

South African Urbanisation Review. Analysis of the Human Settlement Programme and Subsidy Instruments

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Contents

1	Introduction	1
2	Overview of South Africa's Human Settlements Strategy	1
2.1	Philosophy and Approach	1
2.2	Legislative, Policy and Regulatory Framework	2
2.3	Institutional Arrangements for Human Settlements Delivery	3
2.4	South Africa's national housing policy	3
2.5	Theory of Change for South Africa's Human Settlements Programme	4
2.6	Draft Human Settlements White Paper	5
2.7	Key Findings: Strategy, Legislation and Policy	6
3	Funding & subsidy framework for urban development	6
3.1	Human Settlements-Related Competencies	6
3.2	Human Settlements Funding Arrangements	6
3.3	Allied Urban Development Grant Framework	8
3.4	Fiscal Alignment for Spatial Targeting	9
3.5	Accreditation and Assignment of Human Settlements Functions to Municipalities	10
3.6	Un-funded & Under-funded Mandates	10
3.7	Key Findings: Funding and Subsidy Framework	11
4	Status of housing demand and supply in South Africa	11
4.1	Current Housing and Tenure Conditions	12
4.2	Housing Affordability and Demand	15
4.3	Subsidised Housing Delivery Performance	17
4.4	Private Housing Market Trends	18
4.5	Key Findings: Housing Demand and Supply Trends	18

5	land, housing and services expenditure and revenue	19
5.1	Capital Expenditure on Urban Services	19
5.2	City Expenditure on trading services, rates and support services	21
5.3	City Sources of Revenue Generation	23
5.4	Estimated Infrastructure investment Requirements	24
5.5	Key Findings: City Revenue and Expenditure	27
6	Spatial Dynamics of Human Settlements	27
6.1	Population and Urbanisation	27
6.2	Household Size and Structure	27
6.3	Population Distribution, Settlement Hierarchy and Economic Growth	28
6.4	Spatial Dynamics of Human Settlement in Cities	31
6.5	Housing Market Dynamics	35
6.6	Key Findings	37
7	Comparative Analysis of State-supported Human Settlements Programmes	37
7.1	Subsidy Programmes, Targets and Implementation Effectiveness	37
7.2	Subsidy Capital Expenditure vs Estimated Delivery Costs	38
7.3	Land and Locational Issues	41
7.4	Costs & Benefits for Households	41
7.5	Fiscal Sustainability of Current Human Settlement Subsidy Programmes	42
7.6	Spatial Outcomes of Subsidised Housing	42
7.7	City Efficiency	44
7.8	Fiscal & Economic Tradeoffs Between Programmes	46
7.9	Subsidies, Affordability and Demand Targeting	46
8	Findings & Policy recommendations	47
8.1	Key Findings	47
8.2	Policy Recommendations	48
	Annexure 1: Human Settlements Typology	50
	Annexure 2: Comprehensive List of National Subsidy Interventions	52
	Annexure 3: Detailed Analyses of key housing programmes	53
	Individual Subsidy Programme (FI-IS)	53
	Finance Linked Individual Subsidy Programme (FI-FLISP)	54
	Provision of Social and Economic Facilities (FI-PSEF)	55
	Institutional Subsidies (SR-IS)	56
	Social Housing Investment Programme (SR-SHIP)	57
	Community Residential Units Programme (CRU)	58
	Integrated Residential Development Programme (II-IRDP)	59
	Enhanced People's Housing Process (EPHP)	60
	Upgrading of Informal Settlements Programme (II-UISP)	61

Annexure 4: Urban Form, Infrastructure and Transport Grants	63
Annexure 5: Bulk Services Development Contribution Charges	66
annexure 6: Financial and Fiscal Commission: Future Housing Scenarios	68
Annexure 7: Future Vision(s) for Human Settlements	69
The Sustainable Development Goals	69
The National Development Plan	70
What SPLUMA says	72
What the Integrated Urban Development Framework says	73
What NT and USDG and DORA imply	74
What the National Department of Human Settlements Draft White Paper says	74
NDHS's National Spatial Investment Framework (SIF)	76
What the National Spatial Planning Framework for Human Settlements (Master Spatial Plan for Human Settlements) says	76
NDHS Catalytic Projects	77
Provincial Human Settlements Visions (from PSDFs) and Provincial SDF Visions	78
Identification of the Key Human Settlements Issues	79
Annexure 8: housing and urbanisation intervention strategy (HUIS) Model	82
Annexure 9: City of Cape Town housing strategy	84
References	86

List of Tables

Table 1: Grants, Spatial Targeting Mechanisms and Planning Frameworks for Spatial Targeting	9
Table 2: Income Distribution of Households In the Worst Housing Circumstances (Focus Cities)	16
Table 3: Reduction in Average Household Sizes (1996 To 2016)	27
Table 4: Comparative Analyses of Population and Economic Activity Across Settlement Typology	30
Table 5: Application of Subsidy Programmes to Housing Delivery in Different Income Groups	38
Table 6: Comparison of The Efficiency of South African Cities With Other Cities in Developing Countries	44
Table 7: Summary of Key Human Settlement Challenges and Issues From the Literature	80

List of Figures

Figure 1: Proposed Overall Theory of Change For the Human Settlements Programme	5
Figure 2: Conceptual Framework for Spatial Targeting Grant Alignment	10

Figure 2: Distribution of Households Per Dwelling Type, South Africa	12
Figure 3: Distribution of Households Per Dwelling Type, Per Province	13
Figure 4: Distribution of Households Per Dwelling Type, Per Income Group (Eight Metros)	14
Figure 5: Distribution of Households Per Dwelling Type, Per Province	14
Figure 6: Distribution of Households Per Income And Tenure Type, Per City	14
Figure 7: Income Distribution of Households In The Worst Housing Conditions	15
Figure 8: Subsidised Housing Delivery (1994 To 2017)	17
Figure 9: USDG Allocations Per Metro (2013/14)	19
Figure 10: Historical Capital Expenditure By City By Service (2009/10 To 2016/17) (R Nominal)	20
Figure 11: Historical Capital Funding yo Cities By Source - 2009/10 To 2016/17 (R Nominal)	20
Figure 12: Operating Expenditure Per Household Per Month (Per City)	21
Figure 13: Public Services Expenditure Per Household Per Month (Per City)	21
Figure 14: Number of Households Receiving Free Basic Services Vs Households Used to Determine Equitable Share	22
Figure 15: Expenditure on Providing Free Basic Water, Sanitation, Electricity and Refuse Per Household Served	22
Figure 16: Operating Subsidies Received Per Household In Main Cities	23
Figure 17: Property Rates Revenue Generated Per Rand Value of Property on Valuation Roll	23
Figure 18: Surpluses Generated on Trading Services Per Metro (% of Expenditure Incurred Per Service)	24
Figure 19: Expenditure on Providing Free Basic Water, Sanitation, Electricity And Refuse in the Metros Compared to the Allocation of Local Government Equitable Share Received	24
Figure 20: Projected Infrastructure Investment Need Per Annum In Metros Compared to Projected Expenditure	25
Figure 21: Projected Infrastructure Investment Need Per Annum in the Metros By Service	25
Figure 22: Projected Infrastructure Investment Need for Backlog Eradication, Growth And Renewal Per Annum in Metros in the Model Base Run	26
Figure 23: Projected Infrastructure Investment Need for Social and Economic Infrastructure Per Annum In Metros in the Base Model Run	26
Figure 24: Spatial Distribution of Households in South Africa	28
Figure 25: Settlement Size & Distribution of Households in South Africa	29
Figure 26: Spatial Distribution of Households Per Settlement Category in South Africa	30
Figure 27: South African Functional Settlement System	31
Figure 28: Race Distribution in Focus Cities	31
Figure 29: Spatial Distribution of Lowest and Highest Income Households In Gauteng and Focus Cities	33
Figure 30: Spatial Distribution of Informal Settlements and Backyarding In Gautng and Focus Cities	34

Figure 31: Spatial Distribution of Households Earning Below R6,400 Per Month in Formal Houses in Focus Cities	34
Figure 32: Gauteng Mega Human Settlements	35
Figure 32: CAHF Housing Market Performance Index for Major Metros	36
Figure 33: CAHF Housing Market Activity in Different Market Segments in Major Metros	36
Figure 35: CAHF Calculated Capital Costs of Key Subsidised Housing Typologies	39
Figure 36: CAHF Comparison of Capital Costs and Subsidy Provisions of Key Subsidy Housing Typologies	40

Abbreviations and Acronyms

BNG	Breaking New Ground: A Comprehensive Plan for Housing Delivery
COGTA	Cooperative Governance and Traditional Affairs
CSIR	Council for Scientific and Industrial Research
DPME	Department for Planning, Monitoring and Evaluation
DRDLR	Department of Rural Development and Land Reforms
GDP	Gross Domestic Product
GIS	Geographic Information System
GVA	Gross Value Add
HDA	Housing Development Agency
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immuno-Deficiency Syndrome
HOD	Head of Department
HSRC	Human Science Research Council
IDT	Independent Development Trust
IRDP	Integrated Residential Development Programme
ITP	Integrated Transport Plan
IUDF	Integrated Urban Development Framework
KZN	KwaZulu-Natal
LED	Local Economic Development
LUS	Land Use Scheme
MIG	Municipal Infrastructure Grant
MSP	Master Spatial Plan for Human Settlements
MTSF	Medium Term Strategic Framework
NHF	National Housing Forum
NDP	National Development Plan
NGOs	Non-Governmental Organisations
NPC	National Planning Commission
NSDF	National Spatial Development Framework
NSDP	National Spatial Development Perspective
PICC	Presidential Infrastructure Coordinating Commission
PLAAS	Institute for Poverty, Land and Agrarian Studies
RDPs	Rural Development Plans
RSA	Republic of South Africa
SADC	Southern African Development Community
SDF	Spatial Development Framework
SDIs	Spatial Development Initiatives
SIPs	Strategic Infrastructure Projects
SMME	Small, Micro, Medium Enterprises
SPLUMA	Spatial Planning and Land Use Management Act
UN	United Nations
UNDP	United Nations Development Programme

Policy Brief: Housing Inputs To The Urbanisation Review

Over two decades of subsidised housing delivery in South Africa has achieved notable quantitative success, but this has also perpetuated undesirable urban form, including low-density, mono-functional and predominantly low-income residential areas on the periphery of cities with limited related economic opportunity. This paper explores the intent and impact of the last 23 years of South Africa's human settlements policy with a focus on cities, and proposes strategies to better align land, infrastructure and transport strategies with human settlements approaches to achieve better city-level outcomes.

Key Findings: Human settlements strategies continue to deliver predominantly large-scale, peripheral and income-polarised housing development with limited economic opportunity. Yet, certain existing programmes have potential to better support a city restructuring agenda including social housing and upgrading of informal settlements.

- The last decade of human settlements policy has better integrated infrastructure, transport and housing investments, but the outcomes from existing housing programmes still diverge from desired city form and constrains their effectiveness as effective city restructuring tools.
- While 'catalytic' satellite city developments are a useful tool, a dominant policy focus will create new patterns of peripheral development and heavy reliance on satellite-to-city transport networks.
- Inefficiencies in inter-governmental functions and fiscal flows constrain the development of city-specific strategies that better align housing, infrastructure and transport expenditure to support improved city form. Notably, very limited subsidised rental or owned housing is being built to support TOD investments and significant under-funded and un-funded mandates exist in cities, including strategic land purchase and social services provision.

Policy Conclusions: Multi-faceted and specifically tailored human settlements strategies are required to match low affordability with increasingly complex and changing housing demand patterns in the metros.

- Existing human settlements programmes offer a partial solution, but must be re-focused to deliver at greater scale, at higher density and in support of city restructuring agendas. This requires that new large-scale integrated developments are augmented by enhanced Social Housing delivery, inclusive housing developments, upgrading of well-located informal settlements and demand-side subsidies.
- New approaches are also required that adapt to unique city contexts. A 'Massive Small' human

settlements development paradigm is required to balance large-scale developments and to drive city-level and household-level densification and restructuring strategies. This includes a focus on medium and small-scale subsidised infill developments, inclusionary housing, strategies to support private inner-city and TOD-focused affordable rental developments, more effective implementation of demand-side subsidies for accommodation purchase by middle income households and programmes to facilitate the scale and quality of low-income rental developments by household landlords.

- To achieve this, good governance, effective administration and devolution of housing, transport and related infrastructure functions and allied funding mechanisms to city level is required. This should be augmented by retention of a portion of city revenues to fund city-specific integrated programmes and under-and un-funded mandates including strategic land transactions, higher density and high-rise development, social facilities and services and basic service provision.
- City growth is driven by land markets, making land mobilisation a key driver of inclusive spatial access. In a market economy, more investment is required to buy access for lower-income households.
- Critical to human settlements improvement will be more rapid economic growth in cities and improved growth and dynamism in low-income property markets.

Executive Summary

This paper explores the impact of South Africa's post-democracy human settlements policy in the major cities, and proposes strategies to better align spatial and non-spatial strategies to achieve improved city-level human settlements, spatial and city growth outcomes.

Notwithstanding the notable achievements of South Africa's housing programme over the last 23 years, the structure of South Africa's cities still carry the legacy of Apartheid social engineering. Uneven economic development, residential segregation based on income and race and peripheral and poorly serviced low-income townships are still dominant features of cities. The mass development of subsidised, low-density housing since 1994 now accommodates a quarter of all South Africa's households, but has continued to entrench mono-functional, peripheral zones of predominantly low-income housing offering limited socioeconomic services and dislocated from areas of economic opportunity.

Overcoming spatial inequity in order to create more equitable and inclusive cities is currently the overriding urban development paradigm in South Africa's cities. In response, the last decade of urban policy has increasingly focused on creating more dense, internally efficient

and inclusive city form, using investments in human settlements, infrastructure and transport as the key drivers. More recently, city governments are expected to develop and implement clear strategies that densify, intensify and improve urban efficiencies, most notably through Built Environment Performance Plans. This has resulted in incremental changes to, and greater coordination between human settlements, infrastructure and transport strategies and funding mechanisms. Cities' main strategies to realise this urban agenda focus on intensifying city cores and specific secondary nodes, investing in higher-intensity transport-oriented development corridors and strategic 'infill' developments. However, these investments are not yet influencing urban spatial change at significant scale, and are unlikely to generate significant pro-poor urban residential and economic opportunities in relation to the scale of the urban housing challenge.

Spatially targeted human settlement and transport strategies are necessary, yet not sufficient cause to redress equity issues in South Africa's cities. This requires greater concentration on non-spatial policies that drive economic growth in cities in order to raise incomes and the shares in economic output in parallel with spatially-targeted investments. Given the large and increasing urban housing demand and high rates of urban poverty, national and city-level economic growth and skills development strategies are critical drivers of improved economic access. Spatial policies must therefore be complemented by programmes that build the skills required to improve economic access of the urban poor to a modern and growing economy. Household income drives housing affordability, which in turn creates spatial mobility through enhanced effective demand. Improved affordability and buoyant property markets further improve the potential to collect and use property rates and service charges, which further sustain municipal finances.

Multi-faceted human settlements strategies are required to target increasingly diverse patterns of inter-city and intra-city migration, accommodation demand, tenure preferences and housing supply and demand mismatches. Yet, the DNA of post-democracy human settlement strategies is still evident in the outcomes of current human settlements programmes. Large-scale peripheral housing developments still dominate delivery, very limited subsidised rental or owned housing is being built to support nodal and TOD investments, and middle-income households lack a subsidy instrument that mobilises effective demand for accommodation. This limits cities' ability to simultaneously meet human settlement demand and city restructuring objectives using existing programmes, as these are often not supportive of each other. While comprehensive programmes to meet human settlements needs are necessary, it is also important to allow latitude in the implementation of housing strategies to tailor programmes to the specific differences that exist in different metropolitan areas.

Urban strategy must continue to strengthen spatially focused investments to improve urban concentration and efficiency and to realise the value of existing public investment. Human settlements, infrastructure and transport investments must where feasible better support broader city shaping strategies, including better-located new residential investments and improved linking of areas of residence and areas of economic concentration. This must focus on the following outcomes. First, increased investment in land assembly and release of public and privately owned strategic land parcels for integrated housing, manufacturing and office developments. Second, consistent and intensified investments to promote inner-city and nodal concentration, TOD corridor development. Third, a shift in focus to drive suburban and township densification and infill developments. A combination of certain existing strategies and programmes will need to be augmented by new programmes that more effectively combine land, infrastructure, human settlements, transport and productive sector investments.

Given the increasing scale of housing demand and low affordability, large 'new city' developments (such as 'catalytic projects') will continue to be a key city form driver, but must not dominate or replace other complementary human settlements delivery approaches. However, to offset mass delivery via catalytic projects, certain other existing human settlements programmes require relatively more investment in order to be implemented at greater scale and impact, due to their city restructuring potential. More social housing projects should be clustered to support node and corridor intensification, and should be adapted to deliver higher densities and include smaller and more affordable accommodation typologies. Inclusive housing strategies should also be used to facilitate lower-income households' access to more affluent areas. Increased concentration on upgrading well-located informal settlements *in situ* is also critical, while minimising 'rollover' and greenfield development for displaces in order to increase settlement densities.

Existing levels of human settlement investment are sufficient to deliver accommodation at the current rate, scale and built forms, using current delivery programmes. But, cities' unique contexts need the development, financing and implementation of tailored and integrated land, infrastructure, transport and housing interventions at greater scale to continue to drive the development more spatially efficient cities. This in turn requires increased, sustained and better co-ordinated investment flows at city level to promote city restructuring, suburban densification and further investment to augment existing expenditure on TOD infrastructure. Yet, inter-governmental functional responsibilities and fiscal flows constrain city administrations' ability to develop and implement specific strategies that better align housing, infrastructure and transport expenditure. To achieve this, the long overdue devolution of housing, transport and related infrastructure functions and allied funding mechanisms to city level must be implemented. This should be augmented by the

retention of a portion of city revenues to fund city-specific programmes, as well as under-and un-funded mandates including strategic land assembly, higher density and high-rise development, social facilities and services and basic service provision. Equity must be balanced against the need to invest in areas of optimum economic and settlement potential.

The long-term effectiveness of TOD corridors and nodes depends on sustained public investments to stimulate concomitant private investment. This mix of public and private investments in housing and building productive economic activity will build the ridership patterns envisaged during their planning and implementation. Public and private housing investments proximate to corridors are therefore a key success factor for ensuring returns on TOD investments. In the cases of Cape Town and Johannesburg, TOD infrastructure investments are premised on clear height, density and intensity parameters along corridors and within sub-nodes along their length, in order to build ridership to sustainable levels. Additional resources must be applied to extending and intensifying existing human settlements subsidy instruments to increase pro-poor development on TOD corridors. New city-level subsidies that compensate developers for the higher costs of more dense and higher-rise built forms suitable to corridors and nodes are required. City-specific pro-poor human settlements subsidy mechanisms are also proposed to develop city-subsidised (Sub-R1500 per month) low-income rental accommodation.

A new, 'Massive Small' human settlements development paradigm premised on large-scale implementation of smaller-scale human settlements interventions by multiple private actors and individual households is required to balance large-scale developments and to drive city-level densification and restructuring strategies. Critically, an effective demand-side subsidy programme is urgently needed to replace the Finance Linked Individual Subsidy Programme that mobilises and converts effective demand of middle-income households sufficiently to support the growth of the middle-income housing market. This also includes a focus on medium and small-scale subsidised and unsubsidised infill developments, refurbishment and conversion of buildings to residential uses and strategies to support private inner-city and TOD-focused affordable rental developments. In addition, support mechanisms are required to encourage greater development activity and improved accommodation and services outcomes from the 'backyard rental' market, and developments by small-scale landlords and individual households.

Implementing sustainable settlement development is an important role of city government. Human settlements require complementary investments in the human elements necessary for urban living including education, healthcare, recreation and safety. The absence of these facilities and services perpetuates exclusion. At the city level, better co-ordination of national and provincial

expenditure and delivery at the settlement level is required. Further, this must be augmented by additional fiscal resources to provide for significant under- and un-funded city mandates. This includes facilities and programmes for early childhood development, municipal healthcare, active and passive recreation and community facilities, safety and emergency services, libraries and arts and cultural programmes.

Finally, the success of urban areas is significantly affected by the success of the implementation of human settlements and related strategy and policy. The significant governance failures in South Africa have had a detrimental impact on the ability to sustain and improve strategy implementation, funding of human settlements programmes and on the sentiment and involvement of the private sector in real estate activities. A renewed focus on good governance, solid strategy and effective implementation of provincial and local planning, land, housing and infrastructure programmes are critical to South Africa's ability to effect positive changes to our metropolitan areas.

1. Introduction

The City Support Programme at the South African National Treasury requested the World Bank to carry out an Urbanization Review for South Africa. The objectives of the review are to clarify the economic, social, and fiscal implications of the evolution of the national urban system and individual metropolitan areas; identify key policies that are most likely to promote inclusive economic growth, and highlight policies that need to be recalibrated; and provide a framework for prioritizing and sequencing policy initiatives and institutional reforms.

This paper provides inputs into the Urbanization Review from a human settlements perspective, and the role that land, infrastructure and housing can play in evolving the spatial structure of South Africa's urban areas. This work is different from the other input papers that form part of the Urbanisation Review, in that it is a "deep dive" study that places greater emphasis on analysis and diagnosis of the key issues impacting on the human settlements sector. As a result, this is a more comprehensive paper than most of the other inputs.

This report draws on a wide body of existing literature, including national policy documents, reviews and research reports. The intent is to draw together findings from a wide body of research, rather than undertaking specific new research. Specifically, the following studies were referenced: a series of Performance and Expenditure reviews of human settlements programmes undertaken by National Treasury; A range of evaluations of different components of the national human settlements programme undertaken by the Department of Planning Monitoring and Evaluation (DPME) and the National Department of Human Settlements (NDHS)¹; Reviews undertaken by the Presidency (10 year and 20 year reviews); a wide range of research reports and evaluations undertaken by sectoral experts; and a number of papers prepared as inputs into the World Bank's Urbanisation Review.

Subsequent to the finalisation of the Terms of Reference, it was agreed with the Reference Group that the "Deep Dive" analyses would also focus greater attention on three specific metros (Johannesburg, Cape Town and eThekweni). As a result, throughout this paper more emphasis is placed on data and analysis of these three metros than on the rest of urban South Africa.

2. Overview Of South Africa's Human Settlement Strategy

This section outlines the approach, legislative, policy and programme approach to South Africa's human settlements strategy.

2.1 Philosophy and Approach

The progressive right of South African citizens to adequate housing is included in our Constitution, and forms the basis of all human settlements sectoral policies and plans. This right to housing has, since the dawn of the democratic dispensation in South Africa, been interpreted as a key role of South Africa's developmental state. Housing provision through the Reconstruction and Development Programme (RDP) (Wilkinson, 1998), and more recently as outlined in the Breaking New Ground (National Department of Human Settlements (NDHS), 2004) policy has formed a core delivery programme of the first four political dispensations in South Africa.

The creation of sustainable human settlements is viewed as the key mechanism for overcoming South Africa's Apartheid spatial legacy, and for shaping a new South African urban society. It is acknowledged that provision of tenure, access to services and development of shelter are insufficient alone to create sustainable human settlements. The draft Housing White Paper (National Department of Human Settlements, 2015) adopts the UN definition of human settlements:

"Human settlements are defined as the totality of human community—whether a city, town or a village—with all social, material, organisational, spiritual and cultural elements that sustains it." (National Department of Human Settlements, 2015, p. 23)

There is also a definition of sustainable human settlements from BNG:

"...well-managed entities in which economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity" (Department of Human Settlements, 2004).

The Presidency also envisaged a definition of sustainable human settlement in the Medium Term Expenditure

¹ These include: Design and implementation evaluation of the Integrated Residential Development Programme (Rebel Group, 2016a); Impact and Implementation Evaluation of the Social Housing Programme (Rebel Group, 2016b); Baseline Assessment for Future Impact Evaluation of Informal Settlements Targeted for Upgrading (Human Sciences Research Council, 2016); Evaluation of the Urban Settlement Development Grant (Department of Planning Monitoring and Evaluation, 2015); Synthesis evaluation of whether the provision of state subsidised housing addressed asset poverty for households and local municipalities (Subsidised housing programme for ownership) (National Department of Human Settlements (NDHS) & Department of Performance Monitoring & Evaluation (DPME), 2014); Impact Evaluation of Government's Approach To "Affordable" Housing; and Investigation into the implementation of the Community Residential Unit Programme (Ilse Martin Projects et al, 2015).

Forecast, noting that:

"There is an acknowledgement that the sustainability of human settlements... rely on good infrastructure such as public transport, water, energy sources, and public spaces and accessibility of essential community services such as schools, shops, healthcare, and facilities for families and children. Therefore a strategy for human settlements should strive for the establishment of viable, socially and economically integrated communities, located in areas allowing convenient access to economic opportunities as well as health, educational and other social amenities."

(National Treasury, 2013)

Implementing this approach requires inter-governmental planning and investment coordination in order to synchronise the phased development of different housing types for a range of housing markets, using more dense accommodation typologies. Coordinated efforts are also required to ensure that settlements are provided with economic opportunities, transport access, education, healthcare and recreational facilities. Housing is the central point at which many of government's developmental programmes impact on individual households. Human settlement planning, design, implementation and on-going management are key interventions through which other core developmental imperatives of government are implemented. Redistribution of land, access to tenure and shelter, access to network services (roads, water, sanitation, electricity) and social services (safety and security, education, healthcare, sports, recreation and government services) are mostly distributed through, or close to human settlements.

Further imperatives, such as growing family life, access to economic opportunities and restructuring of Apartheid city form are also strongly influenced by the location, planning, type and operation and maintenance of human settlements. Many studies further indicate the strong correlation between deprivation and human settlement form and location, with historical apartheid townships and informal settlements showing the highest levels of social deprivation and lack of access to urban amenity and services (Peberdy, Philip, & Dinath, 2017) (Human Sciences Research Council (HSRC), 2013)

While South Africa's housing paradigm is described in policy as a government-aided, private sector-driven approach, in essence it has been implemented as a state-dominated housing provision approach for lower-income households who are deemed to comprise a part of the officially-defined 'housing backlog'. This 'backlog' has been defined, since 1994, as households living in informal settlements, backyard shacks and rooms, and in overcrowded circumstances in existing houses and inner city buildings. A private sector driven housing market with limited state intervention is intended to supply middle-income and higher-income households on a supply meets demand basis.

The central role that housing provision plays in South Africa's 'developmental state' places further

expectations on its developmental role. Housing and human settlements development processes are therefore expected to contribute to, or even drive further developmental objectives. Overcoming South Africa's Apartheid spatial legacy is expected to be achieved through better location of human settlements, more compact, efficient and integrated urban form, encouraging class and racial integration, and providing a balance of tenure types. Contributions to economic growth that accrue from human settlements are expected to include employment and entrepreneurial opportunities and skills development within the housing construction and rental value chains, development of a robust land and housing market, financial market strengthening, Sustainability improvements should also be realised, through reduced materials consumption, reduced fossil fuel use due to reduced travel times, water saving and energy saving and generation alternatives and improved use of renewable resources.

2.2 Legislative, Policy and Regulatory Framework

South Africa's Constitution defines housing as a concurrent competency of national and provincial government. The following key legislation governs the implementation of Human Settlements. The Constitution of South Africa (1996) establishes the progressive right to housing, and outlines the powers and functions of national, provincial, local government and State-Owned Companies. Importantly, "housing" is a Schedule 4, Part A function in the Constitution and a municipality only has executive authority over functions listed in Schedules 4 and 5 Part B, unless assigned a function by national or provincial government. Local government functions, however, do impact on human settlements as they include aspects such as municipal planning, municipal roads, water and sanitation, refuse collection, electricity and gas, storm water, building regulations, municipal health services, cemeteries, municipal public transport, local amenities, sports facilities, parks and recreation, public places, to name some. These are executive functions of local government and provinces cannot override the decisions of municipalities or force provincial plans onto them, underscoring the importance of coordination and collaboration and good intergovernmental relations across all spheres of government.

The following legislation governs the housing sector. The Housing Act (1997) sets out the policy framework for housing nationally, including the specific roles of different spheres of government. This Act also establishes the Housing Code (2009), which outlines the public funding approach (grant programmes) to human settlements in South Africa. The Rental Housing Act (1999) sets out the rights of landlords and tenants, and establishes provincial rental tribunals for dispute resolution. The Housing Development Agency Act (2008) sets out the objectives, structures and powers of the HDA to perform specific roles in the identification and facilitation of land access for human settlements and establishing Priority Housing

Development Areas (PHDAs). The HDA is increasingly implementing human settlement projects (and informal settlement upgrading in particular) and assisting national government in policy formulation. The Social Housing Act (2008) governs the establishment and operation of the Social Housing Regulatory Authority (SHRA), and its functions in respect of regulation and investment of public money in Social Housing respectively.

2.3 Legislative, Policy and Regulatory Framework

As a concurrent competency, national, provincial and local government departments are engaged in the delivery of human settlements. National government sets the overall policy and legislative and funding framework. Provincial human settlements departments set a provincial delivery agenda within the national framework and coordinate, monitor and review human settlements implementation by metros and municipalities. It must be noted that the process of assigning powers to metros and some municipalities will pass these functions to the assigned authority from Province, but this devolution has not been implemented yet.

Metropolitan authorities and municipalities are responsible for planning, zoning, identifying, approving and implementing human settlements projects (municipal planning functions), in coordination with provinces. In addition, municipalities are responsible for maintaining human settlements areas post-development. Full assignment of the (provincial) housing function has not occurred to municipalities.

Several human settlements-related State Owned Entities (SoEs) have also been established to perform human settlements-related functions. These include the six national, and various provincial and local housing entities. At a national level, the National Housing Finance Corporation (NHFC), the Social Housing Regulatory Authority (SHRA), the Rural Housing Loan Fund (RHLF), the Housing Development Agency (HDA), the National Urban Reconstruction and Housing Agency (NURCHA) are the most relevant to housing. While a new Housing Bank has been launched which will amalgamate the operations of the NHFC, RHLF and NURCHA, this bank is far from being operational (Interview, National Treasury).

Private sector, non-profit, community and other bodies are also engaged in the delivery of human settlements either as delivery agents (developers, financiers and Social Housing Institutions), stock holders and managers (Social Housing Institutions) or non-profit organisations engaged in community development, construction or policy advocacy.

In respect of urban development, basic services and urban management are functions of municipal government. However increasingly the responsibility for the management of urbanization, housing and service delivery vests with cities.

2.4 South Africa's national housing policy

South Africa's first housing policy comprised three strategic thrusts. First, the National Housing Subsidy Programme was introduced to provide a subsidised houses to all unsheltered households earning below R3500 per month. Second, the policy included a specific strategy to "stabilise the housing environment" to encourage greater access to housing finance. Third, the policy sought to "mobilise additional housing finance" through the establishment of the National Housing Finance Corporation and the Rural Housing Loan Fund. The subsidy programme set the platform for the delivery of nearly two million homes over the first fifteen years of democracy.

The Comprehensive Plan for the Creation of Sustainable Settlements, or 'Breaking New Ground in Housing Delivery' was released by the National Department of Housing in September 2004. BNG implemented a new housing strategy focused on more sustainable human settlement rather than a focus on quantitative targets only. BNG defines five primary ends (Department of Human Settlements, 2004):

- **Sustainable human settlements (p12):** "*well-managed entities in which economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity.*"
- **Integration and spatial restructuring which is seen as being critical to sustainable human settlements:** "... utilising housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring" (p7). There is also an institutional dimension as integration is both intra-governmental (within a sphere of government) and inter-governmental, requiring integrated planning and coordinated investment.
- **Housing assets:** The subsidy house as an asset to the beneficiary household is introduced as a concept for the first time: "*ensuring property can be accessed by all as an asset for wealth creation and empowerment*" and "*supporting the functioning of the entire residential property market to reduce duality ...*" (p7)
- **Upgraded informal settlements:** For the first time the need to upgrade informal settlements is recognized. The BNG calls for the progressive eradication of informal settlements and urban inclusion: "*informal settlements must urgently be integrated into the broader urban fabric to overcome spatial, social and economic exclusion.*" (p12)
- **Scaling up the social housing programme:** The importance of social housing to upgrade and integrate city development was clarified. BNG sees this form of tenure as enhancing "*the mobility of people and promoting a non-racial, integrated society*" (p18)

Outcome 8: Sustainable Human Settlements and an improved quality of household life, 2010 to 2014 started to focus on informal settlement upgrading as a new thrust in housing delivery, while Annexure 8 of the Medium Term Strategic Framework (2014 to 2019) (Presidency of the Government of South Africa, 2014) sets a new delivery framework for South Africa and for each province over the next five years. More recently, a new strategic approach to housing development is outlined in the National Spatial Framework for Human Settlements (Housing Master Spatial Plan) (The Housing Development Agency, 2014) which focuses housing delivery in mixed tenure, mixed typology and mixed income catalytic or 'mega projects'.

2.5 Theory of Change for South Africa's Human Settlements Programme

The Human Settlements Evaluation Synthesis (Department of Performance Monitoring & Evaluation (DPME), 2017) sets out for the first time a formal Theory of Change for the human settlements programme. This is illustrated in Figure 17. The description below is taken verbatim from the Summary Report. The key components of the TOC are as follows.

Inputs: The inputs into the programme are government funding, human capacity and public housing finance and support institutions.

Activities: The programme is implemented thorough a range of housing support programmes (as per figure 1 above) undertaken by the National and Provincial Departments of Human Settlements and municipalities. As well as through coordinated and integrated public-sector investment by other Departments. Other activities include local and provincial government planning and coordination and integrated public-sector investment into the built environment.

Outputs: The outputs are subsidised housing products for ownership for low income households, subsidised rental housing products for low and middle-income households, affordable housing for ownership for middle income households, serviced land, the provision of basic services (water, sanitation and electricity) and health, education and social amenities.

Immediate outcomes: The immediate outcomes are economic opportunities for contractors, job creation, the increased provision of housing as shelter, access to basic services and access to social and community services.

Intermediate outcomes: The intermediate outcomes are access to economic opportunities, the stabilisation of the housing environment, the provision of secure tenure to households, the mobilisation of private household savings into housing products, private sector investment into the human settlement sector and the availability of housing credit at scale.

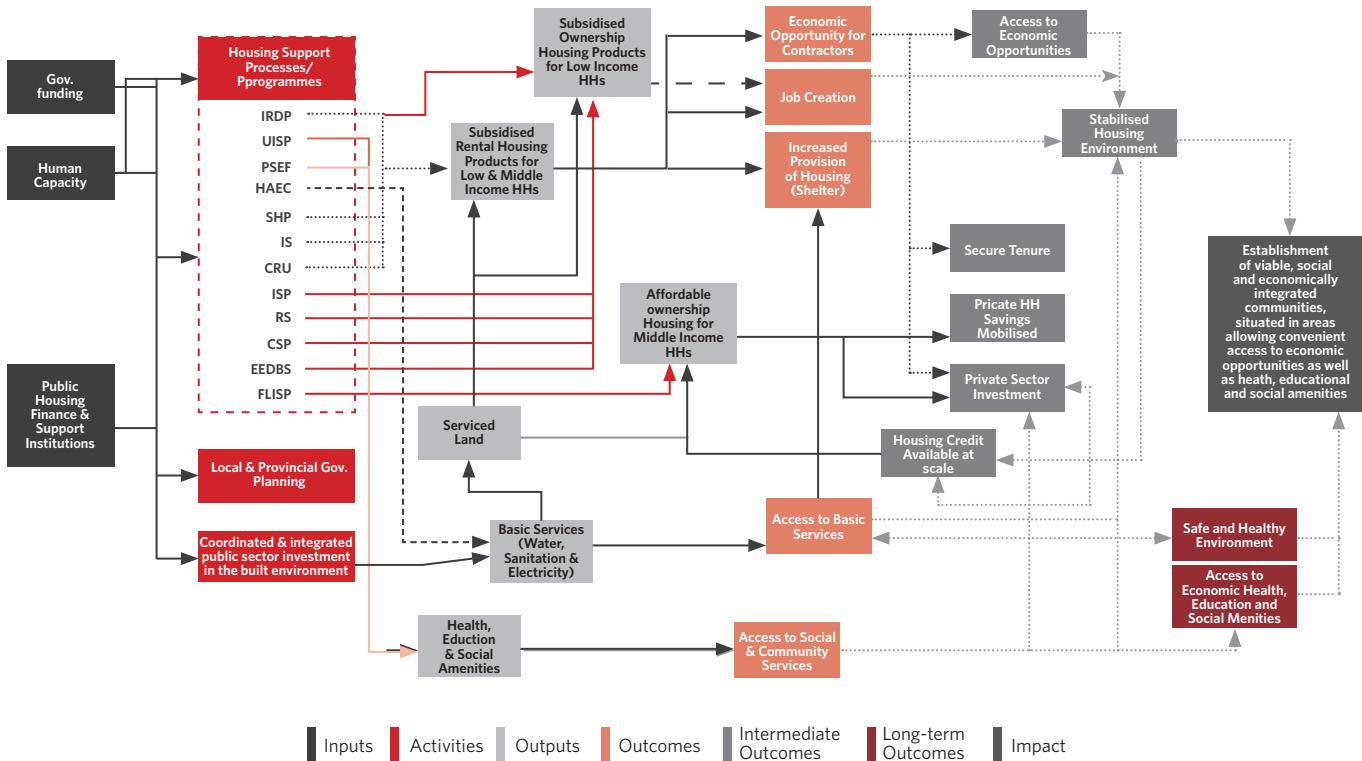
Long term outcomes: The long-term outcomes are a safe and healthy environment with access to economic, health, education and social amenities.

Impact: The impact is the establishment of viable, socially and economically integrated communities, situated in areas allowing convenient access to economic opportunities, as well as health, educational and social amenities.

The **key assumptions** underpinning the TOC are:

- Effective capacitated local government
- Effective and integrated spatial planning and coordination across all three spheres of government
- Investment by other relevant departments in transportation networks, infrastructure, social and economic amenities.
- The availability of sufficient subsidies
- Private sector investment
- Access to housing credit (mortgage, short term loans etc)
- Households affordability and investment in housing
- Payment by households for services and rates
- A strong and growing economy

Figure 1: Proposed Overall Theory of Change for the Human Settlements Programme



Source: DPME, 2017

2.6 Draft Human Settlements White Paper

A new human settlements White Paper is being drafted, although its progress has been slow over the last three years. The White Paper responds to the many evaluations and critiques undertaken on the progress of the housing sector over the last 23 years.

The most recent draft sets the following vision for 2050:

"By 2050 visible outcomes from effectively coordinated spatial planning systems will have transformed human settlements in South Africa into equitable and efficient spaces with citizens living in close proximity to work with access to social facilities and essential infrastructure."
 (National Department of Human Settlements, 2015)

In the current draft the strategic objectives focus on developing spatially and socio-economically integrated settlements, communities and neighbourhoods; Facilitating access to adequate housing and quality living environments; Supporting the development of a functional and equitable residential property market; and Improving institutional capacity and capabilities for implementation.

These objectives will be achieved through greater focus on planning, design and development of human settlements; facilitating access to adequate housing for all households by formulating new typologies and financing responses for a new housing landscape; Developing a more functional and equitable residential property market through

supporting the secondary market, ensuring affordability and availability of stock and access to finance; Reforming the current funding system to prioritise development close to economic opportunity and shifting state support away from top structures to public infrastructure and spaces and greater leverage of private sector funding and improving local government financing for capital and operational requirements. Finally, greater emphasis will be placed on implementing policy, and monitoring and evaluating performance.

The outcome is to create sustainable human settlements and improved quality of life, and integral to this is to develop spatially and socio-economically integrated settlements, communities and neighbourhoods. The following strategies are intended to make this happen:

- Aligning human settlements development with economic, transport and planning strategies;
- Promoting area-based planning with different planning responses for different settlement types;
- Promoting integrated land use and transport planning and transit-oriented development;
- Improved spatial targeting;
- Investing in areas that promote densification, integration and household livelihoods;
- Coordinating investment in infrastructure, services and public spaces that are vital for the functioning of settlements;
- Facilitating access to suitable land for human settlements at the right price and at the right location

It remains to be seen whether there will be a renewed political focus on finalising the White Paper within the new Minister of Human Settlement's term of office.

2.7 Key Findings: Strategy, Legislation and Policy

South Africa's human settlements policy, legislative framework and institutional arrangements are clearly set out, and have not shifted substantially over the two decades of democracy. The objective of creating sustainable, integrated human settlements remains the overriding policy objective, with fully-subsidised mass housing being the primary intervention instrument.

While the Comprehensive Plan (BNG) required significant change to the outcomes from the housing programme, this was not supported by sufficient changes to the nature and implementation of housing programmes. The most important shifts have been towards sustainable settlements, and the application of substantial resources to the upgrading of informal settlements

The recently completed Theory of Change for South Africa's overall housing programme sets the outcome from policy as the creation of viable, socially and economically sustainable communities. However, it does not specifically identify city restructuring and equity as an outcome of the programme. The success of the programme also relies on a number of concomitant inputs and responsibilities being met by other tiers of government, and with other investments into the housing sector.

The Draft Human Settlements White Paper is an important opportunity to substantially restructure South Africa's housing strategy. However, its drafting and completion has stalled, and it is not clear whether it remains a political focus of the new administration.

3. Funding & Subsidy Framework For Urban Development

This section provides an overview of the funding framework for human settlements, and identifies the key funding instruments relevant to the development of cities.

3.1 Human Settlements-Related Competencies

Schedule 4 of the Constitution sets out concurrent competences of national and provincial government. In relation to human settlement and social services,

Part A outlines national and provincial competences: Cultural matters; Disaster management; Education at all levels, excluding tertiary education; Health services; Housing; Nature conservation, excluding national parks, national botanical gardens and marine resources; Police to the extent that the provisions of Chapter 11 of the Constitution confer upon the provincial legislatures legislative competence; Public transport; Public works (only in respect of the needs of provincial government departments in the discharge of their responsibilities to administer functions specifically assigned to them in terms of the Constitution or any other law); Road traffic regulation; Tourism; and Welfare services.

Part B outlines local government matters, "...to the extent set out in section 155(6)(a) and (7)", as Child care facilities; Firefighting services; Local tourism; Municipal health services; and Municipal public works (only in respect of the needs of municipalities in the discharge of their responsibilities to administer functions specifically assigned to them under this Constitution or any other law).

The Constitution (Schedule 5, Part A) lists the following social services as exclusive provincial legislative competences (most important functions only): Ambulance services; Archives other than national archives; Libraries other than national libraries; Museums other than national museums; Provincial cultural matters; Provincial recreation and amenities; and Provincial sport.

Part B lists the following as local government (municipal) competences "...to the extent set out for provinces in section 155(6)(a) and (7)": Street lighting; Refuse removal and treatment; Traffic and parking; Beaches and amusement facilities; Cemeteries, funeral parlours and crematoria; Local sport facilities; Municipal parks and recreation; Markets & Street Trading; and Public places.

The focus of this analysis is on spatial and human settlement considerations, which is a concurrent competency of the National and Provincial spheres of government with certain functions being undertaken by State Entities such as HDA, SHRA, NHFC and NURCHA. However, increasingly the municipal sphere is required to implement housing programmes in coordination with national, provincial government support and State Entities. Funding generally follows Constitutional competence, with funds established at national and provincial level to provide facilities and services where appropriate, or in the case of housing, to administer the allocation of housing subsidies to projects implemented at municipal level. Further, it is intended that devolution of national and provincial housing functions to certain metros will also realign these constitutionally mandated functions.

3.2 Human Settlements Funding Arrangements

Funding provided by national and provincial government for human settlements is channelled through three

funding streams. First, the Division of Revenue Act (DORA) allocates funds raised by the government through taxes and income earned in accordance with the Equitable Share formula. The primary objective of the equitable share is to ensure that all South Africans have access to basic services. This is an unconditional transfer i.e. local and provincial governments can decide how they want to use it. Second, Conditional Grants are allocated to municipalities, and must be used for the purposes specified. Other Human Settlements-Related grants relating to engineering infrastructure, urban integration and sustainability and social services are also allocated directly to municipalities. Thirdly, municipalities collect and spend own sources of revenue on capital and operating expenditure. This generally includes revenues from trading services (electricity, water, refuse removal), property rates and municipal borrowing.

The Human Settlements Development Grant (HSDG) is the main source of capital for subsidised housing programmes. The HSDG is allocated to provincial human settlements departments based on a formula. Each Provincial department then decides the allocation of the HSDG to the municipalities in its jurisdiction and which funding programmes are to be used in order to meet national and provincial housing priorities. The only exception to this is the Restructuring Capital Grant (RCG) which is "top sliced" and allocated to the Social Housing Regulatory Authority (SHRA) for allocation to accredited social housing institutions developing approved social housing projects, and the Finance Linked Individual Subsidy Programme (FLISP) which is administered through the National Housing Finance Corporation (NHFC) (soon to be amalgamated into the new National Human Settlements Bank).

National HSDG-funded Programmes include a set of Financial Interventions (FI), Social and Rental Programmes (SR), Incremental Interventions (II), Rural Interventions (RI) and National Spatial Programmes. Given the focus of this assignment, only key Financial Interventions, Social and Rental Interventions and Incremental Interventions are considered as set out in the Housing Code (National Department of Human Settlements, 2009)². A full list of all subsidy programmes (current and past) is included in Annexure 2.

Six Financial Interventions (FI) are described below:

- ***The Individual Housing Subsidies Programme (II-IS)*** enables eligible individuals to obtain subsidies for house purchase on the secondary housing market, or for purchase of a serviced site linked to a construction contract, where they do not or cannot access housing finance.

- ***The Finance Linked Individual Subsidy Programme³ (FI-FLISP)*** has recently been re-calibrated, and provides a reducing sliding scale of capital subsidy to households who purchase first -time bonded houses, in proportion with their income.
- ***The Inclusionary Housing Programme (FI-IHP)*** (and Gauteng Inclusionary Housing Programme) are intended to support the development of inclusionary housing projects, where a mix of tenures and housing types are developed within the context of a single development.
- ***The Provision of Social and Economic Facilities Programme (FI-SEFP)*** provides capital for the development of key social and economic basic amenities within human settlements projects that are normally funded by municipalities, in cases where municipalities are unable to provide such facilities.
- ***The OpsCap Programme (FI-OpsCap)*** is used to 'oil the wheels' of project delivery via other programmes (this programme does not deliver units).
- ***The Land Procurement Programme (FI-LP)*** is intended to assist with procurement of land for subsidised housing programmes. However this function has now primarily been passed on to the HDA.

The four Social and Rental (SR) Interventions are:

- ***The Institutional Subsidies Programme (SR-IS)*** finances the development of institutional housing, but is most commonly matched with the SHIP programme as provinces' contribution to social housing projects, in order to make units more affordable for the primary market of households earning less than R3 500 per month.
- ***The Social Housing Investment Programme (SR-SHIP)*** is delivered via a combination of SHRA-funded projects by accredited Social Housing Institutions (SHIs). This programme is managed by SHRA, who obtains 'Top-Sliced' financing directly from the NDHS.
- ***The Community Residential Units Programme (SR-CRU)*** is aimed at providing good rental stock to households earning below R 3 500 per month incomes.
- ***The Gauteng Backyard Rental Programme (GBRP)***, which provides capital and assistance to home owners in old townships to construct two rental rooms with a shared ablution facility. This is the first programme of its kind in South Africa.

² A number of programmes that are not central to the current delivery programme are excluded from this analysis. These include (but are not limited to) the Consolidation Subsidy Programme (CSP), Enhanced Extended Discount Benefit Scheme (EEDBS), Housing Chapters of an Integrated Development Plan (HIDP), Housing Assistance in Emergency Circumstances (HEP), The Rural Housing Programme (RHP) and Farm Residents Housing Assistance Programme (FRHAP)

³ This programme is not set out in the Housing Code 2009 but was introduced separately afterwards. The programme has recently been restructured and is managed and implemented by the National Housing Finance Corporation (to form part of the new National Housing Bank).

The five main Incremental Interventions (II) are described here:

- **The Integrated Residential Development Programme (II-IRD)** is the main delivery programme for project-based delivery of subsidised housing in South Africa at present. Certain provinces still implement the older Project-Linked Subsidies Programme⁴.
- **The Enhanced Peoples Housing Process Programme (II-EPHP)** mobilises the collective energies of the state, communities and households in the house building process through managed projects. This programme has separate institutional capacity within the NDHS, but this is currently being combined with the in-situ upgrading capacity within the HDA and the National Upgrading Support Programme (NUSP).
- **The Serviced Site Programme (II-S&S)**, which provides titled land and services to beneficiaries.
- **The Upgrading of Informal Settlements Programme (II-UISP)**⁵ is a growing programme aimed at upgrading services and providing houses for households within existing informal settlements.
- **The Emergency Housing Programme (II-EHP)** provides temporary assistance in the form of secure access to land and/or basic municipal engineering services and/or shelter in a wide range of emergency situations including relocation of informal settlements where the location poses a risk to the inhabitants health.

The main subsidy programmes currently used for the development of the majority of subsidised human settlements programmes and that have an impact on urbanisation are described in more detail in Annexure 3. Each subsidy instrument/programme is analysed in relation to its income group target, the quantum of the subsidy, the purpose of the instrument, an overview of the programme. The spatial implications of each subsidy instrument are then summarised, specifically with respect to their effectiveness as an instrument for spatial transformation. Finally, the current status of the instrument and the key implementation challenges it faces are outlined.

3.3 Allied Urban Development Grant Framework

The above HSDG programmes are complemented by other grants from other line departments including the Department of Cooperative Governance and Traditional Affairs (COGTA), the Department of Public Works (DPW), National Treasury, the Department of Water and Sanitation (DWS), the Department of Energy (DoE) and the Department of Transport (DoT). These grants

are briefly described below and outlined in more detail in Annexure 4. The transport-related grants are noted but not reviewed in detail as the transport sector is subject of a separate input paper (Town, 2017)

There are four main Urban Form Grants:

- **The Municipal Infrastructure Grant (MIG-Cities)** is aimed at assisting the poor to gain access to infrastructure, MIG funds can only be used for infrastructure for basic levels of service.
- **The Urban Settlements Development Grant (USDG)** is a PFMA schedule 4 supplementary grant, that supports the development of infrastructure and public services, as well as the purchase of land.
- **The Neighbourhood Development Partnership Grant (NDPG)** stimulates and accelerates investment in poor, underserved residential township neighbourhoods by providing technical assistance and capital grant financing for municipal projects that have either a distinct private sector element or an intention to achieve this.
- **The Integrated Cities Development Grant (ICDG)** provides the eight metropolitan municipalities with incentives to improve spatial development considerations in their planning and job creation.

The following three Infrastructure Grants are also allocated to municipalities:

- **Regional Bulk Infrastructure Grant (RBIG)**: The RBIG supplements the financing for the development of regional bulk water infrastructure and regional bulk sanitation collection as well as regional water and waste water treatment works.
- **Integrated National Electrification Programme (INEP)**: To manage the electrification planning, funding and implementation process with the aim of addressing electrification backlog.
- **Municipal Water Infrastructure Grant (MWIG)**: the MWIG is to facilitate the planning, acceleration and implementation of various projects that will ensure water supply to communities identified as not receiving a basic water supply service.

Finally, a number grants also allocate funds to municipalities for transport-related expenditure.

- **The Public Transport Infrastructure and Systems Grant (PTIG)** aims to catalyse a transformation of South Africa's public transport sector into a safe, secure, and high-quality experience for the passenger by funding public transport infrastructure and systems that promote public transport.

⁴ Provides for planning and developing an integrated project, providing for the housing, social and economic needs of different income categories. It does away with the requirement found in other policy programmes to identify subsidized housing recipients up front and provides for both subsidized, as well as finance linked housing, social and rental housing, commercial, institutional and other land uses to be developed. Replaces the project linked subsidy programme.

⁵ To facilitate the structured in situ upgrading of informal settlements as opposed to relocation. Provides funding for all activities to provide households with a serviced site. UISP allows serviced provision for households that do not qualify for other subsidies but does not allow the transfer of the property to non-qualifying households on an ownership basis. Does not include a top structure.

- Further transport grants include the Provincial Road Maintenance Grant, the Public Transport Operations Grant and the Transport Disaster Management Grant

3.4 Fiscal Alignment for Spatial Targeting

The shift from quantitative to qualitative human settlements outcomes over the last decade has required a change to capital expenditure frameworks. Overall, the

HDA (2015) describes this process as better alignment of capital expenditures from land, engineering services, transport and human settlements grants in combination with various spatial planning targeting and spatial investment targeting instruments. These are outlined in Table x below. Figure x then illustrates how the various grants should be applied to coordinating investments in bulk services, land, internal services, top structures, public social services and the built environment (transport, public places, non-residential services).

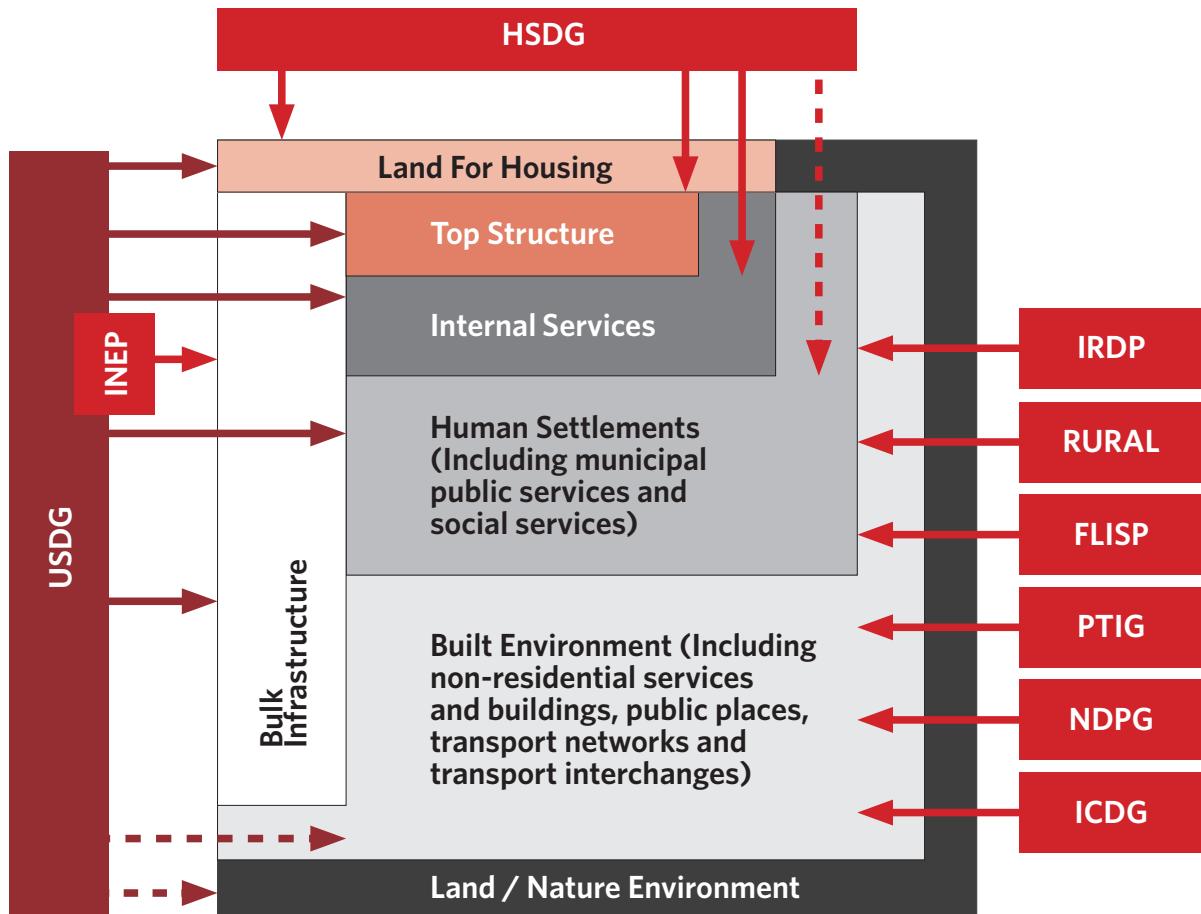
Table 1: Grants, spatial targeting mechanisms and planning frameworks for Spatial Targeting

Instruments	Grants
Infrastructure Grants	
ICDG	Integrated City Development Grant
USDG	Urban Settlements Development Grants
HSDG	Human Settlement Development Grant
PTISG	Public Transport Infrastructure Grant
NDPG	Neighbourhood Development Partnership Grant
INEP	Integrated National Electrification Grant
Spatial Targeting Instruments	
PHDA	Provincial Housing Development Agency
SHRZ	Social Housing Restructuring Zone
UDZ	Urban Development Zone
SEZ	Special Economic Zone
IDZ	Industrial Development Zone
Plans	
BEPP	Built Environment Development Plan
MSDF	Metropolitn Spatial Development Plan
IDP	Integrated Development Plan
UNI	Urban Network Identification

Source: (South African Cities Network (SACN) & Housing Development Agency (HDA), 2014)

The complex interfaces required between these different grant and planning instruments for the creation of sustainable settlements, and to ensure restructuring of urban areas, is shown in the Figure on the following page.

Figure 2: Conceptual Framework for Spatial Targeting Grant Alignment



Source: (*The Housing Development Agency, 2014*)

This process of functional coordination and capital expenditure alignment creates numerous challenges at the city level. The co-ordination of diverse capital expenditure instruments and processes on multi-faceted spatial interventions can be cumbersome, and difficult to align appropriately, at scale and in a sustained manner in specific spatial targeting zones. This is exacerbated by the need to coordinate across budget years for large interventions, and between multiple grant instruments and different functional responsibilities across national, provincial and municipal jurisdictions. The intent of assigning the human settlements function, and related budgets, to city level is a response to simplifying this situation. But, the delays in assignment of human settlements function continue to require complex financial coordination.

3.5 Accreditation and Assignment of Human Settlements Functions to Municipalities

Municipalities may be delegated authority to administer the National Housing Programmes at the municipal sphere, under the Municipal Accreditation Framework.

This devolves housing subsidy functions and budgets from provinces to municipalities and enables municipalities to plan and implement housing and other municipal functions on a more coordinated basis. In order for accreditation to be implemented, municipalities must have the capacity required to take on the ensuing functions, and this must be approved by the Minister of Human Settlements. While accreditation and assignment targets were set out in the MTEF (Outcome 8), no housing function assignments have yet been implemented.

3.6 Un-funded & Under-funded Mandates

The provision of public safety, municipal education and healthcare and sports, arts, culture and recreational facilities and services (SACR) are important mandates for municipalities and are critical for the development of sustainable human settlements. However, while the USDG and other municipal revenues are to some extent used for these services, many of these functions are unfunded or under-funded mandates of municipalities. Important services that have some municipal jurisdiction include:

- **Education** (specifically, preschool care, as primary, secondary and tertiary schooling are national competencies);

- **Healthcare** (specifically local clinics, as healthcare is a national competency);
- **Safety, security and emergency services** (including police, road traffic regulation, firefighting services, emergency medical services and disaster management);
- **Archives, libraries, museums and cultural services**, including cemeteries, funeral parlours and crematoria;
- **Sports facilities, parks, recreation and amenities**, including national parks and botanical gardens, other parks, recreation facilities and amenities, public places, amusement facilities, and Markets;
- **Green infrastructure**;
- **Heritage and tourism**; and
- **Welfare services** (Child care and aged care facilities).

Many social services are concurrent competences of national and provincial government, with specific facilities and services and/or service delivery roles falling to municipalities to implement. In certain cases, such as libraries, museums, art and culture, exclusive provincial functions exist in parallel to concurrent competences. As a result, tracing the delivery of these services requires assessments of delivery at all three spheres of government.

An assessment of these services by PDG (Gauteng Province, 2015) for the Gauteng Integrated Infrastructure Masterplan (GIIMP) showed that Gauteng has significant backlogs in the provision of all of the above social services. Backlogs exist mainly in new residential areas, where new facilities have not yet been constructed, as well as in historically disadvantaged (mostly township) areas, many of which have had social service shortfalls for decades. In the social service sectors assessed, aging assets and infrastructure, and the need to invest in maintenance, rehabilitation and in some cases the replacement of physical assets exacerbate backlogs. Capital budgets are often limited, and trade-offs are made between new construction and maintenance, repair and rehabilitation of existing social services facilities, as well as between social services and other capital works, such as bulk infrastructure and transport networks.

A further issue of importance is that these services require operating expenditure to maintain adequate and consistent services. Facilities for education, healthcare, arts, crafts, sports and recreation generally require activities and programmes to be implemented to meet the needs of the communities they serve. In addition, emergency services can have significant operating cost implications. Hence, often the need for a greater focus on developing and implementing programmes is greater than that for the physical amenities and facilities.

The implications of not sufficiently funding 'softer' non-network infrastructure, specifically those with direct impacts on social stability and order such as policing, welfare and sports and recreational services, are often not immediately apparent. The substantial backlogs in the key infrastructure services departments (water,

sanitation, transport and energy) are often prioritised over the funding and delivery of public and social services. As a result, backlogs grow quickly as very limited new facilities are developed, commissioned and maintained. Within public and social services, the negative causal relationships between non-investment in these facilities and programmes (e.g. emergency services and prisons) are better understood than the positive externalities of investment in 'softer' facilities and services such as active and passive recreation facilities, halls and libraries. In most cases these are non-revenue generating services, with relatively high operating costs, which places added burdens on municipalities to fund and maintain social services.

3.7 Key Findings: Funding and Subsidy Framework

A wide range of human settlements subsidy programmes are described in the Housing Code, and funded through the HSDG. These are supported by additional conditional funding streams for allied infrastructure and service provision, most importantly the USDG.

The importance of devolving the human settlements function to cities is widely acknowledged, accepted and provided for in law. Assigning these functions and related budgets to cities is an important step in the process of cities having more autonomy over how human settlements, transport and other functions are coordinated and implemented at the city level.

The full extent of social services provision and coverage is difficult to ascertain, and differs significantly between cities. However, all sports, arts culture, recreation and public service areas face significant infrastructure and service coverage shortfalls in cities. Mechanisms to improve financing and implementation of new investments and service delivery, as well as overcoming substantial deficits in maintenance and rehabilitation of old facilities is required.

4. Status Of Housing Demand And Supply In South Africa

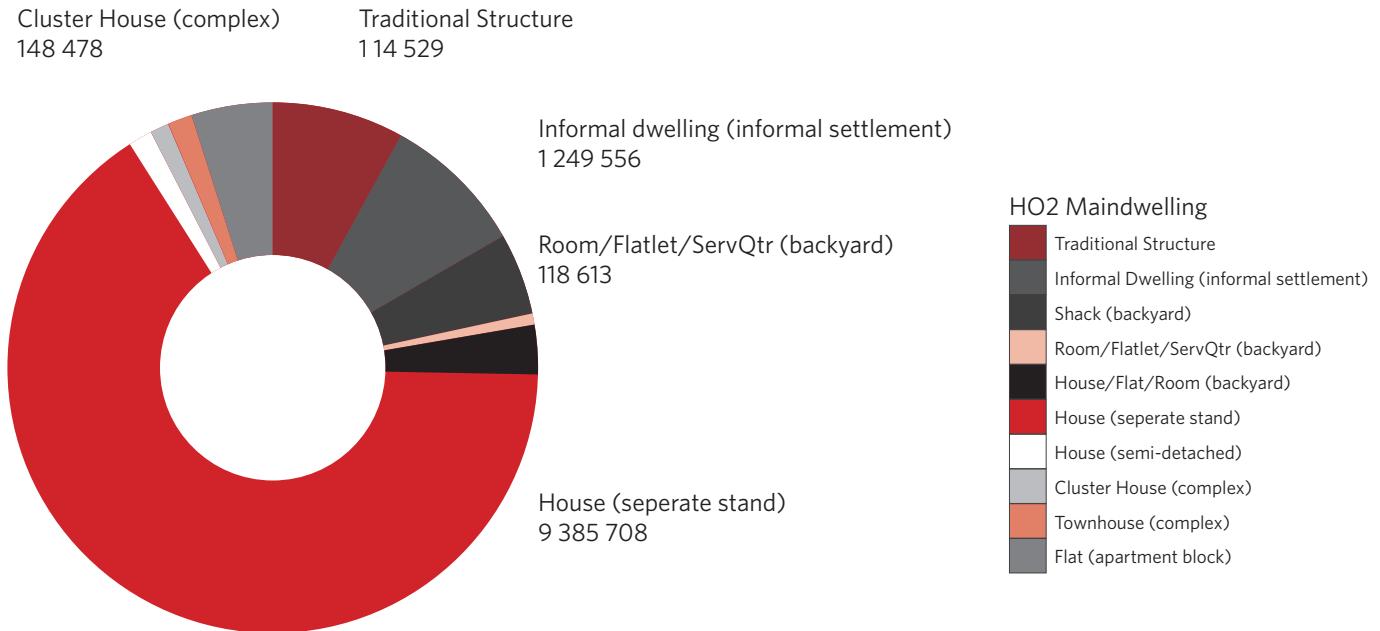
This section provides an overview of the current housing and tenure conditions and housing affordability of households in South Africa. The supply of housing is then outlined, in order to show the match between housing demand and supply.

4.1 Current Housing and Tenure Conditions

Based on the National Census (2011), the following housing typologies are analysed: Low-density typologies (Houses on Separate Stands and Cluster Houses in a Complex); Medium-density Typologies (Semi-Detached

Houses and Townhouses); High-Density Typologies (Flats or Apartments in Blocks); Infill Development (Second Dwellings including Cottages, Flatlets and Rooms); Backyard accommodation (Houses / Flats / Rooms and Backyard Shacks (informal dwelling); and unplanned development (Informal Settlements / shacks). These are illustrated for South Africa as a whole in Figure 2 below.

Figure 3: Distribution of households per dwelling type, South Africa



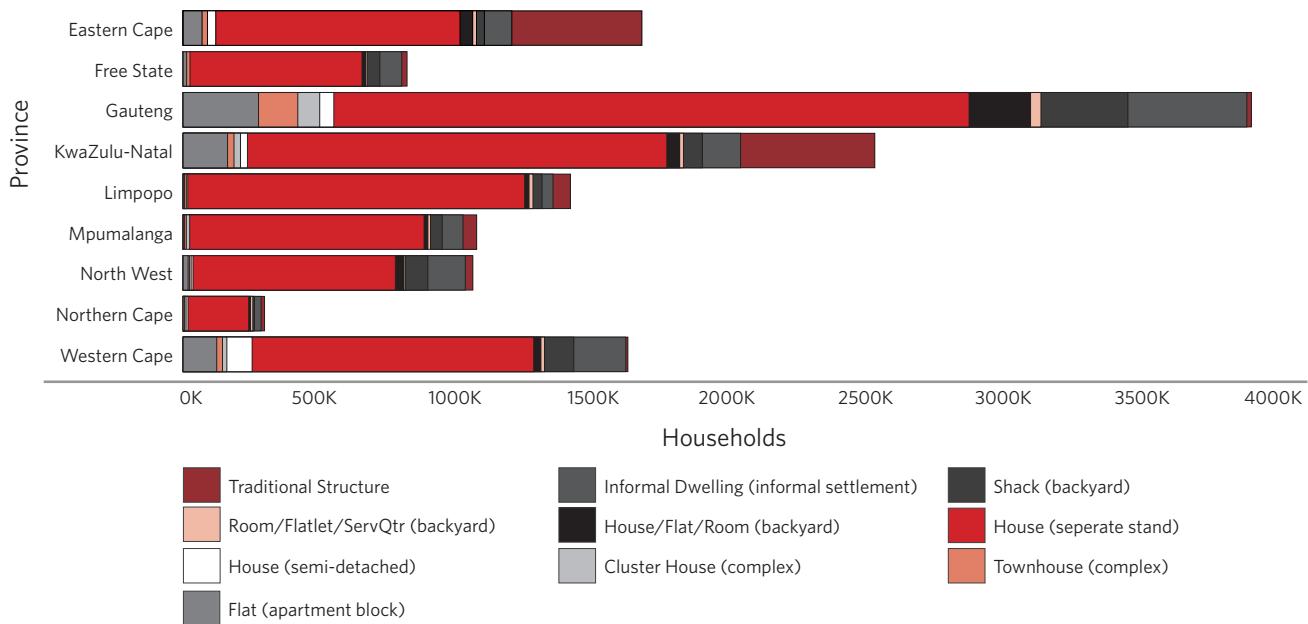
Sum of Households and HO2 Maindwelling. Colour shows details about HO2 Maindwelling. Size Shows sum of Households. The marks are labeled by sum of Households and HO2 Maindwelling. The view is filtered on HO2 Maindwelling, which excludes Caravan/Tent and Other.

Source: Own analysis, Census 2011

Nationally, more than 77.7% of the 14.4m households live in formal dwellings, 13.6% reside in informal dwellings and 7.9% in traditional dwellings. Stats SA estimates that the demand for adequate housing is about 2.2 million households, which includes households in informal settlements and backyard shacks. Figure 3 below outlines

the housing types per province in South Africa. This indicates the highly variable housing profiles across the provinces, in respect of the formality and informality of accommodation, as well as with respect to the density profile of accommodation.

Figure 4: Distribution of households per dwelling type, Per Province



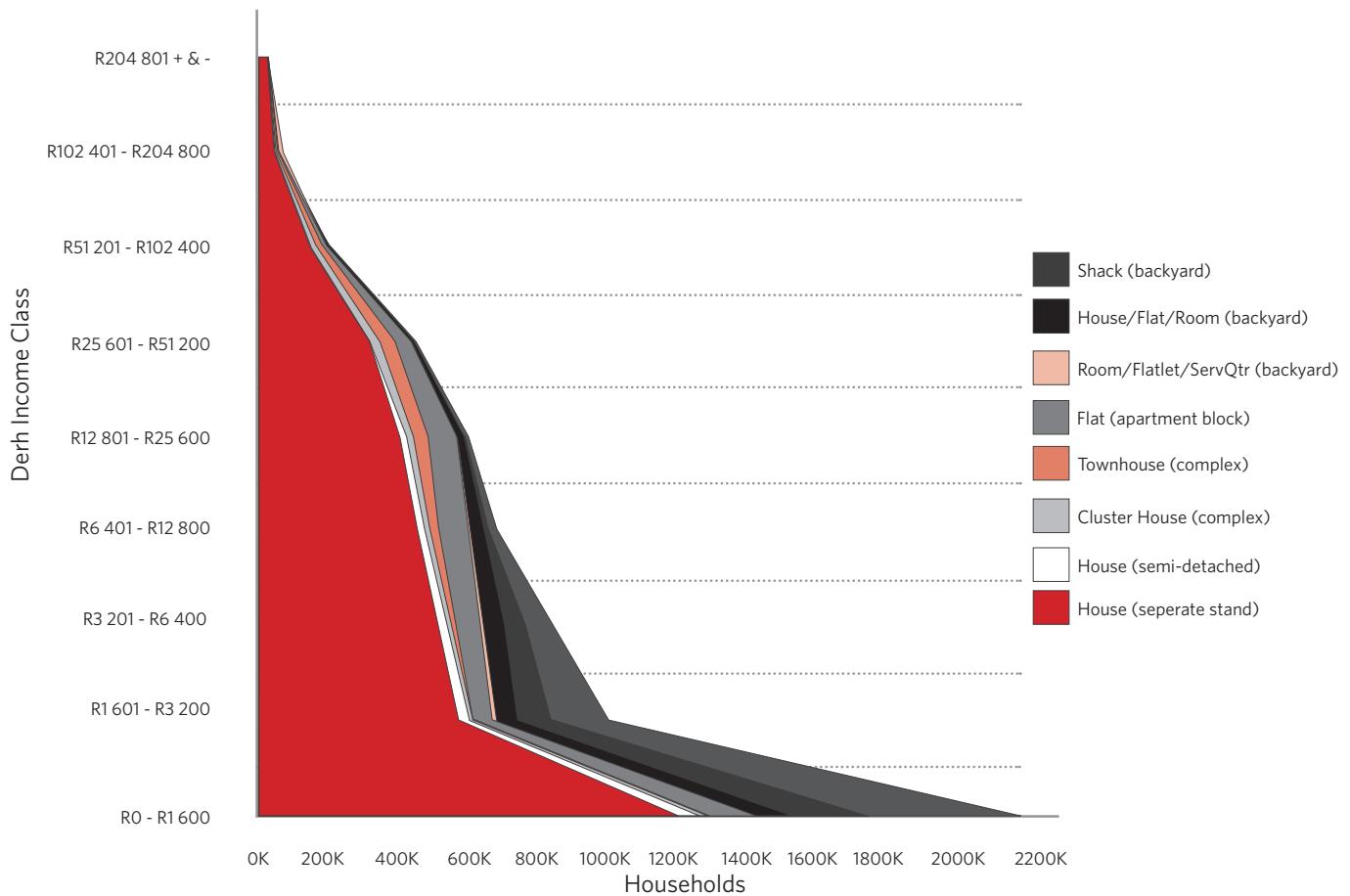
Sum of Households for each province. Colour shows details about HO2 Maindwelling. The marks are labeled by sum of Households. The view is filtered on HO2 Maindwelling, which excludes Caravans/Tens and Other.

Source: Own analysis, Census 2011

Figure 5 below shows the distribution of households by income group and housing type for the eight major metropolitan areas in South Africa. This Figure shows the

increasing number of households in the lower income groups in backyard rooms (yellow) and shacks (orange) and informal settlements (red).

Figure 5: Distribution of households per dwelling type per income group (eight metros)

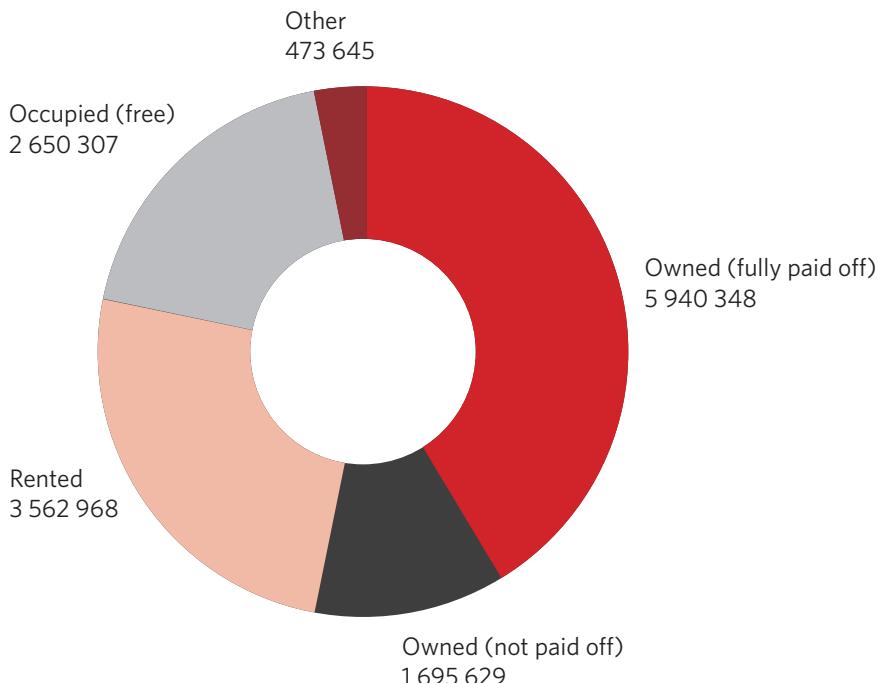


Source: Own analysis, Census 2011

Figure 6 below illustrates the tenure profile of all households in South Africa, with respect to whether they own the accommodation they live in, own it but still have

financial commitments on the property, rent it, or live in it for free.

Figure 6: Distribution of households per dwelling type, Per Province

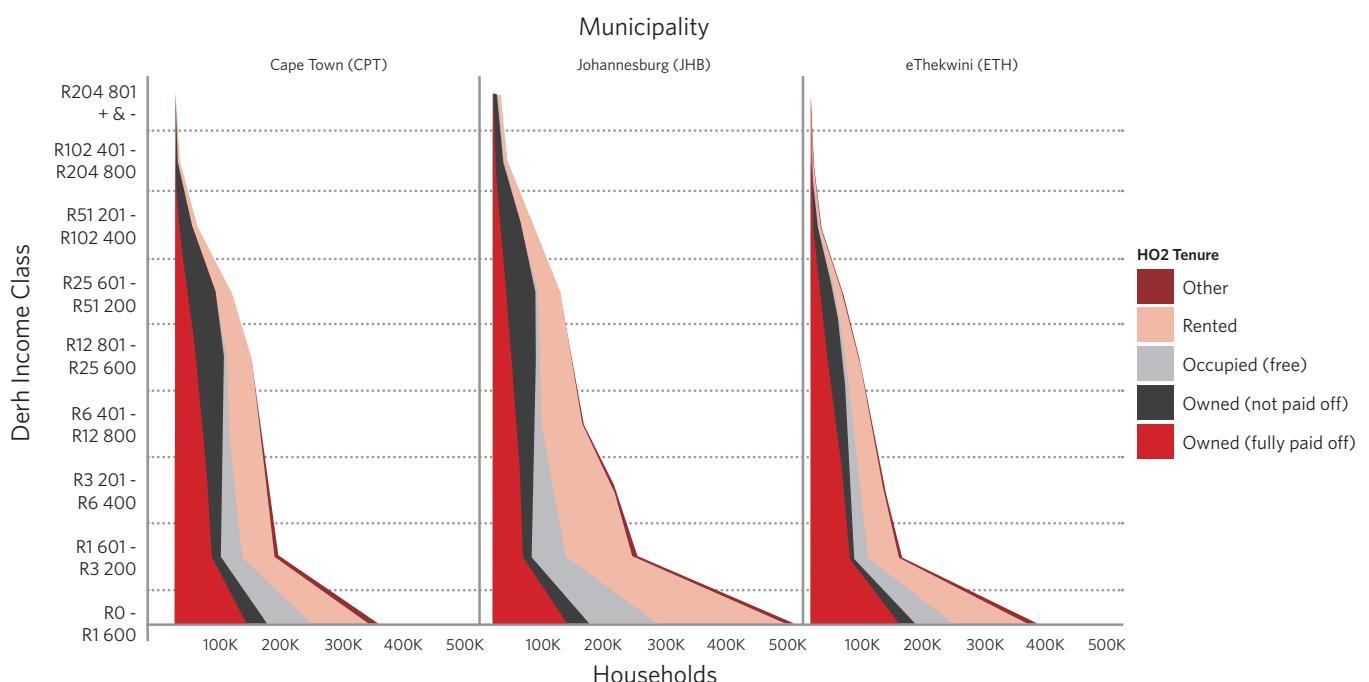


Source: Own analysis, Census 2011

41% of households own and have fully paid off the accommodation they stay in, and an additional 12% own their accommodation but have not paid it off fully. A quarter of South households rent their accommodation. The remaining 18% occupy the house they are in for free, or have other tenure arrangements. Figure 6 below illustrates the differences in tenure arrangements

across the income profile for the three focus cities of Johannesburg, Cape Town and eThekwini. The high proportion of renters in Johannesburg is notable, specifically within the middle income groups. Further, the relatively thin financed housing market in eThekwini is also notable (red – owned but not paid off).

Figure 7: Distribution of households per income and tenure type, Per City



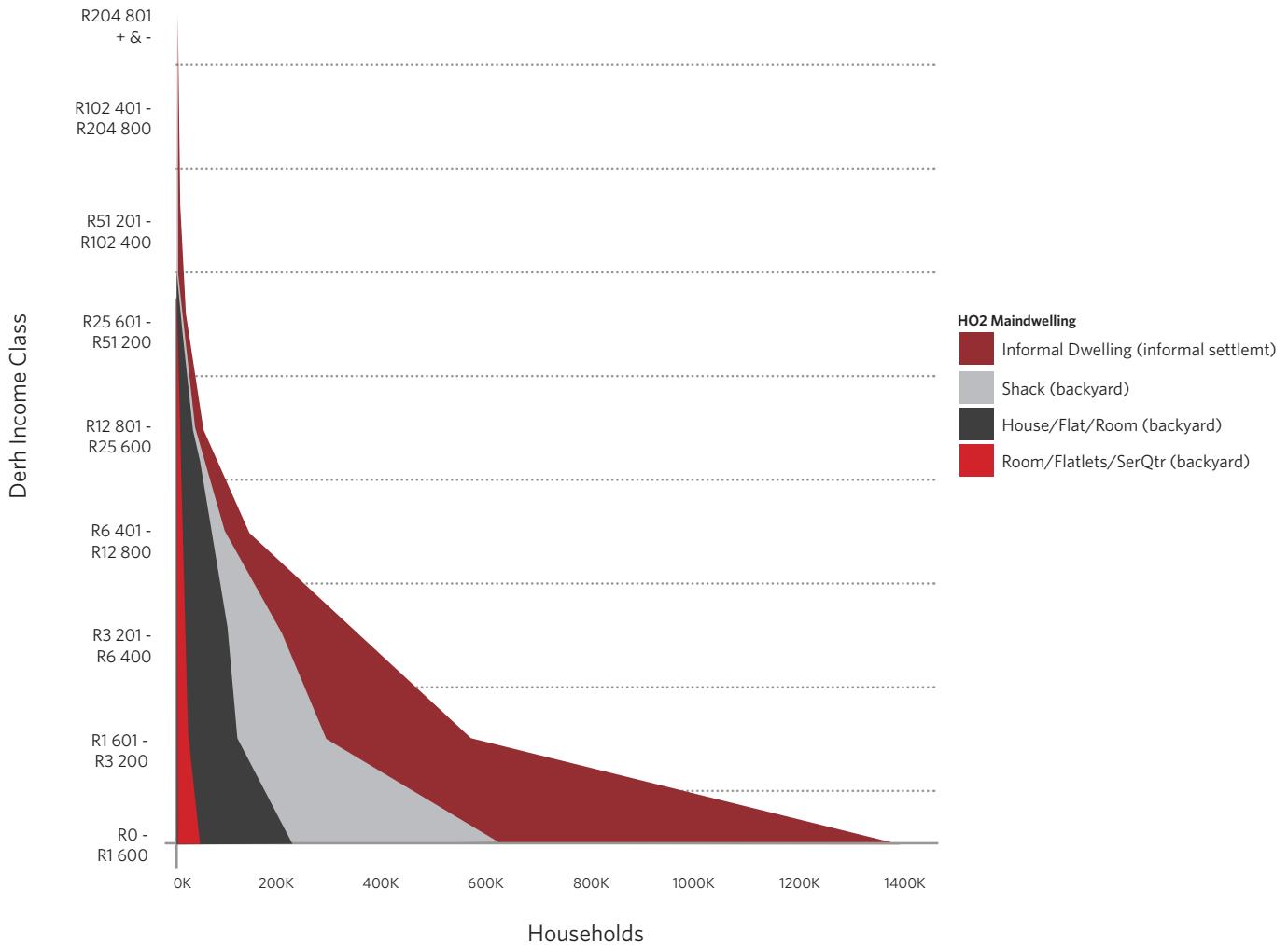
Source: Census 2011, Own Analysis

4.2 Housing Affordability and Demand

The National Department of Human Settlements calculates a 'housing backlog' that should be covered by subsidised house construction. A national 'backlog' figure of around 2.2 million households is calculated to include households living in backyard rooms, shacks and informal settlements. While there are many problems with this definition, it provides some sense of the number of households in less formal, and generally

poorer quality accommodation. However, analysis shows that a certain level of backyard development, and even informal settlement, may in fact be necessary for a well-functioning housing market, especially in South Africa's artificially constrained housing market. Notwithstanding this, Figure 7 shows the quantum of this official 'backlog' in the three focus cities to be 784,000 households. Just under half (49%) of these are in informal settlements, 30% in backyard shacks and 21% in backyard rooms and second dwellings.

Figure 8: Income Distribution of households in the worst housing conditions



Source: Own analysis, Census 2011

Table 2 below shows the income profile of this ‘backlog’ for the three focus cities. Around 365,000 households in Johannesburg, 245,000 in Cape Town and 173,000 in eThekewini live in these poor circumstances.

Table 2: Income Distribution of Households in the Worst Housing Circumstances (Focus Cities)

Municipality	Derh Income Class	Informal Dwelling	Shack (backyard)	House/ Flat.Room (backyard)	Room/ Flat/SerQtr (backyard)	Grand Total
Cape Town (CPT)	R204 801 + & -	32	36	52	22	142
	R102 401 - R204 800	78	55	36	24	193
	R51 201 - R102 400	92	65	219	49	425
	R25 601 - R51 200	947	331	575	280	1 833
	R12 801 - R25 600	1 047	1 008	1 276	882	1 833
	R6 401 - R12 800	4 301	4 231	2 375	1 768	12 675
	R3 201 - R6 400	16 026	12 010	3 032	1 972	33 040
	R1 601 - R3 200	36 127	20 836	3 228	2 012	62 205
	RO - R1 600	85 438	36 343	5 488	3 237	130 506
	Total	143 788	74 917	16 281	10 246	245 232
Johannesburg (JHB)	R204 801 + & -	53	67	164	19	303
	R102 401 - R204 800	94	101	227	46	468
	R51 201 - R102 400	199	14	638	165	1 116
	R25 601 - R51 200	662	473	2 041	407	3 583
	R12 801 - R25 600	1 181	1 351	4 771	1 036	8 339
	R6 401 - R12 800	4 283	5 212	11 283	2 333	23 111
	R3 201 - R6 400	15 580	18 146	19 284	4 082	57 092
	R1 601 - R3 200	29 075	31 318	22 180	5 231	87 804
	RO - R1 600	74 661	67 195	34 913	7 101	183 876
	Total	125 788	123 977	95 501	20 426	365 692
eThekewini (ETH)	R204 801 + & -	40	15	25	10	90
	R102 401 - R204 800	76	33	49	9	167
	R51 201 - R102 400	110	60	123	49	342
	R25 601 - R51 200	591	332	642	201	1 766
	R12 801 - R25 600	1 007	442	1 250	510	3 209
	R6 401 - R12 800	2 557	1 089	2 070	750	6 466
	R3 201 - R6 400	9 699	3 547	2 589	1 030	16 865
	R1 601 - R3 200	21 814	7 684	3 520	1 355	34 373
	RO - R1 600	75 442	24 762	7 093	2 498	109 795
	Total	111 336	37 964	17 361	6 412	173 073
Grand Total		380 912	236 858	129 143	37 084	783 997

Due to low incomes, other household expenditure and over-indebtedness, many households requiring housing have a limited ability to pay regular amounts towards their own housing. Household incomes of these households living in the worst housing conditions are much below the general household income profile, with 78% of households earning below R3,200 per month in the three focus cities. Low incomes and unemployment are exacerbated by increasing poverty rates between 2006 and 2015 (Statistics South Africa, 2016), due to a steady overall decline in GDP growth from 5,5% in 2006 to a

projected economic growth rate of just 0,6% for 2017 (World Bank Indicators, 2017).

Household expenditure on housing and transport is high, with further limits disposable income available for housing. While households living in formal houses in urban areas spend on average 35% of total expenditure on housing and services, only 19% of income is spent by households in informal housing (Statistics South Africa, 2016). According to StatsSA workers in the highest income quintile spend on average R582 per capita per

month on transport, versus R491 (over 20% of average income) amongst workers in the lowest income quintile.

High levels of over-indebtedness further constrain housing affordability. Access to multiple sources of consumer credit has created high levels of indebtedness amongst low and middle-income households. Finscope (Finmark Trust, 2017)) concludes that financial inclusion has remained stable over the last three years, which could indicate a saturated financial sector. 51% of adults are borrowing from multiple sources, mostly credit from non-bank credit providers (46%) and banks (15%). Over 25% of South Africans borrow simultaneously from three sources (bank, other formal money lenders and informal money lenders, indicating both easy access to credit and a high propensity to borrow. Over-indebtedness (borrowing to repay other debt, cannot or do not want to borrow because of existing indebtedness, or in default or with garnishee or emolument order) is reported by 29% of all adults, and is higher among lower-income households even though it seems to be driven by behavioural reasons more than economic reasons. Indebtedness therefore aggravates poverty in South Africa.

Access to housing credit is therefore constrained. Only 24% of adults have used credit for developmental purposes at some stage, which includes housing and education (FinMark Trust, 2017). While home ownership generally reduces over-indebtedness, indebtedness in turn reduces the chances of being able to afford and be approved for housing finance. BusinessTech (2017)⁶ reports that 65,5% of all home loan applications were rejected in the year to April, 2017.

The outcome of low incomes, high relative expenditure on housing, services and transport and over-indebtedness is that many households have little option but to rely on fully-subsidised, state-provided housing. Only 30% of South Africans are able to afford a house of more than R500,000 (National Department of Human Settlements, 2015)

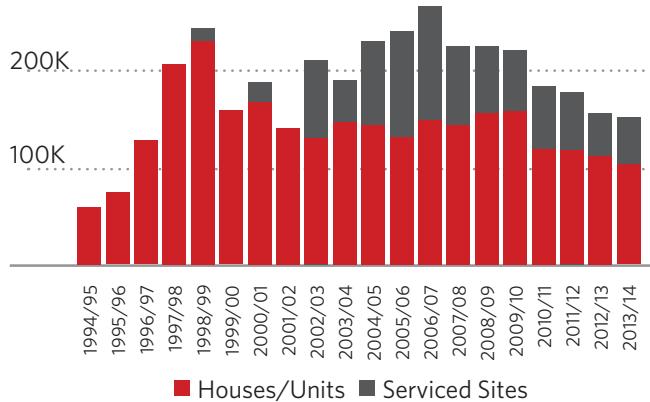
4.3 Subsidised Housing Delivery Performance

In quantitative terms, the Housing Subsidy Programme has delivered millions of subsidised homes to low-income households. The initial ambitious target to deliver one million houses in five years was realised in just seven years. Over the last 22 years the previous Minister of Human Settlements claimed that in 2016 about 2.8 million completed houses, 986 000 serviced sites and 121 000 social housing units have been delivered. A further 360 000 households have had ownership of their previously state-owned rental properties transferred to them. Further, 69 000 upgraded community rental units have been constructed, and 6 000 finance linked subsidies have been paid out (Minister Sisulu quoted in

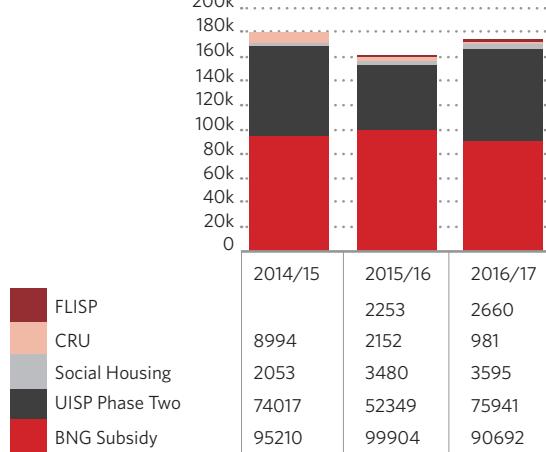
Engineering News, 22nd April 2016). Since 1994, over 12.5 million individuals have been provided with better quality accommodation, secure tenure and access to services in some form (National Department of Human Settlements, 2015). This has provided direct access to improved housing for nearly a quarter of South Africa's population, and access to land, services and housing for significantly more.

However, accurate subsidised housing delivery numbers are not easy to find. A recent National Treasury Performance and Expenditure Review (RebelGroup Southern Africa (RGSA), 2014) on five key housing programmes showed that the relationships between housing expenditure and actual delivery is not transparent. Units claimed in national statistics are not necessarily clearly recorded in project statistics, and the definition of 'housing opportunities' can differ significantly. For instance, delivery of tenure, or water and sanitation, or a serviced site, or a serviced site and a house may be classified as a 'housing opportunity'. Figure 9 below shows claimed annual delivery of subsidy houses and serviced sites from 1994/95 to 2013/14, and shows a detailed programme-level delivery breakdown for 2014/15 to 2016/17.

Figure 9: Subsidised Housing Delivery (1994 to 2017)



■ Houses/Units ■ Serviced Sites



Source: (National Department of Human Settlements (NDHS), 2017) and AfricaCheck (2015)⁷

⁶ <https://businessstech.co.za/news/finance/176515/grim-home-loan-approval-rate-in-sa/>

⁷ <https://africacheck.org/reports/minister-sisulu-is-right-sas-housing-delivery-has-almost-halved-since-200607/>

While the Human Settlements Development Grant (HSDG) allocations have generally grown over this period, delivery of subsidised housing and serviced sites have both been declining steadily over the last decade. From a peak delivery of 235,000 houses and serviced sites in 2006/07, delivery has declined to under 175,000 houses, sites and subsidised rental units in 2016/17. Over the last three budget years, delivery has dropped below 100,000 fully-subsidised BNG houses and 75,000 serviced sites in UISP and serviced site projects. Subsidised rental housing delivery has also declined. Restructuring Capital Grant-subsidised Social Housing delivery by social housing institutions has been around 3,500 units per annum for the last two years, and the Community Residential Unit programme (subsidised municipal rental units) has declined from nearly 9,000 units in 2014/15 to under 1,000 in 2016/17.

Reasons for declining delivery of subsidised housing include institutional capacity constraints in municipalities, provincial departments and State Entities involved in housing delivery and finance, project planning and implementation delays due to the shift of focus to 'catalytic projects', or 'mega-projects'. Increasing discrepancies between subsidy levels (which have not been increased for inflation since 2013/14) and the actual costs of subsidised houses also constrains project feasibility, notably in the Social Housing programme, where subsidies have only very recently been updated for the first time in many years.

The approach to implementing specific programmes is also not aligning with original intents. UISP projects are intended to regularise tenure and provide services to households in-situ in informal settlements. However, while the scale of tenure and service delivery has become an important component of the human settlements programme, often these settlements are subjected to 'rollover' development whereby residents are removed, a greenfields development is undertaken and beneficiaries are located back into the new units. This displacement of households generally increases costs due to relocation and house delivery, hence limiting the number of households that can be reached.

The Social Housing Restructuring Capital Grant is the only explicitly restructuring-focused subsidy programme. However, limited capital budgets, constraints on delivery and institutional problems with the Social Housing Regulatory Authority have limited the scale and effectiveness of Social Housing delivery (RebelGroup Advisory Southern Africa (RGSA), 2015). In total, SHRA has 36,000 social housing units under regulation (National Department of Human Settlements (NDHS), 2017), which comprises roughly 1% of all subsidised units delivered since 1994. Further, these units are spread out in small projects across many Restructuring Zones in metropolitan areas and secondary towns, reducing the concentration potential that social housing has for urban restructuring and infill.

In addition to this decline in delivery, responsibilities for the financing of land and internal services have also shifted from being a part of human settlements subsidies, to becoming an additional financial responsibility of metros. A combination of other grant instruments (see USDG below) and own resources are required to provide serviced land on which top structures can be built.

Ultimately, the implication of the declining delivery of subsidised accommodation is an increasing number of households having to access accommodation in the unsubsidised housing market, mostly within backyards of existing urban areas and in informal settlements. Eighty20 (2017)⁸ calculates that the number of backyard shacks has almost doubled over this period.

4.4 Private Housing Market Trends

The private housing market does not match the demand for unsubsidised and partially-subsidised affordable housing for households earning between R3,500 and R15,000 per month. The private market-produced supply of housing in the R500,000 plus market segment meets household demand. However, the 'affordable' market for homes costing below R500,000 is very constrained, and creates the so-called 'Gap' in the housing market for households who earn too much to be eligible for a fully-subsidised house, cannot access subsidised rental housing, yet cannot afford, do not want to buy or are unable to find houses costing below R500,000. One reason for this is the failure of the Finance-Linked Individual Subsidy Scheme and Individual Subsidy Scheme to stimulate delivery at any scale. While this subsidy programme is generally well-structured (Hoek-smit & Zhang, 2017)), it faces significant implementation problems that limits delivery to under 2,700 units in 2016/17.

4.5 Key Findings: Housing Demand and Supply Trends

While city populations are growing rapidly, subsidised housing delivery and informal settlement upgrading is slowing. Subsidised housing delivery is therefore not keeping pace with new household formation. Consequently, informality is increasing in urban areas through the growth in informal settlements and backyarding.

There is a discrepancy between the size, type and location of subsidised housing supply and demand patterns. Household sizes continue to decrease, and households living in backyards and informal settlements generally comprise one-third single people, one third two-person households and one-third three or more member households (Census 2011, own analysis). These generally younger, more mobile households are not necessarily in the stage of life that they require a freehold house.

⁸ <http://www.eighty20.co.za/shacks-in-south-africa/>

Rental of smaller, better-located spaces (such as shared inner-city accommodation, rooms and small backyard structures) is therefore often better suited to this demand profile than more peripheral, detached freehold houses. However, no subsidy programme exists to facilitate the development of affordable, adequately serviced accommodation of this type. Further, roughly one third of all households earning below R3,500 per month living in formal houses are renting these houses. This implies a mismatch between location of subsidised houses and desired place of residence.

In the partially-subsidised ‘affordable’ housing market, effective demand for accommodation is constrained. There is a discrepancy between the prices of completed, privately developed houses that are mortgageable, and the effective demand of households due to low affordability and over-indebtedness. This is exacerbated by the ineffective implementation of the Finance Linked Individual Subsidy Programme (FLISP) and the individual subsidy programme. While the FLISP programme is in general appropriately structured to stimulate effective demand in this ‘Gap’ housing market, it is poorly implemented and marketed by subsidy authorities and municipalities, which nullifies its impact in stimulating this housing sub-market (Hoek-smit & Zhang, 2017). The constrained delivery of accommodation in the R3,500 to R15,000 per month household income band stimulates down-market purchases of subsidised houses, and high levels of rental amongst households in this market. Over 60% of households in this sub-market rent in the City of Johannesburg, while almost 40% rent in the City of Cape Town and 35% rent in eThekweni.

The above analysis indicates that the current subsidised housing programme is not adequately meeting the scale nor complexity of housing demand. Programmes that reach greater numbers of poor households with the same budgets are required (such as UISP and serviced site delivery that pre-empts informal settlement growth). Such programmes provide secure tenure and access to services, and encourage household investments in incremental house improvement over time. Subsidy instruments that better align supply with both the nature and location of household demand must also be considered. It is suggested that demand-side subsidies would be more appropriate for this purpose, by giving households more autonomy regarding where and how to invest their housing subsidy. In the affordable accommodation market, a major push to stimulate affordability and encourage home ownership in cities using the demand-side FLISP subsidy must be implemented to overcome dependence on rental accommodation.

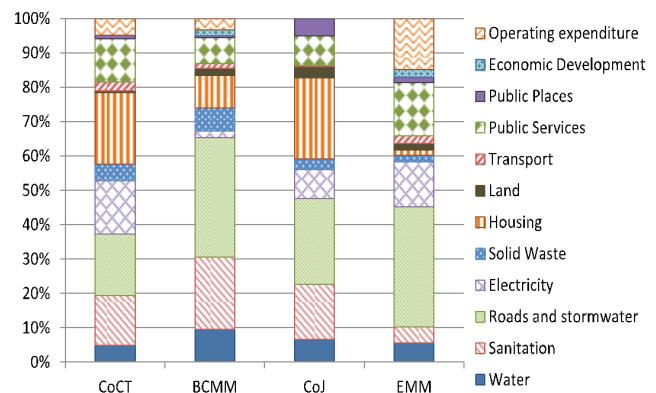
5. Land, Housing And Services Expenditure And Revenue

This section provides an overview of capital and operating expenditure on engineering services, housing, land and social services in South Africa’s cities. Note that a separate paper and modelling exercise has been undertaken on municipal finances, which provides more detailed analyses of revenue and expenditure (Boex, 2017).

5.1 Capital Expenditure on Urban Services

The Urban Services Development Grant (USDG), Human Settlements Development Grant (HSDG) and other related grants are allocated to Cities to provide for land, housing, engineering services, social services and allied expenditures required for the development of sustainable human settlements. Figure 9 illustrates the proportional allocation of USDG to different categories of expenditure by the four major cities in 2013/14. All cities spend in excess of 50% of USDG allocations on engineering services, with roads and storm water and sanitation comprising the largest proportions. Public services also feature as a relatively high proportion of total expenditure.

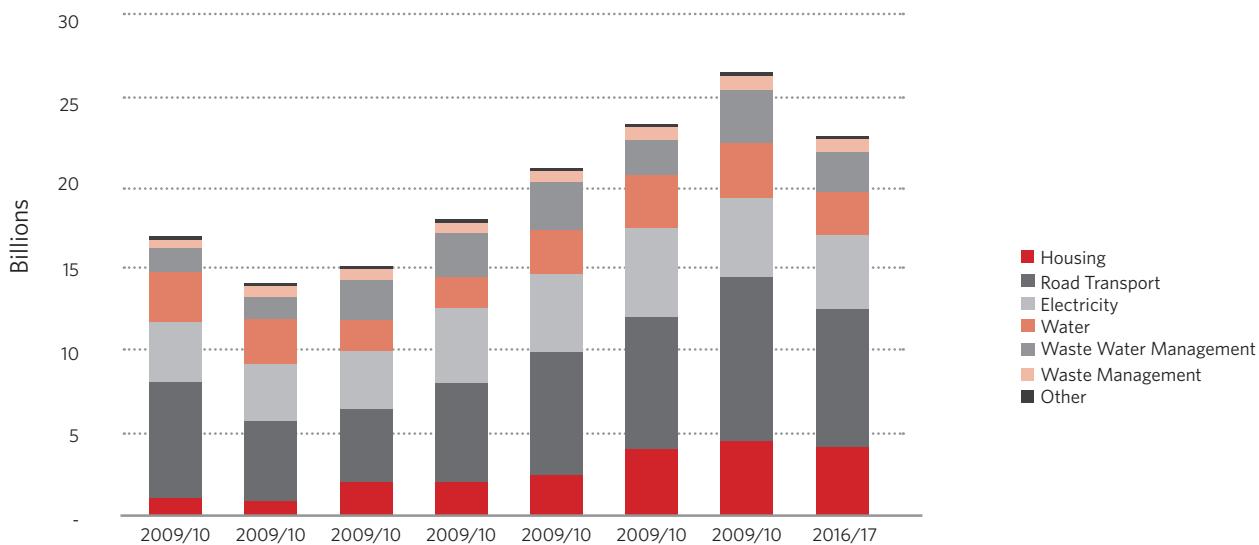
Figure 10: USDG Allocations per metro (2013/14)



Source: (Berrisford & Graham, 2014)

An analysis of National Treasury’s Local Government Budget Database (PDG, 2017) shows the historical capital expenditure on key services between 2009/10 and 2016/17. Figure 10 shows an increase in expenditure between 2010/11 and 2015/16, with a decline in 2016/17. Road transport infrastructure comprises the greatest proportion of expenditure, followed by electricity, housing and water.

Figure 11: Historical capital expenditure by City by service (2009/10 to 2016/17) (R nominal)

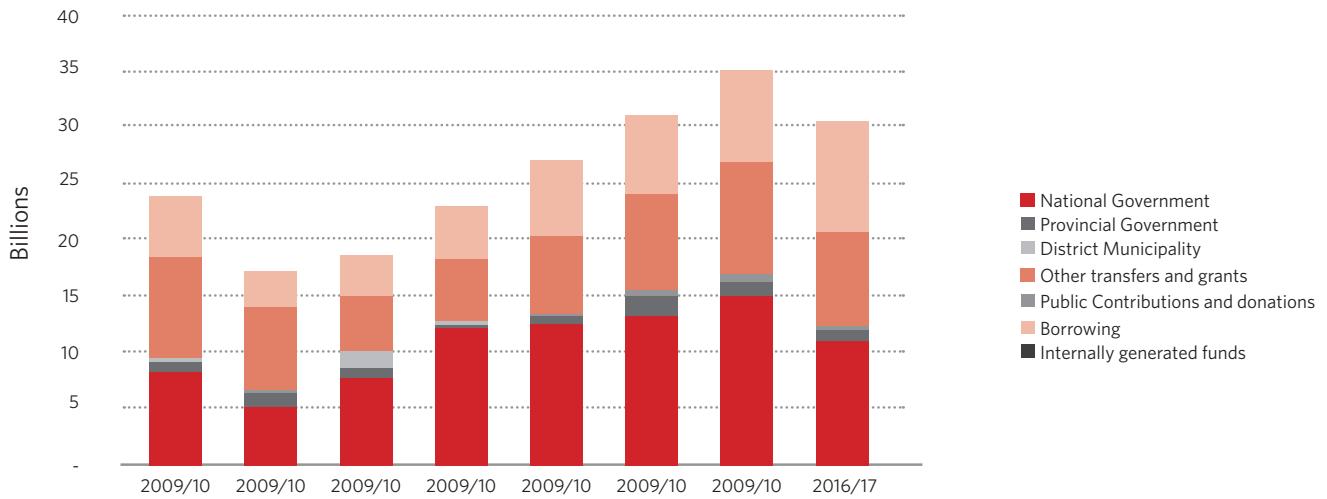


Source: PDG (2017)

Figure 12 illustrates the sources of these funds. The majority is sourced from national government, followed by

City borrowing and internally generated funds.

Figure 12: Historical capital funding to Cities by source – 2009/10 to 2016/17 (R nominal)



Source: PDG (2017)

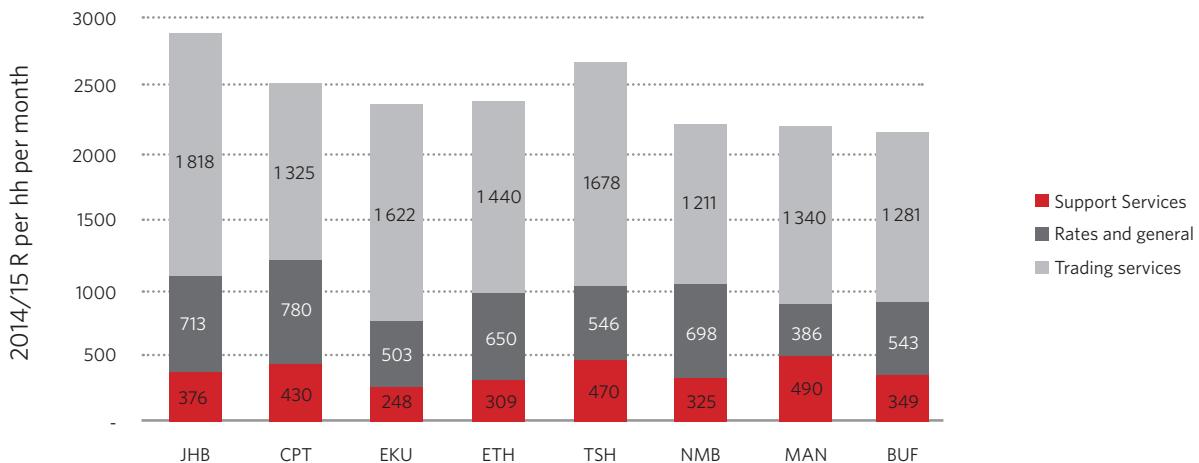
The decline in funding in 2016/17 is likely to continue into the future due to the flat-lined economic growth forecast and lower revenue collection. This will exert more pressure on cities to invest resources wisely in order to meet growing infrastructure shortfalls, unless cities can raise their own revenues and increase borrowing.

5.2 City Expenditure on trading services, rates and support services

Cities spent between R2,250 and R2,800 per household per month on trading services, support services and rates and general expenditure in 2014/15. Johannesburg spent

the most of all metros on trading and support services after adjusting for size, followed by Tshwane. Cape Town spent the third highest, with eThekwin fourth. The city totals are illustrated in Figure 12 below.

Figure 13: Operating expenditure per household per month (per city)

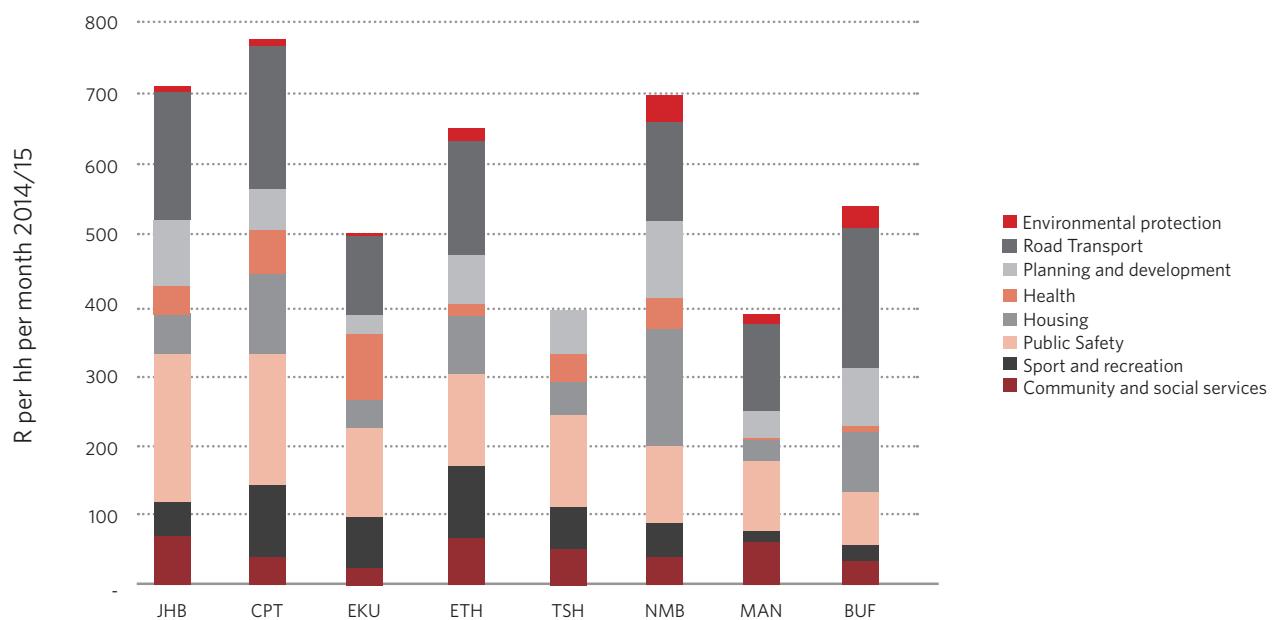


Source: PDG (2017) - Expenditure data ex 2014/15 full year forecast in Table A2; households ex Census 2011

Expenditure per household on public services (which includes all publicly accessed services and including Community and Public Safety and Economic and Environmental services) is highest in Cape Town, followed by Johannesburg and Nelson Mandela Bay, with eThekwin fourth highest. Figure 13 shows the expenditure per household on these functions in each

of the metros. Public safety and road transport are the largest proportions of expenditure on public services. Housing expenditure per household shows significant variation, with Nelson Mandela Bay spending the most per household, followed by Cape Town and eThekwin, with Mangaung spending the least.

Figure 14: Public services expenditure per household per month (per city)

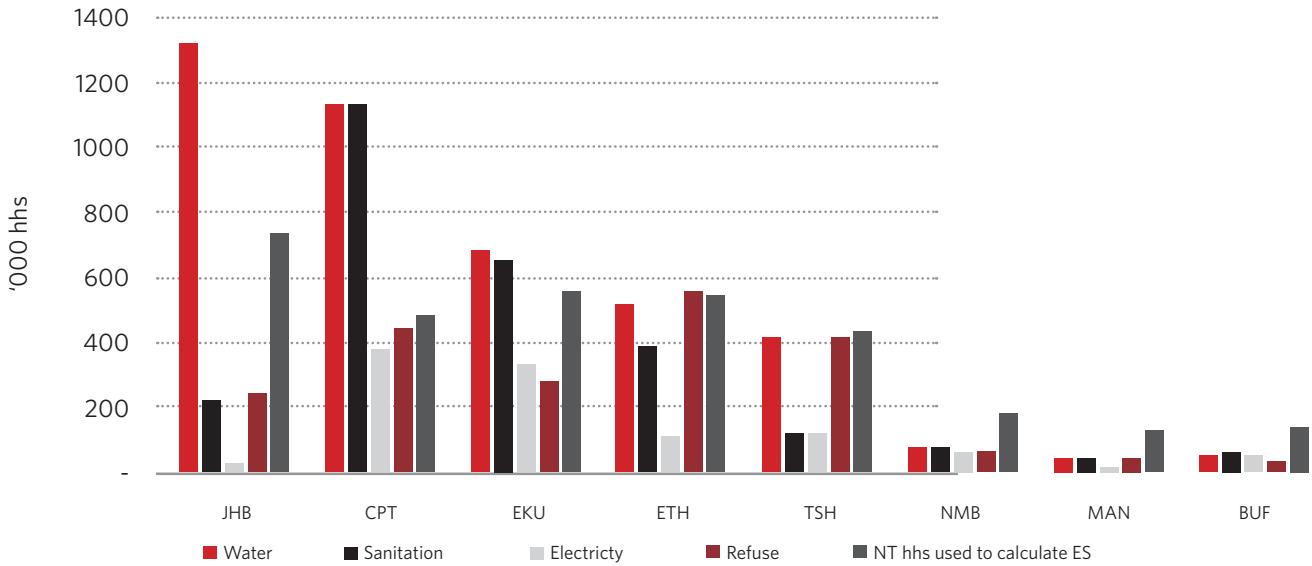


Source: PDG (2017) - Expenditure data ex 2014/15 full year forecast in Table A2; households ex Census 2011

There is significant variation between the numbers of households provided with Free Basic Services in the metros and the numbers of households used by National Treasury in allocating the Local Government Equitable Share. These are illustrated per city in Figure 15. Cape Town provides over double the number of households with free basic water and sanitation services in comparison to

the number of households used to calculate its Equitable Share, and provides the most complete social package that also includes electricity and refuse collection for a large number of households. Johannesburg provides nearly double the number of households with free water, but few receive other basic service allowances.

Figure 15: Number of households receiving Free Basic Services vs Households used to determine Equitable Share

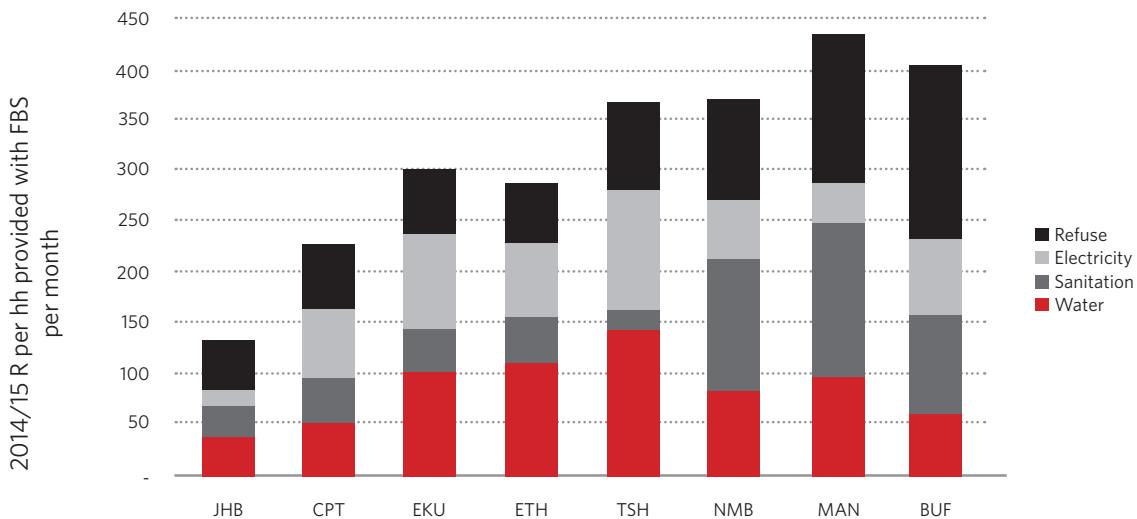


Source: PDG (2017) - Data ex full year forecast for 2014/15 in Table A10

Figure 16 shows that Johannesburg, Cape Town, Ekurhuleni and eThekweni spend the least per household provided with free basic services, in that order but do support the greatest number of households. This subsidy

varies from R140 per month in Johannesburg to R360 in eThekweni. Mangaung spends the most (nearly R450 per household served).

Figure 16: Expenditure on providing Free Basic Water, Sanitation, Electricity and Refuse per household served



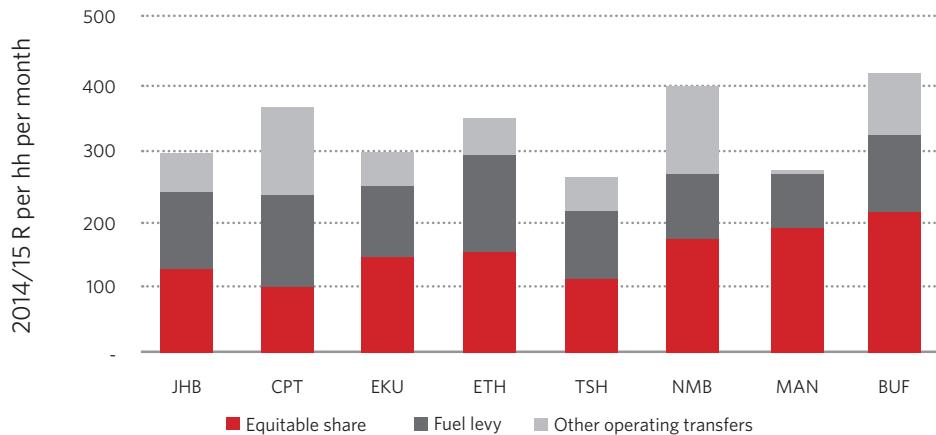
Source: PDG (2017) - Data ex full year forecast for 2014/15 in Table A10

5.3 City Sources of Revenue Generation

The information below is drawn from an unpublished analysis of metro own revenues prepared for National Treasury and GIZ (PDG, 2016). Figure 17 shows that

Buffalo City and Nelson Mandela Bay receive the highest operating subsidies, after controlling for size, while Tshwane receives the least.

Figure 17: Operating subsidies received per household in main cities

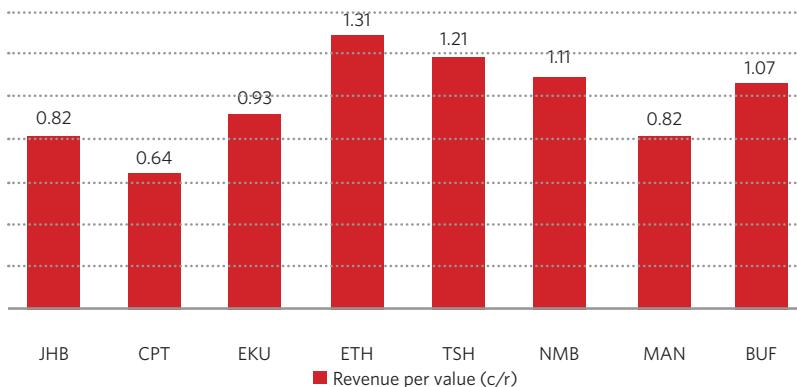


Source: PDG (2016) - Data ex full year forecast for 2014/15 in Table SA18

Figure 18 shows that considering property rates revenue, after controlling for size, eThekweni generates the highest property rates revenue in proportion to its property

valuation base, while Cape town generates the least, and Johannesburg joint second lowest.

Figure 18: Property Rates Revenue generated per Rand value of Property on Valuation roll

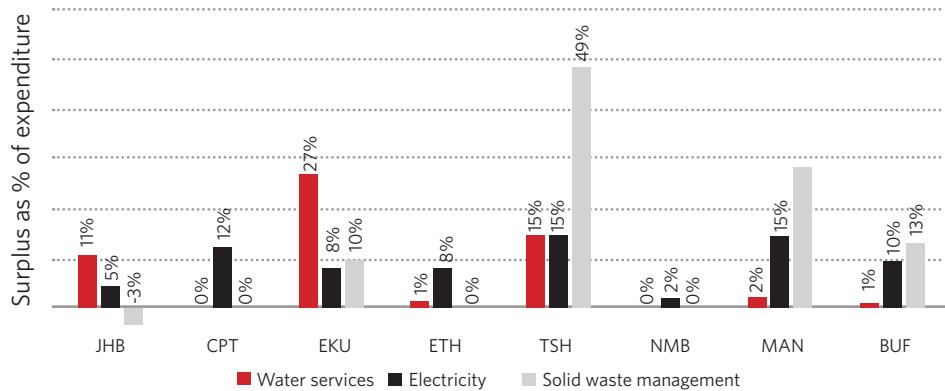


Source: PDG (2016)- Revenue data ex full year forecast for 2014/15 in Table A4, property value data provided by metros

Figure 19 illustrates that all metros generate surpluses on electricity, with some also generating substantial surpluses on water services and solid waste. However, the generation of surpluses varies substantially between cities, with only electricity consistently generating surpluses, in some cases as high as 15%. Nelson Mandela Bay stands out as generating the smallest surplus on electricity as well as the smallest surpluses in total. Johannesburg, Ekurhuleni and Tshwane also generate substantial surpluses on water services. Ekurhuleni,

Tshwane, Mangaung and Buffalo City also report substantial surpluses on solid waste as a percentage of expenditure incurred.

Figure 19: Surpluses generated on trading services per metro (% of expenditure incurred per service)

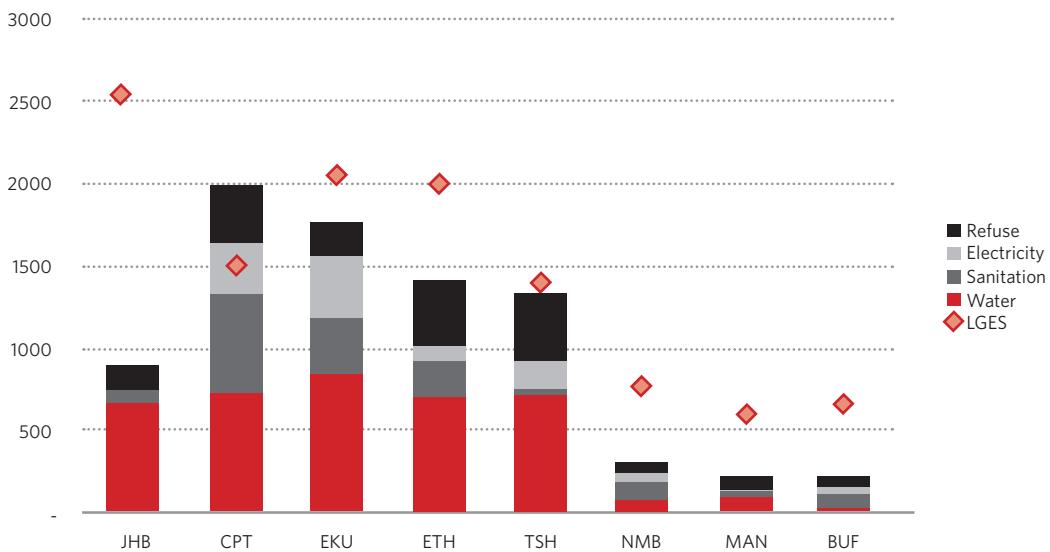


Source: PDG (2016)- Expenditure data ex full year forecast for 2014/15 in Table A2, revenue ex Table A4

Comparing the difference between city expenditure on Free Basic Services and the amount of the Local Government Equitable Share, Figure 20 shows that Cape Town is the only city that spends more than the equitable

share proportion, while Johannesburg has the largest difference between Equitable Share and expenditure.

Figure 20: Expenditure on providing Free Basic Water, Sanitation, Electricity and Refuse in the metros compared to the allocation of Local Government Equitable Share received



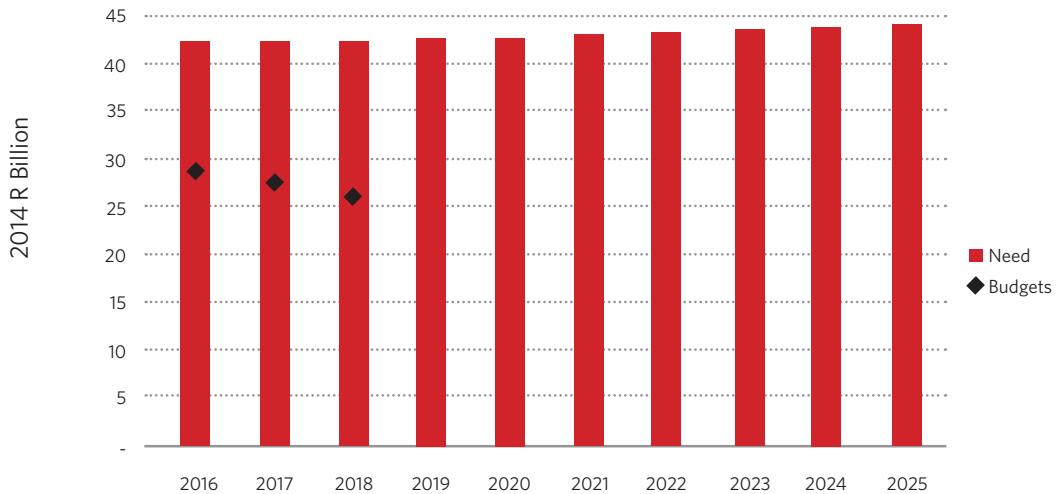
Source: PDG - Expenditure data ex full year forecast for 2014/15 in Table A10, LGES allocations ex '2016 LGES summary and formula' downloaded from National Treasury website

5.4 Estimated Infrastructure investment Requirements

This section provides an estimate of infrastructure investment requirements in the main cities between 2016 and 2025. This is based on the results of an unpublished modelling exercise undertaken for National Treasury by PDG (PDG, 2015).

Figure 21 shows that the average projected expenditure need is R43 billion per annum for all services. On average, cities are budgeting to spend R27.5 billion per annum (in 2014 Rands) over the MTREF period, which is only 64% of the projected need.

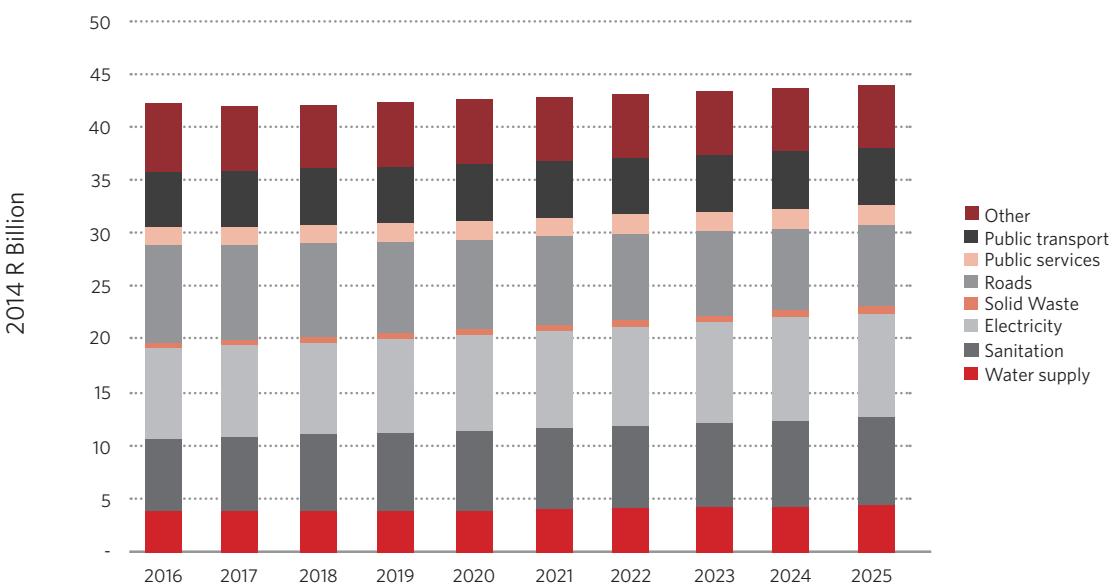
Figure 21: Projected infrastructure investment need per annum in metros compared to projected expenditure



Source: PDG, 2015

Figure 22 below shows the aggregate projected infrastructure investment need per annum in the eight metros, broken down by service.

Figure 22: Projected infrastructure investment need per annum in the metros by service



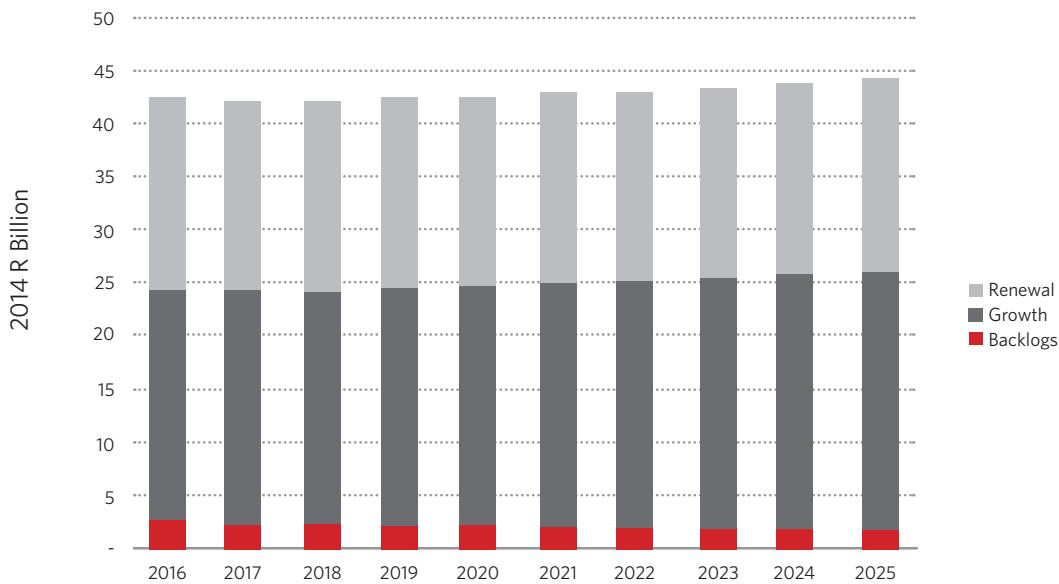
Source: PDG, 2015

The modelling indicates that only R24 billion (5%) of the projected investment need is for backlog eradication⁹. Growth is the most significant driver, accounting for about R228 billion (53%) of the projected investment need

over 10 years. The remaining R179 billion (42%) is for maintenance and renewal.

⁹ Note that the expenditure for backlog eradication is expenditure required to provide adequate infrastructure to those households without access to adequate infrastructure at the start of the model run. The provision of infrastructure to any future households, including those in informal settlements, is classified as 'growth'.

Figure 23: Projected infrastructure investment need for backlog eradication, growth and renewal per annum in metros in the model base run

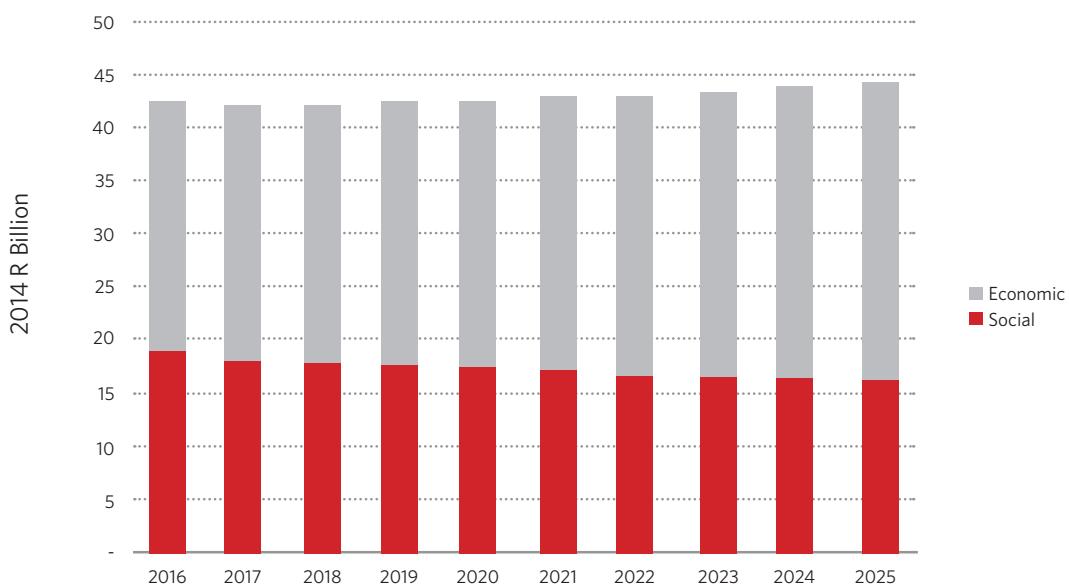


Source: PDG, 2015

The modelling indicates that about R171 billion (40%) of the projected investment need over 10 years is for social

infrastructure, while the remaining R260 billion (60%) is for economic infrastructure.

Figure 24: Projected infrastructure investment need for social and economic infrastructure per annum in metros in the base model run



Source: PDG, 2015

The modelling conducted for this paper finds that R431 billion (in 2014 Rands) is needed for municipal infrastructure in the metropolitan municipalities over the next 10 years under a 'base' scenario that assumes that economic growth nationally will reach 3.5% per annum by 2025.

The infrastructure finance mix currently allowed for in Cities' projected expenditures is sufficient to fund infrastructure investment of around R27 billion per annum, only 62% of the projected investment need. The

modelling suggests that metros can make better use of finance from development charges (and potentially other land based financing instruments) and that levels of borrowing can be increased, such as via Cape Town's recent Green Bond. Even with a more optimistic view on these funding sources, an infrastructure gap of about R54 billion over the 10 years remains, 13% of the projected investment need.

5.5 Key Findings: City Revenue and Expenditure

Cities receive significant capital appropriations through inter-governmental transfers via the Equitable Share and various conditional grant mechanisms - notably the HSDG and USDG - for housing, land engineering services and public services. In addition, their own revenues from trading service surpluses, property rates and borrowing are also used for capital and operating expenditure.

(Boex, 2017) proposes that current appropriations and existing city finances are sufficient to continue to fund the capital and operating expenditures into the future, for the current rates of infrastructure capital expenditure and operating expenditure on basic service delivery. However, infrastructure expenditure requirements, notably for rejuvenation and replacement of existing infrastructure will require more resources over a sustained period of time to arrest infrastructure decline that impacts on service delivery.

Some of the financial resources required can be channelled via existing grant and revenue sharing mechanisms, but it is likely that economic conditions will place pressure on revenue collection and fiscal transfers over the medium term. Further, Cities have some scope to improve revenue collection performance, which is uneven across and within cities.

Notwithstanding the above, municipalities will be required to source additional funds to apply to their specific development priorities. While the CSP-supported BEPP process and USDG allocations assist with this, cities are still limited in their ability to coordinate and re-structure expenditure from human settlements, USDG and transport funds. Fast-tracking the assignment of human settlements and certain transport functions are a necessary part of this, as it will provide greater financial flexibility at the city level. In addition to this, it is suggested that cities should have access to a portion of their own tax revenues generated in their areas to apply to local development. This is especially important, given the need for cities to focus increasingly on economic growth strategies in addition to infrastructure expenditure and operating expenditure on the provision of basic services.

6. Spatial Dynamics Of Human Settlements

This section analyses the spatial distribution of households across South Africa and the intra-city distribution of households according to income and house type. The spatial outcomes from the last 23 years of subsidised housing delivery is also outlined.

6.1 Population and Urbanisation

South Africa has high and increasing rates of urbanisation. About 65% of South Africa's 55.9 million people are urbanised. The average annual population growth rate between 1996 and 2011 was 1.85% (StepSA) but has been declining since 2000 (HSRC, website). For cities and larger towns the average growth rate was 2.87%. Urban populations will continue to grow faster than the population in general, The United Nations estimates that 71.3% of the South African population will live in urban areas by 2030, reaching nearly 80% by 2050. According to work completed for the Integrated Urban Development Framework, this will impact on metropolitan areas to a greater extent than elsewhere in South Africa (Human Sciences Research Council (HSRC), 2013). The 40 million people that will live in urban areas will mostly be concentrated in Gauteng, eThekweni and Cape Town (National Department of Human Settlements, 2015) In contrast to this rapid urbanisation, the proportion of South Africans living in rural areas has fallen by about 10% between 1994 and 2011 (National Planning Commission, 2010)

According to the Draft Housing White Paper, Gauteng and KwaZulu-Natal account for 44% of the total population in the country with 13.2m and 10.9m people respectively.

6.2 Household Size and Structure

Household sizes and structures are changing, and require adaptions in the dominant housing delivery approaches for supply to better meet demand. The average household size has decreased from 4.48 in 1996 to 3.29 in 2016 (Statistics South Africa, 2016). Reasons for declining household sizes shown in Table 3 include declining population growth rates, rural-urban and urban-urban and intra-city migration, reductions in the rates of marriage and a fragmentation of households in order to access subsidised housing. Further, the reduction in subsidised housing delivery forces more people to access available housing opportunities in informal settlements and backyards.

Table 3: Reduction in Average Household Sizes (1996 to 2016)

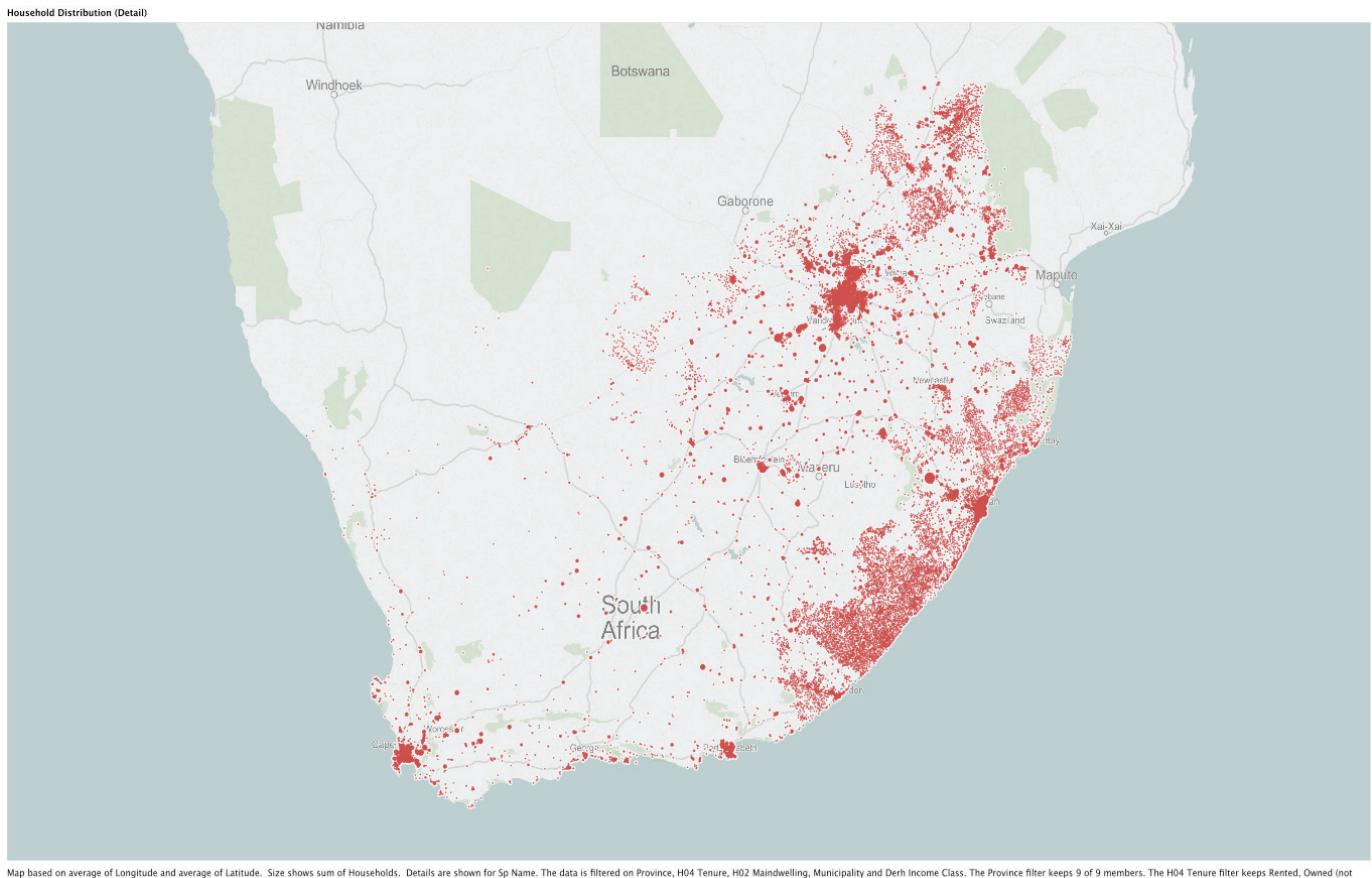
	Census 1996	Census 2001	Census 2011	Community Survey 2016
Average HH size (persons per household)	4.48	4.00	3.58	3.29

Within the worst housing conditions (informal settlements and backyard rooms and shacks), household sizes are almost equally distributed between single people, two-member households (couples and parent and child), and households with three or more members. As household sizes reduce, and these smaller households seek better located and appropriate accommodation, and as the housing demand differentiates, the demand for the product being delivered by the housing subsidy (an owned, small family home generally in peripheral locations) does not necessarily match the prevailing patterns of demand. However this also indicates an opportunity for densifying urban areas through providing smaller accommodation units on a rental basis within the existing city fabric.

6.3 Population Distribution, Settlement Hierarchy and Economic Growth

Figure 25 illustrates the spatial distribution of households in South Africa. This spatial distribution follows general distribution of rainfall (and hence arable land resources), as well as agglomerating in areas of economic growth, specifically historical and current areas of mining activity. The most dense rural areas in the Eastern Cape, KwaZulu Natal and Mpumalanga conform generally to historical patterns of tribal settlement, but were reinforced by Apartheid-era 'Homeland' boundaries and racial relocations. Further, urban concentrations exist around key ports of entry (harbours).

Figure 25: Spatial distribution of households in South Africa



Source: Own analysis from Census 2011

Figure 26 below illustrates the dominance of the five major city regions in south Africa.

Figure 26: Settlement Size & distribution of households in South Africa

Sheet 18



Source: Census 2011, own analysis.

A more informative human settlement hierarchy has been developed by the South African Cities Network and the CSIR as set out in Table 4 below. According to the typology:

"...the spatial distribution of cities, towns and settlements...is set to represent the functional role that cities and towns play in their regional contexts, not a mere hierarchical calculation of population and/or economic production and services." (Van Huyssteen, E., Mans, G., le Roux, A., Maritz, J., Ngidi, M. & Maditse, 2016)

This hierarchy has been developed over a number of years, and has been instrumental in the National Planning Commission's development of the National Development Programme, as well as the DCOG's Integrated Urban Development Framework. The distribution of the different typologies of human settlement are outlined

numerically in Table 4, and shown spatially in Figure 26. City Regions are the dominant urban form in South Africa, and will grow in both population and economic dominance. City Regions comprise 42% of the national population, yet contribute 57% of South Africa's formal national economic activity. Cities, in turn, comprise 7,5% of population and contribute 8,5% of formal economic activity. Together, SA's cities accommodate 50% of the population and generate 65% of formal economic activity. All other settlement types have higher proportions of population than economic activity. Major towns accommodate 19% of the population, and produce 15% of economic activity, while small towns accommodate 9% of the population and generate 6% of economic activity. The rest (high density settlements, sparse rural areas and dense rural areas) comprise 22% of population and generate 13,5% of economic activity.

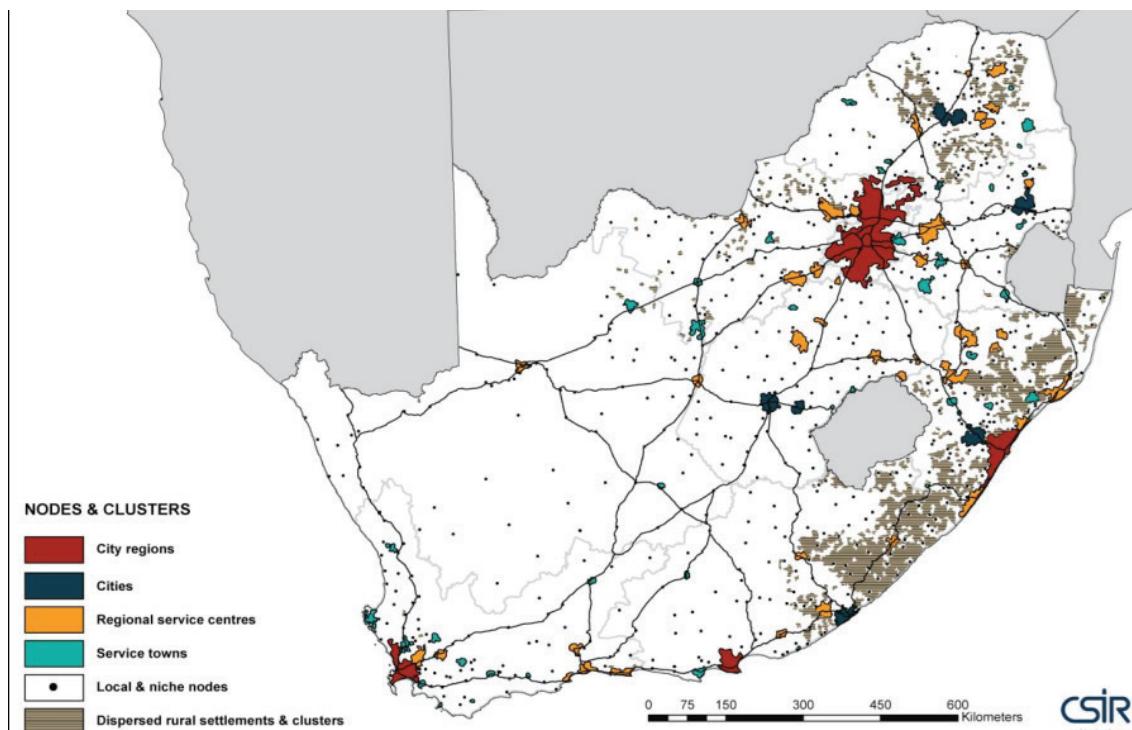
Table 4: Comparative Analyses of Population and Economic Activity Across Settlement Typology

Functional Settlement Type (CSIR/SACN 2013v2)	Area-km	% of National Area	Population 2011	% of National Population	Service Economy (Service Sector GVA (xR1000))	Economic Activity (* Total GVA (xR1 000))	Contribution to Formal Nat Econ Activity	2011 Population In Cities, Towns & Settlements: 77.82%
City Regions	20 575	1.65%	21 856 192	42.22%	758 652	1185 948	56.77%	
Cities	8 225	0.66%	3 876 064	7.49%	102 574	178 276	8.52%	
Total Cities	28 800	2.30%	25 732 256	49.70%	861 226	1 364 224	65.30%	
Regional Centres	18 079	1.45%	7 313 730	14.13%	141 580	229 697	10.99%	
Service Towns	7 232	0.58%	2 720 372	5.25%	47 847	87 232	4.18%	
Total major towns	25 311	2.02%	10 034 102	19.38%	189 427	316 929	15.17%	
Local or Niche towns	29 756	2.38%	4 327 891	8.36%	69 102	121 169	5.80%	
Rural Nodes in High density areas	928	0.07%	191 123	0.37%	2 537	4 850	0.23%	
Total small towns	30 684	2.45%	4 519 014	8.73%	71 639	126 019	6.03%	
High Density Settlements	59 726	4.74%	6 081 912	11.75%	40 074	73 587	3.52%	
Sparse Rural Areas	1 070 931	85.66%	3 036 010	5.86%	51 830	184 994	8.86%	
Dense Rural Areas	35 258	2.82%	2 366 803	4.57%	13 921	23 351	1.12%	
Total rest of South Africa	1 165 465	93.22%	11 484 725	22.18%	105 826	281 932	13.50%	
National Totals	1 250 260	100%	51 770 097	100%	1 228 117	2 089 104	100%	

- GVA Total excludes Construction sector
- SOURCE: CSIR GAP 2013 based on StatsSA Census 1996, 2001, 2011: SACN/CSIR Settlement Typology 2013v2, CSIR TAT (Temporal Analyses Tool) 2013

Source: (Van Huyssteen, E., Mans, G., le Roux, A., Maritz, J., Ngidi, M. & Maditse, 2016)

Figure 27: Spatial distribution of households per settlement category in South Africa

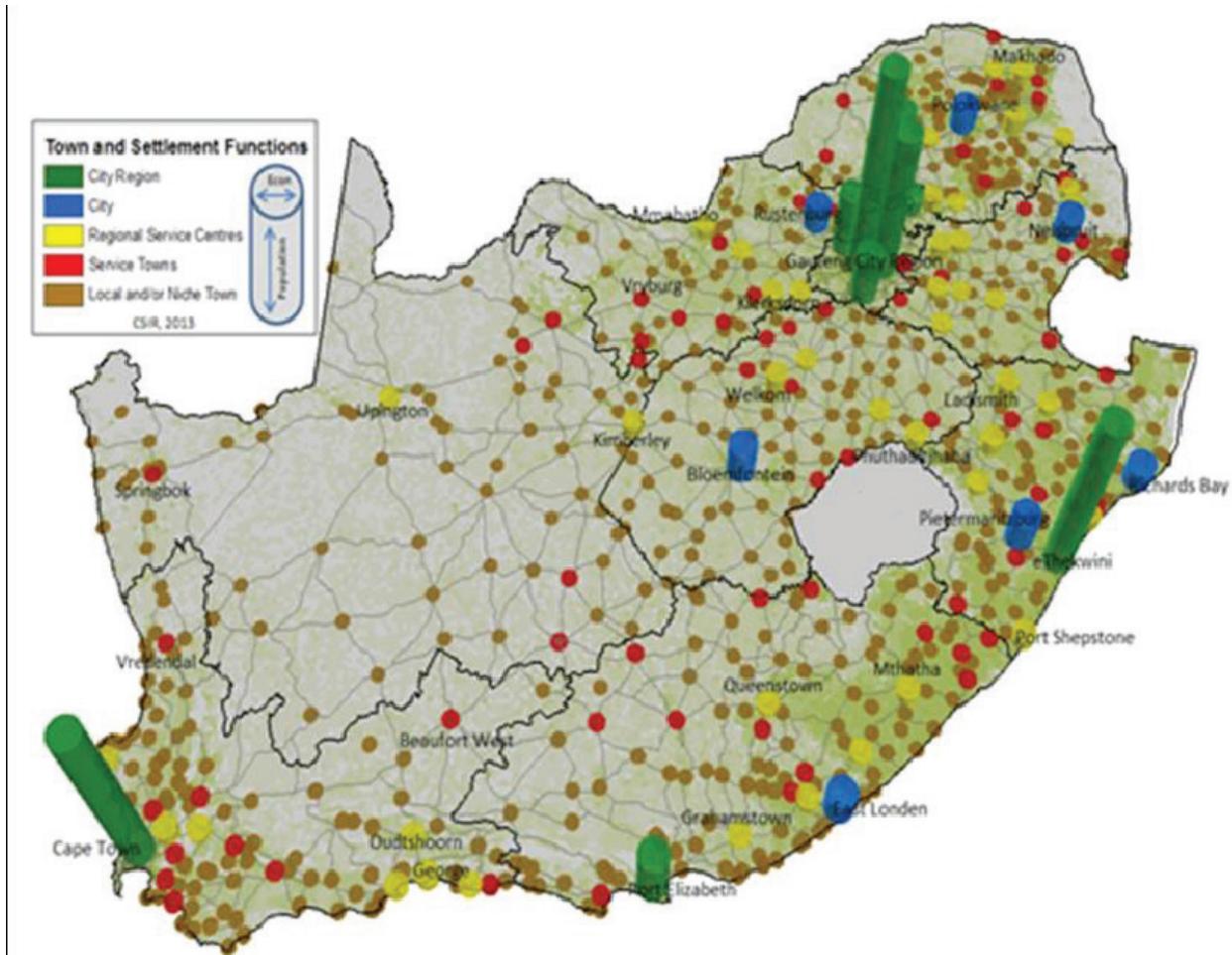


Source: (Van Huyssteen, E., Mans, G., le Roux, A., Maritz, J., Ngidi, M. & Maditse, 2016)

Figure 27 below illustrates the spatial distribution of both population and economic activity, with relative size of population and formal economic productivity shown graphically. This shows the disproportionate economic dominance of South Africa's city regions and to a lesser extent, cities. The need to strengthen the areas that

will continue to produce the majority of South Africa's economic output is clear, as not only are city regions the engines of South Africa's economic growth, but also a continuing attractor for rural to urban and urban to urban migration.

Figure 28: South African functional settlement system



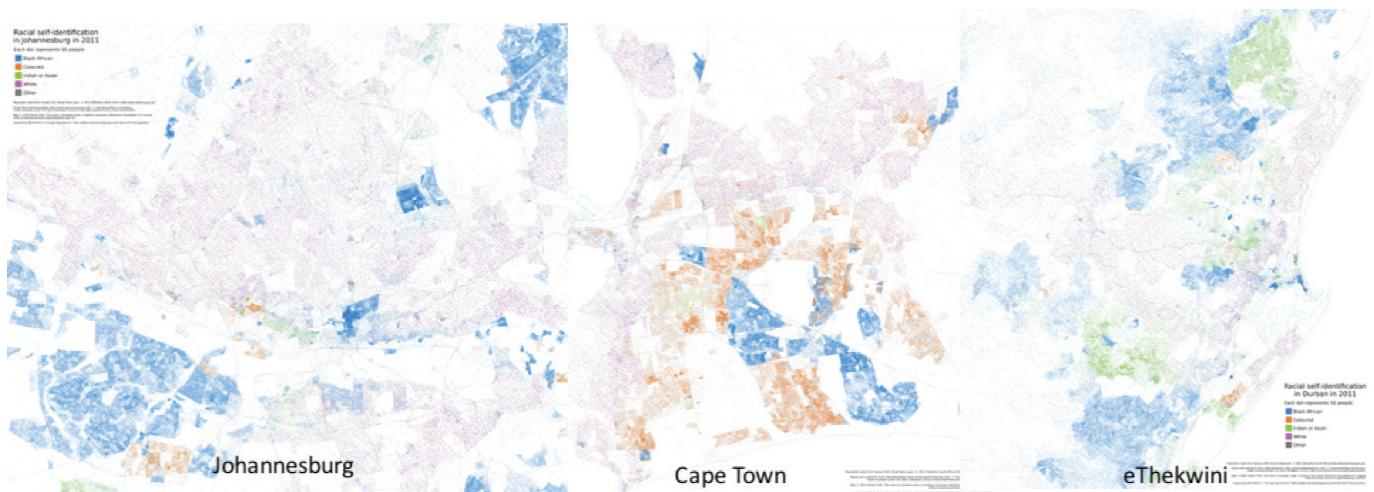
Source: (Van Huyssen, E., Mans, G., le Roux, A., Maritz, J., Ngidi, M. & Maditse, 2016)

6.4 Spatial Dynamics of Human Settlement in Cities

Despite large-scale delivery of subsidised houses, the focus cities have perpetuated the concentration and peripheral locations of most lower-income subsidy

beneficiaries. Figure 28 below shows that racial distributions are still polarised, albeit that historically white suburbs are becoming more racially mixed.

Figure 29: Race distribution in focus cities



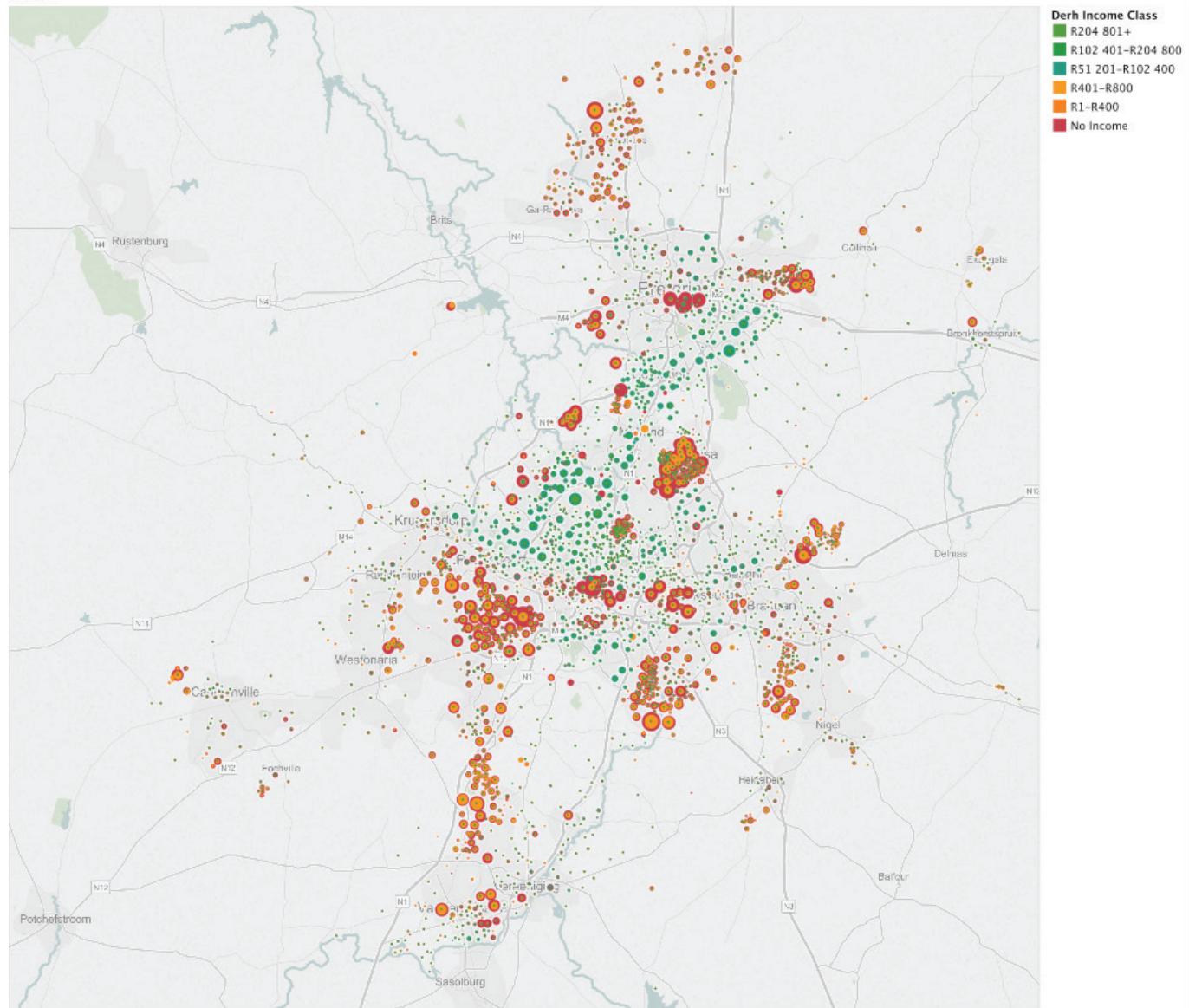
Source: adrianfrith.com, Census 2011

Figure 30 below shows the spatial distribution of households earning less than R3,200 per month in relation to households earning more than R12,400 per month. This clearly shows the exclusion of poorest

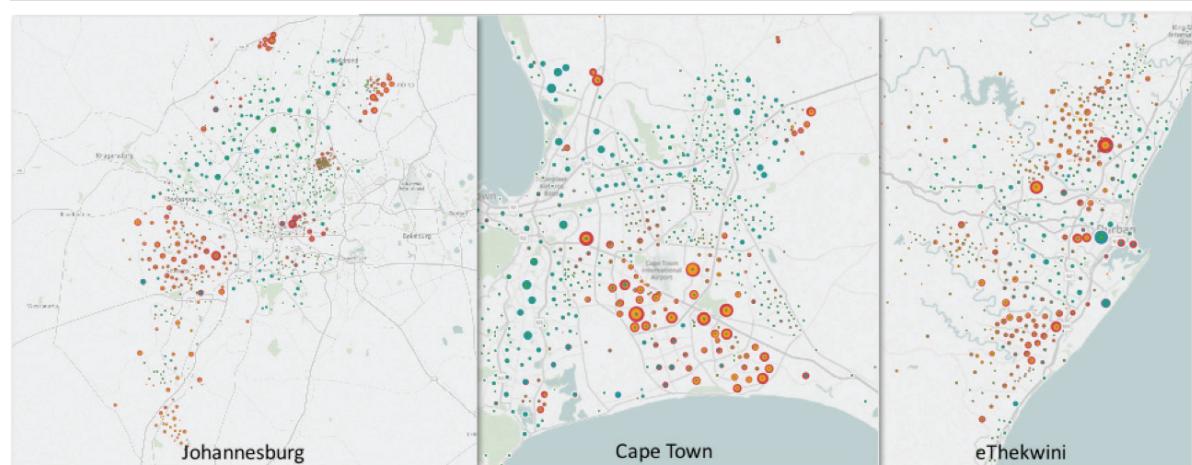
households from the economic centres and inner suburbs of all three cities.

Figure 30: Spatial distribution of lowest and highest income households in Gauteng and focus cities

Sheet 26



Map based on average of Longitude and average of Latitude. Color shows details about Derh Income Class. Size shows sum of Households. Details are shown for Sp Name. The data is filtered on Province, H04 Tenure, H02 Maindwelling and Municipality. The Province filter keeps Gauteng. The H04 Tenure filter keeps Rented, Owned (not paid off), Occupied (free), Owned (fully paid off) and Other. The H02 Maindwelling filter keeps 12 of 12 members. The Municipality filter keeps 234 of 234 members. The view is filtered on Sp Name and Derh Income Class. The Sp Name filter keeps 19 913 of 19 913 members. The Derh Income Class filter keeps 6 of 13 members.



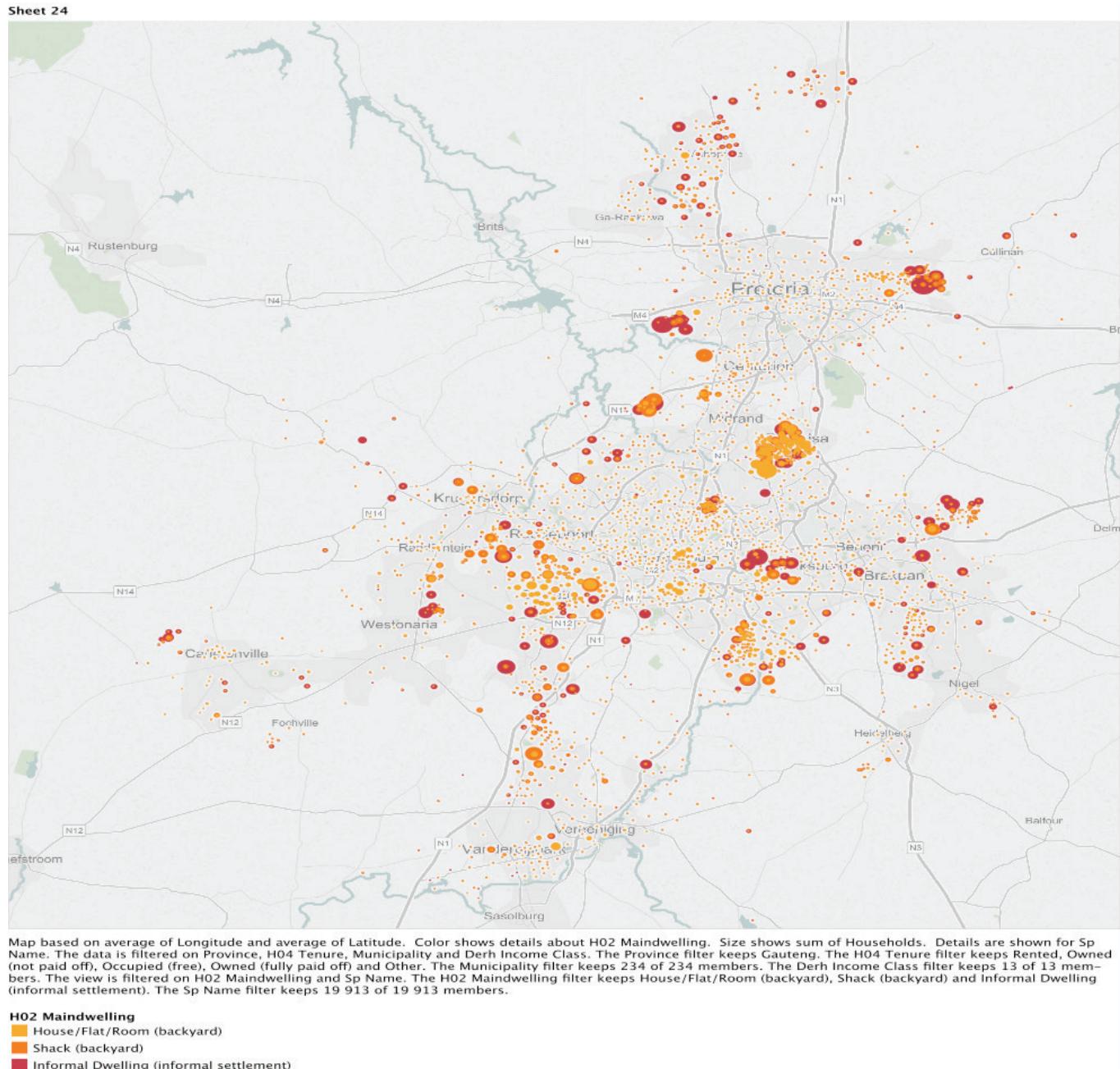
Source: Census 2011; Own Analysis

Large metropolitan areas are experiencing a rapid increase in the number of informal settlements, and the incidence of backyard living. While backyarding contributes to densification of existing suburbs and townships, and are in many cases better located than informal settlements and new subsidised developments, both of these sub-markets keep low-income households out of core cities. Figure 30 below shows the spatial distribution of the worst housing conditions, namely informal settlements and backyard shacks, in the three focus cities.

These two figures illustrate the generally more peripheral

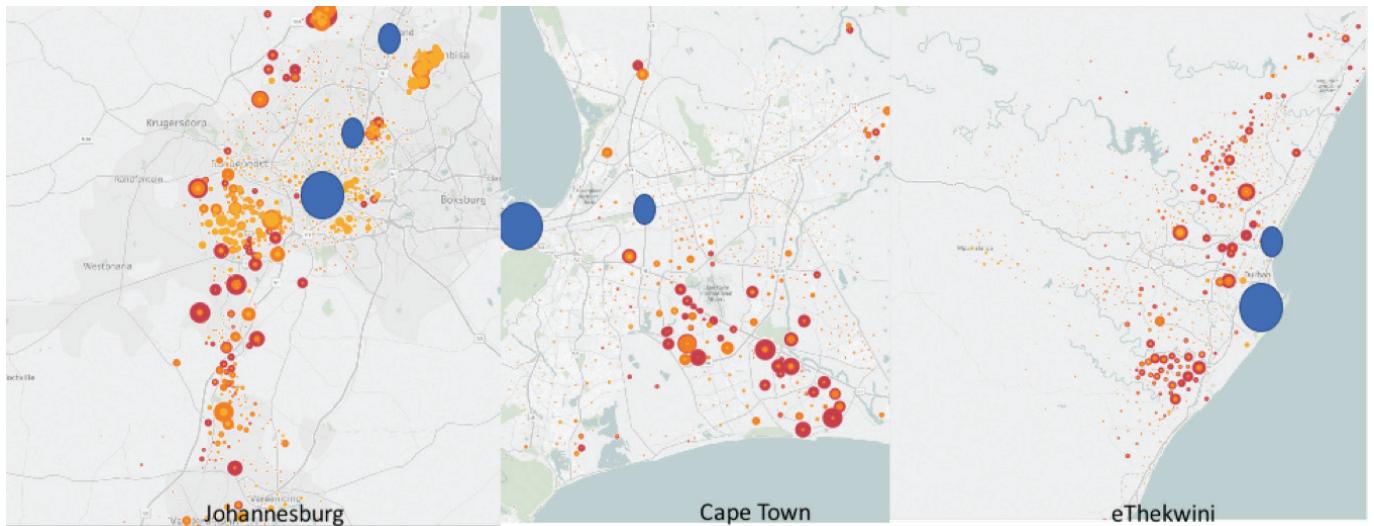
locations of most of the poorest and worst housed households in relation to higher income households, albeit that backyards and informal settlements are often better-located than new, formal housing developments for low-income households. This is a consistent pattern across South Africa's major Cities.

Figure 31: Spatial Distribution of informal settlements and backyarding in Gauteng and focus cities



Source: Own Analysis: Census 2011

Figure 31: Spatial Distribution of informal settlements and backyards in Gauteng and focus cities
(Continued)



Source: Own Analysis: Census 2011

The provision of fully-subsidised housing also reinforces existing spatial marginalisation of low-income households. Figure 32 below shows the spatial distribution of households earning R6,400 and below who live in formal

houses. As many subsidy beneficiary households will fall into this category, this is a proxy for formal, subsidised housing delivery.

Figure 32: Spatial Distribution of households earning below R6,400 per month in formal houses in focus cities



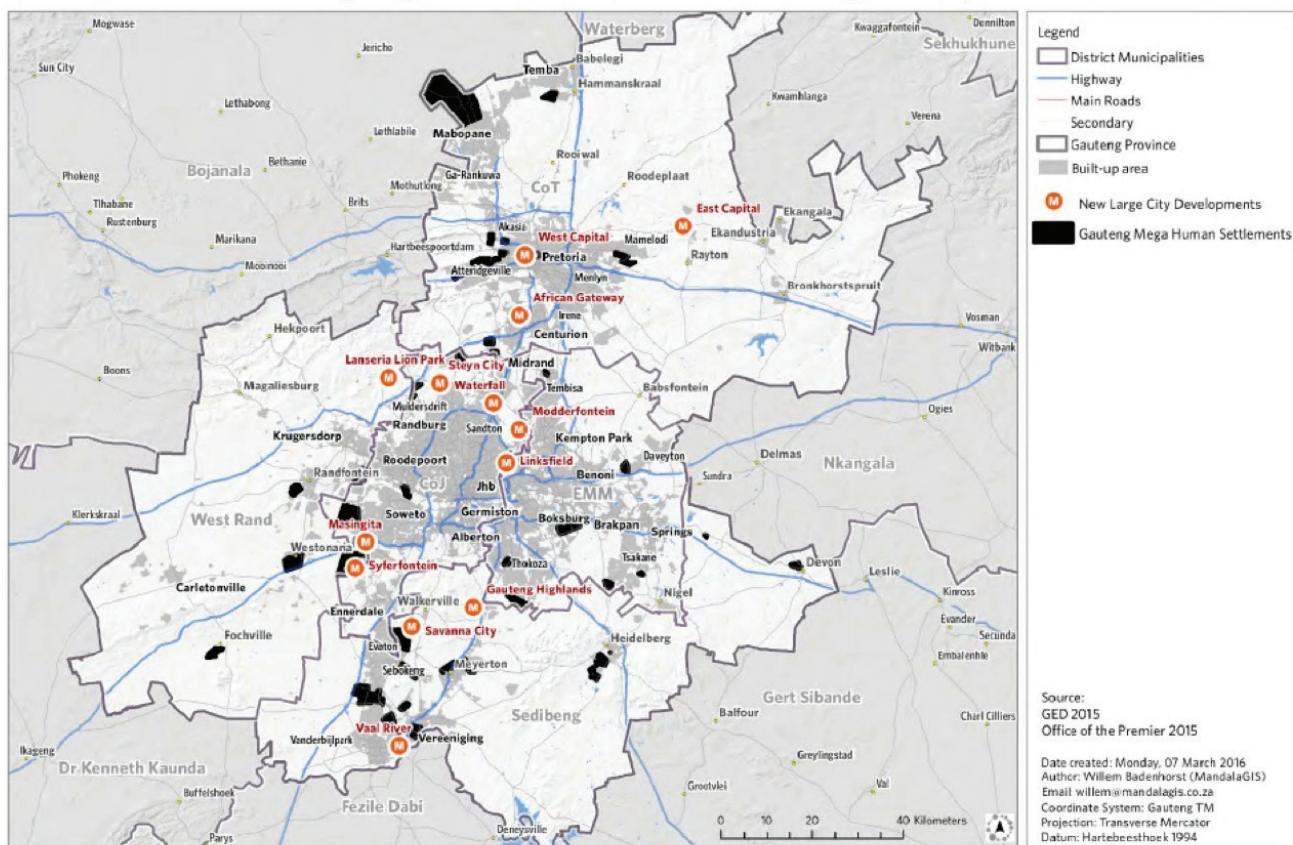
Source: Own Analysis: Census 2011

In addition to this, the location of new human settlements projects (Catalytic, or mega settlements), are shown in Figure 33 below for Gauteng. The generally peripheral locations of these projects is an important concern. While some catalytic and integrated projects have successfully located new housing areas proximate to existing and growing areas of economic activity (such as Cosmo City in Johannesburg and Cornubia in eThekweni), many of the new projects proposed and in implementation

show limited prospects of adequately integrating people into the existing built form, transport networks, social opportunities and economic fabric of our metropolitan areas.

Figure 33: Gauteng Mega Human Settlements

Gauteng SDF 2030: Gauteng Mega Human Settlements and other large developments



Source: (Gauteng Office of Premier, 2016, p. 88)

6.5 Housing Market Dynamics

The 2011 State of Cities Report (South African Cities Network (SACN), 2011) noted that progress in delivering housing to the affordable market segment has been limited. Despite attempts to engage financial institutions through providing subsidies such as the Finance Linked Individual Subsidy (FLISP), a subsidy for households with an income between R3500 and R15 000, very few households have successfully accessed housing in the affordable market (less than 4,000 households per year). Poor performance can be attributed to inadequate supply of suitable and well-located land, slow regulatory processes, delays and costs in providing bulk infrastructure and new services. There is also a mismatch between available stock, what is provided by developers and household affordability.

A key factor that is undermining the market is the housing subsidy and the fully subsidised housing it provides. Increasing building costs and house prices on the secondary market, together with highly inflated stand prices due to land costs and high required municipal bulk infrastructure contributions from developers are eroding value for money for housing products in the affordable housing sector when compared to a subsidy house. This results in distorting demand and willingness to invest, as many consumers are reluctant to pay a higher price for a slightly better product than that which they can get for free. The key issue is that the risk for developers in

developing where the market distortions threaten the value proposition for the seller.

A further issue undermining market performance is that a significant number of subsidy properties have not had their Title Deeds transferred to beneficiaries. A large number of houses delivered through the subsidy programme, particularly in the last ten years despite being for ownership, have not been registered in the Deeds Registry. A study undertaken by Urban LandMark (Urban LandMark, 2011) found that just over one million housing subsidy beneficiaries in South Africa have not received the title deeds to their properties. The obvious value of a title deed is that it protects rights to a property and records changes in ownership. Title deeds also provide individuals with an address, recognising the owner as being part of the municipality, and enabling the owner to secure loans and to pass it on to family members when they die. The consequences of not having a title deed inhibits a household's ability to sell their house thus undermining the ability of the property market to work effectively. In addition it is resulting in the prevalence of informal sales and widespread discrepancy between current occupants and registered owners. This will make it extremely difficult to remedy.

Contrary to the trend in respect of ownership the private rental market, both in respect of corporate and small landlords in inner cities is providing substantial stock and generally more efficiently than the highly

subsidised social housing sector. This is providing a variety of rental stock options ranging from rooms with shared ablutions to family flats. This is not be confused with the slum lords and hijacked buildings that are enabled by failed regulatory control and poor urban management. South Africa's house prices are growing, notably in the affordable housing segment. However, affordable housing delivery is constrained. The Centre for Affordable Housing Finance (CAHF)'s CityMark produces

a housing performance index which indicates the overall performance of South Africa's residential housing market. Figure 34 below illustrates that the performance of housing markets are uneven across metros, but notably stronger in the affordable market segment (houses costing below R500 000).

Figure 34: CAHF Housing Market Performance Index for major metros



Source: CAHF, 2016

Figure 35 below shows the market activity in different segments of the housing market, and the rate of change in

total house sales and in the number of bonded sales per city.

Figure 35: CAHF Housing Market Activity in different market segments in major metros



Source: CAHF, 2016

Municipalities prepare IDPs and MSDFs to guide the location of housing projects that they are responsible for. However the full housing delivery function has not been devolved to municipalities, as was intended in the Housing Act (1997) and the Accreditation Frameworks (1996 and 2012), and PDHS continue their mandated role to provide housing in municipal areas, often without consideration of municipal plans.

The announcement by the previous Minister of Human Settlements regarding the 46 significant “mega city” projects in the country creates a level of synergy between the national, provincial and municipal housing functions. However, a strong coordinative effort will be required to see these ‘mega-cities’ and mega-projects delivered, especially given the mismatch in constitutional responsibilities for land development and human settlements provision between municipal and provincial spheres of government.

6.6 Key Findings

While South Africa’s cities have been densifying, the last 22 years of development has (with a few notable exceptions) perpetuated racial concentrations and the peripheral locations of low-income (mostly black) households.

Generally, new subsidised housing areas are not well-located in relation to areas of existing or new economic opportunity. This is mainly due to the approach to implementation of subsidised housing programmes, which has focused on scale delivery in large settlements, predominantly located on city peripheries due to the availability of large tracts of inexpensive land. These patterns are still being perpetuated by the current focus on large-scale ‘catalytic’ and mega projects. While these developments generally incorporate different income groups, densities and tenure types, they remain predominantly located on the urban periphery.

Cities are the ‘engines of growth’ in South Africa, and this growth is critical to meeting human settlements needs. Economic growth drives income growth, and hence improves housing affordability and mobility in housing markets. While economic activity is concentrated in cities, it is unevenly distributed, and not uniformly accessible by urban residents. Improving the match between places of residence and economic opportunity is an important city restructuring objective.

The potential for cities to retain some proportion of revenues generated in their jurisdictions to apply to their specific city growth requirements should be considered.

7. Comparative Analysis of State-Supported Human Settlements Programmes

This section compares and contrasts the key housing subsidy programmes, in order to understand the key trade-offs between programmes in respect of upfront capital expenditures, implicit subsidies, the costs and benefits for households, the fiscal sustainability of the programmes, and their likely spatial outcomes.

7.1 Subsidy Programmes, Targets and Implementation Effectiveness

South Africa’s human settlements subsidy approach is intended to meet different needs in different housing sub-markets. The intent is broadly to support all very poor households (earning less than R3,500 per month) to access a free home, and to simultaneously meet tenure and service needs through upgrading of informal settlements. For households earning more than R3,500 per month, but not able to afford market housing, subsidised social rental housing and FLISP subsidies are intended to improve effective demand. Finally, through inclusionary housing policies, lower-income households are meant to be facilitated to access affordable housing in higher-income areas. Finally, a series of incremental interventions are established to assist critical needs groups to access basic services and shelter, through emergency and transitional housing programmes.

Current human settlements subsidy programmes are not adequately meeting housing needs within all market segments, although substantial numbers of subsidised houses are still being constructed and informal settlements are being upgraded. Table 8 below summarises the key subsidy instruments being implemented, their applicability to the Urbanisation Review and the household income groups they target. Three broad income groups are shown: low income (households earning below R3,500 per month), medium Income (households earning between R3,501 and R15,000 per month), and high Income (households earning above R15,001 per month). The current effectiveness of these programmes in relation to the scale and needs in their targeted sub-markets are indicated. This shows that a number of programmes that are intended to meet specific needs are not implemented, or implemented at very limited scale. Further, with the exception of the upper-income private housing market, all other submarkets are not functioning adequately.

Table 5: Application of Subsidy Programmes to Housing Delivery in Different Income Groups

No.	Subsidy Programme	Code	Income Group			
			Relevance to the UR	Low Income (<R3 500)	Med Income (R3 500 - R15 000)	High Income (>R15 000)
1.0	Formal Market Housing (MH)	MH	Y			
1.1	Market Housing Very Large (<200m ²)	MH-X	Y			Y
1.2	Market Housing Large (100 - 200m ²)	MH-L	Y			Y
1.3	Market Housing Medium (50 - 100m ²)	MH-M	Y		Y	Y
1.4	Market Housing Small (<50m ²)	MH-G	Y		Y	Y
1.5	Subdivided Properties	MHSD	Y		Y	Y
1.6	Second Dwelling Units	MH-2d	Y		Y	Y
2.0	Financial Interventions (FI)	FI	Y			
2.1	Individual Subsidies	FI-IS	Y		Y	
2.2	Finance Linked Individual Subsidy	FI-FLISP	Y		Y	
2.3	Inclusionary Housing	FI-INH	Y	Y	Y	
3.0	Social & Rental Interventions (SR)	SR	Y			
3.1	Institutional Subsidies	SR-IS	Y	Y	Y	
3.2	Social Housing	SR-SH	Y	Y	Y	
3.3	Community Residential Units	SR-CRU	Y	Y		
3.4	Gauteng Backyard Rental	SR-GBY	Y	Y		
4.0	Incremental Interventions (II)	II	Y			
4.1	Integrated Residential Development	II-IRDP	Y	Y	Y	
4.2	Enhanced Peoples Housing Process	II-EPHP	Y	Y		
4.3	Serviced Site Programme	II-S&S	Y	Y	Y	
4.4	Informal Settlement Upgrading	II-UISP	Y	Y	Y	
4.5	Emergency Housing	II-EH	Y	Y		
4.6	Transitional Housing	II-TH	Y	Y		
5.0	Rural Interventions	RI	N			
6.0	National Spatial Programmes	NS	N			

■ Programme implemented at scale

■ Programme implemented at limited scale

■ Programme not currently implemented

Source: Own Analysis, National Subsidy Determination (2014)

The subsidy regime in South Africa is failing to make any significant impact on middle-income households' housing needs and is constrained with respect to its ability to meet low-income households' demand. The table shows that while a range of subsidy instruments are proposed in the middle and lower income groups, the majority of housing is delivered through two key programmes: IRDP (fully-subsidised housing) and UISP (informal settlement upgrading) in urban areas. All other subsidy programmes have limited impact in terms of their scale of implementation and overall impact on urban areas. Middle-income households have severely constrained housing options due to the implementation difficulties and resulting dysfunctionality of the instruments intended to assist them (Social Housing and Finance Linked Individual Subsidy and individual subsidy). Recent changes to the FLISP subsidy are intended to improve this 'gap' market

performance but have not yet created noticeable take-up of this subsidy.

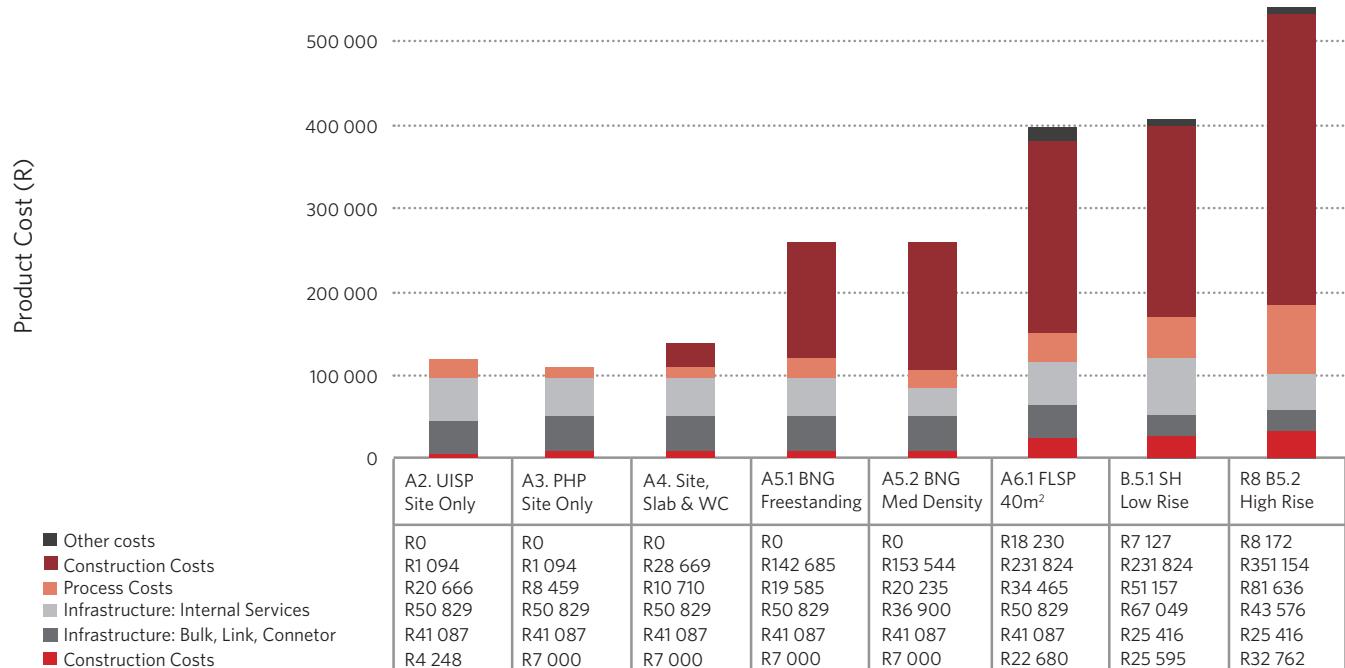
7.2 Subsidy Capital Expenditure vs Estimated Delivery Costs

Analysis shows that current subsidy levels are not sufficient to meet the inflating costs of the housing products they are intended to finance. The Centre for Affordable Housing Finance in Africa (CAHF) has commissioned work on the Subsidized Housing Value Chain in South Africa. This work commences with a detailed breakdown of the intended specifications of the housing products each subsidy programme is intended to produce, and the current subsidy quantum (as set in 2014) for each main subsidy instrument (UISP,

PHP, BNG, FLISP and SH-RCG)¹⁰. From this, a 2017 cost was calculated by a Quantity Surveyor with deep understanding of the subsidy programmes and delivery costs. Figure 36 shows the calculated costs (2017) of developing these specific products intended to be covered by the subsidy quanta. This includes land costs; bulk, link and connector infrastructure contributions¹¹

internal services infrastructure (roads and storm water, water reticulation, sanitation reticulation and electricity reticulation); Process costs (including compliances, approval costs, social facilitation and support services costs where applicable, professional fees and project management costs); house construction costs, and other costs where applicable.

Figure 36: CAHF Calculated Capital Costs of Key Subsidised Housing Typologies



Source: CAHF Subsidised Housing Value Chain (Draft Data); HUIS model.

There are a few notable observations from the cost estimates in this Figure. The cost differentials between the lowest-subsidized product (a UISP regularized and serviced site) and the highest-cost product (a high-rise, new-build social housing unit) is nearly five times. This difference in cost shows the high fiscal impact of driving a restructuring agenda using subsidized rental housing at scale as a restructuring instrument. This ‘breadth’ versus ‘depth’ tradeoff has resulted in social housing delivery being limited to a very small proportion (less than 2%) of the total subsidy housing delivery programme. A further issue is the very limited cost difference between a freestanding BNG unit and a medium-density (duplex, attached and semi-detached) BNG configuration. Given the density increases accruing from the latter, more attention should be given to this typology as a way of improving urban form and potentially accessing better-located land.

Regarding the cost of social housing units, the differential in cost between a BNG house and a social housing unit results from higher quality, higher-density construction

of social housing, as well as provisions for higher land costs. The cost increase between medium-density and high-rise social housing units clearly shows that there is also a significant cost premium on vertical development, due to South Africa’s prevailing construction standards and safety requirements. If a higher-rise construction typology is required, this will require higher levels of investment. The difference in cost of the BNG and Social Housing unit (and of the subsidy provided through these two programmes) illustrates the importance and price tag attached to the city restructuring potentials of the social housing product. During the design of this programme, this cost differential was also qualified due to each subsidized unit housing multiple households over its effective lifespan.

The calculated cost of the notional FLISP house is also notable. This unit is specified above the BNG product, and is modelled on an assessment of the lowest-priced bonded housing in Gauteng being produced at reasonable volumes at present. Bearing in mind that at a R3,500 income, a house is given away for free and that at a R3,501

¹⁰ Note that the Rural Housing Subsidy and other subsidy instruments that are not widely implemented are not included in this analysis. Only subsidies that deliver at some scale in urban areas are considered here.

¹¹ Bulk services costs are calculated per typology based on the City of Cape Town Bulk Services Calculator (2015), developed by PDG. This is deemed to provide the most accurate reflection of true bulk services requirements.

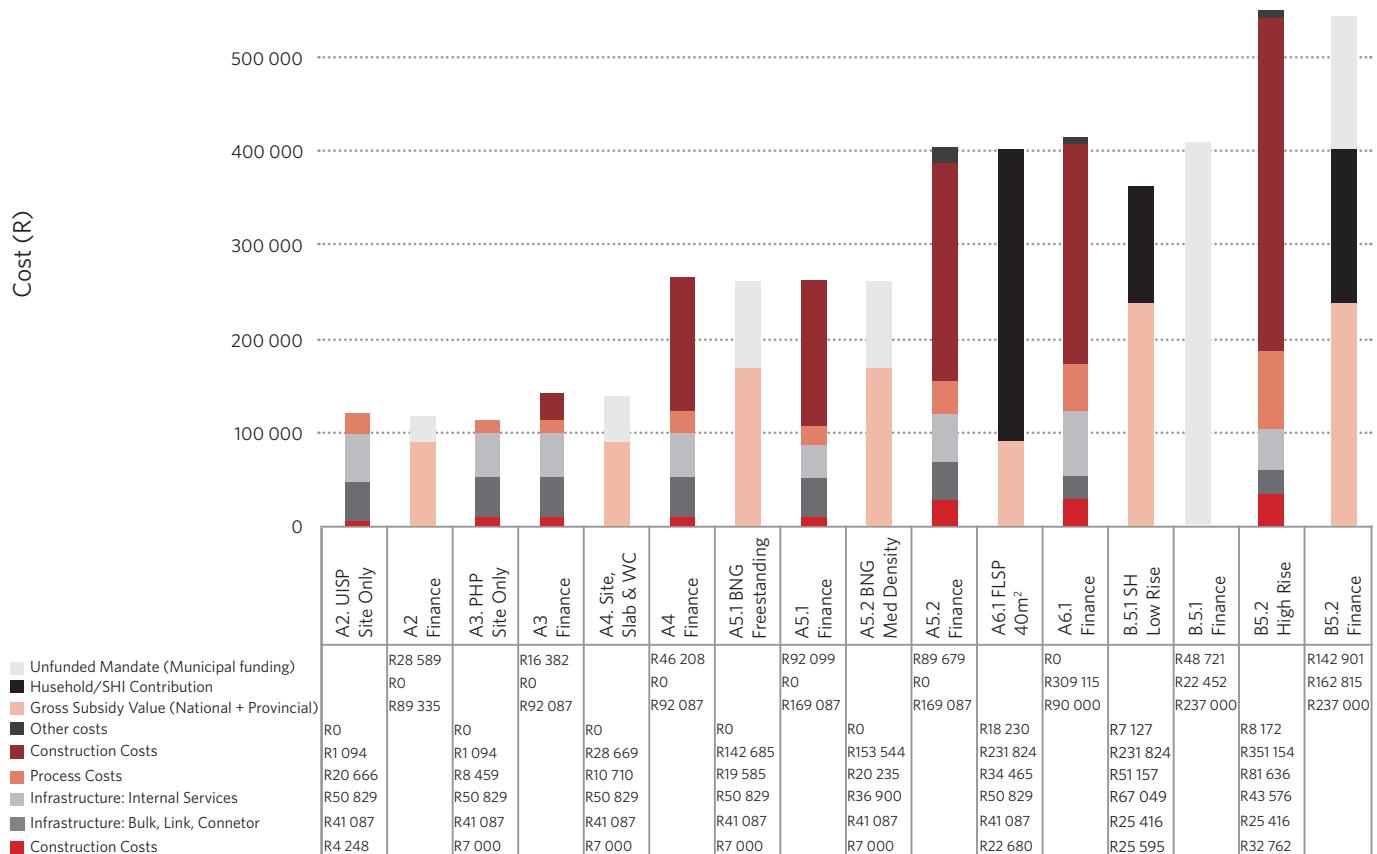
income, a financeable product that is available on the market must be found and must be affordable, even if a FLISP subsidy is available, it is clear why the 'gap' in the housing market results.

Bulk and internal service installation are significant cost components. The estimated costs of land, bulk and internal infrastructure are included in the costs in Figure 37. The bulk service costs are based on the City of Cape Town's Development Contribution Calculator, developed by PDG (Town, 2014). However, these costs are generally the responsibility of cities, and are funded through other

grant programmes and cities' own resources, mostly the USDG. It is notable that bulk and internal servicing costs are very similar across the subsidized housing products – it is primarily the top structure costs that vary significantly.

Figure 38 contrasts the per unit calculated costs of development with the current national subsidy determinations (2014), and calculates the funding gap between the product costs and subsidy financing.

Figure 37: CAHF Comparison of Capital Costs and Subsidy Provisions of Key Subsidy Housing Typologies



Source: CAHF Subsidised Housing Value Chain (Draft Data); HUIS Model

The large and increasing funding gap between subsidized housing products and the available subsidy quanta across all subsidy products is evident. While the subsidy values shown here do not include other sources of funds available to cities such as the USDG and cities' own resources there are still significant under-funded portions of subsidized houses that cities are required to fund. HSDG subsidies generally only cover specific project cost components. USDG is required to finance bulk and internal services. Land costs are generally funded partially out of USDG, and partially from cities' own resources. But even this is often not sufficient to make projects financially feasible.

Multiple sources of financing must be coordinated to implement a number of separately funded mandates in subsidized housing projects. In the case of Social

Housing, RCG and Institutional subsidies from provinces must be coordinated with city contributions of land and services to make projects viable for SHIs. To develop bulk services, cities generally rely on USDG funds. Where this is insufficient, Equitable Share and own resources may also be used. While municipalities are believed to have sufficient sources of revenue to continue providing services at current levels of investment (Boex, 2017 and PDG, 2016), the capital costs of bulk services provision, specifically in the context of distant catalytic 'mega' projects, are often substantial.

The lack of inflationary increases to most subsidy quanta since 2014, while building cost inflation continues to increase above inflation, leads to discrepancies between real construction cost and subsidy available. Inflation alone between 2013 and 2017 has added 25% to costs,

while building cost inflation (for flats and townhouses, as an example), have increased costs by 42% over the same period (BER Construction Inflation figures). This is exacerbated in metropolitan areas (specifically Cape Town), where land and building costs are significantly higher than the country average, and increasing at a more rapid rate than in other areas. To cater for this difference, municipalities apply a range of solutions. Geotechnical variations are not included in the subsidy quanta in Figure 36, but are routinely claimed irrespective of whether they are really justified. Alternative funding sources may be used, such as the OpsCap programme, and there are indications that in certain cases more than one subsidy are used to fund each unit (Rebel Group, 2016a). It is notable that the Department of Human Settlements has not learned from two other cases over the last twenty years where the impacts of inflation has had a significant impact on the delivery rate and quality of subsidised housing (1998 and 2006), as well as from the recent Social Housing Policy Review that shows the impact of the inflationary erosion of the RCG subsidy on the feasibility of Social Housing projects (Wilson, 2015)).

7.3 Land and Locational Issues

While all South Africa's policy instruments demand good location and sustainable settlement outcomes for housing, the basis on which land is accessed for subsidised housing negates this from the outset. Land costs remain a very small proportion of total subsidised housing costs, and land cost is a key driver of subsidized housing location. Only notional land costs are included in the costs in Figure 10, based on estimates of current average land costs for known projects. However, as land costs are mainly cities' responsibility, per-unit land costs could be significantly more than shown but are generally not much more than the few thousand Rands per unit indicated here. USDG expenditure on land acquisition by all metros is very small (Berrisford & Graham, 2014), and cities' own resources are often not applied sufficiently to land purchase. Reasons cited for this by city officials are the high cost and low availability of reasonably priced, well-located land, and limiting financial expenditure on land in order to focus on engineering services, which are more quantifiable and often higher political priorities. Yet, a recent focus group workshop at the Urban Real Estate Research Unit at the University of Cape Town showed that private developers still find well-located, affordable land for private property development. It is therefore the lack of sufficient investment in land by cities, rather than the lack of land, that seems to be the key problem.

The scale of projects is a further mitigating factor. The focus on large project implementations also relies on the availability of substantial parcels of vacant land. For instance, a 5,000 unit development with an average property size of 200 m² requires a site of a million m² (100 Ha) for residential stands alone, or closer to 1,4 million m² (140 Ha) including roads and non-residential uses. This creates a 'perverse incentive' of poor location, in order to find such large, available, affordable parcels of land. There is only one way to ensure good access for

subsidised projects, and that is to buy it through good land locations, or through accessing available, vacant state landholdings.

The implications of this are that subsidised housing programmes are generally not constructed on well-located (more expensive) land, which perpetuates spatial marginalisation of poorer households. More recently, the City of Cape Town has Identified, packaged and partnered with Social Housing Institutions to release and develop 19 strategic landholdings and buildings for social housing development, while the City of Johannesburg has recently called for proposals on 16 parcels of land and buildings for Social Housing and (if not suitable), private housing development. eThekwin has also commenced a process of identifying and releasing strategic land for social housing. In addition, Cape Town has identified and released key strategic landholdings for infill developments, and Johannesburg is in the process of doing this in the inner city and along TOD corridors.

7.4 Costs & Benefits for Households

The subsidised housing programme has had a pervasive influence on South Africa's urban form and housing markets, as well as on the implications for households. Access to a free house has had substantial benefits for many households, in terms of accessing secure tenure, services and a home. CAHF estimates that 25% of all formal houses in South Africa are subsidised houses, and nearly 30% of all South African households reside in, or on the properties of subsidised houses. However, with this home comes greater responsibilities and often increased living costs too. Home maintenance and rates and service charges add costs to household budgets. In many areas, scholars and working people are required to travel long distances and consume high proportions of household budgets on travel costs in order to access city amenities.

Well-located housing can substantially improve households' access to amenities and economic opportunity, but can also be costly for lower income households. A cost benefit analysis between RDP housing and Social Housing (Social Housing Foundation (SHF), n.d.) showed that social housing had significant locational, security, health and travel advantages, especially for single mothers. But that at the same time, living in well-located rental housing placed added financial burdens on occupants due to higher rent and recovered service charges, and greater costs of urban living. There was also not necessarily a direct correlation between the location of social housing and the location of occupants' places of employment.

Subsidised housing is used as a base for other economic activity by many households, or is leveraged for economic gain through rental of space or rooms. However, studies by the author have shown that backyard rental markets are very dependent on location (South African Cities Network, 2014). Furthermore, recent statistics show that

over one third of all subsidised houses are rented out. While this may be an economic strategy for beneficiaries, it does also indicate a mismatch between house and desired place of living.

7.5 Fiscal Sustainability of Current Human Settlement Subsidy Programmes

The subsidy programme in the way it is currently framed is not able to supply sufficient houses to meet the number of households requiring support in the cities, primarily due to the high cost of providing a subsidy house. This results in high levels of informality which undermines both the physical and social health of the population and inhibits households from actively improving their housing conditions due to the insecurity of their tenure, as well as the political promise of a free state provided house. In addition households in informal housing conditions do not contribute either rates or services fees to the cities revenues, despite accessing services, which undermines the sustainability of municipalities.

All recent fiscal modelling exercises undertaken on South Africa's housing sector and subsidy policy indicate that at current subsidy levels, the programme is not fiscally sustainable. The problem is two-fold. Firstly, rate (breadth) and secondly scale (depth) of subsidised housing provision. During 2012 the Financial and Fiscal Commission undertook an options analysis of alternative paradigms for housing delivery in South Africa (Financial & Fiscal Commission, 2012). As part of this process an evaluation of different housing policy scenarios was undertaken. The analysis found that it is unaffordable for South Africa to provide all households in need with a fully subsidised formal house at current standards. To do this would cost an indicated R641-billion of government funds. If the standards of the subsidised product provided is reduced to for example a serviced site and private sector participation is increased (both in respect of private sector suppliers and households) then the cost to the state drops to one third of this cost (i.e. R224 billion). If interventions that make the city more compact and efficient are implemented the cost to the state drops marginally to R213-billion.

Budgetary limits on the human settlements appropriations place pressure on the number of subsidies that can be allocated. For instance, the 2014 to 2019 MTSF target is to deliver 1.5 million 'housing opportunities' over the next five years. Even if this were to be achieved (which is highly unlikely with current delivery rates), this will not meet the existing estimated 'backlog' in the country, not taking household growth into account. Further, as South Africa's economy stagnates and revenues decrease, pressures on the fiscus will increase.

Various stakeholders have called for a shift in housing policy focused on reducing the extent of support provided by government. In October 2012 the Financial and Fiscal Commission recommended supply side options which mobilise household and private firm responsibility and capacity.

This view was supported in the National Development Plan which was released in 2012 by the National Planning Commission with the aim of eliminating poverty and reducing inequality by 2030 (National Planning Commission, 2010) It has a strong message that individuals should do things for themselves rather than be dependent on government. The plan proposes that state investment should shift away from building single houses to investing in serviced sites and the public environment.

The Draft Housing White Paper supports this view, proposing a more nuanced approach than the current programme whereby various forms of assistance will be provided on a sliding scale using predetermined income categories. A hierarchy of interventions targeting poor and moderate income households depending on severity of need is proposed. In the main the White paper proposes that a more self-help approach is applied that comprises a serviced site and raft foundation, in a well located settlement and the provision of professional assistance to households to complete the house on a progressive basis.

Current subsidy regimes also create significant operating expenditure implications. Maintenance of municipal infrastructure networks is a significant, increasing fiscal burden¹². Water leakages, sewer blockages, electricity theft and road maintenance are worsening crises that will place fiscal burdens on municipalities into the future. While maintenance and upgrading of aging and newer infrastructure networks has been systematically neglected. The low-density urban form has increased the scale of the networks that require maintenance. In other areas, where organic densification has occurred, infrastructure networks are over-capacity and require upgrading.

Where social housing is developed, SHIs generally ensure rates and service charges are paid. Other fully-subsidised products have uneven and often area- determined rates and service payment histories. Cf Bram Fischer, where a recent project by TUHF found a 70% to 80% non-payment for rates and services (unless via pre-paid meters for electricity), versus Masiphumelele in Cape Town, with an 80% payment record.

7.6 Spatial Outcomes of Subsidised Housing

Notwithstanding the significant achievements made in relation to housing delivery, criticism has been levelled at the subsidised housing programme for focusing on

¹² The Executive Mayor of Johannesburg is on record as saying the City of Joburg faces a fiscal deficit of R140-billion in infrastructure in 2017.

units delivered rather than the creation of sustainable human settlements. While there has been greater focus on improving the nature of urban developments produced through the BNG policy over the last decade, concerns remain regarding the spatial and settlement legacy being created by these policies of mass housing development. Numerous review processes have identified that South Africa's urban areas still retain many features of the pre-democracy Apartheid urban areas¹³.

The need for rapid development, combined with the lengthy township establishment processes, focuses subsidised housing developments on large parcels of land in order to deliver 'mega projects' of thousands of units. However, with few exceptions such land parcels are peripherally located. Therefore, even if IRDP projects are integrated in their design and land use, their locations in general hamper access to city amenities, and to their long-term urban growth prospects. The basic design principles upon which the IRDP subsidy instruments are structured do not create settlements that meet the stated national objectives of densification, compaction, and 'verticalisation' of cities. These subsidy instruments remain fundamentally housing-focused, not locational, or urban structuring subsidies. Focus is on constructing living spaces that meet predetermined minimum spatial and amenity standards, not on facilitating urban settlements of a specific type.

The majority of state support for low-income subsidized housing is therefore channelled through instruments that perpetuate low-density, peripheral development characterised by race, income and spatial marginalisation and a separation of land uses. Low-density urban sprawl creates inefficiencies in infrastructure installation and maintenance, long commuting distances, and contributes to high carbon footprints and other urban economic inefficiencies, including a reliance on on-going transport subsidies. Land use separation, specifically between places of employment and places of residence and limited focus on higher-density corridors and nodes in urban areas exacerbate these inefficiencies.

While, ironically, South Africa's metropolitan areas are amongst the few in the world that on average continue to densify (Harrison, Todes, & Watson, 2008), South Africa's subsidised housing policy is a legacy of the demands of the massive need for housing delivery in the immediate post-apartheid era, and has now been 'retro-fitted' onto a new (BNG) housing strategy. This densification trend is therefore more a consequence of the failure of subsidised housing delivery, than a direct outcome of it. Where subsidised housing is not provided, new households are forced to find alternatives, which inevitably mean increases in backyard living and informal settlement growth.

The only true urban restructuring subsidy instrument is the Restructuring Capital Grant used to subsidise Social

Housing. Designed specifically as a "Restructuring" instrument, it is described in policy as a spatial restructuring tool first, and a housing subsidy second. Its primary focus was to change apartheid spatial form by constructing new medium density, affordable infill accommodation in good locations. However, various analyses have showed that even this subsidy instrument is severely constrained in its ability to restructure South Africa's cities. The total delivery of social housing over the last 23 years meets one quarter of one year's new household formation, and roughly equals the estimated annual delivery of BNG units in the eight metropolitan areas of South Africa. The author calculates that all social housing built since 1994 (about 35,000 units) would fill an area the size of Yeoville and Bellevue in Johannesburg. However, these units are scattered in small pockets across 25 different urban restructuring zones (Rebel Group, 2016b). So long as delivery via our only restructuring instrument comprises less than 10% of delivery, and less than 1% of new subsidised units, this cannot be claimed to be substantially restructuring our cities, albeit that social housing developments have had local impacts.

Even if social housing production was significantly ramped up, it would not deliver at a scale necessary to halt peripheral subsidised housing development. The HUIS model developed for this review indicates that, taking an average delivery programme for the eight metropolitan areas in South Africa, medium density social housing delivery of 2,750 units would occupy 13 Ha of land versus 1755 Ha for the estimated 35,000 BNG fully-subsidised units - less than 1% of the total new land required for subsidised urban development. Further, HUIS estimates that at current rates of delivery and prevailing spatial standards, market-driven housing development requires as much or more new land than all subsidised housing development combined.

The highest-potential element of subsidised housing delivery that could stimulate densification and better corridor development is expenditure on land, yet this receives little resources from USDG appropriations and other city funding sources. CAHF (2016 & 2017, forthcoming) shows that land generally forms a very small proportion of total BNG housing costs. Cities have not been successful in implementing urban land mobilization and release strategies, including pre-emptive identification, value capture, exploitation of publicly owned land parcels between organs of state, and even the use of expropriation legislation. Therefore, municipalities are required to furnish the burden of land cost too late in the development process, with limited to no significant resources to do so, and with political pressure to deliver other more measurable components of human settlements such as services and housing.

While all national, provincial and metro strategies support densification via permutations of inner cities, corridors and nodes, and while metros have or are implementing

¹³ These include the diagnostic reports for the BNG policy, the NDP and the twenty-year review process, amongst many independent research papers.

BRT systems to support this, human settlements policy remains almost completely disconnected from nodal and corridor development. Corridor and node developments are predominantly re-development approaches rather than greenfields development driven. Therefore, the prevailing development methodologies required in corridors and nodes (small infill projects, densification of existing properties, redevelopment and conversion of existing buildings and 'demolish and rebuild' initiatives) are inapplicable to subsidised housing parameters. The Finance Linked Individual Subsidy Programme (FLISP) should offer a significant potential, but its ineffective implementation to date limits total national approvals to under 4,000 subsidies per annum.

Considering the demographic and spatial outcomes of urban growth, under the current subsidy regime around half of new low-income households formed annually will continue to access new subsidised housing in peripheral locations, even if within integrated settlements. Over half of all new households will continue to find better-located rental accommodation in existing suburbs, townships and backyards, or continue the proliferation of informal settlements. Corridors and secondary nodes, unless located in townships, will continue to serve limited middle and upper-income households. Densification of South Africa's metros is primarily driven by private developers of rental housing, and by informal densification in existing townships, and by informal settlement growth.

The UISP is intended to engage with informal settlement communities to co-determine an approach to settlement upgrading and tenure regularisation. The policy outlines a three phase approach, starting with basic services, leading to passing of secure tenure and full service reticulation, and ending with housing construction. In reality, this more often than not does not occur. The recent Isandla National Policy Round Table heard how in many cases insufficient funds are available for true community engagement, with many projects being undertaken by engineering companies with limited community facilitation experience. This leads to imposed engineering solutions, and in many provinces the prevailing methodology is 'roll-over', or removal of communities, eradication of existing

structures to allow a greenfields servicing approach, with resettlement happening thereafter. This approach also leads to substantial displacement of households to new greenfields settlements.

7.7 City Efficiency

South African cities are characterised by low-density sprawl and highly unequal land distribution patterns, which are largely a result of apartheid policies. However, post-1994 inappropriate regulation, confusing and often conflicting policy priorities, and an unequal land market have contributed to and entrenched apartheid spatial patterns.

Apartheid spatial planning has had a profound impact on the urban landscape. The 2004 State of the Cities report (SACN, 2004) argues that "the 'Apartheid City was a political economy of space' which was based on two policies, i.e. racially-based spatial planning and development for some at the expense of others". The result is low-density, fragmented and separated cities. Post-1994, the delivery of housing and other services has entrenched the apartheid spatial form, despite national policy imperatives that argue for sustainable human settlements with an emphasis on higher density developments on well located land, and better integration between land use, transportation and the provision of infrastructure and services. Yet, the delivery of subsidised housing has not been in line with these policy prescriptions, primarily because of the lower cost and availability of land on the periphery of cities as opposed to expensive land in the more central areas, coupled with insufficient subsidy amounts to build at higher densities to offset higher land costs and the burden on the cities to fund the higher costs without any additional support from the fiscus.

Table 6 below compares South Africa's cities with similar cities in other development countries in terms of population density, average trip times and carbon footprint. As is evident in the table population density is much lower in South African cities and the rate of carbon - dioxide emissions is much higher.

Table 6: Comparison of the efficiency of South African cities with other cities in developing countries

Measure	Joburg	Cape Town	eThekweni	Tshwane	Curitiba	Ahmedabad	Bangalore	Addis Ababa
Population density (people/hectare)	20.9	12	14	9.5	57	134	207	560.8
Average commuting time (minutes/capita/commuter trip)	52	50	45	60	-	20	-	62
Carbon footprint (tons Co ² /capital/ year) (tons)	7	8	6	9	4.2	0.05	0.12	-

(PDG, Stephen Berrisford Consulting and the African Centre for Cities, 2011)

Low-density developments on the urban periphery have serious implications for the efficient delivery of transport infrastructure and mobility, with the result that transport subsidies often match or exceed housing subsidies in South Africa. For example, in Cape Town, public transport subsidies for rail and bus transport was R430 million in 2001/2002. In comparison, the money spent on subsidised housing was R231 million¹⁴. In other words, the amount spent on the transport subsidy was more than double that spent on the housing subsidy. The transport subsidies are operating subsidies and the housing subsidies are capital subsidies. If housing was better located the higher once off cost could result in substantial savings in subsidies for recurring transport operating costs, as well as monthly travel costs for the low income households.

Location also affects the economic efficiency of cities, and a lack of interaction between employment and residential location results in unacceptably high commuting times and high carbon-dioxide emissions. The average carbon dioxide emissions in South Africa's six big cities are 6.5 tons per person, which exceeds the global average¹⁵. The mismatch between location of housing and employment opportunities also contributes to income inequality between rich and poor. Unlike poor households, middle- and high-income groups can rely on private motorcars to access economic opportunities.

Two-thirds of South Africans rely on public transport¹⁶, but public transport still imposes huge social and economic costs on poor households, as commuting times are high. Public transport commuter trips in South Africa are longer than global averages: in Tokyo trip lengths are 8 km compared to more than 25 km in the City of Tshwane. Moreover, for the 20% of households in the lowest income band, transport expenditure, as a percentage of household expenditure, increased from 4% in 1995/96 to 10.6% in 2005/2006¹⁷. In an attempt to correct this unsustainable situation, the South African government is investing massively in transport infrastructure. This includes improving the national road system, rail infrastructure and bus rapid transportation systems.

Urban spatial policy in post-apartheid South Africa has not been effective in addressing the spatial challenges specified above. Atkinson and Marais¹⁸ argue that "a lack of clear urbanisation and spatial direction" from the South African Government has created contradictory and confusing messages about the relationship between rural and urban development. This has also resulted in uncoordinated spending patterns and the allocation of resources without an appreciation and understanding of settlement patterns. This is the result of narrow sectoral thinking, which has failed to recognise the dynamic

interaction between rural and urban areas and has also created conflicting spatial settlement policies.

A modelling exercise (PDG, Stephen Berrisford Consulting and the African Centre for Cities, 2011) that compares a 'hypothetical' South African city with a compact city. The hypothetical South African city is based on the following assumptions: low-cost housing on the periphery, informal settlements on small parcels around the city, racially segregated communities and that spatial growth is informed by drivers such as the current housing subsidy. The compact city scenario showed a 7% saving in recurrent costs per year after ten years of development. Although at first glance this saving may not seem substantial, it applies to the city as a whole and includes all households and businesses. This also has a cumulative impact, with the benefit carrying over to all future years. Households and the state benefit from most of this saving, while lesser levels of expenditure are required by businesses and the city.

In the compact city scenario, all households are, on average, likely to be better off. However, the benefits are greatest for middle-income households, largely owing to savings on transport. In contrast, if the urban sprawl scenario applies, low income households are exposed to the biggest negative impact on their household budgets. Low income households have the most to benefit from a compact city growth scenario, with a 24% difference in recurrent household expenditure between the two scenarios after ten years. The ratio between housing costs and transport and infrastructure costs for low-income households is particularly relevant in the debate around informal settlements. Households in informal settlements spend the least amount on housing, but a considerable portion of their monthly income on transport.

The argument for providing subsidised housing in well-located areas is made on the basis that transport costs will be reduced. For households living in informal settlements, this argument only holds if the transport cost reduction is equal to, or greater than, the increase in housing and infrastructure costs that will occur as a result of accessing formal housing. If not, then the household is likely not to be able to afford the cost of the formal housing and to be driven back to informality. different urban functions could pose significant risks on municipalities in the future.

¹⁴ Western Cape Strategy for the Development of Sustainable Human Settlements, June 2006 as quoted in PDG, Stephen Berrisford and African Centre for Cities, 2011

¹⁵ Sustainable Energy Africa, 2006 as quoted in PDG, Stephen Berrisford and African Centre for Cities, 2011

¹⁶ DBSA, 2008 as quoted in PDG, Stephen Berrisford and African Centre for Cities, 2011

¹⁷ SACN, 2009:6 as quoted in PDG, Stephen Berrisford and African Centre for Cities, 2011

¹⁸ 2006 as quoted in PDG, Stephen Berrisford and African Centre for Cities, 2011

7.8 Fiscal & Economic Tradeoffs Between Programmes

While the Urbanisation Review finds that municipal fiscal sustainability is not under immediate threat¹⁹ (Boex, 2017), modelling of the housing outcomes indicates that the combined impacts of policy decisions across different urban functions could pose significant risks on municipalities in the future.

Continuing to deliver subsidised housing through the existing subsidy programmes (notably, IRDP, UISP, Serviced Sites and FLISP) has been shown to be fiscally sustainable through various modelling exercises at city level in, for instance, Cape Town and Nelson Mandela Bay (Shisaka Development Management Services, 2014). However, this does not impact significantly on city restructuring, and requires substantial investments in land.

The foregoing analysis shows the implications of subsidising Social Housing over BNG housing, and BNG housing over serviced sites. To substantially increase urban densities and subsidised housing on corridors using existing instruments, would require significant increments in RCG expenditure, as well as expenditure on well-located land by cities. Once such investments are made, however, these units would require little more investment nor continued subsidies for services, as Social Housing Institutions are 'good corporate citizens' that pay rates and service charges in full.

The tradeoff therefore exists between upfront capital expenditure and longer-term subsidy requirements. Given that large-scale funding for social housing is not feasible, the fiscal tradeoff here is rather around proportionality, not one delivery modality instead of another. The longer-term benefits of social housing mitigate for an increased delivery programme, especially related to corridors, inner cities and nodes. It is also worth noting that SHIs are required to gear subsidy funds with own resources and/or debt.

FLISP offers an important instrument for gearing subsidy money with housing mortgages. Freeing up the middle income market also has significant additional benefits for cities. This includes stimulation of financial markets, the growth of property investments and rates payments from these properties. This subsidy instrument must be made more readily available, marketed successfully and prioritised by cities, in line with the recommendations on its recent review. In addition, the facilitation of serviced

site opportunities and smaller houses that could be purchased using FLISP must also be considered.

7.9 Subsidies, Affordability and Demand Targeting

The Centre for Affordable Housing Finance in Africa (CAHF), with support from FinMark Trust and the South African Cities Network (SACN) has developed affordable housing profiles for each of the nine metropolitan cities. The profiles comprise an analysis of data from the Deeds Registry, the Census and other data sources. The key findings from the profiles are that affordable markets drive municipal housing market growth and have grown consistently since 2010. In seven of the nine SACN member cities, the affordable areas are growing faster than the total housing market. However, in measuring affordability at the local level, many local housing markets are not affordable to the average household income. On average, across the nine cities, it takes three times the average household income to afford the average house. This varies considerably from area to area however, from 1.7 in Tshwane to 3.9 in Msunduzi. The housing affordability gap – the difference between the average sale price and the average affordable mortgage bond – ranges from R280 000 to R706 000.

Subsidised housing constitutes 24% of the total residential property market in South Africa. If just a portion of these homes become available as resale market supply, existing RDP homeowners may be able to start moving up the housing ladder through mobilising finance backed by the equity released. In this context, government programmes that promote the development of new moderately priced housing will benefit the entire housing market, by creating market mobility.

In the affordable housing market, FLISP subsidies and mortgage finance are generally available, but access to affordable products to purchase is limited by low incomes, high indebtedness and impaired credit records, as well as limited development in these markets.

¹⁹ "The analysis of the composition and trends in urban finances suggests that the country's urban finances are generally on a sustainable trajectory, with no danger of an imminent urban fiscal crisis. However, urban local governments are subject to a range of forces that create upward pressure on local government spending. While at this stage no single urban function threatens the sustainability of urban finances, the combined impact of policy decisions across different urban functions can pose a long-term cumulative risk" (Boex, 2017). "The analysis of the composition and trends in urban finances suggests that the country's urban finances are generally on a sustainable trajectory, with no danger of an imminent urban fiscal crisis. However, urban local governments are subject to a range of forces that create upward pressure on local government spending. While at this stage no single urban function threatens the sustainability of urban finances, the combined impact of policy decisions across different urban functions can pose a long-term cumulative risk" (Boex, 2017).

8. Findings & Policy Recommendations

This section outlines the key findings from the analysis of South Africa's human settlements sector and makes recommendations for improving the effectiveness of South Africa's housing programme as a tool of urban spatial equity and inclusion.

8.1 Key Findings

Cities are the engines of South Africa's economic growth, and are also the main destinations for rural-urban and urban-urban migrants. Growing constraints on economic growth and city revenues will exert pressure on financial resources available to cities. Stagnation of city economies places increasing burdens on national revenue collection, and affects transfers to cities. Economic stagnation also negatively affects economic opportunities and income growth. The approach to the development and growth of city economies and human settlements is therefore critical to the country's future development path. This will require continued and sustained focus on economic and social strategies at city level.

Two decades of subsidized housing delivery have achieved notable successes in relation to access to tenure (redistribution), shelter provision and access to basic services. However, there is a large and growing accommodation demand in all cities across all sub-markets, except for houses costing over R500,000. This growth in demand is exacerbated by urban growth and the reduction in subsidized housing delivery over the last decade, even though human settlements subsidy budgets have continued to grow. Increasing constraints on affordability and creditworthiness also continue to hamper effective demand for housing in the affordable market.

Notwithstanding the notable achievements of South Africa's housing programme over the last 23 years, South Africa's cities still bear the spatial legacy of Apartheid social engineering. Uneven economic development, residential segregation based on income and race and peripheral and poorly serviced low-income townships are still dominant features of cities. Subsidised, low-density and low-rise housing developed since 1994 now comprises almost a quarter of all formal properties on the Deeds Registry and is estimated to accommodate around a third of all South Africa's households, but has entrenched mono-functional, peripheral zones of predominantly low-income housing offering limited socioeconomic services and access to economic opportunity.

The last decade of urban policy has focused on improving spatial equity through creating more dense, internally efficient and more inclusive city form. Increasingly, city governments are expected to implement strategies that densify and intensify urban areas, while simultaneously

facilitating pro-poor access to city opportunities. This is primarily driven by concentration and coordination of human settlement, infrastructure and transport investments. More recently, city governments are expected to develop and implement clear strategies that densify, intensify and improve urban efficiencies through Built Environment Performance Plans. This revised strategy has resulted in incremental changes to, and greater coordination between human settlements, infrastructure and transport strategies and their related funding mechanisms. However, these strategies have to date had a limited impact on changing the overall racial, income and housing distribution of the urban poor in relation to the overall growth of cities. While there are notable and important examples of improved inner-city development (Johannesburg and eThekweni), transport-oriented interventions (such as Voortrekker Road and Louis Botha corridors), and strategic infill developments, on balance these are not significantly impacting on location, access and urban opportunities for a majority of the urban poor. (Alison Todes, Philip Harrison, 2015) show that South Africa's cities are amongst the few in the world that are densifying, but this has as much to do with having inherited a very dispersed urban form and spontaneous informal densification through 'backyarding' of existing middle and low-income areas and growth of informal settlements as a consequence of the slowdown in human settlements development, than as a result of new development outcomes.

Urban exclusion is perpetuated by existing subsidy programme design and approaches to large-scale project implementation. The majority of such developments are still on the urban periphery. The current supply-side subsidy approaches create a housing dependency on state-driven housing delivery, and limit individual choice of where and how to invest subsidies and whether to augment this with other resources. Current subsidy delivery approaches are also creating supply and demand mismatches in the middle and low-income housing markets. While access to housing opportunities has been widened by the UISP and provision of serviced sites, there are high levels of rental in affordable and subsidized housing areas, fragmentation of households and evidence of dual housing strategies. Constraints in the affordable market also encourage downward-raiding through purchase and rental of subsidized housing due to the ineffective implementation of demand-side subsidies in the affordable housing market. This thin middle-income market is constrained by low effective demand, as a result of constrained affordability, over-indebtedness, impaired creditworthiness, an ineffectively implemented demand-side subsidy (FLISP) and a lack of affordable housing for purchase or resale.

Cities are bound by concurrent human settlements competences and lack of devolution of housing functions and budgets. While the accreditation and assignment framework has been approved, assignment of housing functions has not happened. This continues to hamper cities' flexibility to develop and implement tailored financial solutions, and to better coordinate financial

resources towards city development objectives. Co-ordinating multiple sources of funding from different tiers and organs of government complicates integrated and coordinated investment.

There are a number of municipal mandates that are under-funded or un-funded. Most importantly, public, social and cultural facilities and services all face significant capital and operating expenditure shortfalls. These investments are important for the creation of unsustainable human settlements (e.g. preschools, municipal health, cultural facilities and libraries, sports and recreation facilities, emergency services). In addition, while spatial investments in corridors and nodes may benefit the mobility of urban poor, they currently do not deliver significant subsidised & affordable housing opportunities. For example, a recent analysis by the JDA showed that by 2017 (Interview, JDA), there were an estimated 60 developments comprising about 4,500 affordable housing units along the Louis Botha corridor, yet only two of these were Social Housing developments. In order to facilitate pro-poor access to the corridors, different subsidy approaches will be required. Finally, land markets and subsidy policy drive subsidised and affordable housing to peripheral, cheaper, larger parcels of land. Insufficient resources for strategic land interventions by cities therefore encourage peripheral locations of subsidy developments. It is necessary for cities to invest more in 'buying access' through land interventions for subsidy and affordable development.

8.2 Policy Recommendations

Cities are complex, and therefore require multi-faceted and tailored human settlements strategies. Each city has different economic drivers, historical growth patterns, human settlements characteristics and patterns of demand and development trajectories. Internationally, there is no city development paradigm panacea. (Harrison, 2015) shows that there are numerous different, often jointly implemented urban growth strategies. These include full, 'new city' developments, 'Satellite City' developments with rapid transit links to the core, transport-oriented corridor developments, and urban edge and suburban densification strategies. Each has its own costs and benefits, supporters and detractors. Therefore, a polarised human settlements strategy focused solely on spatial concentration is not an appropriate response to this complexity, and is unlikely to meet the complex needs of South Africa's cities.

Efficiency and equity are different policy objectives, the same policy instruments and investment strategies will not address both together. While spatially targeted investment strategies are a necessary contributor to city efficiency and equity, this is not sufficient cause to build efficient and equitable cities. Addressing spatial inefficiencies does not necessarily generate economic growth, equity and fiscal sustainability. These objectives should not be conflated with a single strategy, but often are in the South African context. Given the above, expected outcomes from targeted investment

programmes and human settlements programmes must be realistic. Most human settlements programmes remain substantially unaltered since first implemented, while the urban policy objectives they are expected to achieve have changed significantly.

Current investment strategies are polarized around spatial targeting of housing and infrastructure expenditure as the main mechanism through which to effect spatial change, urban efficiency and inclusive access. Creating more sustainable and inclusive cities requires programmes that grow economies and incomes, provide universal access to basic services and social amenities, facilitate access to adequate accommodation that addresses gaps in housing affordability and demand, and facilitates tenure and locational choice. Therefore, while spatial investments are important components of inclusive city growth, increasing investments in stimulating city economies and productivity are essential. Economic growth is the only mechanism through which sustained household income growth and new economic access can be realized. Even though poor urban form is a constraint to inclusivity and equity, other spatially neutral interventions may have greater impacts on equity than spatial targeting. Most importantly, cities are the catalysts and drivers of South Africa's economy, and city economic growth must be seen as the key catalyst to city transformation and equity. Creation of new economic opportunities, growth in household incomes, market mobility and city revenue growth are critical to spatial equity and access. Further, skills development strategies to improve the ability of the urban poor to access and participate in economic growth are as important. This requires a much greater investment focus on cities' productive sectors, in addition to the current focus on spatial infrastructure and housing expenditure.

There must be continued alignment between spatial structuring objectives and city investments in infrastructure and human settlements. The CSP states that cities have "...the responsibility to guide spatial development through urban planning instruments, infrastructure investments and service delivery programmes that shape the built environment of South African cities [and] there is consensus that a fundamental spatial transformation is required to enable South African cities to contribute effectively to national economic and social development objectives". The envisioned spatial structure of future South African urban spaces, as set out in the NDP, the Spatial Planning and Land Use Management Act (SPLUMA), the 'Breaking New Ground' policy, as well as clearly articulated in the Integrated Urban Development Framework (IUDF), the Urban Network Strategy (UNS), Provincial Spatial Development Frameworks (PSDFs), city Spatial Development Frameworks (SDFs) and Built Environment Performance Plans (BEPP) now needs to be designed into human settlements programmes and cross-sectoral integrated programmes. While market housing, especially in the middle-upper income market shows signs of greater densification (specifically the proliferation of 'walkup' townhouse type apartments), insufficient pressure is

exerted by the spatial planning levers at cities' disposal such as SDFs to drive a fundamental shift in market behaviour. Further, these planning frameworks must guide the actions of the private sector and households themselves towards achieving greater densities and more private development of owned and rented housing.

Spatial investment targeting should be sustained to realize value from existing investments in corridors, nodes and other transport networks. Spatial restructuring is a multi-decade process, and real returns from spatial targeting will accrue over decades, not medium-term budget periods. It is therefore too soon to see significant outcomes from one decade of investments. Sustained land, infrastructure, transport and human settlements investment co-ordination and concentration will create a platform for private housing, retail and commercial investments to cluster around them. Given South Africa's low-density city form, most ToD feasibility studies expect increases in residential densities to stimulate ridership that will ultimately generate returns from initial investments. Yet, each year of housing stock growth contributes only a small percent to total housing stock, and only a small proportion of new stock is aligned with city restructuring goals. Therefore, rail and bus-based transport oriented development is a long-term investment commitment.

Urban planning tools, incentives and disincentives must be better applied to drive suburban and township densification and nodal and corridor concentration of urban form. Planning, zoning and development control instruments are critical for guiding new development and controlling urban edges. Facilitating and incentivizing improved outcomes from suburban and township densification and infill developments can mobilize this mostly extra-legal submarket to produce more desirable outcomes in terms of size, quality and access to services. Regularization of informal backyard densification and mechanisms to broaden service access to backyard dwellers will assist to legitimize this submarket and bring it into the mainstream of accommodation delivery.

Multi-faceted Human Settlements Strategies are required to meet the complexity of human settlements demand. This includes a continued focus and increased investments in existing programmes that have achieved improved spatial outcomes, as well as new approaches to subsidizing housing. The Upgrading of Informal Settlements Programme and Social Housing Programme should continue to be implemented, with specific adjustments. The expansion of 'Smart' Agreements (e.g. Cape Town's MoUs for the development of 19 strategic sites, Johannesburg's imminent request for proposals on 16 parcels of land and buildings for SHIs and private developers, and eThekweni's engagement with SHIs around strategic land parcels). UISP projects should focus more on in-situ interventions, in order to avoid 'rollover' and relocation modes of implementation. The Social Housing RCG subsidy quantum requires adjustment, and should also allow for smaller product typologies including bachelors and rooms with shared ablutions to improve

access by lower income households. A concerted effort to pre-empt informal settlement by providing access to serviced land is also important. Affordable housing markets must be stimulated through demand-side subsidy approaches. A focus on implementing FLISP at scale must close the 'housing gap' between subsidized and private housing markets, through better collaboration between city, private sector, households and financial institutions. Pilot demand-side rental subsidy programmes should be implemented (specifically in corridors and inner cities).

A greater emphasis on assembling, banking and releasing strategic landholdings should be implemented by cities. Resources to buy better access for subsidized households in private land markets are required, as well as improved mechanisms to release state and state entity-owned land for human settlements. Further, mobilization and release of strategic state and state entity-owned landholdings and buildings will be critical to future city growth trajectories. An important part of this is to capture land value prior to city investments in transport and infrastructure, in order to limit the impact of market pricing once value is added to land through enhanced rights and bulk service installation. However, this must be augmented by reduced spatial standards and erf sizes, and implementation of more medium-density housing typologies in order to maximize the use of well-located land.

A change in development approach from a few, large-scale developments to a "Massive Small" development focus is required. Approaches that stimulate many, small and medium-scale city-facilitated, state subsidized or private sector-delivered human settlements projects are required to drive greater accommodation choice through infill, densification, conversion and refurbishment projects. While Johannesburg specifically has started to facilitate such projects, and is looking to develop frameworks for this with private financial institutions and developers, to reach scale will require revisions to how such projects are planned, granted rights and obtain subsidies. A partnership between the City of Johannesburg, the JDA and TUHF, an inner city financial institution, is one example of a programme that is developing a range of programmes that will drive the implementation of the City's Inner-City Housing Implementation Plan (ICCHIP) through multiple small-scale interventions. These include Sectional Title rehabilitation, release of buildings for conversion or redevelopment and showcasing development opportunities for small-scale developers in targeted areas.

Institutional and fiscal arrangements will also be important factors in cities' future development trajectories. Assignment of human settlements functions and budgets to city level will enable cities to develop specific, applied financing strategies relevant to their conditions and specific policy objectives, with greater coordination of resources. This should include focus on affordable rental subsidies, demand-side subsidy instruments that are more useful for facilitating pro-poor corridor and nodal subsidy instruments. Institutional reforms are also developing new structures for city

development. The City of Cape Town's recent creation of the Transport and Urban Development Authority, and proposals for the institutional restructuring of the City of Johannesburg are efforts to better coordinate planning, housing and transport functions.

Cities require greater financial autonomy to implement and finance specific mandates and programmes. Mechanisms that would enable cities to retain a portion of revenues generated in their areas are required that can apply a portion of their own resources to their specific economic and social development programmes. Currently, cities are not incentivized to build revenue streams given that the revenue proceeds of this accrue to national government. The analysis also shows very uneven revenue generation experiences across cities, from rates, service charges and development contributions. Greater focus must be placed on improving the consistency and scale

of revenue collected at city level through development contributions, rates and service income.

Getting basic municipal functions and responsibilities right is a major potential stimulant of private investment. Improving service delivery, billing processes and responses to customer queries and streamlining key municipal functions all encourage investment. Fast-tracking planning, rezoning and building plan approvals, issuance of rates clearance certificates, and facilitating access to temporary and emergency accommodation to enable renovation and redevelopment of occupied properties are also remove important bottlenecks to private investment. Further, transfers of Title Deeds to subsidy beneficiaries will assist to stimulate township property markets.

Annexure 1: Human Settlements Typology

Category Description	Image Representing Characteristics
City Areas Populations 800 000 - 1 million Government & Economic Services Index 2 - 5 Examples: (this includes metro's and secondary city areas) - Polokwane - Mbombela - Buffalo City - Mangaung	
Regional Service Centres (Bigger and medium sized towns with key roles in the surrounding hinterlands)	
Regional Centre 1 Populations 300 000 - 500 000 Government & Economic Services Index 1 - 2 Examples: Regional Services Centres - high population numbers and high economic activity: - Rustenburg - Witbank/Middleburg - New Castle - Richards Bay	
Regional Centre 2 Populations 100 000 - 300 000 Government & Economic Services Index >0.3 Examples: Regional Services Centres - high population numbers in densely settled areas - Mthatha - Queenstown - Thohoyandou - Tzaneen - Grahamstown - Mmabatho	
Regional Centre 3 Populations 40 000 - 100 000 Government & Economic Services Index >0.25 Examples: Regional Services Centres - low population numbers pllying a key role in sparsely populated areas: - Kimberley - Upington - Worcester	

Annexure 1: Human Settlements Typology (Continued)

Category Description	Image Representing Characteristics
Service Town (Medium to small sized towns) Populations mostly > 20 000 Significant role in hinterland (service index: 0.065 - 0.15) Examples: - Saldanha - Groblersdal - Piet Retief - Bothaville - Lichtenburg	
Local and Niche Towns Populations size varies widely Service role in immediate surroundings (Service index: 0.001 - 0.065) Examples: Local towns: Alice (EC), Koppies (FS) Niche towns: Clarens (FS), Prince Albert (WC), Riebeek Kasteel (WC)	
High Density Settlements Rural nodes in High Density Settlement Areas - Meso Zones with >100 people/square km OR more than 10 people/square km PLUS Economic activity in service sector - identified as areas within high-density settlement areas, with highest levels of access to household income. High Density Settlement Areas - Meso Zones with >100 people/square km OR more than 10 people/square km PLUS Economic activity in service sector. These areas typically have very little economic activity, no consolidated town centre/nodes, and a spread out morphological structure.	
Rest of South Africa Less densely populated areas, Sparsely populated areas, mountainous national parks.	

Source: (Mans, et al., 2016)

Annexure 2: Comprehensive List of National Subsidy Interventions

	No.	Subsidy Programme	Code	
B	1.0	FIANCIAL INTERVENTIONS (FI)	FI	
B.1	1.1	Individual Subsidies	FI-IS	
	1.1 a	Individual Subsidy Credit Linked	FI-IHSL	
	1.1b	Individual Subsidy Non-Credit Linked	FI-IHSNCL	
B.2	1.2 a	Finance Linked Individual Subsidy	FI-FLISP	
	1.3.1	Inclusionary Housing	FI-INH	
	1.3.2	Discount Benefit Scheme	FI-EEDBS	
	1.3.3	Relocation Assistance	FI-RA	
	1.4	State Asset Maintenance	FI-SAM	
	1.5	Rectification	FI-R	
	1.5 a	Rectification of RDP Stock (1994-2002)	FI-RRDP	
	1.5 b	Rectification of Housing Stock (Pre 1994)	FI-RH5	
	1.6	Social & Economic Facilities	FI-SEF	
	1.7	OpsCap Budget	FI-OpsCap	
	1.8	Unblocking Blocked Projects	FI-UBP	
	1.9	NHBRC Enrolment Fees	FI-NHBRC	
	1.10	Land Procured	FI-LP	
	1.10a	Land Procured (IHAHSD)	FI-LPIHA	
	1.10b	Land Procured (Other)	FI-LPO	
	1.11	Housing Chapters of IDPs	FI-HCIDP	
	1.12	Accreditation of Municipalities	FI-AOM	
	1.12 a	Accredited Municipalities (L1&2)	FI-AM1&2	
	?	Mortgage Guarantee	FI-MG5	
C	3.0	SOCIAL & RENTAL INTERVENTIONS (SR)	SR	
C.1	3.1	Institutional Subsidies	SR-IS	
C.2	3.2	Social Housing	SR-SH	
	3.2a	Social Housing: Operational Support	SR-SHOS	
	3.2b	Social Housing: Capital Grants	SR-SHCG	
C.3	3.3	Community Residential Units	SR-CRU	
	3.3a	CRU Conversion	SR-CRUC	
	3.3b	CRU New	SR-CRUN	
C.4	3.4	Gauteng Backyard Rental	SR-GBY	
D	2.0	INCREMENTAL INTERVENTIONS (II)	II	
	2.1a	Project-Linked Subsidies Sites<2007)	II-PLSS	
	2.1b	Project-Linked Subsidies Houses<2007	II-PLSH	
D.1	2.2	Integrated Residential Development	II-IRDP	
	2.2a	IRDP-Planning & Services	II-IRDP P1	
	2.2b	IRDP-Top Structure?	II-UISP P2	
	2.2c	UISP- Top Structure	II-UISP P4	
D.2	2.3	Enhanced Peoples Housing Process	I-EPHP	
	2.4	Consolidation Subsidy	II-CS	
	2.4a	Consolidation Subsidy (Not Blocked)	II-CSPA	
	2.4b	Consolidation Subsidy (Blocked)	II-CSPB	
D.3		Serviced Site Programme	II-S&S	
D.4	2.5	Informal Settlement Upgrading	II-UISP	
	2.5a	UISP Phase1: Planning	II-UISP P1	
	2.5b	UISP Phase 2: Temporary Services	II-UISP P2	
	2.5c	UISP Phase 3: Site & Services	II-UISP-P3	
	2.5d	UISP: Phase 4: Top Structure	II-UISP-P4	
	2.7	Emergency Housing	II-EH	
	2.7a	Emergency Housing (Current)	I-EHC	
	2.7b	Emergency Housing (Disasters)	II-EHD	
	2.8	Township Establishment	II-TE	
	?	Gauteng Inclusionary Housing	II-GIH	
D.5	Gap	Transitional Housing	II-TH	
	Gap	Backyard Programme	SR-BY	
	4.0	RURAL INTERVENTIONS (RI)	RI	
	4.1	Rural: Farm Residents	RI-FR	
	4.2	Rural: Communal Land	RI-CLR	
	4.2a	Rural: Communal Land (Sites)	RI-CL P1	
	4.2b	Rural: Communal Land (Planning)	RI-CL P2	
	4.2c	Rural: Communal Land (Units)	RI-CLP3	
	5.0	NATIONAL SPATIAL PROGRAMMES	NS	
	5.1	Vulnerable Groups	NS-VG	
	5.2	Military Veterans	NS-MV	
	5.3	Death of Guardians	NS-DG	

Annexure 3: Detailed Analyses Of Key Housing Programmes

Individual Subsidy Programme (FI-IS)			
Targeted households	<R3,500	Amount (1 April 2014)	R110 947/R160 573
Use	<ul style="list-style-type: none"> ▪ Credit Linked: To acquire an existing house or a vacant residential serviced stand linked to a house construction contract through an approved mortgage loan. ▪ Non-Credit Linked subsidy: To improve an existing residential property or where it is feasible to administer house building contracts, comprising a limited number of houses on existing serviced stands available in the market, to purchase the serviced stand and the construction of a top structure. 		
Process / principles	<ul style="list-style-type: none"> ▪ The individual subsidy mechanism is available to individual households who purchase an existing house or a vacant stand and enter into a building contract for the construction of a house. The latter subsidy option may only be awarded to those households who have entered into a loan agreement with a financial institution. ▪ The Individual Subsidy is only available to beneficiaries wishing to acquire residential properties in registered individual ownership ▪ It is available to beneficiaries who would like to use only the subsidy to acquire an existing house and also to those where the subsidy is linked to mortgage finance from a financial institution for the acquisition of an existing house or the acquisition of a serviced site linked to a house-building contract ▪ Non-Credit Linked subsidies will be administered on the basis of issuing of guarantees by the MEC and approved funding will only be released upon the achievement of specific milestones ▪ Credit Linked subsidies will be paid to the financial institution once the subsidy application has been approved and such funds must be paid into a special interest bearing account by the financial institution ▪ Provincial Departments must introduce mechanisms to ensure that subsidies approved for persons who have acquired unsubsidised sites, apply such subsidies for the construction of new, the completion of incomplete and/or improvement of existing houses ▪ Individual Subsidies may also be accessed through the undertaking of small to medium sized house construction projects for qualifying beneficiary households ▪ The Non-Credit Linked Individual Subsidies can be applied in the context of a small project on serviced stands available in the market. 		
Spatial implications			
Density	40 to 80 units per hectare		
Location of land	The ISP could be used for infill development in existing suburbs or for developments in transport corridors.		
Status	Limited use of this subsidy is currently being made.		
Key challenges/ opportunities	<ul style="list-style-type: none"> ▪ This subsidy offers potential to be used for site and service development ▪ Administration of the subsidy is more onerous than other subsidies. ▪ The credit linked subsidy is dependent on beneficiaries accessing loan finance and current levels of indebtedness inhibit its use. 		

Finance Linked Individual Subsidy Programme (FI-FLISP)			
Targeted households	R3,501 – R15,000	Amount (1 April 2014)	Varies by income from R87,000 to R20,000 but on average is R52,500
Use	Acquire ownership of an existing residential property or vacant serviced residential stand or build a new house with the assistance of a homebuilder registered with the National Home Builders Registration Council (NHBRC).		
Process / principles	<ul style="list-style-type: none"> • FLISP is the subsidy that provides government support in the affordable housing sector. The purpose of FLISP is to '<i>enable sustainable and affordable first time homeownership opportunities to South African citizens and legal permanent residents earning between R3,501 and R15,000 per month (the "affordable" or "gap" market)</i>'. Qualifying applicants may use FLISP to do one of the following:- – buy an existing, new or old, residential property – buy a vacant serviced residential-stand, linked to an NHBRC registered homebuilder contract; or – build a residential property on a self-owned serviced residential stand, through an NHBRC registered homebuilder. • The once-off FLISP subsidy amount ranges between R10 000 and R87 000, depending on the applicant's monthly income. The maximum price of a property that can be financed through FLISP is R300 000. The sliding scale applied results in the subsidy making a more substantial difference to affordability for applicants at the lower end of the scale, than those at the higher end. • FLISP applicants must meet the following qualifying criteria:- <ul style="list-style-type: none"> – South African citizen with a valid ID; or permanent residents with a valid permit – Over 18 years and competent to legally contract – Never have benefitted from a Government Housing Subsidy Scheme before – Have an Approval in Principle of home loan from an accredited South African financial institution – Be a first time home buyer, earning from R3 501 to R15 000 per month – Purchasing a residential property in a formal town where transfer of ownership and registration of mortgage bond is recordable in the Deeds Office. • There are two ways in which FLISP can be accessed: <ul style="list-style-type: none"> – Through an accredited FLISP developer who is providing a FLISP development project and submits the application form on behalf of the applicant – Through taking a mortgage loan with an accredited FLISP lender where the estate agent or the applicant themselves submits the application form <p>In either case the National Housing Finance Corporation (NHFC) reviews the application and either grants or declines to provide the subsidy. This is done both on the merits of the application, as well as whether there is funding available. Funding availability varies from province to province as it is dependent on the amount of funds each province allocates to FLISP.</p>		
Spatial implications			
Density	40 to 80 hectares per unit		
Location of land	Periphery		
Status	This programme is offered to a limited extent and not consistently by all provinces		
Key challenges(Urban-Econ Development Economists, 2016)	<ul style="list-style-type: none"> • Overall, housing finance initiatives have serviced only 29% of the affordable housing demand in the market across the country in some way or form, while the housing units built over the 20-year study period have only addressed 4% of the affordable housing demand. • Banks have had the greatest impact on housing finance, having serviced 19% of the demand for affordable housing. It stands well above that of the DFIs and government programmes. • DFIs have had underwhelming performances in addressing the growing demand in the affordable housing market. Although improvement was shown in the years between 2011-2013. • FLISP, has not effectively addressed the affordability gap for access to housing finance and did not effectively provide to the lower end of the affordable market (Financial Sector Charter (FSC) target market). The reality is that 53% of households in the FSC target market were ineligible for mortgage finance due to indebtedness and creditworthiness issues and a further 20% were too poor. Between April 2012 and March 2014, only 1 696 FLISP subsidies were extended nationally – a fraction of what was available in the budget. In addition, only around 4,000 FLISP-supported loans have been disbursed since 2012 		

Provision of Social and Economic Facilities (FI-PSEF)			
Targeted households	All income groups	Amount (1 April 2014)	Clinics - R743,000, Community hall - R2,7 million, Taxi rank - R1,3 million, Sports facilities - R1,9 million, Small business facilities - R6,8 million, Total grant including project planning and management fees - R7,8 million
Use	The Programme facilitates the development of primary public social and economic facilities, which are normally funded and maintained by municipalities, in cases where municipalities are unable to provide such facilities within existing and new housing areas, as well as within informal settlement upgrading projects. This Programme therefore promotes the provision of certain basic social/ community amenities and economic facilities within existing and new housing areas, as well as within informal settlement upgrading projects		
Process / principles	<ul style="list-style-type: none"> • Grants under the Programme will be made available to municipalities for the undertaking of projects that will culminate in the delivery of selected social and economic facilities • The Programme will only fund the development of the amenities in cases where municipalities are unable to • provide such facilities within existing and/or short terms budget allocations • The facilities that are developed through the Programme's funding mechanism must, as far as possible be provided in a holistic, integrated and locally-appropriate manner • The Programme will be implemented by Provincial Departments. The role of the developer will be fulfilled by municipalities. However, where a municipality is unable to assume this role, the Provincial Departments may act as developer • The development of the social facilities should actively endeavour to encourage private sector involvement in the provision of social and economic facilities within the housing development context • The municipalities must identify suitable land taking into account the land use management schemes or zoning applicable in the said areas • The facilities provided must be located in dominant positions within settlements, taking into account open space public transport networks. • An appropriate and sustainable trade-off must be reached between up-front capital costs, long-term maintenance and operating costs, settlement affordability levels, the need for environmental sustainability, social acceptability, human dignity and safety; • Although this Programme is intended to be flexible, certain standards applicable to the facilities to be provided through the use of the funding from this Programme are set out in the guidelines • Municipalities and/or other agencies contracted by the municipalities will be required to commit to staffing and maintaining the facilities, and will have the option of expanding and/or upgrading the basic facilities provided through the Programme with their own resources 		
Spatial implications			
Density	Not relevant		
Location of land	The subsidy could be applied on infill in existing suburbs, in transport corridors and on the periphery.		
Status	This subsidy is not being used		
Key challenges/ opportunities	This subsidy enables the provision of social, health and economic amenities thus improving the integration of housing with other functions		

Institutional Subsidies (SR-IS)			
Targeted households	<R3,500	Amount (1 April 2014)	R110 947 per unit but this varies by province
Use	This mechanism is targeted at housing Institutions that provide tenure arrangements alternative to immediate ownership (such as rental, instalment sale, share block or co-operative tenure) to subsidy beneficiaries. It provides rental housing to support Social Housing and provide a range of creative and affordable special needs and niche market options.		
Process / principles	<ul style="list-style-type: none"> • The main objective of the Programme is to provide capital to housing institutions for the development (or acquisition and rehabilitation) of affordable rental housing for example rental, instalment sale, share block or cooperative tenure arrangements. • The capital must gear private sector financial investments, hence a precondition to access government assistance is the requirement for a financial contribution by the institution. • The capital subsidy is allocated to the housing institution to the extent that it accommodates beneficiaries who qualify for subsidy assistance. • The policy principles for institutional subsidies are as follows: <ul style="list-style-type: none"> – The subsidy is allocated to an approved housing institution to develop and manage rental housing stock – The subsidy capital is only awarded in respect of qualifying beneficiaries – Where qualifying beneficiaries vacate their units, they must be replaced by other qualifying beneficiaries – Housing institutions applying for capital grants under the Programme must have secure long-term tenure rights over the property to be developed and managed • The Programme may be utilised to develop a variety of housing typologies, adhering to the Norms and Standards, including but not limited to: a) New multi-level flat units; b) New row houses and/or semi-detached units of various design; c) New free standing units in a variety of layout; d) Refurbishing of existing units; and e) Conversion of non-residential buildings into residential use. 		
Spatial implications			
Density	80 to 120 units per hectare		
Location of land	Inner cities, transport corridors and in dense areas in the periphery		
Status	This subsidy is available and is applied but to a lesser extent than other ownership focused programmes.		
Key challenges/ opportunities	This subsidy offers opportunities in respect of developing rental stock for low income households (below R5,000). The kind of accommodation comprises one room and/or shared ablution facilities. However the current standards will need to be revised. In addition key issues remain as to the management of such stock as municipalities generally do not have the capacity and there are insufficient non governmental organisations available.		

Social Housing Investment Programme (SR-SHIP)			
Targeted households	<R1,500 – R7,500	Amount (1 April 2014)	Grant from the SHRA of R125,615 per unit
Use	<p>The Social Housing Investment Programme provides grant funding to establish, capacitate and capitalize social housing institutions which may develop, hold and administer affordable rental units within identified restructuring zones. A precondition for receiving capital grants is that social housing institutions need to be accredited by the Social Housing Regulatory Authority and also access own capital contributions. The programme provides rental stock in designated restructuring zones with a focus on restructuring and creation of affordable rental units.</p> <p>The grant is provided to an accredited social housing institution or a private sector developed social housing project who is regulated by the Social Housing Regulatory Authority</p>		
Process / principles	<ul style="list-style-type: none"> • The Social Housing Act, 2008 defines Social Housing as: "A rental or co-operative housing option for low to medium income households at a level of scale and built form which requires institutionalised management and which is provided by Social Housing institutions or other delivery agents in approved projects in designated Restructuring Zones, with the benefit of public funding". • Social Housing is therefore by definition rental or co-operative accommodation, held by Social Housing Institutions (SHIs) or Private Sector Landlords (PSLs) over a long period of time. It excludes individual ownership by residents. Key characteristics of social housing include the following: • The aim of the Social Housing Programme is to create affordable rental housing stock in South Africa's major urban areas that frees its occupants from on-going government dependency and will contribute to the restructuring of urban areas. • Under the current policy low to medium income households refers to a monthly household income of between R1,500 and R7,500. Within this broad affordability band, SHIs can target a diverse resident population, including households from different income categories, as well as focus on meeting special such as the elderly, the disabled or single-parent families. • Social Housing projects include a variety of housing types, such as high-rise, medium-rise (walk-up) and low-rise (single-storey) housing. • A SHI is defined as a legal entity established with the primary objective of developing and/or managing Social Housing stock, which is owned by the institution. To qualify for public funding support, SHIs (whether public or private, for profit or not-for-profit) must be accredited by the Social Housing Regulatory Authority (SHRA) and be located in a designated Restructuring Zone (RZ). 		
Spatial implications			
Density	Medium to high rise apartment buildings, mostly in four storey walkup configurations.		
Location of land	Appropriate for inner city development, along transport corridors and in dense peripheral areas, or on infill sites.		
Status	The SHIP is a key programme being implemented. While an increased investment into this programme has been seen in the last five years the poor performance of the SHRA has impacted negatively on the willingness of government to invest in this programme.		
Key challenges/opportunities	<ul style="list-style-type: none"> • While the Reconstruction Capital Grant (RCG) and Institutional Subsidy (IS) grants are considered to be effective instruments for stimulating the production of Social Housing (SH), the current calibration of these instruments and other finance criteria affecting Social Housing Institutions (SHI) viability are seriously impacting on SHI sustainability and the production of SH in the future. • The RCG Subsidy quantum has been progressively eroded by inflationary cost increases in new accommodation construction. At current subsidy levels it is not possible to construct SH units, due to the increase in construction costs over the last eight years, but subsidy increases have been announced but not implemented in 2017. This is negatively impacting on the viability of SH projects, SHIs and the overall operation of the SH sector. • Contrary to SH policy intent, most SHIs have very limited equity bases on which to leverage portfolio growth and that financially destabilises them. • With respect to debt finance to date, the National Housing Finance Corporation (NHFC), and to a lesser degree the Gauteng Partnership Fund (GPF) have been the major financiers of SH. Currently the debt instruments offered are not considered very effective instruments for stimulating SH development. • The legislative and regulatory provisions, as well as guidelines for Restructuring Zone (RZ) planning, identification, promulgation and review are not thorough or consistent. Consequently, the SH Programme (SHP) has not been part of a coordinated restructuring framework and has given rise to too many RZ that are too large to focus investment. • The policy framework is inconsistent and unclear and the SHP has not been part of a coordinated framework due to inconsistent public restructuring definitions, policies, plans and funding frameworks. • There is insufficient private sector interest and investment in SH 		

Community Residential Units Programme (CRU)			
Targeted households	<R3,500	Amount (1 April 2014)	A square metre rate is applied. Recent unpublished research indicates that the average cost per unit is R319,000 for a 46m ² but the variance is significant
Use	The Community Residential Units Programme aims to provide secure, stable rental accommodation for very low income households. The programme comprises a grant for the development of existing and new public rental housing assets including both capital and maintenance costs. The stock developed should remain in public ownership and cannot be sold or transferred to individual residents. It is used to upgrade or rehabilitate public owned housing stock or hostels		
Process / principles	<ul style="list-style-type: none"> • The Programme aims to facilitate the provision of secure, stable rental tenure for lower income persons and households earning below R3 500 per month who are not able to be accommodated in the formal private rental and social housing market. • The CRU programme replaces the "National Hostel Re-development Programme" and runs in parallel to the National Social Housing Programme. The programme is an option in Phase 4 of the "Informal Settlement Upgrading Programme" and as a long-term option in cases where "Emergency housing" has been provided • The programme will cover: <ul style="list-style-type: none"> - Public hostels that are owned by Provincial Departments and municipalities - "Grey" hostels which are hostels that have both a public and private ownership component due to historical reasons - Public housing stock that forms part of the "Enhanced Extended Discount Benefit Scheme" but which cannot be transferred to individual ownership and has to be managed as rental accommodation by the public owner - Post 1994 newly developed public residential accommodation owned by Provincial Departments and municipalities - Existing dysfunctional, abandoned, and/or distressed buildings in inner city or township areas that have been taken over by a municipality • The objective of the programme is to: <ul style="list-style-type: none"> - Stabilise the housing environment and market especially in township, suburb and inner-city areas - Support the integration of public housing into the broader housing market and environment - Ensure the creation of sustainable public housing assets - Address dysfunctional and/or distressed buildings in cities - Provide rental accommodation for lower income groups not viably serviced by the social or other housing programmes • The capitalisation plan is a once-off allocation that includes capital works and long-term maintenance only, and it is intended that the operational costs will be realised from rental income (cost-recovery model). Operational management costs will not be subsidised. • The target market of the CRU programme is: existing residents in the housing stock are the primary target market. This includes both subsidy qualifiers and non-qualifiers, displaced persons from informal settlement upgrading, eviction processes, etc. and new applicants from the provincial or municipal housing waiting list. Qualifying indigent groups would also qualify for the housing but they must be able to pay some form of rental and services/utilities. • The housing stock funded by the CRU programme must be owned either by a provincial department or a municipality and should remain in public ownership and cannot be sold or transferred to individual residents. • A municipality/province can choose to manage the housing stock in-house or outsource the management to a private company or a municipal entity 		
Spatial implications			
Density	> 80 units per hectare		
Location of land	Inner city, transport corridors and periphery. Often located in previous apartheid township areas		
Status	The National Minister of Human Settlements has terminated this programme. However, it is still in the Housing Code and therefore the Provincial MEC's can still implement the programme. Accordingly, funding is still being allocated in respect of this instrument/programme.a		
Key challenges/ opportunities	<p>An investigation into the implementation of this programme found the following:</p> <ul style="list-style-type: none"> • The programme resulted in large costs per unit, often benefitting those outside the policy's intended income brackets. • The misalignment to municipal development objectives meant that the programme's huge capital investment were essentially a waste, as the end result was not in line with the intended objectives. • The lack of proper feasibility plans which among other things resulted in there being no limits on the unit size, exponentially resulted in the ballooning of costs per unit. • There was no proper tenant screening to ensure that the units were being occupied by people able and willing to pay, • The capacity within both province and municipalities to manage the units once construction was completed, did not exist or lacked in capacity. • Poor location of the units • The programme should be terminated in its current form and transferred to the SHRA to be implemented as one of the social housing programmes targeted at very low income households. 		

Integrated Residential Development Programme (II-IRDP)			
Targeted households	RO - R15,000	Amount (1 April 2014)	House cost - R110 947, A grade engineering level - R43 626, B grade engineering level - R34 401, Actual cost of raw land
Use	This programme provides subsidies for integrated projects that are implemented in terms of specified guidelines for the planning and development of integrated settlements that include all the necessary land uses, housing types and price categories to become a truly integrated community. The programme provides for the acquisition of land, servicing of stands for a variety of land uses including commercial, recreational, schools and clinics, as well as residential stands for low, middle and high income groups. It does away with the requirement found in other policy programmes to identify subsidised housing recipients up front and provides for both subsidised, as well as finance linked housing, social and rental housing, commercial, institutional and other land uses to be developed. This programme replaces the project linked subsidy programme.		
Process / principles	<ul style="list-style-type: none"> • Developed to give effect to the Comprehensive Plan for the Development of Sustainable Human Settlements and incorporates the following: <ul style="list-style-type: none"> – A comprehensive development approach including the provision of municipal engineering services and sites for all land uses to ensure the development of integrated and sustainable human settlements – A phased development approach in terms of which a housing project is packaged in phases to facilitate effective project management and administration as well as effective expenditure and application of housing funds – The allocation and sale of serviced residential stands to qualifying beneficiaries, as well as to persons who do not qualify for subsidies at a variety of prices depending on the income and profile of the households – Housing construction providing a range of house types and tenure to qualifying beneficiaries • The creation of serviced stands in a new township is no longer subject to the identification and approval of a qualifying housing subsidy beneficiary. • The IRDP may be utilised: <ul style="list-style-type: none"> – In an area where unoccupied vacant land is developed for an integrated Human Settlement; – In an existing township where an undeveloped parcel of land is utilised for development purposes. • In order to deliver housing in terms of a procurement compliant process, it is necessary for <ul style="list-style-type: none"> – A developer to manage the total development process and to administer projects in terms of the provisions of the Programme. A developer can either be a municipality or a Provincial Department where the municipality lacks capacity – Professionals to establish the township, design and monitor the installation of the services and to design the housing units, and provide project management services – Contractors to construct the services and housing units. • The services of professionals and contractors can be procured in a number of ways, depending on how a developer wants to allocate risk and manage the project. A developer can choose any one of the following three contracting strategies or a combination thereof: a) Turnkey contract; b) Traditional pre-planned contracts; or c) Development contracts. 		
Spatial implications			
Density	50 to 70 units per hectare		
Location of land	Periphery of metropolitan areas		
Status	The IRDP is currently one of the key programmes being implemented. It is the central instrument for application of catalytic projects which is a key focus area of the National Department of Human Settlements.		
Key challenges/opportunities	<ol style="list-style-type: none"> 1. IRDP projects are an important part of city building however there is a need for a clear definition as to what an IRDP project is. The Design and Implementation Evaluation of the IRDP suggests the following 'Projects are large Greenfield projects that should deliver housing opportunities of more than 5,000 units at a minimum. IRDP projects should comprise a mix of housing typologies that respond to locational needs and market demand. A high level of services and facilities must be provided. Non-residential facilities must be developed simultaneously with the residential areas. Projects are implemented over long time frames (10 to 20 years). Projects should only occur in areas where there is a high market demand and the location must be attractive to the market. Projects should be implemented as a public private partnership or turnkey contract'. 2. A key challenge is to secure the intergovernmental cooperation so as to achieve the integration of housing with other urban functions such as social and economic facilities and engineering services. Currently mechanisms that enable integrated decision making by different departments that control the budgets in relation to these different functions are poor including for example Spatial Development Frameworks, Integrated Development Plans and Built Environment Performance Plans. 3. There continues to be the need for smaller projects that are implemented on infill sites within existing urban areas. These projects should be implemented using the project linked subsidy which the IRDP replaced. 4. IRDP projects are implemented over long time frames and require substantial and consistent funding which is currently not possible within the existing funding framework. A new financial instrument should be established to provide funding for IRDP projects. This funding instrument should enable the project to access a specified allocation per annum in terms of its project and cash flow plan. 		

Enhanced People's Housing Process (EPHP)			
Targeted households	<R3,500	Amount (1 April 2014)	R160 573
Use	Enhanced People's Housing Process (EPHP) is a process where beneficiaries are actively involved in the decision making over the housing process, product and make a contribution towards the building of their own homes. The EPHO assists households to access housing subsidies (consolidation, project-linked, institutional or rural subsidies) with technical, financial, logistical and administrative support to build their own homes.		
Process / principles	<ul style="list-style-type: none"> ▪ EPHP recognizes that the community is the initiator and driver of the process. ▪ EPHP recognizes that community contribution is broadly defined and should not be equated with a labour contribution (sweat equity) only. This can be a contribution but it is certainly not the determining factor. ▪ Partnerships between the community and the various NGOs and FBOs working in the sector are critical. Strong social facilitation skills as well as project management skills are required. The selected NGO / FBO are also responsible for leveraging additional resources and setting up the value added components of the process. ▪ The Programme is intended to build and support the housing micro-finance sector ▪ EPHP therefore requires project enrolment with the NHBRC through the Province to foundation and slab level, but does not require individual house enrolment. ▪ Community is defined either by location (e.g. through living in a particular area) and/or by common interest (for example a household who wants a house and who wants to / is willing to participate in the housing process). ▪ The Programme applies to the following 2 options: <ul style="list-style-type: none"> - Areas / projects where communities have already organized themselves and want to participate in the housing process. The organised community takes their request to the Local Authority through the local negotiating platform. This is a demand led approach. - Areas / projects where there is an opportunity to mobilize communities to participate in the housing process as identified through the Local Authorities and Provincial Housing Plans. This will happen where Local Authorities have allocated a certain percentage of land to the EPHP programme in their Integrated Development Plan (IDP) / housing sector plan so that the programme is prioritized. This is a supply led approach. ▪ Provinces need to manage their demand databases (housing waiting lists) so as to avoid queue jumping. ▪ Practically EPHP projects can be applied to: a) Projects where ownership (individual or group) is the tenure form or where "Permission to Occupy" (PTO) letters have been given in rural areas. ▪ A range of different building typologies including new build, hostel refurbishment, informal settlement upgrade, in-situ upgrade etc. c) Different housing contexts such as informal settlements, rural settlements, greenfields developments, etc. d) Projects where different densities are introduced; and e) Projects where different products and process options are encouraged. ▪ EPHP can only be applied when there are approved Community Resource Organisations (CROs) in a Province. CROs can be NGOs, FBOs or a specifically put together development consortium. The National Department will provide a set of skills needed for a CRO to work with a community in implementing an EPHP project. CROs would then be screened against the set of skills required and if approved placed on an approved list which will then be issued to provinces. However it is for the community to select which CRO they are going to work with in the Province. 		
Spatial implications			
Density	40 - 80 hectares per unit		
Location of land	Periphery but if applied to informal settlements on well located land		
Status	This programme is offered to a limited extent and not consistently by all provinces		
Key challenges/opportunities	This programme offers significant opportunities in terms of enabling households to themselves develop their own top structure as indicated in the NDP and White Paper (2015)		

Upgrading of Informal Settlements Programme (II-UISP)			
Targeted households	<R3,500	Amount (1 April 2014)	Ranges depending on the project. The breakdown is: Phase 1: survey & participation - 3% of project cost, geotec & preplanning engineering services - R8 021, Phases 2 & 3: town planning to permanent engineering services - R26,031, project management - 8% of total cost, Relocation grant: R1 462
Use	The programme facilitates the structured upgrading of informal settlements. It applies to in situ upgrading of informal settlements as well as where communities are to be relocated for a variety of reasons. The programme entails extensive community consultation and participation, Emergency basic services provision, permanent services provision and security of tenure. The programme focuses on in situ upgrading of informal settlements as opposed to relocation. Provides funding for all activities to provide households with a serviced site on an ownership basis. Does not include a top structure.		
Process / principles	<ul style="list-style-type: none"> • The key objective is to facilitate the structured in situ upgrading of informal settlements as opposed to relocation. • Aims to achieve the following policy objectives: <ul style="list-style-type: none"> - Tenure Security: to enhance the concept of citizenship, incorporating both rights and obligations, by recognising and formalising the tenure rights of residents within informal settlement - Health and Security: to promote the development of healthy and secure living environments by facilitating the provision of affordable and sustainable basic municipal engineering infrastructure. This must allow for scaling up in the future - Empowerment: to address social and economic exclusion by focusing on community empowerment and the promotion of social and economic integration, building social capital through participative processes and addressing the broader social needs of communities. • Funding under the programme will be made available to municipalities as grants for the undertaking of projects based on approved business plans for the upgrading of whole settlements • The programme is first and foremost applicable to the in situ upgrading of informal settlements. It will also apply in cases where communities are to be relocated for a variety of reasons including de-densification of settlements. The provisions of this programme are equally applicable to both the upgraded settlement and the relocation site • Entails an area and/or community wide focus, fostering holistic development of the settlement with minimum disruption of existing fragile community networks and support structures. • In cases of relocation the approval of the community to relocate must be secured and the new location must be in an area designated in terms of an approved Integrated Development Plan (IDP) • The programme provides benefits for all the inhabitants of an informal settlement, in a variety of ways, including persons currently excluded from the benefits of the Housing Subsidy Scheme • The programme will finance the development of serviced stands while housing consolidation, is facilitated through the housing development options of the National Housing Programme as separate projects • Local government is the main implementing agency. To counter the lack of capacity at local government level, a focused capacity building programme to support municipalities must be established by provincial housing authorities • The National Norms and Standards in respect of the creation of serviced stands shall not apply to this Programme but could serve as a guideline • The layout of informal settlements generally precludes the determination of uniform stand sizes. Accessible stand sizes should emerge through a process of dialogue between local authorities and residents. Funding is provided for the installation of interim and permanent municipal engineering services. • Beneficiaries of this programme will only receive access to land, basic municipal engineering services and social amenities and services. To qualify for housing assistance benefits, such as registered ownership and a consolidation subsidy, beneficiaries need to comply to the requirements of the relevant programmes • The municipality must table a comprehensive action plan for the management of projects specifically addressing measures to prevent re-invasion of land and the process of shack demolition in the event of persons accessing housing consolidation benefits. 		

Spatial implications	
Density	50 to 80 units per hectare
Location of land	Generally informal settlements are well located. However some informal settlements are on land that is not suitable for human occupation and therefore relocation is required.
Status	Generally informal settlements are well located. However some informal settlements are on land that is not suitable for human occupation and therefore relocation is required. .
Key challenges/opportunities	<ul style="list-style-type: none"> • Despite the initial assumptions and the stated objectives and principles underlying the UISP, in practice these are not being applied. This does not mean that the UISP needs fundamental change but rather improved application of what was initially intended is required. Gaps in the programme theory such as the lack of a clearly articulated vision, mission and end goals need to be addressed • While removing the threat of evictions is important, the notion that tenure will be upgraded incrementally seems to be proving more elusive. Few attempts have been made to provide documentary evidence of occupation rights. Areas under traditional authorities also need ways to ensure tenure security. • An important assumption that tenure security will lead to investment in the top structure by the occupant was shown to be not true. Communities are more likely to prioritise spending on education, health and food before housing improvements resulting in many of the structures being precariously built contributing to vulnerability. • Data collection on informal settlements needs drastic improvement and is critical to build up the community profile and then use it to design the upgrading required. • Many of the informal settlements include tenants and the UISP needs to clearly outline a process for ensuring that such tenants are also accommodated in the upgrading process. • The high levels of deprivation need to be acknowledged and standards need to be in place for basic services. • The inability of residents to improve their shelter results in greater vulnerability and attempts should be made to use building technologies that foster job creation. There needs to be more awareness created of other sources of funding for houses and alternative technologies to reduce the dependence on the housing subsidy programme • Community participation is not occurring as was intended

Annexure 4: Urban Form, Infrastructure And Transport Grants

The table below provides an overview of relevant funding instruments that are available in respect of engineering services and urban integration and sustainability.

Urban Form Grants	
Municipal Infrastructure Grant for Cities (MIG-Cities)	<p>The MIG is aimed at assisting the poor to gain access to infrastructure, MIG funds can only be used for infrastructure for basic levels of service. There are different categories of infrastructure that MIG funds can be used for.</p> <p>Category 1: Households - MIG can be used for infrastructure for basic household (residential) services. This includes:</p> <ul style="list-style-type: none"> ▪ Electricity ▪ Water supply ▪ Sanitation ▪ Storm water management ▪ Municipal roads ▪ Refuse removal ▪ Street lighting <p>Only poor households would qualify for MIG support.</p> <ul style="list-style-type: none"> ▪ Category 2: Public municipal facilities - MIG funds may be used for the following public municipal facilities: ▪ Public transport such as municipal public transport, municipal airports and pontoons, ferries and harbours ▪ Emergency services such as fire stations ▪ Community services such as: childcare facilities, beaches and amusement facilities; cemeteries; funeral parlours and crematoria; cleansing; facilities for animals; fencing; local amenities; local sports facilities; municipal health services; and public places. <p>Category 3: Institutions other than public municipal facilities - MIG funds may be used for infrastructure to provide services to institutions such as schools, clinics, police stations, prisons, churches and recreational facilities. However, only institutions which are used extensively by the poor may be included. These services include electricity, water supply, sanitation, storm water management, municipal roads, refuse removal and street lighting. The MIG-Cities grant allows a differentiated funding approach for cities, that provide for medium-term implementation of larger, multi-year projects.</p>
Urban Settlements Development Grant (USDG)	<p>As a PFMA schedule 4 supplementary grant, the Urban Settlements Development Grant (USDG) seeks to support the development of sustainable human settlements and improved quality of life for households through accelerating the provision of serviced land with secure tenure for low-income households in the large urban areas by supplementing municipal resources to:</p> <ul style="list-style-type: none"> - reduce the real average cost of urban land, - increase the supply of well-located land, - enhance tenure security and quality of life in informal settlements, - improve spatial densities and - subsidise the capital costs of providing basic services for poor households <p>The USDG replaces MIG in the metropolitan cities. It is already "delegated", i.e. paid directly to municipalities in quarterly tranches. The amount is calculated using a "Municipal Infrastructure Grant formula" which incorporates backlog and poverty-weighted data. The USDG is subject to the following conditions:</p> <ol style="list-style-type: none"> 1. Agreement of multi-year performance targets with the national Department of Human Settlements and where required the relevant provincial departments, based on the strategic capital investment plans and programme of the municipality 2. Conditions associated with the grant must be restricted to output and outcome performance of the overall municipal capital expenditure programme 3. Funds may be transferred to a municipality only if the municipality has satisfied the criteria set out in the grant policy framework; and has submitted a draft performance framework by 30 March of each year and the final approved framework by June each year, and human settlements and built environment performance framework which complies with the requirements set out in the grant policy framework to the national Department of Human Settlements, along with proof that the performance framework and the performance targets contained therein have been ratified by a resolution of the municipal council.

Urban Form Grants (Continued)

Neighbourhood Development Partnership Grant (NDPG)	<p>The long-term vision of the NDP Unit is the improved quality of life for township residents through the creation of economically viable and sustainable township neighbourhoods. The primary focus of the NDPG is therefore to stimulate and accelerate investment in poor, underserved residential township neighbourhoods by providing technical assistance and capital grant financing for municipal projects that have either a distinct private sector element or an intention to achieve this.</p> <p>The NDPG can thus be further divided into:</p> <ol style="list-style-type: none"> 1. A Technical Assistance (TA) grant aimed at supporting the development of township development plans; and 2. A Capital Grant (CG) to support investment in nodal, linkage and general township improvement projects that, in particular, attract private sector investment. <p>The resources allocated to the programme consist of the following:</p> <ul style="list-style-type: none"> ▪ Staff and related resources, being operational costs as part of the Budget Office Programme ▪ A schedule 7 Technical Assistance grant, via the PDF Trading Account ▪ A schedule 6 Capital Grant with direct transfers to municipalities <p>Allocations are made to category A, B and C municipalities based on capacity constraints and priority needs to implement community facility and infrastructure projects.</p> <p>The NDP Unit is required to report to the Minister of Finance and Parliament in respect of the performance of the Programme as set out in the Division of Revenue Act (DoRA).</p>
Integrated Cities Development Grant (ICDG)	<p>The integrated city development grant provides the eight metropolitan municipalities with incentives to improve spatial development considerations in their planning and job creation. The ICDG aims to ensure that large, low-income communities on the urban edge are better connected to centres of economic and social activity through investments in public transport. It provides implementation support for cities in four critical areas: governance and built environment planning, human settlements management, public transport, and environmental sustainability and climate resilience. National Treasury transfers the grant to municipalities subject to conditions.</p>

Infrastructure Grants

Public Transport Infrastructure and Systems Grant (PTIS)	<p>The intent of the PTIS Grant is to catalyse a transformation of South Africa's public transport sector into a safe, secure, and high-quality experience for the passenger. The object of the PTIS Grant is to fund public transport infrastructure and systems that promotes public over private transport. PTIS Grants are to be applied to the development, construction, and operation of quality public transport systems as envisaged by the NLTA and Public Transport Strategy. PTIS Grants may also be applied to assist municipalities in the development of plans required by the National Land Transport Act (NLTA) of 2009. The PTIS Grant may not be applied to non-public transport related investments, such as new or expanded roadway infrastructure for general traffic.</p> <p>The grant is subject to approval by the Department and are paid to municipalities directly by National Treasury.</p>
Regional Bulk Infrastructure Grant (RBIG)	<p>The RBIG is a grant mechanism established in 2007 to supplement the financing for the development of regional bulk water infrastructure and regional bulk sanitation collection as well as regional water and waste water treatment works. The fund aims to support Government's development targets (e.g. eradication of basic water supply and basic sanitation backlogs) as well as socio economic priorities, the enablement of growth and development initiatives. Additionally it aims to address specific water risks (e.g. water availability, water quality and environmental challenges).</p> <p>DWA is responsible and accountable for the management of this specific-purpose Water Services Regional Bulk Infrastructure Grant.</p> <p>The transfer from National Treasury to DWA takes place as per DoRA and bi-lateral arrangements.</p>

Infrastructure Grants (Continued)

Integrated National Electrification Programme (INEP)	<p>The purpose of the Integrated National Electrification Programme is to manage the electrification planning, funding and implementation process with the aim of addressing electrification backlog. The INEP provides a capital subsidy to both Eskom and municipalities to address the electrification backlog of permanent occupied residential dwellings, the installation of bulk infrastructure and the rehabilitation and refurbishment of electricity infrastructure.</p> <p>Originally Eskom was responsible for managing the electrification process, however from 2001 government assumed responsibility for the planning, funding, monitoring and evaluation of the electrification programme.</p> <p>Funds are gazetted on an annual basis under schedule 6 and 7 of the DoRA. In the 2013/14 financial year all funding was transferred directly into the municipalities' primary bank accounts.</p>
Municipal Water Infrastructure Grant (MWIG)	<p>The purpose of the MWIG is to facilitate the planning, acceleration and implementation of various projects that will ensure water supply to communities identified as not receiving a basic water supply service. This is achieved by assisting Water Services Authorities (WSAs) to provide water supply services to consumers currently without services, particularly those in rural areas.</p> <p>The MWIG is a direct grant, and is thus transferred directly to municipalities subject to conditions. If these conditions are not met, DWA can withhold or stop the transfer of funds.</p> <p>Water boards have agreed to partner municipalities in implementing the projects. Indeed, if a WSA is deemed not to have adequate capacity, projects must be implemented and managed by Water Boards or through the appointment of alternative service providers agreed after consultation with the National Treasury.</p> <p>The municipalities are ultimately responsible for ensuring the sustainability and on-going operation of their water schemes. In rural communities consideration and priority must be given to establishing a Community Based Organisation (CBO) to manage or assist with the management of the water supply after the project is completed.</p>

Annexure 5: Bulk Services Development Contribution Charges

Table 1: Calculation of Bulk Services Development Charges - Subsidised Housing (SH)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	SH	Roads	Trips / Day	500	183.50	R4 841	R888 267	R124 357	R1 012 624	R2 025
B	SH	Transport	Person Trips / Peak Period	500	334.87	R659	R220 576	R30 881	R251 456	R503
C	SH	Stormwater	ha*C	500	3.83	R135 347	R518 717	R72 620	R591 328	R1 183
D	SH	Sewerage	Kl / day	500	174.50	R13 761	R2 401 336	R336 187	R2 737 523	R5 475
E	SH	Water	Kl / day	500	199.00	R1 688	R335 916	R47 028	R382 944	R766
F	SH	Solid Water	Kg / day	500	2 317.37	R341	R789 250	R110 495	R899 745	R1 799
Total: ALL							R5 154 062	R721 569	R5 875 630	R11 751

Table 2: Calculation of Bulk Services Development Charges - Group Housing (GH)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	GH	Roads	Trips / Day	500	371.00	R4 841	R1 795 896	R251 425	R2 047 321	R4 095
B	GH	Transport	Person Trips / Peak Period	500	604.87	R659	R398 422	R55 779	R454 201	R908
C	GH	Stormwater	ha*C	500	7.25	R135 347	R980 589	R137 282	R1 117 871	R2 236
D	GH	Sewerage	Kl / day	500	174.50	R13 761	R2 401 336	R336 187	R2 737 523	R5 475
E	GH	Water	Kl / day	500	199.00	R1 688	R335 916	R47 028	R382 944	R766
F	GH	Solid Water	Kg / day	500	1 047.37	R341	R356 713	R49 940	R406 653	R813
Total: ALL							R6 268 872	R877 642	R7 146 515	R14 293

Table 3: Calculation of Bulk Services Development Charges - Group Housing (<200m² Erf) (GS)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	GS	Roads	Trips / Day	500	1 377.25	R4 841	R6 666 840	R933 358	R7 600 98	R15 200
B	GS	Transport	Person Trips / Peak Period	500	604.87	R659	R398 422	R55 773	R454 201	R908
C	GS	Stormwater	ha*C	500	6.95	R135 347	R941 000	R131 740	R1 072 740	R2 145
D	GS	Sewerage	Kl / day	500	199.50	R13 761	R2 745 367	R384 351	R3 129 719	R6 259
E	GS	Water	Kl / day	500	249.00	R1 688	R420 317	R58 844	R479 161	R958
F	GS	Solid Water	Kg / day	500	3 292.37	R341	R1 121 315	R156 984	R1 278 300	R2 557
Total: ALL							R12 293 262	R1 721 057	R14 014 319	R28 029

Table 4: Calculation of Bulk Services Development Charges - (<200m² Erf) (GL)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	GL	Roads	Trips / Day	500	1 589.75	R4 841	R7 695 487	R1077 368	R8 772 855	R17 546
B	GL	Transport	Person Trips / Peak Period	500	274.87	R659	R181 054	R25 348	R206 402	R413
C	GL	Stormwater	ha*C	500	13.16	R135 347	R1 781 505	R249 411	R2 030 916	R4 062
D	GL	Sewerage	Kl / day	500	199.50	R13 761	R2 745 367	R384 351	R3 29 79	R6 259
E	GL	Water	Kl / day	500	249.00	R1 688	R420 317	R58 844	R479 161	R958
F	GL	Solid Water	Kg / day	500	3 292.37	R341	R1 121 315	R156 984	R1 278 300	R2 557
Total: ALL							R13 945 046	R1 952 306	R15 897 352	R31 795

Table 5: Calculation of Bulk Services Development Charges - (350m² Erf) (MM)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	MM	Roads	Trips / Day	500	1 746.00	R4 841	R8 451 845	R1183 258	R9 635 103	R19 270
B	MM	Transport	Person Trips / Peak Period	500	274.87	R659	R181 054	R25 348	R206 402	R413
C	MM	Stormwater	ha*C	500	9.15	R135 347	R1 238 222	R173 351	R1 411 573	R2 823
D	MM	Sewerage	Kl / day	500	199.50	R13 761	R2 745 367	R384 351	R3 123 719	R6 259
E	MM	Water	Kl / day	500	249.00	R1 688	R420 317	R58 844	R479 161	R958
F	MM	Solid Water	Kg / day	500	3 292.37	R341	R1 121 315	R156 984	R1 278 300	R2 557
Total: ALL							R14 158 121	R1 982 137	R16 140 258	R32 281

Table 6: Calculation of Bulk Services Development Charges - Market Housing (650m² Erf) (ML)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	ML	Roads	Trips / Day	500	1896.00	R4 841	R9 177 948	R1 284 913	R0 462 861	R20 926
B	ML	Transport	Person Trips / Peak Period	500	64.87	R659	R42 729	R5 982	R48 711	R97
C	ML	Stormwater	ha*C	500	24.30	R135 347	R3 288 932	R460 450	R3 749 383	R7 499
D	ML	Sewerage	Kl / day	500	249.50	R3 761	R3 433 429	R480 680	R3 914 109	R7 828
E	ML	Water	Kl / day	500	449.00	R1 688	R757 921	R106 109	R864 030	R1 728
F	ML	Solid Water	Kg / day	500	3 707.37	R341	R1 262 656R	R176 772	R1 439 428	R2 897
Total: ALL							R17 963 616	R2 514 906	R20 478 522	R40 957

Table 7: Calculation of Bulk Services Development Charges - Market Housing (1000m² Erf) (MX)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	MX	Roads	Trips / Day	500	1996.00	R4 841	R9 662 017	R1 352 682	R11 014 700	R22 029
B	MX	Transport	Person Trips / Peak Period	500	64.87	R659	R42 729	R5 82	R48 711	R97
C	MX	Stormwater	ha*C	500	33.68	R135 347	R4 588 487	R638 188	R5 196 675	R10 393
D	MX	Sewerage	Kl / day	500	249.50	R13 761	R3 433 429	R480 680	R3 914 109	R7 828
E	MX	Water	Kl / day	500	499.00	R1 688	R842 322	R117 925	R960 247	R1 920
F	MX	Solid Water	Kg / day	500	3 807.30	R341	R1 296 690	R181 537	R1 478 227	R2 956
Total: ALL							R19 835 675	R2 776 995	R22 616 670	R45 225

Table 8: Calculation of Bulk Services Development Charges - Second Dwelling Unit (SD)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	SD	Roads	Trips / Day	500	1000.00	R4 841	R4 840 690	R667 697	R5 518 387	R11 07
B	SD	Transport	Person Trips / Peak Period	500	275.00	R659	R181 140	R25 360	R206 499	R413
C	SD	Stormwater	ha*C	500	6.48	R135 347	R877 049	R122 787	R999 835	R2 000
D	SD	Sewerage	Kl / day	500	80.00	R13 761	R1100 899	R154 126	R1 225 025	R2 510
E	SD	Water	Kl / day	500	160.00	R1 688	R270 083	R37 812	R307 895	R616
F	SD	Solid Water	Kg / day	500	2 930.00	R341	R997 899	R139 706	R1 137 605	R2 275
Total: ALL							R8 267 760	R1 157 486	R9 425 247	R18 850

Table 9: Calculation of Bulk Services Development Charges - Flats (<100m²) (FS)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	FS	Roads	Trips / Day	500	996.00	R4 841	R4 821 636	R675 029	R5 496 665	R10933
B	FS	Transport	Person Trips / Peak Period	500	604.87	R659	R398 609	R55 805	R454 415	R909
C	FS	Stormwater	ha*C	500	3.09	R135 347	R418 425	R58 580	R477 005	R954
D	FS	Sewerage	Kl / day	500	149.50	R13 761	R2 057 270	R288 018	R2 345 278	R4 691
E	FS	Water	Kl / day	500	159.00	R1 688	R268 392	R37 575	R305 967	R612
F	FS	Solid Water	Kg / day	500	2 317.37	R341	R790 223	R110 631	R900 854	R1 802
Total: ALL							R8 754 555	R1 225 638	R9 980 193	R19 960

Table 10: Calculation of Bulk Services Development Charges - Flats (>100m²) (FL)

NO.	TAG	Service	Unit	No. Units	Additional Demands	Unit Cost	Amount	VAT	Total	Total per Unit
A	FL	Roads	Trips / Day	500	1371	R4 841	R6 637 011	R929 182	R7 566 193	R15 132
B	FL	Transport	Person Trips / Peak Period	500	274.87	R659	R181 139	R25 360	R206 499	R413
C	FL	Stormwater	ha*C	500	4.67	R135 347	R632 206	R88 509	R720 715	R1 441
D	FL	Sewerage	Kl / day	500	149.50	R13 761	R2 057 392	R288 018	R2 345 287	R4 691
E	FL	Water	Kl / day	500	159.00	R1 688	R268 392	R37 575	R305 967	R612
F	FL	Solid Water	Kg / day	500	3 527.37	R341	R1 202 833	R168 397	R1 371 230	R2 742
Total: ALL							R10 978 851	R1 537 039	R12 515 890	R25 032

Annexure 6: Financial And Fiscal Commission: Future Housing Scenarios

Scenarios	Total Cost (Rm)	Total State Contribution (Rm)	No of Households targetd (Units)	% Assisted
Scenario 1: Historic Practice: This scenario models the most recent historic practice of housing provision in South Africa. This is the provision of subsidy linked housing units at current standards (large and medium scale subsidy housing projects), social housing rental stock and lower end mortgage financed housing (with a FLISP subsidy).	878 263	641 812	8 622 182	86%
Scenario 2 : Formalisation of informality: This scenario models formalizing informality within urban centres including: <ul style="list-style-type: none"> ▪ The in situ upgrading of all households living in informal settlements and backyard rental (site and service only- with households providing the top structure themselves) ▪ Backlog of service connections: Providing basic service connections to all households (rental and ownership) ▪ In respect of new family formation: <ul style="list-style-type: none"> - For all households with incomes of below R3,499 per month - site and service with households providing a top structure themselves - For households between R3,500 and R6,999 per month - social housing, privately developed or household rental²⁰, - For households above R7,000 per month - privately developed residential rental or ownership. 	573 742	223 925	8 622 182	67%
Scenario 3: Absorption and sustainability: This scenario seeks to model alternatives that will result in creating a more compact, efficient and equitable city and also mobilise increased non state delivery including. <ul style="list-style-type: none"> ▪ The in situ upgrading of all households living in informal settlements and backyard rental (site and service only- with households providing the top structure themselves) ▪ Backlog of service connections: Providing basic service connections to all households (rental and ownership) ▪ In respect of new family formation: <ul style="list-style-type: none"> - For all households with incomes of below R3,499 per month - Site and service and household rental - For households between R3,500 and R6,999 per month - Privately developed or household rental and developer delivered subsidy houses for ownership - For households between R7,000 and R9,999 per month - Sub-divided formal house for ownership, social housing or privately developed residential rental, household rental or developer delivered subsidy house for ownership. - For households above R10,000 per month – Privately developed residential or household rental or developer delivered formal houses for ownership 	643 616	212 928	8 622 182	68%

²⁰ This comprises rental units provided by households on their own property

Annexure 7: Future Vision(S) For Human Settlements²¹

Human settlement development can contribute significantly towards achieving the spatial, economic and social vision. However, in order to do this, All government departments and their application of budgets need to be working in synergy. Already there are several government policies that set out visions of the future and these need to be interrogated and aligned. Key policies that impact on human settlements that need consideration include the Sustainable Development Goals (UN); the National Development Plan (NDP); SPLUMA; The Integrated Urban Development Framework (IUDF); the NDHS's Spatial Investment Framework (SIF); the Human Settlements National Spatial Framework (Master Human Settlement Plan) and the NHDS's Catalytic Projects; the Draft Human

Settlements White Paper (Towards a Policy Foundation for the National Human Settlement Legislation); and Provincial SDFs and Human Settlement Plans.

The Sustainable Development Goals

Following the expiration of the Millennium Development Goals (MDGs) in 2014, the Sustainable Development Goals (SDG)²² were developed by the United Nations, which set the post-2015 agenda. During the run up to the adoption of the post-2015 Agenda in 2015, South Africa hosted an AU Summit to develop a Common African Position on the SDGs and noted its commitment to this and the SDG²³ in September 2015. The SDGs will direct development over the next 15 years. The SDGs are aligned with the NDP. There are 17 SDG, illustrated below.



Source: http://www.za.undp.org/content/south_africa/en/home/post-2015/sdg-overview/

SDG 11 that will realize sustainable cities and communities, which relates to sustainable human settlements directly while others will link to this and can be achieved through sustainable human settlements. This Goal 11 has ten targets set globally by the UN that signatories such as South Africa need to address, including²⁴:

1. By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums;
2. By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those

in vulnerable situations, women, children, persons with disabilities and older persons;

3. By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries;
4. Strengthen efforts to protect and safeguard the world's cultural and natural heritage;
5. By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations;

²¹ This section draws from Abrahams & Gardner (2016): Housing Input Paper to the National Spatial Development Plan.

²² See <http://www.saiia.org.za/news/factsheet-the-journey-to-the-sustainable-development-goals>

²³ See <http://www.iol.co.za/news/politics/zuma-commits-sa-to-agenda-2030-1921732>

²⁴ See <http://www.thenatureofcities.com/2015/12/08/an-explicitly-urban-sustainable-development-goal-has-been-adopted-by-the-un-11-now-what-how-can-it-be-effective-in-the-ways-it-was-intended-and-in-the-ways-that-we-need-where-could-it-go-wrong/>

6. By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management;
7. By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
8. Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning;
9. By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels;
10. Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

Hence, Goal 11 of the SDGs is targeted at making cities and human settlements inclusive, safe, resilient, and sustainable. The member countries of the United Nations agreed to create affordable public housing; upgrade slum/informal settlements; invest in public transport; create green spaces; and get a broader range of people involved in urban planning decisions. Therefore, the commitment is to develop new spatial norms and standards for human settlements that will contribute to the densification of cities; improving access to transport; locating jobs where people live; upgrading informal settlements; and address the housing gap market.

The National Development Plan

Overall the NDP presents South Africa with a vision of life in 2030. In relation to Human Settlements, the NDP's Vision for 2030 refers to South Africa having:

"...more walking and cycling...security barriers coming down... a mix of housing types and tenures to meet different needs... energy efficient homes; decent public transport... public spaces where people from different social groups mix... resilient planning systems..."

Chapters 6 and 8 of the NDP²⁵ are relevant for Human Settlements. Chapter 8 proposes a strategy that has 5 pillars (National Planning Commission , 2011, p. 260) to achieve the 2030 vision:

- To respond over time to the entrenched spatial patterns that exacerbate social inequality and economic inefficiency;
- To implement strategic catalytic interventions to achieve spatial transformation;

- To balance spatial equity, economic competitiveness and environmental sustainability;
- To provide South Africans with greater choices of where to live;
- To support individuals, communities and the private sector to engage with government on the future of settlements while streamlining the implementation of spatial interventions.
- To support individuals, communities and the private sector to engage with government on the future of settlements while streamlining the implementation of spatial interventions.

The NDP identifies many of the challenges to achieving this, the key ones that impact on the future NSDF are included below, followed by the proposed interventions. The challenges include:

- South Africa must remain competitive in the Southern African context and our spatial form is dysfunction, hampering the achievement of this;
- This dysfunction includes the high levels of poverty in rural areas (only 30% employment) (National Planning Commission , 2011, p. 267) and high dependence on social grants;
- The housing programme has unwittingly contributed to the apartheid spatial geography with uniform and monotonous settlements on the urban edge and poor quality residential environments;
- The scale of the housing problem is increasing despite the delivery of RDP houses;
- The housing programmes are a "blunt instrument" that has not responded to the diverse housing needs of individuals;
- The housing programme did not give sufficient attention to the working of the market;
- The BNG policy shift has tried to address better located, integrated housing projects and the setting of targets in Outcome 8;
- That households participate in circular migration and have more than one house making it difficult to establish the true demand for housing;
- Many projects do not create efficient urban spaces or improved living environments (with schools, clinics and job opportunities);
- Housing backlogs are growing in areas experiencing economic growth and inward migration while housing projects are being undertaken in areas with little or no growth;
- Tackling informal settlement upgrading has been slow; and
- Municipalities are constrained in providing bulk infrastructure proactively for development.

To reshape human settlements by 2050, the National Development Plan proposes that South Africa must

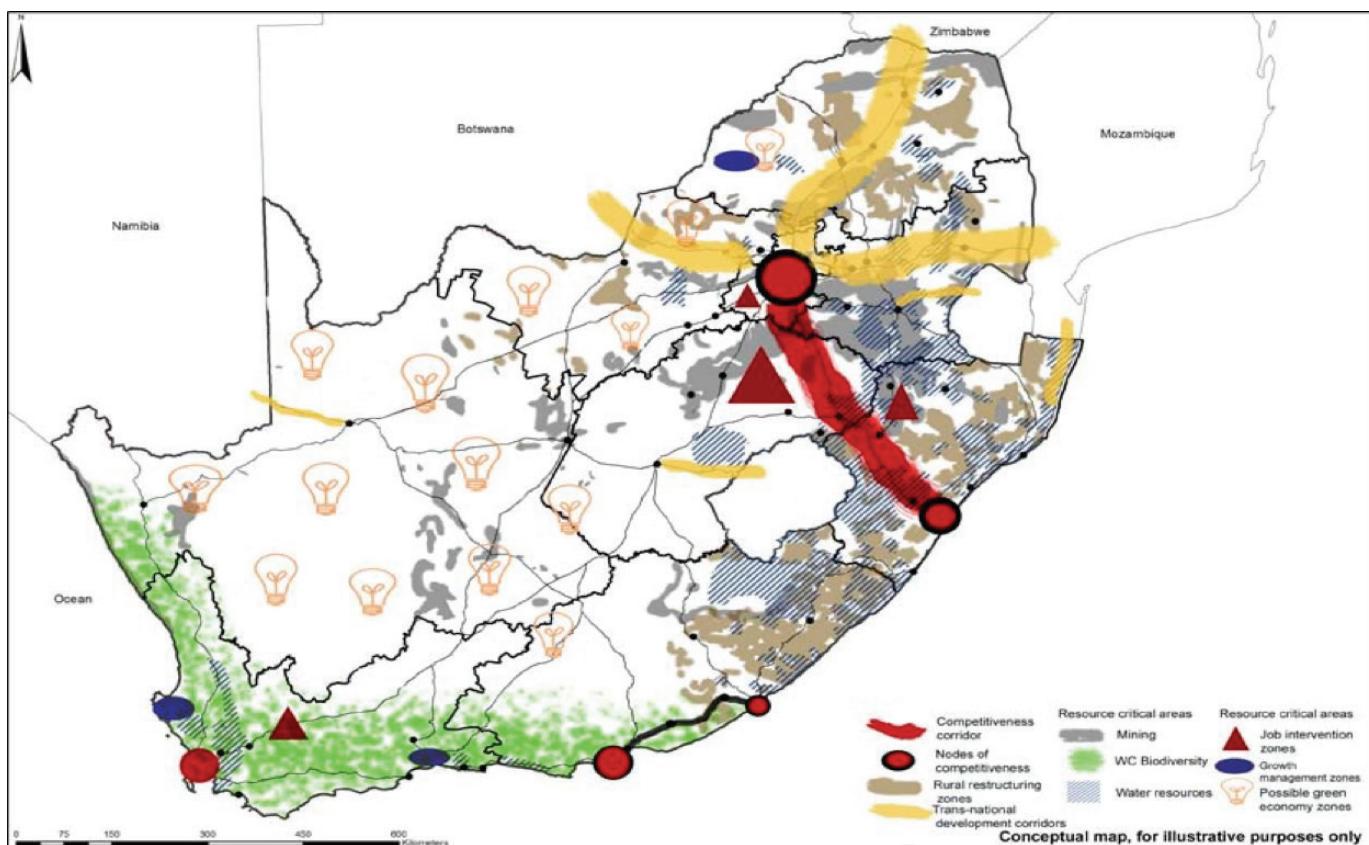
²⁵ Titled "An integrated and inclusive rural economy" and "Transforming Human Settlement and the National Space Economy" respectively

(National Department of Human Settlements, 2015, p. 18):

- Address inequalities in the land market that makes it difficult for the poor to access the benefits of life in towns and cities.
- Adopt stronger measures to reconfigure towns and cities towards more efficient and equitable urban forms.
- Develop housing and land policies that accommodate diverse household types and circumstances.
- Ensure that municipalities put economic development and jobs at the heart of what they do and how they function.

From a spatial perspective, the NDP proposes a Schema for Spatial Targeting, illustrated in the Figure below, that identifies:

- National competitive corridors: these will concentrate economic investment and greater regional competitiveness;
- Nodes of Competitiveness: these are clusters of high economic growth and must strengthen their efficiencies to continue to contribute to the national economy;
- Rural restructuring zones: to develop viable markets to stimulate economic growth;
- Resource critical regions: where minerals and other resources are concentrated;
- Transnational development corridors: to link South Africa into sub-regional economies;
- Special intervention areas: including job intervention zones in declining areas, growth management zones where future growth is anticipated and green economy zones where “green jobs” can be created.



Source: National Development Plan, 2011, pg 250

What this means for human settlements (and for the NSDF framing of human settlements development) is that (National Planning Commission , 2011, pp. 286, 287):

- the identified investment areas will direct investment and growth in the economy and human settlements must be targeted to these areas;
- human settlements can contribute towards spatial transformation;
- municipalities must align their interventions in spatial targeting and human settlements developments to support the national spatial schema;
- the housing subsidy regime must be revised to ensure

diversity of products to suit different spatial areas and options for households;

- housing projects should not be directed to non-strategic areas or poorly located areas;
- prioritising inner city areas, areas of opportunity such as transport hubs and corridors;
- greater government investment in public space and facilities and not just houses;
- municipalities to support pro-poor approaches to housing (e.g. land identification and acquisition);
- greater support for informal settlement upgrading;

In conclusion, the NDP remains the lead government policy to guide the economic and spatial policies in South Africa. While it provides a 2030 vision, all government plans need to begin aligning to it which will take several iterations as most plans are prepared for 5 year cycles.

What SPLUMA says

SPLUMA was enacted on 5 August 2013 and came into effect on 1 July 2015. As the name implies, this legislation sets out the framework for spatial planning and land use management in South Africa. It is framework legislation and Provinces may enact Provincial Planning Acts in line with SPLUMA and municipalities may approve municipal planning bylaws to implement SPLUMA. SPLUMA and its regulations therefore form a "family" of planning laws that guide spatial planning and land development across all spheres of government.

The Spatial Planning and Land Use Management Act (SPLUMA) directs the Minister to compile and publish a National Spatial Development Framework (NSDF) after consultation with other organs of state and the public. The NSDF must take into account the "...policies, plans and programmes [and any matter relevant to the coordination of] public and private bodies that impact on spatial planning, land development and land use planning"²⁶. The NSDF must give effect to the Chapter 2 development principles and norms and standards, most notably:

- The principle of **spatial justice**;
- The principle of **spatial sustainability**;
- The principle of **efficiency**;
- The principle of **spatial resilience**; and
- The principle of **good administration**.

Important substantive elements that are incorporated in SPLUMA and which have an impact on human settlements include:

- That policies, plans and programmes of public (and private) bodies that impact on spatial planning, land development and land use management must be taken into account (13(3)(a));
- That any matter relevant to the co-ordination of the above must be taken into account (13(3)(b)) - the development of human settlements, but their very nature requires considerable co-ordination of sectors;
- That representations or inputs must be considered - here it is the intention of the NDHS to prepare a national human settlements spatial (master) plan that presumably will be an input to the NSDF;
- That the development principles and norms and standards in Chapter 2 must be applied (14(a));
- That consideration must be given to provincial and spatial development frameworks (SDFs) (14(c));
- That the NSDF must enhance the spatial co-ordination of land development and land use management (14(d));

- That the NSDF must indicate the desired spatial patterns of land use (14(e));
- That it must take cognisance of environmental management impacts (14(f)).

SPLUMA makes provision for Provincial and Municipal SDFs and incorporates a new level of SDF called a Regional Spatial Development Framework (RSDF), approved by the Minister. These all need to be aligned with one another.

SPLUMA also regulates the development of land and the management of land uses. It does this through guiding municipalities to include land development procedures in their municipal planning bylaws, which must include land development tribunals, authorised officials and appeal authorities as decision-making bodies. Effectively, this gives municipalities executive authority over any spatial planning and landuse matters in their municipal area. Land use schemes (zoning schemes or town planning schemes) (LUSs) prepared and approved at municipal sphere, will govern land use and land use changes. SPLUMA is very clear that these 3 planning instruments (SDFs; Land Development Procedures and LUSs) must include provisions (including tenure security) that address informal settlements, land in former homelands (customary land) and inner-city slum areas, much of which impacts on human settlement development.

Importantly, all these mechanisms must be guided by the nationally applicable principles in Chapter 2 of SPLUMA. Principles (and norms and standards) support a normative planning system - one that embodies an agreed view of how, as a society, we all see development being guided. In this case, these principles are intended to achieve development outcomes that:

- Address the spatial imbalances / discrimination of past spatial forms of development;
- Are democratic and equitable rather than exclusionary like past practices;
- Results in sustainable development (fiscal, institutional, administrative and environmental) and promotes land markets and land development in good locations;
- Produces efficient development that optimises infrastructure investment.

These are all very important for human settlements as the development of new housing areas, especially government-subsidised projects, need to take these into consideration so that they can contribute to this new spatial vision for the country. Related to SPLUMA, the NDHS intends to prepare a **National Plan for the Development of Sustainable Human Settlements**. **Therefore, implicit in SPLUMA is a vision of a more just spatial form where imbalances from the past are addressed to produce sustainable development that optimises infrastructure investment.**

²⁶ SPLUMA, Chapter 4, part B

What the Integrated Urban Development Framework says

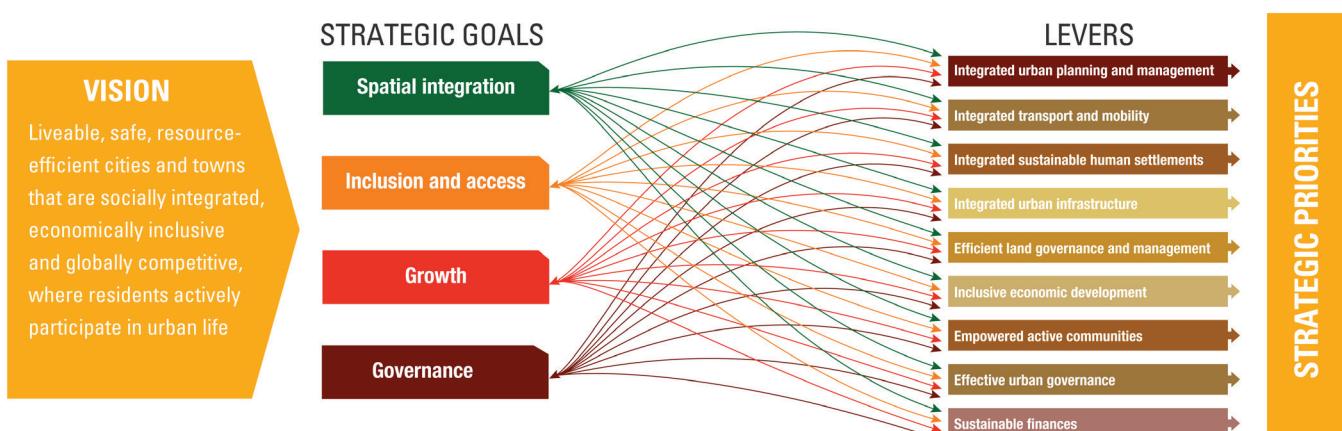
The Integrated Urban Development Framework (IUDF) was approved by Cabinet on 26 April 2016. It is an important policy in terms of influencing the NSDF, and is hailed as the "New Deal" for South African cities and towns and builds on the vision in the National Development Plan (NDP) and the (post 2015) Sustainable Development Goals (SDGs). The IUDF presents a vision of the future where by 2030 almost three-quarters of the population (71,3%) will live in spatially transformed inclusive, resilient and liveable urban settlements that will offer improved quality of life for all citizens through access to basic services, facilities and economic opportunities (Cooperative Governance, DPLG, 2016, p. 7). The vision is explicitly stated as:

Liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life (Cooperative Governance, DPLG, 2016, p. 38).

To achieve this vision, the IUDF has four strategic goals – spatial integration; inclusion and access; growth and governance. These goals are achieved through identifying key levers that will unlock the constraints and structural impediments that are behind the current form of urban development.

To understand the overall concept or linkages between the levers and achieving the goals and vision, the IUDF explains that integrated urban planning (lever 1) forms the basis for achieving integrated urban development. Such development will follow a sequence of policy actions that include provision of integrated transport (lever 2) that will direct targeted investments into integrated human settlements (lever 3) which will be underpinned by integrated infrastructure network systems (lever 4) and efficient land governance (lever 5). This, in combination, will trigger economic inclusion and diversification and result in empowered communities (lever 7). To achieve all this will require effective urban governance (lever 8) and financial reform (lever 9) (Cooperative Governance, DPLG, 2016, p. 8). This is illustrated in the schema below:

Core elements of the IUDF



Source: <http://www.cogta.gov.za/?programmes=the-integrated-urban-development-framework-iudf>

It is Lever 3 that addresses 'Integrated and Sustainable Human Settlements'. In summary, the creation of integrated and sustainable human settlements is seen as the key to unlocking the apartheid spatial form and restructuring cities. The overall vision is to create cities and towns that are liveable and connected. It is closely linked to strategic goal 1 (integrated spatial planning) and its levers. (National Treasury, City Support Programme, 2012).

The IUDF identifies a number of current human settlements issues and the challenges in this sector and proposes key policy priorities to address these (Cooperative Governance, DPLG, 2016, pp. 61-63):

1. A growing demand for serviced shelter: rapid urbanisation and growth in settlements is putting a strain on municipal service delivery and municipal financial viability. The resultant growth in informality, often in environmentally sensitive areas is increasing vulnerability of residents in these informal areas.

2. A shortage of well-located land for public housing.
3. A skewed residential property market: there is duality between formal and informal markets and even low income formal (subsidy) homes have not created an economic asset for the poor and title deeds transfers have been very slow.
4. Low densities of South Africa cities: this along with separate areas for employment and living present barriers to integration. More compact, transit-oriented, denser development is needed.
5. Some human settlement interventions lack an economic logic: post-apartheid housing projects have been located in places far from economic opportunities or have not included or attracted economic opportunities.
6. Township and informal settlements are poorly planned and designed: poor quality environments contribute to crime and violence and compromised health.

7. Conflicting interests and approaches by role players: the many actors required to develop human settlements with economic and social facilities are not coordinated and often community participation to co-produce integrated settlements is lacking.

Several of the policy priorities in the IUDF are at the level of housing projects and do not have a national spatial impact per se, however, their cumulative impact will contribute to improved human settlements and hence better functioning cities. The priorities that have been identified include:

1. Finalising the Human Settlements White Paper;
2. Finalise the devolution of the housing function: this will bring it into line with SPLUMA which identifies municipal planning as a local function.
3. Accelerate the upgrading of informal settlements;
4. Prioritise the regeneration of inner cities;
5. Provide additional options for accessing urban opportunities;
6. Promote densification, including backyards;
7. Redevelop townships;
8. Develop a national policy on inclusionary housing;
9. Identify and fast track land for settlement interventions, including the provision of secure tenure;
10. Develop norms and standards for urban design;
11. Transform public spaces into safe places of community life;

While the focus of this paper is on human settlements, the IUDF has important pronouncements on wider issues of spatial development that are important for locating the human settlements issues. Importantly, it highlights significant spatial development trends that must be noted in the formulation of the NSDF. These include:

1. That cities are the driving force for economic development;
2. That urban centres continue to dominate the country's economy - four city-regions dominate the economy, accounting for more than half the national gross value added (GVA);
3. That the economies of metropolitan municipalities (metros) are growing twice as fast as those of secondary cities and the rest of the country;
4. That all metros have much higher average incomes (by about 40%) than the country as a whole while the 'urbanisation of poverty' is also growing, especially in townships, informal settlements and inner cities, putting pressure on city resources;
5. That between 1996 and 2012, employment grew twice as fast in the metros than anywhere else and over that same period accounted for three-quarters (74.9%) of all net job creation in the country;
6. That individuals and households are moving into 'inner core' cities, where jobs are being created and household incomes are higher;

7. That the majority (64%) of South Africa's youth and just over half (54%) of its children live within urban areas;
8. That most migrants retain strong ties with their rural areas of origin, and regularly visit and send back money.

What this amounts to is summed up in the quote from the IUDF (Cooperative Governance, DPLG, 2016, p. 24)

"The overall picture is stark: individuals and households in South Africa are 'voting with their feet', by moving into provinces and areas where jobs are being created, and where household incomes are higher."

The IUDF is therefore built on the foundations of the NDP, it includes SPLUMA approaches and it acknowledges and empirically illustrates the trends that shape urban development. Its goal is to achieve spatial transformation and maximise the potential of urban areas to do this. It sees the delivery of sustainable human settlements as key to achieving this (along with transport, economic development and good governance).

What NT and USDG and DORA imply

National Treasury's Cities Support Programme (CSP) seeks to support and strengthen the service delivery and management capacity and systems of South African cities, focusing specifically on human settlements, public transport and environmental sustainability (CSP Framework, January 2012). It is focused on the metropolitan areas.

The CSP is focused on addressing the inefficient spatial form of cities that includes long travel times to employment by the poor, increasing township population and ad hoc funding of infrastructure development (CSP Framework, January 2012). The vision of the CSP is to achieve "inclusive, liveable, integrated, productive and sustainable cities." It aims to achieve this through the Urban Services Development Grant (USDG) which has funding allocated through Division of Revenue Act (DORA). Metropolitan areas must prepare Built Environment Performance Plans (BEPPs) to access these funds. A significant portion of the USDG is used for bulk and link infrastructure, however it is also apportioned in certain areas to human settlements projects for internal infrastructure installation and land purchase. More recently, its focus is on servicing and upgrading informal settlements. The CSP also provides support to government departments and municipalities. Hence, it is important to note that National Treasury will have a major influence on the spatial form of our major metropolitan cities through this conditional grant funding (USDG).

What the National Department of Human Settlements Draft White Paper says

There is increasing recognition that the current trajectory of human settlements delivery – in relation to scale, location and nature of subsidy provided – is not fiscally nor spatially sustainable in to the future. The NDHS

has taken up the cudgels of spatial reconstruction and is proposing several policy interventions with spatial implications.

The National Department of Human Settlements is in the process of drafting a new White Paper and legislation, as the previous Housing White Paper was launched in 1994. While the White Paper is not yet completed, a draft discussion document called "Towards a Policy Foundation for the Development of Human Settlements Legislation" (hereafter called **Draft White Paper**) is being circulated and can be seen as the forerunner to the White Paper. The MTSF (2014 to 2019), Sub-Outcome 1 envisages approval of the revision to the housing finance regime by the last quarter of 2015/2016, a White Paper being approved by the first quarter of 2016, a revised Housing Act promulgated by 2017 and the Housing Code being adjusted by 2018. This section draws on current version of the findings in this Draft White Paper document. Clearly, this timeline has not been met, and although revisions and comments on the Draft White Paper continue, it seems increasingly unlikely that it will be finalised and implemented during this Cabinet term.

Overall, the intention is to achieve sustainable human settlements and improved quality of household life. It intends achieving this through the progressive realisation of goals in 15 years' time, (by 2030) and by 2050. Hence, the vision for 2030 is that:

"By 2030 most South Africans will have affordable access to services and quality environments. New developments will break away from old patterns and significant progress will be made in retrofitting existing settlements. In rural areas, targeted investment and institutional reform will drive a revival of rural South Africa towards 2050." (National Department of Human Settlements, 2015, p. 23)

The vision for 2050 is:

"By 2050 visible outcomes from effectively coordinated spatial planning systems will have transformed human settlements in South Africa into equitable and efficient spaces with citizens living in close proximity to work with access to social facilities and essential infrastructure." (National Department of Human Settlements, 2015, p. 23).

The outcome is to achieve sustainable human settlements and improved quality of life and integral to this is to develop spatially and socio-economically integrated settlements, communities and neighbourhoods (National Department of Human Settlements, 2015, p. 29). It will do this in a number of ways, including:

- Aligning human settlements development with economic, transport and planning strategies;
- Promoting area-based planning and having different planning responses in relation to different settlement types;
- Promoting integrated land use and transport planning;
- Promoting transit-oriented development;

- Improving spatial targeting;
- Investing in areas that promote densification, integration and household livelihoods;
- Facilitating and coordinating investment in infrastructure and services vital for the functioning of settlements;
- Facilitate and coordinate investment in public spaces;
- Facilitating access to suitable land for human settlements at the right price and at the right location (National Department of Human Settlements, 2015, p. 29).

The imperatives that underpinned the 1994 White Paper have shifted and even though a policy shift occurred ten years later with the 2004 Comprehensive Plan or Breaking New Ground (BNG), there are still many inherent problems within this sector. In the abovementioned draft policy document, the following ten (10) challenges were identified:

1. Weak spatial planning and governance capability has made human settlements dysfunctional: this includes lack of integrated layout planning, poor pre-planning and weak spatial targeting and the perpetuation of the apartheid spatial form.
2. The high cost of well-located land for human settlements development drives development to the periphery: this has contributed to urban sprawl.
3. Inability to adequately respond to the diverse needs of low-middle income households: the nature of the housing subsidies has proven to be a 'blunt instrument' to meet the complex needs of individuals and households and rental options have been limited. The inability to address the 'gap' market more decisively is problematic.
4. Dysfunctional property market and inability of poor household to participate: the state-built subsidy houses have failed to become integrated into the housing market and not providing a financial lever for the poor or not realising its market value when sold. Also the registration of title deeds for (a million) of these homes has not occurred, while subsidised rural housing has also not delivered title deeds. Government subsidised housing has been excluded from the rates and valuation rolls of municipalities, contributing to unsustainable local government.
5. Narrow focus of performance measurement: mostly based on delivery of units and serviced sites so targets are chased and national data is questionable and there is little geo-spatially referenced data.
6. Escalating cost of development for government: the actual cost of providing units and serviced sites is in excess of the subsidy allocation.
7. Inability to capitalise in value created through the government subsidy programme: less than 40% of all government subsidy beneficiaries are billed for services and the total investment that government has made in the property market, estimated at over R3 Trillion, is not included in the determination of the GDP.

8. Poor quality of construction: the resultant remediation costs are borne by government.
9. Lack of community and civil society involvement.
10. Narrow interpretation of the Constitutional Mandate: these were summed up as comprising 3 challenges - how far the progressive right to access housing should go; what purposes housing subsidies should play and the respective roles of the 3 spheres of government in developing human settlements.

Many of these identified challenges may not have spatial implications, but it is important to note that in general, state funded human settlements provision have not contributed to positively addressing the apartheid spatial legacy as the government intended back in 1994.

NDHS's National Spatial Investment Framework (SIF)²⁷

The SIF is apparently based on the NDP and IUDF (HDA, 2016, p. 4) and aims to guide decisions on where to invest, in what types of housing and through which combination of funding instruments and budgets (HDA, 2016, p. 5). It essentially provides the framework for improved and co-ordinated housing investment. While not a vision *per se*, it is intended to guide where human settlement investment should be directed to in the future.

The SIF provides a housing investment logic that is based on guiding principles (SPLUMA Chapter 2 principles), mixed land uses and providing different typologies and tenure. The housing investment logic is built up from 4 key foundations – building coherence in the planning paradigm, understanding the delivery paradigm and the hierarchy of investment logic and providing funding instruments.

The SIF identifies problems with the planning logic which lacks coherence due to poor linkages between spatial plans, capital investment frameworks, regulatory and institutional aspects along with the problem that at present there is no spatial location logic or transformation imperative built into the allocation of funding for housing. Instead what happens is that funding (HSDG) is channelled to Provinces from the NDHS according to a formula in DORA; Housing sector plans only show broad intentions and then housing subsidies are allocated to projects which identify qualifying beneficiaries (HDA, 2016, p. 16). There is no spatial targeting as such. Also provinces and municipalities often provide housing in the same space and the Provincial projects often pay little attention to local IDPs and SDFs and other plans.

To break this planning incoherence and improve the delivery mechanisms, the SIF proposes three key interventions that are spatially targeted:

- Directing investment into investment zones: this could be through designating priority housing development areas;
- Identifying and implementing catalytic projects: these

are large-scale, integrated, mixed income projects that the NDHS will identify according to set criteria;

- Boosting the NUSP: in municipalities with a critical mass of informal settlements that need a coordinated response (HDA, 2016, p. 17).

In addition, the hierarchy of the investment logic needs to be understood, starting from defining roles and responsibilities for each sphere of government. Importantly, it is at local, municipal sphere where the spatial logic must address municipal viability, city restructuring and balancing housing typologies across the city or town (HDA, 2016, p. 18).

The many sources of funding that get channelled into human settlement development is often not co-ordinated, not directed to achieve similar objective or not aligned to the same location. In addition there are several sectoral infrastructure grants that contribute to human settlements. What the SIF proposes is to consolidate the various grants to support a more area-based approach and have grants that support housing, infrastructure and capacity support (HDA, 2016, p. 21).

The SIF is therefore a framework that is intended to address apartheid spatial form to create integrated human settlements through guiding public and private sector investment in human settlements.

What the National Spatial Planning Framework for Human Settlements (Master Spatial Plan for Human Settlements) says

At a national level, the Minister of Human Settlements has announced the development and implementation of a National Spatial Human Settlement Plan which will define:

- Principles for spatial targeting;
- Criteria for public and private investment;
- Identification of broad investment areas using the principles and criteria;
- Identifying available land in suitable locations for development
- Developing a list of Catalytic Projects (including mining town interventions)

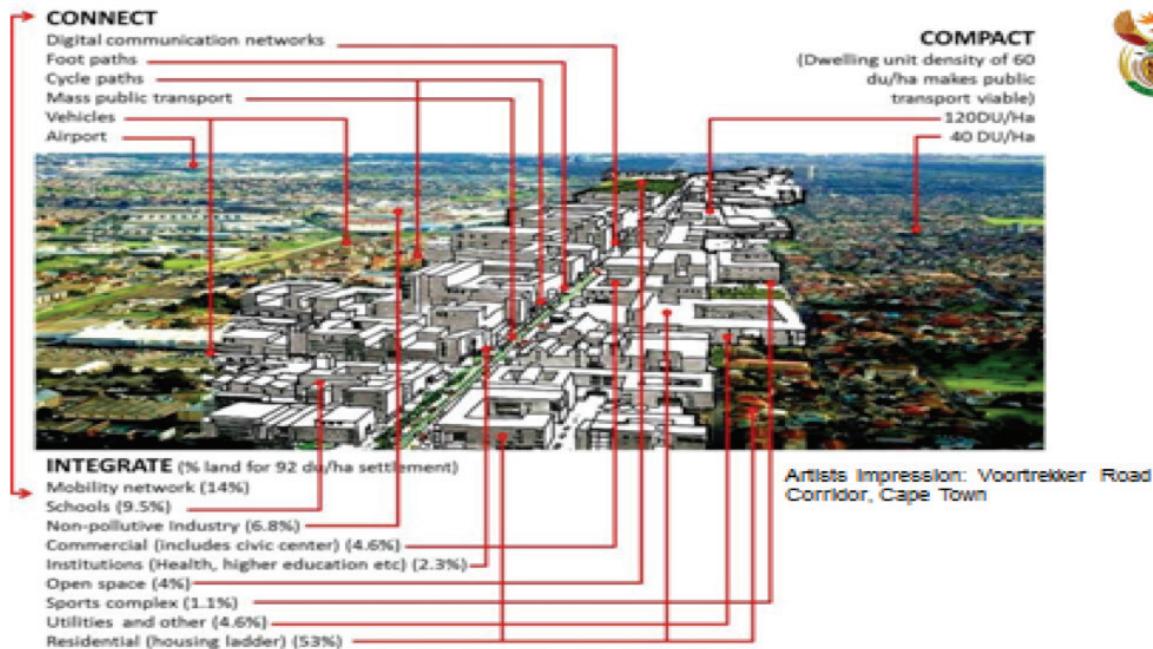
The NDHS is also proposing (in the Draft White Paper) that Provincial Spatial Development Frameworks for Human Settlements be prepared so that there is integration with economic development, services and infrastructure (NDHS, 2015, pg 31).

Based on an analysis of the numerous national provincial and local plans, three key urban development principles, as illustrated in the Figure below have been distilled by the NDHS for guiding future human settlements. These are:

- Connectedness;
- Compaction; and
- Integration.

²⁷ This document was prepared by the Housing Development Agency in March 2016 and is marked as confidential.

Meeting Sustainable Development Goals



Source: Housing Development Agency

Related to the Spatial Framework for Human Settlements is the Ministerial agenda to identify and support “megaprojects” or catalytic projects. These will be chosen strategically in order to achieve spatial transformation. These will all aim to meet the three interrelated principles of Compaction, Connectedness and Integration, and should conform to the following principles (HDA, Presentation):

- Spatial Justice – e.g. integration
- Spatial Sustainability – e.g. location, access to employment opportunities, relationship to environment
- Spatial Resilience – e.g. mixed use, incremental development
- Spatial Quality - e.g. diversity and choice
- Spatial Efficiency – e.g. optimal use of limited resources
- Good administration (SPLUMA) – e.g. institutional arrangements

The implied human settlements vision is therefore one which will direct investment in human settlements to well-located areas where infill or catalytic projects that will be integrated and compact to address spatial imbalances.

The Minister will imminently announce a full list of 105 catalytic projects across the country that will form the basis of the next few years' focus for the creation of new human settlements. The NSDF must take heed of all these new NHDS policy initiatives.

NDHS Catalytic Projects

As part of the ‘spatial targeting’ approach and in order to scale up the delivery of integrated human settlements, the NDHS and the HDA are promoting the concept of ‘catalytic’ projects. These are housing ‘megaprojects’ that will deliver 5 000 to 10 000 units within a development in locations that will purportedly address spatial reconstruction (however this is disputed by many commentators). They will also trigger investment by the private sector (estimated at R150 billion over five years²⁸). Smaller projects will also be identified that meet the catalytic project criteria. The Minister of Human Settlements made a public announcement on catalytic projects in May 2016 and following that a call was made to the public and private sectors to identify projects that meet the criteria developed by the NDHS. Projects have been evaluated and 46 ‘mega city’ projects have been identified across the nine provinces, representing a combined investment of approximately R300 billion²⁹.

The HDA has mapped the location of these projects but this information is not available presently, pending a public announcement by the Minister, expected in the near future. For example, in Gauteng, several of the mega human settlements were mapped by the GCRO and these are illustrated in the plan below, taken from the Gauteng Draft PSDF. What is important for the NSDF is that the ‘mega human settlements’ approach using a “big solution” to tackle a “big problem” which requires large tracts of land (maximum of 15 000 units per development) which either have to be assembled or acquired by the authorities. Such land is usually more

²⁸ See <http://www.gov.za/speeches/minister-sisulu-announce-human-settlements-catalytic-project-across-country-4-may-2016-0000>

²⁹ See Min. Sisulu's speech following the NDHS budget vote: <http://www.gov.za/speeches/minister-lindiwe-sisulu-human-settlements-dept-budget-vote-201617-3-may-2016-0000>

available on the peripheries of built up areas. The map below illustrates this clearly, causing the GPSDF to note that not all mega human settlements are well located in Gauteng. All such developments will need the support of the municipalities for implementation (they are responsible for infrastructure and spatial planning) and the mega human settlement will need to align with their IDPs and infrastructure investment priorities if they are to be implemented.

Provincial Human Settlements Visions (from PSDFs) and Provincial SDF Visions

The Provincial SDFs are mandatory instruments now, in terms of SPLUMA. Many are still being prepared under this new legal regime. The PSDFs have an important role in:

- Spatially representing provincial development policies and strategies, including sectoral provincial plans;

- Providing the vision for future land development patterns in the province;
- Coordinating municipal SDFs;
- Expressing spatially any national development strategies.

While they provide a framework for municipal SDFs and they rely on coordination and cooperation, municipal SDFs remain a municipal planning function, making it difficult for a province to force provincial spatial proposals onto a municipality, which has determined its own spatial priorities. However, through cooperative governance, IGR structures and ongoing iterations of SDFs and housing plans, greater alignment will be achieved towards provincial and national spatial visions. The table below provides an illustration of a comparison of 3 provincial SDFs and their respective Human Settlements Strategic Plans to provide a snapshot of alignment of these plans.

Province	Spatial Frameworks	Human Settlements Plans	Comments and Implications
Western Cape	PSDF ³⁰	PHSSP ³¹	
	Its purpose is to serve as a basis for coordinating, integrating and aligning 'on the ground' delivery of national and provincial departmental programmes. 5 Key policy objectives, including 2 related to human settlements: A strong sense of place and quality environments within settlements at all scales. Accessibility to opportunities and services	Acknowledges the PSDF - will align its spending patterns and programmes to the PSDF Identified 5 catalytic projects comprising 48 558 units in 5 municipalities. Provincial priority projects: mostly in CoCT - deliver 11 539	Human Settlements projects to be aligned to the PSDF 90% of population in CoCT (64%), Cape Winelands District and the Eden District. This underscores the importance of a settlement hierarchy approach to spatial and human settlement interventions
KwaZulu Natal	KZN PSDF ³²	KZN Human Settlements Strategic Plan 2016/16 ³³	Implications
	PSDF is being revised as last done in 2011. Much new research, data and policies and SPLUMA to be made consistent with. Based on the PGDS and presents the spatial picture from environmental, social, economic, accessibility aspect to achieve a spatial vision. Essentially it identifies a hierarchy of nodes (not urban and rural) and corridors that link: social investment areas (mostly rural), priority conservation areas, economic support areas (rural and coastal), economic value adding areas (economic cores) and agricultural investment areas.	It is based on Outcome 8 and achieving the MTSF and the PSDF. It recognises the problems with human settlements delivery including coordination and capacity constraints. It also is informed by other human settlements policies (e.g. Informal settlement upgrading strategy). It also has data, including mapping of areas of most need and human settlement projects and alignment of human settlements projects and the PSDF	In broad terms, there appears to be alignment between the PSDF and the Human settlements Strategic Plan, at the level of policy and plans. There seems a common understanding of the developmental issues in the Province and how human settlements can address the inequalities in space to support the PSDF. Promoting more evidence-based and settlement hierarchy approaches

³⁰ See (Western Cape Government, 2016) presentation based on the 2014 approved PSDF

³¹ See (Western Cape Government , 2015)budget-vote-201617-3-may-2016-0000

³² See (KZN Department of Cooperative Governance and Traditional Affairs, 2016)

³³ See (KZN Department of Human Settlements, 2015)

Province	Spatial Frameworks	Human Settlements Plans	Comments and Implications	
Gauteng	Gauteng PSDF	<p>HS Strategic Plan 2015 ³⁴</p> <p>Draft at this stage and just completed public comment period Based on polycentric growth model with several nodes where growth will occur, linking corridors and Provincial "corridors" which are in fact regions within Gauteng (east, west, central, north and south). Sees new development expanding more in northern (and to east and west in the north) as areas as south has infrastructure constraints.</p>	<p>Based on aligning the GPG 10 Pillars, the PSDF, the MTSF and Outcomes. Has 8 strategic goals of which few have explicit spatial outcomes but is an emphasis on equitable, integrated and efficient spatial patterns. To achieve this they acknowledge the need for more alignment and cooperation with municipalities, through IGR structures, the IDP process, land acquisition and infrastructure coordination.</p> <p>Strong emphasis on IGR and alignment of policies and programmes (HSDG AND USDG).</p> <p>Mention is made of introducing "game changers" such as rapid delivery of services and spatial restructuring, but these are essentially municipal functions.</p>	The PSDF makes few spatial proposals that will fundamentally alter the structure of Gauteng as it sees the existing areas growing but wants these to grow more strategically (densification, mixed uses, corridors, economic uses, public transport). Where new public transport is planned – east of Tshwane is earmarked for more growth as is the west around Lanseria. On paper the HS Strategic Plan acknowledges improved alignment. Recognition of the key role that municipalities play in land and services, IDPs and SDFs is important. Provincial human settlement programmes are geared to achieving the national outcomes (mixed use, integrated developments and informal settlement upgrading).

Source: Abrahams & Gardner, 2016

Identification of the Key Human Settlements Issues

This section summarises and consolidates key issues related to human settlements from various strategic documents. A number of key sources³⁵ which set out the issues, considerations, challenges and actions have been analysed and collated into the comparative table below to provide a summarised snapshot of the recurring issues in the human settlements sector. It is from these that the main or key human settlements research issues that impact on the NSDF are identified for further elaboration in the next section.

It is clear from the comparative table below (Table 6) that common challenges include that human settlements have contributed to, and continue to perpetuate apartheid spatial form rather than helping to restructure space along new visions and goals; that cities are growing

fast and investment in human settlements is often at odds with this and directed to smaller towns which are in decline; that the nature of the population moving to cities or experiencing higher growth is poor and reliant on government housing supply and in its absence are living informally in freestanding settlements, backyard shelters or crowding into rooms in inner city areas; that government housing projects (RDP) produced poor quality environments with few or no economic opportunities or a range of social facilities; that poor households adopt survival strategies that include having more than one house making it difficult to establish demand or specific kinds of housing products and that our human settlements of the future need to be mindful of global future trends and accommodate "green" and "smart" strategies going forward.

³⁴ See (Gauteng Dept Human Settlements, 2014)

³⁵ The National Development Plan Vision 2030; Towards a Policy Foundation for the Development of Human Settlements Legislation (the Draft White Paper); the Medium Term Expenditure Framework for Human Settlements 2014 – 2019; the Integrated Urban Development Framework (IUDF) and the UN's Sustainable Development Goals (SDGs).

Table 7: Summary of Key Human Settlement Challenges and Issues from the Literature

Human Settlement Challenges	Human Settlement Challenges	Draft White Paper	Mtef 2014-19 (Implicit Challenges Are Reflected In The Actions)	Iudf	Sdg (Not Explicitly Stated But Implicit In The Targets)
1. Apartheid city form not addressed by human settlements programme	The housing programme has contributed to the apartheid spatial geography	Weak spatial planning and governance had made human settlements dysfunctional – perpetuated the apartheid spatial form	Implement spatial targeting through HSSDF Catalytic housing projects in priority areas Economic, social and housing integration	Human settlements in peripheral locations far from economic opportunities	Access to safe and affordable transport systems for the poor and vulnerable groups Improve national and regional planning
2. Human settlements not addressing climate change					Human settlements to adopt policies and plans that promote resource efficiency, mitigation and adaption to climate change
4.Land availability constraints		The high cost of well-located land drives development to the periphery	Fast track the release of well-located land	Shortage of well-located land for public housing	
5.Low density and fragmented cities				Low densities of cities Separate living and work areas	
6.Housing demand is increasing	The scale of the housing problem is increasing			Growing demand for shelter, rapid urbanisation and growth in informality	
7.Housing programmes have been a “blunt instrument”, not providing choices to match needs	Housing programmes are a “blunt instrument” - insufficient choice	Inability to respond to the diverse needs of households - “blunt instrument”	Need a diversity of tenure types and programmes (backyard, mineworker, social, rental, FLISP, affordable)		Access for all to affordable, safe and adequate housing and basic services
8.State housing provision has contributed to a dysfunction property market	Housing programme did not give sufficient attention to the working of property markets	Dysfunctional property market, delays in title deeds, asset creation problems and exclusion from rates and valuation rolls	Need a functional residential property market	Skewed residential property market – duality between formal and informal Asset creation limited	
9.Investment in housing by the state has not contributed to GDP		Government value in the programme (R3t) not counted as GDP			
10.Phenomenon of circular migration and multiple house ownership	Households participate in circular migration and have more than one house - difficult to establish demand				

Human Settlement Challenges	Human Settlement Challenges	Draft White Paper	Mtef 2014-19 (Implicit Challenges Are Reflected In The Actions)	Iudf	Sdg (Not Explicitly Stated But Implicit In The Targets)
11.Chasing targets rather than human settlements		Narrow focus on performance measurement – units and serviced sites			
12.Municipal accreditation to promote delivery			Need Municipal accreditation		
13.Gap in actual cost of subsidy house and subsidy quantum		Actual cost of providing subsidy units is escalating and costs more than the subsidy			
14.Quality human settlements environments are not being produced	Projects do not create efficient urban spaces or improved living environments	Poor quality construction,	Households must have adequate housing and better living environments	Settlements not integrated. Poorly planned and designed, poor quality environments.	Provide adequate shelter. Improved planning of human settlements
15.Poor community involvement - low levels of co-production		Lack of community and civil society involvement		Poor community involvement and co-production	Participatory approaches
16.Lack of co-ordinated planning to produce human settlements				Poor co-ordination of role players to develop sustainable human settlements	Need integrated planning
17.Human settlements not targeted to the right areas	Housing backlogs are growing in some areas yet projects undertaken in areas with little or no growth			Lack of economic logic to some settlements, far from and not included or attracted economic opportunities	
18. Not doing enough informal settlement upgrading	Informal settlement upgrading has been slow		Target informal settlement upgrading	Growing informality	Upgrade informal settlements
19.Infrastructure for human settlements not provided pro-actively	Municipalities are constrained in providing bulk infrastructure proactively		All new state housing developments to have access to basic water, sanitation, energy and roads		

Annexure 8: Housing And Urbanisation Intervention Strategy (Huis) Model

A. Demographics Tab

Households balance with National Census figures for eight metros in 2011, escalated at 2% pa.

Table 1 separates out households across housing type (and notional density) for the eight metros. Note this is notional, as a high density high income apartment may consume much more space than a middle income apartment.

Note the Tableau graph though - clearly shows that middle-high income households have greater medium and higher density living arrangements than low income people.

B. Development Contribution Tab:

This is calculated for the key typologies using the City of Cape Town Development Contribution Calculator. It is a year or two old, but is the best source of scientifically calculated DCs. This model is applied in the Bulk Services Contributions in later tabs.

C. Typology Costs

- Table 1 outlines the detailed costings just obtained for the CAHF work I am doing. These are produced by a very knowledgeable QS who does a lot of subsidised housing and social housing policy work (Jacus Pienaar), so give a current view of real costs of these different typologies.
- Table 2 is the data table for the scenario modelling. This summarises costs, and has red inputs for subsidies related to each typology.
- Subsidy figures are based on the last national determination (2014), with some assumptions where necessary. Specifically, the intent here is to calculate a 'Municipal residual' subsidy - unfunded housing subsidy mandate - not covered by national or provincial appropriations.
- Table 3 allocates each housing intervention type and sub-type to a specified Delivery Typology, and targeted income group.

D.1 Scenario Models

- Table 1 divides incomes into five categories. Jamie, I suggest for RUIM we perhaps have three: Low Income, Medium income, and High + Very high combined. This split is NB for the subsidy parameters, given the split between <R3500 and the "Gap" market. Table 1 is there to guide the allocation of future delivery to specific density categories.
- Table 2 projects the 2017 new family formation per income class (note as per your model, it is assumed that income groups grow evenly in the metros).
- Table 3.2 then allocates these households across

the broad housing categories. The model balances all remaining households not allocated to a delivery "interventions" to informal housing. These figures are calculated by changing the red %. Note that once the red % are calculated, this number of delivered units are then allocated across the subcategories. Subcategory % therefore add up to 100%.

Scenario 1: Status Quo:

- I have assumed the following, based on 'educated estimates', as subsidy figures per metro are hard to find.
 - Market Subsidised Housing
 - FLISP: 3,369 flisp subsidies paid. This is probably about accurate.
 - Subsidised Rental Housing:
 - Social Housing: 2% of total low income households, 4% Medium income households. Total Delivery = about 2700 units. Probably ambitious at present.
 - Subsidised Ownership Housing:
 - BNG: 50% of households (delivery of 35,000 units pa). Divided between:
 - Med Density BNG 20%
 - Low Density BNG 45%
 - PHP Serviced Site (no top structure) 10%
 - UISP Upgraded site (no top structure). 25%
 - Informal Housing:
 - 48% of new low income households are housed in informal circumstances (backyard rooms, shacks, informal settlement)
 - 76% of Medium income households are housed informally. This is due to their inability to access subsidised BNG or FLISP accommodation.

Scenario 2: Medium Densification:

- The remaining two scenarios are premised on the same delivery of units per intervention, but changed density types within each intervention.
 - FLISP: Same
 - Social Housing: 50% high density (10 storey), 50% medium density (walkup).
 - BNG: 50% of households (delivery of 35,000 units pa). Divided between:
 - Med Density BNG 40% (up 20%)
 - Low Density BNG 25% (down 20%)
 - PHP Serviced Site (no top structure) 10%
 - UISP Upgraded site (no top structure). 25%

Scenario 3: High Densification:

- FLISP: Same
- Social Housing: 75% high density (10 storey), 25% medium density (walkup).
- BNG: 50% of households (delivery of 35,000 units pa). Divided between:
 - Med Density BNG 65% (up 25%)
 - Low Density BNG 0% (down 25%)
 - PHP Serviced Site (no top structure) 10%
 - UISP Upgraded site (no top structure). 25%
- Table 3.3 then allocates this delivery programme to density groupings.
- Table 4.1 outlines the financing parameters of the products allocated to each type. This looks up the category costs, subsidy and 'unfunded subsidy' mandate. At this stage, it combines all subsidies as per RUIM. But this could be separated out into national/provincial subsidy and municipal finance required if necessary.
- Table 5 then calculates land use implications, in terms of Ha of land required for new build, as well as the proportion of the programme related to 'infill' (which includes consolidation and resubdivision in market housing, and second dwellings and backyard units in lower income groups). Finally, new informal settlement is also indicated.

summary table that draws out the key capex implications for the three scenarios.

Bulk services contributions may be included or excluded from HUIS. In these scenarios they are excluded, as this is calculated in the RUIM model.

Annexure 9: City Of Cape Town Housing Strategy

Shisaka's Housing Strategy Tool (HST) has been applied to key metros in order to quantify human settlement demand. This approach considers the following:

- **Housing circumstances** are the current housing conditions of all households
- **Housing interventions** are a set of defined activities that are required to improve current housing circumstances, for example delivering basic services to existing formal housing or in situ upgrading of informal settlements.
- **Strategic housing scenarios** is the combination of a range of interventions, responding to the full range of housing circumstances requiring intervention
- **Proposed High Level Strategy** is the combination of interventions, so as to optimise the positive impact on households in current and projected housing circumstances requiring intervention, within the delivery resource constraints.

Housing Circumstances

Monthly Income	R0 - R3 200	R3 201 - R5 400	R5 401 - R13 000	R13 001 - R26 000	R26 000 Plus	Total
A: Formal - owned	156 167	67 453	77 885	80 822	107 463	489 833
	15%	6%	7%	8%	10%	46%
B: Formal - rented, plus room / flatlet not in backyard	147 650	53 569	49 757	41 820	35 321	328 135
	14%	5%	5%	4%	3%	31%
C: In formal settlement - regardless of whether it is owned or rented	121 812	15 979	4 156	1 017	858	143 823
	11%	1%	0%	0%	0%	13%
D: Backyard dwelling - regardless of whether it is owned or rented	57 259	12 105	4 142	999	451	74 957
	5%	1%	0%	0%	0%	7%
E: Traditional dwelling - regardless whether it is owned or rented	1 981	554	442	358	433	3 767
	0%	0%	0%	0%	0%	0%
F: Hostels	7 747	2 090	1 353	738	396	12 297
	0	0	0	0%	0	0
G: Other	9 796	2 674	1 613	871	804	15 297
	1&	0%	0%	0%	0%	1%
Total excluding overcrowding (2011)	502 412	154 424	139 348	125 625	145 689	1 068 571
	47%	14%	13%	12%	14%	100%
Households living in overcrowded conditions in formal owned or rented	61 933	26 157	16 684	6 515	2 801	114 384
	(6%)	(2\$%)	(2%)	(1%)	(0%)	(11%)
Total incorporating overcrowding (2011)	564 345	180 581	156 032	133 140	148 490	1 182 955
New family formation (growth and in-migration) # of Households	201 - 2012	107 466	32 673	29 180	26 404	28 789
		48%	15%	13%	12%	13%
	2022 - 2032	90 373	29 696	28 001	25 833	29 622
		44%	15%	14%	13%	15%
Overall total (households)	2022	671 811	213 254	185 212	159 544	177 279
	2032	762 184	242 950	213 213	185 377	206 901
Overall total (households) in need	2022	356 217	89 004	55 515	1755	1 227
	2032	446 590	118 700	83 516	1755	1 227
						651 788

Source: Abrahams & Gardner, 2016

Income Band	R 0- R 3,200	+ R 3,200 – R 6,400	+ R 6,400 – R 13,000	+ R 13,000 – R 26,000	+ R 26,000 plus	= TOTAL HH's
✓	315,594	124,250	129,697	124,870	144,463	838,873
✗	186,818	30,174	9,651	1,755	1,227	229,625
	+ 61,933	+ 26,157	+ 16,684	+ ✓	+ ✓	+ 104,774
✗	197,839	62,369	57,181	✓	✓	317,389
	= 446,590	= 118,700	= 83,516	= 1,755	= 1,227	= 651,788
TOTAL HH's in need to 2032						

Household Circumstances : Key

Acceptable: A: Formal – owned + B: Formal - rented, plus Room / Flatlet not in backyard + E: Traditional dwelling - regardless of whether it is owned or rented + G: Other
Sub-optimal: C: Informal settlement- regardless of whether it is owned or rented + D: Backyard dwelling - regardless of whether it is owned or rented (<R13k) + F: Hostels

Overcrowded: Households living in overcrowded conditions in formal owned or rented
Additional HH Growth: New family formation (growth and in-migration) to 2032

Summary of programmes: Households Assisted and Funding Required

Prgramme	Households Assisted	Total Cost	Value of Contribution			
			City	Other State (SHRA + FLISP)	Private Sector	Hh's
Prgramme 1: Upgrading of informal settlements	143 823	R31.13	R15.66	-	-	R15.47
Prgramme 2: Encouraging and supporting backyard dwellings	299 610	R16.04	R11.12	-	4.93	-
Prgramme 3: Encouraging and supporting household densification	50 183	R7.16	R1.78	-	R1.08	R4.30
Prgramme 4a: New areas for housing development: Supported Serviced Sites	90 229	R27.30	R12.21	-	-	R15.08
Prgramme 4b: New areas for housinf developement: Housing Developer Delivery Support	44 318	R13.53	R1.93	R1.93	-	R10.08
Prgramme 5: Supporting higher density development	23 626	R5.85	R0.97	R0.84	R3.73	-
Prgramme 6: Enabling low income households to participate more effectively in the housing market	-	-	-	-	-	-
Prgramme 7: Adjusting the expectation of stakeholders	-	-	-	-	-	-
Total	651 789	R101.10	R43.66	R2.77	R9.74	R44.93

Summary of Land Requirements

Prgramme	Informal Settlemt		Unfill & Greenfields (Inside & Extension)		Household densification	
	Ha	% Public land	Ha	% Public land	Units	Factor
Prgramme 1: Upgrading of informal settlements	863	1.66	575	0.44	-	-
Prgramme 2: Encouraging and supporting backyard dwellings	-	-	-	-	264 824	0.73
Prgramme 3: Encouraging and supporting household densification	-	-	-	-	39 157	0.11
Prgramme 4a: New areas for housing development: Supported Serviced Sites	-	-	1 288	0.98	-	-
Prgramme 4b: New areas for housinf developement: Housing Developer Delivery Support	-	-	605	0.46	-	-
Prgramme 5: Supporting higher density development	-	-	-142	0.11	-	-
Total Requirements (Ha/units)	863	1.66	2 713	2.06	303 981	0.81

Total funding commitments

Seven programmes are proposed to be undertaken by the City of Cape Town over the next 20 years to address the housing circumstances of the **650,000 households that need support**

These programmes will **deliver an estimated 556,799 housing opportunities**

These programmes are estimated to cost **R101 billion** over the twenty-year period i.e. **R 5 billion per annum**. Of this amount:

- **R44 billion or R2.2 billion pa will be directly attributable to the City**
- **R45 billion will be contributed by households**
- **R10 billion by the private sector**

This is within the R50 – R60 billion that it is estimated the City will have available

- The proposed programmes are a shift away both from the current City human settlements approach and the National approach. This will need to be carefully tested and managed.
- The proposed approach is **affordable in terms of current grants received for human settlements**
- The proposed approach requires a **change in management focus, processes and structure as well as bringing in new and different capacity**.
- **Substantial engagement with leadership and key stakeholders will be necessary to fully explore the implications of the Strategy as proposed.**

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