TSHWANE METROPOLITAN SPATIAL DEVELOPMENT FRAMEWORK
DRAFT FOR COMMENT-SEPTEMBER 2019
CITY VISION: Tshwane Vision 2030

“Tshwane: A prosperous Capital City through fairness, freedom and opportunity.”

Vision Principles

- Service delivery excellence and innovation
- Economic growth and jobs
- Promoting a safe and healthy City
- Social cohesion, inclusion and diversity
- Participation, collaboration & partnerships

Vision pillars

- Fairness
- Freedom
- Opportunity

SPATIAL VISION

A spatially efficient Capital City that is Sustainable, Competitive and Resilient

SPATIAL MISSION

To lead integrated planning, maximizing on spatial efficiencies for optimal service delivery
ACKNOWLEDGEMENTS

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</tr>
</tbody>
</table>

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## CONTENTS

Glossary of Terms  
Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION AND BACKGROUND</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>ECONOMIC DEVELOPMENT</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>SOCIAL DEVELOPMENT</td>
<td>79</td>
</tr>
<tr>
<td>4</td>
<td>HUMAN SETTLEMENTS</td>
<td>90</td>
</tr>
<tr>
<td>5</td>
<td>TRANSPORTATION</td>
<td>163</td>
</tr>
<tr>
<td>6</td>
<td>UTILITY SERVICES</td>
<td>225</td>
</tr>
<tr>
<td>7</td>
<td>ENVIRONMENT AND NATURAL RESOURCES</td>
<td>294</td>
</tr>
<tr>
<td>8</td>
<td>CAPITAL EXPENDITURE FRAMEWORK AND BUILT ENVIRONMENT PERFORMANCE PLAN</td>
<td>370</td>
</tr>
<tr>
<td>9</td>
<td>SPATIAL DEVELOPMENT FRAMEWORK</td>
<td>402</td>
</tr>
</tbody>
</table>
GLOSSARY OF TERMS

Accessibility
At a general level, accessibility for people implies the ability of people, including elderly and disabled people, those with young children and those encumbered with luggage or shopping to move around an area and reach places and facilities (see urban accessibility).

Activity Nodes
Areas of concentration of mixed land uses.

Activity Spines
Mobility routes connect a number of nodes or mixed use areas, serving as the main public transport channels of the region. These routes could support linear development although not necessarily continuous along its length. Higher order land uses should be accommodated in the nodes, but lower order land uses could develop in a linear fashion subject to alternative access opportunities. Densification along these spines should be encouraged to maximise the public transport opportunities provided by these routes.

Activity Streets
Local collector roads supporting lower order land uses in a linear fashion along its length. Direct access to land uses is provided compromising mobility for activity. Development along activity streets should be permitted in accordance with a local spatial development framework.

Affordable housing
Traditionally affordable housing refers to housing with prices or values below the overall open market value which targets below average incomes. In this MSDF affordable housing refers to the household income brackets of R3 501 – R18 000 per month, and is inclusive of social, GAP, and inclusionary housing. It also refers to residential units valued at R500 000 or less.

Agglomeration of Economies
Occurs when firms cluster together to produce at an added economy. This can take the form of urbanization economies, where cost decreases as total output of an urban area increases; or localization economies, where costs decrease as firms in a specific industry increase output.

Agri-park
Also referred to as an ‘agri-village’ in the City of Tshwane, an agri-park can be defined as an innovative system that connects agricultural services such as agro-production, processing, logistics, marketing, training and extension services. As a network of systems, agri-parks will enable the growth of market-driven commodity value chains as well as contribute to the achievement of rural economic transformation.

Agri-Village
A sustainable rural settlement which integrates residential development with agriculture in order to ensure the creation of vibrant, equitable and sustainable rural communities and food security. An agri-village is intended to improve the livelihood of rural communities.

Backyard dwelling
Backyard dwellings refer to informal structures on formal, residential erven, regardless of ownership. These structures are used for habitation and may be positioned behind, in front or next to the primary dwelling.
Batho Pele
The City of Tshwane aims to espouse the following values, known as Batho Pele Principles:

- Consultation
  Customers should be consulted about the level and quality of the municipal services they receive and, wherever possible, should be given a choice about the services that are offered.

- Service standards
  Customers should be told what level and quality of services they will receive so that they are aware of what to expect.

- Access
  All customers should have access to all our services, and possible barriers should be done away with.

- Courtesy
  All customers should be treated with courtesy, consideration and empathy.

- Information
  Customers should be given full, accurate information about the municipal services they are entitled to receive.

- Openness and transparency
  Customers should be given honest and open feedback on how the Municipality works, what the resources are and how they are used, and the level of efficiency.

- Redress
  If the promised standard of service is not delivered, customers should be offered an apology, a full explanation and a speedy and effective remedy; and when complaints are made, customers should receive a sympathetic, positive response.

- Value for money
  The Municipality should seek ways to simplify services and eliminate waste and inefficiency by ensuring that services are delivered in the most efficient way.

The Municipality will establish effective stakeholder forums that are inclusive and promote the ideals of a non-racial, non-sexist, democratic, caring and prosperous society.

Biodiversity
Biological wealth of a specified geographic region including the different marine, aquatic and terrestrial ecosystems, communities of organisms within these, and their component species, number and genetic variation.

Brownfield Site
Previously developed land and any associated fixed surface infrastructure. It often constitutes abandoned or under-utilized sites within the built-up urban area, (such as hazardous industry, manufacturing, utilities, etc...) and is available for redevelopment.

BRT- Bus Rapid Transit
BRT is a bus-based public transport technology typically operating on exclusive right-of-way lanes at surface level; in some cases underpasses or tunnels are utilized to provide grade separation at intersections or in dense city canters. Typical BRT consists of element such as segregated median busways, pre-board fare collection, platform level boarding, free transfer between corridors, high frequency service and restricted operator access.

Capital Core
The Tshwane Inner city is identified as the Capital Core as it is the city’s first order node amongst all metropolitan nodes. Traditionally, the inner city is also the Central Business District (CBD) of major cities. Tshwane is no different. The Capital Core must: Be the focal point for housing government departments; and be developed to a higher than average density, supporting all principles of smart growth.
Central Business District
This is the traditional business core of an urban area. The CBD is usually the office, financial, retail and service Centre of a city, providing both employment opportunities for a large number of people and a significant share of the tax base.

City-region
A major metropolitan conurbation that is ranked in the world hierarchy of urban settlements. This perspective stresses the importance of understanding the functional economic geography of the city-region - how the different components relate to each other, their comparative and competitive advantages, and how people, capital flows and business linkages shape the regional economy.

Conservation Area
Areas of special natural, ecological, architectural or historic interest, the essence of character or appearance of which it is desirable to preserve and/or enhance.

Carbon Footprint
A measure of the 'load' imposed by a given population on nature. It represents the land area of average quality needed to sustain current levels of resource consumption and waste discharge by that population. The bigger the footprint the greater is the impact that it represents.

Climate Change
Climate change is the long-term change in average weather conditions, including temperature, precipitation and wind.

Compaction
A planning and urban design concept that is achieved through a combination of infill development, intensification of land use and densification and which:
- promotes relatively high residential density with mixed land uses.
- is based on an efficient public transport system
- encourages walking and cycling, low energy consumption and reduced pollution.
- provides a large resident population accommodation opportunities for social interaction as well as a feeling of safety in numbers and 'eyes on the street'

Concentration Zones
The Concentration Zones are the primary focus areas for high density, medium to high-rise residential developments and are centred on nodes of metropolitan importance such as Metropolitan and Urban Cores (High Density Zones), Transit Promotion Zones and other strategic locations.

Consolidation
Higher-density spatial form achieved by 'filling in the gaps' in the existing built form; seen as an opportunity to reduce the ecological footprint of urbanization while enhancing social interaction.

Densification
The process of increasing land use densities (the building density) in a planned and meaningful way within the existing boundaries of a specific area. This yields an increased population density (as determined by the occupancy density) and subsequent increased efficiency in the utilization of infrastructure, services and amenities.

Development Corridor
Transport or trade corridors that provide an appropriate regional level of mobility and accessibility to adjacent areas, and should contain a high concentration of population and mixed land uses (job opportunities). Development Corridors will thus accommodate major linear transport routes such as heavy and light rail and/freeways.
**Economies of Density**
Somewhat related to agglomeration of economies, but focus on spatial coverage and proximity. For instance, retailers can achieve several types of cost savings by locating its stores in proximity to one another. Such a structure reduces logistics and delivery costs by sharing a distribution centre. Other advantages may include the possibility to relocate part of the workforce between nearby facilities and having shared advertising. In such circumstances, the locational strategies are based on proximity to existing facilities, even if this implies the selection of sub-optimal locations.

**Economic agglomeration**
A concentration of businesses and people increases productivity both by putting upward pressure on the price of land, thus driving businesses to become more productive and people to become more skilled, and also through the agglomeration benefits to which close proximity of firms gives rise. Valuable agglomeration economies, which help to sustain the city's prominent regional position, are crucially dependent on effective infrastructure.

**Economic potential areas**
Areas anchored by ‘opportunity’ or ‘growth’ business nodes which exhibit an above-average location potential, and typically characterised by economic agglomeration.

**Ecological services**
Ecological services refer to the provision of services by nature and can include inter alia water supply, air purification, flood attenuation, pollination and natural recycling of waste.

**Engineering Infrastructure**
Engineered services such as roads, electricity, water, sewers and storm water systems. Sometimes referred to as ‘hard services’.

**Evidence Mapping**
A structured process of seeking, ordering and making sense of relevant published and unpublished research (i.e. ‘evidence) to inform the preparation and review of policy and legislation.

**Exurbia**
The rural-urban fringe located beyond most suburbs, where low-density suburban development meets rural and semi-rural areas. Exurbia often contains a mixture of land uses, including large-lot suburban residences, country estates, low-density commercial development, and the remaining agricultural and rural land uses. Specific concerns arise with such developments regarding the creation of "leap-frog" development that stimulates further sprawl of the urban area. By contrast, the small holding and agricultural potential of this zone can be planned to constitute an integral and dynamic part of the city economy (sometimes referred to the "urban breadbasket")

**Food security**
Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active healthy life.

**Green Infrastructure**
The interconnected set of natural and constructed ecological systems, green spaces and other landscape features. It includes planted and indigenous trees, wetlands, parks, green open spaces and original grassland and woodlands, as well as possible building and street level design interventions that incorporate vegetation. Together these assets form an infrastructure network providing services and strategic functions in the same way as traditional grey infrastructure.
**Grey Infrastructure**
The set of man-made or engineered systems and other features that involve the use of traditional technology and building materials such as concrete, bricks and impermeable surfaces.

**Gap housing**
Housing for households with a monthly income of between R3 500 and R10 000, who fall outside the government housing subsidy income limit of R3 500 per month, and find it difficult to access housing in the private market.

**Gauteng City Region**
The city region is a new way of looking at urban Gauteng, not just as a collection of towns, cities, local governments and boundaries, but as a single conurbation with potential at the global level. This change of focus is important for establishing institutional relationships that will lead the growth and development of the city/region.

**Green corridor**
Green corridors can integrate urban development with natural vegetation. They help to promote environmentally sustainable development and can also act as vital linkages for wildlife dispersal between wetlands and the countryside.

**Greenfield Site**
Undeveloped land identified for residential or industrial/commercial or other development, generally on the fringe of the metropolitan area.

**Green Economy**
The broad application of the Green Economy concept relates to sustainable development in all its forms and covers six main areas: renewable energy, green buildings, clean transportation, water management, waste management and land management.

**Growth Management**
Growth management is a spatial concept that encompasses all aspects that ensure efficient, optimal and sustainable development of the physical environment. Growth management encompasses smart growth, transit-oriented development, densification, intensification, compaction and infill development.

**Improvement District**
A (city) improvement district is defined as a geographic area in which the majority of property owners and/or business owners agree to provide an extra level of public service in a specific area by imposing an added tax or fee on all of the properties and/or businesses in the area. CIDs are grassroots, community driven organizations where the private sector delivers supplementary services for the revitalization and maintenance of a specifically designated area, which services are beyond what the local government provides.

**Inclusionary Housing**
Policy directive and approach that seeks to leverage the development application process for new residential or commercial developments to secure the construction and perpetual availability of affordable housing in an integrated manner. (See also Affordable Housing). The crux of inclusionary housing policy is the ‘inclusion’, either voluntary or mandated through policy, of affordable housing with market-orientated units as part of private sector housing developments. Affordable units in inclusionary projects are conveyed to low-income households, with the definition and income thresholds varying based on the locational context of implementation.

**Incremental densification**
Small-scale densification that has a minimal impact on the urban fabric, e.g. subdivision or secondary dwelling units, but translates into higher densities over time.
Infill
New development on vacant or underutilised parcels that are served by infrastructure and surrounded by urban development. Infill sites are normally scattered throughout the city and are usually only a few lots wide or in isolated parcels within already built-up areas. The sites are vacant either because the structures formerly on them were demolished or because they remained undeveloped when the adjoining buildings were erected. Infill also includes redevelopment and revitalization projects where existing structures in already developed areas are removed to allow for new construction.

Informal Settlement
The National Upgrading of Informal Settlements Programme refers to two UN-Habitat definitions of Informal Settlements. An ‘Informal Settlement’ exists where housing has been created in an urban or peri-urban location without official approval. Informal settlements may contain a few dwellings or thousands of them, and are generally characterised by inadequate infrastructure, poor access to basic services, unsuitable environments, uncontrolled and unhealthy population densities, inadequate dwellings, poor access to health and education facilities and lack of effective administration by the municipality. (NUSP 2013, taken from UISP Consolidation Document 2014).

Another definition in use which is similar to the above is: “Residential areas where 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) the neighbourhoods usually lack, or are cut off from, basic services and city infrastructure and 3) the housing may not comply with current planning and building regulations, and is often situated in geographically and environmentally hazardous areas”. The UN-Habitat (2015).

In-situ upgrading
Upgrading is a staged process of improvement of quality of life in informal settlements, based on incremental provision of services and tenure. It should seek to maximise in-situ development in appropriate areas and minimise relocation. An effective improvement process is built on close community participation and cooperation, aiming to strengthen livelihoods strategies of the poor. Housing is provided by a variety of methods, including self-build, People’s Housing Process, social housing or affordable rental, individual subsidy or consolidation subsidy.

Inner City
An area in the City of Tshwane comprising the Pretoria Central Business District and surrounding residential areas.

Intensification
The development of a property, site or area at a higher density than currently exists through: (a) redevelopment, including the use of brownfield sites; (b) the development of vacant and/or underutilized lots within previously developed areas; (c) infill development; or (d) the expansion or conversion of existing buildings.

Integrated Planning
Integrated planning refers to planning that enjoys the co-operation and contribution of different sector department, different spheres of government, state-owned entities and the private sector in order to programme and implement development that is geared towards achieving a shared set of development outcomes.

In space, integrated planning is planning of the built environment that supports the performance of the built environment as a whole in an equitable manner balancing land uses and infrastructure requirements, optimising public access and creating liveable urban precincts.

Integrated Rapid Public Transport Network
In line with the National Public Transport Strategy of 2007, this is an initiative to implement high quality networks of Rail Priority Corridors and Bus Rapid Transit Corridors. The Tshwane Integrated Public Transport Network (IPTN) comprises both rail and road based rapid transit infrastructure. It consists of
all the public transport related routes and modes, the PRASA and Gautrain rail network including bus, minibus taxis, metered taxis and non-motorised transport (NMT) in the City.

Integration Zone (IZ)
An integration zone is a spatial planning element facilitating spatial targeting of investment aimed at spatial transformation. Each zone consists of a transit spine connecting two anchors via mass public transport (rail/bus), e.g. the CBD and an “urban hub” (township node with the best investment potential).

Intensification/Mix Land Use
Achieving a greater spectrum of compatible land uses (commercial, industrial, residential or social) through the increased use of space, both horizontally and vertically, within existing areas or properties and new developments within a TOD precinct, resulting in increased population thresholds that support public transport ridership, walkability, economic development and inclusivity.

Intergovernmental Project Pipeline
The intergovernmental project pipeline consists of a pipeline of projects of a strategic/priority nature within the metropolitan space whether it is a project of the national, provincial or metropolitan government, or that of a state-owned entity. The main purpose of the pipeline is for it to incorporate funding and projects from all spheres and entities to prioritise collective public investment in particular spaces.

Land Based Financing
A policy and regulatory mechanism that allows a public entity to share in a portion of the increased value (direct or indirect) of land resulting from either investment in infrastructure or the allocation of use rights by the public sector.

Leapfrog Development
A pattern of growth in which vacant parcels adjacent to existing development are bypassed and land farther out is developed instead. Leapfrog development generally occurs as developers choose to build on less expensive, more removed parcels. Considered part of a sprawl pattern, leapfrog development often uses extensive amounts of land beyond the urban edge and requires additional infrastructure extensions.

Liveable Streets
Streets for everyone that are planned, designed and operated to enable a network of safe access for all users including pedestrians, bicyclists and transit riders.

Marginalised areas
Areas characterised by predominantly low-income communities including significant informal settlements and/or other neighbourhoods classified as needy or very needy by the City’s Socio-Economic Index.

Marginalised Residential areas
Marginalised areas are areas, primarily residential in purpose with related land uses, which are in decline and/or where people are deprived. They are typically informal settlements and dormitory residential townships in need of redress. These are areas that do not tend to be the focus of the private sector developers and will thus require some kind of intervention or support from government to start with if they are to flourish as liveable neighbourhoods with high accessibility to the broader urban network.

Mixed land use
Area of existing or proposed horizontal and/or vertical integration of suitable and compatible residential and non-residential land uses within the same area or on the same parcel of land; implies contextually appropriate intensity
of land uses that should facilitate efficient public transport and a vibrant local urban environment. Also referred to as land use diversity.

**Mobility**
The ease with which people can travel with minimal delay on a route.

**Nodal development**
Significant and concentrated development in terms of scale, location, impact, diversity and agglomeration of functions (facilities, Node
Provides the focus for services, employment and social interaction in cities and towns. They are where people shop, work, meet, relax and often live. Usually well-served by public transport, they range in size and intensity of use from local neighbourhood strip shopping centres to traditional universities and major regional malls.

**Non-Motorised Transport**
This term is inter-changeable with the spatial planning concept of “pedestrianism”. NMT entails all forms of movement that are human powered and do not rely on engine or motor; this includes walking, cycling, rickshaws, wheelchairs, animal drawn carts and recreational activities such as equestrian, rollerblades, skates and battery propelled scooters.

**Pedestrianisation/ Pedestrianism**
The term is inter-changeable transport planning term of ‘non-motorised transport’ (NMT). Any form of transport of movement that involves physical activity. This includes cycling, walking and using public transport (the walk to and from the bus, taxi or train is part of the journey).

**Population Density**
The number of people in a given area, calculated as people per km²

**Public Open Space**
All space of public value, including public landscaped areas, public squares and civic spaces, plazas and entrances to shopping areas, pedestrian areas, bikeways and paths, playing fields, parks and play areas, and also including not just land, but also areas of water such as rivers, canals, lakes and reservoirs, which can offer opportunities for sport and recreation or can also act as a visual amenity and a haven for wildlife. These areas usually remain unbuilt upon.

**Public transport interchange**
Supports the transfer of public transport users between modes (rail/bus/taxi) but also functions to support economic activity.

**Pyramid South**
Logistics Gateway, combining direct terminal handling facilities and value add logistics services and activities which are mutually beneficial and of a symbiotic relationship with the terminal such as transportation, processing, manufacturing, warehousing, distribution, commercial and retail functions.

**Regeneration**
The economic, social and environmental renewal, restructuring and improvement of rural and urban areas.

**Rural**
Rural areas are sparsely populated areas, not included core nodal areas cities. Economic activity typically consists of agriculture, fisheries, forestry, nature conservation, tourism, mining or similar and related activities. In South Africa, there are also rural areas that are more densely populated but yet are not compact or urban in nature, which is a remnant of the apartheid era spatial planning and the creation “homelands” rural areas constitute spaces where human settlement and infrastructure occupy only small patches of the landscape. The majority of rural poor live in areas that are resource-poor and highly heterogeneous.
Spatial Development Framework
A management tool that provides a spatial strategy to achieve the city’s vision, provides development direction, co-ordinates initiatives and identifies key interventions and development areas. It is a set of development objectives, strategies and policy statements established to achieve a holistic vision and approach to development and management of land.

Smart Growth
The smart growth principle is a component of Growth Management and guides development such that resources and services are provided in such a manner that they meet the demands of the affected population over a long-term period. In short, “Smart Growth” can be explained as “doing the right thing in the right place in the right way at the right time”. Smart growth is transit and pedestrian oriented, and has a greater mix of housing, commercial and retail uses. It also preserves open space and many other environmental amenities.

Social Housing
A rental or co-operative housing option for low to medium income households which requires institutionalised management which is provided by accredited Social Housing Institutions or in accredited social housing projects in designated areas.

Socio-economic Integration
Our communities are categorized by low, middle to upper income groups. Due to past policies, these communities have been accommodated in neighbourhoods based on either/both their income group and/or racial classification. Socio-economic integration redresses that imbalance by creating places of residence whereby communities are mixed and integrated through provision of different housing typologies for various income groups, with supporting social facilities that are essential for livelihoods such as government institutions, clinics, libraries, shops, transport facilities, places of employment and communal spaces such as parks and public squares.

Spatial Economy
In traditional terms, spatial economy refers to the allocation of (scarce) resources, their location and subsequent economic effect. In the context of this document, the spatial economy will include all social, economic and environmental considerations relating to spatial planning.

Spatial efficiency
Supporting productive activity and jobs and reducing burdens on business. Efficient commuting patterns and circulation of goods and services should be encouraged and ensure that regulatory procedures do not impose unnecessary costs on development.

Spatial justice
Reversing the historic policy of confining particular groups to limited space, as in ghettoization and segregation, and the unfair allocation of public resources between areas, to ensure that the needs of the poor are addressed first rather than last.

Spatial Inequality
Unequal access to urban opportunities as a result of spatial distribution.

Spatial quality
Improving the aesthetic and functional features of housing and the built environment to create liveable, vibrant and valued places that allow for access and inclusion of people with disabilities.

Spatial resilience
Building the capacity to withstand vulnerability to environmental degradation, resource scarcity and climatic shocks.
Spatial Restructuring
A spatial planning concept that aims at redressing an unsustainable spatial form by redirecting growth to areas of opportunity. It encourages development around nodes, densification along corridors, residential developments near areas of economic activity with supporting social facilities, and defines spaces through spatial design etc. Also see ‘Spatial Transformation’.

Spatial Sustainability
Promoting living environments whose patterns of consumption and production do not damage the natural environment.

Spatial Targeting
A built environment investment prioritisation approach where specific areas are prioritised for investment at a range of geographic scales, within an urban system, to achieve particular development outcomes. Spatial targeting is an approach recommended by the National Development Plan.

Spatial Transformation
The process of reversing the negative impacts of apartheid spatial planning (spatial fragmentation, inefficient urban form, racial segregation and ghettos of poverty etc.). Integrating communities and increasing opportunities to a greater number of people in highly connected areas are among the key outcomes of spatial transformation. Renouncing the creation of new low-income communities on the periphery of the city is also a key principle to avoid the need for these groups to spend a disproportionate amount of household income on transport and remain distant and dislocated from the socio-economic benefits and amenities associated with central urban locations. Also see ‘Spatial Restructuring’.

Sprawl
A multifaceted concept, which includes the spreading outwards of a city and its suburbs to its outskirts to low-density and decentralized development, often giving rise to leapfrog development, sometimes outside of the urban edge with a high segregation of uses and various design features that encourage car dependency.

Sustainable Development
Sustainable development is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come. The field of sustainable development can be conceptually broken into three constituent parts: environmental sustainability, economic sustainability and socio-political sustainability. Sustainability within the built environment refers to spatial types and morphologies related to intensity of use, consumption of resources and production and maintenance of viable communities.

Sustainable Human Settlements (Old)
The term ‘sustainable human settlement’ refers to a spatial concept that has two areas of emphasis: 1) human 2) sustainable. In terms of SPLUMA Principles “The human-centred approach emphasises that a central purpose of planning is to ensure that the developmental needs and activities of people living in settlements are catered for and, in particular, that Opportunities for people to achieve their full potential are maximised through their own efforts. This approach, rather than being purely technology-driven, is people-driven and democratic”. It makes such settlements socially, politically and economically sustainable. But there is also the dimension of environmental sustainability.

Township
In the context of this document, residential suburb established during the Apartheid era. These were located beyond the urban periphery, specifically created to accommodate non-white people. Apartheid legislation enabled the government to forcibly locate non-white people in townships. This is not to be confused with the legal term of township, which refers to a measure of land that has been formalised through town planning and legal processes, including the approval of a general plan which is approved by the Surveyor-General and the recording of land title with at the Deeds Registry.
Transit-Oriented Development (TOD)
Transit orientated development (TOD) is a mixed-use residential or commercial area designed to maximise access to public transport, and often incorporates features to encourage transit ridership. A TOD neighbourhood typically has a centre with a transit station or stop (i.e. a train station, metro station, BRT stop, or taxi rank), surrounded by relatively high-density residential development, retail facilities, employment and social facilities concentrated around the station. TODs are generally equipped with facilities and services at a convenient distance for pedestrians as well as non-motorized transport infrastructure.

Transport Corridors
These are main public transport channels, which implies the prioritising of public transport and non-motorised transport over private transport. Pedestrian/cyclist oriented environment with traffic calming for cars where appropriate. Densification along these corridors should be encouraged to maximise the public transport opportunities provided by these routes. Mixed uses fronting the trunk route will also be supported in certain areas along the trunk route and not only at stations.

Travel Demand Management
It focuses on understanding how people make their transportation decisions and helping people use the infrastructure in place for transit, ridesharing, walking, biking, and telework. It is cost-effective in guiding the design of our transportation and physical infrastructure so that alternatives to driving are naturally encouraged and our systems are better balanced.

Urban Cores
Former township areas were developed as a result of forced relocation programmes. Inevitably, these townships grew to accommodate large populations of low income or unemployed people. The economic circumstance was clearly evident in the quality of the physical environment. Under the new government which was established in 1994, these township areas were identified, not as a blight in the urban fabric as previously thought of, but as beacons of opportunity, through the human capital that was concentrated within the various communities of the townships. Due to the great need that often belies such nodes; the government has to play a more active role in social and economic restructuring, especially in view of the limited private investment, relative to Metropolitan cores. The Neighbourhood Development Programme Grant (NDPG) is a nationally funded programme that aims to address the improved quality of environment in urban cores.

Urban Development
Buildings and infrastructure with a residential purpose as well as offices, shops, community facilities and other associated buildings, infrastructure and public open space necessary to provide for the proper functioning of urban areas and amenity and recreation. The term ‘urban development’ includes golf estates, vineyard estates with a residential component, equestrian estates with a residential component, rural living estates, eco-estates, gated communities and regional shopping centres. Urban development excludes noxious industry and generally excludes land for industrial purposes. However, service trades that are compatible with mixed-use development and that generate a low impact on surrounding urban uses may be permissible if the nature and type of industry is deemed to form an integral part of an area demarcated for urban development purposes.

Urban Development Zone
The Urban Development Zone is an area demarcated in accordance with the Income Tax Act, Act 58 of 1962 as amended by the Revenues Laws Amendment Act, Act 45 of 2003. In terms of this incentive, taxpayers who construct, improve or purchase a building or part of a building from a developer within this area will be allowed to claim a reduction in taxable income.
Urban Edge
A virtual development boundary and inter-related policy that serves to control urban sprawl by mandating that the area inside the boundary be used for higher density urban development and the area outside be used for lower density, green open spaces and/or no development. Outside the urban edge, development should only be permitted within existing small towns and rural nodes, and where the environment and agriculture are not compromised. The urban edge forms the boundary between urban development and the valuable natural and agricultural hinterland in order to contain the lateral growth of the urban areas.

Urban footprint
The total spatial extent of existing urban development.

Urban management
Urban management involves the area-based involvement of and coordination with end users in the implementation, operation and maintenance of public facilities and services. In the local context, this may include the establishment of City Improvement Districts, Area Coordination Teams or Mayoral Urban Regeneration Programmes. In the long term successful urban management fosters a culture of joint accountability between the City and local stakeholders, reducing the potential of tension usually associated with top-down service delivery.

Urban Restructuring Zone
A well-located area where the national housing department’s Capital Restructuring Grant subsidy, as defined in terms of the Social Housing Act, Act 16 of 2008, applies.

Value Capture
A type of public financing where increases in private land values generated by public investments are all or partly recovered by the public sector.

Value Creation
Occurs when the introduction of infrastructure in a certain place results in the land close to this infrastructure increasing in value.

Water security
The reliable availability of an acceptable quantity and quality of water for health, livelihoods and production, coupled with an acceptable level of water-related risks defined by Gey & Sadoff in Sink or Swim: Water security for Growth and Development.

Water services provider
Any person who provides water services to consumers or to another water services institution, but does not include a water services intermediary as defined by the National Water Services Act No. 108 of 1997.

Water quality
The physical, chemical, toxicological, biological (including microbiological) and aesthetic properties of water that determine sustained (1) healthy functioning of aquatic ecosystems and (2) fitness for use (e.g. domestic, recreational, agricultural and industrial.
ABBREVIATIONS AND ACRONYMS

AIDC - Automotive Industry Development Centre
BEA - Building Efficiency Accelerator
BEPP - Built Environment Performance Plan
BEPPSCO - Built Environment Performance Plan Steering Committee
BRT - Bus Rapid Transit
BSC - Budget Steering Committee
CAP - Climate Action Plan
CAPEX - Capital Expenditure
CAPS - Tshwane’s Capital Planning and Prioritisation System
CAPSCO - Capital Planning Steering Committee
CAPSTTT - Capital Planning System Technical Task Team
CBD - Central Business District
CIF - Capital Investment Framework
CITP - Comprehensive Integrated Transport Plan
CLDP’s - Catalytic Land Development Programmes
CNG - Compressed Natural Gas
COT - City of Tshwane
CPM - Capital Prioritisation Model
CR&R - Climate Resilience and Responsiveness
CRDP - Comprehensive Rural Development Programme
CRDP - Comprehensive Rural Development Programme (2009)
CRS - Climate Response Strategy
CSIR - Council for Scientific and Industrial Research
CSIR - Council for Scientific and Industrial Research
CSP - City Support Programme
CSU - City Sustainability Unit
DHS - Department of Human Settlements (National)
DIPS - Development Intervention Portfolios
DORA - Division of Revenue Act (2 of 2013)
DRDRLR - Department of Rural Development and Land Reform
DU/HA - Dwelling units per hectare
EDPQ - Economic Development Priority Quadrant
EGP - Embedded Generation Policy
EIA - Environmental Impact Assessment
EPMU - Enterprise Programme Management Unit
EV - Electric Vehicle
EXCO - Executive Council
FDA - Future Development Areas
FDI - Foreign Direct Investment
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>FLISP</td>
<td>Finance Linked Individual Subsidy Programme</td>
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<tr>
<td>GBCSA</td>
<td>Green Building Council of South Africa</td>
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<tr>
<td>GCM</td>
<td>Global Circulation Model</td>
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<tr>
<td>GCR</td>
<td>Gauteng City Region</td>
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<tr>
<td>GCRO</td>
<td>Gauteng City Region Observatory</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GEMF</td>
<td>Gauteng Environmental Management Framework</td>
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<tr>
<td>GGMP</td>
<td>Gauteng Growth Management Perspective</td>
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<tr>
<td>GHGEI</td>
<td>Greenhouse Gas Emissions Inventory</td>
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<td>GPC</td>
<td>Global Protocol for Community-Scale</td>
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<td>GPG</td>
<td>Gauteng Provincial Government</td>
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<td>GSDF</td>
<td>Gauteng Spatial Development Framework</td>
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<td>GVA</td>
<td>Gross Value Add</td>
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<td>HDA</td>
<td>Housing Development Agency</td>
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<td>HSMSP</td>
<td>Human Settlements Master Spatial Plan (National)</td>
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<td>ICDG</td>
<td>Integrated City Development Grant</td>
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<td>IDP</td>
<td>Integrated Development Plan</td>
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<td>IDZ</td>
<td>Industrial Development Zone</td>
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<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<td>IRPTN</td>
<td>Integrated Rapid Public Transport Network</td>
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<td>IUDF</td>
<td>Integrated Urban Development Framework</td>
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<td>LED</td>
<td>Local Economic Development</td>
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<td>MCA</td>
<td>Multi-Criteria Analysis</td>
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<td>MFMA</td>
<td>Municipal Finance Management Act</td>
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<td>Municipal Financial and Management Act (56 of 2003)</td>
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<td>MSA</td>
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<td>MSDF</td>
<td>Metropolitan Spatial Development Framework</td>
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<td>MTEF</td>
<td>Medium Term Expenditure Framework</td>
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<td>National Development Plan</td>
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<td>NDPG</td>
<td>Neighborhood Development Partnership Grant</td>
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<td>NEMA</td>
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<td>National Energy Regulator</td>
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<td>Non-motorised Transport</td>
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<td>National Spatial Development Framework</td>
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<td>National Spatial Development Perspective</td>
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<td>NUSP</td>
<td>National Upgrading Support Programme</td>
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<td>OPEX</td>
<td>Operational Expenditure</td>
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<td>PRASA</td>
<td>The Passenger Rail Agency of South Africa</td>
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</table>
RDP - Reconstruction and Development Programme
RSDF - Regional Spatial Development Framework
SAF - Strategic Area Framework
SAL - Small Area Layer (Statistics South Africa Census 2011)
SANBI - South African National Biodiversity Institute
SANEDI - South African National Energy Development Initiative
SAPOA - South African Property Owner’s Association
SDBIP - Service Delivery and Budget Implementation Plan
SDF - Spatial Development Framework
SIP - Strategic Infrastructure Project
SOCA - State of the City Address
SPLUMA – Spatial Planning and Land use Management Act
SPLUMA - Spatial Planning and Land Use Management Act (13 of 2013)
SPP - Sustainable Procurement Policy
SRES - Special Report in Emissions Scenarios
TAC - Tshwane Automotive City Project
TACDF - Tshwane Automotive City Project Development Framework
TICRS - Tshwane Inner City Regeneration Strategy
TOD - Transit Oriented Development
TRT - Tshwane Rapid Transit System
UDF - Urban Development Framework
UDZ - Urban Development Zone
UNS - Urban Network Structure
USDG - Urban Settlements Development Grant
WMP - Wetlands Management Plan
WTP - Water Treatment Plants
WWTW – Waste Water Treatment Water
SRES - Special Report in Emissions Scenarios
TAC - Tshwane Automotive City Project
TACDF - Tshwane Automotive City Project Development Framework
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