HOUSING FINANCE OPTIONS ANALYSIS

"For an Equitable Sharing of National Revenue."

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Abbreviations

BNG	Breaking New Ground
EEDBS	Enhanced extended discount benefit scheme
ePHP	Enhanced people's housing process
FLISP	Finance-linked individual subsidy programme
MEC	Member of Executive Committee
NDP	National Development Plan
NHFC	National Housing Finance Corporation
NPC	National Planning Commission
NUSP	National Upgrading Support Programme
RDP	Reconstruction and Development Programme
RHIG	Rural Households Infrastructure Grant
SARS	South African Revenue Services
SHRA	Social Housing Regulatory Authority
StatsSA	Statistics South Africa

Glossary of terms

Affordability	How much a household can afford to spend on getting and paying for a home. Affordability depends on how much income the household earns, and how much must be spent each month on non-housing items such as food, clothes, education and transport.
Affordability Parameters	The financial terms applied to either secure (bonded) or unsecured credit provided by financial institutions or the basis on which rentals for rental accommodation is calculated
Backyard rental	Informal dwellings erected in the backyard of existing formal houses. The backyard rental traditionally occurred in Township areas but is now more widely spread. The dwellings are generally not in compliance with current planning and building regulations

Deeds Office/Registry	The Deeds Office is a government department responsible for the registration, management and maintenance of the property registry of South Africa. This is the office in which all title deeds are registered. All records regarding ownership and other rights relating to property are kept here.
Demand side interventions	Programmes or activities that result in enhanced accessibility or affordability by households which results in their being able to access houses of higher standards or size, for example, a housing voucher provided to beneficiaries, mortgage insurance or subsidies etc.
Developer/Contractor	A person or company who is building a housing project (presumably owning a house for the first time).
Development parameters	Parameters applied in order to determine the cost of the unit and the intervention in terms of defined specifications
End User Finance	Mortgage backed or short term loans provided to households to purchase or upgrade houses.
Estate Agent	Person or organisation who can buy, sell or rent property for and on behalf of the owner or landlord. The estate agent is entitled to receive a commission or fee, which is usually paid by the seller or landlord.
Financial Institution	Bank, loan provider or moneylender or anyone who lends money as a business.
First Time Home Owner	Someone who has never owned a home previously.
Formal owned house	A house which is owned by a household and which generally meets minimum housing standards.
Formal rental house	A house occupied on the basis of a rental agreement between a landlord and tenant, which generally meets minimum housing standards.
Funding parameters	Parameters applied to assess the cost to the State and the gearing of State funding.
Hostels	Single or family accommodation in hostel complexes. Hostels were originally built during the Apartheid era for occupation by a single sex basically to accommodate workers in the city on the basis of one bed per person and several beds in a room. Most hostels now accommodate households often in very poor conditions.
Household Income	The total amount of money earned each month, by all the regular earning members of the household. This includes salaries, pensions, interest from savings, rental from tenants etc.
Housing arena	Where an intervention is to be located i.e. where within the urban spatial frameworks the intervention is implemented (for example inner city, urban periphery, infill areas, existing suburbs etc) and this

	is taken into account when doing the costing as well as assessing impact.
Housing circumstances	Current housing conditions of households defined in terms of tenure and the nature and condition of the housing stock and services accessed by households.
Housing interventions	A set of explicit activities that are applied to improve a specific current housing circumstance, for example delivering RDP Housing or upgrading informal settlements or subsidizing mortgage interest rates.
Informal settlements	Informal dwellings erected by the occupants on land often without the permission of the owner, generally using non-conventional building materials. The settlements are unplanned and are generally not in compliance with current planning and building regulations. Households generally lack any formal security of tenure over their investment in housing in informal settlements.
Interest	The charge for the use of money from the bank.
Interest rate	The percentage at which interest is charged. This rate is changed by banks from time to time.
Investment interventions	Programmes or activities aimed at stimulating increased investment into housing such as, for example, tax rebates etc.
Loan (secured)/mortgage bond	Money lent for a specific period. A secured loan for housing purposes is called a mortgage bond. A mortgage bond is registered over a property by a financial institution when a person is given a loan to purchase property. This is the financial institution's security that the employee will pay the loan every month. If the employee does not pay the loan instalments every month, the financial institution can apply to the courts to sell the house to get the loan amount back.
Loan (unsecured)	Money lent for a specific purpose. An unsecured loan for housing purposes is provided without any collateral being required.
Municipal Finance	Provided to Municipalities to develop bulk infrastructure and provide basic services.
Project Finance	Bridging and long term finance provided to Developers, Contractors and Public Entities to undertake the development of a project.
Registered title	Registered title means that the home has a title deed that is registered in the employee's or his/her legal spouse's name on the South African Deeds Registry.
Rent	An amount paid each month to a landlord in order to stay in his/her accommodation.

Savings	The contribution that households make to housing out of current income.
Services	Basic or consumption services are electricity and water. General services are street cleaning, sewerage, refuse removal, tarring roads, providing parks, etc. Your local authority provides all these.
Subsidies and incentives	Provided by Government to individuals or communities towards the cost of meeting their housing needs.
Supply side interventions	Programmes or activities that result in housing being supplied to households for example subsidy housing projects, site and service schemes etc.
Tenant	A person who rents a property, agreeing to pay a landlord a fixed amount of money on a monthly basis, in order to live on the property.
Tenure	The rights an individual has to a property in which they are living.
Title deed	The document which proves the legal owner of a piece of property. This document shows that the individual has title over the property.
Traditional dwelling	A house generally in tribal or rural areas erected out of traditional materials (such as clay, mud or thatch) which may be erected on land under the administration of a Traditional Authority [1]. While historically land rights in tribal areas where based on customary tenure (Tribal Tenure), whereby households were given occupation rights, this appears to be changing and a mix of different rights are occurring including ownership.
Tribal Authority	Communal property under traditional authorities that is excluded from the deeds registration system. Twenty nine percent (29%) of South African land is under traditional authorities.

[1] Communal land tenure areas, DFIDSA, November 2003

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1. Introduction

The Financial and Fiscal Commission (Commission) held public hearings on housing finance in October 2011[2] in order to better understand the dimensions of the problems within the funding and delivery of housing in South Africa. Submissions from a broad range of stakeholders on challenges in the housing sector were received, presented and debated. The hearings revealed that there are enormous challenges within the housing sector some of which are always not clearly understood leading to poorly conceived interventions both from the public and private sector (refer to report on problem statement for full details, available at www.ffc.co.za). Furthermore, the hearings reemphasised the long standing problem of rising housing backlogs, perceptions of fiscal sustainability and poor programs performance amid rising annual expenditure allocations which the Commission interpreted as need signal for review of the current housing finance programs, including subsidies, from an economic and fiscal standpoint. Such a review needs to develop alternative housing delivery and funding models in order to improve the efficacy of the housing sector among other things. In this report the Commission takes the first short into comprehensively scrutinising exiting housing policies and finance instruments with a view to developing options and scenarios from which current and future debates about improving housing delivery can be drawn.

To achieve this, a brief review of Constitutional issues pertaining to housing, housing policy regimes and performance of housing finance tools as well as relationship between housing sector performance and the macro economy are carried out. Furthermore an excel based financial model has been developed and used to asses various options and scenarios in terms of impact on households, market distortion, contribution to inclusive cities, affordability and cost to the state. The model follows a basic logical framework in which households housing circumstances are first identified, matched to a set fitting interventions (supply, demand and investment) and then assessed in terms of above criteria.

Just over 34 interventions have been analysed and applied to relevant household circumstances. These interventions were compressed into four alternative scenarios to obtain an understanding of how different interventions could be combined and applied to the current housing circumstances at an overall level. The four alternative scenarios include

[2] These public hearings were attended by a total of 83 stakeholders from all three spheres of government, the banking sector, NGO's and independent researchers and consultants in the field of human settlements.

historic practice, lowest cost to the state, formalisation of informality (Outcome 8) and National Development Plan (Absorption and sustainability. It is important to note that at this stage these scenarios are not exhaustive or indicative of preference for any particular policy mix on the part of the Commission and that a combination of interventions in each scenario are merely based on interpretation of policy.

At this stage, it is difficult to pick one scenario over the other but their combination appears to be more efficient in achieving overall impact (on households, contribution towards integrated, inclusive and equitable cities, market distortion and contribution to effective housing market).

Preliminary findings from this study suggests that different household in different housing circumstances requires specific housing intervention. For this reason the role of the government in the provision of adequate housing should be understood and responsive to conditions households' who are in varying circumstance. The constitution is particularly ambiguous in these respect as provision of adequate housing continues to be interpreted as physical delivery of top structure by the state. These interpretation is found to be costly to government but appears to have a significant overall impact in terms of coverage. A combination of government and households/private sector funded interventions cost the state less, but have less overall impact than the fully state funded interventions. The most significant constraint to overall impact with respect to these interventions is the low levels of household credit worthiness, which reduces household's ability to access credit for building or home loans.

Demand side interventions such as housing vouchers and aggregated retail credit risk underwriting are moderately effective in terms of cost and impact at lower income levels but quickly reach cliff edge as income levels rises due to the credit impairment factor. Rental voucher also performs relatively with regard to targeting, cost less to the state but may be administratively costly.

Investment Incentives using tax rebates are generally found to be effective and likely to stimulate additional funding (gearing) for housing. These interventions can be well targeted, leakage is low, as is the administrative costs. Overall, high levels of indebtedness inhibit greater contribution by households in meeting part of their housing needs. This has cost implications for a state funded housing programs as it increases eligibility thresholds caused by factors other structural incapacity.

With respect to performance of existing housing finance instruments, the study makes inconclusive findings due to lack of consistent and credible data on delivery and impact from implementing agencies. A rudimentary analysis further suggests positive relationship between house prices, residential investment and GDP[3], suggesting that investment in housing can be developmental at the same time.

The rest of the document is structured as follows. *Section 2* covers the aims and objectives. Description of methodology and data used is given in *Section 3*. *Section 4* address Constitutional issues pertaining to housing are while *Section 5 and 6* deals with housing policy regimes and housing finance instruments respectively. The relationship between housing and the economy is presented in *Section 7* and summary of modelling results is in *Section 8*. *Section 9* provides some conclusions.

2. Problem statement

To put the above introduction into context, it is important to highlight some of the housing sector challenges that were raised during housing finance public hearings before discussing methodology. These includes:

- Increasing housing backlogs - Despite the government delivering more than 3 million fully subsidised housing units to poor households over the past 18 years, South Africa still has a backlog of over 2 million houses, which is rising annually.
- Housing delivery falling short of targets - The actual delivery of subsidised housing units has consistently fallen short of the government's annual target of 300,000 houses per year, with for example only 161,854 housing units and 64,362 serviced sites delivered in 2009/10. The failure to deliver houses to the required scale is the result of various factors, including delays in township establishment processes, infrastructure constraints and the limited availability of well-located and affordable land.
- Fiscal sustainability - Within the current subsidy framework, this backlog, at R140,000 per unit and assuming no further growth in demand, would cost over R300 billion. Assuming a projected delivery rate of 250,000 houses per year, the annual

[3] Note that the significance of the relationship has not been tested due to data constraints.

budgetary implication is R35 billion, which is far beyond the state's current fiscal capacity.

- Supply-side state driven approach of housing provision - A particular concern for public policy is that the supply-side state-driven approach of fully subsidised housing provision is not only inadequate and inefficient, but is also causing significant distortions in access to housing – and is thus unlikely to work in the future.
- Dysfunctions in rental market - There are also dysfunctions in the rental housing market where about 40% of tenants live in what constitute slum conditions, highlighting the need for quality and affordable rental housing.
- Demand-side of housing - lack of understanding and accurate estimation of the housing demand, due in part to poor data, especially for the informal housing market;
- Housing supply-side - problems with supplying houses because of lack of access to well-located land and bulk infrastructure, and housing delivery chain inefficiencies; and
- Legislative and administrative barriers - The failure to transfer title deeds to many subsidised housing beneficiaries is further preventing participation by these households in the formal property market. Of concern is the decrease in the rate of formal registration of newly built houses in the Deeds Registry, with only 50% of subsidised homeowners estimated to have title deeds. Title deeds play a crucial role, as without a title deed, an owner is prevented from trading their home, which limits choice, mobility and the development of a secondary market in low-cost houses. The result is a bottleneck, as households are unable to move out of low-income homes into middle-income homes, and lower-income households are displaced to backyard shacks and informal settlements.
- Distortions - The current subsidy system distorts prices in the gap market, which continues to grow because home ownership is unaffordable for households whose income is too high for state subsidies (i.e. earning just above the subsidy threshold of R3, 501 per month) and too low to attract loans from the private sector (i.e. below R10, 000 per month, the household income required to purchase the cheapest, newly built house on the market). Making home ownership even more unaffordable are the current levels of unemployment and household debt that affect households' ability to save and raise finance.

3. Aim, Purpose and Objectives of this Project

The main aim of this project is to carry out an options analysis where various alternatives to the current housing finance frameworks and reforms are scrutinised, costed and modelled. The key options to be analysed in the study are as follows:

- The Business As Usual scenario: reviewing the long run consequences and implications of the current housing delivery and funding system;
- Increasing supply side interventions: reviewing supply supply-side alternatives/reforms such as Integrated Housing and Human Settlements grant and mortgage indemnity;
- Switching to demand side interventions: finding ways to encourage self built initiatives including leveraging household savings, housing vouchers and co-savings schemes. These include exploring the roles of the private sector and Development Finance Institutions (DFIs) - what sort of incremental housing products could they put on the table to facilitate self-build.
- Developing a hybrid model with clear roles and responsibility for government in all of the above alternatives.
- Undertaking basic costing of each option to establish the fiscal, economic and household impact.

4. Methodology Used and Limitations

Methodology used is divided into two.

Firstly, a brief review of a Constitutional right to adequate housing and the role of government on fulfilling this right. A review of housing policy regimes, housing finance tools and performance has been undertaken. In order to understand a relationship between the performance of housing sector and the economy, relationship between some economic variables and housing market performance has been reviewed.

Secondly, a modelling exercise (Housing Strategy Tool) which is presented in an Excel workbook has been developed and used to cost selected housing funding alternatives. The model briefly described below. The tool utilises the following as inputs and assessment parameters:

- *Demographic Data:* 2007 Community Survey (StatsSA) data enhanced wherever possible with additional available data sets;
- *Financial Parameters:* Publicly available information on subsidy quanta, mortgage parameters, insurance parameters, supply and demand parameters; and

Cost Data: Information on the cost of developing land, infrastructure and housing based on extensive work previously undertaken as well as specific additional inputs from sector experts.

Development parameters **–** were applied in order to determine the cost of the unit and the intervention in terms of defined specifications. Costs in terms of defined specifications for the land cost per arena, infrastructure costs per level of service, construction cost for different standards and building methodologies, professional and programme management costs and a variation on land and service costs based on density has been developed and applied. The assumptions made in respect of each of these parameters are outlined in Annexure A.

Funding parameters - state subsidies, private sector funding to households and private sector funding to firms have been applied. The assumptions made in respect of each of these parameters are outlined in Annexure A.

Affordability Parameters - secured mortgage loans, unsecured credit and monthly rental on rental accommodation have been applied to the financial terms applied to either secure (bonded) or unsecured credit provided by financial institutions or the basis on which rentals for rental accommodation is calculated. The assumptions is made in respect of each of these parameters are outlined in Annexure B.

Housing needs used in the model have been determined through an analysis of the current housing circumstances of households and have been provided at a national and metropolitan level. Table 1 below shows the number of households per housing circumstances per income category. The table can be interpreted as follows: At least 2.5 million or 21 percent of household in South Africa earning less R3 500 per month own formal house.

In addition new household formation (population growth) were estimated from 2007 to 2020[4]. Projected growth rates were applied to the 2007 Community Survey figures starting in the year 2008. In respect of the metropolitan municipalities 2001-2007 growth rates were assumed and an overall weighted average was determined for all metropolitan municipalities.[5] The growth rates were applied to the 2007 Community Survey figures for metropolitan municipalities starting in the year 2008.

[4] At a national level this was estimated using projected growth rates taken from UNISA BMR, Population and Household Projections for South Africa by Province and Population Group, 2001-2021.

[5] The growth rates were determined from UNISA BMR, Population and Household Projections for South Africa by Province and Population Group, 2001-2021.

Table 1: Housing circumstances: National Housing circumstances

Housing Circumstances	R 0-R 3,500	R 3,500 - R 7,000	R 7,000 – R 10,000	R 10,000 - R 15,000	R 15,000 – R 20,000	R 20,000+	Total
A: Formal – owned	**2,595,398**	**880,882**	**415,107**	**522,558**	**308,920**	**1,026,420**	**5,749,285**
% of total HH	21.0%	7.0%	3.4%	4.2%	2.5%	8.3%	**46.4%**
B: Formal - rented, plus Room/Flatlet not in backyard	**1,380,830**	**433,093**	**224,180**	**228,985**	**103,018**	**255,611**	**2,625,717**
% of total HH	11.2%	3.5%	1.8%	1.8%	0.8%	2.1%	**21.2%**
C: Informal settlement - regardless of whether it is owned or rented	**903,349**	**192,439**	**61,254**	**24,060**	**9,991**	**11,664**	**1,202,757**
% of total HH	7.3%	1.6%	0.5%	0.2%	0.1%	0.1%	**9.7%**
D: Backward dwelling - regardless of whether it is owned or rented	**626,984**	**166,507**	**69,820**	**38,885**	**14,330**	**28,803**	**945,329**
% of total HH	5.1%	1.3%	0.6%	0.3%	0.1%	0.2%	**7.6%**
E: Traditional dwelling - regardless of whether it is owned or rented	**1,133,113**	**210,203**	**37,341**	**20,298**	**17,998**	**23,722**	**1,442,675**
% of total HH	9.2%	1.7%	0.3%	0.2%	0.1%	0.2%	**11.7%**
F: Hostel	**181,202**	**108,658**	**53,512**	**7,598**	**1,986**	**3,508**	**356,464**
% of total HH	1.5%	0.9%	0.4%	0.1%	0.0%	0.0%	**2.9%**
G: Other	**33,582**	**9,704**	**5,300**	**3,295**	**1,165**	**3,483**	**56,529**
% of total HH	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	**0.5%**
Total (as at 2007)	**6,854,458**	**2,001,486**	**866,514**	**845,679**	**457,408**	**1,353,211**	**12,378,756**
% of total HH	**55.4%**	**16.2%**	**7.0%**	**6.8%**	**3.7%**	**10.9%**	**100%**
New family formation	***2,012,529***	***587,664***	***254,429***	***248,312***	***134,313***	***397,326***	***3,634,573***
Total (projected to 2020)	***8,866,987***	***2,589.150***	***1,120,943***	***1,093,991***	***591,721***	***1,750,537***	***16,013,329***
% of total HH as at 2007	***7.,7%***	***20.9%***	***9.1%***	***8.8%***	***4.8%***	***14.1%***	***129%***

Source: The household income data is based on data modelled by the Department of Economics at the University of Stellenbosch utilising the Community Survey of 2007.

Table 2: Housing circumstances: Metropolitan

Housing Circumstances	R 0-R 3,500	R 3,500 - R 7,000	R 7,000 – R 10,000	R 10,000 - R 15,000	R 15,000 – R 20,000	R 20,000+	Total
A: Formal – owned	**749,981**	**354,140**	**201,810**	**306,379**	**160,718**	**707,550**	**2,480,578**
% of total HH	14.7%	7.0%	4.0%	6.0%	3.2%	13.9%	**48.8%**
B: Formal - rented, plus Room/Flatlet not in backyard	**511,729**	**193,558**	**107,151**	**126,701**	**55,026**	**157,571**	**1,151,736**
% of total HH	10.1%	3.8%	2.1%	2.5%	1.1%	3.1%	**22.7%**
C: Informal settlement - regardless of whether it is owned or rented	**506,220**	**117,817**	**34,645**	**16,301**	**5,476**	**7,343**	**687,802**
% of total HH	10.0%	2.3%	0.7%	0.3%	0.1%	0.1%	**13.5%**
D: Backward dwelling - regardless of whether it is owned or rented	**358,177**	**102,871**	**40,903**	**25,308**	**8,456**	**21,153**	**556,868**
% of total HH	7.0%	2.0%	0.8%	0.5%	0.2%	0.4%	**11.0%**
E: Traditional dwelling - regardless of whether it is owned or rented	**57,167**	**14,719**	**4,309**	**2,721**	**772**	**2,949**	**82,637**
% of total HH	1.1%	0.3%	0.1%	0.1%	0.0%	0.1%	**1.6%**
F: Hostel	**66,899**	**22,835**	**11,388**	**2,097**	**680**	**986**	**104,885**
% of total HH	1.3%	0.5%	0.2%	0.1%	0.0%	0.0%	**2.1%**
G: Other	**12,095**	**3,101**	**1,427**	**1,854**	**386**	**1,557**	**20,420**
% of total HH	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	**0.4%**
Total	**2,262,268**	**809,041**	**401,633**	**481,361**	**231,514**	**899,109**	**5,084,926**
% of total HH	**44.5%**	**15.9%**	**7.9%**	**9.5%**	**4.6%**	**17.7%**	**100.0%**
New family formation	***925,770***	***331,087***	***164,370***	***196,996***	***94,754***	***367,944***	2,080,921
Total (projected to 2020)	***3,188,038***	***1,140,128***	***566,003***	***678,357***	***326,268***	***1,267,053***	***7,165,847***
% of total HH as at 2007	***62.7%***	***22.4%***	***11.1%***	***13,3%***	***6.4%***	***24.9%***	***140.9%***

Source: The household income data is based on data modelled by the Department of Economics at the University of Stellenbosch utilising the Community Survey of 2007.

Definition of applied household housing circumstances.

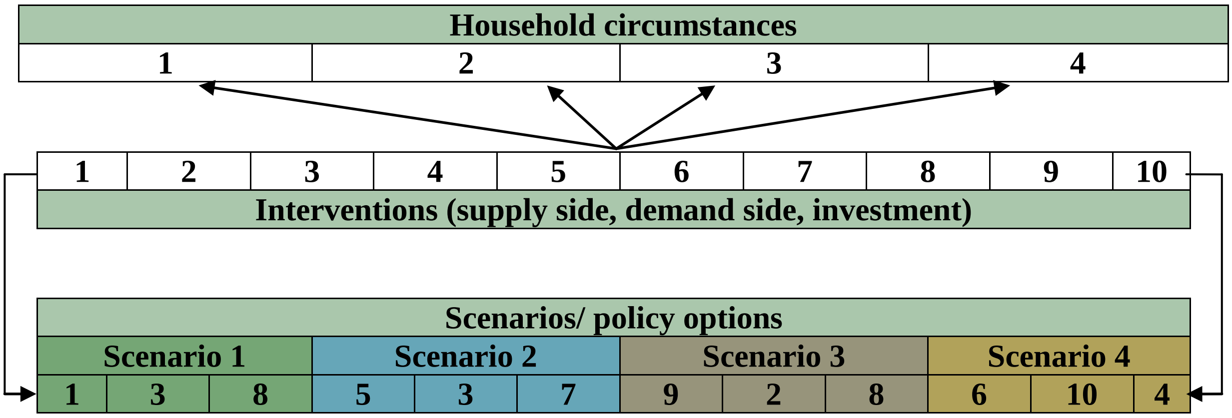
- *Formal owned:* Households are occupying a formal house which they own and which generally meets minimum housing standards.
- *Formal rental:* Households are occupying formal houses which they rent and which generally meet minimum housing standards.
- *Traditional dwellings:* Households are living in traditional dwellings generally in tribal or rural areas.
- *Informal settlements:* Households are living in informal accommodation in informal settlements. Most of these houses have no or substandard access to basic services (water, sanitation and electricity).
- *Backyard rental:* Households are living in formal and informal dwellings erected in the backyard of existing formal houses. The dwellings are generally not in compliance with current planning and building regulations.
- *Hostels:* Households are living in single/family accommodation in hostel complexes. Much of this accommodation has substandard access to basic services (water, sanitation and electricity).

3.1 Housing interventions

The following different categories of housing interventions have been developed and applied throughout this paper: A detailed account of these interventions is given in annexure A.

- *Supply interventions:* programmes/activities that result in housing being supplied to households for example subsidy housing projects, site and service schemes etc.
- *Demand side interventions:* programmes/activities that result in an enhanced accessibility or affordability by households for example a housing voucher provided to beneficiaries, mortgage insurance or subsidies etc.
- *Investment interventions:* programmes/activities aimed at stimulating increased investment into housing for example tax rebates etc.

Figure 1: Conceptual framework of the model



Limitations of the model

The model has been designed as a high level tool modeling the outcomes of the interventions and does not model variables such as inflation, interest rate fluctuations, exchange rate impact on costs, and any other economic variables that may have an impact on the outcome or outputs for each intervention. It deals with generic cost inputs reflecting average prices. No aassumptions have been made about the availability of land and the administrative capability to deliver the housing interventions. It has also been assumed that resources (materials, water, electricity, etc.) are unlimited and that such large scale delivery does not impact on costs or ability to delivery. The housing interventions that are modelled are generic housing responses. This has its limitations as there can be variations within each of the inputs used. For example the size of the top structure in each housing development may differ from the sizes modeled.

Contributions from the State, the private sector and the households the required portion has been assumed. This will vary for each person and for each development. The impact of the demand side interventions modeled has been applied generically without differentiation beyond affordability and indebtedness issues.

To calculate affordability and access to credit various general assumptions have been applied that may vary from credit provider to credit provider. In addition, due to the lack of detail for each income category, the average income for all households within each income category has been used. Although the inputs and assumptions of the model are general and the results are general in their nature, the assumptions are consistent across the range of interventions, which allows for comparison on a relative basis.

5. Constitutional Issues Pertaining to Housing

South African government is constitutionally bound to ensure that everyone has access to adequate housing (Section 26 of the Constitution). Furthermore, the Constitution requires that the State take reasonable legislative and other measures, to achieve the progressive realisation of this right. However it is important to understand what this right to housing entails as it could be subject to different interpretations resulting in different expectations with regards to what role should the government play in the fulfilment of this right.

As indicated above, the Constitution of the Republic of South Africa enshrines everyone's right of access to adequate housing. Since 1994, the South African government has developed and reviewed legislation and policies in an attempt to give effect to the progressive realisation of this right. To date it is estimated that the government through its housing programmes has delivered more that 3 million housing units for the poor[6], however despite this, the country still faces housing crisis, with a housing backlog currently estimated at more than 2 million households.

Two key issues emanating from the Constitution is with respect to definition of "*adequate housing*" and "*progressive realisation*". What does adequate housing mean? The Constitution itself does not further define adequate housing and it is not an easy thing to do as its meaning is entirely dependent on the specific context and circumstances of households together with their needs or priorities (Socio-economic rights institute of South Africa, 2011). For a household to have access to adequate housing, some conditions have to be met and these include the following:

- Land
- Services and
- A dwelling

It is important that the government fully understands households' housing needs and their affordability in order to design relevant and responsive set of interventions. Essentially, there

[6] From South African Government Information http://www.info.gov.za/aboutsa/housing.htm

are three types of households: those who cannot afford at all, those who can be able to contribute towards their own housing needs and those who can fully afford their own housing needs either through their own finance and savings or mortgage bond. For those who can afford their own housing needs from their own savings or bank finance, the state has a more facilitative role (including unlocking the system, providing access to housing stock and a legislative framework to facilitate self-built houses through planning laws and access to finance). For the other two groups of households, the state is expected to play a bigger role which include some form of financial subsidy (either partially or fully subsidization).

The state's obligation therefore on the provision of access to adequate housing depends on context, and may differ from province to province, from city to city, from rural to urban areas and from person to person (see Grootboom case). Diverse needs of different households on the state's role on the provision of adequate house could mean that some households may only need access to:

- land;
- land and building materials;
- finance; and
- services such as water, sewage, electricity and roads.

All these factors need to be taken into account when defining adequate housing depending on the circumstances.

Progressive realisation just like adequate housing is subject to different interpretations. For example according to Sandra Liebenberg, the Court interprets '*progressive realisation*' as referring to the dismantling of a range of legal, administrative, operational and financial obstacles that impede access to socio-economic right (Tessington, 2010). In contrast to this definition, the United Nations Committee on Economic, Social and Cultural Rights interprets progressive realisation as a minimum core obligation from the side of the state to ensure that everyone has access to at least a basic level of housing. In this instant, the state would have to improve the quality of goods and services gradually until it achieved full realisation of the right.

The second definition implies that progressive realisation of a housing right will therefore include the provision of important social and economic goods and service such as land, water, sanitation, refuse removal and other key services first of which the actual house may follow after. This interpretation is the most relevant and is currently being practiced through the current upgrading of informal settlements programme. Progressive realisation is also in line with a demand-driven housing delivery approach as the state may provide some households with serviced land and gives those beneficiaries who can afford top structure to do so. Other measurable benchmarks include upgrading of 500 000 shacks in informal settlements by 2014 through the provision of basic services and land tenure rights (Tessington, 2010).

6. Overview of Housing Policy Regimes in South Africa

With regards to the delivery of housing in South Africa, poor households are being left out by the formal housing market as they cannot afford their own housing needs. In a way to assist poor households, the government introduced the national housing subsidy scheme in 1994 targeting poor households who were deemed unable to fulfil their housing needs by themselves. To date there is a number of different government intervention tools within the housing or human settlements sector ranging from individual subsidy programme (where qualifying beneficiary pay nothing) to housing guarantee scheme (where beneficiaries contribute on a sliding scale).

The current housing policy in South Africa is the outcome of negotiations within the National Housing Forum that took place between 1992 and 1994 (Khan & Thurman, 2001). Since 1994 to date, there have been a number of developments within the housing policy environment and legislative framework in South Africa. Shisaka (2011) suggested five broad housing policy periods that could be identified and these are as follows:

- *Period between 1992-1994* – It begins with National Housing Forum and ends with launch of the National Subsidy Programme. The main issues during this period were the formulation of housing policy.
- *Between 1995-2001:* Begins with the implementation of the National Subsidy Programme in 1995 and ends with the termination of the use of conveyancers to pay out subsidies. One of the main characteristics of this period is the delivery of subsidised housing through private sector developers.
- *2001-2004* - Begins with the termination of the use of conveyancers to pay out subsidies and ends with the publishing of the Breaking New Grounds (BNG).
- *2004-2009* - Begins with the publishing of the BNG and ends with the adoption of the Revised Housing Code as well as a focus on sustainable human settlements.

- 2010 onwards – focus on upgrading of informal settlements to address housing backlogs.

While these periods are grouped according to some key developments within each period, the approach taken in this paper groups housing policy periods according to what is considered as major policy issue (shift). There are therefore three major policy episodes:

- *Period one* – introduction of housing subsidy focusing on coverage with a White Paper on Housing being the principal overarching housing policy. This period is from 1992 to 2003.
- *Period two* – represents a shift in policy in the approach in which subsidized housing are delivered as guided by the BNG in 2004: a comprehensive housing plan for the development of sustainable human settlements. The BNG is the first major housing policy amendment or refinement of the White Paper on housing since 1994. This period starts from 2004 to 2009.
- *Period three* **–** where the upgrading of informal settlements efficient land use and the introduction of new financing mechanisms for the gap market remain some of the focus housing delivery areas. This period is from 2010 to date.

These three housing policy regimes, pieces of legislation and challenges will be briefly discussed.

6.1 Period one

This period was characterised by the development of the National Subsidy in 1992 and the launching and commencement of the programme in 1994. During this period, the government was aiming at addressing poor households' housing need as indicated by a high housing backlog (in 1994 the White Paper on Housing estimated the housing backlog to be 1.5 million units). The main aim of the government was therefore to provide as much subsidized housing as possible (coverage was the main objective) and the target was to deliver 1 million houses in the first five years through the National Housing Subsidy Programme (200,000 subsidized housing units per annum and this target was expected to be increased to 300,000 by year three). This target was not achieved within this period but only achieved after seven years. One of the key features during this period was that the housing development projects were developer driven as developers used to identify the beneficiaries themselves. This however, ended towards the end of the period as beneficiaries were allocated to the project from a waiting list managed by Provinces and municipalities.

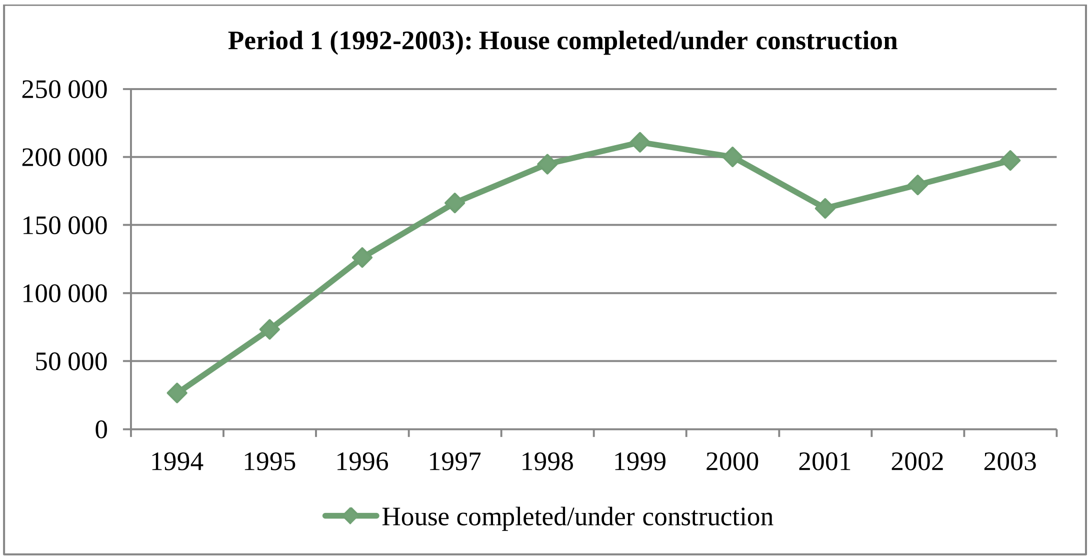
In 1994, a housing policy and strategy for South Africa was guided by the White Paper on Housing of 1994 which was the principal overarching national policy during that period. The Housing White Paper was also promulgated during this period to set out the framework for the National Housing Policy. The National Home Builders Registration Council (Pty) Ltd was established to promote the common interests of persons occupied in the profession of home building, through the regulation of the home building industry. The Constitution of the Republic of South Africa and the Housing Act (Act no. 107 of 1997) were also finalised during this period. With section 26 of the Constitution providing that everyone has the right to have "access to adequate housing" and the Housing Act setting out the general principles for housing delivery in South Africa, the functions and clarity on roles and responsibilities of different spheres of government and the provision of administrative procedures for the development of National Housing Policy.

There were a number of challenges that were experienced during this period and they include complaints by beneficiaries on the size and quality of the houses delivered and constructors on the other hand complained about the insufficient subsidy to build the standard expected houses. In response to the size and quality of the houses, the national minimum norms and standards for servicing and top structure were introduced and for the first time, a size specification of $30m^2$ was introduced and the quantum of subsidy increased over time in response to insufficient subsidy quantum. The sale of subsidized housing units at prices lower than development value was also experienced hence a sale restriction of subsidized housing units were introduced. Other challenges experienced included:

- peripheral residential development; poor quality products and settlements; the lack of community participation;
- the limited secondary low income housing market; corruption and maladministration; a slowdown in delivery;
- underspent budgets; limited or decreasing public sector participation; the increasing housing backlog; and
- the continued growth of informal settlements.

The actual delivery of housing by the government started in 1994 as illustrated in figure 2. The actual housing delivery started very slowly in 1994 as expected due to the fact that the programme was still at its infancy stages but peaked up in 1999.

Figure 2: Houses completed/ under construction in period 1



Source: National Department of Human Settlements

6.2 Period two

In an attempt to address challenges from period one, the BNG was formulated as the new housing policy. It represented a shift away from a focus on quantity of houses delivered to quality (including the size, settlement design and alternative technology) and choice (including tenure type and location). The BNG is based on four key principles:

- The delivery of sustainable human settlements;
- Integration;
- The delivery of housing as an asset; and
- Upgrading of informal settlements.

The BNG however was built on principles of the White Paper on Housing but supplemented existing mechanisms and instruments to ensure more responsive, flexible and effective delivery. It also sought to place increased emphasis on the *process* of housing delivery, i.e. the planning, engagement and the long-term *sustainability* of the housing environment (Tissington, 2011). According to Tissington (2011), the BNG policy also acknowledged a number of factors including:

- change in the nature of the housing demand;
- the increasing average annual population growth;

- the drop in average household size;
- significant regional differences; and
- increasing urbanisation.

Major highlights include the development and publishing of the Comprehensive Plan as contained in the BNG. The BNG saw a dramatic shift towards a more comprehensive approach to housing delivery in South Africa by defining such housing within the context of sustainable human settlements.

The housing product since introduction of the housing subsidy has evolved significant as during this period it comprises of $40m^2$ with two bedrooms, a toilet with own washbasin, kitchen with basin, wooden front door, roof tile and facial boards.

Other developments during this period included the Finance-linked individual subsidy programme (FLISP) implemented in 2005 and the introduction of Social Housing Policy in 2005. FLISP was designed to provide support to households in their deposit obligations for mortgage finance reducing the capital amount being borrowed and the interest charges associated with it. The Social Housing Policy on the other hand was introduced to fill policy vacuum and address challenges in the social housing sector. A Rental Housing Amendment Act, 2007 (Act 43 of 2007) was approved by the cabinet during this period. This Act, among other things, seeks to amend the Rental Housing Act, 1999 to further provide for rulings by rental tribunals.

The actual housing delivery during this period is illustrated in figure 3. While housing delivery was increasing from 2004, delivery started to decrease after 2006. Such a decrease could be attributed to policy changes for example a shift towards a more comprehensive approach to housing delivery within the context of sustainable settlements and adjustments on the minimum size of an RDP house to $40m^2$ and adjusting on the quantum implemented in 2005. Economic meltdown contributed to further deepening of housing delivery in 2007 and 2008.

Figure 3: Houses completed/ under construction in period 2

Data source: National Treasury (2009) and Industry insight (2011)

6.3 Period three

In 2008, the National Upgrading Support Programme (NUSP) commenced as a joint project of the National Department of Human Settlements and the Cities Alliance. The process of the NUSP involved an assessment of 16 pilot projects on informal settlement upgrading. Proposals on NUSP were incorporated in the national and provincial delivery agreements including its roll-out to 49 municipalities nationally.

The other key housing policy development under this period includes the publishing of a Revised Housing Code in 2009. This Revised National Housing Code contains the underlying principles, guidelines and norms and standards to be applied to various government housing assistance programmes. This code indicates another major shift in government policy away from municipal driven subsidy projects providing the Reconstruction and Development Programme (RDP) to informal settlement upgrading, subsidies to encourage the development of secondary housing market and the provision of subsidies within integrated areas. The three key subsidies are the:

- Upgrade of Informal Settlements Programme – recognizing informal settlement upgrade as one of the key programmes of government

- Individual Housing Subsidy Programme
- Integrated Residential Development Programme

Recently, Ministers are required to sign performance agreement where targets are explicitly and clearly specified. Outcome 8 commits the National Department of Human Settlements to upgrade 400 000 households living in informal settlements over the next four years from 2010. Outcome 8 is in line with a revised Housing Code focusing on informal settlement upgrading and supporting the market to develop affordable housing. The four focus outputs are:

- Output 1: Accelerated Delivery of Housing Opportunities
- Output 2: Access to basic service
- Output 3: Efficient Utilisation of Land for Human Settlement
- Output 4: Improved property market

Social Housing Act, 2008 (Act 16 of 2008) aims at the establishment and promotion of a sustainable social housing environment. The Act was enacted in this period. The Social Housing Act also provides for the establishment of Social Housing Regulatory Authority (SHRA) to regulate social housing institutions among other things. The National Rental Housing Strategy was approved in 2008, setting the delivery of 100 000 rental housing units (75 000 social housing and 25 000 community residential units) by 2012.

Housing gap market has been acknowledged during this period. As a result a new housing guarantee scheme as a new development within the human settlements was announced by the President in February 2012 to be implemented through the National Housing Finance Corporation (NHFC) (National Implementing Agent for the subsidy) as from April 2012. This fund targets households earning between R3501-R15000 per month. Households within this income bracket would then be required to find a newly built house for sale costing R300 000 or less, and then apply to a bank for a mortgage to buy that house.

Recently, the National Planning Commission (NPC) has come up with a National Development Plan (NDP). A NDP has a number of objectives including a need to addressing the apartheid geography (where the majority of South Africans were placed in periphery of the cities far away from work making it difficult to access the benefits of participating in the economy) and urban inefficiencies. Some elements suggested include:

- Urban sprawl should be contained and possibly, reversed as denser forms of development are more efficient (on land usage);
- Special incentives and subsidies should be designed to make affordable, large-scale high-density housing possible in inner cities; and
- New urban development and infrastructure investment around corridors of mass transit and around existing and emerging economic nodes.

Number of housing units completed under construction for 2010/11 was 121 879 and for 2011/12 up to December 2011 was 88 441 units. These housing deliveries have been achieved using a number of housing instruments/grants.

7. Housing Finance Instruments

In efforts towards progressive realisation of adequate housing, funding from the fiscus has also been made available. South African national housing programme is referred to as the most dramatic intervention in the housing sector and possibly in the welfare sector and unparalleled internationally (Rust 2008). The national housing programmes could be grouped into the following "Intervention Categories" (Socio-economic rights institute of South Africa, 2011):

- *Financial Programs*: Some of the housing programmes under this category include individual housing subsidies, enhanced extended discount benefit scheme, social and economic facilities, operational capital budget and rectification of pre-1994 housing stock.
- *Incremental housing Programmes*: Programmes include integrated residential development programme, enhanced people's housing process, and informal settlements upgrading programme, consolidation subsidies and emergency housing assistance.
- *Social and Rental Housing Programmes*: Three programs under this category include institutional subsidies, social housing programme and Community residential units programme.
- *Rural Housing Programme*: Two programmes – rural subsidy and farm residents housing assistance programme.

Housing finance intervention tools briefly discussed above are summarized in a table 3 below.

Table 3: Summary of housing programmes

Programme name	Aim/objective	Targeting
	Financial Interventions	
Individual housing subsidy programme	to stimulate the secondary housing market. The policy envisages a funding arrangement for housing assistance to individual households who wish to acquire properties of choice.	Households wishing to acquire an existing house or a vacant serviced stand, linked to a small-medium construction contract through an approved home loan and those who have acquired stands before without state assistance and require a top-structure subsidy.
a. Credit Linked Subsidies and Non-Credit Linked Subsidies	In cases where the applicant can afford mortgage loan Finance In cases where the applicant cannot afford mortgage loan finance	Qualifying households who can afford mortgage loan. Qualifying households who cannot afford mortgage loan.
b. Consolidation Subsidies	In cases where individual beneficiaries of state-financed serviced stands wish to apply for Individual Consolidation Subsidies	Households who have already benefited from state assistance to acquire a serviced residential site under pre-1994 state programme.
Enhances extended discount benefit scheme	to stimulate and facilitate the transfer of public housing stock to qualifying occupants, by using subsidisation up to the full prevailing individual housing subsidy amount.	A person, who: has a direct housing arrangement with the State; has benefited from any of the housing subsidies; and has an outstanding debt with the municipality among others.
Provision of social and economic facilities	to facilitate the development of basic amenities which are normally funded by municipalities in cases where municipalities are unable to provide such facilities.	Municipalities which do not have the ability to fund such facilities on their own.
Rectification Programme	to facilitate the improvement of state financed residential properties created through State housing programme interventions during the pre-1994 that are still in ownership of the public sector institution and/or that were disposed off to beneficiaries	Properties currently owned by a Municipality and/or provincial government as well as individual persons. In cases where properties have been transferred to beneficiaries, those that will benefit under the Programme would have to be the original beneficiaries who acquired the property from the State organ.
Operational capital budget programme	to provide for a funding framework for the reservation and application of a percentage of the	Provinces and accredited municipalities

	annual housing allocation to provincial governments for the appointment of external capacity to support the implementation of the National and Provincial Housing Programmes.	
	Incremental Interventions	
Emergency housing programme	to provide 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 of exceptional housing need through the allocation of grants to municipalities.	All affected persons who are not in a position to address their housing emergency needs from their own resources or from other sources such as the proceeds of superstructure insurance policies.
Integrated Residential Development Programme	to give effect to the objectives of the Comprehensive Plan for the Development of Sustainable Human Settlements	
Enhanced People's Housing Process	to deliver better human settlement outcomes based on community contribution, partnerships and the leveraging of additional resources through partnerships.	Lawfully resident in South Africa not yet benefited from government housing assistance programme
Upgrading of informal settlements programme	to facilitate the upgrading of informal settlements main in situ to achieve the following complex and interrelated policy objectives:	Individuals who qualify under the NSHS and to other groups including households that exceed the income threshold, those without dependants, child-headed household and those who are not first time homeowners
	Rural Interventions	
<u>*Communal Land Rights Rural Subsidies*</u>	to facilitate project based housing development on communal land for the benefit of beneficiaries of both old order and new order land tenure rights.	individuals living in areas referred to as "rural" areas where they enjoy functional security of tenure as opposed to legal security of tenure.
<u>*Farm Residents Programme*</u>	to provide a flexible mechanism which will promote access to adequate housing, including basic services and secure tenure to farm workers and residents in a variety of farming situations across the country.	Farm occupiers as defined in the *Extension of Security of Tenure Act* of 1997, and farm workers employed by a farm owner and who satisfy the eligibility criteria.
	Social and Rental Interventions	
Institutional Subsidy	to provide affordable rental housing to the lower end of the market within specific urban restructuring zones.	Qualifying households benefiting through registered Social Housing Institutions.
Community Residential Units Programme	low 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.	Include existing residents in the housing stock and those displaced from informal settlement.
Social Housing	narrow segment of the housing market	Qualifying households near the top of

Programme	near the top of the R3,500 cut-off point.	R3500 benefit through registered Social Housing Institutions.
	Other	
Housing guarantee scheme	Improve housing affordability to qualifying beneficiaries.	Households earning between R3501-R15000 per month
Rural Households Infrastructure Grant	Established in 2010 to provide onsite water and sanitation infrastructure.	Citizens through services provided by municipalities.
Housing Disaster Relief Grant	To assist provinces to provide emergency relief in support of reconstruction work to housing and related infrastructure damaged in natural disasters.	Qualifying households affected by natural disasters.
Urban Settlement Development Grant	To assist metros to improve urban land usage.	Metropolitan municipalities.

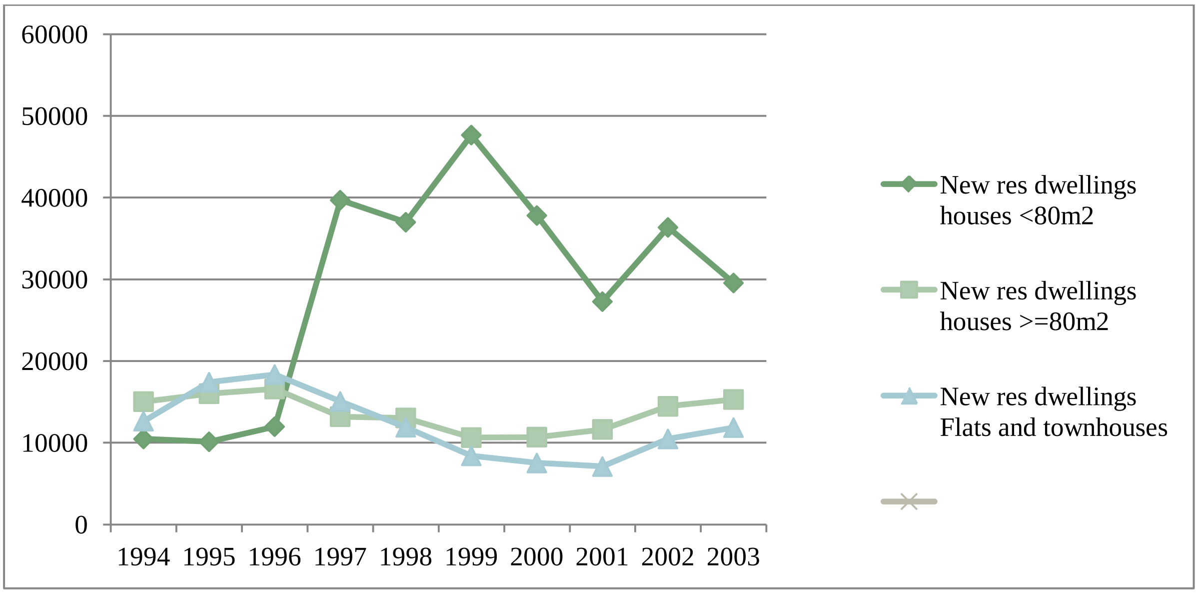
7.1 Performance on housing delivery

On the supply-side of housing, the government, the private sector and households themselves through their savings play key roles on the provision of housing. The private sector including housing developers play a direct role on the provision of housing stock, while private financial institutions through the provision of finance mechanisms assist households to either purchase already built house or construct their own housing. The public sector on the other hand through different housing subsidies plays a key role on the funding and delivery of housing, while through policies and legislation promotes environment for housing provision and provides regulations. It is common that income groups targeted by the private and public sector differ; with the private sector focusing mainly on those individuals who qualify for housing finance as provided by banks and public sector focusing on those individually at the lower end who do not qualify for housing finance provided by banks or those who need some form of assistance from the government. Analysis of public sector housing delivery has been covered under policy regimes and financing instruments. The delivery of housing by the private sector and performance some selected grants (newly established grants) have been briefly discussed in this section.

7.1.1 Formal private sector housing delivery

Figure 4 shows new formal residential dwellings completed and delivered by the private sector as from 1994 to 2003. The delivery of new residential dwellings of 80m^2 and more and flats and townhouses followed a similar trend over the period. On the other hand private sector delivery of new residential houses smaller than 80m^2 continue to dominate since 1996 and this could be attributed to the affordability issue.

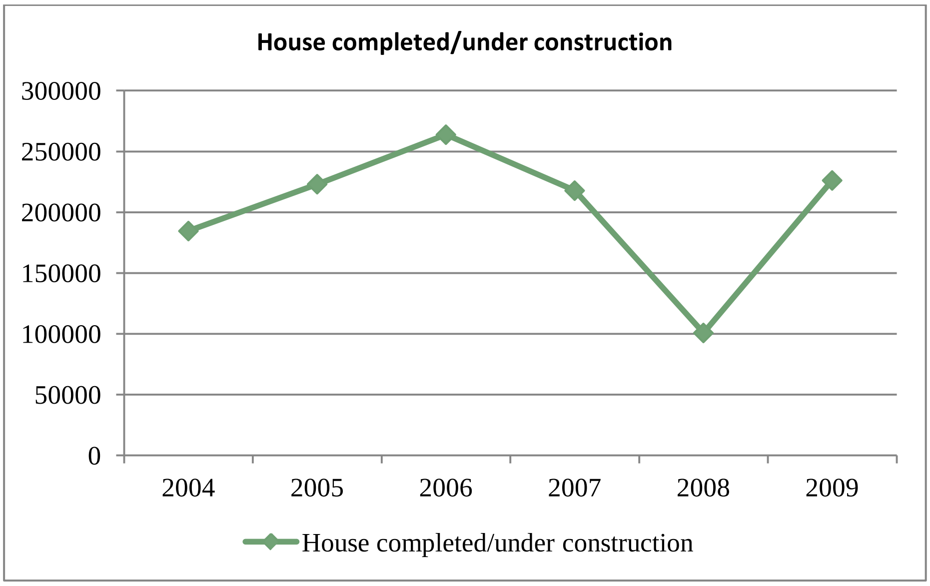
Figure 4: Delivery of new residential dwellings by the private sector – 1994 to 2003



Source: Statistics South Africa

Between 2004 to 2009, the delivery of new residential dwelling of $80m^2$ houses and flats and townhouses also follow similar trends as shown in figure 5. During the same period, new residential dwellings smaller than $80m^2$ did not converge back to the trend of other residential dwellings.

Figure 5: Delivery of new residential dwellings by the private sector – 2004 to 2009



Data source: Statistics South Africa

7.1.2 Performance of individual housing programme/grants

- **Human Settlements Development Grant**

The purpose of the grant is to provide funding for the development of human settlements. R15,3 billion (which include roll-overs to the amount R395 743 000) has been made available for 2011/12 financial year. Table 4 shows performance of this grant as of 31 March 2012.

Table 4: Performance of Human Settlements Development Grants as of March 2012

Province	DoRA Allocation R'000	Roll-overs R'000	Total Available R'000	Percentage spent of total available funds %
Eastern Cape	2 177 676	133 829	2 311 505	82
Free State	913 907			99
Gauteng	3 804 611			100
KwaZulu-Natal	2 769 871			100
Limpopo	1 398 914	111 580	1 510 494	83
Mpumalanga	916 677			100
Northern Cape	322 639			100
North West	998 376	150 334	150 334	100
Western Cape	1 638 845			100
Total	**14 941 516**	**395 743**	**15 337 259**	**98**

Source: NDHS, 2012

The grant performed good as 98% of available funds were spent as of March 2012. However, the Eastern Cape and Limpopo provinces under spent by 82% and 83% respectively. It is important to note that both these two provinces had received adjustments to their allocation through roll-overs as shown in table x but failed to spend all funds that were allocated through DoRA. Causes of under-spending include cash flow problems, slow registration of transfer documents by the Deeds Office (which are institutional issues) and other issues including unavailability of bulk infrastructure and serviced sites (which could be attributed to the fragmentation of the current funding in the built environment).

- **Rural Household Infrastructure Grant**

In a bid to improve the provision of sanitation and in particular eliminate sanitation backlogs, in 2010 the government (through National Treasury) established a schedule 7 Rural Households Infrastructure Grant (RHIG) for the provision of onsite water and sanitation infrastructure. Since its inception in 2010/11, RHIG has underperformed (see a table 5 and a figure 6 below). Of the 100 million RHIG allocation in 2010/11, only R66.7 million or 67%

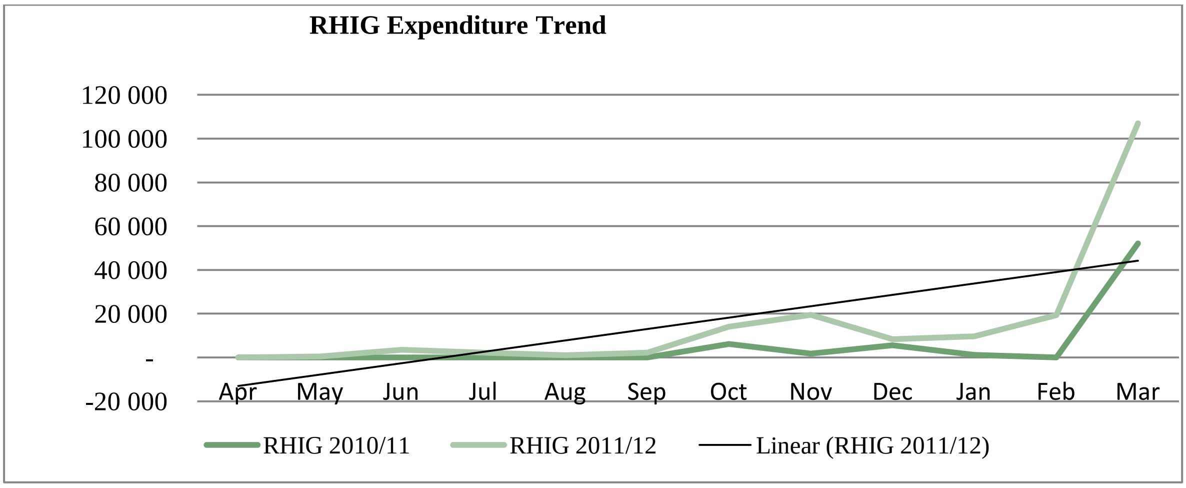
was spent. For the 2011/12 financial year R187.3 million (or about 72%) of the R257.5 million adjusted allocation was spent. Furthermore, on both financial years expenditure on the grant depicts sharp increase on spending between February and March. This raises questions of fiscal dumping.

Table 5: Allocation and spending for RHIG 2010/11 – 2013/14

Financial Performance of the RHIG for 2010/11 and 2013/14 Financial Years			
Financial year	Amount allocated in millions	Amount spent	Over/under-spending
2010/11	R100	66 722	33 278
2011/12	R257.5	187 353	70 155
2012/13	479.5		
2013/14	517.25		

Data Source: National Treasury

Figure 6: RHIG Expenditure Trend for 2010/11 and 2011/12 financial years



Source: National Treasury

Figure 6 shows that a large percentage of funds spend over the last two financial years was between the month of February and March (2010/11 – 33% and 72% in 2011/12) which could be a reflection of amounts transferred to service providers before financial year end.

- **Urban Settlement Development Grant**

Established to assist metropolitan municipalities to supplement their revenue to reduce the real average cost of urban land, increase supply of well-located land, improve spatial density, subsidise the capital costs of acquiring land and provide basic services. For 2011/12 financial year only 44% of allocated funds were spent as of 31 March 2012. It is important to note that during the time of reporting municipalities had three months left to spend the remaining 56% of allocated funds. Table 6 below shows the actual performance of this grant in 2011/12.

Table 6: Urban Settlements Development Grant spending as at 31 March 2012

Municipality	Fund allocated/transferred (R'000)	Funds spent	Percentage spent
Buffalo City	423 446	796 99	19
Nelson Mandela	502 626	314 922	63
Mangaung	411 995	163 153	40
Ekurhuleni	1 094 276	504 305	46
City of JHB	1 027 970	470 176	46
Tshwane	891 081	349 874	39
eThekwini	1 091 574	558 323	51
City of Cape Town	824 030	287 972	35
Total	**6 266 998**	**2 728 424**	**44**

Source: National Department of Human Settlements 2012

- **Housing Disaster Relief Grant**

This is a new grant made available to provinces to provide emergency relief in support of construction work to housing and related infrastructure damaged during a natural disaster. Only 18% of allocated funds were spent during the 2011/12 financial as shown in table 7 below**.**

Table 7: Housing disaster relief grant expenditure as of 31 March 2012

Province	Amount allocated and transferred (R'000)	Amount spent	Percentage spent
Eastern Cape	56 700	0	0
Free State	44 100	16 631	38
Gauteng	36	0	0
KwaZulu Natal	31 140	3 503	11
Limpopo	21 474	0	0
Mpumalanga	360	360	100
Northern Cape	10 350	10 350	100
North West	15 840	2 368	15
Total	**180 000**	**33 212**	**18**

Source: National Department of Human Settlements 2012

7.1.3 Issues affecting performance of government housing programme and Financial and Fiscal Commission past recommendation

The Commission has previously undertaken a number of research work which sought to evaluate the underlying factors behind performance of subsidised housing programs in South Africa. This factors were further put under microscope during the discussion that took place at the first public hearings. In term of the Commission findings and anecdotes from the hearings the key factors impacting on perrfomace of housing programs include problems with the design of the subsidy, institutional arrangements and policy and legislative framework.

Problems with the design of the current housing subsidy

In its 2011 report the Commission indicated that one of the major challenges in the current public housing subsidy system, is narrowed focus on direct state provision of housing. This was also confirmed by stakeholders during the first housing finance public hearings. The current housing subsidy system does not leverage private finance and end-user contributions for housing delivery.

Furthermore, the focus on mass provision of fully-subsidised housing units constrain consumers' choices. The design of the current housing grant does not allow beneficiaries to choose locations as a result mass provision of fully-subsidised housing units are, in most cases poorly located (periphery of cities where land is easily accessible and is cheaper). The fact that some households choose to live in informal settlements, slums and backyard dwellings indicates that they are prepared to accept low quality housing opportunities closer to economic opportunities. Therefore, if given a choice they would prefer their houses to be built closer to the jobs.

It is a fact that well located land for housing development is scarce and expensive and not always owned by government. It is therefore important to use land efficiently and to consider infill and developments,[7] but the current design does not incentivise prioritization of infill and development housing projects.

There are numerous sectoral grants within the built environment administered by different spheres of government and departments and subjected to different conditions and reporting framework. These grants include for example, Housing and Human Settlements Development grant and Urban Settlements Development Grant under the NDHS, Municipal Infrastructure Grants administered by the Department of Cooperative Governance, Integrated National Electrification Grant under the Department of Energy. The common purpose of these grants is to provide sustainable human settlements with the necessary basic infrastructure but are

[7] Infill development generally refers to the development that prioritises the development of parcels of vacant, underdeveloped or underutilised sites within an urban area, rather than allowing development of underdeveloped land outside the city. Brownfield development refers to development that takes place within an area or on land that was used previously but subsequently become vacant or derelict.

currently fragmented. Without coordinated planning, fragmentation of funding instrument is likely to undermine attainment of outcome 8.

Institutional arrangements

The lack of coordination among all institutions responsible for the delivery of housing continues to dominate the discussion on housing finance. This emanates from the fact that the delivery of human settlements in South Africa is a shared responsibility among the three spheres of government, public entities and the private sector which includes commercial banks. In some instances there is a lack of clear and distinctive role in the process. These institutional and legislative bottlenecks stall/delay the delivery of housing as illustrated in the housing delivery value chain below. Bottlenecks increases housing delivery process to an excess of more than three years, in the process escalating costs (See figure 7 below).

Figure 7:Housing value chain

Source: Department of Human Settlements, 2010 as cited by the National Treasury[8]

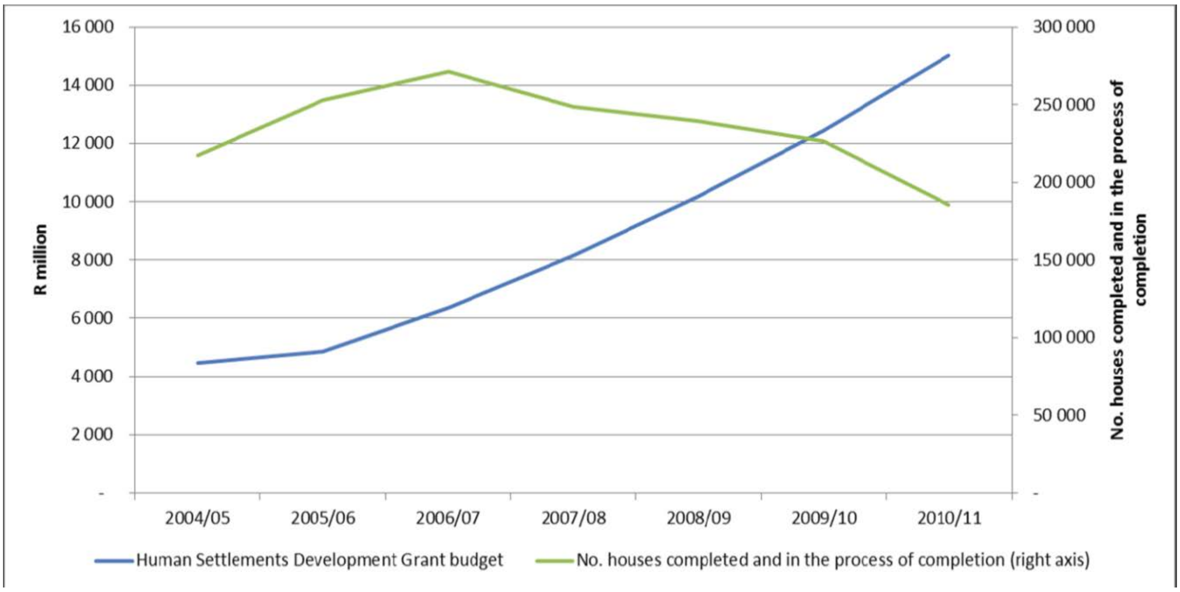
Furthermore, the Commission in its Submission for the 2009/10 Division of Revenue highlighted inefficiencies in the housing funding and delivery due to the fact that allocations are determined in the provincial sphere while planning is undertaken at the municipal level. This challenge is further exacerbated by delays in transferring funding which cause cash flow problems for municipalities which encounters difficulties in raising bridging finance. The Commission has since recommended fast tracking of accreditation of municipalities as remedial to planning and cash flow challenges. Progress on this issue has however been very slow.

[8] Presentation made by the National Treasury during the housing public hearing held at Ekuruleni in October 2011.

Policy and legislative framework

Over the years since 1994, the government has been gradually adjusting policies in response to changing policy environment and implementation challenges. In some cases there has been a need to review existing policies or establish new sets of policies while in other cases norms and standards for delivery have had to be established. These policy shifts and new standards have contributed to increased unit cost of housing delivery over time. For example, an increase in a minimum size of a housing unit as a norm affects the unit cost and number of units delivered. Figure 8 shows how allocations have been increasing in comparison to units delivered.

Figure 8: Declining delivery with rising allocations



The Commission as result of above issues has made a number of recommendations including the following:

- Accreditation of municipalities to administer housing programme, in cases where municipal capacity exists. While progress is very slow on the accreditation itself, there is a positive development as the NDHS intends to assign the housing function to six metros.
- Government should consider the funding implications of any further policy changes.
- Considerations should be given to linking new housing subsidies with the municipal infrastructure grant

- Government should conduct a review of the efficacy of current housing finance arrangements in meeting housing needs within the context of creating sustainable and more compact human settlements

Government has responded positively to a number of these recommendations, although full implementation is still yet to be seen.

8. Housing and the Economy

It is also important to undertake a brief analysis of objectives of those instruments and whether the intended outcomes have been achieved (policy intentions versus outcomes). Understanding of macro-economic performance and how it relates to the performance of human settlements, this is also undertaken in this section.

Housing market does not operate on its own but within the entire economy. It is therefore influenced by changes in the economy at a point in time. Macro-economic factors such as economic growth leading to changes in the level of employment and income among others affect the performance of the housing market. Under normal circumstances and applying basic economic principles, house prices are likely to increase in a rapidly growing economy. This is true especially in cases where supply of new housing does not keep up with the rising demand and this is normally the case as housing supply in most cases takes time to respond to demand. This trend is likely to be stronger where there are a number of constraints on the supply side (e.g. planning restrictions and lengthy approval processes among other things). In the following paragraphs a relationship between the average change/growth in GDP and the average change or growth in housing prices will be undertaken and analysed. The relationship between investment in housing and the GDP has also been undertaken.

8.1 GDP growth and house prices

Economic growth measured by an increase in GDP is expected to lead to an increase in average house prices. A comparison on how these variables have been performing in South Africa between 2007 and 2011 is shown in figure 10 which compares year on year growth/change in house prices (residential houses smaller than 141 m^2, medium between 141

m^2 and $200m^2$ and large houses $221m^2$ and above) and GDP for a period of five years (2007-2011) using constant 2005 prices.

Figure 9: Relationship between real percentage change in GDP and real percentage change in house prices (80m2, 400m2 and less than R3,6 m)- 2012 and 2013 projections

Data source: ABSA

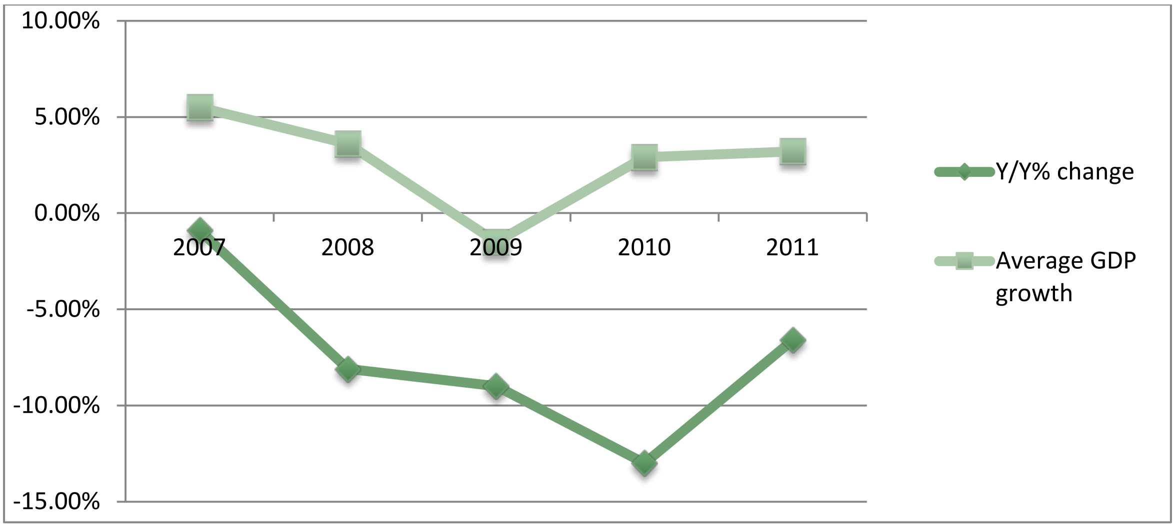
Figure 9 depicts that generally, GDP and house prices follow the same trend as it shows a positive relationship between these two variables. However, it is important to note that house prices turn to lags behind GDP. However, the strength of the relationship does change.

8.2 GDP and residential investment

Residential investment[9] is another key macro-economic variable that needs to be understood and its relationship to GDP. The relationship between GDP and residential investment is undertaken shown in figure 10 below.

[9] Residential investment refers to the purchase of residential property e.g. house.

Figure 10: Relationship between Residential Investment and GDP in constant 2005 prices – Year on Year Percentage Change



Data source: Industry insight 2012

According to figure 10, there is a relationship between a percentage change on GDP growth (year on year) and percentage change in the level of residential investment over the period of 2007 and 2011. There has been a decrease in average growth in GDP and over the same period residential investment measured by year on year percentage change decreased. However, a positive average growth in GDP started in 2009, while a turning point on residential investment occurred in 2010. This means that residential investment lags behind GDP.

8 Summary of Modelling Results

8.1 Supply interventions

a) Informal settlements

Table 8 : Informal settlements: National

Interventions	Arena	Unit Cost (R)	Total cost of intervention (all HH assisted) (R billion)	Total funding contribution			Evaluation			
				State (%)	Private (%)	HH (%)	Overall Impact on Households %	Contribution towards integrated, inclusive & equitable cities	Market Distortions	Contribution to effective housing market
Insitu upgrading of informal settlements with formal top structure	Informal settlement	129,707	156,0	100	0	0	100%	● (Good)	● (Significant)	0
Site and service with formal top structure	Periphery	132,805	159,7	100	0	0	100%	● (Poor)	● (Significant)	0
In situ upgrading of informal settlements with incremental top structure	Informal Settlement	139,367	46,9	23	0	77	R0 to 3,499 - 19% All other HH – 54%	● (Good)	● (Average)	3,4
Site and service with incremental top structure	Periphery	142,465	47,8	23	0	77	R0 to 3,499 - 19% All other HH –	● (Poor)	● (Average)	3,3

							54%			
Administrative incorporation of informal settlements with no top structure	Informal settlement	24,295	29,2	100	0	0	100%	(Partial)	(Average)	0
Subsidised (RDP) housing	Periphery	134,200	161,4	100	0	0	R0 to R3,499 - 100% All other HH – 0%	(Poor)	(Significant)	0

Table 9: Informal settlements - Metropolitan[10]

Interventions	**Arena**	**Unit Cost (R)**	**Total cost of intervention (all assisted HH) R bil**	**Total funding contribution**			**Evaluation**			
				State (%)	**Private (%)**	**HH (%)**	**Overall Impact on Households %**	**Contribution towards integrated, inclusive & equitable cities**	**Market Distortions**	**Contribution to effective housing market**
Insitu upgrading of informal settlements with formal top structure	Infill or township	131,772	90,6	100	0	0	100%	(Good)	(Significant)	0
Site and service with formal top structure	Periphery	137,967	94,9	100	0	0	100%	(Poor)	(Significant)	0
In situ upgrading of informal settlements with incremental top structure	Infill or township	141,432	27,7	24	0	76	R0 to 3,499 -19% All other HH – 54%	(Good)	(Average)	3,2

[10] National figures have been revised to accommodate for Metropolitan circumstances as follows: Land prices have been adjusted and backlog connections have been moved from basic to medium. All other costs are the same.

Site and service with incremental top structure	Periphery	147,627	28,9	27	0	73	R0 to 3,499 -19% All other HH – 54%	● (Poor)	● (Average)	2,7
Administrative incorporation of informal settlements with no top structure	Infill or township	26,360	18,1	100	0	0	100%	● (Partial)	● (Average)	0
Subsidised (RDP) housing	Periphery	141,575	92,3	100	0	0	100%	● (Poor)	● (Significant)	0

Impact on households

The total number of households living in informal settlements nationally is approximately 1.2 million of which 688,000 are living in a metropolitan municipality and most of households living in informal settlements earn between R0 and R3, 499. In situ upgrading of informal settlements with formal top structure, site and service with a formal top structure and subsidised (RDP) housing have the highest overall impact on households**,** but at the same time the highest cost to the state. In addition, these interventions create significant market distortions and do not contribute to effective housing markets.

The administrative incorporation of informal settlements with no top structure intervention has the same level of overall impact as the interventions above, but at a significantly lower cost to the state. This intervention creates average market distortions and does not contribute to an effective housing market

In situ upgrading of informal settlements with an incremental top structure and site and service with an incremental top structure have the least overall impact on households of all the interventions modelled in respect of this housing circumstance. However, overall impact is lower (19%) for households with incomes below R3, 499, as opposed to those with incomes higher than this amount (54%). This is due to high levels of household indebtedness and an inability to access end user finance. However these interventions have the lowest cost to the state and highest gearing.

Cost to the state

In situ upgrading of informal settlements with incremental top structure and site and service with an incremental top structure has the lowest cost to the state - however the impact on households particularly below R3, 500 is low. Administrative incorporation of informal settlements with no top structure has the second lowest cost to the state by a significant amount, creates average market distortions and does not contribute to an effective housing market. In situ upgrading of informal settlements with formal top structure, site and service with a formal top structure and subsidised (RDP) housing have the highest cost to the state.

Level of gearing

Only in situ upgrading of informal settlements with incremental top structure and site and service with an incremental top structure result in a level of gearing of state funding with contributions from households.

Developmental outcomes

In situ upgrading of informal settlements with incremental top structure and administrative incorporation of informal settlement show the best developmental outcomes.

Metropolitan differences: There are no significant differences between the national and metropolitan analysis with the exception that the unit cost is slightly higher in metropolitan municipalities.

b) Backyard dwellings

Table 10: Backyard rental: National

Interventions	Arena	Unit Cost (R)	Total cost of intervention (all HH assisted) R bil	Total funding contribution			Evaluation			
				State (%)	Private (%)	HH (%)	Overall Impact on Households %	Contribution towards integrated, inclusive & equitable cities	Market Distortions	Contribution to effective housing market
Subsidised (RDP) housing	Periphery	134,200	126,8	100	0	0	100%	● (Poor)	● (Significant)	0
Upgrade of backyard rental (with incentive)	Existing suburbs	R0 to R9,999- R68,912 >R10,000 - R79,412	66	R0 to 9,999 – 81% > R10,000 – 70%	0	R0 to 9,999 - 63% > R10,000 – 68%	100%	● (Good)	● (Average)	R0 to 9,999 – 0.8 > R10,000 – 1

Table 11: Modeling results: Backyard rental: Metropolitan

Interventions	Arena	Unit Cost (R)	Total cost of intervention (all HH assisted) R bil	Total funding contribution			Evaluation			
				State (%)	Private (%)	HH (%)	Overall Impact on Households %	Contribution towards integrated, inclusive & equitable cities	Market Distortions	Contribution to effective housing market
Subsidised (RDP) housing	Periphery	141,575	74,7	100	0	0	100%	● (Poor)	● (Significant)	0

Upgrade of backyard rental (with incentive)	Existing suburbs	R0 to R9,999 – R68,912 >R10,000 – R79,412	39	R0 to 9,999 – 81% > R10,000 – 70%	0	R0 to 9,999 - 63% > R10,000 – 68%	100%	● (Good)	● (Average)	R0 to 9,999 – 0.8 > R10,000 – 1

National figures have been revised to accommodate for Metropolitan circumstances as follows: Land prices have been adjusted and backlog connections have been moved from basic to medium. All other costs are the same.

The total number of households living in backyard rental nationally is approximately 945,000, of which 557,000 are living in metropolitan municipalities with the majority earning between R0 and R3, 499. Subsidised (RDP) housing and upgrade of backyard rental (with supply side incentive). Both interventions impact on all households. The subsidised (RDP) housing intervention has a substantially higher cost to the state than the upgrade of backyard rental intervention. Only the upgrade of backyard rental intervention results in a level of gearing from households. The upgrade of backyard rental intervention shows better developmental outcomes than does the subsidised (RDP) housing. There are no significant differences between national and metropolitan municipalities with the exception that the unit cost is slightly higher in metropolitan municipalities.

c) New family formation

Table 12: New family formation and housing ladder: National

Interventions	Arena	Unit Cost (R)	Total cost of interven-tion (all assisted HH) R bil	Total funding contribution			Evaluation			
				State (%)	Private (%)	HH (%)	Overall Impact on Households %	Contribution towards integrated, inclusive & equitable cities	Market Distortions	Contribution to effective housing market
Subsidised (RDP) housing	Periphery	134,200	270	100	0	0	R0 to 3,499 -100% All other – 0%	● (Poor)	● (Significant)	0

Interventions	Arena	Unit Cost (R)	Total cost of interven-tion (all assisted HH) R bil	Total funding contribution			Evaluation			
				State (%)	Private (%)	HH (%)	Overall Impact on Households %	Contribution towards integrated, inclusive & equitable cities	Market Distortions	Contribution to effective housing market
Site and service with incremental top structure	Periphery	142,465	55	27	0	73	R0 to 3,499 -19% All other HH – 54%	(Poor)	(Average)	2,7
Subsidised social rental Apartment	Inner city/infill	R0 to 3,499 – R181,360 R3,500 to R6,999 – R202,245 R7,000 to R9,999 – R243,130 R10,000 to R14,999 – R289,900 R15,000 + - R366,670	136	Ranges from 100% to 16%	Ranges from 0% to 84%	0	54%	(Good)	(Average)	Ranges from 0 to 5,2
Privately Developed Residential Rental	Inner city/infill		83	0	100%	0	R0 to 3,499 -23% R3,500 to R6,999 – 39% All other – 54%	(Good)	(None)	Full
Social housing or privately developed rental apartment with incentive	Inner city/infill		75	Only applies to R0 to R9,999 and ranges from 25% to 50%	Ranges from 25% to 100%	0	R0 to 3,499 -15% R3,500 to R6,999 – 39% All other – 54%	(Good)	(Average)	Ranges from 0 to full
Developer delivered formal housing for ownership	Infill/ Periphery	R0 to 6,999 – R267,931 R7,000 to R14,999 – R338,731 R10,000+ - R503,931	344	0	100%	0	R0 to 3,499 -12% R3,500 to R6,999 – 35% R7,000 to R9,999 – 47% All other – 54%	(Good)	(None)	Full
Privately developed bonded 'RDP'	Periphery /infill	160,850	254	25%		100%	R0 to 3,499 -19% All other HH – 54%	(Partial)	(Average)	4,0

Interventions	Arena	Unit Cost (R)	Total cost of interven-tion (all assisted HH) R bil	Total funding contribution			Evaluation			
				State (%)	Private (%)	HH (%)	Overall Impact on Households %	Contribution towards integrated, inclusive & equitable cities	Market Distortions	Contribution to effective housing market
house										
Sub-divided formal house for ownership (with incentive)	Existing suburbs/ Townships	R0 to 6,999 – R220,410 R7,000 to R14,999 – R294,750 R15,000+ - R468,210	381	Only applies to R0 to R9,999 and Ranges from 18% to 14%	0	Ranges from 82% to 100%	R0 to 3,499 -18% R3,500 to R6,999 – 53% All other – 54%	● (Partial)	● (Average)	Ranges from 5,5 to full
Household rental apartment with incentive	Existing suburbs/ Townships	R0 to 3,499 – R155,551 R3,500 to R6,999 – R173,926 R7,000 to R9,999 – R213,301 R10,000 to R14,999 – R255,301 R15,000 + - R328,801	712	Only applies to R0 to R6,999 – ranges from 23% to 26%	0	100%	R0 to 3,499 -38% R3,500 to R6,999 – 93% All other – 100%	● (Partial)	● (Average)	Full
Privately converted industrial space to residential units	Infill	R0 to 3,499 – R153,454 R3,500 to R6,999 – R172,429 R7,000 to R9,999 – R210,814 R10,000 to R14,999 – R252,584 R15,000 + - R324,354	301	Only applies to R0 to R6,999 and ranges from 23% to 26%	0	100%	R0 to 3,499 -21% R3,500 to R6,999 – 51% All other – 54%	● (Good)	● (Average)	Ranges from 3,8 to full

Table 13: Model results: New family formation and housing ladder: Metropolitan

<table>
<tr><th rowspan="2">Interventions</th><th rowspan="2">Arena</th><th rowspan="2">Unit Cost (R)</th><th rowspan="2">Total cost of intervention (all assisted HH)
R bil</th><th colspan="3">Total funding contribution</th><th colspan="4">Evaluation</th></tr>
<tr><th>State (%)</th><th>Private (%)</th><th>HH (%)</th><th>Overall Impact on Households
%</th><th>Contribution towards integrated, inclusive & equitable cities</th><th>Market Distortions</th><th>Contribution to effective housing market</th></tr>
<tr><td>Subsidised (RDP) housing</td><td>Periphery</td><td>141,575</td><td>131</td><td>100%</td><td>0</td><td>0</td><td>R0 to 3,499 -100%
All other – 0%</td><td>(poor)</td><td>(Significant)</td><td>0</td></tr>
<tr><td>Site and service with incremental top structure</td><td>Periphery</td><td>147,627</td><td>136,7</td><td>27</td><td>0</td><td>73</td><td>R0 to 3,499 -19%
All other HH – 54%</td><td>(Poor)</td><td>(Average)</td><td>2,7</td></tr>
<tr><td>Subsidised social rental apartment</td><td>Inner city/infill</td><td rowspan="3">R0 to 3,499 – R249,800
R3,500 to R6,999 – R269,800
R7,000 to R9,999 – R309,800
R10,000 to R14,999 – R354,800
R15,000 + - R429,800</td><td>73,6</td><td>Ranges from 75% to 14%</td><td>0</td><td>Ranges from 25% to 86%</td><td>R0 to 3,499 -35%
All other – 54%</td><td>(good)</td><td>(Average)</td><td>Ranges from 0,35 to full</td></tr>
<tr><td>Privately Developed Residential Rental</td><td>Inner city/infill</td><td>47,8</td><td>Only applies to R0 to R6,999 and is 16%</td><td>100%</td><td>0</td><td>R0 to 3,499 -18%
R3,500 to R6,999 – 29%
R7,000 to R9,999 – R37%
All other – 54%</td><td>(Good)</td><td>(None)</td><td>Full</td></tr>
<tr><td>Social housing or privately developed rental apartment with incentive</td><td>Inner city/infill</td><td>44,5</td><td>Only applies to R0 to R6,999 and ranges from 25 – 50%</td><td>100%</td><td>0</td><td>R0 to 3,499 -19%
R3,500 to R6,999 – 33%
R7,000 to R9,999 – R37%
All other – 54%</td><td>Good)</td><td>(Average)</td><td>Ranges from 1 to Full</td></tr>
</table>

Interventions	Arena	Unit Cost (R)	Total cost of intervention (all assisted HH) R bil	Total funding contribution			Evaluation			
				State (%)	Private (%)	HH (%)	Overall Impact on Households %	Contribution towards integrated, inclusive & equitable cities	Market Distortions	Contribution to effective housing market
Developer delivered formal housing for ownership	Infill/ Periphery	R0 to 6,999 – R291,138 R7,000 to R14,999 – R361,938 R10,000+ - R527,138	254	0	0	100%	R0 to 3,499 -11% R3,500 to R6,999 – 31% R7,000 to R9,999 – 42% All other – 54%	● (Partial)	● (None)	Full
Privately developed bonded 'RDP' house	Periphery/infill	R172,454	166	23%		100%	R0 to 3,499 -18% All other HH – 54%	● (Partial)	● (Average)	4,3
Sub-divided formal house for ownership (with incentive)	Existing suburbs/ Townships	R0 to 6,999 – R232,594 R7,000 to R14,999 – R306,934 R10,000+ - R480,394	268	Only applies to R0 to R6,999 and is 17%	0	100%	R0 to 3,499 -17% R3,500 to R6,999 – 50% All other – 54%	● (Good)	● (Average)	Ranges from 5,8 to full
Household rental apartment with incentive	Existing suburbs/ Townships	R0 to 3,499 – R155,551 R3,500 to R6,999 – R173,926 R7,000 to R9,999 –R213,301 R10,000 to R14,999 – R255,301 R15,000 + - R328,801	382	Only applies to R0 to R6,999 and ranges from 23% to 26%	0	100%	R0 to 3,499 -38% R3,500 to R6,999 – 93% All other – 100%	● (Partial)	● (Average)	Ranges from 3,8 to full
Privately converted industrial space to residential units	Infill	R0 to 3,499 – R165,844 R3,500 to R6,999 – R186,884 R7,000 to R9,999 –R227,334 R10,000 to R14,999 – R273,234 R15,000 + - R349,134	213	Only applies to R0 to R6,999 and ranges from 21 to 24%	0	100%	R0 to 3,499 -21% R3,500 to R6,999 – 51% All other – 54%	● (Good)	● (Average)	Ranges from 4,1 to full

It is estimated that there will be 3, 6 million new households in South Africa by 2020, of which 2, 1 million will be living in a metropolitan municipality with the majority falling in R0-R3, 499 income levels. The following interventions were modeled in respect of the households living in this housing circumstance: Subsidised (RDP) housing, Site and service with incrementally built top structure, Subsidised social rental apartment, Privately developed residential rental (apartment), Social housing or privately rental apartment with an incentive, Household rental apartment with an incentive, Privately converted industrial space to residential units, Developer delivered formal house for ownership, Privately developed bonded RDP house and Sub-divided formal house for ownership with an incentive.

The subsidised (RDP) housing intervention has the highest impact on households earning below R3, 499, but none on households earning above that amount. All other interventions modelled have a very low impact on households in this income category. With respect to all of the interventions modelled (other than the subsidised (RDP)) the impact improves as the households income increases. This is due to the higher affordability levels which have a significant impact.

The interventions with the lowest cost to the state are privately developed residential rental and developer delivered formal housing for ownership. The most expensive interventions to the state are subsidised (RDP) housing and subsidized social rental (SHRA).

- Level of gearing: The interventions with the highest gearing are privately developed residential rental and developer delivered formal housing for ownership.
- Developmental outcomes: The interventions with the best developmental outcomes are privately developed residential rental and developer delivered formal housing for ownership Metropolitan differences: There are no significant differences between national and metropolitan municipalities with the exception that the unit cost is slightly higher in metropolitan municipalities

d) Formal owned, rented and traditional dwelling

The total number of households living in formal owned and rented and traditional dwellings nationally are approximately 9, 8 million which is by far the majority of households in respect of all housing circumstances. Of these 3, 7 million are living in a metropolitan municipality. Service connection backlog (water, sanitation and electricity) were modeled in respect of the households living in this housing circumstance.

The impact of the interventions modelled is significant and the cost to the state of these interventions is very high. There is no gearing with respect to the interventions modelled**.** The developmental outcomes of the interventions modelled are very good. The unit cost of the interventions modelled is significantly higher in metropolitan municipalities. This is a function of higher levels of service applied.

Generally State funded supply side options have more impact, but cost the state significantly more and are more likely to negatively distort the markets. The most significant constraint to overall impact where households and the private sector provide funding is the low levels of household credit worthiness. The most significant constraints to overall impact where the State provides all of the funding is the ability to sustain the levels of funding.

While incremental housing delivery for example site and service with an incremental top structure or backyard upgrading, is more expensive in terms of overall cost, it is more flexible to household's ability to invest and to mobilize support from family and friends. It also results in substantial savings to the state thereby enabling funds to be redeployed to demand side interventions.

8.2 Demand interventions

Table 14: Demand side interventions

Description of Intervention	Income Bracket	FLISP (Current Policy)	FLISP Impact	Capital Value (Increased)	Capital Value (Original)	Impact (Post Increased Incentives)	Impact (Original Post)	Impact (Pre) As per Supply Side Result	Impact	Leakage	Admin Effort	Commentary
Housing Vouchers	a) R0 - R3,499			75,000	50,000	54%	36%	19%	**High**	**Low**	**Med**	Overall impact of the intervention is not influenced by credit worthiness or the affordability level of the HH. The overall impact is therefore 100% of the value of the voucher (assuming 0% leakage). The intervention is administratively efficient and once established will be able to be maintained without effort.
	b) R3,500 - R6,999			50,250	33,500	54%	54%	54%				
	c) R7,000 - R9,999			37,500	25,000	54%	54%	54%				
	d) R10,000 - R14,999											
	e) R15,000 - R19,999											
	f) R20,000 - +											
Aggregated Retail Cr Risk Underwriting	a) R0 - R3,499			R 2,435	R 1,740	24%	22%	19%	**Med**	**Med**	**Low**	Overall impact improves as a result of the reduction in interest rate payable on the unsecured loans. Interest rate reduction is assumed to reduce from the current interest rate cap of 28.7% to 18.7% for 6 x 12 month loans (less reduced Admin cost). Administrative processes will need to be established to limit leakage.
	b) R3,500 - R6,999			R 3,128	R 2,235	54%	54%	54%				
	c) R7,000 - R9,999			R 3,485	R 2,490	54%	54%	54%				
	d) R10,000 - R14,999											
	e) R15,000 - R19,999											
	f) R20,000 - +											
Mortgage Tax Deduction	a) R0 - R3,499	R -	12%				12%	12%	**Low**	**Low**	**Low**	Very easy to implement via SARS. However overall impact of the intervention is very limited due to the average tax rates for individuals earning less than R10, 000 per month.
	b) R3,500 - R6,999	R 75,525	47%		R 660		34%	33%				
	c) R7,000 - R9,999	R 53,588	54%		R 3,585		47%	45%				
	d) R10,000 - R14,999	R	54%									

Description of Intervention	Income Bracket	FLISP (Current Policy)	FLISP Impact	Capital Value (Increased)	Capital Value (Original)	Impact (Post Increased Incentives)	Impact (Original Post)	Impact (Pre) As per Supply Side Result	Impact	Leakage	Admin Effort	Commentary
		26,588										
	e) R15,000 - R19,999											
	f) R20,000 - +											
Saving Linked Mortgage Subsidy Capital Amount	a) R0 - R3,499	R -	12%	R 75,000	R 50,000	16%	14%	12%	**Med**	**Low**	**High**	HHs rewarded fixed capital contribution to be deduced from interest payments if HH reaches saving target. Savings target is equal to 50% of normal mortgage instalment for 36 months for each of the HH income brackets. Impact is limited unless impairment is fundamentally changed.
	b) R3,500 - R6,999	R 75,525	47%	R 50,250	R 33,500	41%	38%	33%				
	c) R7,000 - R9,999	R 53,588	54%	R 37,500	R 25,000	51%	49%	45%				
	d) R10,000 - R14,999	R 26,588	54%									
	e) R15,000 - R19,999											
	f) R20,000 - +											
Saving Linked Mortgage Subsidy Capital Amount with credit rehabilitation	a) R0 - R3,499	R -	12%	R 75,000	R 50,000	18%	16%	12%	**High**	**Med**	**Med**	As for above plus Incentive of R6, 000 to be paid to debt councillors to encourage rehabilitation of targeted HHs. Impact significant on the assumption that 10% of targeted HH are rehabilitated over 3 year period during which the HH takes advantage of the savings incentive. Credit worthiness improves from 54% to 64%.
	b) R3,500 - R6,999	R 75,525	47%	R 50,250	R 33,500	47%	44%	33%				
	c) R7,000 - R9,999	R 53,588	54%	R 37,500	R 25,000	59%	57%	45%				
	d) R10,000 - R14,999	R 26,588	54%									
	e) R15,000 - R19,999											
	f) R20,000 - +											
Interest Rate Subsidy for Targeted Mortgage Loans	a) R0 - R3,499	R -	12%	R 73,681	R 50,906	21%	17%	12%	**High**	**Low**	**Med**	In this intervention the State provides the HH with the interest rate subsidy via the mortgage banks for a limited term. For Income Bracket R0-R3,500 the subsidy starts at 5% deduction (7.5% in increased incentive) reducing by 0.60% (
	b) R3,500 - R6,999	R 75,525	47%	R 53,586	R 33,223	54%	45%	33%				
	c) R7,000 - R9,999	R 53,588	54%	R 36,170	R 19,291	54%	54%	45%				
	d) R10,000 - R14,999	R 26,588	54%	*								

Description of Intervention	Income Bracket	FLISP (Current Policy)	FLISP Impact	Capital Value (Increased)	Capital Value (Original)	Impact (Post Increased Incentives)	Impact (Original Post)	Impact (Pre) As per Supply Side Result	Impact	Leakage	Admin Effort	Commentary
	e) R15,000 - R19,999											or 1% -increased incentive) per year for 5 years. Subsidy reducing by 1 % of each income bracket and support is reduced by 1 year for each income bracket.
	f) R20,000 - +											
FLISP	a) R0 - R3,499	R -	12%	R 75,000	R 50,000	16%	14%	12%				Overall impact of this intervention improves HH affordability due to the reduction in amount of borrowings of the HH by the FLISP amount paid to the mortgage bank. The impact would be enhanced significantly if linked to a debt rehabilitation programme (see above)
	b) R3,500 - R6,999	R 75,525	47%	R 50,250	R 33,500	41%	38%	33%				
	c) R7,000 - R9,999	R 53,588	54%	R 37,500	R 25,000	51%	49%	45%	**Med**	**Low**	**Med**	
	d) R10,000 - R14,999	R 26,588	54%									
	e) R15,000 - R19,999											
	f) R20,000 - +											
Mortgage Deposit Guarantee	a) R0 - R3,499	R -	12%	R 6,120	R 4,080	15%	13%	12%				Assume impact improves by 10% (20% of Increased incentive) due to improved access by HHs to mortgage loans. Assuming that some HHs with affordability, but who have no savings use unsecured credit to fund a deposit for a mortgage loan. Benefit is equal to an annual saving of the extra interest payable on the unsecured credit assuming the state pays the premium cost. (unverified impact improvement as no current data)
	b) R3,500 - R6,999	R 75,525	47%	R 12,240	R 8,160	40%	37%	33%				
	c) R7,000 - R9,999	R 53,588	54%	R 17,490	R 11,660	54%	50%	45%	**Med**	**Med**	**Med**	
	d) R10,000 - R14,999	R 26,588	54%									
	e) R15,000 - R19,999											
	f) R20,000 - +											

Description of Intervention	Income Bracket	FLISP (Current Policy)	FLISP Impact	Capital Value (Increased)	Capital Value (Original)	Impact (Post Increased Incentives)	Impact (Original Post)	Impact (Pre) As per Supply Side Result	Impact	Leakage	Admin Effort	Commentary
Capital payment to Mortgage Bank - Admin Subsidy	a) R0 - R3,499	R -	12%	R 37,500	R 25,000	13%	12%	12%	**Low**	**Med**	**Low**	Admin fee for 5 Years paid annually in advance paid to the mortgage bank originating qualifying loans. Qualifying loans receive a 1% reduction in normal interest rate on their home loan. Increased incentive is a 1.5% reduction for R7, 500 Admin fee for 5 Years.
	b) R3,500 - R6,999	R 75,525	47%	R 37,500	R 25,000	38%	36%	33%				
	c) R7,000 - R9,999	R 53,588	54%	R 37,500	R 25,000	52%	48%	45%				
	d) R10,000 - R14,999	R 26,588	54%									
	e) R15,000 - R19,999											
	f) R20,000 - +											
Rental Voucher	a) R0 - R3,499			R 180,000	R 120,000	29%	23%	12%	**High**	**Med**	**Med**	Rental voucher disbursed on a card that is redeemable with accredited rental stock providers for up to 20 years. The value of the monthly rental voucher is R500 & R250 for the income brackets R0-R3, 5000 & R3, 501, R7, 000 respectively.
	b) R3,500 - R6,999			R 90,000	R 60,000	39%	36%	31%				
	c) R7,000 - R9,999											
	d) R10,000 - R14,999											
	e) R15,000 - R19,999											
	f) R20,000 - +											

The impact of poor credit worthiness undermines the overall impact of all interventions which rely on credit. This is the most significant factor influencing all interventions (both supply and demand) which reply on formal credit (secured and unsecured) and also to a slightly lesser extent formal rental options (subsidized or private rental).

Interventions which provide grants in cash or through vouchers are most effective unless they are also linked to credit. This is because the impact of these interventions is not undermined by high levels of household credit impairment. The overall impact of less formal rental housing arrangements such as occurs in Backyard Rental and Household Rental are also not significantly undermined by credit worthiness issues.

It is essential to change/rehabilitate credit behavior in order to improve overall impact in assisting households to access housing. However this requires the investment of substantial resources and will take a significant amount of time to filter into increased overall impact in the housing sector. The outcome of improved credit worthiness has far wider positive implications than just the housing sector. The value placed on such interventions should recognize this. Consequently the cost and resource intensity of credit rehabilitation interventions should be absorbed in budget lines way broader than those in the housing sector.

Tax deductibility of mortgage instalments is not effective in improving overall impact. This is because the household's where the need for support is highest are in fact paying little or no personal income tax.

Risk underwriting of unsecured credit and of secured loans (deposit guarantees) is cost effective. This conclusion only applies when the beneficiaries of the risk intervention (generally the lenders rather than the borrowers) in fact recognize and pay for the intervention.

8.3 Investment interventions

Table 15: Investment interventions

Description of Intervention	Income Bracket	Tax Value Benefit	Impact (Post)	Impact (Pre)	Impact	Leakage	Admin Effort	Commentary
Operator Rebate Investment Incentive	a) R0 - R3,499	R 8,918	14.5%	10.0%	Poor	High	Low	Depreciation allowance benefit is equal to a 20% write off of cost in the first year then 5% each year thereafter (17 years total). Average House Price R198k, R218k and R258k. First year benefit based on 30% tax rate on write off amount. The benefit results in an improved rental yield for the investor.
	b) R3,500 - R6,999	R 9,818	14.5%	10.0%				
	c) R7,000 - R9,999	R 11,618	14.5%	10.0%				
	d) R10,000 - R14,999							
	e) R15,000 - R19,999							
	f) R20,000 - +							
Investor Rebate Investment Incentive	a) R0 - R3,499	R 4,756	12.4%	10.0%	Good	Low	Low	Investor receives a tax rebate based on the income earned from funds invested in qualifying funds. Benefit based on yield improvement on the house unit price. Assuming 80% of total cost is funded by investors. Investors yield improved by the difference between a return of 10% taxed at 30% and a tax free 10% return. The difference is added to the pre impact yield to determine the post impact yield
	b) R3,500 - R6,999	R 5,236	12.4%	10.0%				
	c) R7,000 - R9,999	R 6,196	12.4%	10.0%				
	d) R10,000 - R14,999							
	e) R15,000 - R19,999							
	f) R20,000 - +							
Municipal Rates Rebate	a) R0 - R3,499	R 6,000	10.3%	10.0%	Good	Low	High	Investors benefit from a 50% reduction in the current municipal rates charge. Assuming the current rates charge is 0.5% of house value
	b) R3,500 - R6,999	R 6,000	10.3%	10.0%				
	c) R7,000 - R9,999	R 6,000	10.3%	10.0%				
	d) R10,000 - R14,999							
	e) R15,000 - R19,999							
	f) R20,000 - +							

Investment Incentives, using tax rebates are generally quite effective and are likely to stimulate additional funding for housing. These interventions can be well targeted and leakage is low as is the administrative costs. Likely applications of such investments would be the financing of rental projects, whether in rehabilitation, conversion or new build projects as well as development finance for developers undertaking developments of housing for sale.

Municipal rates rebates do not appear to be effective and are relatively administratively intensive. Operator tax rebates, while providing apparent strong incentives are not well targeted and have high levels of leakages.

Alternative scenarios for modeling and assessment

Alternative scenarios generated, modeled and evaluated are classified as follows: historical practice, lowest cost to the state, formalization of informality and the NDP[11]. In assessing these scenarios, the model considers the overall performance of each scenario against the range of indicators. The scenario that has the highest total cost by far is Historic Practice. This scenario also requires the highest state contribution. However this scenario reaches the greatest percentage of targeted households (86%). The scenario also performs badly in respect of the other developmental indicators, having the greatest amount of additional land required with the highest percentage of households assisted on the periphery - contributing negatively to the compact city indicator more than the other scenarios. In addition this scenario performs worst in respect of gearing non state investment into the housing sector. Finally the interventions used in this scenario, rely on subsidy mechanisms that generally generate high levels of market distortions and fail to encourage an effective housing market.

The NDP scenario has the second highest total cost. However, the required contribution by the state is about half of that required for the Historic Practice scenario. This scenario reaches significantly less of the targeted households than does the Historic Practice scenario i.e. 69% versus 86%. The number of households reached can be improved by increasing the value of the demand side interventions.

[11] It must be noted that the NDP has a number of objectives but in this case only an objective that promotes investment in high-densities and inner cities has been modelled. It is further assumed that all investment is high-density and in inner cities (nothing on the periphery).

The NDP Scenarios with enhanced demand side housing vouchers by 50% and 100% seek to assess the impact of increasing the state contributions to demand side interventions on overall impact and how much this would increase the overall cost of the intervention and the state's contribution. Given the significant negative impact of high levels of indebtedness on inhibiting overall impact wherever formal credit assessments are likely to be applied to accessing loans or rental accommodation, the impact of increasing the housing voucher only has been modelled. The 50% and 100% increases in the housing voucher result in increases in the proportion of households assisted from 69% to 72% and 74% respectively. This increased overall impact increases the overall cost and particularly the value of the state contribution in the NDP scenario significantly. For the 50% increase in the housing vouchers the overall cost of the scenario increases by 6% and the state contribution by 27%. In a case of 100% increase in the housing voucher value, the overall cost of the scenario increases by 11% and the state contribution by a huge 52%. The conclusion is that increased contributions to housing vouchers are fairly effective (additional state contribution as a ratio of improved overall impact) in improving the overall impact of the scenario up to a 50% increase of the housing vouchers, but less efficient above that level.

With the exception of the Lowest Cost to the State scenario, the NDP scenario achieves the best state gearing (1.9). In addition, this scenario has the best impact in terms of compact cities, resulting in no households being assisted on the periphery and about one third of the land required for the Historic Practice scenario.

The scenario that has the third highest total cost is that of Formalization of Informality (Outcome 8). This scenario reaches a similar number of households to that of the NDP scenario i.e. 68%, but requires a significantly less contribution from the state. However it results in 56% of households being assisted on the periphery thereby negatively impacting on the compact city indicator and contributes slightly less in gearing non state resources and stimulating a more effective housing market. This scenario also has a higher level of subsidy linked market distortions than the NDP scenario.

Overall, it can be concluded that the best performing Scenario of those modelled is the NDP (enhanced demand side housing voucher by 50%). This scenario does however still only impact on 72% of targeted households. This is mainly a function of the severe limitations of the current high levels of household indebtedness in South Africa. There is room to scope and model alternative scenarios to optimise overall impact and the other developmental criteria against cost to the state. Notwithstanding this, ultimate progress in housing the nation while limiting informality would require a fundamental reduction in current levels of household indebtedness.

Table 16: Alternative scenarios

Scenario	Arena	Scenario : Historic practice	Scenario : Lowest Cost to the State	Scenario : Formalisation of Informality	Scenario : National Development Plan (Absorption and sustainability)	Scenario: NDP (enhanced demand side vouchers increased by 50%)	Scenario: NDP (enhanced demand side vouchers increased by 100%)
Total Costs (R'm)		**878,263**	**484,247**	**573,742**	**643,616**	**689,375**	**689,375**
Total State Contribution (R'm)		**641,812**	**127,049**	**223,925**	**212,928**	**270,356**	**299,730**
Total State Housing Subsidy (R'm)		236,889	-	13,289	3,929	3,929	11,636
Total State Additional Subsidy (R'm)		269,898	85,642	66,708	97,001	97,001	108,141
Total State Funding Gap (R'm)		124,874	-	-	-	-	-
Total State Demand Side Interventions (R'm)		10,151	-	58,962	31,272	88,122	141,429
Total State Supply Side Interventions (R'm)		-	28,360	84,965	82,727	81,305	73,663
Total HH Contribution (R'm)		**188,059**	**247,672**	**277,597**	**390,630**	**378,962**	**349,588**
Total HH Debt (R'm)		169,253	203,620	231,845	355,291	346,443	310,826
Total HH Savings (R'm)		18,806	44,052	45,752	35,339	32,519	28,046
Total Pvt Sector Contribution (R'm)		**48,392**	**109,526**	**72,221**	**40,057**	**40,057**	**40,057**
Total Pvt Sector Debt (R'm)		42,423	101,393	61,241	35,422	35,422	45,294
Total Pvt Sector Equity (R'm)		5,969	8,133	10,980	4,635	4,635	4,647
No of HHs Targeted (units)		**8,622,182**	**8,622,182**	**8,622,182**	**8,622,182**	**8,622,182**	**8,622,182**
No of HHs Assisted (Units)		**7,411,974**	**5,225,452**	**5,812,773**	**5,898,360**	**6,201,614**	**6,201,614**
% Assisted		**86%**	**61%**	**67%**	**68%**	**72%**	**72%**
Total Cost/HH assisted (per Unit)		**118,492**	**92,671**	**98,704**	**109,118**	**111,161**	**115,100**
State contributing per HH assisted (per Unit)		**86,591**	**24,314**	**38,523**	**36,100**	**43,594**	**53,260**
State Gearing (Based on qualifying		**0.4**	**2.8**	**1.6**	**2.0**	**1.5**	**1.2**

Scenario	Arena	Scenario : Historic practice	Scenario : Lowest Cost to the State	Scenario : Formalisation of Informality	Scenario : National Development Plan (Absorption and sustainability)	Scenario: NDP (enhanced demand side vouchers increased by 50%)	Scenario: NDP (enhanced demand side vouchers increased by 100%)
HHs)							
%age HH Assisted in Periphery		**49%**	**63%**	**50%**	**0%**	**0%**	**0%**
Hectare of additional land required		**123,999**	**25,483**	**35,384**	**40,811**	**45,653**	**52,048**
Arena where Land is Required (ha)	Existing township	12,028	3,362	4,872			

Table 17: Alternative scenarios

Scenario	Arena	Scenario : Historic practice	Scenario : Lowest Cost to the State	Scenario : Formalisation of Informality	Scenario : National Development Plan (Absorption and sustainability)	Scenario: NDP (enhanced demand side vouchers increased by 50%)	Scenario: NDP (enhanced demand side vouchers increased by 100%)
Total Costs (R'm)		**878,263**	**484,247**	**573,742**	**643,616**	**689,375**	**689,375**
Total State Contribution (R'm)		**641,812**	**127,049**	**223,925**	**212,928**	**270,356**	**299,730**
Total State Housing Subsidy (R'm)		236,889	-	13,289	3,929	3,929	11,636
Total State Additional Subsidy (R'm)		269,898	85,642	66,708	97,001	97,001	108,141
Total State Funding Gap (R'm)		124,874	-	-	-	-	-
Total State Demand Side		10,151	-	58,962	31,272	88,122	141,429

Scenario	Arena	Scenario : Historic practice	Scenario : Lowest Cost to the State	Scenario : Formalisation of Informality	Scenario : National Development Plan (Absorption and sustainability)	Scenario: NDP (enhanced demand side vouchers increased by 50%)	Scenario: NDP (enhanced demand side vouchers increased by 100%)
Interventions (R'm)							
Total State Supply Side Interventions (R'm)		-	28,360	84,965	82,727	81,305	73,663
Total HH Contribution (R'm)		**188,059**	**247,672**	**277,597**	**390,630**	**378,962**	**349,588**
Total HH Debt (R'm)		169,253	203,620	231,845	355,291	346,443	310,826
Total HH Savings (R'm)		18,806	44,052	45,752	35,339	32,519	28,046
Total Pvt Sector Contribution (R'm)		**48,392**	**109,526**	**72,221**	**40,057**	**40,057**	**40,057**
Total Pvt Sector Debt (R'm)		42,423	101,393	61,241	35,422	35,422	45,294
Total Pvt Sector Equity (R'm)		5,969	8,133	10,980	4,635	4,635	4,647
No of HHs Targeted (units)		**8,622,182**	**8,622,182**	**8,622,182**	**8,622,182**	**8,622,182**	**8,622,182**
No of HHs Assisted (Units)		**7,411,974**	**5,225,452**	**5,812,773**	**5,898,360**	**6,201,614**	**6,201,614**
% Assisted		**86%**	**61%**	**67%**	**68%**	**72%**	**72%**
Total Cost/HH assisted (per Unit)		**118,492**	**92,671**	**98,704**	**109,118**	**111,161**	**115,100**
State contributing per HH assisted (per Unit)		**86,591**	**24,314**	**38,523**	**36,100**	**43,594**	**53,260**
State Gearing (Based on qualifying HHs)		**0.4**	**2.8**	**1.6**	**2.0**	**1.5**	**1.2**
%age HH Assisted in Periphery		**49%**	**63%**	**50%**	**0%**	**0%**	**0%**
Hectare of additional land required		**123,999**	**25,483**	**35,384**	**40,811**	**45,653**	**52,048**
Arena where Land is	Existing	12,028	3,362	4,872			

Scenario	Arena	Scenario : Historic practice	Scenario : Lowest Cost to the State	Scenario : Formalisation of Informality	Scenario : National Development Plan (Absorption and sustainability)	Scenario: NDP (enhanced demand side vouchers increased by 50%)	Scenario: NDP (enhanced demand side vouchers increased by 100%)
Required (ha)	township						
	Infill	29,280	5,990	9,596	25,311	29,439	35,028
	Periphery	60,817	16,131	17,529			
	Inner city	21,874		3,387	1,970	1,970	3,489
	Existing suburbs						
	Existing informal settlements				2,067	2,781	2,067
	Informal settlements				11,463	11,463	11,463

9 Preliminary Conclusions

The role of the government in the provision of adequate housing should be understood and interpreted according the conditions as households' circumstances differ. It is therefore important that the provision of access to land should be understood as the provision of adequate housing for those individuals who are only in need of land. For households who only need access to land and building material, the provision of these should also be understood as the provision of adequate housing, while provision of access to finance for those who are need of it should be interpreted as the provision of adequate shelter. Some households only need services such as water, sewage, electricity and roads. Provision of these services to those who only need them should also be interpreted as the provision of adequate housing.

On the performance of housing finance instruments, there is a need to track the performance of each instrument in terms of delivery and meeting set objectives. One of the objectives of this report was to report on the performance of each instrument against its target/objective so as to determine the efficacy of various instruments. This however was not done successfully due to lack of data from provinces.

From the perspective of modelling and costing of alternatives, the following conclusions are made:

The costs of different housing options are a direct function of the cost of the land, specifications for services and top structure adjusted for various densities. The costs differences for different levels of service are exponential and raise questions in respect of state/municipal affordability.

The cost to the State is a function of the level of explicit or implicit subsidies and unrecovered costs provided. The extent to which these are directly funded or funded out of general municipal allocations can undermine municipal viability.

Gearing is achieved when the households or private firms are incentivised to fund a portion of the unit costs through savings/debt or equity/debt. To achieve gearing the household or firm must have a real interest in the outcome (asset creation for households or profit for firm).

Overall impact on households is a function of eligibility, affordability and credit worthiness. The most significant limiting factor is current levels of credit impairment which are huge. These will not be changed by increased subsidies unless these incentivise changed household behaviour. There is a significant opportunity to use incentives around housing to influence the way in which households save and behaviour in relation to credit.

Given the current limited municipal capacity to directly manage delivery, supply side options which mobilise household and private firm responsibility and capacity, need to be seriously considered. This also generally enhances gearing. Care must be taken to design interventions in such a way that ensures good quality value for money outcomes for participating buyers/tenants.

Municipal viability will in the long run be enhanced by supply interventions that increase densities, encourage more compact cities and deliver products that are more amenable to the collection of rates and service charges over time. This implies a need to avoid low density peripheral developments and un-incentivised incremental housing delivery.

Demand site interventions show promise and should be seriously considered especially the housing voucher, as long as it is not linked to a requirement to access credit. Risk underwriting of unsecured credit and of secured loans (deposit guarantees) are also cost effective. This only applies when the beneficiaries of the risk intervention (generally the lenders rather than the borrowers) in fact recognize and pay for the intervention.

Investment Incentives, using tax rebates are generally quite effective and are likely to stimulate additional funding for housing. These interventions can be well targeted, leakage is low, as is the administrative costs. Likely applications of such investments would be the financing of rental projects, whether in rehabilitation, conversion or new build projects as well as development finance for developers undertaking developments of housing for sale.

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Annexure A

Supply interventions

Supply interventions modelled per circumstance are divided into:

I. Informal settlement interventions

- *Insitu upgrading of informal settlements with formal top structure* - An informal settlement is upgraded on the basis where each remaining household receives registered ownership of a stand (at an assumed density of 60 units per hectare), serviced to a medium level of service[12] and a top structure comprising a 40m2 house fully financed by the state.
- *Site and service with formal top structure* - Households are relocated from an informal settlement into a site and service project. The household receives a stand at a density of 60 units per hectare, serviced to a medium level of service and a top structure comprising a 40m2 house (which is usually delivered at a later stage) and fully financed by the state
- *In situ upgrading of informal settlements with incremental top structure* - Households are relocated from an informal settlement into a site and service project. The household receives a stand at a density of 60 units per hectare, serviced to a medium level of service and a top structure comprising a 40m2 house (which is usually delivered at a later stage) and fully financed by the state.
- *Administrative incorporation of informal settlements with no top structure* - All households in the informal settlement receive confirmation of their right to access the site on which their informal dwelling is located, an administrative number for their dwelling (or address) and a basic level of service[13]. This is fully funded by the state.

  Subsidised (RDP) Housing - A household receives registered title to a stand (generally developed to a density of 40 units per hectare) serviced to a medium level of service and with a 40m2 house. This is fully funded by the state.

II. Backyard rental

[12] A medium level of service comprises piped water to site, water borne sewerage, gravelled roads (tarred bus routes) and medium level of electricity (3,5 KVA)

[13] A basic level of service comprises stand pipes, ventilated pit latrine, graveled roads and low level of electricity (2, 5 KVA).

- *Upgrade of backyard rental with an incentive* **-** The owner of a property in a designated area, is provided with a state incentive of R30, 000 to replace an informal backyard unit with a formal unit to specific specifications. The incentive is only provided once the formal unit has been built.
- *Subsidised (RDP) Housing* **-** As per informal settlement above.

III. New family formation and housing ladder

- *Subsidised (RDP) Housing* **-** As per informal settlement above.
- *Site and service with incremental top structure* **-** As per informal settlement above.
- *Privately developed residential rental (apartment)* **–** A rental unit of between 30 and 60m2 developed and managed by a private sector landlord. No government subsidization is accessed.
- *Household rental apartment with an incentive* **-** An owner of a property in a designated area is provided with a state incentive of R40, 000 for the development of a formal unit for rent to specific specifications.
- *Privately converted industrial space to residential units* **-** A SHI/private developer provided with a State incentive of R40,000 for converting an industrial property to a residential rental unit of between 30 and 60m2 to specific specifications in a dedicated area

- *Developer delivered formal house for ownership* **-** A developer delivered formal house on a serviced stand (at a density of 30 unit per hectare), developed to a high level of service and a top structure of between 40 and 80m2 house. The purchase is funded by privately provided mortgage backed loan.
- *Privately developed bonded RDP house* **-** A developer delivered formal RDP type house on a serviced stand (at a density of 60 units per hectare), developed to a medium level of service. The purchase is funded by privately provided mortgage backed loan.
- *Sub-divided formal house for ownership with an incentive* - An owner subdivides his property and develops a formal house for sale on the sub divided portion in designated areas. The owner receives a state provided incentive of R40 000. The purchase is funded by privately provided mortgage backed loan.

IV. Formal owned, rented and traditional dwelling

- *Service connection backlog: water* **-** Project-based state funding is provided to a municipality to upgrade water service connections to- minimum standards in existing residential areas where backlogs exist.
- *Service connection backlog: electricity* **- State** funding to a municipality to upgrade electricity connections to minimum standards in existing residential areas.
- *Service connection backlog: sanitation* **- State** funding is provided to a municipality to upgrade sanitation connections to minimum standards in existing residential areas.

Demand side interventions

The following categories of demand interventions have been modelled:

I. Incremental housing intervention

- *Housing voucher* **-** This comprises a once of capital amount managed by either the accredited subsidy authority or a national DFI being authorized to accredit and monitor suppliers disbursed via a debit card which is issued to beneficiaries earning below R10,000 per month and redeemed at accredited suppliers. Quality control is monitored by independent audit.
- *Aggregated retail credit risk underwriting* **-** This comprises the state underwriting the risk of unsecured lending to targeted households earning below R10,000 per month, by underwriting 70% of the credit providers loans that are written off (with a maximum write off of 50% of the portfolio). The facility would only be applicable to incremental housing credit via the National Credit Regulators registered lenders and separately identifiable as credit used at accredited suppliers. The interest rate on unsecured loans is capped at 10% less than the current cap (28.7%). The maximum loan size is R20, 000. The facility would be managed by a national DFI and the Accredited Lenders and quality control monitored by audit.

II. Bonded housing market

- *Mortgage tax deduction* **-** This comprises an annual deduction of the interest payment on a mortgage against taxable income for 5 years. The deduction is made and managed via SARS. The deduction is for individuals with an income of below R10, 000 per month who first time home owners are purchasing a property for less than R300, 000.

- *Savings linked mortgage subsidy capital amount* **-** The individual (earning below R10, 000 per month who are first time home owners purchasing a property for less than R300, 000) is incentivised to save the equivalent of 50% of a mortgage instalment for 36 months to qualify for a capital contribution to a bond. Registered bank will be accredited to administer a national home ownership savings scheme. The intervention is quality controlled and audited and monitored by registered lenders.
- *Savings linked mortgage subsidy capital amount with credit rehabilitation* **-** This comprises a savings linked mortgage subsidy capital amount (as described above) but combined with a structured debt rehabilitation / counselling process for individuals who are credit impaired to undergo debt rehabilitation with an accredited counselling entity receiving a once-off payment when the individual qualifies for a loan. The subsidy is for individuals with an income of below R10, 000 per month who first time home owners are purchasing a property whose price is below R300, 000. The intervention is quality controlled and audited and monitored by registered lenders.
- *Interest rate subsidy for targeted mortgage loans* **-** This comprises the state subsidising the interest rate on qualifying loans from mortgage banks for a limited period. The mortgage bank originates qualifying loans at a subsidised interest rate and claims the difference in interest rate from the State. Targeting those earning below R10, 000 per month who are first time home owners purchasing a property for less than R300, 000.
- *FLISP (Revised)* **-** This comprises a once off capital amount payable to a mortgage bank to improve a households affordability and to reduce the loan amount. Targeting first time home owner purchasing a property for less than R300, 000. The Subsidy is on a sliding scale starting at monthly household incomes of R3, 501 up to a maximum household income of R15, 000 and managed by the National Housing Finance Corporation who undertakes quality control, auditing and reporting.
- *Mortgage deposit guarantee* **-** The subsidy is equal to the annual premium, paid for 5 years, for an insurance product that replaces the need for the individual to provide the mortgage bank with a deposit to secure a home loan. Qualifying individuals with affordability can access a 10% deposit guarantee (20% for an increased incentive). The mortgage bank lends 100% to the household to acquire a house and the accredited insurance company issues the mortgage bank with a deposit guarantee. The subsidy is managed by accredited insurers who undertake quality control, auditing and reporting.

- *Capital payment to mortgage bank admin subsidy* **-** This subsidy comprises a once off capital amount payable to a mortgage bank to encourage greater lending to targeted households. The mortgage bank receives a once off payment for each qualifying loan. The subsidy is applied for households with an income below R10, 000 per month who are first time home owners and are purchasing a property with a price of less than R300, 000. The subsidy is managed by accredited lenders who undertake quality control, auditing and reporting.
- *Rental voucher* **-** This comprises a monthly rental voucher, disbursed via a debit card and redeemed at accredited rental stock providers. The voucher is provided to households with an income of below R7, 000 per month. This subsidy is managed by the Social Housing Regulatory Authority who undertakes quality control, auditing and monitoring.

It should be noted that the Mortgage Indemnity Fund currently being developed by the NHFC is not included, as information on how the intervention will be structured is currently not available. An overview of the above interventions as they apply to different income categories by housing circumstance is shown in the table 3 below.

Table 18: Interventions by housing circumstance and income group

Housing circumstance	Intervention	Income level
Incremental housing	Housing vouchers and Aggregated retail credit risk underwriting.	R0-R3500,R3501-R7000 and R7000-R10000
Formal owned developer delivered house. First time home buyer only	Mortgage tax deduction, savings linked mortgage subsidy capital amount, savings linked mortgage capital amount with credit rehabilitation, interest rate subsidy for targeted mortgage loans, mortgage deposit guarantee, admin subsidy and FLISP adjusted.	R0-R3500, R3501-R7000 and R7000-R10000 and up to R10000-R15000.
Privately developed residential rental	Rental voucher.	

Investment interventions

Investment interventions that only apply to privately developed residential rental and household rental up to income level in excess of R20000 modelled are:

- *Operator rebate investment incentive:* a reduced corporate/individual tax payment through an accelerated depreciation allowance offered to developers of qualifying rental housing stock with quality control, monitoring and auditing managed by SARS.

- *Investor rebate investment incentive:* a corporate/individual tax rebate on income from funds invested into designated applications offered to investors investing funds into qualifying funding instruments/projects. Qualification is based on house price and location with quality control, monitoring and auditing issues managed by SARS.
- *Municipal rates rebate:* a reduction of property rates and taxes cost through a reduction of municipal rates and taxes payable offered to developers of qualifying housing stock. Qualification is based on house price and location. Application is made to the Municipality for the rates rebate.

Each intervention is evaluated in terms of the following assessment criteria as shown in table

Table 19: Assessment criteria

Criteria	Description
Overall impact on households	The amount and proportion of targeted households in respect of a particular housing circumstance assisted and is calculated as follows: eligibility, affordability and credit worthiness.
Contribution towards integrated, inclusive and equitable cities	The extent to which interventions are not implemented on the periphery of the cities and if the density is lower than 40 units per hectare, then it is not contributing towards densification.
Impact on market distortions	This measure takes into consideration the impact on competition[14], risk allocation[15], transparency[16] and transaction cost / duplication[17].

Annexure B

Modeling assumptions

Development parameters

Infrastructure costs per level of service

[14] The extent to which the intervention allows for easy entry and exit of other players into the market. For example subsidised (RDP) housing is market distorting because it discourages the delivery of private mortgage finance housing developments at the lower price range.
[15] The extent to which the intervention shifts risk unduly or eliminates risk for specific parties and potentially changes their behaviour. For example mortgage underwriting shifts the risk from the financial institution to government potentially resulting in financial institutions reducing their due diligence when assessing applicants.
[16] The extent to which the intervention is transparent especially in respect of subsidisation. Hidden subsidies create false perceptions of value and often unfair playing fields or hide cost which others cannot avoid. For example subsidised (RDP) housing costs approximately R134,000 to develop but the majority of these costs are hidden being provided by the municipality, with the explicit stated subsidy being R 59 000.
[17] The extent to which the intervention results in duplication of systems, institutions, processes etc. and results in increased costs to society.

Infrastructure costs cover the supply of water, sanitation, electricity, roads and storm water. A service level is selected from three categories:

A basic level of service comprises stand pipes, ventilated pit latrine, graveled roads and low level of electricity (2, 5 KVA) A medium level of service comprises piped water to site, water borne sewerage, graveled roads (tarred bus routes) and medium level of electricity (3, 5 KVA)

A high level of service comprises piped water into the unit, water borne sewerage, tarred roads and high level of electricity (12,5KVA)

The costs used for each level of service are tabulated below:

Table 20: Costs of services by level of service

	High	Medium	Basic
Water			
Bulk cost	R 6 563	R 3 938	R 525
Reticulation cost	R 3 500	R 3 500	R 3 500
Unit connection cost	R 2 000	R 2 000	R 0
Total Water Cost	**R 12 063**	**R 9 438**	**R 4 025**
Sewer			
Bulk cost	R 6 000	R 1 200	R 0
Reticulation cost	R 4 625	R 4 625	R 0
Unit connection cost	R 1 250	R 1 250	R 5 000
Total Sewer Cost	**R 11 875**	**R 7 075**	**R 5 000**
Electricity			
Bulk cost	R 18 750	R 5 250	R 3 750
Reticulation cost	R 5 000	R 5 000	R 5 000
Unit connection cost	R 2 000	R 2 500	R 2 500
Total Electricity Cost	**R 25 750**	**R 12 750**	**R 11 250**
Roads & Storm water	**R 8 750**	**R 5 000**	**R 2 500**
Land	**R 12 500**	**R 12 500**	**R 0**
Total average cost per unit	**R 70 938**	**R 46 763**	**R 22 775**

NOTE: No provision has been made for solid waste bulk investment e.g. land fill sites

Land cost per arena

For each intervention the housing product is delivered in a housing arena or area at a certain density. The density of the housing development has an impact on the on the price of the land per housing unit delivered and on the cost of the services delivered to the housing unit. For each intervention the density of the housing product is set by income level. The costs of the housing arenas are as follows:

Table 21: Land cost by arena

Housing Arena Description	National *Land Price per Hectar*	National *Land Price per Sqm*	Metro *Land Price per Hectar*	Metro *Land Price per Sqm*
Land on the periphery of Cities and Towns	250000		500000	
Land located within existing developed areas (Infill)	750000		1250000	
Existing suburbs		200		1000
Existing Township		100		400
Existing Informal Settlements	100000		200000	
InnerCity Areas		150		500

Note:
Land prices given are broad averages and amounts influenced by;
- availability of bulk infrastructure
- specific location in relation to existing high/middle/low income areas

Construction cost for different standards and methodologies

For each intervention and by each income level the size (in square meters) is determined for each housing unit. Ranging from the smallest unit (backyard upgrade) at 16 square meters to the largest unit size (developer delivered formal house) of 80 m^2.

The cost of the top structure is depended on the type of housing intervention and the quality of finishes. Higher income groups generally have higher cost of top structure. Top structure costs range from R2, 300 to R5, 00 per m^2.

Professional and programme management costs

Depending on the housing intervention the cost of housing unit is escalated by the following fees:

- Professional Fees: 18% has been added to all infrastructure and building costs (but not to land) to cover the following:
    - Legal and cadastral costs
    - Urban and town planning costs

- EIA, TIA and other relevant investigations
- Land surveying
- Civil and electrical engineering design and oversight
- Beneficiary administration
- Conveyancing
- Project development management

- Program Management Fee: A 5% program management fee has been added to all costs under the following housing interventions:
  - In-situ upgrades of informal settlements (with formal top structure)
  - Site and service (with formal top structure)
  - In-situ upgrades of informal settlements (with Incremental top structure)
  - Site and service (with Incremental top structure)
  - Admin Incorporation of informal Settlements (Basic Level of Service no top structure)
  - Upgrade of Backyard Rental (with incentive)
  - Household Rental (Formal Apartment)

  Developer Mark-Up: Where the housing product has been delivered by the private sector for sale i.e. the developer delivered housing units, the cost to the household is escalated by 18% to cover the developers profit and financing costs.

Funding parameters

State subsidies

The State's contribution has been defined in the model as either one or a combination of the following funding streams:

- Housing Subsidy (as per allocation via province or accredited municipality);
- Additional Subsidy (including SHRA, infrastructure grant/USDG etc.). For all housing interventions the value of the additional subsidy is equal to the total cost of the land and services, expect in the case of SHRA funded residential rental where the additional subsidy is equal to R125,000 per housing unit;
- State Incentive (an amount paid to the provider of the housing stock to incentivise specific housing outcomes);

- State Funding Gap (the unfunded portion of the residual cost of delivering the housing unit); and
- Bulk infrastructure grant.

A portion of the total cost of the housing unit is recovered by the State through municipal capital recoveries. This is a recovery of the bulk services costs by the municipality from the household or private developer. This municipal recovery does not impact on the calculation of the State's contribution.

The model is designed to calculate the household contribution by deducting the State's contribution from the total cost. For example, in the case of the historic practice the 'RDP' housing intervention for households earning less than R3, 500 per month was fully funded by the State (ignoring the deposit requirement for households earning more than R1, 500 but less than R3, 500). So in this case there would be no household contribution.

Private sector funding to households

In the housing interventions where the household funds the remaining portion of the costs, the costs are funded by either household savings or by the household accessing credit (secured credit for mortgage loans and unsecured credit for incremental housing interventions).

The model allows for a different level of debt for each housing intervention and for each income group. The residual amount required to fund the remaining portion of the costs is assumed to be funded from households' savings.

Private sector funding to firms

For the housing interventions that are delivered by the private sector, such as the Privately Developed Residential Rental (apartment), the private sector developer will fund the cost of the housing units from:

- private sector equity; and debt provided by commercial funders of development (construction) finance, i.e. banks.

Annexure B: Affordability parameters

Secured mortgage loans and unsecured credit

Affordability for secured mortgage loans and unsecured credit was determined as follows:

- For each household income bracket the midpoint of the household income is used as the average household gross income.
- It is assumed that 30% of the household gross income is available by the household as an instalment to pay debt or as payment towards rent.
- If the intervention requires the household to borrow money the following unsecured (personal or incremental loan) and secured (mortgage) parameters that would apply to the cost of the loan have been assumed:
  - For unsecured the interest rate is set at 28.7%, the term of the loan is 36 months, the upfront administration fee is R1,000 (inclusive of VAT) per loan and that the household takes out two loans over 6 years to fund their housing debt requirements.
  - For secured loans (mortgages) the interest rate is set at 10.5% for the income brackets R0 to R10, 000 and at 8.5% above R10, 000. The term is set at 240 months and the administration fee is R1, 000.
  - No monthly service administration or credit life insurance costs have been included for either the secured or unsecured loans.

Monthly rentals on rental accommodation

Where the intervention was for rental, the rental cost for the household is the sum of the two following components:

- Gross Rent Cost: The gross rental cost is determined by using the total cost of the house less any State subsidy that may be applicable to determine a net cost of the housing unit. The net cost is multiplied by an annual rental yield factor of 12% for income between R0- and R10, 000 and 10% for incomes above R10, 000 to determine the gross rental cost for the household (shown as a monthly cost). This differentiation is to match the differentiation in the interest expectations used under the assumptions used where borrowing is applicable. For rental stock provided under the SHRA intervention only the debt portion of cost of the housing unit is used to determine the rental cost for income between R0 and R7,000.

- Additional Cost: Added to the gross rent cost is an additional 20% cost which is to cover administration, maintenance, collection costs and vacancy.