CAPE TOWN DENSIFICATION POLICY

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City**Space** Planning Cape Town



CAPE TOWN DENSIFICATION POLICY



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The Cape Town Densification Policy was approved by Council February 2012

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ACRONYMS AND ABBREVIATIONS

CBD	Central business district		
CO ₂	Carbon dioxide		
CSD	Community Services Directorate		
CTIZS	Cape Town Integrated Zoning Scheme		
CTSDF	Cape Town Spatial Development Framework		
DFA	Development Facilitation Act (Act 67 of 1995)		
DPZ	Density Priority Zones		
DU/HA	Dwelling units per hectare		
EESPCO	Economic, Environment and Spatial Planning Portfolio Committee		
FAR	Floor area ratio		
FD	Finance Department		
IDP	Integrated Development Plan		
IRT	Integrated rapid transit		
LUPO	Land Use Planning Ordinance (Ordinance 15 of 1985)		
MSA	Municipal Systems Act (Act 32 of 2000)		
MSDF	Metropolitan Spatial Development Framework		
MTREF	Medium-Term Revenue and Expenditure Framework		
NHRA	National Heritage Resources Act (Act 25 of 1999)		
P&BDM	Planning & Building Development Management Department		
Province	Provincial Government of the Western Cape		
PSDF	Provincial Spatial Development Framework		
T,R&SD	Transport, Roads & Stormwater Directorate		
SDP	(district-level) spatial development plan		
SPUD	Spatial Planning & Urban Design Department		
USD	Utility Services Directorate		

TERMS AND DEFINITIONS

TERM	DEFINITION
Activity route	Significant and/or metro-wide to district route characterised by strip and/or nodal urban development along sections of the route. Activity routes are generally supported by a mix of land uses and higher-density urban development. Activity routes are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights.
Activity street	Local routes characterised by continuous development, including centres or nodes, mixed land use, linear commercial and business developments, light industry, institutions and social facilities. Activity streets are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights.
Amenity/ attraction areas (urban, natural coastal)	Significant urban places that are attractive to people across the city, including certain urban nodes and business complexes, public space precincts, social and institutional facility areas and heritage areas; coastal nodes that include a range of functions, from businesses (shops, services and restaurants) and social facilities (including recreation and resorts) to residential development.
Building density	Ratio of total building floor area (FAR) to the corresponding site.
Civic precinct	Concentration of public facilities (e.g. schools, clinics, hospitals) located in close proximity.
Coastal edge	Demarcated area around the coast, primarily to protect coastal resources and avoid hazards and financial risks pertaining to areas at risk of flooding.
Coastal node	Concentrated development at a specific location.
Densification	Increased use of space, both horizontally and vertically, within existing areas/properties and new developments, accompanied by an increased number of units and/or population threshold.

TERM	DEFINITION	
Development route	Major citywide or district movement routes, including line-haul public transport or integrated rapid transit (IRT). Mixed land uses and higher-density development tend to be nodal, with access provided at intersections, and generally linked to parallel and connecting side routes. Development routes may include short stretches of activity route-type development.	
District park	Large landscaped parks with informal and formal recreational activities, sometimes combined with related social uses, ranging from sports grounds/facilities and open- air theatres to tea gardens; generally multifunctional and serving several surrounding local communities or suburbs.	
External departure	Departures from the applicable zoning scheme relating to the side, rear and front boundaries of a property.	
Floor area ratio	The ratio of the total floor area of buildings on a certain location, to the size of the land of that location, or the limit imposed on such a ratio.	
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, yet find it difficult to access housing in the private market.	
Gross base density	The average number of dwelling units per hectare across large city district areas or the city as a whole, excluding land-extensive uses such as agricultural and rural land and large natural areas/nature reserves/parks.	
Gross du/ha	The number of dwelling units per hectare of land calculated in a designated area on the basis of land used for residential purposes and other land uses such as industry, commerce, education, transport and parks. Excluded are land-extensive uses such as agricultural land and natural areas/nature reserves/parks.	
Incremental densification	Small-scale densification that has a minimal impact on the urban fabric, e.g. secondary dwelling units.	

TERM	DEFINITION		Т
Infill site	Undeveloped or partially developed site within the existing urban fabric that is suited to urban development		Popu densi
Local/ neighbourhood parks	Small parks serving the immediate local community/neighbourhood (within walking distance), focused on informal recreation, including play equipment and kick-about		Subsi housi
Metropolitan park	areas. Large-scale multifunctional parks meeting the wide-ranging needs of the regional		Subu mode deve
	often extensive landscapes.		Urba
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		Urba mana
	same parcel of land; implies context- appropriate intensity of land uses that		zone
	and a vibrant local urban environment.		Urba
Multifunctional	The combination of different yet compatible functions within one physical framework serve a variety of social and community groups allowing for a wider range of		Urba mode deve
	facilities that reinforce one another in close proximity and offering greater access to potential users; differentiation in activity may be physical (different activities on different floors or premises of the same building) or in time (using the same facility for different activities, but at different		Urba
Net du/ba	times). The number of dwelling units nor bectore of		Zonir scher
Net du/lla	land calculated on the basis of land used for residential purposes, including the garden and off-street parking, if any.		Seriel

TERM	DEFINITION	
Population density	Number of people per hectare (calculated by multiplying the number of units by an appropriate average household size).	
Subsidised housing	Housing supplied in terms of the National Department of Housing's housing subsidy scheme.	
Suburban model of development	See illustrations in annexure 4.	
Urban edge	A demarcated edge line defining the outer limits of urban development for a determined period of time.	
Urban edge management zone	Zone identified on both sides of the urban edge within which specific management guidelines are adopted to direct and manage land uses.	
Urban fabric	The existing built area of the city.	
Urban model of development	See illustrations in annexure 4.	
Urban nodes	Urban nodes are characterised by the intensity, mix and clustering of urban activities or land use at points of high accessibility, exposure, convenience and urban opportunity. The role and function of nodes are differentiated in terms of scale (metropolitan, submetropolitan, district and local).	
Zoning scheme	Determines development rights and land uses permitted within each category.	

'City' vs 'city'

In this publication, 'City' refers to the City of Cape Town, while 'city' denotes the municipal area.

1. INTRODUCTION

Rapid and continuous low-density development is threatening the long-term sustainability of Cape Town, and has created the following challenges:

- Urban sprawl has created long travel distances with fragented and dispersed urban activity patterns, which make it difficult to develop a viable public transport system. This has a negative impact on the mobility of poorer people, who are dependent on public transport (travel and fuel costs), and is unsustainable in an oil-constrained world.
- Road-based transport (including private transport) with increased traffic congestion and carbon dioxide (CO₂) emissions has significant environmental pollution consequences.
- The place-making qualities and urban vibrancy of neighbourhoods, districts and the city as a whole are being threatened.
- Good agricultural land on the urban edge and elsewhere is rapidly being consumed by urban development, and valuable biodiversity resources and areas of scenic and amenity value are being threatened.
- The unit cost of providing the necessary infrastructure required to service low-density forms of urban development is far greater than the unit and operating cost of servicing medium to higher-density forms of urban development.
- Lastly, the inefficiency caused by this fragmented and lowdensity form of development has serious economic implications, limiting access to opportunities and causing operational inefficiencies and a wastage of supporting economic resources (both natural and built).

Densification is viewed as a necessary step to promote the longerterm sustainability of Cape Town's valuable natural, urban and rural environments. In August 2007, the Planning and Environment Portfolio Committee endorsed the establishment of a Densification Task Team to oversee the preparation of this Densification Policy. A Densification Policy was identified as a high priority to:

- Guide decision making with respect to density-related applications;
- Integrate, update and rationalise the existing studies into a single policy framework;
- Inform the Cape Town Spatial Development Framework (CTSDF) on citywide density policy, as well as the district-level spatial development plans (SDPs) as to the identification of areas of land use intensification;
- Guide the detailed planning and design of local-area and precinct plans as well as density-specific plans;
- Align density patterns, trends and proposals with the landuse management regulations and infrastructural capacity; and
- Identify and put in place feasible mechanisms and processes (city wide to local scales) to support the appropriate implementation and management of higher densities.

Between August and November 2009, the public, government departments and subcouncils were asked to comment on the draft CapeTown Densification Strategy (2009). This Densification Policy has been drafted on the basis of the aforementioned strategy and all comments received.

This policy begins with a definition of densification. It then outlines the existing policy context and hierarchy of density-related policies/plans. The policies and procedures to be followed when assessing density-related development applications are then outlined. Finally, key areas of further work to support the implementation of this policy are identified.



Figure 1 : The same density depicted in different building forms

2. WHAT IS DENSIFICATION, AND WHY IS IT IMPORTANT?

2.1 Definition

Densification is defined as follows:

The increased use of space, both horizontally and vertically, within existing areas/properties and new developments, accompanied by an increased number of units and/or population threshold

Incremental densification, in turn, denotes the following:

Small-scale densification that has a relatively low impact on the character of an area, e.g. the subdivision of a residential property or construction of a second dwelling

Densification is not an end in itself, but a means of improving the sustainability of the city as well as the vitality of urban precincts. It is a relative indicator of the intensity of development and the population thresholds that could support economic activity, public transport services and the like.

2.2 Forms of densification

Broadly speaking, there are three generic building forms that support higher densities (see figure 1).

These building forms can be applied in many different ways. These include:

- Single, detached tower block buildings (on an erf), surrounded by open space;
- A traditional street layout with attached row/terrace housing; and
- A perimeter block enclosing an open space or courtyard.

The 'terrace' and 'perimeter block' are the preferred generic forms, as their resultant urban form and city landscape are best suited to Cape Town.

2.3 Motivation for densification

Densification can contribute to the creation of good-quality, efficient and sustainable urban environments in a number of ways, including the following :

Densification reduces the consumption of valuable/non-renewable resources

By encouraging development upwards rather than outwards, densification helps reduce the consumption of valuable resources such as agricultural land, areas of mineral potential, aquifer recharge areas and valuable biodiversity areas. It can also reduce the consumption of non-renewable fuels by lessening car dependence. Densification supports the development of a viable public transport system

Higher densities, accompanied by increased population thresholds and mixed-use development, support the efficient functioning and viable provision of public transport services, especially on major line-haul routes for mass and rapid transit.

Densification makes the city more equitable

Higher densities in appropriate locations, especially those close to urban opportunities (services, facilities, jobs) and public transport, help rationalise the housing pattern in the city, and improve access to the city's amenities and facilities. They help reduce travel distances and times, as well as the associated costs.

Densification facilitates economic opportunities and supports service provision

Higher densities, accompanied by increased population thresholds, create sufficient consumers to generate the development of economic opportunities, social facilities and services, and enable the cost-effective provision and optimal use of infrastructure, especially where there is excess service capacity or where increased thresholds are required to provide services and infrastructure.

Densification improves housing patterns and choice of house type

A mix of residential densities ensures diversification and choice of housing types and tenure options.

Densification contributes to urban place-making and improves safety

Appropriately designed and located higher densities (in terms of form, scale, height, orientation) can provide an opportunity for place-making and the creation of attractive and safe urban environments, particularly those in proximity to public spaces (both natural and built).

Higher densities are not a guarantee of quality urban environments, appropriate built form or good urban design. However, the extremes of either very high or low densities often result in negative urban environments. Appropriate regulations, local development policies and urban design policies can be used to help prevent negative built environments.

2.4 Means of achieving densification

Densification can take place in the developed areas of the city, on vacant infill sites within the developed areas, and on greenfield sites that coincide with the City's planned growth direction. The general process of densification takes place in a number of ways (see figure 2), and is facilitated and managed by a range of zoning and land use regulations.



SCHEMATIC BLOCK LAYOUT (with underlying subdivision)



7. Consolidation of sites within a street block to create a single, larger parcel for redevelopment into multi-storey units.



Existing New

Figure 2 : Generic means or ways of achieving densification within developed areas of the city

2.5 Measures of densification

A range of measures are used to calculate and compare built form and population densities. Some of the commonly used measures are dwelling unit density (gross/net), population density, and gross base density. Table 1 below describes these measures in more detail. This policy makes use of a gross base density at the citywide level, and net du/ha figures when setting density guidelines in specific locations. When planning the provision of social facilities and public open space, or undertaking market analyses, population density is the most appropriate measure of densification.

Table1 : Measures of densification

MEASURE	DEFINITION		
Du/ha	Number of dwelling units per hectare (du/ha).		
Population density	Number of people per hectare (calculated by multiplying the number of units by an appropriate average household size).		
Building density	Ratio of total building floor area to the corresponding site area.		
Gross du/ha	The number of dwelling units per hectare of land calculated in a designated area on the basis of land used for residential purposes and other land uses, such as industry, commerce, education, transport and parks. Excluded are land-extensive uses, such as agricultural land and natural areas/nature reserves/parks.		
Net du/ha	The number of dwelling units per hectare of land calculated on the basis of land used for residential purposes, including the garden and off-street parking, if any.		
Gross base density	The average number of dwelling units per hectare across the city as a whole or a smaller unit, excluding land-extensive uses, such as agricultural and rural land and large natural areas/nature reserves.		

Table 2 : Examples of net dwelling units per hectare (net du/ha) in Cape Town

PROPERTY AND LOCATION	NUMBER OF FLOORS	NET DU/HA
Edward Heights, Goodwood	22	107
Knightsbridge, Century City	13	143
The Claremont, Claremont	10	403
Tiger Ridge, Tygervalley	6	191
Rustenberg Square, Rondebosch	4-5	107
Constantia Mews, Plumstead	4	114
Natures Gate, Plumstead	3	110
Portland Park	2	84
Mountain Road, Woodstock (attached housing)	1	69
District Six (new land claimants' houses)	2	97
Delft (some attached)	1	54
Masiphumelele informal settlement, Noordhoek	1	270
Doornbach informal settlement, opposite Du Noon	1	217



Figure 3 : Illustration of gross base density citywide and at a local scale



3. CONTEXTUAL POLICY ENVIRONMENT

3.1 Legislation and policy informants

A number of strategy and policy documents, prepared by different spheres of government, promote densification within urban settlements throughout South Africa.

- 1. The Constitution of the Republic of South Africa (Act 108 of 1996) supports densification to develop the built environment for the efficient provision of services, social and economic development, and environmental sustainability.
- II. The principles of the *Development Facilitation Act (Act 67 of 1995)* (DFA) that are applicable to the Western Cape emphasise the value of higher densities in urban settlements. Integrated, higher-density development is indicated for:
 - Small-scale business that is dependent on vibrant markets;
 - Supporting a range of social services and facilities;
 - The cheaper provision of bulk services, such as water, sewerage and electricity, per building unit;
 - Integrated movement modes and public transport; and
 - Integrated land uses ranging from directly mixed uses to reasonable spatial proximity of different uses.
- III. The Provincial Spatial Development Framework (PSDF, 2009) supports the introduction of an urban edge and higher densities. An average or gross base density of 25 du/ha is proposed. Policy UR2 of the PSDF makes the short to mediumterm achievement of this densification target mandatory.
- IV. The Cape Town Spatial Development Framework (CTSDF) (2011) – which was endorsed by Council, forwarded to the Provincial Government of the Western Cape (the Province) for approval as a structure plan (in terms of section 4(6) of the Land Use Planning Ordinance, Ordinance 15 of 1985), and incorporated into the Integrated Development Plan (in terms of section 34 of the Municipal Systems Act, Act 32 of 2000) – promotes the development of a more sustainable, compact city. The CTSDF supports contextually appropriate densification across the city. It proposes higher densities in specific locations, such as along activity and development routes and in urban nodes.

3.2 Hierarchy and role of plans and policies that affect densification

The City's current planning framework comprises outdated plans that are inconsistent and contain conflicting development objectives and dated information. The City has begun updating and rationalising this framework, and plans to put in place the hierarchy of plans and policies outlined in table 3. Within this framework, densification is covered at the level of general policy on a citywide basis, and at a detailed level at local/density plan scale. It should be noted that local-area density plans and policies that are in operation will need to be reviewed to ensure their alignment with this policy. Stakeholder engagement and communication regarding the review of these plans and the introduction of new density plans is critical.

In line with the consistency principle and hierarchical system of plans, a development proposal contained in a lower-order plan/ policy must be measured for consistency with the plans/policies of a higher order and/or higher legal status.

It is important to note that this policy does not grant nor limit rights. Rather, the Densification Policy provides guidelines to be used by decision makers. It should therefore be distinguished from a zoning scheme, which confers rights and for which statutory compliance is mandated.

Table 3 : Hierarchy of spatial plans and policies

SPATIAL PLAN/ POLICY	PURPOSE	DENSIFICATION-RELATED PROVISIONS	WHO APPROVES?	LEGISLATION OR POLICY THAT GUIDES APPROVAL
Cape Town Spatial Development Framework (CTSDF)	Long-term (20+ years) citywide spatial structuring elements and plans, and overarching policy framework	 Identifies criteria, guidelines and policies relating to the development and location of higher densities. Identifies broadly applied mechanisms and incentives/disincentives to be applied across the city context. Promotes the use of the urban edge as an integral part of a containment strategy. 	Province Council	MSA (section 34) LUPO (section 4(6)) NHRA World Heritage Act
District spatial development plan (SDP)	Medium-term (10+ years) district-level spatial development plans that indicate proposed land uses in new development areas, urban restructuring and upgrade interventions	 Identifies the areas to be targeted for land use intensification. Identifies areas where the preparation of density plans should be prioritised. 	Council	LUPO (section 4(10)) – provision on the lapsing of structure plans after a specified time frame; NHRA, World Heritage Act City's system of delegations
Local/density development plans	Detailed plan related to, for example, the management of land uses and detailed local-level planning, such as density plans	 Identifies areas for densification on a street block and, where appropriate, an erf basis, and establishes density parameters. Where appropriate, minimum density and/or subdivision standards will be set. Establishes location-specific design guidelines and, where appropriate, maximum and/or minimum height restrictions. Indicates what the minimum zoning of the sites should be when a rezoning application is received. Following approval of the CTIZS, local/density plans will delineate subject areas and provide parameters for incorporation into the CTIZS, as overlay zones, where appropriate. 	Council	LUPO (section 4(10)) City's system of delegations NHRA
Strategy/policy documents	Detailed issue/land-use-specific policy parameters that should determine land use decisions	 <i>Densification Policy</i> – provides the detailed framework for all density-related matters, including density guidelines, decision-making tools and density facilitative mechanisms. <i>Tall Buildings Policy</i> – guidelines for assessing buildings that meet the definition, i.e. depart from the zoning scheme's height provisions. <i>Parking policy</i> – outlines the City's approach to parking provision related to different zoning categories. <i>Schedule of standards and guidelines for the provision of public facilities and public open space.</i> Water, stormwater, wastewater, solid waste and electricity master plans. 	Economic, Environment and Spatial Planning Portfolio Committee (EESPCO) and/or Council	City's system of delegations
Development guidelines	Detailed guidelines that should inform land use decisions, such as fire protection guidelines and urban design guidelines (for example tall buildings guidelines)	• Density and urban design guidelines.	EESPCO (if other sectors are not affected) Council, if other sectors are affected	City's system of delegations

4. THE DENSIFICATION POLICY

4.1 Goal

The Densification Policy seeks to improve the city's sustainability and to enhance the quality of the built environment.

4.2 Objectives

The Densification Policy's more specific objectives are to:

- Ensure optimal and efficient use of infrastructure, services, facilities and land;
- Support the development of a viable public transport system and to improve levels of access to the city's resources and amenities;
- Protect, manage and enhance the natural and built environment and significant cultural landscapes;
- Provide a framework and guidelines for the assessment of development proposals;
- Provide homeowners and property investors with a level of certainty regarding areas that will be targeted for various types of densification;
- Ensure that the scale and character (in terms of bulk, height and architectural styling) of higher-density areas are appropriate to the immediate context;
- Support the development of mixed land uses, providing for vitality, opportunities and integrated living environments;
- Cater for the trend of decreasing household sizes; and
- Contribute to place-making and the development of attractive and safe urban environments.



4.3 Densification policy statements

The following policy statements should guide all density-related land use decisions:

- **DP1** The City aims to achieve a minimum average gross base density of 25 du/ha in the next 20 to 30 years, and will aim for a higher gross base density thereafter.
- DP2 The City will promote densification in all areas. However, importantly, a 'one size fits all' approach will not guide density decisions. Higher levels of densification will be encouraged at specific spatial locations, particularly in areas with good public transport accessibility, at concentrations of employment, commercial development and/or social amenities, and in areas of high amenity, e.g. at coastal nodes. Small-scale incremental densification should be permitted across the city, where appropriate and feasible in terms of infrastructure availability.
- **DP3** The intensification of all types of land uses, not just residential land uses, should be encouraged, and a better mix of land uses should be supported.
- **DP4** Cape Town as a city is not defined by its urban or built skyline, and it is not intended for this to be the case in future. The mountain skylines and views of the sea are the defining elements that make Cape Town unique, and views of them must continue to be protected from inappropriate built form through, for instance, the application of the Tall Buildings Policy, when approved.
- **DP5** A variety of erf and dwelling sizes are to be promoted within any one area. On smaller erven, the urban rather than suburban model of development should be encouraged. A design framework/precinct local plan may be required to guide the densification of properties larger than one hectare.
- **DP6** The determination of the appropriate location, height, scale, form and orientation of a higher-density development in a particular location should be guided by the density decision-making framework. The following factors must be considered:
 - <u>Generic considerations for densification</u> related to the suitability of the area for land use intensification, such as surrounding land use character; access to public transport; proximity to places of employment, services and social facilities; proximity to public open space, and infrastructure availability (existing and planned) (see table 4).
 - The <u>spatial locations</u> targeted for different types of densification as per this policy (see table 5).
 - <u>The applicable policy frameworks</u>, namely the CTSDF, districtlevel SDPs and local spatial plans, density plans and urban design policy.
 - <u>Contextual informants</u> related to the development application and its immediate surroundings, such as the natural environment, land use, built and heritage character, infrastructure availability and capacity, and socio-economic considerations, should determine the densities appropriate in a specific location (see table 6).

- **DP7** The City will proactively encourage densification in density priority zones (DPZs) and urban civic upgrade areas, as defined in the box opposite. Different packages of incentives may be applied in different locations. The packages could include land use measures (e.g. overlay zones, class rezoning and the relaxation of building lines, authorising enhanced bulk, reduced parking and public open space provisions), financial mechanisms (e.g. adjustments to developer contributions, property rates and/or planning application fees), and procedural improvements (e.g. streamlining application procedures) (see annexure 1).
- **DP8** The densities proposed on greenfield sites within and outside the existing built fabric should, as far as is appropriate, align with the densification spatial location criteria and density guidelines described in the Densification Policy (see table 5).
- **DP9** When local/density plans are prepared, minimum height and/or maximum height and density parameters/guidelines must be set.
- DP10 Generally speaking, the gross density of formal housing in subsidised housing areas is higher than in other parts of the city. Challenges in some of these areas include the monotonous mono-functional form of the subsidised housing developments, their spatial location, and the number of informal backyard dwellings. The City will investigate, promote and support urban design as well as financial and institutional mechanisms that support multi-storey/more suitable forms and locations of subsidised housing, in order to achieve better city form and higher-quality, sustainable living environments.
- **DP11** The City should proactively encourage the development of state-owned land within the urban fabric. This land should be developed in a way that facilitates spatial integration and the intensification of land uses.
- **DP12** The notion of separate water and electricity meters and refuse and sewerage charges where there is more than one dwelling unit on a property is supported.
- **DP13** Informal settlements and subsidised housing areas that are too densely settled to make their upgrade feasible may require the relocation of some households to alternative sites and/or the use of creative design and financing solutions.
- **DP14** 'Live' information systems need to be put in place to monitor the take-up of infrastructure capacity and to guide density-related decision making.
- **DP15** In higher-density areas (where the net density is >50 du/ha), the provision of open space should focus on accessibility rather than provision per person.
- **DP16** In selected instances such as in major commercial areas and along development routes, activity routes and activity streets– maximum parking standards related to the accessibility of public transport should be considered. The provision of onstreet parking, especially for a proportion of the visitor parking required by group housing/flats, should be encouraged where circumstances permit (see annexure 3).

Density priority zones

In the short term (next five years), the DPZs will be as follows:

Development and activity routes and activity streets and around rail and IRT stations: Areas adjacent to development routes, activity routes and activity streets, especially close to employment and mixed-use areas, and around social facilities/institutions, public open spaces (especially parks) and amenity areas.

Zoning rights: Areas where zoning rights correlate with one of the following zones proposed by the new CTIZS: general residential zones 1–6; community zones 1–2; local business zones 1–2; general business zones 1–7, and mixed-use zones 1–3. Electricity, water, wastewater and stormwater capacity should exist in these areas, or be planned within the next three years. Alternatively, where appropriate, the developer must be able to cover the cost of the required infrastructure upgrades.

Infill sites: The development of these sites should be guided by the density decision-making framework, and should ideally be at a higher density than the adjacent properties. The most desirable infill areas are those located close to economic opportunities, social amenities and IRT routes. Athlone Power Station, Stikland Hospital and Wingfield are large infill areas that are very well located. Being state-owned, they also represent a huge opportunity to realise greater socio-economic urban integration. The City should proactively pursue their release for urban development.

Greenfield developments within the urban edge, and more specifically adjacent to existing urban development: The development and zoning of these areas should be guided by the targeted average gross base density and the density decision-making framework. The appropriate mechanisms referred to in DP7 above should be put in place to support the densification of the prioritised areas.

Urban civic upgrade areas

Urban civic upgrade areas are specific locations within the DPZs that are the focus of a broad range of public interventions (e.g. getting rid of crime and grime, landscaping, and public transport enhancements) and investments, and where private investment will be proactively encouraged. The Cape Town central business district is an example of an urban civic upgrade area. The criteria to be used to identify urban civic upgrade areas include:

- The existing zoning/location, where these factors facilitate densification;
- The likelihood and feasibility of densification (based on market trends, the affordability and acceptability of the product, and the City's ability to enhance development rights);
- The potential of a particular location to contribute to urban restructuring and/or compact urban growth; and
- The capacity of existing infrastructure to accommodate new growth.

5. THE ASSESSMENT OF APPLICATIONS

Densification decisions should be guided by the density decisionmaking framework and be balanced by resource limitations and infrastructure availibility. Figure 6 outlines the components of the framework that should guide decisions regarding the location, form, extent, scale, height and orientation of densification.

5.1 Generic considerations for densification

Particular issues require consideration when identifying and evaluating areas or locations for higher-density forms of development, especially where densities are in excess of 50 du/ha (net) or where erven are smaller than 200 m². These are outlined in table 4.



Figure 6 : Density decision-making framework

Table 4 : Generic considerations for densifications

LEVEL OF DENSIFICATION	CONSIDERATION
Medium to high levels of densification	 √ Access to public transport system (existing or planned)
	Medium to high levels of densification should be aligned with existing/proposed public transport routes. This is essential for housing development targeted at lower-income earners, who are unable to afford the costs of private transport. It should not be an overriding consideration for middle and upper-income townhouse/ group housing developments, as the residents are likely to make greater use of private transport.
	Land use integration
	Preferably medium to high levels of densification should be located near places of employment, social services and community facilities.
	Access and proximity to public open spaces
	Medium to high-density development should have access to urban open spaces (such as squares and promenades), recreational green spaces (parks and sports fields) and/or natural open space (nature reserves, beaches) to provide physical and psychological relief from higher-density living environments.
All forms of densification densification	✓ Infrastructural capacity Densification should not be supported where water, wastewater and stormwater capacity are reaching points of absolute constraint, and the cost implications of rectifying the situation are too high for the private sector, or are not provided for in the City's capital budget.

5.2 Spatial location criteria and density parameters

The CTSDF (2011) proposes a compact city with middle to higher densities aligned with specific structuring elements, such as public transport and land use-orientated development, as well as activity routes, urban nodes, parks, and amenity and attraction areas. This Densification Policy provides more specific guidelines on the location of middle to higher densities and the density parameters suited to the different locations. See table 5 for more details.



Figure 7 : Activity Route - Voortrekker Rd, Parow - before and after



AFTER

Table 5 : Areas / Locations targeted for different types of densification

	SPATIAL LOCATION CRITERIA AND DENSITY PARAMETERS			
	Targeted Areas	Description of the Spatial Area/ Structure	Targeted Locations/ Areas	Density Guideline at the locations
Incremental Densification				
	Citywide	All single, residential- zoned areas	All locations as permitted by the zoning scheme or applications for new rights	Second dwellings as well as other forms of development, provided no external departures are required and the character of the area and rights of surrounding properties are not negatively affected (see annexure 2)
		Affordable Ho	using Area	
	Specific residential areas or parts thereof	Within areas of focused public-sector investment, e.g. sub- sidised housing	Informed by spatial structure locations	80-300 du/ha (net) Single to 4 storeys,* informed by spatial structure
		Spatial Structurin	ng Elements	
	Development Route	Major citywide or district movement routes, including line- haul public transport or IRT. Mixed land uses and higher density development tend to be nodal, with access provided at intersections, and generally linked to parallel and connecting side routes. Development routes may include short stretches of 'activity route' -type development. Examples: Jan Smuts Drive, Klipfontein Rd, Symphony Way, Marine Drive/Otto du Plessis and Jan van Riebeeck/35 th Ave/ Stellenbosch Arterial, Durban Rd north of the N1	Particularly near points of direct access, transport intersections and interchanges, places of intense mixed-use and nodal activity ('activity route' character) and next to or part of commercial complexes	75-175 du/ha (net) 3-7 storeys

SPATIAL LOCATION CRITERIA AND DENSITY PARAMETERS

		TENS	
Targeted Areas	Description of the Spatial Area/ Structure	Targeted Locations/Areas	Density Guideline at the locations
Spatial Structuring Elements			
Activity route	Significant and/or metro-wide to district route, characterised by strip and/or nodal urban development along sections of the route. Activity routes are generally supported by a mix of land uses and higher-density urban development. Activity routes are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights. Examples: Main Road, Voortrekker/ Van Riebeeck Road, Kloof Street, Sea Point Main Road, Wetton- Lansdowne Road, Koeberg Road and AZ	Generally near the activity route, but particularly near public transport interchanges and stations, mixed-use areas and concentrated activity, business/ commercial nodes, and public institutions and facilities including open space	100–375 du/ha (net) Four to 15 storeys
Activity street	Berman Local routes characterised by continuous development, including centres or nodes, mixed land use, linear commercial and business developments, light industry, institutions and social facilities. Activity streets are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights. Examples: Main Street (Newlands), Main Road (Somerset West), Main Road (Strand), Long Street, Klip Road and Gabriel Road	Generally near the activity street, but particularly near public transport stops, stations and route intersections, in mixed-use areas and concentrated activity, local business/ commercial nodes, and at public institutions and facilities including open space	35–100 du/ ha (net) Townhouses – four storeys

Table 5 : Areas / Locations targeted for different types of densification continue....

SPATIAL LOCATION CRITERIA AND DENSITY PARAMETERS			
Targeted Areas	Description of the Spatial Area/ Structure	Targeted Locations/ Areas	Density Guideline at the locations
	Spatial Structurin	g Elements	
Rail/IRT corridors	Land adjacent to IRT/ rail stations not located near any of the other spatial structuring elements	The surrounding area within easy walking distance of the IRT/rail stations	Location- specific, but generally higher than surrounding densities
Metropolitan and sub- metropolitan urban nodes	Urban nodes characterised by a very high/high intensity, mix and clustering of urban activities or land use at points of very high/high accessibility, exposure, convenience and urban opportunity Examples: Cape Town, Bellville and Claremont/Wynberg CBDs, Mitchells Plain town centre and Century City	Generally within and abutting the defined node or central business district area. Particularly in the vicinity of public transport routes, interchanges and stations, near civic precincts, public open space and where there is a diverse, concentrated mix of land uses, activities and services	100–375 du/ ha (net) Four to 15 storeys
District and local urban node	Urban nodes characterised by a very medium intensity, mix and clustering of urban activities or land use at points of good accessibility, exposure, convenience and urban opportunity. They tend to serve district or suburb-level needs. Examples: Rondebosch, Parow, Kenilworth, Hout Bay, Fish Hoek, Simon's Town, Mfuleni and Rylands	Generally within and abutting the node with a focus on public transport routes, interchanges and stations, next to civic precincts, public open space, and where there is a diverse and concentrated mix of land uses, activities and services	75–175 du/ ha (net) Three to seven storeys
Metropolitan, district and local parks	A landscaped park with recreational facilities, sometimes combined with related social uses, ranging from sports grounds/facilities and open-air theatres to tea gardens	Generally fronting onto the park to improve surveillance and security, and create a sense of enclosure	Location- specific, but generally higher than the surrounding densities

SPATIAL LOCATION CRITERIA AND DENSITY PARAMETERS

PARAIVIETERS				
Targeted Areas	Description of the Spatial Area/ Structure	Targeted Locations/ Areas	Density Guideline at the locations	
	Spatial Structurin	g Elements		
Amenity/ attraction areas – urban, natural and coastal destination places, urban edge management zones	Significant urban places that are attractive to people across the city, including business complexes, civic precincts, public open spaces, social and institutional facility areas and heritage areas. Examples: Government Avenue, V&A Waterfront, Cape Quarter – De Waterkant, Kalk Bay and Simon's Town Select places of natural and recreational attraction, views and amenity, for example river corridors and natural open spaces Example: Princess Vlei Coastal nodes that include a range of functions, from businesses (shops, services and restaurants) and social facilities (including recreation and resorts) to residential development. Examples: Camps Bay, Table View, Mnandi, Monwabisi and	Areas not prone to sea level rise and that do not negatively affect natural/ coastal processes or valuable built/heritage environments	Location- specific. Where appropriate, influenced by the City's Urban and Coastal Edge Management Guidelines (draft).	
	Silverstroom Strand			

* Note: One storey is on average ±3 m high.

5.3 Guiding contextual informants

The contextual informants that should guide the evaluation of development applications in their immediate context are outlined in table 6.

Table 6: Contextual informants

CONTEXT	INFORMANTS	
Surrounding land uses	The general land use character of an area is important when considering the suitability of higher-density development. Urban areas (existing or planned) characterised by a diverse land use mix (including different types of residential development) and a fine built grain of development are best suited as locations for higher densities. If an area is solely single-dwelling residential, greater attention needs to be given to the height and form of new developments than where flats and other forms of mixed land use development already exist. Townhouses or low-rise flats can be highly compatible within a single-dwelling residential area. Higher-density residential development is not particularly appropriate in predomnantly industrial areas, where amenity and general living are negatively affected.	
Built and heritage	Higher-density forms of development need to be carefully evaluated in order to ensure that proposals fit in with the surrounding environment. The form and design of the development must be compatible with the area's built/natural character. If it is not possible to accommodate a compatible built form without negatively altering the existing built context, or compromising the surrounding built environment, the development should not be supported.	
Infrastructure	The contextual consideration of applications for higher- density forms of development entails a number of infrastructural factors:	
	 The capacity to accommodate larger flows of traffic must be considered in conjunction with planned public transport upgrades. If necessary, transport impact assessment(s) must be undertaken. The capacity of the existing/planned bulk infrastructure services (water, wastewater/sewerage, electricity and stormwater) to accommodate increased service demands 	
	Densification should not be supported where water, wastewater and stormwater capacity are reaching points of absolute constraint, and the cost implications of rectifying the situation are too high for the private sector, or are not provided for in the City's capital budget.	
Socio-economic	The affordability of the product and the compatibility of the intended market and/or product with the surrounding local communities require consideration. Consideration should be given to the fact that multi- storey developments in low-income areas have not had a good track record, as they have become associated with negative social impacts.	

CONTEXT	INFORMANTS		
Community facilities and open-space provision	The availability and/or provision of open space and community facilities (libraries, clinics, schools, police stations) are important contextual informants in the evaluation of medium to higher-density proposals.		
Natural environment	Higher-density forms of development should not have a negative impact on the landscape and scenic aspects of the surrounding natural environment, or on the operation of natural systems. The location, orientation, scale, height and design of higher-density development in scenic and sensitive landscapes should therefore be carefully considered to ensure that densification- related applications do not have a negative impact on the surrounding natural environment. For example, in locations abutting productive agricultural areas, lower-density forms of development may provide a more appropriate rural-urban interface and may reduce negative impacts such as crime and theft.		

5.4 Density and urban design guidelines

The impact of densification on the quality of the built environment is affected by the design of buildings and spaces, and the minimum subdivision size of properties. The Densification Guidelines Manual (Cape Town Metropolitan Council, 2002) prescribed a set of urban design guidelines to foster an aesthetic and functional urban form. These guidelines are being updated and reviewed in the Draft Urban Design Policy and associated guidelines. It may be necessary to prepare location-specific density/urban design guidelines for specific areas within the city.

6. MAKING IT HAPPEN

The Densification Policy provides the framework for promoting densification and guiding decision making with regard to the appropriate location, form, scale and height of densification. The dynamic nature of urban development requires that it be reviewed at least every ten years, or more frequently if deemed necessary.

The following key areas of work have been identified to support the implementation and monitoring and evaluation of the Densification Policy:

a) Organise information-sharing sessions for staff, councillors and built-environment professionals

To ensure consistency in density-related decision making across the city, information sharing/training sessions must be held with relevant officials and councillors regarding the interpretation of the policy and the assessment of development applications. In addition, information sessions should be held for built-environment professionals.

b) Ensure consistency of spatial planning

Existing and future local/density plans must align with the Densification Policy.

c) Ensure regulatory/policy support

The regulatory mechanisms that facilitate appropriate forms of densification need to be incorporated into the new draft CTIZS and other relevant City policies outlined below. This will help streamline application procedures, shorten time frames associated with the assessment of applications, and/or improve the consistency of decision making.

- Summary Guidelines and Standards for the Planning of City of Cape Town Social Facilities and Recreational Spaces (draft report).
- Public Open Space Operational Policy (being drafted).
- Parking Policy (being redrafted).
- Tall Buildings Policy (being drafted).
- *Property Rates Policy* (the inclusion of provisions with regard to densification-related municipal rates rebates needs to be investigated).
- Developer Contribution Policy (currently being reviewed).

d) Proactively promote densification in identified DPZs and urban civic upgrade areas

The densification of the DPZs and urban civic upgrade areas should be supported by:

- The prioritised preparation of local/density plans;
- The introduction of an appropriate package of incentives;
- Cross-sector planning, budgeting and implementation of projects that will ensure that necessary infrastructure and social facilities are in place;
- Putting the necessary management arrangements in place, for example to deal with 'crime and grime';
- Preparing a communication/density marketing strategy; and/or
- Putting in place the appropriate institutional arrangements to streamline the assessment of development applications in these zones/areas.
- e) Ensure quality built environments

The development of quality higher-density environments depends on the application of appropriate urban and architectural design principles. The MSDF Densification Guidelines Manual (2002) provides some of the necessary guidelines. These need to be reviewed and aligned with this Densification Policy, and appropriate additional guidelines need to be included. Following this, the guidelines must be widely disseminated.

f) Investigate densification support mechanisms appropriate to subsidised housing

Investigations need to be launched into urban design as well as financial and institutional mechanisms that will improve the form and quality of living environments in subsidised housing areas and will facilitate the development of affordable multistorey housing in suitable locations.

g) Set up a monitoring and evaluation system

A monitoring and evaluation system that assesses progress with regard to densification, and identifies infrastructure and other bottlenecks, should be designed and implemented.

Table 7: Implementation of the densification policy framework: Key action areas

ACTION AREA	KEY PERFORMANCE INDICATOR	DEPARTMENT(S) RESPONSIBLE/ INVOLVED	TIME REQUIRED TO COMPLETE THE TASK AFTER PROJECT IS INITIATED
Information sessions	Information sessions completed and material prepared	Responsible: SPUD Involved: P&BDM	Four months
Ensure consistency of local plans and policies	Existing and future density plans and local plans aligned	Responsible: SPUD & P&BDM	Ongoing
DPZs and urban civic upgrade areas	Local density plans prepared on an 'as and when needed' basis	Responsible: SPUD Involved: P&BDM & USD	Approximately six to eight months required to prepare each plan
	Detailed design of density incentives prioritised from annexure 1	Responsible: SPUD Involved: P&BDM, US & FD	Will vary from incentive to incentive, and depending on whether changes to national and provincial legislation are required
Ensure quality built environments	Densification Design Guidelines Manual updated and refined	Responsible: SPUD	12 months
Ensure regulatory support	Guidelines and standards for the provision of social facilities and recreational spaces reviewed	Responsible: SPUD Involved: P&BDM & CSD	12 months
	Parking policy	Responsible: T,R&SD Involved: SPUD & P&BDM	12 months
	Alignment of the Densification Policy and CTIZS	Responsible: P&BDM Involved: SPUD	Ongoing
Investigate densification support mechanisms appropriate to subsidised housing	Appropriate suite of mechanisms in place	Responsible: Housing Involved: SPUD, FD	36 months
Monitoring and evaluation system	Monitoring and evaluation system set up	Responsible: SPUD and USD	12 months

Summary of mechanisms that can be used to encourage densification

Densification should be proactively encouraged through a range of land use, financial, regulatory and procedural measures and communication strategies. The selection of mechanisms has been informed by the factors limiting and facilitating densification, as well as existing density patterns and trends. They can be divided into two broad categories, namely:

i) the overall measures for achieving higher densities across the city; and

ii) the measures that could support densification in different locations.

These mechanisms need to be investigated in more detail, prioritised, and then applied.

TYPE OF MECHANISM	PRIORITISED MECHANISMS	IMPLEMENTATION VEHICLE			
CITYWIDE					
Regulatory and zoning measures	 Reduced height restrictions Second dwellings Subdivision to smaller site sizes Increased bulk/FAR, especially in mixed-use areas Provisions related to front, rear and side boundaries 	CTIZSLUPO (Ordinance 15 of 1985)			
Community facilities, open space standards and parking policy	 Space standards for community facilities and open space adjusted to accommodate sharing and/or clustering Parking standards 	 Application of adjusted standards and parking policies to new developments in the assessment of applications and new developments initiated by the City 			
Development containment	Urban edge enforcementDelaying the provision of bulk infrastructure	Urban Edge PolicyCTSDF and district-level SDPsLocal plans			
Incentives	 Municipal tax rebates in areas targeted for higher-density development Increased developer contributions/levies 	 Rates Policy Developer Contribution Policy			
Legislation	 Lobbying national/provincial government to draw up, amend or withdraw legislation 	Comments on legislationResearchCampaigns			
Communication	Communication strategy	Educational materialStakeholder engagement			
	SELECTED AREAS				
Regulatory and zoning measures	Overlay zones (generic or place-specific)	CTIZS (when approved)			
Density plans	District or local-area density plans	Approved plans			
Design controls	Urban design and architectural guidelines	Approved guidelines			
Public investment	 Investment in infrastructure, social amenities and the public environment 	Integrated Development Plan (IDP)MTREF			
Research and development	• Financial and institutional mechanisms that support multi-storey developments in affordable housing areas	State-initiated/assisted housing projects			

Assessment guidelines for small-scale incremental densification

The primary objective of incremental densification is to allow densification, without substantially departing/detracting from the overall general built form and character of the area. The following is a list of possible tools/mechanisms that could be used to achieve this:

- Attached dwelling units often seem like one dwelling.
- It is advantageous for new buildings to be modest in height and size and roughly to conform with the character and built form of the nearby locality.
- Internal departures (e.g. relaxation of building lines) related to new buildings within the property being developed may be necessary to facilitate small-scale incremental densification and an attractive built form. Applications for internal departures will be favourably considered.
- Vehicular access to the new units created should be minimised and should ideally be shared (e.g. a single access point).
- On the road frontage side, first-floor windows should overlook public road space.
- The proposal should not create any unacceptable privacy problems for neighbours on its lateral boundaries impact on abutting rights is an important consideration.
- Substantial and appropriate soft landscaping on the public edges (to obscure the impact of the additional units further) may be required to reduce the visual impact on the character of the area.
- On-site parking proposals situated on the street frontage of properties should be carefully considered to prevent a perception of over crowding as a result of the new/additional units being created.
- Corner sites have advantages in reducing the visual impacts of densification.
- This form of densification does not necessarily require the subdivision of a property, but can be treated as a type of sectional-title scheme.
- A change in zoning is often not required.

Interim guidelines for the provision of parking

The draft Cape Town Parking Policy supports densification by identifying minimum parking standards in areas supported by public transport and by introducing more appropriate parking standards for visitor parking and parking in low-income areas. The draft CTIZS provides for the introduction of overlay zones that indicate where the minimum parking provisions will apply. Until these policies are approved and the necessary overlay zones are in place, the standards outlined in the table below should be treated as a guideline.

Two public transport zones have been identified: PT1 and PT2.

• The PT1 zone shall comprise areas within:

- o the 400 m (five-minute) walkable catchment of any bus stop not qualifying under the PT2 zone, but offering access to a moderate-frequency service; and
- o an intermediate development environment.

• The PT2 zone shall comprise areas:

- o defined by the 800 m (ten-minute) walkable catchment around a Metrorail station, an IRT bus station, or other major public transport transfer station offering access to a high-frequency service; and
- o within an urban development environment.

Minimum guidelines for the provision of parking

LAND USE	STANDARD AREAS	PT1 AREAS	PT2 AREAS
Main dwelling house (single residential 1 zone)	2 bays per dwelling unit (1 bay per dwelling for erven smaller than 350 m ²)	1 bay per dwelling unit	Nil
Main dwelling house (single residential 2 zone)	1 bay per dwelling unit (nil per dwelling for erven larger than 100 m ²)	Nil	Nil
Second dwelling	1 bay per second dwelling	1 bay per second dwelling	1 bay per second dwelling
Group dwelling	1,75 bays per dwelling unit, plus 0,25 bays per dwelling unit for visitors	1 bay per dwelling unit, plus 0,25 bays per dwelling unit for visitors	0,75 bay per dwelling unit, plus 0,25 bays per dwelling unit for visitors
Flats	1,75 bays per dwelling unit, plus 0,25 bays per dwelling unit for visitors	1 bay per dwelling unit, plus 0,25 bays per dwelling unit for visitors	0,75 bays per dwelling unit, plus 0,25 bays per dwelling unit for visitors

Comparative analysis of suburban and urban models of development



Source : Partially based on Matthew Gray Architects and Urban Designers : Response to the CTIZS

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