></td>
<td>Cato Ridge</td>
</tr>
<tr>
<td></td>
<td>Shongweni</td>
</tr>
<tr>
<td></td>
<td>Bartletts</td>
</tr>
</tbody>
</table>
### 6.4.5 Rural Service Nodes

**Description:** Rural Service Node
- These nodes provide local level services (social and economic activities, traditional structures, facilities etc) for surrounding communities
- Must be centrally located for easy access to surrounding rural communities
- Must have easy access for pedestrians

<table>
<thead>
<tr>
<th>Nodal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zwelibomvu</td>
</tr>
<tr>
<td>KwaNgcolosi</td>
</tr>
<tr>
<td>Ntshongweni</td>
</tr>
<tr>
<td>KwaSondela</td>
</tr>
<tr>
<td>Buffelsdraai</td>
</tr>
<tr>
<td>Cottonlands</td>
</tr>
<tr>
<td>Adams/Folweni</td>
</tr>
<tr>
<td>Matabetule (new)</td>
</tr>
<tr>
<td>Senzokuhle (new)</td>
</tr>
</tbody>
</table>

### 6.4.6 Rural Investment Node

**Description:** Rural Investment Node
- Rural Investment Node have potential to provide support Services (Business, Agriculture, Tourism and Environmental issues and opportunities for local economic development)
- Must ideally be located within easy access to major transport routes
- Ideally must be located where there is already an existing accumulation of activities

<table>
<thead>
<tr>
<th>Nodal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>uMgababa/ uMnini</td>
</tr>
<tr>
<td>Umbumbulu</td>
</tr>
<tr>
<td>Inchanga</td>
</tr>
<tr>
<td>uMzinyathi</td>
</tr>
<tr>
<td>KwaXimba</td>
</tr>
</tbody>
</table>

### 6.4.7 Industrial Node

**Description:** Industrial Node
- These nodes provide specialized focused services
- These areas have a metro-wide significance

<table>
<thead>
<tr>
<th>Nodal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cato Ridge (Industrial)</td>
</tr>
<tr>
<td>Hammarsdale (Industrial Node)</td>
</tr>
<tr>
<td>Tongaat Inyaninga</td>
</tr>
<tr>
<td>Cornubia</td>
</tr>
<tr>
<td>Port</td>
</tr>
<tr>
<td>Umbogintwini</td>
</tr>
<tr>
<td>Illovo</td>
</tr>
<tr>
<td>Pinetown</td>
</tr>
</tbody>
</table>

### 6.4.8 Tourism and Recreational Node

**Description:** Tourism and Recreational Node
- These nodes can provide a range (or some) form of cultural, recreational and tourism opportunities
- May have inherent natural qualities such as dams, scenic views or cultural heritage
- Provide a range of Cultural, Recreational and Tourism Opportunities for Local Economic Development.

<table>
<thead>
<tr>
<th>Nodal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durban Beach Front</td>
</tr>
<tr>
<td>Umhlanga</td>
</tr>
<tr>
<td>Umdloti</td>
</tr>
<tr>
<td>Amanzimtoti</td>
</tr>
<tr>
<td>Kingsway Tourism Corridor</td>
</tr>
<tr>
<td>Valley of Thousand Hills</td>
</tr>
<tr>
<td>Inanda Dam</td>
</tr>
<tr>
<td>Shogweni Recreational Node</td>
</tr>
<tr>
<td>Inanda Dam</td>
</tr>
<tr>
<td>Hazelmere Dam</td>
</tr>
<tr>
<td>Ntshongweni Dam</td>
</tr>
<tr>
<td>Dudley Pringle Dam (New local recreational node)</td>
</tr>
<tr>
<td>Shembe Village</td>
</tr>
</tbody>
</table>

### 6.4.9 Rural Tourism and Recreational Nodes

- **Description:** Rural Tourism and Recreational Node
- Range of Cultural, Recreational and Tourism Opportunities for Local Economic Development

<table>
<thead>
<tr>
<th>Nodal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inanda Dam</td>
</tr>
<tr>
<td>Hazelmere Dam</td>
</tr>
<tr>
<td>Ntshongweni Dam</td>
</tr>
<tr>
<td>Dudley Pringle Dam (New local recreational node)</td>
</tr>
<tr>
<td>Shembe Village</td>
</tr>
</tbody>
</table>
### 6.4.10 Tourism Routes

**Description:** Tourism Route

- Scenic cultural and environmental routes.

<table>
<thead>
<tr>
<th>Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durban Beach Front</td>
</tr>
<tr>
<td>Umhlanga</td>
</tr>
<tr>
<td>Umdloti</td>
</tr>
<tr>
<td>Amanzimtoti</td>
</tr>
<tr>
<td>Kingsway Tourism Corridor</td>
</tr>
<tr>
<td>Valley of Thousand Hills</td>
</tr>
<tr>
<td>Inanda Heritage</td>
</tr>
<tr>
<td>Township Tourism</td>
</tr>
<tr>
<td>Warwick</td>
</tr>
</tbody>
</table>

### 6.4.11 Sports and MICE (Meetings, Incentives, Conferences/conventions and Exhibitions) Nodes

**Description:** Sports events and MICE (Meetings, Incentives, Conferences/convention and Exhibition) Node

- Offer a range of sports events, recreation, entertainment and tourist oriented precincts

<table>
<thead>
<tr>
<th>Nodal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Convention Centre (ICC),</td>
</tr>
<tr>
<td>Point Waterfront Development,</td>
</tr>
<tr>
<td>Ushaka Marine World,</td>
</tr>
<tr>
<td>Sibaya Kingdom,</td>
</tr>
<tr>
<td>Golden Mile</td>
</tr>
<tr>
<td>Green Hub Corridor</td>
</tr>
<tr>
<td>Sun Coast Entertainment Complex</td>
</tr>
<tr>
<td>Moses Mabhida and King’s Park Sport Precinct</td>
</tr>
</tbody>
</table>
6.4.12 Strategic Investment Areas

In addition to these nodes the SDF identifies Strategic Investment Areas (Figures above) to help prioritise and guide development initiatives to be located in areas where the greatest impact and positive spin-offs from a city wide scale can be achieved. The Strategic Investment areas are identified as follows:

- **Port of Durban**
  The Port of Durban is the primary contributor to eThekwiní’s economy which is of provincial and national significance and has seen a steady increase in container traffic in recent times. One of the serious constraints to development is the inefficiencies and congestion in the Durban port operations. Improving the Municipality’s logistics infrastructure will ensure the maximization of port economic opportunities. In this sphere, rail linkages, port efficiency, back-of-port operations to enhance capacity and range of business, inter-modal transport hubs in-port and inland and the newly-planned dug-out port are projects which will give life to KwaZulu-Natal’s positioning as the Gateway to Africa.

- **Illovo**
  The Illovo Local Area Plan (LAP) is underway to develop a shared vision for understanding the role of Illovo in the sub region, metropolitan and regional context. The Illovo South Boundary is within close proximity to the South of Durban Port and forms part of the Strategic Investment Project (SIP 2) corridor from the South of Durban inclusive of the Port to Gauteng. The Port expansion plans, the Back of Port Plan, the Dedicated Freight Route and the Automotive Supply Park (ASP) are all integral elements of SIP2 and will be crucial to the economy of eThekwini and the Province.

- **Back of Port**
  The development of the Port as an economic, manufacturing and trading hub is essential for its promotion as a gateway especially to the east. This needs to be located within an integrated development plan for the port that includes linking its planning with that of the CBD and with the adjacent industrial areas to the south. The Department of Trade and Industry’s National Spatial Development Initiative (SDI) provides the opportunity for focusing on the co-ordination of different levels of government and different stakeholders.

- **Dube Trade Port**
  The Dube Trade Port (DTP) has been established between the two sea-ports of Durban and Richards Bay to harness the value of having an air logistics platform. DTP is developed to promote access to global trade and open up new opportunities for production and export of high-value perishable products and manufactured goods. It is expected to act as a catalyst for economic development and labour intense growth throughout KZN province. The massive infrastructure investments in the Dube Trade Port aerotropolis will need to be optimised to fulfil its logistics promise and the Richards Bay port and industrial complex will work on the development of its growth path.
• **Cato Ridge**
Cato Ridge has been identified as one of the industrial expansion and potential dry port areas in the Municipality that can respond to the increasing demand for industrial land in eThekwini Municipality and provide logistics support for the port. However, the area faces enormous challenges especially with regards to traffic issues (limited accessibility) and as a result the area has not been unlocked and used to its full potential. By improving the infrastructure, upgrading the N3 and addressing the sewer issue these challenges can be addressed and the area can be unlocked for industrial and logistic development. The development of Cato Ridge will also serve as a stimulus to unlocking the potential of the surrounding areas of Mpumalanga and Hammersdale.

• **South Durban Basin**
This area contains South Africa's largest manufacturing enterprises in the midst of relatively poor residents. The aim in this area is to regenerate the industrial base, creating cleaner, greener industries, whilst improving the residential conditions of people in the area. The aim of the SDB ABM is to improve resident's access to social, recreational, economic and environmental facilities in the area. As a strategic focus area the objective in the SDB is to restore business confidence, consolidate existing enterprises and stimulate new development, facilitate renewed socio-economic investment and improve quality of life by tackling environmental problems, addressing operational deficiencies and improving the built environment in a sustainable manner.

• **iTRUMP Inner City Regeneration**
The Inner eThekwini Regeneration and Urban Management Programme (iTRUMP) programme drives regeneration and urban management in the Durban inner city. A complex range of issues from the flight of offices to the suburbs to the problems of the urban poor, informal trading etc all require innovative responses and is thus a strategic focus area. The iTRUMP ABM was established as a response to the need to prioritise regeneration of the inner city and places strategic value at the core of its business which seeks to maximize its multiple opportunities. The promotion of the inner city as a commercial and tourist gateway requires building on the current strengths of the inner city as well as utilising opportunities for residential densification and economic growth. The work of the current inner city ABM (iTRUMP) must give guidance to realising this potential.

### 6.5 Provision of Social Facility Nodes

A hierarchy of social facilities is supported and reinforced in this SDF to ensure the allocation of social facilities is done in appropriate locations. The hierarchy of nodes is proposed to guide an effective distribution network for a range of social services and to maintain service provision efficiency. This is to ensure that facilities have the potential to be utilised to an acceptable level rather than planning for high levels of excess / unused capacity.
6.5.1 Proposed hierarchy of social facility nodes

The criteria that has been used in the study of social nodes has taken the following factors into consideration:

- **The Catchment area extent** which shows the node locations and catchment extent. The model assigns all population in the hexagons to the closest node (each having unlimited capacity), thereby creating a spatial extent / boundary;

- **The User-side classification** which takes into consideration travel time to the closest node within each catchment (indicated by shading on the map) and

- **The service-side node classification** based on the modeled allocation to each node of all people (who are closer to this node than to any other).

The clustering of social facilities is ranked and translated into different social facility nodes levels (level 1-5) as follows:

**Level 1 Node: Durban CBD**

This level is linked to the foreseeable future of a single social facility node of a metropolitan status where all the highest order social facilities are to be located. This includes facilities such as the High Court, City Hall, Reference Library, ICC and International Sport Precinct, main City Council offices, etc. This decision was based on the pragmatic approach that irrespective of the emergence of decentralised nodes over the years, the historic Durban CDB remains the established location for these services with limited likelihood of any change. Duplication of these metropolitan facilities is unlikely in the foreseeable future given resource constraints. Durban CBD is supported by the *de facto* investment in higher order local, provincial and national facilities.

**Level 2 Node:**

The second level nodes have threshold requirements of sub-regional / higher order facilities. Second order nodes should have a population catchments of 400 000 people within 20 minutes travel time. It is considered appropriate that there should be at least one Level 2 Node in each sub-region to act as the focus for higher order facilities. The outcome indicated too many competing nodes in the North and no Level 2 Nodes in the South or West due to inadequate population within any of the catchments. An initial action was to test the ability of Isipingo Rail (key transport node) in the South, and Mpumalanga in the West, to attract 400 000 residents within its catchment before testing the remaining nodes in competition with one another.

Bridge City will serve as the Level 2 Node in the North and Umlazi (mega city area) will be the Level 2 Node in the South. Pinetown will serve the West and part of Central whilst the CBD will provide for all Level 1 and 2 needs for those closest to this area. In the next five to eight years it is expected that a second Level 2 Node is likely to emerge in both the north and south.
No node in the Outer West can be designated as a Level 2 Node as neither Hillcrest nor Mpumalanga (the two most established nodes) attract 400 000 people. Shongweni node has the greatest regional accessibility but at the moment there is insufficient development at this node.

**Level 3**
The primary criterion for ranking of Level 3 and lower nodes was based on a minimum threshold of 90 000 people, but not exceeding 390 000, living within a 20 minute travel time (in competition with other nodes of Level 3 status or higher)

**Level 4**
The population threshold of level 4 ranges between 30 000 and 90 000 people. The nodes of this level are in competition with other nodes of Level 4 or higher, in 15 minutes travel time.

**Level 5**
The population threshold of this level is less than 30 000 people but more than 3 000 people in 10 minutes of travel time.
The catchment areas around the nodes are shown in various shades on the map to distinguish each separate catchment area
6.6 Strategic Infrastructure Planning and Implementation

6.6.1 Infrastructure Asset Management

The Municipality is on a drive to introduce good asset management practices in all municipal departments. For example, ensuring that there is a greater emphasis on proactive rather than reactive maintenance of infrastructure thus ensures that we are not over-committing funds to building new infrastructure which leads to insufficient funding for the maintenance, renewal, rehabilitation/reinforcement and replacement of existing assets. Managing the demand for new infrastructure is also being promoted. One example of this is the effort being put into reducing the loss of municipal water (and thereby reducing the need for new water infrastructure to be built) through replacing water pipes and repairing leaks, reducing water theft and managing water pressures in the pipe network. Consideration is also being given to, where possible, reducing the
dependence on river water as the only potable supply through the re-use of water from treatment works as well as research into sea water de-salination. These initiatives are referred to as ‘alternative supply’ projects. Another example of this type of project is the generation of electricity from methane gas at municipal landfill sites.

6.6.2 Addressing Infrastructure Backlogs

The Municipality has as part of its Infrastructure Planning, documented the nature and extent of the urban and rural backlogs in service delivery across the entire metropolitan area, using digital records held by the Municipality together with input from communities and councillors. Services that are being targeted include water, electricity, solid waste, sanitation, storm water, roads and sidewalks, pedestrian bridges, public transport infrastructure, all community facilities and the provision of street addresses to all houses within eThekwini. In order to address these backlogs, specific strategies will be developed for urban and rural areas.

The Comprehensive Infrastructure Plan (CIP) Phase One identifies the backlog for bulk and reticulation infrastructure, and the backlog in asset management for water, sanitation, electricity and roads. The asset management Section of the plan indicates the long-term operational costs. Phase 1 of the CIP deals with the provision of services for the current Housing Plan and to rural areas. It acknowledges that later editions of the plan will need to deal with private developments as well. Phase One reflects all projects in the eThekwini Housing Plan, the Interim Service Program, rural backlogs and New Initiatives for social facilities.

Emphasis is given to the eradication of rural basic service backlogs especially water and sanitation. In urban areas the primary intervention is the eradication of informal settlements through the provision of housing and a package of household services as well as the provision of interim services to improve living conditions in these settlements.

The CIP distinguishes between three standards of services:

<table>
<thead>
<tr>
<th>Area</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural service standards</td>
<td>One ground tank per household supplied with 300l per day; Urine diversion toilet; Electrification only of densely clustered pockets; All weather surface to all public transport routes and roads within communities having a density greater than 15 person per Ha</td>
</tr>
<tr>
<td>Interim Service standards</td>
<td>Communal ablution blocks (toilets and showers) within 200m of served households; Electricity to every dwelling; High mast lighting for security; Emergency access roads for waste removal, fire and emergency vehicles.</td>
</tr>
<tr>
<td>Urban service standards</td>
<td>Full pressure house connections; Waterborne sanitation; Electricity connection; All weather surface roads</td>
</tr>
</tbody>
</table>
6.6.3 Cost Surfaces Model

Land identified for both in-situ upgrade and greenfields projects are evaluated using the Cost Surface Model. This Model indicates spatially the presence as well as the capacity of bulk infrastructure across the Municipality. It provides cost estimates for bulk infrastructure provision for any location in the city.

The objective of applying the model is to locate housing projects where services with available capacity are present rather than locating projects in areas where new services must be provided at higher cost to the Municipality. Where services are not available in areas identified for projects (given land constraints) a phased servicing approach integrating various (engineering) line budgets is undertaken. It is noted that the Cost Surfaces Model needs to be regularly updated to reflect new developments.
CHAPTER 7
THE REVISED SPATIAL DEVELOPMENT FRAMEWORK

Synopsis: This chapter seeks to guide the overall spatial distribution of current and desirable land uses within the municipality in order to give effect to the vision, goals and objectives of the municipal IDP.
7. THE REVISED SPATIAL DEVELOPMENT FRAMEWORK (SDF)

The revised spatial development framework is represented by a composite map that shows key spatial proposals and development concepts and depicts pictorially the thrust of the IDP showing the Municipality’s investment intentions and development management approach as discussed previously.
7.1 Composite/Spatial Development Framework Map

The strategic focus areas for our municipal SDF are:

- Identification of future landuses including areas for industrial expansion, mixed use development and residential infill contained within an urban development line.

- Future residential development outside the UDL that supports different lifestyles, densities and has different servicing needs and constraints as opposed to those within the UDL which are higher density and urban in nature;

- Regeneration of existing developed areas such as Warwick Junction, the Inner City, Cato Manor and South Durban Basin, Secondary CBD’s such as Pinetown, and Township Nodes and Corridors e.g. INK, Clermont/KwaDabeka and Umlazi)

- The Port of Durban, Dube Trade Port and Cato Ridge as key economic investment areas which require major investment;

- The provision of investment opportunity areas within Hammarsdale, Bartletts, Shongweni, Cornubia and Illovo as a way of encouraging private investment and partnerships within the Municipality subject to servicing and financial limitations;

- Smaller urban investment nodes which provide convenient and efficient access to commercial, community and social facilities thereby reducing the need to travel long distances. These nodes have a number of characteristics and may include higher residential densities, mixed use, public transport and non-motorised transport, public amenities and good infrastructure with the level of services defined by the respective role of the node within the hierarchy of nodes;

- Densification and intensification of land uses along the Integrated Rapid Public Transport Network (IRPTN) and within existing nodes and corridors to reduce sprawl and the need to travel long distances to access services.

- Emphasis on integration, accessibility and convenience in more densely populated urban areas including the provision of priority public transport routes, road and rail linkages;

- The promotion and preservation of key environmental assets e.g. upper catchment areas that provide free ecosystem services, including the buffering of negative climate change impacts, and supports the health of the entire metropolitan area;

- The promotion and preservation of key agricultural assets to secure long term food security
• The promotion of Coastal, Mixed Use and Tourism corridors that provide diverse opportunities for development and lifestyle whilst protecting against the risks of sea level rise;

• Any development in areas in or adjacent to the Municipalities important environmental assets will require careful scrutiny and appropriate action to ensure no negative impacts, notwithstanding the current zoning that may apply.

7.2 Detailed Spatial Planning

The SDF does not provide definitive statements on all aspects of spatial development in the EMA. Sector plans and detailed spatial plans also reflect this understanding at a more local scale. In order to achieve more detailed spatial proposals the SDF is translated into more geographically specific physical development and land use management guidelines through the preparation of Spatial Development Plans (SDPs), Local Area Plans, Functional Area Plans and Land Use Schemes.

Spatial Development Plans are undertaken annually for each spatial planning region identified in the municipal area, namely the Central, North, South and Outer West Spatial Planning Regions. These are informed by the SDF and provide greater detail about future spatial planning and land use, environment, transport and infrastructure interventions required at a regional level and might be considered equivalent in nature to a Regional Spatial Development Framework. This SDF should be read in conjunction with all lower order plans (SDPs, LAPs, FAPs and Schemes as they reflect and carry though the spatial and non-spatial planning intentions of the IDP and SDF to increasing levels of detail culminating in detailed Land Use Guidelines and Draft Schemes. All of the above plans form part of the Package of Plans and should be read in conjunction with the SDF Review 15/16. Annexure 2 of this report provides a summary of the SDPs.
CHAPTER 8
SDF IMPLEMENTATION AND CAPITAL INVESTMENT FRAMEWORK

Synopsis: The capital investment framework is part of the implementation which indicates capital projects and priorities which the Municipality will undertake within its five years budget cycle.
8. SDF IMPLEMENTATION AND CAPITAL INVESTMENT FRAMEWORK

8.1 Linking Town Planning Schemes to the SDF

The Municipality’s delivery plan (IDP) is organized into eight separate but related plans. The first of these plans is ‘Sustaining the Natural and Built Environment’. The goal of this plan is to direct and manage the use of the built and natural environment to ensure sustainable and integrated growth and development of the Municipality.

There are 7 programmes in the plan, and programme 1 aims at establishing and implementing a sustainable and integrated spatial planning system. The desired outcome of the plan is that citizens will be able to access and use resources to meet their needs without comprising the ability of future generations to achieve well-being by meeting their needs (better health and wealth) as free as possible of inherited burdens.

The Spatial Development Framework (SDF) is the point of integration of strategic municipal spatial strategies in the arena of economics, transport, environment and society. The Spatial Development Plans (SDPs) cover the municipal area at a greater level of detail than the SDF. The relationship between broader strategic planning and Schemes is central to ensuring consistent and thorough decision-making around land use management and change.

The Scheme is used to enforce the broader policies contained in the Municipality’s Integrated Development Plan (IDP) and Spatial Development Framework (SDF) at a property level. Our municipal IDP and SDF guides development, and thus inform the preparation and management of land use in terms of the Scheme. The Land Use Management Framework (LUMF) provides the link between the Scheme and SDF proposals.

The LUMF translates the strategic objectives to a level that will provide spatial representation and quantification of SDF proposals to guide the preparation of the Scheme and decision-making on applications for land use change. It does this by translating the SDF into a more detailed set of broad land use areas that direct the future development of areas and provides the basis for the formulation of the detailed zones for the Scheme.

This link between the Scheme and SDF through the LUMF ensures that operational guidance is provided for planners responsible for implementing the SDF and Scheme and ensures that institutional guidance is provided and takes account of existing governance structures such as Traditional Authorities and the Ingonyama Trust Board in some areas of land use decision-making. The following diagram illustrates the relationship between the SDF, LUMF (linking elements) and the Scheme.
The eThekwini Spatial Planning and Land Use Management System (LUMS) will provide a customer-focused tool that will implement spatial policy, stimulate growth, which will give citizens, landowners and developers a sense of security and confidence, and will allow Council to make decisions that are in the public interest. The eThekwini Land Use Management Systems ‘toolbox’ is made up of an Integrated Suite of Plans. The Suite of Plans includes corporate policies and strategies for the Municipality (LTDF, IDP and SDF) and implementation tools (SDPs, LAPs, FAPs, SAPs and LUSs).

The corporate policies and strategies outline the long term vision for the development of the Municipality which is applied and achieved through the implementation tool. The implementation tools consist of a range of planning activities all running in parallel with each other with the common purpose of updating, refining and establishing appropriate mechanisms for managing land use and development in the Municipal area.

The SDF provides a spatial translation of the corporate policies and strategies. It is implemented through a set of detailed plans starting from the Spatial Development Plans (SDP’s) which are developed to bridge the gap between the strategic/conceptual SDF and the detailed land-use schemes referred to in the municipal plan hierarchy. The SDP’s identify a number of priority projects which are detailed in Local Area Plans (LAPs) and Functional Area Plans. The following diagram reflects the integrated suite of plans and the relationship between the Implementation tools:

![Diagram](image-url)

**Figure 54: Relationship between the SDF, LUMF (linking elements) and the Scheme**

*Long-term vision
- Strategic direction and guidance
- Sectoral integration occurs here
- Investment framework

*Operational guidance
- Link to institutional structures
- Selection of scheme approach and content
- Phasing of scheme preparation and application
- Quantification of SDF proposals
- Could form part of SDF, Scheme or be separate plans

*Management tool to implement strategic plans and manage development
- Provides certainty*

- e.g. Local Action Plans
  - Urban Design Plans
  - Conservation Plans
The implementation tools provide detailed planning and land development guidelines. These guidelines often include urban design guidelines and directives as a way of detailing the principles as suggested within the SDF. This in turn guides the preparation of the Scheme. The update of Schemes is informed by the phasing of development as illustrated in the detailed planning. The Municipality will only support development that aligns with the policy proposals and guidelines as contained within the Integrated Suite of Plans.

Figure 55: Suite of Plans and Relationship between the Implementation Tools
8.2 Development Strategies, Policy Statements and Land Use Guidelines

Development strategies have been formulated to help achieve the desired spatial outcomes of the EMA. The strategies outlined below have been developed from an understanding of the development context and are guided by the policy framework pertaining to the SDF as outlined in chapter 1.

The strategies are also guided by the SDF vision, to have by 2030 a socially equitable, resilient, environmentally sustainable and functionally efficient Municipality that bolsters its status as a gateway to Africa. This vision is underlined by a set of principles as discussed in chapter 4.

The strategies discussed below are intricately linked and do not exist in isolation of each other. Integration of the strategies occurs in the following way:

- At a broad strategic level through the Integrated Development Plans, and
- At an operational level through the application of spatial planning tools (such as nodes and corridors density variation, catchment based planning and encouraging compact development through the application of the Urban Development Line (UDL) and various spatial targeting instruments.

Underlying the strategies are two institutional pre-conditions. Firstly there needs to be a supportive land use management system to provide the strategic and operational framework for development. Secondly linkages should be established with IDP strategies.
8.2.1 STRATEGY 1: Manage urban growth, construct and maintain viable built environment and sustain natural environments and resources

This strategy is informed by the principle of sustainable environmental planning. The spatial focus of this strategy is protecting and enhancing rural, agricultural and urban built and natural environments. The strategy aims to maximize opportunities for sustainable urban form and promoting sustainable use of resources and protection of the natural environment and agricultural resources. Some examples of Municipality projects that align with this strategy include the Coastal Management Plan, Catchment Planning, the Umgeni Green Corridor Project and the Ohlanga-Tongati Local Area Plan.

The key elements of the strategy include environmental protection and enhancement, climate change, place-making and optimal use of existing infrastructure. Good design, creativity and innovation, are essential to improve the built environment and make better use of land to support sustainable patterns, for example:

- taking into account the economic, environmental, social and cultural implications of development and spatial investment decisions on communities;
- improving the built and natural environment, and conserving the region’s heritage;
- promoting community safety and security, including flood risk;
- ensuring that services are conveniently located, close to the people they serve, and genuinely accessible by public transport;
- promoting good quality design in new development
- promoting policies relating to green infrastructure and the greening of towns and cities;
- maintaining and enhancing the quantity and quality of biodiversity and habitat;
- assessment and amelioration of the potential impacts of development (and associated traffic) on air quality, water quality and water levels.

Strategy 1 is elaborated further in the table below:
<table>
<thead>
<tr>
<th>Policy Statements</th>
<th>Requirements to achieve policy statements</th>
<th>Land use management guideline</th>
<th>Alignment with policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Construct and maintain a viable built environment</strong></td>
<td>• Promote the optimal use of existing and future infrastructure and resources</td>
<td>• Promote a variety of housing typologies to maximize efficiency while at the same time promoting culture and heritage.</td>
<td>• ETekwini densification study</td>
</tr>
<tr>
<td></td>
<td>• Promote densification in strategically located and well-serviced areas</td>
<td>• In promoting housing, ensure that there are safe spaces and recreational places for people.</td>
<td>• DMOSS</td>
</tr>
<tr>
<td></td>
<td>• Encourage mixed land use particularly along transport corridors</td>
<td>• Ensure preservation of the natural environment.</td>
<td>• IRPTN</td>
</tr>
<tr>
<td></td>
<td>• Identify well located, accessible land for Greenfield development</td>
<td>• Rural development should be guided by the Rural Strategy</td>
<td>• SDP's</td>
</tr>
<tr>
<td></td>
<td>• Upgrade informal settlements and under-invested areas.</td>
<td></td>
<td>• Housing Sector plan</td>
</tr>
<tr>
<td></td>
<td>• Maintain public investment in existing residential and public environments.</td>
<td></td>
<td>• ETekwini Urban Design</td>
</tr>
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<td></td>
<td>• Previously disadvantaged areas should be specifically targeted for the identification of open space projects</td>
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<td>• Adaptation Plan</td>
</tr>
<tr>
<td></td>
<td>• Promote mixed land use particularly along transport corridors</td>
<td></td>
<td>• Strategic Environmental Plan</td>
</tr>
<tr>
<td></td>
<td>• Identify well located, accessible land for Greenfield development</td>
<td></td>
<td>• Catchment Management Plan</td>
</tr>
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<td></td>
<td>• Upgrade informal settlements and under-invested areas.</td>
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<td></td>
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<td>• Promote mixed land use particularly along transport corridors</td>
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<td></td>
<td>• Upgrade informal settlements and under-invested areas.</td>
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<td></td>
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<tr>
<td></td>
<td>• Previously disadvantaged areas should be specifically targeted for the identification of open space projects</td>
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</tr>
<tr>
<td><strong>2. Reduce urban sprawl and promote a compact city development</strong></td>
<td>• Minimise the conversion of agricultural land for new urban development</td>
<td>• In areas where there is sufficient infrastructural capacity, densify the area by the introduction of a mix of land uses.</td>
<td>• ETekwini densification study</td>
</tr>
<tr>
<td></td>
<td>• Prioritise infill development in areas that provide opportunities for linking and integrating areas</td>
<td>• Support rezoning of land to allow for increased densities only in areas identified for densification</td>
<td>• DMOSS</td>
</tr>
<tr>
<td></td>
<td>• Ensure clustering of various activities (work, live, play) at appropriate locations.</td>
<td>• Prioritise infill areas for development that provide opportunities for linking and integrating communities, neighbourhoods and economic areas</td>
<td>• IRPTN</td>
</tr>
<tr>
<td></td>
<td>• Densification and Infill should be promoted in well serviced and strategically located areas and should contribute to the restructuring and efficiency of the urban environment</td>
<td>• Ensure the pre-conditions to densification such as suitable development controls and building regulations, namely, FAR, coverage, setbacks, minimum lot sizes, zoning, parking regulations, height, restrictive title conditions are addressed and discussed with the applicant.</td>
<td>• SDP's</td>
</tr>
<tr>
<td></td>
<td>• Densification and Infill should help create thresholds for public transport and contribute towards more effective utilization of various modes of public transport.</td>
<td>• Prioritise higher residential densities / housing projects within existing nodes and within public transport corridors</td>
<td>• Housing Sector plan</td>
</tr>
<tr>
<td></td>
<td>• Higher residential densities should be promoted around nodes and within corridors</td>
<td></td>
<td>• ETekwini Urban Design</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Adaptation Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Strategic Environmental Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Catchment Management Plan</td>
</tr>
<tr>
<td><strong>3. Sustain natural environments and resources</strong></td>
<td>• Optimise the economic, social, aesthetic and functional value of open space services through the implementation of DMOSS</td>
<td>• Ensure proposed development does not encroach onto environmentally sensitive land</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Existing natural environmental resources should be protected and enhanced to ensure that the ecosystem within the open space</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14: Strategy 1 Policy Statements, Requirements and Land Use Management Guidelines
are able to effectively deliver services

- Development must be directed away from hazardous areas such as floodplains, unstable soils and steep slopes
- Protect environmentally sensitive areas, agricultural land and open space
- Protect river catchments and develop catchment management plans for river systems where rapid development will occur
- Develop coastal management plans
- Create a network of green open spaces and protect important environmental areas
- Support sustainable catchment management and stormwater practices.
- Promote the prevention and reduction of pollution.
8.2.2 STRATEGY 2: Improve access and movement of people and goods between areas of need and areas of opportunity

This strategy is informed by the principle of spatial concentration and promotes efficient movement of people and goods, urban infill and densification. The spatial focus of this strategy is to address challenges relating to spatial fragmentation and distorted settlement patterns within the EMA.

In relation to movement of people the strategy proposes that development should be located so as to reduce the need to travel, especially by car, and to enable people as far as possible to meet their needs locally. Safe and sustainable access for all, particularly by public transport, between homes and employment and a range of services and facilities (such as retail, health, education, and leisure) should be promoted.

In terms of movement of goods a shift towards a more sustainable mode of transport for freight should be secured, an integrated approach to managing travel demand should be encouraged, and road safety improved.

An example of a project that aligns with this strategy is Bridge City, a fairly new mixed use sub-metropolitan node which is located on a major development corridor and transport networks, MR93 and North Coast Road and includes an underground railway station. The locality of the Bridge City site suggests that, from a development perspective, the site is accessible to a local and regional commuter and consumer markets. Bridge City will serve as the social and commercial centre to an area housing a population of over 800 000 people, who at present, have generally poor access to facilities and social services.

Other examples of projects that align with this strategy include the City’s Densification Strategy; the MR 577 (constructed) links Pinetown and Inanda-Ntuzuma-KwaMashu (INK) areas and the MR 579 (proposed) aimed at improving linkages between uMlazi with Pinetown.

Strategy 2 is elaborated further in the table below:
### Table 15: Strategy 2 Policy Statements, Requirements And Land Use Management Guidelines

<table>
<thead>
<tr>
<th>Policy Statements</th>
<th>Requirements to achieve policy statements</th>
<th>Land use management guidelines</th>
<th>Alignment with policies</th>
</tr>
</thead>
</table>
| **4. Improve connectivity within the Municipal area and** | • Strengthen and integrate public transport networks, services and modes to ensure that passengers move optimally from origin to destination in an efficient manner and in the shortest time possible.  
• Promote public transport links between disadvantaged areas and main economic nodes of the Municipality  
• Reduce the need to travel by vehicular transport  
• Facilitate movement between areas of need and wider metropolitan opportunities  
• Create a safe, efficient and integrated city wide public transport system and use it as a tool to restructure the Municipality and integrate marginalized areas.  
• Include Non Motorized Transport as essential components of land use and transport planning  
• Investigate new road and rail based network links.  
• Engage with PRASA to explore potential of improving passenger rail service | • Around brown field developments: the strategy to create and introduce a vibrant mix of land uses and higher densities must be considered without impacting on the existing amenity of the area while at the same time supporting a more efficient public transport system.  
• In green field developments: the opportunity to density along public transport corridors remains prime with densities of varying intensity toward pure residential development.  
• Promote mixed use, working from home e.g. in the form of online work in zoning and land use management.  
• Identify and maintain non-motorized transport routes | • Integrated Transport Plan (2010/15)  
• eThekwini Housing Sector Plan (2011)  
• eThekwini Energy Strategy  
• eThekwini Environmental Services Management Plan  
• Built Environment Performance Plan (BEPP) |
| **5. Implement Housing within the context of a sustainable and integrated development planning framework** | • Encourage the implementation of housing as part of a broader strategy to re-structure and transform the present sprawling and inequitable urban form into a more compact, integrated and accessible environment.  
• Promote the development of well located areas and optimize the use of existing infrastructure  
• Ensure that movement system directly links with and is supported by strong high intensity nodes and higher density residential development.  
• Integrate land use with economic and transport planning  
• Encourage mixed use environments and non-residential uses in appropriate areas, namely, particularly in identified nodes and along transport corridors and interchanges. | When assessing new proposed housing developments the following issues must be considered:  
• Is the proposed development inside the Urban Development Line?  
• Is the proposed development in close proximity or within a walking distance to main public transport routes Is the proposed development within walking distance to main nodes and corridors?  
• Does the proposal benefit from good access to economic and social opportunities?  
• Does the layout encourage a grid road structure that provides logical and accessible public transport routes?  
• Identify mechanisms and processes to fast track the delivery and approval of subsidized housing applications |
8.2.3 STRATEGY 3: Build and protect vibrant economic areas and lay a foundation for future economic development

This strategy is informed by the principle of enhancing (or harnessing) economic potential, coordinated planning and implementation. The strategy aims to promote and enhance the economic role of the EMA within the KZN province. This could be achieved in several ways including:

- Revitalisation of existing economic areas. Examples include Greater Durban and Pinetown CBD.
- Developing new economies (e.g. Cornubia, Umhlanga, Bridge City and Shongweni) and former townships (e.g. Umlazi Megacity and Clermont/ KwaDabeka Regeneration Project and Mpumalanga Town Centre).
- Facilitating emerging and informal economic activity for example Warwick Junction.
- Identifying industrial and business expansion opportunities in areas such as Cato Ridge, Inyaninga / Tongaat and Dube Trade Port.
- Improving freight and passenger linkages (as per the Integrated Rapid Public Transportation Network study recommendations)

Strategy 3 is elaborated further in the table below:

<table>
<thead>
<tr>
<th>Policy Statements</th>
<th>Requirements to achieve policy statements</th>
<th>Land use management guideline</th>
<th>Alignment with policies</th>
</tr>
</thead>
</table>
| 7. Revitalize economic areas of major significance | • Encourage economic restructuring and development in existing and prioritized economic nodal areas and corridors.  
• Establish incentive for businesses to locate in established areas to avoid decentralization of businesses and increasing vacancy rates and declining amenity at the centre. | • Translation of the Municipality’s economic Plan into the Schemes as it relates to market trends.  
• Updating and Review of the Schemes to promote emerging land uses.  
• Ensure quality environments as it relates to built form. | • eThekwini Economic Development and Job Creation Strategy (2013)  
• eThekwini Industrial Spatial Strategy |
| 8. Develop new economic areas to augment and | • Enable and encourage the promotion of a wide range of economic sectors to complement each other | • All new zoned land to continuously promote a variety of vibrant land uses that will promote the Municipality’s vision and quality | • Economic |
| Diversify the economic base of EMA | - Promote the Green Economy including the generation of energy from renewable sources in the eThekwini municipal area.  
- Promote and manage investment into energy generation from renewable sources  
- Focus economic growth and job creation through investment nodes and tourism corridors | - Consider energy generation from renewable sources in town planning scheme and related policies. | Review and the Industrial Strategy  
eThekwini Energy Strategy |
|---|---|---|---|
| 9. Develop spaces to facilitate economic activity which should encompass informal trading economy and SMME’s | - Focus employment interventions to include the marginalized sectors of the population to support emerging and informal enterprises | - Introduce land use policies and mechanisms that will support the development of small businesses and allow for the location of trading facilities in established market areas  
- Where appropriate ensure that the informal sector and small business opportunities are not excluded from formal economic development  
- Facilitate, support and extend agricultural production and distribution networks | |
| 10. Identify appropriate industrial and business infill and expansion paths to accommodate demand | - Protect existing industrial land and identify new opportunities for Industrial development | - The Industrial development strategy must be used as a guide in assessing industrial development applications  
- Carefully consider the compatibility of proposed land use when assessing rezoning applications, especially in predominantly residential areas  
- Do not support growth of ad hoc industrial areas, use nodal areas, transport routes and service availability as guidelines | |
| 11. Address spatial economic imbalance | - Ensuring there is spatial integration of investment for local economic development.  
- Development of LED strategies for key nodal and under-invested areas  
- Unlock employment opportunities in areas that lack economic opportunities  
- Bring economic opportunities closer to where people live  
- Improve /establish access to facilitate that are of major importance  
- The development of nodes should take into consideration rural-urban linkages | - Support development initiatives in locations that are easily accessible especially to areas of need | |
8.2.4 STRATEGY 4: Ensure eThekwini strategies and policies are proactive in responding to and promoting rural development, food security and agriculture

This strategy is informed by the principle of Balanced and Sustainable urban and rural development. This strategy provides the basis for integration of the rural areas into the mainstream growth and development of the municipal area. This includes understanding the nature of the space economy and how urban and rural activities support each other (e.g. agriculture and agricultural processing) and adopting policies that could strengthen this relationship (e.g. protect agricultural land from development and diversifying agricultural opportunities and rural economies). There is also the need to understand the roles of rural settlements in the space economy and promote future development that is supportive of this role. For this strategy, reference is made to the eThekwini Rural Development Framework and the development of priority rural nodes i.e. Inchanga, Umbumbulu, KwaXimba, uMzinyathi and Umnini nodes.

The strategies formulated for the rural areas are aligned with the sector plans as contained in the IDP summarized here as follows:

- **Economic development**, facilitation of community based economic development with emphasis on skills development, agriculture support, cultural and eco-tourism and sustainable livelihood opportunities, renewable energy generation potential, public investment focused on rural service centers,
- **Transportation**, provided by the Integrated Public Transportation Network,
- **Housing and services**, providing appropriate rural servicing packages in line with affordability, sustainable use of natural resources and minimisation of environmental impact, public investment to be focused on rural service centers,
- **Environment**, securing threatened environmental areas on which the health of the urban periphery and core depend, promoting good land management via appropriate land use management and catchment management mechanisms, maximising open space opportunities for eco and cultural tourism, sustainable livelihood opportunities and agriculture.

| Table 17: Strategy 4 Policy Statements, Requirements And Land Use Management Guidelines |
|---|---|---|---|
| **Policy Statements** | **Requirements to achieve policy statements** | **Land use management guideline** | **Alignment with policies** |
| 1. Protect and enhance the city's rural environment | • Conserve critical environmental assets  
• Conserve good agricultural potential land for future food security and job creation  
• Prevent unconventional urban development from intruding into the rural environment | • Defend rural landscape  
• Support appropriate development and activities in rural areas | • eThekwini Municipality rural development framework (currently being updated)  
• eThekwini Energy Strategy  
• National Development |
| 2. Promote integrated and | • Facilitate sustainable and integrated service delivery,  | • Develop a clear hierarchy of rural service nodes and corridors |  |

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appropriate development in the rural periphery
- Development of Human Settlements in line with National and Provincial Policies
- Development of rural service nodes and rural corridors
- Promote and support integrated housing development in rural areas

3. Establish appropriate land use planning and management guidelines for rural development
- Clear understanding of the nature and role of rural areas within the wider eThekwini Municipal area
- See details below of land use guidelines for the Umnini Rural Scheme Pilot Project. The rural scheme project will be rolled out in other rural areas across the Municipality.

4. Promote the opportunities of generating renewable energy in rural areas.
- Investigate the potential of resources for renewable energy generation and appropriate technologies
- Facilitate investment into renewable energies in rural areas
- Include and manage generation of renewable energy as an additional land use.

The Umnini Rural Scheme pilot project takes into account the existing institutional arrangements and processes i.e. Ingonyama Trust Board (ITB) and Traditional Authorities. The introduction of the scheme in Traditional Authorities will not replace the existing land administration system but rather enhance it. The Umnini Scheme has developed the following set of guidelines:

**Table 18: Umnini Rural Scheme Land Use Guidelines**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Land Use Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placement of buildings in relation to roads</td>
<td>For safety reasons all buildings should be set back from roads:</td>
</tr>
<tr>
<td></td>
<td>- National Roads: 60m from edge of the fence line of the road</td>
</tr>
<tr>
<td></td>
<td>- Provincial Main Roads: 30m reserve and 15m building line</td>
</tr>
<tr>
<td></td>
<td>- District roads: 20m road reserve and 10m measured from the edge of the road reserve</td>
</tr>
<tr>
<td></td>
<td>- Local Roads: 10m road reserve and 5m building line</td>
</tr>
<tr>
<td></td>
<td>- Un-surveyed Main Roads: 30m measured from the approximate centre line of the road</td>
</tr>
<tr>
<td></td>
<td>- Un-surveyed District Roads: 20m measured from the approximate centre line of the</td>
</tr>
<tr>
<td></td>
<td>road or 11m from approximate edge of the road</td>
</tr>
<tr>
<td></td>
<td>- Un-surveyed Local Roads: 10m measured from the approximate centre line of the road</td>
</tr>
<tr>
<td></td>
<td>- 6m from approximate edge of the road</td>
</tr>
<tr>
<td>Imizi</td>
<td>Adequate space about buildings for future installation of services.</td>
</tr>
<tr>
<td></td>
<td>Cluster residential development together to retain land for agricultural development,</td>
</tr>
<tr>
<td></td>
<td>minimize impact on sensitive environmental areas, and facilitate efficient provision of basic services.</td>
</tr>
<tr>
<td></td>
<td>Cluster houses near interSections and places with good access to road network so that people can access public transport.</td>
</tr>
<tr>
<td></td>
<td>Access to individual houses off busy main roads should be limited.</td>
</tr>
<tr>
<td></td>
<td>Access should be gained off side roads where the interSection of the road with the main road has been approved by the Municipal Civil Engineer.</td>
</tr>
<tr>
<td></td>
<td>Access off Provincial Roads requires the permission of the Provincial Department of Transport in terms of the KwaZulu-Natal Provincial Roads Act, Act No. 4 of 2001.</td>
</tr>
<tr>
<td></td>
<td>Demarcate adequate space for grazing land, cattle vaccine, dipping and dosing</td>
</tr>
<tr>
<td>Land Use</td>
<td>Land Use Guidelines</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Crèches</td>
<td>- Baby care – less than 6 infants.</td>
</tr>
<tr>
<td></td>
<td>- Crèche – 6 or more children.</td>
</tr>
<tr>
<td></td>
<td>- Need access to clean water for cooking and cleaning, as well as access to toilet facilities.</td>
</tr>
<tr>
<td>Pension pay points</td>
<td>- These may be associated with community halls, shops, post offices, or an open space.</td>
</tr>
<tr>
<td></td>
<td>- A waiting/queuing area should be provided away from the road so that queues do not encroach into the road.</td>
</tr>
<tr>
<td></td>
<td>- A place should be provided for parking of vehicles off the road.</td>
</tr>
<tr>
<td></td>
<td>- A space should be provided for the traders that set up stalls on pension day. This should be located away from the road to ensure safety of traders and shoppers.</td>
</tr>
<tr>
<td>Tuck Shops/ Farm stalls / spazas</td>
<td>- If separate from the homestead, the building must be set back from the road as recommended above.</td>
</tr>
<tr>
<td></td>
<td>- Any facility larger than 25m² is classified as a shop and requires the permission of the municipality as well as the Traditional Leader structures.</td>
</tr>
<tr>
<td></td>
<td>- If loading is part of the operation adequate off road space must be provided to accommodate the delivery vehicle.</td>
</tr>
<tr>
<td>Taverns</td>
<td>- May not be located near schools, churches or crèches.</td>
</tr>
<tr>
<td></td>
<td>- All applications must be referred to the Municipality who will only consider applications by the Special Consent, with full advertisement; which Special Consent may be withdrawn on sufficient complaints by neighbours or the surrounding community.</td>
</tr>
<tr>
<td>Home Businesses</td>
<td>- Should generally be facilitated as long as the predominant use of the building/s remain residential and the impact on neighbours is not onerous.</td>
</tr>
<tr>
<td>Cell masts</td>
<td>- No approval without an EIA and the granting of environmental authority from the relevant Department.</td>
</tr>
<tr>
<td></td>
<td>- Consideration must be given to potential impacts on views and health of children.</td>
</tr>
<tr>
<td>Steep slopes</td>
<td>- No development on slopes steeper than 1:3 without a full geotechnical study and a certificate from a suitably qualified professional.</td>
</tr>
<tr>
<td>Stream valley protection</td>
<td>- No development within an appropriate buffer from the boundary of wetlands and riparian areas as determined by Environmental Planning and Climate Protection Department, Development Planning, Environment and Management Unit, eThekwini Municipality</td>
</tr>
<tr>
<td>Sand winning</td>
<td>- No sand-winning without an EIA and the granting of environmental authority from the relevant Department that takes into account the impact on the river as well as the impact of access by trucks to and from the site.</td>
</tr>
<tr>
<td></td>
<td>- Special consent of the Municipality is also required.</td>
</tr>
<tr>
<td>Storm water management</td>
<td>- Any development, particularly hardened surfaces increases storm water run-off that must be accommodated to prevent erosion and potential flooding hazards</td>
</tr>
<tr>
<td></td>
<td>- Any development on a site must include some natural ground or vegetation to absorb run-off. A rough guide is that 25% of the site should be set aside as natural ground, planting or landscaping</td>
</tr>
<tr>
<td></td>
<td>- Wetlands and reed beds to be protected to assist in storm water management.</td>
</tr>
</tbody>
</table>

8.3 Spatial Monitoring and Evaluation

The White Paper on Local Government (1998), states that “integrated development planning, budgeting, and performance management are powerful tools which can assist municipalities to develop an integrated perspective on the development in their area. It will enable them to focus on priorities within an increasingly complex and diverse set of demands. It will enable them to direct resource allocation and institutional systems to a new set of development objectives”

Furthermore, the Municipal Finance Management Act of 2003 (MFMA) obligates a municipality to complete and adopt the Service Delivery and Budget Implementation Plan (SDBIP). The SDBIP links the IDP with the municipal budget and is based on specific targets and performance indicators.
derived from the IDP. Section 67 of the MSA also highlights the monitoring, measuring and evaluating of performance by the municipalities. Similarly, for eThekwini Municipality, the monitoring and evaluation of the impact of the SDF is an on-going process that is inclusive, interactive and involves consultation with various stakeholders (internal and external). This process is viewed by the municipality as being critical in that it identifies areas that need improvement, identifies priorities and interventions.

The monitoring and evaluation process also involves the identification and allocation of roles and responsibilities for different role players while at the same time documenting all the activities that are taking place as part of the SDF review process. The SDF reporting is done through the SDBIP annual reporting and municipal Annual Balanced Score Card system.

8.4 Capital Investment Framework

8.4.1 The Municipal Infrastructure Investment Framework

The municipality has embarked on a Municipal Infrastructure Investment Framework for the city. The municipality is committed to ensuring that all backlogs in the provision of infrastructure are removed. However, this must be done in such a way so as to ensure that the municipality, which is at the forefront of infrastructure delivery, remains financially viable and have the capacity to operate and maintain this infrastructure.

The Municipal Infrastructure Investment Framework (MIIF) thus aims to establish:

- The extent of infrastructure to be provided;
- The capital expenditure required to provide this infrastructure;
- The extent to which financing is available for this capital expenditure;
- The operating expenditure required to ensure that the infrastructure provided is properly operated and maintained;
- The extent to which revenue can be raised to cover this operating expenditure, within the provisions of the Municipal Fiscal Framework.

The framework also considers the monitoring systems required to assess progress with respect to infrastructure delivery as well as processes to ensure that systems and management capacity are in place in municipalities to manage the infrastructure, with the emphasis on a municipal infrastructure asset management strategy. The Capital Investment Framework (CIF) outlines the capital projects and priorities which the Municipality will undertake within the next five years. The capital projects and priorities are as a consequence of strategies and goals set by the Municipality in order to achieve the desired outcomes and vision.
The Capital budget is directly informed by the needs submitted by the community through the IDP process. The capital budget continues to reflect consistent efforts to address backlogs in basic services and the renewal of the infrastructure of existing network services.

8.4.2 Overview of past capital budget allocation and expenditure

The table below indicates the Capital spend on ‘Basic Service Delivery’ items over the past three years. One will observe that the bulk of the Capital is spent on ‘Basic Service Delivery’ infrastructure. This pattern of expenditure is expected to be maintained for the foreseeable future.

**Capital utilised for Infrastructure**

<table>
<thead>
<tr>
<th>Procurement and Infrastructure</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R’000</td>
<td>%</td>
<td>R’000</td>
</tr>
<tr>
<td>Housing &amp; Hostels</td>
<td>657</td>
<td>50,066</td>
<td>64,684</td>
</tr>
<tr>
<td>Roads &amp; Storm water (Engineering)</td>
<td>1,056,450</td>
<td>928,350</td>
<td>972,098</td>
</tr>
<tr>
<td>Transport (ETA)</td>
<td>120,772</td>
<td>198,586</td>
<td>296,182</td>
</tr>
<tr>
<td>Procurement</td>
<td>252</td>
<td>208</td>
<td>233</td>
</tr>
<tr>
<td>Sanitation</td>
<td>426,008</td>
<td>576,599</td>
<td>822,062</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>159,435</td>
<td>139,732</td>
<td>145,454</td>
</tr>
<tr>
<td>Water</td>
<td>292,975</td>
<td>282,492</td>
<td>838,044</td>
</tr>
<tr>
<td>Electricity Services</td>
<td>567,382</td>
<td>606,097</td>
<td>526,070</td>
</tr>
<tr>
<td></td>
<td>2,623,931</td>
<td>75</td>
<td>2,782,130</td>
</tr>
<tr>
<td>Total Capital Expenditure</td>
<td>3,484,739</td>
<td>3,468,713</td>
<td>4,201,622</td>
</tr>
</tbody>
</table>

The table below indicates the actual borrowings and the future loans to be taken to continue the service delivery programme.

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Forecast</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R’m</td>
<td>R’m</td>
<td>R’m</td>
</tr>
<tr>
<td>Total debt</td>
<td>10,247.0</td>
<td>10,258.0</td>
<td>10,281.0</td>
</tr>
<tr>
<td>Loans Raised</td>
<td>1,500.0</td>
<td>1,000.0</td>
<td>1,000.0</td>
</tr>
</tbody>
</table>

Over the MTREF period gearing reduces to 29%.
LONG TERM BORROWING

APPROACH

Long term borrowings in eThekwini have risen gradually between 2008 and 2014 and have been mainly in the form of annuity loans, with a significant proportion borrowed from the Development Bank of South Africa and financial institutions. The dominance of annuity loans within eThekwini's borrowing portfolio is largely due to the ability of the City to source competitive interest rates from financial institutions. While a bond issuance is a viable option for eThekwini, in part due to an excellent credit rating of AA - issued by the Global Credit Rating Company, annuity loans are preferred.

This is because they are a cheaper source of finance and are less risky for the City, as the principal is paid over the duration of the loan instead of a bullet payment at the end of the term. The City has in the past preferred fixed interest rate annuity loans as they eliminate interest risk associated with variable rate loans.

The eThekwini Municipality's loan requirement for 2014/15 is R 1 billion, and it is anticipated that this loan will be drawn down by the 30th of June 2015.

8.4.2.1 Capital Allocations

The Capital Budget from 2006/07 to 2009/10 increased by 56% cumulatively to fund increased expenditure on major infrastructure (Roads, Electricity, Water & Sanitation) as well as World Cup 2010 related projects.

The capital budget totaled R5.4 billion in 2010/11. This was funded by National and Provincial grants in the amount of R2.1 billion and R1.0 billion being funded from Council's internal sources, with the balance of R2.3 billion from external sources.

The 2010/11 capital budget allocation decreased by 22.8% amidst concerns about eThekwini being over geared and hence needing to limit further borrowing. This also comes in the context of the global recession and the potential for a decline in revenue due to households’ economic circumstances.

8.4.2.2 Capital Sources
The city’s capital program is financed through a mix of internal sources, borrowing and major grants. They account for 15%, 34% and 51% respectively over the five-years ending 2011/12.

Grants and subsidies are the most significant financing sources.

Borrowing grew significantly in 2009/10 to account for shortfalls in revenue realisation arising from the recession. This was necessary to maintain planned levels of capital spending.

**Borrowing indicators**

<table>
<thead>
<tr>
<th>R million</th>
<th>05/06</th>
<th>06/07</th>
<th>07/08</th>
<th>08/09</th>
<th>09/10</th>
<th>10/11</th>
<th>11/12</th>
<th>12/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowings</td>
<td>4,218.1</td>
<td>4,582.6</td>
<td>5,322.8</td>
<td>6,070.3</td>
<td>8,674.6</td>
<td>10,110.4</td>
<td>10,679.0</td>
<td>10,642.0</td>
</tr>
<tr>
<td>Gearing Ratio (%)</td>
<td>40.6</td>
<td>38.5</td>
<td>34.9</td>
<td>35.6</td>
<td>46.3</td>
<td>50.9</td>
<td>45.5</td>
<td>39.9</td>
</tr>
<tr>
<td>Finance Charges</td>
<td>544.4</td>
<td>499.2</td>
<td>513.8</td>
<td>598.5</td>
<td>690.8</td>
<td>687.3</td>
<td>855.0</td>
<td>1,152.0</td>
</tr>
<tr>
<td>Capex</td>
<td>1,865.4</td>
<td>2,489.4</td>
<td>4,724.6</td>
<td>5,987.7</td>
<td>6,493.6</td>
<td>4,614.8</td>
<td>4,088.6</td>
<td>5,285.2</td>
</tr>
<tr>
<td>Internal Capex Funding</td>
<td>168.9</td>
<td>398.3</td>
<td>1,739.8</td>
<td>2,830.0</td>
<td>1,828.6</td>
<td>979.1</td>
<td>583.1</td>
<td>482.6</td>
</tr>
</tbody>
</table>

**New Borrowings in 2010/11**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Fixed Interest Rate</th>
<th>Term</th>
<th>R m</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>A B S A</td>
<td>10.19%</td>
<td>15</td>
<td>1.000</td>
<td>Already taken</td>
</tr>
<tr>
<td>A B S A</td>
<td>8.73%</td>
<td>7</td>
<td>1.000</td>
<td>Already taken</td>
</tr>
</tbody>
</table>

**TOTAL** | 2.000 |
8.4.2.3 Capital Expenditure

The major capital expenditure made by the city has been in infrastructure. Increase in Water Services expenditure was due to two major projects being implemented, namely the Western Aqueduct bulk water supply pipeline and the replacement of ageing Asbestos Cement secondary pipe network.

In addition there has been increasing emphasis on rolling out a package of interim services to informal settlements in order to improve the quality of life of residents in these communities through the provision of ablution facilities, all weather footpaths and electricity.

In the 2010/11 year, housing delivery reduced, because of slow-downs in receipts of funding from Province, and because of slow-downs in procurements, which were prompted by corrections in SCM processes.

The electricity spend is related to the expansion of current infrastructure to create additional capacity and to support housing delivery. The total capital spends decreased post the 2010 World Cup by 43%.
## 8.5 Capital Budget Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HUMAN SETTLEMENTS &amp; INFRASTRUCTURE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>4,952,803</td>
<td>5,170,050</td>
<td>5,335,416</td>
</tr>
<tr>
<td>Engineering</td>
<td>1,218,930</td>
<td>1,198,400</td>
<td>1,134,686</td>
</tr>
<tr>
<td>Water</td>
<td>626,487</td>
<td>701,667</td>
<td>702,999</td>
</tr>
<tr>
<td>Electricity</td>
<td>730,156</td>
<td>793,119</td>
<td>809,667</td>
</tr>
<tr>
<td>Sanitation</td>
<td>636,422</td>
<td>666,152</td>
<td>691,100</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>641,736</td>
<td>653,900</td>
<td>692,921</td>
</tr>
<tr>
<td>ETA</td>
<td>84,198</td>
<td>126,271</td>
<td>145,527</td>
</tr>
<tr>
<td><strong>COMMUNITY EMERGENCY SERVICES</strong></td>
<td>296,021</td>
<td>420,017</td>
<td>591,442</td>
</tr>
<tr>
<td>Establishment of parks &amp; gardens</td>
<td>1,014,874</td>
<td>1,030,540</td>
<td>1,158,516</td>
</tr>
<tr>
<td>Sport fields</td>
<td>14,355</td>
<td>20,970</td>
<td>24,759</td>
</tr>
<tr>
<td>Community halls</td>
<td>21,913</td>
<td>33,976</td>
<td>61,782</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>3,199</td>
<td>7,530</td>
<td>21,820</td>
</tr>
<tr>
<td>Libraries</td>
<td>4,227</td>
<td>13,359</td>
<td>21,140</td>
</tr>
<tr>
<td>Pools &amp; Beaches</td>
<td>60,926</td>
<td>134,473</td>
<td>288,958</td>
</tr>
<tr>
<td>Museums &amp; art galleries</td>
<td>33,641</td>
<td>16,824</td>
<td>23,469</td>
</tr>
<tr>
<td>IMS</td>
<td>28,664</td>
<td>90,999</td>
<td>56,548</td>
</tr>
<tr>
<td>Clinics</td>
<td>9,892</td>
<td>5,473</td>
<td>2,221</td>
</tr>
<tr>
<td>Fire &amp; Emergency Services</td>
<td>21,058</td>
<td>15,184</td>
<td>5,195</td>
</tr>
<tr>
<td>Emergency Control &amp; Disaster Management</td>
<td>65,640</td>
<td>57,146</td>
<td>68,600</td>
</tr>
<tr>
<td>Plant &amp; Equipment</td>
<td>20,926</td>
<td>14,831</td>
<td>13,340</td>
</tr>
<tr>
<td>Security Management</td>
<td>20,926</td>
<td>14,831</td>
<td>13,340</td>
</tr>
<tr>
<td><strong>ECONOMIC DEVELOPMENT &amp; PLANNING</strong></td>
<td>245,081</td>
<td>272,422</td>
<td>364,910</td>
</tr>
<tr>
<td>Economic Development</td>
<td>162,970</td>
<td>164,826</td>
<td>240,200</td>
</tr>
<tr>
<td>Business Support &amp; Tourism</td>
<td>3,843</td>
<td>55,333</td>
<td>37,790</td>
</tr>
<tr>
<td>Development Planning &amp; Management</td>
<td>19,979</td>
<td>5,525</td>
<td>3,720</td>
</tr>
<tr>
<td>Markets</td>
<td>18,724</td>
<td>16,250</td>
<td>32,080</td>
</tr>
<tr>
<td>Urban Renewal</td>
<td>39,645</td>
<td>30,400</td>
<td>51,000</td>
</tr>
<tr>
<td>ABM – Cato Manor</td>
<td>0,050</td>
<td>0,040</td>
<td>0,060</td>
</tr>
<tr>
<td>DCM: Economic Development &amp; Planning</td>
<td>0,050</td>
<td>0,048</td>
<td>0,060</td>
</tr>
<tr>
<td><strong>TREASURY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GOVERNANCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CORPORATE HUMAN RESOURCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.5.1 Service Delivery

The City places a high level of importance on achieving value for money from its investments, measured in terms of its strategic priorities. Key outputs delivered show significant progress in the eradication of household backlogs by the city. With over 75 % of residents having access to basic services, the municipality has one of the best service delivery programmes in Africa. Nationally, our municipality is used as a financial model for financial governance and we are making great strides environmentally.

The municipality has maintained its proud record of always receiving unqualified audit reports which strengthens the municipality's vision of receiving clean audit reports ahead of government's clean audit target. eThekwini continues to review and develop sound policies, procedures and systems.

Our service delivery achievements include (amongst others) the following:

- 125 669 housing units built (2002-2012)
- 67 946 new electricity connections (2008-2012)
- Solid waste services to 945 910 formal and 687 000 informal houses (100 % coverage)
- Water Supply to 730 650 formal customers
- 253 000 houses with free basic sanitation
- 518 200 houses with free basic water
- Provision of 106 lane km of new roads and 110 lane km of gravel to ‘black-top' roads
- Construction of 305 km of sidewalks
- Construction of 46 pedestrian bridges

In recognition of the service delivery progress, the municipality has received the following awards:

- SALGA awards for the following :
  - Human Settlement award – best delivery of houses
  - Blue Drop Status- clean water category

- COGTA Awards for the following :
  - Best Integrated Development Programme
  - Best own Metro in the District Municipality Category
  - Best Innovative Infrastructure
- Top Business Portfolio Award
- Winner for Promotion of Sustained economic growth

- Govan Mbeki Human Settlement Awards
- Recognition of delivering houses
- South Africa’s “Greenest City Award

8.6 2015/16 Budget Overview

The 2015/2016 Medium Term budget proposes a total consolidated budget of R 39.1 billion which has been developed with an overall planning framework and includes programmes and projects to achieve the city’s strategic objectives. Provisions in this medium term budget continue to support government’s commitment to broadening service delivery and expanding investment in infrastructure, while taking into account the constrained fiscal environment. Municipal revenues and cash flows are expected to remain under pressure in 2015/16 due to the state of the economy; hence a conservative approach has been adopted when projecting expected revenues and receipts. Spending plans had to be revised and funds reprioritised to ensure key objectives are achieved. This budget has been developed to contribute to the municipality achieving the strategic objectives of the IDP. The 2015/2016 MTREF is informed by the municipality’s long-term financial strategy with emphasis on affordability and long-term sustainability. National Treasury’s MFMA Circular Nos. 74 & 75 was used to guide the compilation of the 2015/16 MTREF. In addition, this budget format and content incorporates the requirements of the Municipal Budget and Reporting Regulations. The budget also takes into consideration the incorporation of new wards into the municipal area.

2015/2016 TOTAL BUDGET R39.1 billion

This budget seeks to continue addressing the backlog in infrastructure and service delivery in order to deliver for all. The municipality is committed towards ensuring that the limited financial resources are
maximized for service delivery. This infrastructure roll-out will allow the municipality to focus on creating the economic environment in which investment thrives and jobs can be created. This budget has also been developed within an overall planning framework and includes programmes and projects to achieve the municipality’s strategic objectives.

8.6.1 Strategic Priorities for the 2015/16 Year

The Municipality has identified the following priority areas to be addressed during the 2015/16 financial year.

- Service delivery backlogs;
- Human settlements;
- Economic development;
- Financial sustainability;
- Mitigation and adaption of the municipality for climate change;
- Water challenges;
- Access to public transport;
- Human capital development;
- Energy challenges;
- Health of society;
- Food security;
- Sustainable spatial form;
- Rural development;
- Infrastructure degradation;
- Undermining natural capital;
- Safer city

8.6.2 2015/16 Capital Budget [Medium Term Revenue and Expenditure Framework (MTREF)]

Municipalities play a critical role in creating an enabling environment for investments and other activities that lead to job creation. Investment in urban infrastructure is important for the development of the local economy, combating poverty and the provision of universal access to municipal services. Rapid inward population migration, declining household sizes and greater economic activity places pressure on existing municipal infrastructure and require larger investments in the periods ahead.

The capital budget is directly informed by the needs submitted by the community through the IDP process. In view of borrowings being maximised and the present economic climate, the high levels of capital expenditure cannot be sustained. The capital budget continues to reflect consistent efforts to address backlogs in basic services and the renewal of the infrastructure of existing network services. To meet the demand for infrastructure; the projected capital expenditure budget for the
2015/16 period is R5.9 billion. In line with strategic priorities, the major capital investments made by the city have been in Water services and Housing.

Over the next three financial years, 2015/16 to 2017/18, capital spending is projected to increase slightly. The following diagram reflects the proposed capital expenditure program for 2015/16 by vote:

**2015/16 Budget Year Capital Expenditure program per vote**

The following are some of the Major Capital programmes, which have been included in the Medium Term Capital budget:

<table>
<thead>
<tr>
<th>Project / Item</th>
<th>Rm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low cost Housing and Infrastructure</td>
<td>2,698.3</td>
</tr>
<tr>
<td>Ethekwini Transport Authority (including PTIS)</td>
<td>3,717.9</td>
</tr>
<tr>
<td>Electricity Infrastructure</td>
<td>836.5</td>
</tr>
<tr>
<td>Addressing Community Service Backlogs</td>
<td>884.8</td>
</tr>
<tr>
<td>Water Loss intervention programme</td>
<td>174.4</td>
</tr>
<tr>
<td>Roads Rehabilitation &amp; Reconstruction and new access roads</td>
<td>1,656.9</td>
</tr>
<tr>
<td>Wastewater Treatment Works: Upgrades/Expansion</td>
<td>842.9</td>
</tr>
<tr>
<td>Northern Aqueduct – Water</td>
<td>271.4</td>
</tr>
<tr>
<td>Western Aqueduct – Water</td>
<td>883.9</td>
</tr>
<tr>
<td>Solid Waste Fleet replacement</td>
<td>158.3</td>
</tr>
<tr>
<td>New Central Library</td>
<td>354.5</td>
</tr>
<tr>
<td>Ablution Blocks Upgrade: Informal Settlements</td>
<td>720.5</td>
</tr>
<tr>
<td>Town Centre Renewals – Nodal developments</td>
<td>230.5</td>
</tr>
</tbody>
</table>
8.6.3 Economic / Social Development

In a highly global economy where competition for investment has intensified, only those economies that continuously improve their comparative and competitive advantages will weather the economic storm. The city has several comparative and competitive advantages and has in recent years enhanced these in a bid to stay ahead of the competition for investment. The municipality is on the expansion trail, with a number of strategic areas earmarked for rapid development to fit in with the city’s aim of remaining a regional power house. The second phase of the 55 km Western aqueduct pipeline is underway and will be rolled out over a seven year period. It is expected to significantly strengthen the capacity of bulk water supply to the Western regions, ultimately boosting water supply to the north of the city. There are currently a number of programmes and projects being undertaken as part of the city’s priorities in a range of sectors most of which align with national governments focus on infrastructure development and job creation. Further enhancing the provinces comparative and competitive advantages are several major infrastructure projects that form part of the Strategic Infrastructure Projects (SIP’s) announced by government. Aerotropolis, DubeTradePort, King Shaka International Airport, dig-out port, logistics hub development, dedicated rail and links, Durban to Gauteng rail upgrades—all multibillion–rand projects, which are key infrastructure developments of the Provincial Growth and Development Strategy.

8.6.4 Capital Funding and Projected Expenditure

In terms of funding the capital budget, the municipality is in a fortunate position to undertake much needed service delivery programmes from both internally generated reserves and long term external funding. In the latter case, the municipality with its sound financial credentials has financial options available that are in line with the NFMA and the Municipal Borrowing Framework. Section 45 of the MFMA guides short term borrowing in the City.

Investments for the municipality are done in accordance and adherence with the Municipal Investment Regulation of the MFMA, Councils Investment Policy and other relevant legislation. Cash flow forecasts and cash needs by the city provide guidance for the type of investment employed. The investments are made with primary regard to the risk profile, liquidity needs of the city and the return on investments. In so far as the investment and borrowing activities are concerned, all the requirements of the MFMA have been compiled with. The ability of the eThekwini Municipality to deliver on progress depends a lot on its funding sources which are summarised as follows:
The Municipal Integrated Development Plan (IDP) Review 2015/16; Medium Term Revenue and Expenditure Framework (MTREF) 2015/16 and the Service Delivery and Budget Implementation Plan 2015/16 will provide extensive details on all current projects. Indicated below is the spatial location of capital projects 2011-2015, followed by the spatial representation of the capital budget by Ward 2011-2015.
8.7 Spatial Planning Priorities and Budget Alignment Processes

8.7.1 Strategic Level Assessment

A significant amount of work has been undertaken by the eThekwini Municipality in attempting to align spatial planning priorities and inform the city’s budget.

In 2007, based on initial work done on the SDF/SDP’s, a strategic level assessment was made of the bulk infrastructure required to support the future growth of the municipality. The assessment revealed that the North region (north of the Umgeni River to the Tongati river boundary) within a city-wide context, offered the greatest potential for new development and hence the largest opportunity for expanding the municipal rates base. The reasons for this, was that in the metropolitan context, the North region was anticipated to yield the greatest proportion of new low income housing construction. It was also projected that 73% of the metropolitan residential growth, 88% of mixed use (a mix of commercial, office and residential land use) and 34% of industrial expansion would occur in the North region. Economic development was focussed in the North region and it was considered that this trend would be likely to continue for the foreseeable future with the construction of flag ship economic projects such as the Dube Trade Port.

The North comprises a number of waste water treatment catchment areas. Of these catchments it made financial, engineering and planning sense to focus development in the Ohlange catchment. Furthermore, from an infrastructure network perspective it was considered preferable to incrementally grow the network outwards rather than to provide infrastructure to ‘islands’ of development beyond the current urban area. The Ohlange catchment exhibited an excellent mix of private development (which provided for the expansion of the municipal rates base) and public housing development (which is not rateable but which addresses social and equity priorities.) In the North region, the Ohlange is the only catchment where development was not being severely constrained by the uncertainty around how much treated sewage effluent can legally be discharged into the municipal river systems. The non-completion, by the Department of Water Affairs & Forestry at the time, of these river reserve determinations was effectively holding back bulk infrastructure planning for the Umdloti and Tongati catchments which lie north of Ohlange. This combination of factors made the Ohlange the prime catchment in which to focus development to 2010/11. Through the provision of the necessary infrastructure, the following development would be facilitated in the Ohlange catchment:

- 44,500 Low Income Housing Units
- 31,200 Private Residential Units
- 1,045 million square metres Commercial / Office (Mixed Use)
- 175 ha Industrial
It was noted that much of the bulk infrastructure required to serve this new development had lead times of 3-4 years. Even though 2011 was the likely year for this new infrastructure capacity to come on stream, there were approximately 2000 sewer connection approvals already granted to cover developments that would be completed prior to 2010/11. It was also considered unlikely that public sector housing in the Verulam and Tongaat areas would be stalled since there was spare capacity in the Verulam and Tongaat sewerage treatment works at the time.

The package of infrastructure required to service the above development was then split into ‘essential’ and ‘supporting’ infrastructure for the purpose of minimising the immediate investment required. Considering the ‘essential’ infrastructure items, the additional capital monies required were estimated noting the commitment required by Council and other external bodies. A number of funding options were then identified and it was recommended that, *inter alia*, municipal officials assess all infrastructure within the Ohlange catchment in more detail to determine which developments would trigger the need for each infrastructure project and that the detailed analysis undertaken for the Ohlange catchment be undertaken for other catchment.

Aligning the budget with the development needs of the city has subsequently been undertaken at
- a community level
- nodal level and,
- Spatial Analysis of the budget
- implementation using a variety of spatial targeting instruments

### 8.7.2 Community Level- Development and Budgeting

Zone Plans have been prepared for the entire municipal area. Zones Plans indicate 17 zones (or clusters of wards) across the municipal area. Profiles of ‘Need’ have been developed for each Ward /Zone together with the Capital Budget Spend in each Ward/Zone which details ‘Delivery’. ‘Need’ has been determined from the socio-economic information for each ward / zone and from expressed community priorities. Using the ward / zone profiles, the municipality has been able to map spatially the areas of “Need” and compare this with the “Delivery of Services” as a means of aligning the municipal budget to the developmental needs of communities. The analysis of the “Need” that exists within these geographic units (Ward & Zone Profiles), allows the municipality to assess how well it is “Delivering” in relation to the “Need”, to identify the “Gaps” and determine the local area priorities. The analysis has revealed that some Developmental Needs are not adequately funded and the big gaps are largely around economic development/job creation/skills, health & welfare, safety & security and services to informal settlement.

- The greatest Developmental Need exists in Zones 2, 3 & 10. Accordingly, these Zones should receive high priority in the Capital Budget based on the geography of “Need” - an indicator combining indices of unemployment, income, infrastructure backlogs and social facility backlogs.
As of February 2013 a new process was proposed. This entails an analysis of ‘Need’ versus ‘Delivery’ in the 17 Zones for 2013/14-2015/16 budgets for ‘Community-facing’ projects (such as roads and sidewalks etc), obtain candidate projects and engage at a zone level with a view to finalising the Zone Plans and obtaining Council approval of the Zone Plan and Community Block Sum

8.7.3 Nodal Level – Unblocking Development Process

With the completion of the SDF/ regional SDP’s in 2009, a number of Phase 1 Spatial Investment Priority Areas were identified for development in the next 5 years. The following map is the spatial representation of the priority areas for each region and the estimated cost as at 2009 estimates, required to unlock their development:
8.7.4 Current Projects as per the Spatial Priorities

Of the 26 phase 1 priorities identified in the SDF/SDP’s, the following were identified as key priority investment areas in both rural and urban areas:

- Cato Ridge
- Port and Back of Port
- Tongaat/ DubeTradePort and Surrounds / Cornubia
- Mpumulanga
- KwaXimba
- South Illovo
Listed below are the capital budget 2013-2015 provisions for these key priority areas.

<table>
<thead>
<tr>
<th>Project Area</th>
<th>Capital Budget Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012/13</td>
</tr>
<tr>
<td>Cato Ridge</td>
<td>5.000</td>
</tr>
<tr>
<td>DubeTradePort &amp; surrounds</td>
<td>438.189</td>
</tr>
<tr>
<td>Back of Port</td>
<td>32.000</td>
</tr>
<tr>
<td>Mpumulanga</td>
<td>109.424</td>
</tr>
<tr>
<td>Cornubia</td>
<td>610.689</td>
</tr>
<tr>
<td>KwaXimba</td>
<td>13.490</td>
</tr>
<tr>
<td>Umbumbulu</td>
<td>1.971</td>
</tr>
<tr>
<td>Inchanga</td>
<td>31.365</td>
</tr>
</tbody>
</table>

Numerous processes have been undertaken to refine these strategic priorities and better inform the budget requirements each year.

**Step 1: Strategic Level Bulk Infrastructure Assessment:** A strategic level bulk infrastructure assessment of the 26 phase 1 priorities revealed that these areas require various degrees of infrastructure provision to support the development that is envisaged and in some cases, based on resources and budgets and the cycle of planning, designing and implementing infrastructure, may even go beyond the envisaged short term priorities (5 years). Since 2009, the infrastructure assessment of the Phase 1 priorities has focused on refining the data base information and priorities across sectors, with particular focus on the following:

- Establishing current development pressures and realistic take up rates in the various regions to “ground truth” and further refine the anticipated phasing of development within each region in order to inform the likely demand for infrastructure.
- Refining the criteria for prioritization by establishing which sectors of the economy will make the greatest impact on job creation and regional wealth and determining which geographic areas require infrastructure in order to meet the city's imperatives of reducing unemployment. This process was trying to reach alignment across sectors in terms of the priorities identified.
- Establishing upfront the availability of excess infrastructure capacity and the areas in which development opportunities could be provided in the short term while new infrastructure was being built;
- As a further criterion for prioritization investigating the opportunities for spatial restructuring including how the municipality might support public transport corridors and housing densification around these corridors;
- Understanding and responding to the public housing and basic services programmes since these are reliant on bulk infrastructure and establishing how to spatially align the demands for infrastructure provision for housing and the 26 priorities originally identified;
- Further investigating opportunities to grow the municipal rates base which in 2009/10 grew by a mere 1%. If the rates base does not expand it begins to limit the ability of the municipality to maintain and expand its social programme.
Several meetings have been held with the key municipal sectors to inform more realistic development phasing based on likely demand and in particular growing the rates base and prioritisation public housing initiatives with impact and scale.

In addition, consideration has also been given to private sector plans and the likely take up rates in the Phase 1 priority areas with a view to seeking greater alignment in unlocking the development potential of these areas.

**Step 2: Identification of Catalytic Projects:** Of the 26 phase 1 priorities identified in the SDF/SDP, the following Catalytic Projects were identified:

- **Cato Ridge**
- **Port and Back of Port**
- **Tongaat/ DubeTradePort and Surrounds**
- **Cornubia**

Of the priority projects listed above, attention initially focused on two catalytic projects where there were projects identified and there was certainty with respect to development, namely Cornubia and Tongaat/Dube Trade Port and surrounds. Both these priority areas incorporate housing opportunities, a mix of commercial and industrial land uses addressing economic requirements, help to maximize infrastructure efficiencies and address the developmental aspect associated with development in close proximity to the R102 (a mixed use and public transport corridor close to existing and future residential areas and an important road link to neighbouring municipal areas). Work to date has focused on unlocking these developments and understanding the infrastructure costs, timing and financing options giving greater certainty on the budgetary requirements. As further detailed studies have progressed, so too have the detailed infrastructure investigations, leading to further refinements to the anticipated cost and phasing of development as illustrated below. These have been factored into each budget cycle.

The eThekwini Municipality has since updated its Prioritisation Decision Matrix by adding more filters in order to get better alignment across sector strategies, budgets and National (SIP2) and
Provincial initiatives. Refinements to the catalytic project identification process are outlined in the City's 15/16 Built Environment Performance Plan to which reference is made below.

8.7.5 Spatial Analysis of the Budget

Step 1: Spatial Analysis of the Budget and Identification of Strategic Outcomes: In addition to the work done above, the eThekwini Municipality has also embarked on a spatial analysis of the budget spend and the identification of mechanisms for achieving greater internal alignment. This process is often referred to as the “Blue Skies Process”. Translating the Blue Skies process into projects was an attempt to use spatial budgeting to identify key investment locations in order to drive spatial transformation, address social, economic and environmental imperatives, and address inefficiencies in service provision. Taking its cue from the Blue Skies Process the following strategic outcomes or criteria were identified:

- Intensify, Densify and Regenerate the Existing Urban Centres and Key Corridors
- A strategic approach around the development of greenfields projects
- Mitigate Apartheid Spatial Planning and Mitigate the Urban-Rural Divide
- Promote Social Inclusion
- Connect the City
- Retain Existing Jobs and Grow New Ones
- Grow the Rates Base

These strategic outcomes were then turned into overarching criteria and used to identify Key Urban and Rural Investment Locations in alignment with the SDF key investment areas. Projects were then identified inside the Key Investment Locations. The key urban and rural investment areas that measured up closely to these criteria are illustrated below. In addition, there are projects and programs that affect or support Multiple Investment Locations such as the IRPTN, D’MOSS, freight routes and agricultural areas.

Figure 59: Urban and Rural Investment Locations
The projects listed already enjoy attention and were sourced from a number of municipal plans (SDF, SDP, Local Area Plans, sector plans etc) and then assessed in terms of the 2011/12 and 2012/13, MTEF up to 2013/2014. This assessment demonstrated a mismatch between the spending on key spatial locations and public sector investment in other areas of the city – a total of R2.94 billion being spent outside of the key investment locations. It was further noted that project life-cycles tend to be much longer than MTEF or even IDP periods, and it was not clear if the current mechanisms are effective for keeping long-term projects in view and in funds.

The process then explored possibilities for redirecting the budget to key investment locations and city wide projects through project savings in non-key investment locations and / or reviewing, coordinating and consolidating projects and their budgets to achieve maximum impact. This process further highlighted the need to examine the projects and budgets outside of the key investment locations with a view to identifying cost savings and/ or, if slower capital expenditure is possible etc.

**Step 2: Spatial Analysis: Monitoring and Evaluation: Mapping of the Medium Term Expenditure Framework (MTEF) Capital Budget and Past Expenditure**

Building on the previous work undertaken, in 2013/14 the eThekwini Municipality embarked on an exercise to spatially capture and represent the capital budget in order to assist with the SDF review and assist the municipality advance on its work in trying to spatially align investment and achieve the desired urban form.

The ultimate objective of this project was to assist with the monitoring and evaluation of the Municipality’s long term spatial development goals and with reviews and refinements of both the SDF and the MTEF Capital budget. The assessment has also taken account of the Built Environment Performance Plan and the principle of Integrated City Development and Expenditure as required by National Government. A key aspect of the analysis was an assessment of whether the MTEF Capital
budget is promoting the SDF objectives and other spatial targeting instruments such as, the National Treasury's Integration Zones, or inhibiting them.

The project captured the actual expenditure for 2013/14 and the Budgeted Expenditure for 2014/15, 15/16 and 16/17 in a GIS database. The project focused on elements within the MTEF that grow and drive development with less emphasis on elements that either follow development, or are standard Municipal maintenance elements. Accordingly filters were applied when determining projects to be captured. City building projects were mapped while maintenance projects were not, housing projects under R1 million over 3 years were not mapped, engineering projects under R3 million over 3 years were not mapped and social facilities under R2 million over 3 years was used as cut off. Approximately 50% of the budget was ultimately mapped because projects fell below the filters, they were not spatially referenced or captured as block sums, and they were maintenance projects.

Notwithstanding the limitations of the budget captured, it was still possible to analyse the trend in capital expenditure and evaluate the general alignment/non-alignment with the SDF and spatial targeting instruments. In terms of the SDF 14/15 prepared by the eThekwini Municipality, the following conclusions are of relevance to the analysis that was undertaken in this project:

- **Densification and Residential Elements**
  
The SDF reflects future densification along the primary transport corridors with infill areas located in the central region. It is within these areas that the future growth is envisioned to happen. Future residential use is generally located within the UDL. The IRPTN is a major component as this is the structuring element that forms the densification corridors.

- **Direction of Growth**
  
  This is primarily related to the corridors, as the direction of growth by in large extends from the CBD northwards to Dube TradePort and also from the CBD westwards out to Shongweni, Hammarsdale & Cato Ridge. Growth is also anticipated to extend southwards to the Port, Umlazi and Illovo South. There is also major emphasis on the CBD as the primary investment node.

- **Major Economic Activities**
  
  Activities related to economic growth (shown as future industry, future business park, future mixed use on the SDF etc.) are primarily located:
  
  - Durban CBD
  - Pinetown CBD
  - Around Dube TradePort
  - Around Cornubia
  - Around the South Durban Basin
  - South of Durban
  - West of Durban around Cato Ridge and Hammarsdale / Mpumalanga

The figures that follow summarise the data captured by project, then by magnitude of expenditure and then by major cluster i.e. engineering services, social, economic and housing. These figures illustrate that there are many ways to represent the data and query the database. It is therefore a useful operational tool to undertake a review of the SDF and review spatial targeting instruments.
Source: Mapping of MTEF Capital Budget Project 13/14 – 16/17

Figure 60: All Projects Captured
Source: Mapping of MTEF Capital Budget Project 13/14 – 16/17

Figure 61: Representation of Expenditure Captured
Figure 62: Engineering Services Captured
Figure 63: Social Facilities Captured
Source: Mapping of MTEF Capital Budget Project 13/14 – 16/17

Figure 64: Economic Development Projects Captured
Source: Mapping of MTEF Capital Budget Project 13/14 – 16/17

Figure 65: Housing Expenditure Captured
The assessment was based on the following:

- Does the capital expenditure and budget address the key SDF principles
- Does the capital expenditure and budget address the key areas of growth
- Does the capital expenditure and budget accord with the Integration Zones identified in the Built Environment Performance Plan (BEPP)

In conclusion, the analysis of the SDF principles indicated broad alignment with budgeted expenditure. The catalyst projects listed in the SDF appear to be supported by budgeted expenditure. The expenditure also appears to tie quite strongly with the Integration zones. The only real anomaly applied to historically initiated and in the pipeline housing projects influenced largely by the national subsidy regime and availability of greenfields land. The recent nationally driven process of identifying Human Settlement Mega Projects located within the Urban Development Line / Integration Zones (elaborated on below) will go a long way to remedy this disjuncture and ensure better located and integrated housing opportunities.

On the whole, the project provided useful information for the SDF and Budget Review and could be extended and improved. Accordingly, it was recommended that the information be updated on an annual basis (after the budget has been approved) and that future projects should endeavour to also capture block sums, maintenance projects, the spatial impact of projects, the phasing of projects, and provincial, national and major private sector projects to provide a more rigorous analysis. In addition, data quality could be improved in future iterations of the budget by ensuring that names of projects or areas are standardised, the nature of projects are captured and projects are assigned a unique ID in an effort to capture and cross reference data more easily. It was also strongly recommended that the city introduce a 10-20 year budget cycle to ensure longer term commitment to the city’s investment priorities. It was recommended that these will need to be addressed in future budget cycles and could be addressed in the City’s Built Environment Performance Plan Review.

The table below indicates the proposed MTERF Budget Allocation in support of the Key Urban and Rural Spatial Priorities.

**Table 19: Supports Development of SDF/SDP Key Urban and Rural Priority Investment Areas**

<table>
<thead>
<tr>
<th>Area</th>
<th>2022 MTERF</th>
<th>2023 MTERF</th>
<th>2024 MTERF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cato Ridge</td>
<td>20.0</td>
<td>33.0</td>
<td>145.7</td>
</tr>
<tr>
<td>Cornubia</td>
<td>409.3</td>
<td>298.0</td>
<td>327.0</td>
</tr>
<tr>
<td>Dube Trade Port and Surrounds</td>
<td>100.0</td>
<td>186.7</td>
<td>220.7</td>
</tr>
<tr>
<td>- DTP &amp; Surrounds</td>
<td>52.0</td>
<td>75.7</td>
<td>78.1</td>
</tr>
<tr>
<td>- Tongaat</td>
<td>48.1</td>
<td>111.0</td>
<td>142.6</td>
</tr>
<tr>
<td>Inchanga</td>
<td>1.1</td>
<td>2.8</td>
<td>1.4</td>
</tr>
<tr>
<td>KwaXimba</td>
<td>18.8</td>
<td>0.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Mpumulanga</td>
<td>77.6</td>
<td>100.2</td>
<td>123.9</td>
</tr>
</tbody>
</table>
In addition table below indicated budget allocation to critical infrastructure required to unlock development potential in the North and Outer West Regions.

**Table 20: Budget Allocation to Critical Infrastructure**

<table>
<thead>
<tr>
<th></th>
<th>Back of Port</th>
<th>Umbumbulu</th>
<th>South Illovo</th>
<th>Umzinyathi</th>
<th>Umgababa / Umnini</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.0</td>
<td>2.3</td>
<td>13.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.9</td>
<td>5.7</td>
<td>18.9</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.0</td>
<td>0.7</td>
<td>5.1</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>18.5</td>
<td>32.0</td>
<td>20.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.8 Integrated and Spatially Targeted Implementation and Budgeting

8.8.1 Built Environment Performance Plans

Built Environment Performance Plans (BEPPs) were first introduced in the 2011/12 financial year as an eligibility requirement for the Urban Settlements Development Grant (USDG) and then later as an eligibility requirement for the Integrated City Development Grant (ICDG) in the 2014/15 financial year.

The preparation of Built Environment Performance Plans is premised on the notion that “a fundamental spatial transformation is required to enable South African cities to contribute effectively to economic and social development objectives and that large urban municipalities have a critical role to play in supporting more inclusive economic growth in South Africa. Metropolitan municipalities, in particular, are seen as having the responsibility to guide spatial development through urban planning instruments, infrastructure investments and service delivery programmes that shape the built environment of South African cities” (BEPP Guidenote for 15/16).

Section 14 of the Division of Revenue Act (DoRA) (2014) requires that, by 30 May 2015, the Municipality submit to the National Treasury, a built environment performance plan that includes all projects partially or fully funded by grants from a national or provincial department and must cover the Integrated City Development Grant, Urban Settlements Development Grant, Public Transport Infrastructure Grant, Neighbourhood Development Partnership Grant, Integrated Electrification Programme Grant, and the Human Settlements Development Grant. The BEPP has to be approved by the Municipal Council.

The 2014 DoRA Framework on the Integrated City Development Grant provides that the grant will only be released to a municipality that has submitted (i) a BEPP which includes the Council’s...
approval of integration zones, urban networks and the ICDG with a signed Cities Support Programme (CSP) participation agreement. All participating municipalities are required through the DoRA to submit the BEPP as part of the batch of documents when the IDP, Budget and SDF are submitted to Council at the end of the municipal financial year.

In 2014, participating metropolitan municipalities outlined plans for restructuring their built environments, based on the concepts of integrated, transit oriented development as articulated in the National Treasury’s Urban Networks Strategy. The plans identified key elements of their urban networks, focusing on specific integration zones that would be the focus of future investment programmes across sectors, and within which specific, catalytic intervention projects were identified. These plans responded to agreed indicators and targets so that measurable progress could be achieved in building more productive, liveable, inclusive and sustainable cities.

The principles in the BEPP are no different to those in our own municipal plans (LTDF, IDP, SDF etc.) - the key value that the BEPP adds is integrated implementation and the ability to drive capital budgets spatially rather than sectorally. The BEPP complements existing municipal plans; it does not intend to replace any such plans. The BEPP process and approach being prescribed by national treasury is based on the integration of the plans of key sectors (economic, transport and housing), and the co-ordination of budgets (municipal, provincial and national) and the co-ordinated timing of implementation that should result in triggering long-term spatial transformation and inclusivity, facilitating economic growth and improved service delivery. THE BEPP is updated annually with a long term planning horizon to 2030, with intermediate milestones in 2020 and 2025. The performance of the built environment and its transformation outcomes will be assessed against predetermined indicators.

BEPP is a therefore a critical instrument for identifying catalytic projects and investment priorities and an important tool to shift the investment focus to spatial targeting and integration. The BEPP therefore bridges the gap between the IDP & Budget giving effect to the strategic and spatial intent of the SDF and fulfilling the requirements of the Capital Investment Framework as required in terms of the MSA (32 of 2000).

While the focus of the 2014 BEPP processes was on planning for spatial transformation, the 2015 BEPP will now focus on accelerating the implementation of catalytic interventions. To this end the 2015/16 – 2017/18 BEPP seeks to refine, enhance and consolidate the content of the baseline BEPP established in 2014/15.

8.8.2 Urban Networks and Integrations Zones

National Treasury’s spatial targeting approach uses the concept of an Integration Zone as the foundation for making medium and long-term capital commitments for the purpose of creating
efficient, sustainable and inclusive development in the country’s metropolitan municipalities. The focus of the National Treasury’s spatial targeting initiative is the identification of a CBD, major Townships, other Townships, and the connections between these three types of spaces or elements, and an Integration Zone. This system is termed the Urban Network.

Urban Networks and Integration Zones were the key focus of the 2014/15 BEPP. In particular the focus for 2014/15 BEPP was on the identification refinement, prioritisation and phasing of the Hubs /Node and Integration Zone(s) in the municipality, including its geographic boundaries as informed by the Urban Networks Strategy (with its associated spatial, economic and developmental objectives).

2015 offers the opportunity to refine and consolidate the planning of the urban network and Integration Zones done in the 2014/15 BEPP.

The eThekwini’ Municipality’s response to the Urban Network has been to incorporate and develop the intellectual and institutional capital which was created in the preceding Blue Skies initiative and to use the opportunity to develop a corporate spatial prioritisation and 20-year implementation program which is rooted in the SDF and the other documents in the eThekwini Municipality’s Package of Plans.

The model used by the eThekwini Municipality is to phase development within the urban development line by defining a Dense Urban Zone, Medium & Low-Density Suburbs, and a Non-Urban Zone. These major elements are connected by a Metropolitan Movement Network, comprising the IRPTN, Feeder and Complementary Public Transport (PT) Routes.

**Dense Urban Zone**

The Dense Urban Zone is made up of major economic uses and adjoining residential uses.

The city is structured around urban centres and economic zones with high concentrations of infrastructure, jobs, and economic activities, and which are well served with public transport.
Neighbouring uses are residential areas, including some townships, informal settlements, and former group area suburbs and which are already dense or have good potential to become dense.

The major economic uses comprise significant urban centres, the external and internal connections (particularly the IRPTN), and the intense uses along these connections. The Dense Urban Zone contains both existing high-intensity uses, as well as numerous opportunities for intense brownfields or greenfields urban development. 90% of jobs (i.e. almost all jobs) are located here. 11% of the population (i.e. one in every nine persons) lives here, 429,000 people in total. These areas occupy about 10% of the municipal extents. The challenge is to maintain the infrastructure and buildings, and because they are so well located, to find opportunities to expand, intensify or redevelop properties for economic uses and high density residential.

The adjoining residential uses are well connected by public transport and other movement systems, have good access to social facilities. Typically they form a belt of approximately 2km wide around IRPTN and other major movement routes. Existing densities are typically in the low and medium range. A big chunk of the population lives here – 1.4 million people, about 37% of the population (i.e. almost four out of every ten persons). These well-located dormitory areas take up only 15% of the municipal extents (i.e. one-seventh), and so they have the highest relative population densities (though still too low for efficient and self-sustaining urban environments). The intention is to maximise densities, which will require vigorous intervention, to upgrade informal settlements into high-density schemes, and to promote higher levels of LED to support the new densities.

A key program for the Dense Urban Zone will be to identify and stimulate take-up of development opportunities, particularly in Cornubia and around the Aerotropolis, and to accelerate the construction and commissioning of the IRPTN. Infrastructure investment, particularly in sewer works and reticulation, as well as the improvement of regional routes northwards will also be required.

**Medium- & Low-Density Suburbs**

In other parts of the city there are low-density dormitory suburbs that have infrastructure but are poorly connected to urban centres and jobs. These are former townships and informal settlements which came about through apartheid planning, as well as low density former white suburbs which rely on private motor vehicles.

The Medium- & Low-Density Suburbs form another belt beyond the Dense Urban Zone. About 1.6 million people (about 43% of the population) live here. They live on a third of the municipal extent, at low densities in absolute terms (usually less than 10 dwellings per hectare). The big challenge here is to improve the connectivity of these dormitory suburbs to where the jobs are, by reducing travelling times, lowering transport costs and improving the roads network. The former townships and informal settlements in these areas tend also not to be as well served with social facilities, so a challenge is to improve the quality and effectiveness of existing facilities and in some cases to build new ones. The
development intentions are to rectify backlogs in social facilities, to promote LED, to increase densities to a degree and in accordance with approved plans, to quickly provide informal settlements with universal access to basic services alongside the slower upgrading program, and to significantly improve the connectivity of these suburbs to the Dense Urban Zone.

**Non-Urban Zone**

Beyond the Suburban Zone there are Non-Urban areas, which are low density traditional areas, as well as densifying traditional areas, protected areas and commercial farming and which in the past used to be isolated from the other parts of the city. Non-Urban areas typically have none or very basic services only, and poor or expensive connectivity to the city is a constant feature.

The Non-Urban Zone supports traditional lifestyles, agriculture, tourism and nature conservation. Non-urban areas are home to 8% of the population (one in every twelve persons) 313 000 people in total, and about 68% (more than half) of the municipal extent. The key challenges are to improve social facilities and basic infrastructure (water, electricity, sanitation), connectivity (roads and internet), and to encourage sustainable livelihoods and access to agri-processing and distribution.
Figure 66: Composite – IRPTN and Integration Zones

Investment Intentions

It is intended to steer capital budgets to delivering on the diverse development intentions for each of the three Zones. Already there is an emerging spatial and temporal prioritisation within this framework. The development initiatives in the North Urban Development Corridor (including the Aerotropolis), the Port, and the current phase of the IRPTN have been accepted and confirmed as initial priorities within the Dense Urban Zone.
Summary of Interventions

<table>
<thead>
<tr>
<th>INTERVENTION</th>
<th>DENSE URBAN</th>
<th>MEDIUM- &amp; LOW-DENSITY SUBURBS</th>
<th>NON-URBAN AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVESTMENT STRATEGY</td>
<td>Deliberate investments, intensive detailed planning, mobilisation of private sector investment, deliberate rezoning for high densities, deliberate crowd in of budgets/ infrastructure upgrades and expansion etc.</td>
<td>Stabilisation of settlements with services to ensure universal access on affordable standards, maintenance of infrastructure and services, provision of social facilities to the norms and standards agreed etc.</td>
<td>Provision of infrastructure and services, improved linkages, and agri processing, and monitoring of growth</td>
</tr>
<tr>
<td>PROPERTY DEVELOPMENT INTENTIONS</td>
<td>High Floor Area Ratios Extensively Developed No Vacant or Underdeveloped Properties Property Improvements Property Extensions Redevelopments</td>
<td>Moderate Floor Area Ratios Improvements Formalisation Regularisation</td>
<td>Formalisation of Towns Regularisation</td>
</tr>
<tr>
<td>INTENDED CONTRIBUTIONS TO ECONOMIC HEALTH</td>
<td>Improved City GDP Improved Rates Revenues High Sales of Water and Electricity Job Retention Job Creations</td>
<td>Improved Rates Revenues High Sales of Water and Electricity</td>
<td>High Sales of Water and Electricity</td>
</tr>
</tbody>
</table>

In essence, the Integration Zone concept is about prioritised and co-ordinated implementation in each of the zones. If this can be achieved, the impact of capital and operating spend will be greatly enhanced with significant benefits emerging for residents and for the economy as well as for the municipality.

8.8.3 Spatial Plans, Urban Development Line and Integrations Zones

There is already significant alignment between the SDF’s Urban Development Line (long term outer boundary for urban development) and the long term Integration Zone (Medium to low density Suburban Residential Integration Zones). In addition, the SDF’s spatial focus on densifying and intensifying development along the mixed use priority public transport routes aligns fully with the proposed Dense Urban Integration Zone. The Dense Urban Integration Zone represents the Phase 1 priority area for

*Figure 67: UDL and Integration Zones*
mixed use, high dense and transport oriented investment within the Urban Development Line of the SDF. Council approved spatial plans (details of which are outlined in Annexure 6) are well aligned with the Dense Urban Integration Zones and the Urban Network Strategy which requires a focus on Integrating townships into the movement & economic system, revitalising township nodes & stimulating economic development and supporting transit-oriented development within key nodes and public transport corridors. Examples of the North and South Public Transport Corridor Studies are illustrated below. Implementation projects within these corridors are currently in progress. Rezoning approvals also show alignment between denser urban integration zones and private sector initiatives.
Example of Transit Oriented Development within Transport Nodes and Corridors
8.8.4 Spatial Targeting Instruments

8.5.4.1 Mega / Catalytic Projects
Several mega-projects are in motion, and other candidates have been identified. Their aim is to bring about high-impact and large-scale urban transformation. “Catalytic projects can range from mega scale inclusionary neighbourhoods to seemingly small but high impact interventions. The underlying principle of all of these is that they are all spatially targeted interventions whose main objective is to intervene to deliberately restructure settlement patterns. This implies that catalytic projects do not necessarily occur in the same place if the supply is lacking, but are located in places of best opportunity for access to work, live, play. These mega projects are all well located and show the direction in which Human Settlement projects are moving. Typologies and funding models become critical along with good partnerships with private sector (eThekwini Draft BEPP report 15/16)

8.8.4.2 Economic Investment and Dashboard
Although predominantly private sector development, most of these initiatives are located within the priority economic investment nodes, within close proximity to the N2 and N3 mobility corridors and along mixed use corridors. They are therefore supportive of the need to grow the economy in more accessible locations.
8.8.4.3 Economic, Housing Catalytic Projects & Public Transport (in progress / to be implemented shortly)

Combined the projects demonstrate spatial proximity between housing and economic projects and public transport trunk routes. They also display a good mix of development types which supports revenue-absorbing and revenue-generating elements in the same project and therefore supports greater financial viability.

The eThekwini Integration Zones incorporate the public transport routes identified in the Integrated Rapid Public Transport Network and the intention is to intensify development around these corridors. This will assist in improving the ridership of public transport as well as creating vibrant spaces with a mix of higher density public and private housing, economic investment, social facilities and a quality public realm. The servicing of informal settlements is also a high priority in the BEPP. Emphasis is also given to the alignment with national initiatives such as the Strategic Infrastructure Projects (SIP2 and SIP7) for improved economic development.

The following spatial instruments are currently under review

a) SHRZ - Social Housing Restructuring Zone

The eThekwini Municipality has numerous SHRZs as shown below. The SHRZs were designated in two Phases several years apart. All fall within Urban Development Line and within the Integration Zone (both Dense Urban and Suburban Zones), with the exception of Chatsworth which does not fall within the Dense Urban Integration Zone, but does fall within the Long term Integration Zone / Urban Development Line.
A review of the SHRZ is required to extend it to encompass a greater space within the Dense Urban Zone.

b) UDZ - Urban Development Zone
The greater part of the Durban CBD has been designated as a UDZ. Because the Durban CBD is a key priority investment area and wholly contained within the Phase 1 Dense Urban Zone within the Integration Zone, no adjustment to the spatial definition of the UDZ is presently suggested.

c) SEZ - Special Economic Zone
The eThekwini Municipality does not presently have an SEZ, although the Aerotropolis has been identified locally and nationally as a candidate. If it were to be designated as an SEZ, the SEZ would fall wholly within the Dense Urban Zone.

d) IDZ - Industrial Development Zone
The eThekwini Municipality does not have an IDZ. It appears unlikely that government will support new IDZs, and instead is likely to consider converting existing IDZs to SEZs. Consequently, no IDZ is proposed for the eThekwini Municipality.

e) Urban Development Line (UDL)
The UDL is not a servicing line but a spatial tool for achieving compact and efficient urban growth over time. It prioritises areas with existing services and high accessibility (ie the integration zone) but also identifies the outer limits of urban growth as subsequent phases of development. The major review of the SDF will introduce spatial instruments that manage urban, peri-urban and rural development based on typology, density, access etc. in an effort to restructure the urban form and prevent outward sprawl and encroachment into agricultural and rural areas.

Sector plans will determine how these areas are to be serviced.

f) Alignment of the Spatial Development Frameworks and the Integration Zone
As indicated above a significant amount of detailed planning has already been undertaken within the Dense Urban Integration Zones / Transit Oriented Development (TOD) Corridors (Annexure 6). The SDF process needs to monitor and review if the desired outcomes are being achieved (ie performance targets are being met) and shift the planning focus to implementing the programmes and projects identified in the council approved plans. Some of the exercises identified thus far include: identifying land redevelopment opportunities in the Dense Urban Integration Zone/Transit Oriented Development Nodes and Corridors, undertaking a detailed Land Use Survey to assist with the monitoring and review of development targets, align zoning and land use controls to facilitate the desired development intensity and mix and, where necessary, introduce a package of spatially aligned development incentives.
8.8.5 Catalytic Projects

One of the main expectations of the 2015/16 – 2017/18 BEPP is the identification, packaging and implementation of catalytic urban development projects within the Integration Zones. In addition there is a specific focus on the upgrading and development of informal settlements and other marginalised areas.

In terms of the BEPP Guidance Note, Oct 2014, “The definition of catalytic urban development projects are land development initiatives that:-

- Are integrated, that is mixed and intensified land uses where the residential land use caters for people across various income bands and at increased densities that better support the viability of public transport systems;
- Are strategically located within integration zones in cities; and re game changers in that the nature and scope of the projects are likely to have significant impact on spatial form.
- Require major infrastructure investment;
- Require a blend of finance where a mix of public funds is able to leverage private sector investment as well as unlock household investment;
- Require specific skills across a number of professions and have multiple stakeholders.”

There are numerous catalytic projects, several of which are in planning or construction phases:

PROJECTS IN/NEAR IMPLEMENTATION:
1. Cornubia South
2. Cornubia North
3. Dube Trade Port
4. Point Infill, Waterfront & Cruise Terminal
5. Centrum Site & Municipal Complex
6. Warwick
7. Keystone
8. C3 IRPTN Corridor Bridge City to Pinetown
9. C3 IRPTN Node Bridge City
10. C2 Rail Corridor Bridge City to Umlazi
11. Back of Port
12. King Edward Node

---

Figure 70: Catalytic Projects near Implementation
PROJECTS IN PREPARATION:
1. Amaoti Informal Settlement Upgrade
2. Avoca Greenfields
3. Virginia Airport Redevelopment
4. Durban Central Business District Human Settlement Projects
5. Umlazi Urban Regeneration
6. Illovo South
7. New Germany Industrial Redevelopment
8. Ntshongweni
9. Mpumalanga Town Centre
IRPTN Phase 1-4 comprises:

**Phase 1**
- C3 - Road - Bridge City to Pinetown 2016
- C1 - Road - Bridge City to CBD via KwaMashu 2017
- C9 - Road - Bridge City to Umhlanga 2018
- C2 - Rail - Bridge City and KwaMashu via Berea

Road to Umlazi and Isipingo 2016
Mynah and People Mover (Inner city) 2015

**Phase 2**
- C5, C7 2022

**Phase 3**
- C4, C8 2025

**Phase 4**
- C6 2027

The table below indicates the proposed MTERF Budget Allocation in support of the BEPP Catalytic Projects “In or Near Implementation” and “In Preparation”.

**Table 21: Catalytic Projects "In or Near Implementation"**

<table>
<thead>
<tr>
<th>Area</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back of Port</td>
<td>10.0</td>
<td>2.3</td>
<td>13.1</td>
</tr>
<tr>
<td>Bridge City Intermodal</td>
<td>157.0</td>
<td>143.0</td>
<td>41.0</td>
</tr>
<tr>
<td>Rail Corridor C2 - Bridge City to Umlazi</td>
<td>10.0</td>
<td>10.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Road Corridor C3 - Bridge City to Pinetown</td>
<td>447.5</td>
<td>401.3</td>
<td>436.9</td>
</tr>
<tr>
<td>Centrum</td>
<td>33.6</td>
<td>95.0</td>
<td>280.1</td>
</tr>
<tr>
<td>DTP &amp; Surrounds</td>
<td>52.0</td>
<td>75.7</td>
<td>78.1</td>
</tr>
<tr>
<td>Greater Cornubia</td>
<td>409.3</td>
<td>298.0</td>
<td>327.0</td>
</tr>
<tr>
<td>Keystone</td>
<td>3.5</td>
<td>27.6</td>
<td>98.5</td>
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<tr>
<td>Point</td>
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<td>0.7</td>
<td>1.0</td>
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<td>Warwick</td>
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<td>16.8</td>
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<tr>
<td>King Edward Node</td>
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</tr>
</tbody>
</table>

**Table 22: Catalytic Projects "In Preparation"**

<table>
<thead>
<tr>
<th>Area</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amaoti ISU</td>
<td>29.3</td>
<td>19.7</td>
<td>37.0</td>
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<tr>
<td>CBD Redevelopment</td>
<td>11.8</td>
<td>1.5</td>
<td>28.5</td>
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<td>KwaMashu Urban Hub</td>
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<td>54.0</td>
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<tr>
<td>Mpumalanga Town Centre</td>
<td>16.1</td>
<td>46.1</td>
<td>48.2</td>
</tr>
<tr>
<td>Ntshongweni Greenfields</td>
<td>5.0</td>
<td>21.6</td>
<td>20.7</td>
</tr>
<tr>
<td>Umlazi Urban Regeneration</td>
<td>249.8</td>
<td>128.1</td>
<td>103.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
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<tr>
<td>Illovo South</td>
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<tr>
<td>Virginia Airport Redevelopment</td>
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<tr>
<td>New Germany Industrial Redevelopment</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Avoca Greenfields</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
</tbody>
</table>

### 8.8.6 Alignment with Provincial Projects

The Municipality is moving towards aligning Provincial Projects with the Spatial Priorities contained in the SDF and BEPP. Provincial Departments are urged to spatially capture and map their Current and Future Expenditure.

### 8.8.7 Way forward

The BEPP is determining short and medium term priorities (taking cognizance of the Integration Zone and directions set in the IDP and SDF) and hence is leading to a pipeline of projects which can then fulfill the requirements of the Capital Investment Framework. The BEPP offers technical support in the form of a Project Preparation Facility. This support is necessary to help improve coordination and build a robust pipeline of well-designed, catalytic projects for implementation over the medium term with financial commitments and dedicated project management for Catalytic projects. This will provide the necessary support for spatially aligned Capital and Operating Budgets and improved vertical and horizontal integration of budgets.
ANNEXURES

ANNEXURE 1: SUMMARY OF NATIONAL AND PROVINCIAL POLICY & LEGISLATION

ANNEXURE 2: SUMMARY OF ETHEKWINI MUNICIPALITY SECTOR PLANS

ANNEXURE 3: PUBLIC PARTICIPATION AND STAKEHOLDER ENGAGEMENT PROCESS

ANNEXURE 4: SPLUMA PROCESS PLAN

ANNEXURE 5: SPATIAL DEVELOPMENT PLANS

ANNEXURE 6: COUNCIL APPROVED PLANS

ANNEXURE 7: RESPONSE TO COGTA COMMENTS ON DRAFT SDF 2015/2016

ANNEXURE 8: SPATIAL DEVELOPMENT FRAMEWORK 2015/2016
### ANNEXURE 1: Summary of National and Provincial Policies & Legislation

<table>
<thead>
<tr>
<th>ACT</th>
<th>SUMMARY OF RELEVANT LEGISLATION</th>
</tr>
</thead>
</table>
| Constitution of the Republic of South Africa, 1996 | - Section 7(2) – State must respect, protect, promote and fulfill the rights in the Bill of Rights  
- Section 152 – Objects of Local Government  
- Section 153 – Structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community. Participate in national and provincial development programmes  
- Section 195(e) – Peoples needs must be responded to and the public must be encouraged to participate in policy making  
- Schedule 4B – Municipality has executive authority in respect of and the right to administer municipal planning |
| National Development Plan (NDP) 2030 | The National Planning Commission has developed a National Development Plan which focuses on enabling sustainable and inclusive development. The objectives include strong and efficient planning system integrated across the spheres of government.  
- The plan seeks to eliminate poverty and reduce inequality by providing South Africans with a secure foundation from which they can expand their capabilities and improve their life opportunities Some directives towards achieving this include  
  - Developing people’s capabilities to be able to improve their lives through education and skill development, health care, better access to public transport, jobs, social protection, rising incomes, housing and basic services and safe communities. One of the critical actions identified in this plan is the need for ‘New Spatial norms and standards – densifying cities, improving transport, locating jobs where people live, upgrading informal settlements and fixing housing market gaps. |
| The National Spatial Development Perspective (NSDP)(2006 | The NSDP represents a key instrument in the states drive towards ensuring greater economic growth and sustained job creation and the eradication of poverty. The implications it has for the SDF is that it requires it to:  
  - address spatial restructuring  
  - reflect on service backlogs and presents a position on the provision of services, especially in the rural areas  
  - reflect on and make proposals for the spatial implications of social investment |
| National Strategy on Sustainable Development (2010) | The National Strategy on Sustainable Development builds on the National Framework for Sustainable Development and a number of existing initiatives by business, government, NGO’s, academia and other key role players to address sustainability issues in South Africa. It is a forward-looking strategy that regards sustainable development as a long-term commitment that combines environmental protection, social equity and economic efficiency. |
| Intergovernmental Relations Framework Act, 2000 (Act No. 5 of 2000) | Provides a framework for national government, provincial government and local government to promote and facilitate intergovernmental relations |
| Local Government: Municipal Structures Act (Act No. 117 of 1998) | Section 19 (2) – A municipal council must annually review the needs of the community, its priorities to meet those needs, its processes for involving the community, its organisational and delivery mechanisms for meeting the needs of the community; and its overall performance in achieving its objectives.  
Section 19 (3) – a municipal council must develop mechanisms to consult the community and community organisations in performing its functions and exercising its powers.  
Section 44 (2) (c) – the executive committee must recommend to the municipal council strategies, programmes and services to address priority needs through the integrated development plan and estimates of revenue and expenditure, taking into account any applicable National and Provincial Development Plans.  
Section 81 – traditional authorities that traditionally observe a system of customary law in the area of the Municipality may participate, through their leaders, in the proceedings of the Municipal Council, in particular, in matters of municipal planning. |
Section 24(1) – Municipality must align its planning with national and provincial planning  
Section 26(e) – SDF is core component of IDP and SDF must include the provision of basic guidelines for a land use management system  
- In terms of the MSA, the SDF, as part of the IDP, prevails over any other plan as defined in Section 1 of the Physical Planning Act.  
- The Public Infrastructure Investment Framework (PIIF) is an integral component of the medium-term to long-term City Development Strategy, and together with the SDF informs the preparation of the IDP. The PIIF is regularly reviewed. |
| GNR.796 of 24 August 2001: Local Government: Municipal Planning and Performance Management Regulations, 2001 | Section (2)(4) of the Local Government Planning and Performance Management Regulations require that an SDF should:  
- Give effect to the DFA principles  
- Set out objectives that reflect the desired spatial form of the municipality  
- Contain strategies and policies to achieve the objectives and which should: Indicate desired pattern of land use.  
- Address the spatial reconstruction and provide strategic guidance regarding the location and nature of development  
- Set out basic guidelines for a land use management system in the municipality  
- Set out a capital investment framework for the municipalities development programs  
- Contain a strategic assessment of the environmental impact of the SDF  
- Identify programs and projects for the development of land within the municipality  
- Be aligned with the spatial development frameworks reflected in the integrated development plans of neighbouring municipalities  
- Provide a plan of the desired spatial form of municipality which: should indicated where public and private land development and infrastructure investment should take place, indicate the desired or undesired utilization of space in a particular area, may delineate the urban edge, should identify areas of strategic intervention and should indicate priority spending areas. |
| Local Government: Municipal Finance Management Act, 2003(No. 56 of 2003) | The objective of this Act is to secure sound and sustainable management of the financial affairs of municipalities.  
Section 16. (1) Requires the municipality to approve an annual budget for the municipality and any decision must be accompanied by inter alia the following documents:  
- 17 (b) measurable performance objectives for revenue from each source and for each |
vote in the budget, taking into account the municipality's integrated development plan;

- any proposed amendments to the municipality's integrated development plan following the annual review of the integrated development plan in terms of Section 34 of the Municipal Systems Act;

<table>
<thead>
<tr>
<th>Municipal Finance Management Act, 2003 (Act No. 56 of 2003)</th>
<th>To secure sound and sustainable management of the financial affairs of municipalities and other institutions in the local sphere of government; to establish treasury norms and standards for the local sphere of government; and to provide for matters connected therewith. To secure sound and sustainable management of Municipal financial affairs, and in particular the management and disposal of public assets, particularly land</th>
</tr>
</thead>
</table>

| KwaZulu-Natal Provincial Growth and Development Strategy (PGDS) (2011) | The PGDS provides KZN with a strategic framework for accelerated and shared economic growth through catalytic and developmental interventions. One of the goals of the PGDS is spatial equity through the implementation of effective spatial planning and land management systems

- It bolsters the Province commitment to achieving the vision of KwaZulu Natal as a “Prosperous Province with a healthy, secure and skilled population, acting as a gateway to Africa and the World”.
- The PGDS aims to build this by growing the economy for the development and improvement of the quality of life for all people living in the province.
- In this strategy EMA is classified as a primary node within the provincial context as an urban centre with very high existing economic growth and the potential for expansion |

| KwaZulu-Natal Provincial Growth and Development Plan (2014) | This plan is the implementation plan of the Provincial Growth and Development Strategy. The 2014 review specifically aligns itself to the National Development Plan. The overall goal is to build a better life for all the people of KwaZulu-Natal by the achievement of a number of strategic goals;

- Job creation
- Human resource development
- Human and community development
- Strategic infrastructure
- Environmental sustainability
- Governance and policy and
- Spatial equity |

| KwaZulu-Natal Planning and Development Act, 2008 (Act No. 6 of 2008) | Purpose of a land use scheme is to regulate land use and promote orderly development in accordance with the IDP

Although the KwaZulu-Natal Planning and Development Act, 2008 (Act 6 of 2008) is the main planning tool within the Province, it does not refer to Spatial Development Frameworks, and does not give guidelines towards the Development of an SDF.

The PDA does however identify a number of principles that municipalities needs to adhere to when a development application is considered. These principles are fairly standard and are largely repeated in each Chapter of the PDA.

Schemes are managed by the PDA, and as a scheme needs to be informed by the Spatial Development Framework, it is clear that these principles should be considered when compiling a Spatial Development Framework as well.

The principles are the following:

- The potential impact of the proposal on the environment, socio-economic conditions, and cultural heritage;
- the impact of the proposal on existing or proposed developments or land uses in the vicinity, or on existing developmental or mineral rights;
- the provision and standard of engineering services; |
• the impact of the proposal on the national, provincial and municipal road networks, public transport, municipal services, sewage, water and electricity supply, waste management and removal, policing and security;
• access to public transport and health and educational facilities;
• The historical effects of past racially discriminatory and segregation legislation on land ownership, land development and access to engineering services and public facilities, and the need to address the historical imbalances;
• the protection or preservation of cultural and natural resources, including agricultural resources, unique areas or features and biodiversity;
• the natural and physical qualities of the land;
• the general principles for land development as stated in Section 3 of the Development Facilitation Act, 1995 (Act No. 67 of 1995), other national norms and standards, frameworks and policies contemplated in Section 146(2)(b) of the Constitution;
• the provincial planning and development norms and standards;
• the municipality’s integrated development plan;
• the municipality’s scheme;
• Any local practice or approach to land use management that is consistent with:
  o the laws of the Republic;
  o the provincial planning and development norms and standards;
  o the municipality's integrated development plan; and
  o the scheme;
• Any relevant other information. This is dependent on specific situations

### Spatial Planning and Land Use Management Act, 2013, (Act No. 16 of 2013) (SPLUMA)

Framework Act for all spatial planning and land use management

The principles of spatial justice, spatial sustainability, efficiency, spatial resilience and good administration apply to spatial planning

Municipal SDF must assist in integrating, coordinating, aligning and expressing development policies and plans emanating from various spheres of government as they apply in the municipal area

Municipality may pass by-laws to enforce its land use scheme

The objects of SPLUMA are to:

- Provide for a uniform, effective and comprehensive system of spatial and land use management for the Republic
- Ensure that the system of spatial planning and land use management promotes social and economic inclusion
- Provide for development principles and norms and standards
- Provide for the sustainable and efficient use of land
- Provide for cooperative government and inter-government relations amongst the national, provincial and local spheres of government; and
- Redress the imbalances of the past and ensure that there is equity in the application of spatial development planning and land use management

Section 21 of the Act provides for the content of a Municipal SDF

SPLUMA repeals the Physical Planning Act; Less Formal Township Establishment Act and the DFA


NEMA provides a framework for co-operative environmental governance so that government authorities may co-ordinate their efforts to manage the environment.

The key principles of NEMA that inform the SDF include the following:
- environmental, social and economic sustainable development;
- the protection of natural resource and the maintenance of natural systems;
- the provision of access to resources and environmental management that puts people and their needs first.

NEMA requires that these principles be applied by municipalities, and used to undertake environmental impact assessments (EIAs) and to prepare Environmental Management Frameworks (EMFs)

| **NEMA : Biodiversity Act, 10 of 2004** | Provides for the management and conservation of biological diversity in South Africa IDP must align with any bioregional plans |
| **National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)** | Protection and conservation of ecologically viable areas Purpose of Act is sustainable development of identified areas for the benefit of the people Local protected areas are nature reserves or protected environments managed by the Municipality |
| **Environmental Conservation Act,** | Provides for the effective protection and controlled utilization of the environment |
| **National Response to Climate Change White Paper (2012)** | The National Response to Climate Change White Paper is the South African Government’s response to the threat of climate change. It is a document that is intended to provide guidance in terms of policy development and implementation. The document focuses chiefly on mitigation, but does also include a chapter on adaptation |
| **Infrastructure Development Act, 2014 (Act No. 23 of 2014)** | Every organ of state must ensure that its future planning or implementation of infrastructure or its future spatial planning and land use is not in conflict with any strategic integrated project implemented in terms of this Act. The Act provides for the facilitation and co-ordination of public infrastructure development which is of significant economic or social importance to the country; to ensure that infrastructure development is given priority in planning, approval and implementation and to ensure that the development goals of the state are promoted through infrastructure development. |
| **The National Housing Code (2009)** | The code interprets the Housing Act and Comprehensive Plan for the development of human settlements. The revised Code re-emphasises the vision of the National Department of Human Settlements to promote the achievement of a non-racial, integrated society, the development of sustainable human settlements and quality housing. A number of detailed objectives are to: Accelerate the delivery of housing as a key strategy for poverty alleviation Use provision of housing as a major job creating strategy Ensure that property can be accessed by all as assets for wealth creation and empowerment |
“Breaking Ground” | The Comprehensive Plan is informed by international documents such as the Habitat (Istanbul) Declaration of 1996 to which South Africa was a signatory and based on national legislation such as the DFA (1995) and Housing Act (1997). The objectives of the Comprehensive Plan includes:
- Accelerating the delivery of housing as a key strategy for poverty alleviation
- Ensuring property can be accessed by all as assets for wealth creation and empowerment
- Leveraging growth in the economy
- Combating crime, promoting social cohesion and improving quality of life for the poor
- Utilising housing as an instrument for restructuring the spatial legacy of apartheid |


| Social Housing Act, (No..16 of 2008) | The purpose of the Social Housing Act is to contribute to the National priority of restructuring South African society in order to address structural, economic, social and spatial dysfunctions in ways which take into account amongst other factors:
- meeting the basic human needs of present and future generations;
- promoting equitable access to water;
- redressing the results of past racial and gender discrimination; |

| National Water Act, No.36 of 1998) | The purpose of this Act is to ensure that the nation’s water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors: |
| **Subdivision of Agricultural Land, 1970 (Act No. 70 of 1970)** | This Act governs the subdivision of agricultural land as defined in terms of the Act and such land may fall within the jurisdiction of a local municipality. Future city growth and conversion of all agricultural land will require prior approval in terms of this Act. |
| **Public Transport Action Plan (2007)** | **National Transportation Master Plan 2050 (NATMAP)** The strategy is aimed towards the development of a new fully integrated public transport system incorporating all modes within a formal contract based public transport system. Consists of a three phased strategy as follows:  
- Promote and Deliver Basic Networks (2010-2014)  
- Advance and Sustain Accessible Networks (2014-2020)  

The overall goal of this initiative is to improve the quality of life for the city’s residents through the establishment of an integrated rapid public transport network (IRPTN). A wall to wall plan for the project has been completed. The network will comprise an integrated package of rail and rapid bus trunk routes with dedicated right of ways (ROW), feeder and complimentary services for public transport. |
| **National Land Transport Act, 2009 (Act No.)** | Land transport planning must be integrated with the land development and land use planning processes |
| **White Paper on Spatial Planning and Land Use Management (2001)** | Requires municipalities to prepare an SDF with the following components:  
- Policy for land use and development  
- Guidelines for land use management  
- A capital expenditure framework showing where the municipality intends spending its capital budget  
- A strategic environmental assessment  

The SDF should also indicate the following:  
- direction of growth,  
- major movement routes  
- special development areas for targeted management to redress past imbalances  
- conservation of both the built and natural environment |
areas in which particular types of land use should be encouraged and others discouraged
areas in which the intensity of land development could be either increased or reduced

The SDF should:
- only be a strategic, indicative and flexible forward planning tool to guide planning and decisions on land development
- develop a spatial logic which guides private sector investment. This logic primarily relates to establishing a clear hierarchy of accessibility
- ensure social, economic and environmental sustainability of the area
- establish priorities in terms of public sector development and investment
- identify spatial priorities and places where public-private partnerships are a possibility.

<table>
<thead>
<tr>
<th>The National Heritage Resources Act, 1999 (Act No. 25 of 1999)</th>
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<tbody>
<tr>
<td>Identifies and regulates the declaration or designation of national and provincial heritage sites, protected areas and heritage areas</td>
</tr>
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</table>

The NHRA and the Provincial Heritage Ordinance promulgated in terms of the NHRA empower local authorities, with the authority of PHRA, to make by-laws for regulating and managing local heritage resource areas or other higher-order heritage resource areas where a responsibility may be delegated.
### LTDF- “Imagine Durban”

In essence, the Imagine Durban process involves enabling us to place a long term lens over the existing planning framework to produce a clear and effective long term action plan that outlines the steps to be followed in order to implement and operationalise our vision for the future. More importantly, it is about creating a community-based process to agree on a desired development path and to mobilize resources across the Municipality which will afford an action oriented framework with specific targets, implementable programmes and measurable project outcomes.

### Package of Plans

<table>
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<tbody>
<tr>
<td>The SDF provides the parameters to guide sector and local level initiatives. The package of plans facilitates the translation of the strategic intentions of the SDF through a number of lower order plans culminating in a Scheme that is responsive to the needs and spatial challenges of the municipality. Refer Annexure 6 for a list of the Council Approved Plans</td>
</tr>
</tbody>
</table>

### Water Conservation Guidelines

- Green Landscaping Guidelines
- Energy Efficiency Guidelines
- Green Roof Guidelines

These guidelines were prepared through the Greening Durban 2010 Programme and subsequent work, an initiative aimed at ensuring that a positive environment legacy is achieved. The information contained in the water conservation guideline are around daily management of water and ensures that water is used efficiently and effectively. The green landscaping guidelines provide information which is replicable to any landscaping project thereby creating an aesthetically pleasing, cost effective, functional, low maintenance and environmentally sound landscape. The energy efficiency guidelines provide information which can be used to stimulate wider implementation of intelligent building design thereby becoming more energy and resource efficient. The green roof guidelines provide recommendations on the creation of green roofs (substrates, planting palettes etc.) in Durban and their benefits in terms of addressing climate change and promoting biodiversity.

### Municipal Adaptation Plan, Health and Water

An increase in global surface temperature leads to changes in atmospheric circulation and sea levels, which in turn alters rainfall patterns and increases the intensity of storms. Durban already faces challenges associated with water availability and storms, but the nature and occurrence of these events is likely to change with altered climates. The impact of these direct, physical, climate risks have multiple, interlinked, secondary and tertiary effects including effects on social and institutional arrangements. Water availability and quality, and health (including food security) have been identified as potentially being critically affected by climate change in Durban. The institutions central to the responses to these challenges within eThekwini Municipality are:

- Water Sector Water and Sanitation (Coastal, Storm water and Catchment Management and Coastal Policy)
- Health Sector Environmental Health (Clinical Health; Social Development (food security); and Communicable Disease Control.

In addition to the health and water sectors, the Disaster Management Department is affected through the need to respond to emergency situations. Responses by the respective institutions need not be specific to that institution. On the contrary, the best adaptation responses are likely to be shared between institutions and departments and provide solutions to a range of threats.

### Energy Strategy of 2008

The Vision Statement of the Energy Strategy reads:

Encourage sustainability in energy sector development and energy use though efficient supply-side and demand-side practices and increased uptake of renewable energy sources. Thereby:

- Minimising the undesirable impacts of energy use upon human health and the environment, particularly climate change and contributing towards secure and affordable energy for all.

The Energy Strategy – in line with national and provincial policies – sets targets for the reduction of Greenhouse Gas emissions in four sectors: residential, transport, municipal operations, and industry/commercial/agricultural. The reductions are to be achieved through energy efficiency and generation of energy from renewable sources.

In the Durban Climate Change Strategy (DCCS) more detailed targets for energy efficiency and

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<table>
<thead>
<tr>
<th>Sector Plan</th>
<th>Summary of the plan</th>
</tr>
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<tbody>
<tr>
<td>LTDF- “Imagine Durban”</td>
<td>In essence, the Imagine Durban process involves enabling us to place a long term lens over the existing planning framework to produce a clear and effective long term action plan that outlines the steps to be followed in order to implement and operationalise our vision for the future. More importantly, it is about creating a community-based process to agree on a desired development path and to mobilize resources across the Municipality which will afford an action oriented framework with specific targets, implementable programmes and measurable project outcomes.</td>
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<tr>
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<td>Water Conservation Guidelines, Green Landscaping Guidelines, Energy Efficiency Guidelines and Green Roof Guidelines</td>
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| Municipal Adaptation Plan, Health and Water | An increase in global surface temperature leads to changes in atmospheric circulation and sea levels, which in turn alters rainfall patterns and increases the intensity of storms. Durban already faces challenges associated with water availability and storms, but the nature and occurrence of these events is likely to change with altered climates. The impact of these direct, physical, climate risks have multiple, interlinked, secondary and tertiary effects including effects on social and institutional arrangements. Water availability and quality, and health (including food security) have been identified as potentially being critically affected by climate change in Durban. The institutions central to the responses to these challenges within eThekwini Municipality are:  
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| Energy Strategy of 2008 | The Vision Statement of the Energy Strategy reads:  
Encourage sustainability in energy sector development and energy use though efficient supply-side and demand-side practices and increased uptake of renewable energy sources. Thereby:  
- Minimising the undesirable impacts of energy use upon human health and the environment, particularly climate change and contributing towards secure and affordable energy for all.  
The Energy Strategy – in line with national and provincial policies – sets targets for the reduction of Greenhouse Gas emissions in four sectors: residential, transport, municipal operations, and industry/commercial/agricultural. The reductions are to be achieved through energy efficiency and generation of energy from renewable sources.  
In the Durban Climate Change Strategy (DCCS) more detailed targets for energy efficiency and
generation of energy from renewable sources have been set that will replace the targets in the Energy Strategy once the DCCS has been adopted.

| eThekwini Agricultural Status Guidelines | This status quo report provides an overview of the potential to undertake agricultural activities within the EMA. As such it provides an assessment of the natural resources, infrastructure, agricultural activities and products, markets and support mechanism relating to agricultural sector. |
| Agricultural Policy for eThekwini | This document presents a policy for future agricultural development in the rural areas of the eThekwini Municipality. The intended purpose of the policy is to promote integrated, coordinated and sustainable agricultural development in these areas. |
| Economic Development Strategy | The strategy provides a framework within which to develop partnerships with business and society to drive economic initiatives, and guidance to maintain high quality core infrastructure that serve key economic nodes in the EMA. The Economic Development Strategy (EDS) seeks to improve the business environment within key economic nodes to encourage growth and further investment, provides a framework for the identification and development of catalytic projects, encourages broad based black economic empowerment (BBBEE) and promotes small, medium and micro-enterprises (SMMEs). |
| eThekwini Housing Sector Plan | The Housing vision visualizes “The creation of sustainable human settlements in eThekwini Municipality with a view to ensuring that... all residents will have access to a housing opportunity which includes secure tenure, basic services and support in achieving incremental housing improvements in living environments with requisite social, economic and physical infrastructure.”  

The Municipality has various housing programmes, some of which overlap but fall under two main groups; individual ownership and rental. Under individual ownership there is Rural Housing, Greenfield, Upgrading and Affordable Housing. Under rental there is Social Housing, Council Rental Stock and Community Residential Units (CRU’s).

The Informal Settlement Program is the main focus of eThekwini Housing and its principal intention is to upgrade informal settlements wherever possible and only to relocate if upgrading is impossible for health, safety or technical reasons. The Greenfields Program as well as other related individual ownership programs complements the Informal Settlement Upgrading Program and the Rural Program lies outside the Urban Development Line (UDL). Concili and Provincial rental stock is being transferred to tenants in terms of the Enhanced Discount Benefit Scheme whereby tenants take ownership of their units at minimal or no costs.

The SDF addresses housing need and backlog by identifying areas for residential intensification, infill and redevelopment and as areas for new residential growth that support public transport, increase accessibility to social and economic opportunities.

The Housing Sector Plan is currently in the process of being updated. |
| Integrated Transport Plan | eThekwini Integrated Transport Plan has been prepared in terms of National Land Transport Act, 2009 (Act 5 of 2009) and addresses the period 2010-2015. ETA’s (eThekwini Transport Authority) mission statement is “To provide and manage a world-class transport system with a public transport focus, providing high levels of mobility and accessibility for the movement of people and goods in a safe, sustainable and affordable manner”.

This has been translated into five goals: Effective transport, efficient transport, sustainable transport, safe & secure transport and black economic empowerment. The five primary focus areas in the ITP are: Public transport, Freight, Road Safety, Roads, Traffic management and control.  
Transport systems and services aim to: improve quality of life for all, support government strategies for economic growth and social development, improve levels of accessibility and mobility, minimise time spent in transit, be economically and environmentally sustainable as well as make provision for community participation |
| Water Services Development Plan | A Water Services Development Plan is a plan to progressively ensure efficient, affordable, economical, and sustainable provision of water services (i.e. Water and Sanitation services). It deals with socio economic, technical, financial, institutional and environmental issues as they |
In compliance with the Disaster Management Act No. 57 of 2002, the eThekwini Municipality has compiled a Disaster Management Framework. The Framework is based on the nationally accepted four key performance areas (KPA) viz.: Integrated institutional capacity for disaster risk management; Disaster risk assessment; Disaster risk reduction; Response and recovery. The Disaster Management Framework also highlights the need to establish eThekwini Municipal Disaster Management Advisory Forum. The forum will establish task teams that will deal with projects requiring specialist inputs such as City Wide Risk Assessment; South Durban Basin Of-site Emergency Plan and Municipal Adaptation Plan. The framework talks to establishment of Disaster Operations centre where all disaster management operational activities are coordinated. Each of the departments involved have specific response and/or recovery roles and functions, which includes the following generic requirements. The Departmental Heads: must ensure that Disaster Risk Management Plans are compiled and maintained within their respective departments. Each department is responsible for the following:

- Compilation of pro-active departmental disaster risk management programmes to support disaster risk reduction
- Compilation of reactive departmental disaster management plans to ensure service continuation during emergency/disaster situations
- Submit departmental disaster management plans to the Head of Disaster Management and ensure regular review of such plans
- Provide a representative at the Disaster Operations Centre if this has been activated

<table>
<thead>
<tr>
<th>eThekwini Disaster Management Framework</th>
</tr>
</thead>
</table>
| In compliance with the Disaster Management Act No. 57 of 2002, the eThekwini Municipality has compiled a Disaster Management Framework. The Framework is based on the nationally accepted four key performance areas (KPA) viz.: Integrated institutional capacity for disaster risk management; Disaster risk assessment; Disaster risk reduction; Response and recovery. The Disaster Management Framework also highlights the need to establish eThekwini Municipal Disaster Management Advisory Forum. The forum will establish task teams that will deal with projects requiring specialist inputs such as City Wide Risk Assessment; South Durban Basin Of-site Emergency Plan and Municipal Adaptation Plan. The framework talks to establishment of Disaster Operations centre where all disaster management operational activities are coordinated. Each of the departments involved have specific response and/or recovery roles and functions, which includes the following generic requirements. The Departmental Heads: must ensure that Disaster Risk Management Plans are compiled and maintained within their respective departments. Each department is responsible for the following:

- Compilation of pro-active departmental disaster risk management programmes to support disaster risk reduction
- Compilation of reactive departmental disaster management plans to ensure service continuation during emergency/disaster situations
- Submit departmental disaster management plans to the Head of Disaster Management and ensure regular review of such plans
- Provide a representative at the Disaster Operations Centre if this has been activated |
ANNEXURE 3: PUBLIC PARTICIPATION AND STAKEHOLDER ENGAGEMENT PROCESS

Spatial Development Framework Consultation Process

The SDF review process is driven by the Strategic Spatial Planning Branch of the Development Planning Department. It comprises a public process and a stakeholder engagement process. The stakeholder engagement is on-going and takes place throughout the year. Table 3a below lists the various stakeholder engagement meetings that have contributed towards this SDF review process.

In addition, the DRAFT 15/16 SDF Review was placed in public libraries and Sizakhala Centres and advertised in local newspapers from 1 April 2015 to 4 May 2015 for public comment. A summary of the public and stakeholder comments can be found in Table 3b below. These comments have also been incorporated into the Final SDF document which will be submitted to EXCO and full Council in May 2015 for final adoption prior to being submitted to the MEC for COGTA in June 2015 for final assessment.

Table 3a - SUMMARY OF SPATIAL DEVELOPMENT FRAMEWORK REVIEW 2015/2016 MEETINGS

<table>
<thead>
<tr>
<th>MEETING &amp; ACTIVITY</th>
<th>SCHEDULE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGTA IDP Feedback sessions on final SDF14/15</td>
<td>2 December 2014</td>
</tr>
<tr>
<td>IDP Best Practice Workshop</td>
<td>5 December 2014</td>
</tr>
<tr>
<td>IDP Forum Meetings</td>
<td>5 November 2014; 31 March 2015</td>
</tr>
<tr>
<td>SDF Core Group Meetings</td>
<td>24 February 2014; 05 March 2014</td>
</tr>
<tr>
<td></td>
<td>07 August 2014; 22 September 2014</td>
</tr>
<tr>
<td></td>
<td>02 October 2014; 20 November 2014</td>
</tr>
<tr>
<td></td>
<td>17 November 2014; 19 January 2015</td>
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<tr>
<td></td>
<td>20 January 2015; 03 February 2015</td>
</tr>
<tr>
<td></td>
<td>05 February 2015; 17 February 2015</td>
</tr>
<tr>
<td></td>
<td>23 April 2015</td>
</tr>
<tr>
<td>SDF - GIS Mapping Improvements - Project Initiation</td>
<td>From January 2015 &amp; on-going</td>
</tr>
<tr>
<td>SDF SPLUMA Compliance Meetings</td>
<td>25 June 2014</td>
</tr>
<tr>
<td>SPLUMA Bylaws and Regulations Meetings</td>
<td>14 November 2014</td>
</tr>
<tr>
<td>SPLUMA Implementation National Coordinating Forum</td>
<td>27 July 2014</td>
</tr>
<tr>
<td></td>
<td>12 December 2014</td>
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<tr>
<td></td>
<td>29 July 2014</td>
</tr>
<tr>
<td></td>
<td>27 January 2015</td>
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<td></td>
<td>01 August 2014</td>
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<td>10 February 2015</td>
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<td>04 August 2014</td>
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<td>17 February 2015</td>
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<td></td>
<td>14 August 2014</td>
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<td>18 February 2015</td>
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<tr>
<td>MEETING &amp; ACTIVITY</td>
<td>SCHEDULE DATE</td>
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<td>----------------------------------------------------------------------------------</td>
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<tr>
<td><strong>MEETING &amp; ACTIVITY</strong></td>
<td><strong>SCHEDULE DATE</strong></td>
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<tr>
<td><strong>MEETING &amp; ACTIVITY</strong></td>
<td><strong>SCHEDULE DATE</strong></td>
</tr>
<tr>
<td>SIP 2 Meetings (Durban-Gauteng - Free State Logistic Corridor)</td>
<td>18 August 2014</td>
</tr>
<tr>
<td>SIP 2 KZN Combined Focus Group Meeting</td>
<td>27 August 2014</td>
</tr>
<tr>
<td>SIP 2 KZN Project Integration Meetings</td>
<td>23 March 2015</td>
</tr>
<tr>
<td>PGDP Action Work Group Meetings (AWG 12)</td>
<td>June 2014 – June 2015 (bi-monthly)</td>
</tr>
<tr>
<td>SIP 2 Stakeholder meeting</td>
<td></td>
</tr>
<tr>
<td><strong>Integrated Cities Development Grant</strong></td>
<td></td>
</tr>
<tr>
<td>ICDG Forum meetings</td>
<td></td>
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<tr>
<td>Revisions to Integration Zones</td>
<td></td>
</tr>
<tr>
<td>IDP/ SDF and BEPP alignment meetings</td>
<td></td>
</tr>
<tr>
<td>Spatial Analysis and Review of the SDF and Integration Zones - Mapping of Capital</td>
<td></td>
</tr>
<tr>
<td>Budget and Past – presentation to ICDG Forum</td>
<td></td>
</tr>
<tr>
<td>Identification of Catalytic Projects</td>
<td></td>
</tr>
<tr>
<td>Coordination of Spatially targeted budgets</td>
<td></td>
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<tr>
<td>Monitoring and Review – refinements to Key Performance Indicators</td>
<td></td>
</tr>
<tr>
<td>Mid Term Assessment of MTEF</td>
<td></td>
</tr>
<tr>
<td><strong>Cross Border Planning &amp; Alignment Meetings</strong></td>
<td></td>
</tr>
<tr>
<td>eThekwini Municipality &amp; Umdoni/ Vulamehlo/UGU Municipality / COGTA</td>
<td>24 October 2014</td>
</tr>
<tr>
<td>eThekwini Municipality – Mkambathini</td>
<td>28 October 2014</td>
</tr>
<tr>
<td>KwaDukuza Cross-Border Planning Meeting</td>
<td>1 December 2014</td>
</tr>
<tr>
<td>KwaDukuza (Compensation LAP)</td>
<td>20 February 2015</td>
</tr>
<tr>
<td>SIP 2 Stakeholder Meeting with eThekwini Municipality (Corridor Plan)</td>
<td>23 March 2015</td>
</tr>
<tr>
<td>SIP2 Stakeholder workshop (Corridor Plan)</td>
<td>26 June 2014, 24 November 2014; 12 February 2015</td>
</tr>
<tr>
<td>N2 Corridor Study PSC Meeting</td>
<td>Various</td>
</tr>
<tr>
<td>N3 Corridor Study PSC meeting</td>
<td>Various</td>
</tr>
<tr>
<td>Aerotropolis meetings</td>
<td>15 August 2014, 30 January 2015, 24 February 2015,</td>
</tr>
<tr>
<td></td>
<td>30 March 2015</td>
</tr>
<tr>
<td>Submission of Draft SDF 2015/16 to EXCO/Council for noting</td>
<td>24 March 2015 &amp; 31 March 2015</td>
</tr>
<tr>
<td>Sector / Stakeholder Consultation on Draft SDF 2015/16</td>
<td>December 2014 - April 2015</td>
</tr>
<tr>
<td>MEETING &amp; ACTIVITY</td>
<td>SCHEDULE DATE</td>
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<tr>
<td>--------------------</td>
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</tr>
<tr>
<td>Economic - 24 April 2015</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
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<tr>
<td>Engineering Dept (BEPP alignment meeting) – 1 December 2014</td>
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<tr>
<td>Transport – ETA</td>
<td></td>
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<tr>
<td>Land Use Management (LUMs branch)</td>
<td></td>
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<tr>
<td>Infrastructure Depts (Water, Sanitation, Electricity, Eng, Parks and Recreation, Fire, Disaster Management, Coastal, Real Estate, Solid Waste, Storm Water)</td>
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<tr>
<td>Rural ABM</td>
<td></td>
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<tr>
<td>Dept of Agriculture (KZN) – 10 December 2014</td>
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<tr>
<td>IDP office</td>
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<tr>
<td>Human Settlement</td>
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<tr>
<td>Environment Planning and Climate Protection</td>
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<tr>
<td>Energy office</td>
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</tr>
<tr>
<td>Draft SDF advertised for Public Comment</td>
<td>1 April 2015 - 4 May 2015</td>
</tr>
<tr>
<td>Documents placed in public libraries, Sizakhala Centres, newspapers &amp; on Municipal website</td>
<td></td>
</tr>
<tr>
<td>Copies given to neighbouring municipalities (Ugu, Illembe and Mkhambathini) and Provincial Departments.</td>
<td></td>
</tr>
<tr>
<td>COGTA’s Draft IDP / SDF 15/16 Self Assessments</td>
<td>14 April 2015</td>
</tr>
<tr>
<td>IDP/Budget Hearings 2015-2016</td>
<td>28-30 April 2015</td>
</tr>
<tr>
<td>Amendments and revisions to SDF based on Public / Sector / COGTA comments</td>
<td>April / May 2015</td>
</tr>
<tr>
<td>Submission of FINAL SDF to Executive Committee of Council (SDF)</td>
<td>8 May 2015</td>
</tr>
<tr>
<td>Adoption of IDP / SDF by EXCO / Full Council</td>
<td>19 May / 27 May 2015</td>
</tr>
<tr>
<td>Deliver to MEC COGTA</td>
<td>June 2015</td>
</tr>
</tbody>
</table>
### Table 3b Summary of Public and Stakeholder Comments – SDF Review 2015-2016

<table>
<thead>
<tr>
<th>SOURCE/DATE</th>
<th>NAME</th>
<th>COMMENT</th>
<th>RESPONSE &amp; DOC REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRASA</td>
<td>Sonitha Pooran</td>
<td>- It is recommended that KwaMnyandu to be considered as an urban node.</td>
<td>Comment noted and discussed with PRASA, urban nodes not reflected at SDF level</td>
</tr>
<tr>
<td>19 February 2015</td>
<td></td>
<td>- Durban station should be declared a node.</td>
<td>Text and maps updated to reflect recent rail proposals, in Section 2.5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Page 149 N-S rail corridors, now includes Bridge City in the north.</td>
<td></td>
</tr>
<tr>
<td>Umgeni Water</td>
<td>Alka Ramnath</td>
<td>- Additional legislation and policy requested.</td>
<td>Legislation and policy Section has been updated in Annexure 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Information provided on water supply dams.</td>
<td>Water supply is addressed in Section 2.9.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Comments on electricity generation were flagged for clarity.</td>
<td></td>
</tr>
<tr>
<td>Ezemvelo KZN</td>
<td>Felicity Elliott</td>
<td>Ezemvelo has updated Biodiversity information that can be supplied. The updated biodiversity information has however been used by the eThekwini Environment Section in their recent systematic conservation assessment process and the resultant development of the draft eThekwini Biodiversity Sector Plan. Fine scale planning will always provide a more detailed picture and it is suggested that the SDF is updated with this fine scale planning that has been undertaken within eThekwini. It is also suggested that the Biodiversity Sector Plans for the ILembe, Ugu and UMgungundlovu Districts are also investigated with regards to edge matching of biodiversity priority areas and corridors.</td>
<td>An SDF does not go to the fine grain suggested in the comments, however it is noted that the eThekwini Biodiversity Sector Plan does already consider this information.</td>
</tr>
<tr>
<td>Wildlife</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 March 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KZN Department of Agriculture</td>
<td>Felicity Mitchell and Bayo Ogunnaike</td>
<td>KZN Department of Agriculture requested Chapter on agriculture, soil and vegetation surveys and revision to SDF land use proposals.</td>
<td>Meeting was held on 10 December 2014 with Mr B Ogunnaike from the Dept. of Agriculture. Municipality requested information regarding DoA strategies in KZN and role of Metro. Also requested latest land category information. Updated agriculture land categories received on 14 April 2015 but no supporting documentation providing clarity on the data. EM has undertaken a preliminary analysis to determine extent of alignment of agricultural land use. Internal discussion being held to address institutional challenges and mandate for agriculture.</td>
</tr>
<tr>
<td>10 December 2014</td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>16 March 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE/DATE</td>
<td>NAME</td>
<td>COMMENT</td>
<td>RESPONSE &amp; DOC REFERENCE</td>
</tr>
<tr>
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</tr>
<tr>
<td>eThekwini Municipality: Architecture Department 23 February 2015</td>
<td>Bernardus van Heerden</td>
<td>Durban Inner city strategic initiatives for 2015 are provided.</td>
<td>The projects are noted.</td>
</tr>
<tr>
<td>eThekwini Municipality: Energy Office 24 February 2015</td>
<td>Susanna Godhart</td>
<td>Durban Climate Change Strategy has been completed and ready for Council approval. Various amendments relating to the strategy provided throughout the document.</td>
<td>The text has been updated accordingly</td>
</tr>
<tr>
<td>eThekwini Municipality: Engineering Unit 25 February 2015</td>
<td>Andrew Mather</td>
<td>In support of the SDF, no concerns raised</td>
<td>Noted</td>
</tr>
<tr>
<td>eThekwini Municipality: EDU 25 February</td>
<td>Ajiv Maharaj and Nuthan Maharaj</td>
<td>Requested presentation on SDF to the Economic Development Unit</td>
<td>Presentation held on 24 April 2015</td>
</tr>
<tr>
<td>eThekwini Municipality: Area Based Management 27 February 2015</td>
<td>Linda Mbonambi</td>
<td>ABM office requested a presentation on SDF for clarification purposes only and to assist with the implementation of the SDF</td>
<td>Presentation to be given in May 2015</td>
</tr>
<tr>
<td>eThekwini Municipality: Legal Department 27 February 2015</td>
<td>Kathleen Hall</td>
<td>Provided update on national legislation and policies Provided update on SPLUMA Provided update on SCHEME</td>
<td>Update on national legislation and policies provided in Annexure 1. SPLUMA processes included in Annexure 4 SCHEME is updated in Section 2.2.6</td>
</tr>
<tr>
<td>eThekwini Municipality: Real Estate 4 March 2015</td>
<td>Keith Mathias</td>
<td>One strategic issue would be the investment incentives that have been included in Rating Policy draft out at moment for public comment. Joint work with ECOD and Income Units under contract released by ECOD.</td>
<td>The outcomes of the rating policy will be noted in the SDF once approved.</td>
</tr>
</tbody>
</table>

Several follow up meetings are suggested given the complexity of the issues to be addressed.
<table>
<thead>
<tr>
<th>SOURCE/DATE</th>
<th>NAME</th>
<th>COMMENT</th>
<th>RESPONSE &amp; DOC REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>eThekwini Municipality: Electricity Department 04 March 2015</td>
<td>Vasu Chetty</td>
<td>Minor text updates. Updated maps provided.</td>
<td>The text and mapping has been updated accordingly in Section 2.9.4</td>
</tr>
<tr>
<td>eThekwini Municipality: Environment Planning and Climate Protection Department 02 March 2015 09 March 2015 30 April 2015</td>
<td>Jo Boulle / Sean O'Donoghue</td>
<td>Various updates to text and mapping. Proposed replacement of Safe Operating Space Study by the Sustainable Horizons Project. This study will provide an integrated indicator system that will form part of the Strategic Environmental Assessment.</td>
<td>Environment texts and mapping updated accordingly</td>
</tr>
<tr>
<td>eThekwini Municipality: Human Settlement Unit 06 March 2015</td>
<td>Faizal Seedat</td>
<td>Updates on the Housing Sector Plan provided. Rental stock transferred to tenants. Acquisition of suitable land compounded by lack of densification subsidies. Update of demographic information from 2007 to 2011. Shift from informal dwelling eradication to in-situ upgrades. Request for Urban Development Line review in order to provide interim services.</td>
<td>The text has been updated accordingly in Section 2.7 SDF major review to address review of the UDL</td>
</tr>
<tr>
<td>eThekwini Municipality: IDP Office 1 April 2015</td>
<td>Ravesh Govender</td>
<td>Provided updates; a revised vision statement per Imagine Durban process, alignment of demographic figures and climate change information with the Integrated Development Plan 2015/16, tourism and recreation information per 2014/15 statistics.</td>
<td>All text updated accordingly</td>
</tr>
<tr>
<td>eThekwini Water and Sanitation 22 April 2015</td>
<td>Bill Pfaff</td>
<td>Concern raised regarding the SDF being done in isolation of the SEA. It is recommended that this issue be taken into account in future SDF review.</td>
<td>SDF major review to address SEA</td>
</tr>
<tr>
<td>Public Comment</td>
<td>Tom Dennen</td>
<td>Provided suggestion on food security (One Home, One Garden)</td>
<td>Suggestions on food security noted. Included in previous SDF 4/15 under Section on Community Gardens Also referred comment to the IDP office for inclusion in the IDP</td>
</tr>
<tr>
<td>SOURCE/DATE</td>
<td>NAME</td>
<td>COMMENT</td>
<td>RESPONSE &amp; DOC REFERENCE</td>
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</tr>
<tr>
<td>Tongaat Hulett Developments 29 April 2015</td>
<td>Kate Ralfe</td>
<td>From a private sector perspective, it is critical that the SDF be an enabling framework, not a detailed, site specific master plan, and should, in its entirety, be utilised to provide clarity, guidance and confidence that facilitates appropriate new growth and development. The principles described in the SDF document are fully supported but it is not possible to fully display such on the SDF plan and hence the actual implementation and interpretation of such principles should be left to more appropriate levels of plans – LAPs/ or private sector development plans.</td>
<td>Agreed, the SDF is a strategic high level document but the content of the SDF is dictated by the Municipal Systems Act and will shortly be informed by the Spatial Planning and Land Use Management Act. As the only statutory document guiding spatial planning, the detail included in the package of plans must be elevated into the SDF for the SDF to provide the necessary guidance in decision making.</td>
</tr>
</tbody>
</table>
## ANNEXURE 4: SPLUMA PROCESS PLAN

### DEPARTMENTAL SPLUMA PROCESS PLAN AS AT JANUARY 2015

<table>
<thead>
<tr>
<th>TASK</th>
<th>ACTION REQUIRED</th>
<th>STATUS</th>
<th>TIME FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A] DELEGATIONS</strong></td>
<td>1. A set of SPLUMA delegations must be drafted, approved by Council and thereafter gazetted</td>
<td>1. The new Regs were published in December 2014 and the closing date was 16 January 2015. No Comments were received from LUM nor other Departments but a set of comments was prepared and sent thro. The draft bylaw is ready and will be circulated internally during the first week in February 2015.</td>
<td>a) Council adoption : April 2015 &lt;br&gt; b) Gazette : May 2015</td>
</tr>
<tr>
<td></td>
<td>2. The existing PDA delegations must be reviewed in line with SPLUMA and be adopted afresh.</td>
<td>2. Due to process changes there has had to be a new set of delegations drafted. These too will be circulated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: this set of delegations will be read in-conjunction with possible new work flow processes</td>
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</tr>
<tr>
<td><strong>B] MUNICIPAL PLANNING TRIBUNAL</strong></td>
<td>1. Terms of Reference for the MPT must be drafted and adopted.</td>
<td>1. The new regs have provided more direction for the MPT. The TOR is complete and the advertisement process calling for nominations will be initiated by the CM end Feb</td>
<td>1. Dependent on National for new regs adoption.</td>
</tr>
<tr>
<td></td>
<td>2. Structure and budget for the MPT must be finalised.</td>
<td>2. The structure has been proposed and formal submission to the CM to be done shortly. Budget for 2014/2015 has been secured but SPLUMA new date 1/7/2015. Budget will be used for development of internal systems for SPLUMA (SOPS/WORKFLOWS/TRAINING MATERIAL, etc)</td>
<td>2. MPT appointment expected to be finalised April 2015</td>
</tr>
<tr>
<td></td>
<td>3. Members of the Tribunal must be appointed</td>
<td>3. Work in progress</td>
<td>April 2015</td>
</tr>
</tbody>
</table>
## C] APPEAL AUTHORITY

4. An Appeal Authority must be constituted in terms of SPLUMA. The Municipality has the option of establishing the AA internally or constitute and external independent body. Decision on a preferred option must be made soonest.

Preparation of TOR underway. Report to Council in this regard scheduled for March.

March 2015

## D] TARIFFS

Tariffs will have to be adopted for implementation effective 1\textsuperscript{st} July.

Tariff report has already been prepared for submission to Council.

February 2015 to Council

## E] WORK FLOW PROCESSES AND STANDARD OPERATING PROCEDURES

1. Current PDA workflow processes must be reviewed in line with SPLUMA.

- Existing processes have been reviewed. New Regs allow Municipalities to couch their own processes; however it puts in place 3 stages of an application. An entirely new process will be implemented. Better work flow and shorter time periods.

2. Current SOP’S must be reviewed and re-worked if necessary.

- New SOP’s are being prepared in conjunction with Legal

March 2015

April 2015

## F] COMMUNICATION/AWARENESS AND TRAINING:

- Councillors, Developers, Ordinary citizens, Staff

Awareness re: SPLUMA must be created and necessary training undertaken.

1. Once the bylaw is adopted- training will begin.
2. Once the workflows are endorsed – training will start.
3. Once the SOPS are complete –

April/May/June 2015
<table>
<thead>
<tr>
<th>Date</th>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb/March 2015</td>
<td><strong>I) PLANNING BYLAW FOR ETHEKWINI</strong></td>
<td>The Constitution of South Africa empowers Municipalities to prepare Bylaws for carrying out of their functions. The Draft Bylaw is currently being prepared and will be in circulation shortly.</td>
</tr>
<tr>
<td>May 2015</td>
<td><strong>J) JOB DESCRIPTIONS</strong></td>
<td>1. Work has commenced. It must be noted that Job Titles may change.</td>
</tr>
<tr>
<td>May 2015</td>
<td><strong>H) PARTICIPATION OF TRADITIONAL AUTHORITIES</strong></td>
<td>SPLUMA requires that Traditional Authorities participate in the decision making process on applications affecting their areas. A mechanism must be in place for this to be achieved. Institutional mechanism already in place for the participation of traditional leaders in Council business. This arrangement must be extended to include SPLUMA requirements.</td>
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<td>1. Work has commenced. It must be noted that Job Titles may change.</td>
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<td>Work in this regard will commence as part of the 15/16 IDP and SDF review.</td>
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<td>The 2016/17 SDF must be SPLUMA compliant. The current methodology and approach will have to change.</td>
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ANNEXURE 5: SPATIAL DEVELOPMENT PLANS

SPATIAL DEVELOPMENT PLANS

Spatial Development Plans are undertaken annually for each spatial planning region identified in the municipal area, namely the Central, North, South and Outer West Spatial Planning Regions. These are informed by the SDF and provide greater detail about future spatial planning and land use, environment, transport and infrastructure interventions required at a regional level and might be considered equivalent in nature to a Regional Spatial Development Framework. Although summary details are provided about the SDP’s in this Annexure, this SDF should be read in conjunction with all lower order plans (SDP’s, LAP’s, FAP’s and Schemes which accompany this SDF) as they reflect and carry though the spatial and non-spatial planning intentions of the IDP and SDF to increasing levels of detail culminating in detailed Land Use Guidelines and Draft Schemes.

The information used to prepare the SDP’s was sourced from various reports, studies, research processes, municipal & national policies. In addition, there has been extensive engagement with key municipal sectors (particularly transport, water and sanitation, environment, housing and economic sectors) including a series of interdepartmental workshops and bilateral meetings, as well as engagement with provincial planning authorities and neighbouring municipalities to achieve cross boundary alignment, external stakeholder engagement and extensive, community engagement throughout the metropolitan area.

Minor revisions of the SDPs are undertaken annually between 2010-2013 while the major reviews are undertaken once every 5 years in line with the IDP review process. This provides an opportunity to reassess the SDPs based on new information and sector studies as the information becomes available. The third minor annual review of the SDPs was conducted for the 2013/14 financial year and adopted by Council in March 2014. The focus of the revision included:

1. Changes made in alignment with the IDP 2013/14 and SDF 2013.14
2. Changes made in alignment with the key proposals in Council adopted Local Area Plans (LAPs), Special Plans and Functional Area Plans / Precinct Plans namely:
   • Adams/Folweni Local Area Plan (August 2012),
   • Nsimbini Functional Area Plan (January 2013)
   • Northern Public Transport And Land Use Corridor Study Phase 2 (May 2013)
   • Tongaat and Inyaninga Functional Area Plan and Draft Scheme (2013)
   • City Densification Strategy (May 2013)
   • Cato Ridge Local Area Plan (May 2012)
3. Changes to ensure alignment with the IRPTN and that densities are in support of these.
4. Verification of alignment between existing land uses and spatial planning intentions
5. Ongoing stakeholder engagement, particularly to obtain alignment with private sector and neighbouring municipality planning initiatives.
6. Changes to mapping and text to reflect new/updated information including:
   • Demographic profile according to Stats SA 2011
   • Amended Land-use Mapping
7. A new Central SDP Concept Map to reflect the long term spatial intentions of the Central Region.
8. LAP Map reflecting the LAP detail land use and boundaries - for what and where
9. City Wide Densification Strategy
10. An ongoing engagement with the Dept of Agriculture has been sought and an internal working group in collaboration with COGTA has been established to pursue investigations around agriculture and various regulatory and spatial planning issues.
11. Information highlighting the status of the Rural Development Strategy as well as the City Densification projects currently underway
12. Updated mapping to include Passenger Rail SA (PRASA) stations and the Integrated Rapid Public Transport Network (IRPTN) and update
13. Industrial Spatial Strategy

Future SDP reviews will be informed by a number of current and planned studies. These include:

- Spatial Prioritization and Spatial Capturing of projects
- Consolidating the documents and addressing mapping defects
- Informed by further studies (eg Climate Change Impacts and Safe Operating Spaces, Strategic Environmental Assessment of the SDF and SDPs);
- Refinements to the City Wide Densification Strategy
- Rural Development Strategies
- Information highlighting the Demarcation Board’s re-demarcation proposals, which if approved, will take effect in 2016
- Sustainability Indicators for Spatial Planning and Land Use Schemes
- Review of the Outer West Development Corridor Plan
- Transfer of Development Rights: Phase 2 of the Hillcrest Gillits Kloof Land Use Management Framework
- Mpumalanga Local Area Plan

These reviews allow for a continual strategic refinement of each Regional Spatial Development Plan. Of critical importance, is the more detailed assessment of the Phase 1 Priority areas.

**PRIORITY AREAS FOR DEVELOPMENT**

A number of Phase 1 Priority Areas have been identified for development in the next 5 years. An initial study has revealed that these areas require various degrees of infrastructure provision to support the development that is envisaged in the SDPs and in some cases, based on resources and budgets and the cycle of planning, designing and implementing infrastructure, may even go well beyond the envisaged short term priorities (5 years).

Accordingly, more detailed assessments of the Phase 1 Priority areas are currently underway with a view to gaining an improved understanding of the cost, timing and phasing of development across the metropolitan area:
### Table: eThekwini First Phase (5-10 years) Priority and Strategic Focus Areas

Source: eThekwini Municipality, Development, Planning, Environment & Management Unit  
*(Subject to further detailed cost investigation, phasing and servicing limitation)*

<table>
<thead>
<tr>
<th>REGION</th>
<th>STRATEGIC PRIORITY</th>
<th>REGION</th>
<th>STRATEGIC PRIORITY</th>
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</table>
| Central SDP  | Port of Durban  
South Durban Basin  
Regeneration and  
Redevelopment  
Inner City Regeneration  
Pinetown South  
Point Waterfront  
Cato Manor Regeneration | South SDP    | Umlazi  
Illovo  
Umkomaas/Cragieburn  
Areas west of Umlazi (including parts of Folweni and Inwabi)  
Umgababa/Umnini  
Amanzimtoti |
| North SDP    | Bridge City  
Canelands and Surrounds  
Cornubia  
Dube TradePort and Surrounds (Iyaninga)  
Redcliffe  
Tongaat Industrial  
Tongaat Residential | Outer West SDP | Cato Ridge  
Hammersdale  
Bartletts  
Hillcrest  
Shongweni  
Mpumalanga  
KwaXimba  
Inchangha  
Molweni  
Zwelibomvu  
uMzinyathi |

There has been significant progress with refining the SDP priorities based on the following criteria:

- Establishing current development pressures.
- Establishing which sectors of the economy will make the greatest impact on job creation and regional wealth.
- Establishing upfront the availability of excess infrastructure capacity and the areas in which development opportunities can be provided in the short term while new infrastructure is being built;
- Investigating the opportunities for spatial restructuring including how the Municipality might support public transport corridors and housing densification around these corridors and reduce sprawl;
- Establishing how to spatially align the demands for infrastructure provision for housing and the 26 priorities originally identified

In addition to the above, there has been ongoing engagement with other spheres of government to support the financing and release of Phase 1 priorities.
eThekwini SDPs at a glance

The following Section provides detailed summaries of the four municipal SDPs:

CENTRAL SPATIAL DEVELOPMENT PLAN (CSDP:2013-2014)

The Central Spatial Development Plan (CSDP) differs from other SDPs in that it is more focused as a highly developed and serviced area that is under constant change. The focus of this plan is to identify and propose standards at a broad level that tests impacts and sustainability. Large parts of the Central Spatial Region are already engaged in further detailed levels of planning that is (Local Area Plans (LAPs) and Precinct Plans that give more city-wide direction in terms of the needs, opportunities and challenges of an area such as the Back Of Port (BOP) Local Area Plan(LAP).

This region is essentially the Urban Core of the EMA and is home to approximately 1.30 million people accounting for 34% of eThekwini’s total population of 3.5 million people (Stats SA, 2011). The boundaries of the Central Spatial Region (CSR) extend from the Umgeni River, in the North, along the coast through to the Umlaas Canal in the South and extend to the escarpment in the west extending over an area of 677 km² (67772.33 Ha). Three Area Based Management (ABM) areas fall within the CSR namely; Inner eThekwini Regeneration and Urban Management Programme (iTrump), Cato Manor Development Association (CMDA) and part of the South Durban Basin (SDB).

The Central Spatial Region contributes to 56% of the EMA’s GDP and is centered on the transport and logistics activities of the Port. A substantial portion of the EMA’s economic development opportunities are concentrated in the Central Spatial Region with industry, commerce and tourism being the leading sectors.
The spatial intent of the CSR is to have a mix of residential type and quality which would be characterized by high density, high amenity and ease of affordability. The “Plan” for the Central Spatial Region does not build up to a spatial concept, it was however developed through investigations of the respective functional areas and subsequent identification of regeneration projects within those areas, due to the region being already developed.

The vision for spatial development of the Central Spatial Region has been formulated in accordance with the strategic role this region serves in the wider context of eThekwini and has been underpinned by its inherent characteristics and capacities to support development. The identification of strategic spatial investment areas at a metropolitan level highlights the areas that can play an important role in promoting spatial principles.

While each of these opportunities presents its own set of issues and concerns, if the Spatial Development Plan is to have maximum impact, it needs to draw together these largely unrelated claims for attention so that they work to reinforce and support one another and are directed to achieving the aims of the metropolitan vision.

All of the areas listed below are currently covered by a range of projects and initiatives. Realising the opportunities that these areas present require that they are accommodated within the Spatial Development Plan and are linked to other spatial elements:

- Development of the new dug-out port and expansions to the existing port and supporting infrastructure to ensure that Durban continues to be the hub-port of Southern Africa
- Re-investment and new opportunities in the south Durban Basin to consolidate the manufacturing, logistics and industry will continue. Promoting tourism and mixed use development in the inner city, the beach, sports and business and heritage areas in particular.
- Ensuring that Cato Manor and the Pinetown CBD still represents an opportunity for well-located mixed-use development and the promotion of higher densities.
- Maximisation of industrial and economic potential in areas such as Pinetown/New Germany and Back of Port.
- Promotion of densification within the central region especially along public transport nodes and corridors.
- Regeneration of areas within the Inner City and former R293 townships such as Cleremont/KwaDabeka, Umlazi, Inanda, Ntuzuma and KwaMashu (INK)

In terms of balancing physical, social and economic benefits, optimising the opportunities offered by the coastal area includes the need to ensure that tourism enhances the quality of the environment and is undertaken in a sustainable manner, and that other competing uses are managed. Historically advantaged areas and infrastructure that serve the metropolitan area are major assets for the city in terms of sustaining and generating economic opportunities.
NORTHERN SPATIAL DEVELOPMENT PLAN (NSDP: 2013-2014)

Figure: North SDP Map 13/14
Source: eThekwini Municipality, Development, Planning, Environment & Management Unit
The Northern Municipal Planning Region (NMPR) boundary extends from Umgeni River in the south to Tongaat in the north with the coastline in the east and the iLembe District Municipality to the west and north. It has a population of about 1.15 million which is 31% of the total population of 3.5 million (Stats SA Community Survey, 2007). The population is housed in a total of 201,612 houses. The largest population concentrations are to be found at Inanda/ KwaMashu (58.6%), Phoenix (17.5%) and Durban North (7.1%).

In determining a spatial role for the NMPR it is important to note the area has environmental, social and economic linkages to the wider metropolitan area. These linkages also occur within the broader region both provincially and nationally. The following roles of the NMPR have been determined in accordance with its inherent character and capacity to support envisaged growth and development within the EMA:

- Air and landside component to logistics hub associated with new international airport
- National and international Gateway to Metropolitan area and Coastal Destinations.
- Consolidate Provincial Development Corridor between Durban and Richards Bay and surrounding municipalities
- Protection, consolidation and establishment of new well located serviced industrial opportunity areas.
- Protect denuded environmental assets to ensure eco-service delivery and to ensure tourism and recreation opportunities are not lost.

The spatial challenges of the NMPR include protection of environmental assets; prevention uncoordinated urban sprawl; protection lifestyle options; provision new major transport infrastructure; provision employment opportunities; protection agricultural assets and provision new bulk infrastructure.

Approximately 25% of the NMPR is urban, 36% is agricultural activities of which 31% is sugar cane. Industrial and commercial land uses currently only account for 2%. Development is concentrated around Durban North/La Lucia, Inanda, Ntuzuma, KwaMashu and Phoenix and around the small towns of Verulam and Tongaat. 84% of the land is under freehold ownership. Sugar cane land is under pressure for conversion to residential and/or commercial and industrial development.

At the sub metropolitan level the NMPR consists of three discrete land use corridors i.e. rural, urban and coastal corridors, all running parallel to the coast. The roles of the corridors are directly related to their inherent landscape, settlement and infrastructure characteristics and potential which include urban, rural and coastal characters.

The northern region has been divided into 6 Local Areas namely; Buffelsdraai, Hazelmere, Ohlanga-Tongati, Northern Suburbs & Umhlanga, Phoenix/ink, Tongaat & Dube Tradeport, and lastly Verulam/ Cornubia. These local areas will play a role in achieving the broader growth and development objectives of the metropolitan area but will also ensure that local level needs and lifestyles are respected and met. All the LA’s will be linked to each other and into the metropolitan area as a
whole through the metropolitan level access, movement and linkage system.

The Northern Region is dynamic and there is a high demand for development, particularly within the urban corridor. A number of key areas are development priorities and various projects and initiatives are taking place, including:

- **King Shaka Airport** and the surrounding **Dube Tradeport** are being promoted as a key economic node, comprising of a variety of economic and transport related activities.
- A major business, retail and mixed use urban node is the **Umhlanga Town Centre/Gateway** area.
- **Bridge City**, strategically located between KwaMashu and Phoenix, brings innovative transportation, urbanism and mixed use development to a previously marginalised part of the city and actively promotes higher densities.
- As an emerging entertainment and tourism node, the **Sibaya** area plays a key role.
- To promote town centre redevelopment, the **Verulam and Tongaat CBDs and KwaMashu Town Centre** are seen as key priorities and being revamped to increase functionality within the broader Northern Urban Development Corridor.
- The new town of **Cornubia** is central in the promotion of mixed use, **densification** and integration.
- The emerging industrial and residential components of the **Inyaninga** area, west of the Airport, are seen as top city-wide development priorities.

In addition rural nodes are to be established, consolidated and enhanced as village centres to provide support to the development of the rural and agricultural hinterland, these include; Matabetule, Senzokuhle, Buffelsdraai and lastly Cottonlands.
The South Spatial Development Plan (SSDP) identifies the capacity of the existing natural and built environment to create sustainable investment and development opportunities and establishes linkages to opportunities for the socio-economically disadvantaged communities of the south. Within this context, the SSDP identifies what development is desirable, where such development should occur and how such development should be facilitated.
The main objectives of the SSDP therefore include:

- To establish an understanding of the strategic role of the southern area within the context of the eThekwini Municipality,
- To ensure alignment of the SSDP with the development plans of the west and north as well as the South Durban Basin Framework in progress,
- To inform the broader eThekwini Spatial Development Framework as well as providing guidance for subsequent local area plans and land use schemes.

The study area of the SSDP is in extent of 510km2. In 2001, it was estimated to accommodate in the region of 730,000 people (census 2001), and the projected population for 2008 was 754,356 (based on a 1.1% growth rate). The South MPR extends from the northern boundary consisting of the Umlazi River and the Umlaas Canal to the uFudu Escarpment and the EziMbokodweni River in the northwest to the western and southern boundaries of the eThekwini Municipality. It abuts in the north onto both the central and western metropolitan planning regions. In the west the South MPR borders onto the UMgungundlovu and UGu District Municipalities.

The role of the SSDP is based on achieving a balance between the following key imperatives that the Southern Region must address to achieve sustainable development for the broader Metropolitan region as well as the local region:

- Major residential role
- Industrial role with potential for limited expansion
- Coastal Tourism (existing and development of potential)
- Potential to diversify/intensify existing agricultural uses and improve food security for Metro

The conceptual approach and vision of the SSDP includes the following:

- To provide quality, variety and properly serviced residential facilities to cater for all residents of the SMPR
- To upgrade and develop existing industrial and commercial activity, while expanding and developing LED and tourism opportunities and diversifying & intensifying agriculture for the benefit of all.
- To integrate and link communities, through co-operation between traditional and non-traditional authorities, structures & communities, and the provision of social facilities for all.
- To strengthen the Metro role of the South Municipal Planning Region (SMPR), to ensure appropriate development of airport site, the creation of increased employment opportunities, and the upgrading of informal areas and market activities.
- To identify and strategize for additional appropriate industrial, business, commercial, agricultural and tourism opportunities.
- To plan for additional required residential accommodation, through infill & densification in a range of affordability levels.
- To plan for improved & appropriate accessibility throughout the SMPR.
- To ensure a protected, rehabilitated & managed natural environment.
- To ensure the improvement of living environments and the enabling of communities to take a greater part in influencing their environment.

SSDP has identified 9 Local Planning Areas (LAPs) these include Isipingo, Umlazi, Kingsburg/ Amanzimtoti, Illouvi, KwaMakhutha. Umbubulu Folweni, Umgababa/Umnini and Umkomas. The LAPs will establish Land Use Management and regulatory instruments for the area in terms of the overall Metro LUMS approach and frameworks for specific developments to guide municipal actions and private investment.
Major development components consist of the southern portion of the South Durban Basin, the existing airport (due to become a key area for redevelopment), a range of formal residential developments (including the former township of Umlazi), a large contingent of informal residential development both within the formal development and on its periphery, and large rural areas, being substantially in the ownership of the Ingonyama Trust.

Figure: Southern SDP Nodes
Source: Ethekwini Municipality, Development Planning Environment and Management Unit

The South MPR accommodates a significant part of the coastal environment of the eThekwini Municipality. While the South Coast provides some recreational and tourism activities, much of the development potential is severely underutilized.
The fourth OWSDP will be adopted by Council in March 2014 and builds on the need to address current challenges and unpack the long term strategic policy by translating it into a more detailed framework in terms of residential, transport, investment and environmental interventions. The purpose of the OWSDP is to promote and guide development in the Outer West to respond in a sustainable manner to the various needs and challenges facing the eThekwini Municipality as a whole. The OWSDP provides the spatial expression for short, medium and long term development of the region, which will be achieved by identifying spatial structuring elements aimed at:

- Safeguarding the environment
- Establishing investment points and lines based on local opportunity
- Establishing the urban development line to guide infrastructure provision
- Consolidating local planning areas based on inherent characteristics

The Outer West Planning Region is spatially located in the western part of the eThekwini Municipality. It measures approximately 78 438ha in extent. The area has approximately 338 024 people which constitute 10% of Ethekwini’s total population of 3 442 358 (Stats SA Community Survey, 2011). The Outer West Region stretches 30km east to west from near the base of Fields Hill, to Cato Ridge and 40km from beyond Inanda Dam on the uMgeni River in the north to beyond uMlaas River in the south. Umkhambathini Local Municipality (under Umgungundlovu District Municipality) forms the
western boundary of the region. 50% of the Outer West Region is covered by traditional authorities. The region shares an urban and rural landscape with a wide range of settlements types extending from formal urban to rural settlements. Rural areas as well as the Western Suburbs have shown significant residential growth in the last few years. A major portion of metropolitan open space system (50%) which requires protection is found within this region.

The region shares an urban and rural landscape with a wide range of settlement types extending from formal urban to rural settlements. Rural areas as well as the Western Suburbs have shown significant residential growth in the last few years. Agriculture activities in the form of commercial and subsistence farming, is under threat from urban development. There are limited levels of economic development activities in the region in relation to the existing population resulting in people having to travel out of the region to access economic opportunities. The role of the OWSDP is based on achieving a balance between the following key imperatives that the Western Region must address to achieve sustainable development for the broader Metropolitan region as well as the local region:

- Priority Environmental Management Area
- Strategic Industrial Expansion
- Strategic Residential & Commercial expansion
- Key Metro International and Domestic Tourism Destination
- Settlement Upgrading

The conceptual approach of the spatial development plan includes the following:

- Establishing the N3/M13 corridor as the main economic movement system linking the Outer West to other economic centres, as well as supporting key strategic economic development.

- Protecting and managing of the natural assets of the Outer West are very important and is evidenced by the fact that DMOSS covers almost 50% of the area.

- Establishing the Urban Development Line to delineate the outer limits where urban development will be permitted in accordance with infrastructure provision and capacity. The urban development line applies to the Western Suburbs and the Cato Ridge/Mpumalanga areas. Due to historical policies certain parts of the Outer West such as Hammarsdale and Mpumalanga are more developed in terms of infrastructure services than other areas. The proposed urban development line in this context therefore applies to the east and west of the region with agriculture concentrated in the centre.

- Organising the Outer West region into six local areas, namely Western Suburbs, Shongweni, Cato Ridge, Inanda Dam, Mpumalanga and Zwelibomvu to support a range of lifestyles and develop the assets and attributes of each local area.

Corridors of development act as growth or development axes that spatially structure development. These include

- N3 Metropolitan Movement and Development Corridor
- MR385 and Old Main Road as Urban Services Corridors supporting mixed use urban activities
- R103 as main Tourism Corridors supporting tourism activities.
The aim of the OWSDP is to establish a movement system which not only operates in terms of improved circulation, access and linkage, but which also reinforces the social, economic and spatial importance of the movement network. Particularly as public transport routes are used for locating and structuring the provision of community facilities and economic activities. A clear hierarchy of nodes are established, consolidated and distributed throughout the OW area including, Urban nodes, Rural nodes, Tourism and Recreation nodes and new opportunity areas. These nodes will serve as investment and access points that provide convenient and efficient access to a hierarchy of commercial, community services and facilities.
ANNEXURE 6: COUNCIL APPROVED SPATIAL PLANS

(reports available at the following web address

<table>
<thead>
<tr>
<th>PROJECTS IN PROGRESS</th>
<th>COUNCIL APPROVED</th>
<th>DATE APPROVED</th>
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<tbody>
<tr>
<td>SDF / SDP Major Review</td>
<td>In progress</td>
<td>May 2014</td>
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<tr>
<td>Central Region / Inner City Local Area Plan, Functional Area Plan and Scheme</td>
<td>In progress</td>
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<td>Isipingo Local Area Plan, Functional Area Plan and Scheme (including the Reunion Rezoning and property transaction process)</td>
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<td>Pinetown South LAP, Functional Area Plan and Scheme Review</td>
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<td>South Public Transport Corridor Precinct Scheme Amendment</td>
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<td>South Public Transport Corridor Study</td>
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<tr>
<td>South Public Transport Corridor Study / PUBLIC PROCESS</td>
<td>In progress</td>
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<td>KwaMashu A regeneration Plan</td>
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<td>Rural Development Strategy</td>
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<td>Land Use Survey (Phase 1 Dense Urban Integration Zone)</td>
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<td>ETHEKWINI COUNCIL PLANNING PROJECTS</td>
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<td>Spatial Development Framework Review 2014/2015</td>
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<td>Illovo South LAP</td>
<td>March 2014</td>
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<td>Spatial Development Plan Review 2013/2014</td>
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<tr>
<td>Back of Port Concept, FrameworkPrecinct Plans &amp; Zoning reports</td>
<td>November 2014</td>
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<tr>
<td>Mpumalanga LAP</td>
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<td>South Public Transport Corridor</td>
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<td>Nsimbini Rural Functional Area Plan</td>
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<td>City Densification Strategy</td>
<td>June 2013</td>
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<td>Northern Public Transport and Integrated Land Use Corridor Phase 2 (NPTC Phase 2)</td>
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<td>Tongaat Inyanya Functional Area Plan and Draft Scheme</td>
<td>March 2013</td>
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<td>Back of Port Interface LAP</td>
<td>June 2012</td>
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<tr>
<td>Molweni Nodal Precinct Plan</td>
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<td>Adams / Folweni LAP</td>
<td>June 2012</td>
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<td>Outer West Development Corridor Study &amp; Cato Ridge LAP</td>
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<td>Northern Urban Development Corridor (NUDC) including 3 LAP’s (Tongaat Dube Trade Port, Verulam / Cornubia, INK/ Phoenix</td>
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<td>Amanzimtoti CBD Regeneration Study</td>
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<td>Cragieburn Precinct Plan/ Functional Area Plan</td>
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<td>Cornubia Framework Plan</td>
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<td>Umlazi Malukazi LAP and Township Regeneration Plan</td>
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<td>Clermont KwaDabeka Regeneration Project</td>
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<td>Illovo Bekhulwandle LAP</td>
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<td>Shongweni LAP</td>
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<td>Hillcrest Gillits Kloof Land Use Management Plan</td>
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<td>Western Corridor Cross boundary Forum</td>
<td>July 2010</td>
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<td>NPTC Phase 1</td>
<td>June 2010</td>
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<td>Verulam CBD Precinct Plan</td>
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<td>Ohlanga Tongati Local Area Plan – Traffic Study</td>
<td>April 2010</td>
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<td>Umhlanga Node Precinct Plan</td>
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<td>Pinetown CBD Node Precinct Plan</td>
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<td>North, South, Outer West and Central Spatial Development Plans</td>
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<tr>
<td>Industrial Spatial Strategy</td>
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### ANNEXURE 7: RESPONSE TO COGTA COMMENT ON DRAFT SDF 2015/2016

**COGTA DRAFT SDF ASSESSMENT - DRAFT SDF REVIEW 2015-2016**  
14 April 2015

<table>
<thead>
<tr>
<th>ISSUE</th>
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<tbody>
<tr>
<td>COGTA COMMENTS ON DOCUMENTATION RECEIVED</td>
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<tr>
<td>ISSUE</td>
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<tr>
<td>SDF Text submitted</td>
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<tr>
<td>Quality of SDF Maps submitted</td>
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<td>SDF Self-Assessment submitted</td>
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### MEC REQUESTS

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<tr>
<th>ISSUE</th>
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<tr>
<td>COGTA COMMENTS</td>
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<tr>
<td>1. Requested to improve the focus on Rural Scheme Guidelines</td>
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### Spatial Development Frameworks

The work done in the North region was mirrored in the South Region. In considering the impact of coastal land use and storm damage on coastal tourism opportunities and coastal assets, in particular the internationally acclaimed Aliwal Shoal, the Umkhomazi Local Area Plan, 2010 recommends land uses and strategies that minimise the risk to effective coastal management. Similar intentions to protect coastal assets in areas under extreme pressure for development have been addressed through the Umgababa Coastal Management Plan and an Estuary Management Plan for Isipingo.

Detailed proposals contained in all of the aforementioned plans have informed all relevant higher order plans (Spatial Development Plans and Spatial Development Frameworks) as part of the iterative process in which the package of plans is undertaken.

### 2. Careful consideration of the SIP2, 1-18 Elements of National Infrastructure Plan 2012

The section on SIP 1-18 does not address the SIP 11 initiatives. It is recommended that the National Infrastructure Plan 2012 be carefully localised in the final SDF.

Reference is made to SIP 11 under Section 2.6.5 and 2.10.3

The Municipality participates fully in the SIP2, SIP7 and SIP10 programmes and is a key informant of the SIP2’s N2 and N3 Corridor Plans. Confirmation of our required participation in SIP11 is awaited from the coordinator for SIP11.


There is no indication that this plan has been updated. The mismatch in agricultural data sets is noted in the SDF & discussions have been initiated. However, the outer West areas noted as being partially agricultural in nature is provided with little guidance in relation to the requisite data sets called for.

Refer section 2.10 for an update on agriculture.

### 4. Lack of dedicated section on Agriculture which prioritises high value agricultural. Draft DARD Policy Guidelines of 2013 need to be addressed

Mentioned briefly but requires dedicated attention

Refer section 2.10 for an update on agriculture.

Attempts to resolve areas of conflict since 2009. Most recent meeting held on 10 December 2014 Revised Agricultural Land Categories received on 14 April 2015. A preliminary mapping analysis has been undertaken. Further meetings required with DoA and internally to resolve areas of conflict and address institutional responsibilities and mandates.

### 5. Soil and vegetation surveys need to be conducted in strategic areas where more detail is required for specific SDF delivery

Not addressed in SDF

This is not currently a municipal mandate, responsibility and funding for such survey’s need to be resolved.
<table>
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<tr>
<th>6. Threats to production must also be identified.</th>
<th>Not addressed and needs more attention in SDF</th>
<th>Information from DOA is still awaited regarding the threats to production, food security, agricultural strategy regarding the future role of the municipality in agricultural development within the province and country.</th>
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<tbody>
<tr>
<td>7. Mapping does not take cognisance of recent KZNDARD land categories data set of 2013</td>
<td>Only briefly notes categorisation at Provincial level and discussions are underway. Requires attention</td>
<td>Recent Land Categories have been mapped and compared to future agricultural land uses proposed in the SDF. Land use conflicts to be discussed and resolved with DoA.</td>
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<td>8. Agricultural sector goals and strategies developed must be alighted with to up to date spatial prioritised agricultural areas in the SDF.</td>
<td>Requires attention in relation to MEC comments on agriculture noted above. Some conflict in SDF on job creation and agricultural development the North in the introduction section and the role of agriculture in chapter 2.</td>
<td>SDF Major Review to address this</td>
</tr>
<tr>
<td>9. Demographics on vulnerable groups and strategies to address their needs are not clearly shown in the SDF.</td>
<td>Not addressed in the summary of comments on MEC letter in SDF. Needs further attention</td>
<td>Reference to Vulnerable Groups has been included under Section 2</td>
</tr>
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<td>10. SDF does not address migration or urbanisation issues which need to be included and mapped in the SDF.</td>
<td>Migration and urbanisation is briefly discussed and mapping addresses densification issues. Requires further attention.</td>
<td>Chapter 2 updated to include in/out migration statistics</td>
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<tr>
<td>11. Disaster Managements Must be integrated into the municipal goals, objectives, strategies, programmes and budgets which must be presented spatially.</td>
<td>This still needs to be addressed. Noted that the disaster Management Units suggested inclusion of a portion of the Disaster Management Section from the IDP be inserted into the SDF be addressed and mapped programs and budgets be addressed.</td>
<td>All information available from Disaster Management has been included in the SDF</td>
</tr>
<tr>
<td>12. Lack of concrete risk reduction projects and programmes in the SDF and the budget for Disaster management must be clearly indicated in the IDP/SDF.</td>
<td>The SDF notes that the need for disaster risk reduction plans to be prepared and included in the future SDF reviews</td>
<td>Noted, this needs to be addressed</td>
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<td>15. A SEA is not covered in the environmental chapter.</td>
<td>There is a concern from the EThekwini Environment Dept, EWS, Energy office, Env Health “that the absence of an Strategic Environmental Assessment (SEA) is critical, there is a need for a collective approach to include social and economic aspects; The city was not taking the SEA and SDF seriously enough”. The eThekwini Spatial Planning response is that “A preliminary process towards preparing an SEA has been</td>
<td>Budget provision have been made for the SEA to be initiated in the next financial year</td>
</tr>
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initiated through the Safe Operating Space Study as part of the first phase of an SEA but a collective process and institutional response is still required” (2015: 243)

This needs to be addressed

12 A strategy for informal settlement management needs be included in the Housing Sector Plan

eThekwini Housing - intention is to upgrade informal settlements wherever possible - to relocate if upgrading is impossible for health, safety or technical reasons. The Housing Sector Plan is currently in the process of being updated.

Housing Sector Plan to be updated

**LEGAL COMPLIANCE**

<p>| 1. Does SDF show desired direction of growth | The SDF contains maps indicating the desired direction of growth but the mapping needs to be improved. | Noted |
| 2. Does SDF promote conservation of built and natural environment | The SDF does contain conservation of the natural environment but does not address the built environment, therefore the municipality is encouraged to also focus on the conservation of the built environment in their next review of the SDF. | Noted |
| 3. Provide scheme guidelines | Scheme guidelines addressed above | Noted |
| 4. ID Areas for development intensity | The SDF identifies areas where development intensity is intended in particular around nodes and corridors. | Noted |
| 5. Urban and development edges | The SDF indicates urban development line. | Noted |
| 6. Where development &amp; infrastructure investment takes place (public and private) | The SDF has indicated the priority investment areas and there are detailed local areas plans indicating where infrastructure investment will go | Noted |
| 7. Strategies programs and projects for development of land | The SDF does not discuss land reform strategies and programmes. | Information from COGTA received too late for inclusion in this SDF. Land Reform issues to be considered in major SDF review |
| 8. Guidelines for Schemes/ design &amp; Rural Schemes | See above MEC comments | Noted, as per above |
| 9. Does the SDF provide a CIF? | The SDF contains CIF with MTEF, although mapping needs improvement and are illegible | Noted |
| 10. SEA | See above MEC comments | Noted, as per above |</p>
<table>
<thead>
<tr>
<th><strong>11. Clear indication of alignment of neighbouring municipalities</strong></th>
<th>The SDF contains description on alignment issues with neighbouring municipalities but there are no strategies addressing alignment issues. The municipalities are encouraged to allocate budgets to the proposed alignment Strategies.</th>
<th>It is proposed that the feasibility of preparing regional or sub-regional plans which are approved by the respective municipalities be further investigated subject to funding availability. SIP2, N2 and N3 corridor plan will also address the alignments required.</th>
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<tr>
<td><strong>12. Alignment with NDP, Policy &amp; legislation</strong></td>
<td>The SDF is partially aligned to the NDP. It is recommended that the municipality study the NDP in detail in order to distil the core NDP calls for change based on addressing structural poverty and spatial equity, special compacts, diversification of rural areas, cheap and efficient transportation based on sound understanding of current transportation disjuncture and the high cost of accessing employment opportunities.</td>
<td>Noted</td>
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<tr>
<td><strong>13. How aligned with PGDS, Policy and legislation</strong></td>
<td>See above MEC comments</td>
<td>Noted</td>
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<tr>
<td><strong>14. Public Consultation</strong></td>
<td>There is clear evidence of consultation with line departments and responses to comments made. There is no record of comments from business, NGOS and communities outside of council.</td>
<td>The comments reflect all comments received. An extensive public consultation process will be undertaken as part of the major SDF review process.</td>
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<tr>
<td><strong>Restructuring Elements</strong></td>
<td>1. Questions 1-6, 10, are addressed above. 2. Q8 &amp; Q9: The economic &amp; demographic analysis is sound. 3. Budget Alignment: The housing expenditure is not closely aligned to the SDF, Existing MTEF programs is reflected on a series of maps. 4. Provincial &amp; National Sector Department investments are not mapped or analyzed in the SDF except housing projects.</td>
<td>Provincial and National Sector Departments to provide spatial representation of their budgets</td>
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<td><strong>SPLUMA compliance and Gaps</strong></td>
<td>1. Q1, 2, 3, 4, 5, 11, 14 &amp;15 have been addressed above. 2. Q6, 7, 8: Population projections, housing demand, employment, have been addressed. 3. Q9: Quantification and specific location requirements of infrastructure provision not addressed. 4. Q10: Identification of housing policy applicable sites has not been addressed. 5. Q12: Proposed LAP areas not addressed. 6. Q16: proposed scheme impacts on areas not addressed. 7. Q17: Detailed SPLUMA compliant implementation Plan is under development.</td>
<td>See Annexure 6 for the List of Council Approved Plans. A Map showing the approved Local Area Plans and future Local Plans has now been inserted in the document. SPLUMA compliance to be addressed as part of the SDF major review.</td>
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<td><strong>SDF GAPS IDENTIFIED &amp; POSSIBLE SUPPORT</strong></td>
<td>BEPP does not meet the entire CIF requirement as it focuses only on Housing, Public Transport and Economic Sectors</td>
<td>Noted, it partially fulfills this requirement</td>
</tr>
<tr>
<td><strong>SDF Integration Zones and Future population Growth Northwards</strong></td>
<td>Non alignment between SDF Integration Zones and Future population Growth Northwards</td>
<td>Table indicating population growth projections, future density scenarios and residential land requirements was misinterpreted.</td>
</tr>
<tr>
<td><strong>Density Strategy and Integration Zones Logic</strong></td>
<td>1. Catalytic projects mirror high density status quo areas in densification strategy. 2. Projected population increases as per previous map is not addressed in the BEPP 3. Land Reform projects / LDOs not addressed in integration zones 4. Integration zones mirror the apartheid city structure and older Scheme locations.</td>
<td>The integration zones represent a phased of implementation of the SDF are underpin by the urban networks strategy (integrating the CBD and former townships) along key public transport routes.</td>
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Good Practice | Overall, the SDF has focused on the strategic importance of spatial location of programs and budgets  
2. The following good practice is commended:  
2.1 Supplementing demographics with local research  
2.2 The mapping and analysis of the MTEF  
2.3 Rural information updating and  
2.4 Ongoing engagement with DARD on data sets and mapping conflicts.  

| Noted |