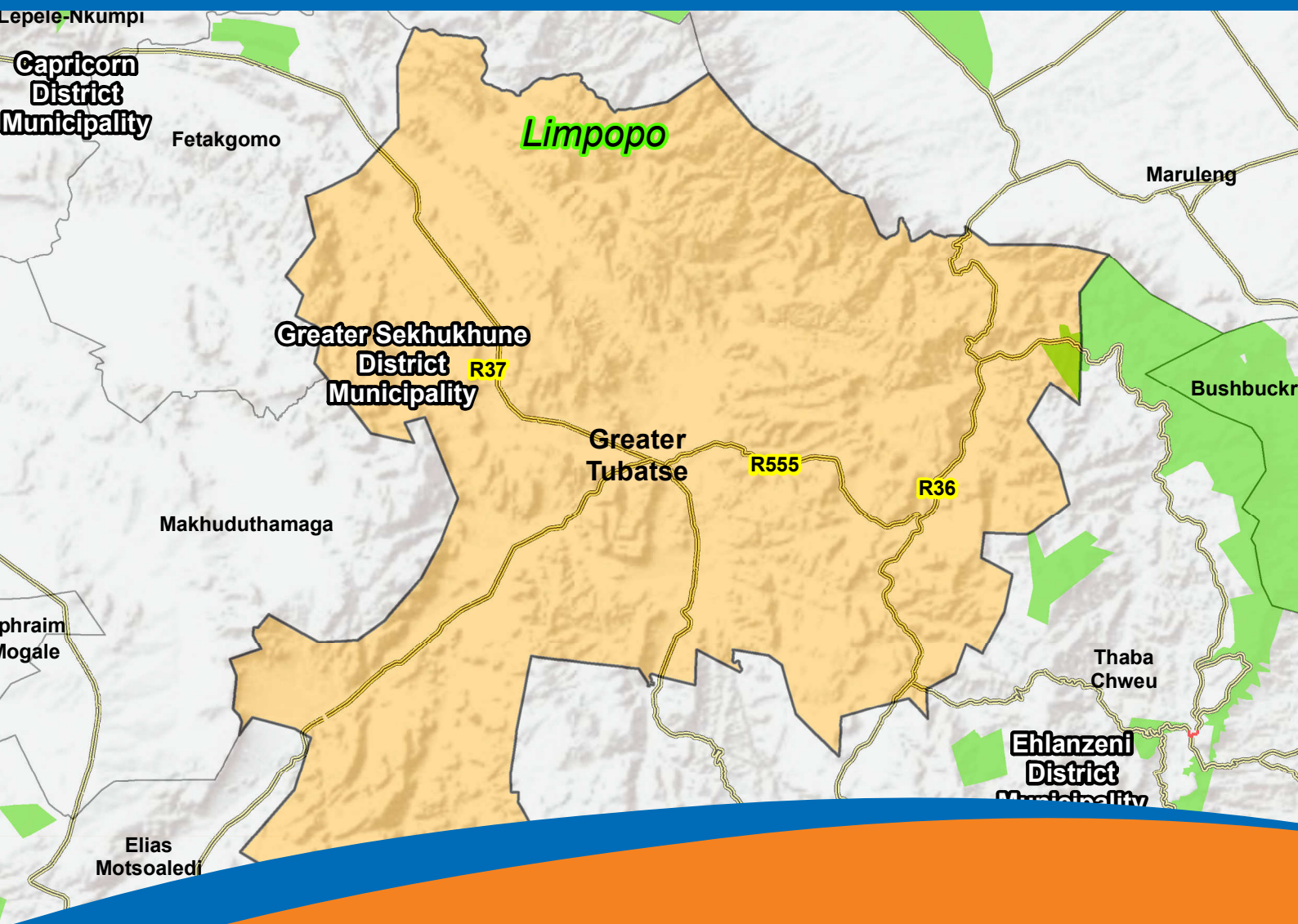


Working for integration



Greater Tubatse – Limpopo

Housing Market Overview
Human Settlements Mining Town Intervention
2008 – 2013

The Housing Development Agency (HDA)

Block A, Riviera Office Park,
6 – 10 Riviera Road,
Killarney, Johannesburg
PO Box 3209, Houghton,
South Africa 2041
Tel: +27 11 544 1000
Fax: +27 11 544 1006/7

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The Centre for Affordable Housing Finance (CAHF) in Africa, www.housingfinanceafrica.org
Coordinated by Karishma Busgeeth & Johan Minnie for the HDA

Disclaimer

Reasonable care has been taken in the preparation of this report. The information contained herein has been derived from sources believed to be accurate and reliable. The Housing Development Agency does not assume responsibility for any error, omission or opinion contained herein, including but not limited to any decisions made based on the content of this report.

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1. Frequently Used Acronyms

CAHF	– Centre for Affordable Housing Finance in Africa
GDP	– Gross Domestic Product
GVA	– Gross Value Added
HDA	– Housing Development Agency
HPI	– Housing Performance Index
IDP	– Integrated Development Plan
LM	– Local Municipality
NU	– Non-Urban, StatsSA subplace designation
RDP	– Reconstruction and Development Programme
SDF	– Spatial Development Framework
SP	– Subplace
StatsSA	– Statistics South Africa

2. Introduction

The Housing Development Agency (HDA) is a national public development agency that promotes sustainable communities by making well-located land and buildings available for the development of human settlements. As its primary activity, the HDA assembles and releases state, private and communal land and buildings for development. In addition, the HDA provides project delivery support services to organs of state at local, provincial and national levels.

In setting the agenda and asserting its role in the housing continuum, the HDA realised that there is a gap in the provision of accurate and easy-to-understand information regarding the property market, particularly in previously overlooked areas including the mining towns.

The development of this report is a result of this gap. It aims to explore and present an overview of the formal housing markets in Matjhabeng, Moqhaka, Merafong, Randfontein, Westonaria, Thabazimbi, Greater Tubatse, Elias Motsoaledi, Lephalale, Fetakgomo, eMalahleni, City of Matlosana, Mogale City, Ephraim Mogale, Steve Tshwete, Thaba Chweu, Tsantsabane, Ga-Sekgonyana, Gamagara, Kgetlengrivier, Madibeng, Moses Kotane and Rustenburg so as to change perceptions of affordable markets and as such, expand and deliver affordable housing options within South Africa's municipalities.

The study was undertaken over a three-month period, relying mainly on the high level indicators developed by the Centre for Affordable Housing Finance in Africa which considered the market conditions, existing market size and activity, average prices and values, market growth and lending activity in the area to support a better understanding of the opportunity and the impact of various housing policy interventions. The centre also highlighted the range of opportunities across areas to stimulate the affordable housing market in South African municipalities.

The methodology also included site visits to eMalahleni, Randfontein, Westonaria and Rustenburg so as to confirm findings and to gain more insights about the current housing circumstances.

The report is intended for use by all stakeholders involved in planning including professionals in municipalities, Government officials, private sector, investors, developers and urban planners, for the mission of enticing a range of development options. The report does not address housing supply for the lowest income levels but rather seeks to make the case for expanding the gap market in order to entice private sector engagement more effectively.

2.1 Report Contents

The report covers the following aspects of housing markets through maps, charts and graphs to highlight understanding across the municipality and at the neighbourhood level, where housing markets function.

1. **Housing Performance Profile** – the pace of growth by suburb, on maps and in charts, as measured by the Housing Performance Index
2. **Market Size** – total number and distribution of residential properties, households, values and sales prices, key demographic indicators
3. **Market Activity** – properties, sales and new properties and resales over time
4. **Lending Activity** – sales and loans by lender
5. **Affordability Profile** – affordability based on local incomes, compared to sales price, housing gaps and affordability ratios
6. **Leverage** – the value of equity available for purchasing new homes
7. **Rental Index** – those areas most prime for quality, dense, professionally managed rental housing

2.2 Definitions and Methodology

For housing supply, title and deeds records were merged at the suburb level, mapped and ranked through the Citymark dashboard. Priority has been placed on actual transaction datasets from familiar sources that can be geocoded to the subplace level, trended over time and updated regularly. For housing demand, StatsSA data was applied as the most consistently collected, widely understood and most common source of demographic data in the Country.

2.3 Benchmarks

Benchmarks are indicators used to compare performance across areas and are valuable for understanding meaning. Each indicator was created at the local, municipal and national levels in order to measure performance within and across markets. These benchmarks also highlight areas or trends which are outperforming the overall market in certain ways and might be most receptive to a variety of new housing development options.

2.4 Site Visits

As mentioned, the team conducted four site visits to eMalahleni, Randfontein, Westonaria and Rustenburg. These visits provided the chance to confirm findings from the data and chat informally with residents about their current housing circumstances: where they had moved from, where they were currently living and how affordable it was and where they were headed, including their ambitions and concerns. This helps to provide a sense of the housing continuum in the town – what choices residents feel empowered by and what constraints keep them from realising their dreams and aspirations. Residents who were engaged came from informal settlements, brand new RDP homes and a stalled RDP project which had recently been reactivated by the city.

Some of the key insights from these site visits were:

- Residents may not know exactly what their home might be worth but they are very aware that their home has a value, which includes stability and security for themselves and a better future for their families
- Many residents use their homes to supplement their own income, including renting shacks and rooms and operating home-based businesses
- There might be a relationship between how the houses are handed over and the sense of ownership (as evidenced by improvements to the homes)
- Everyone we spoke to understood the importance of a title deed, that the title deed proved (secured) ownership, even if in a few cases, they were not sure of its status or how to get one
- Most people mentioned a better future for their children as an integral part of the importance of homeownership
- Residents were aware that there is an acute shortage of housing opportunities and that despite having their homes, they were surrounded by others without adequate housing

Many people understood housing markets around them intuitively – where the better houses were closer to jobs and transportation and what the barriers were – the price, the inconvenience and the cash required to access the houses.

2.5 Using this Report

This report is intended to provide a high-level view of the mining town housing markets overall and by neighbourhood, within areas of particular interest by measuring and comparing housing market performance amongst each other and with the municipality. This report highlights connections and implications from the findings that are of significant interest to the HDA. The report does not seek to understand why things are but offers general ideas based on experience with housing markets and new learning about mining town housing markets from these reports.

The report findings emphasise opportunity as opposed to risk or failure. Opportunities are defined as conditions or indicators within areas which can show:

- The ways in which areas or markets are behaving *positively* (such as growing more quickly) or showing strength (such as stability and consistency)
- The ways in which areas can be connected to common strategies that promote *growth, investment or sustainability* (such as proximity to transit or density)
- A more accurate picture of the *real value of areas* in ways that can leverage economic investment (such as equity, lending levels and new registrations)
- Better ways in which *risk* can be measured and accounted for (such as timing, scale, or location risk)
- A more *comprehensive scope or scale of markets*, to better estimate and project market intervention (such as property or population size, absorption rates, or patterns of behaviour)
- Ways to *challenge and overcome those perceptions* or assumptions that might stymie investment, or slow growth

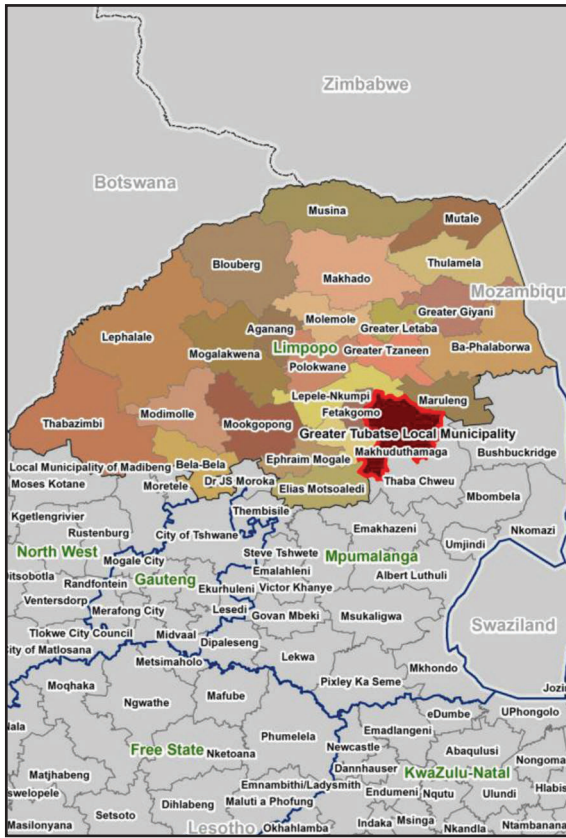
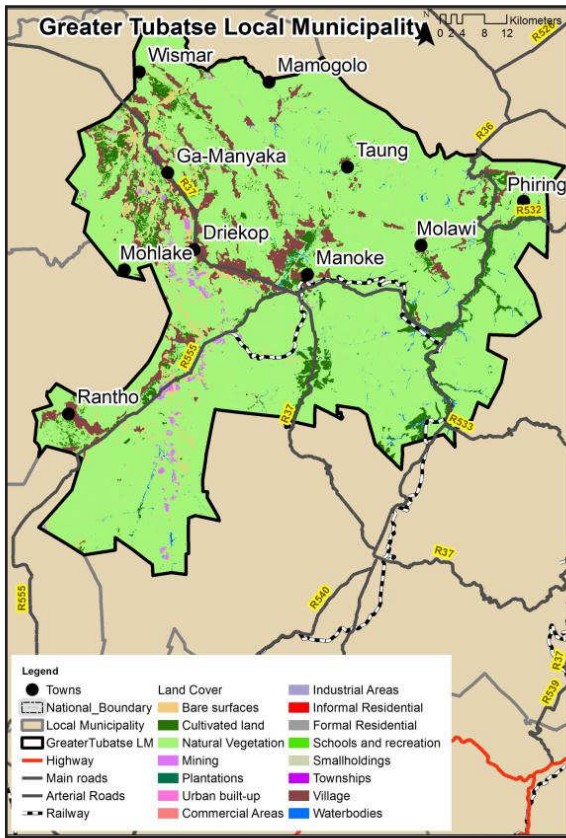
This report is not intended to provide a complete final picture of market conditions or demographic circumstances. It does not reflect conditions in the informal market, nor general attitudes. It is not intended to be the last word on market potential but rather the *first*: how can current conditions present opportunities for better housing options and improved market performance? Where are places that might be performing better in some ways, which might provide areas of opportunity, and how? The highest and best use of this report is to suggest new ways to support the growth of affordable housing in South African mining towns, by exploring and reconsidering areas for new investment, expanding existing investment and promoting policies and programmes which can support and entice that development. It can also imply the impact of ongoing investment and programmes activities.

2.6 About Formal Housing Markets

This report relies on the South African deeds registry as the basis for analysing local housing markets. Thus, the report **only measures the formal housing market**, which can be defined as those residential properties which have been formally titled to a specific owner or group of owners. While this excludes a large part of the human housing condition in these towns, the advantage of focusing on the formal housing market is that it offers a better understanding of that part of the residential property market which is most opportune for leverage and investment interventions in ways previously not understood.

Taking into consideration the housing backlog from StatsSA, informal settlements and human mobility, housing markets are quite fluid and difficult to measure. Understanding housing markets more completely is one advantage of the titling initiatives recommended by many housing policy and planning advocates across the Country.

3. Context



3.1 Municipal and Regional Context

Key aspects of the city are shown from here for contextual purposes which have been published on the city's website. These aspects are summarised from its 2014 IDP, to give important insights to the market overall:

- “Geographically, the municipality is the biggest of the 5 local municipalities in Sekhukhune district, constituting 34% of the area with 4 550 square kilometres of the district’s 13 264 square kilometres”
- “Land ownership is mostly traditional and the municipality is predominantly rural with about 166 settlements, most of which are villages”
- “The area comprises of 175 farms, which is indicative of the rural composition of the area and the reliance on mining and agricultural activities”
- “Of the 175 farms, 61 are under the control of tribal leadership”
- “Traditional Authorities and Magoshi play a role in the management of Greater Tubatse”

3.2 Socio-Economic Profile:

The municipality's current demographic information is drawn from the HDA Municipal Profiles and from the 2001 – 2011 Census Data:

- "Greater Tubatse has a population of 335 676"
- "There was a 2.19% population growth between 2001 – 2011"
- "The unemployment rate was 50.3% and the youth unemployment rate at 59.6% as measured by Stats SA in the 2001 – 2011 Census Data"
- "There are 83 199 households in Greater Tubatse and 25 347 agricultural households with a collective average household size of 4 people"
- "83.2% live in formal dwellings"
- "24.9% of the households have flush toilets connected to a sewerage system, piped water inside the dwelling, weekly refuse removal and electricity for lighting"
- "53.9% of the houses are fully owned and paid off"

4. Context: Mining Sector Overview

This brief industry profile is provided to help one understand how the mining sector might affect and engage housing in the mining towns. The mining policies are not specific to the towns – that information is not available. This information has been included because of the mineral mined, the regional location or specific city references (this report does not assess programme efficacy or impact).

Greater Tubatse has an abundance of precious metal deposits, in the north-south direction and the west part of the municipality. The eastern limb of the mining belt is emerging as an important structuring element of the Greater Tubatse Municipality spatial development.

4.1 Mining Industry Profile

- “It is anticipated that Sekhukhune District Municipality will produce 22% of South Africa’s PGM (Platinum Group Metals) in 2015”
- “The capacity of chromite mines in Sekhukhune is anticipated to increase by 150% and Vanadium by 50% in 2015”
- “Mining related employment opportunities are anticipated to increase by 180% in 2015”
- “The dominant economic sector in Greater Tubatse is mining, which contributes over 55% to the GVA and employs 51% of Greater Tubatse’s people”
- “There are currently 15 mines in the Greater Tubatse area and more have been planned”
- “Greater Tubatse forms part of the Dilokong Corridor, which is a top priority project for the Provincial Government”

4.2 Housing in the Mining Sector

The remote locations of many mining operations means that mining companies have long histories of providing housing solutions for their employees, from executive management to miners. Different approaches to housing policies vary and are not discussed in specific terms. The knowledge of the general mine housing policies assists one in understanding the effects on the housing markets in their entirety in the towns. Unlike large metropolitan areas where housing markets grew more organically (with some historical master planning involved), these towns were largely designed intentionally to serve the interests of the mining franchises above them. The following is only indicative of each company’s general approach; the housing models in each town are approached differently and more specific to their context. Essentially, understanding the housing options offered by the mining companies is an important factor in understanding local housing markets.

Greater Tubatse is located in Sekhukhune District Municipality and the primary extractive in Greater Tubatse is PGM (Platinum Group Metals eg. platinum, palladium, rhodium, iridium, osmium and ruthenium). The major mining activity in Sekhukhune District occurs within the Dilokong Corridor, which stretches largely across Greater Tubatse, Fetakgomo, Elias Motsoaledi, Makhuduthamaga and Marble Hall, although the last three areas have relatively low mining activity. It is estimated that mining activity grew at an annual rate of 5.4% from 1996 – 2001. Furthermore, there were 17 mines operating in Sekhukhune District Municipality in 2006.

The prominent mines in Greater Tubatse are: Marula Mine (owned by Implats), Modikwa Platinum Mine (owned by ARM Platinum) and Twickenham Mine (owned by Anglo American Platinum). Their Mine Housing Policies outline the following:

- “Anglo American committed more than R2 billion to facilitate home ownership and achieve the Mining Charter target of ‘one person per room’ through 2014”
- “Anglo American currently offers a number of different housing options, ranging from housing allowances to houses built for employees”
- “Anglo American assists employees with the improvement of living conditions among displaced people, through the provision of adequate housing with security of tenure at resettlement sites”
- “Consistent with Government’s integrated human settlements programme, Implats develops schools near housing developments”

5. Context: Housing

The municipality has identified the following challenges and opportunities from its 2014/2015 IDP:



5.1 General Housing Challenges:

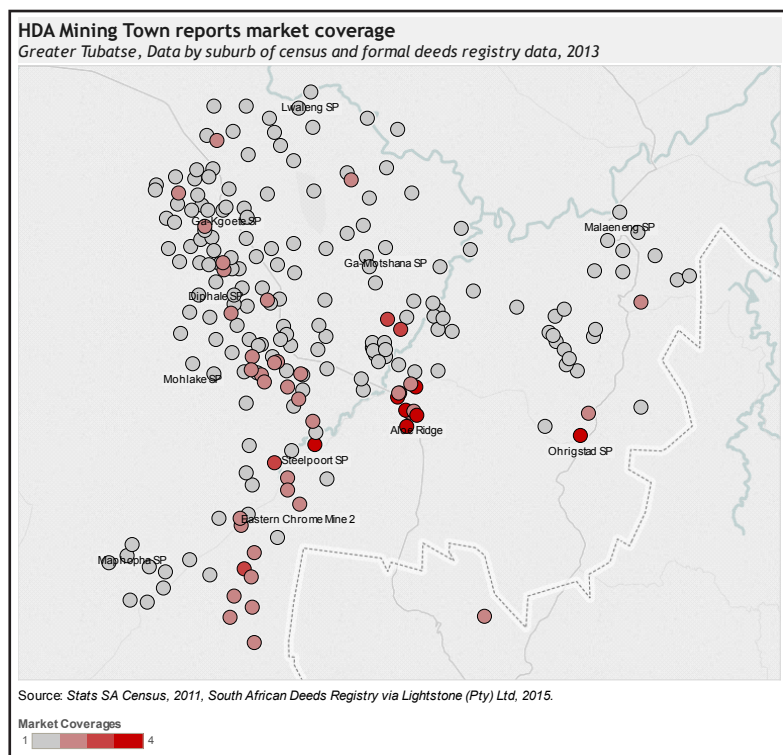
- “Housing provision is one of Greater Tubatse’s top priorities”
- “The majority of the settlements in the municipality are unplanned with only a few being planned, as formal housing developments”
- “The unplanned settlements generally have poor services, gravel roads, self-made pit toilets and lack of electricity and solid waste disposal”
- “Several wards throughout the municipality require either Government-sponsored housing units and/or the completion of existing Government-sponsored housing units”



5.2 Housing Challenges:

- “Staffing shortages, with only one person (building inspector) working on housing in the municipality”
- “Lack of experience/expertise regarding technical aspects around housing in the municipal area”
- “Poor communication and information dissemination between Limpopo Provincial Government and the local authority regarding housing matters”
- “Lack of consumer education for housing beneficiaries”
- “The bulk of water, sanitation and electricity network in and around the various Development Nodes will have to be extensively upgraded to cater for projected future growth”
- “No land within the municipal area belongs to the municipality, while some of the land portions belonging to the other spheres of Government are subject to land claims”

6. Context: Market Reports



6.1 Report Coverage

It is important to keep in mind that these reports only cover the formal housing market, as captured by the Deeds Registry. Thus, there are four layers of information in the report:

1. Total StatsSA suburbs
2. Suburbs with residential properties
3. Suburbs with residential properties sold
4. Suburbs with residential properties sold with a bond

This map shows all the census suburbs in the town (pink) to all the suburbs with residential properties with bonded sales (dark red). The chart shows what percentage of the town has a formal residential housing market. This may help explain some of the maps and why some suburbs are included and some may be omitted. As example, information on bonded sales will only reference suburbs in which bonded sales took place.

Greater Tubatse Housing Market Report Coverage

Total Census Subplaces (SP's)	186	
Total SP's with registered residential properties	17	84%
Total SP's with sales	12	6%
Total SP's with bonded sales	12	6%

Market Area by the Numbers

Suburbs	186
Suburbs with residential properties	17
Households	83 200
Residential properties	4 206
Housing Backlog	10 543
Backlog as percent of all properties	251%
Households to properties ratio	19.78
Total residential value	R 1.8 billion
Average monthly income	R 5 400
Average property value	R 429 000
Average sales price	R 490 000

Source: Centre for Affordable Housing Finance in Africa, Lightstone, StatsSA

7. Key Findings: Housing Market Overview



Greater Tubatse has experienced slow growth – this appears to be attributed to the number of subplaces with slow growth surpassing those with stable and growing markets. Only one subplace out of 17 has been consistently growing since 2010 – this may suggest lack of development and/or the presence of rural areas within the municipality. Other parts of the municipality have more diverse housing options (by value segment). The market generally seems to be focused on upper-priced properties with little to no bonded sales activity in lower property value segments. Some areas are spiking, perhaps the result of more recent higher-priced housing development.



Greater Tubatse has an average affordability ratio of **3.4, meaning the average household needs 3.4 times the average income to afford the average house. There remain large disparities between income and affordable housing within the municipality.** The municipality's relatively high sales prices further affirm the above. In some areas, low sales prices could be the result of lack of credit access, forcing sellers to sell for whatever cash might be offered regardless of how much the house may be worth.



The presence of older **RDP units within the municipality, although the volume is low (7% of all properties, the lowest of all towns studied), represent an important opportunity to leverage that investment** in the years ahead, as owners seek to sell and move up the housing continuum if opportunities are positioned properly. Average equity in these areas doubles purchasing power, putting moderately priced housing within reach of lower-income families. This situation can be used to drive developers to build more gap housing and financiers to finance RDP acquisition loans.



The town has very little diversity and integration of housing values and property types, which suggests **a market that is not ready to meet a wide range of needs and expectations** – but can be stimulated to do so. Formal mixed-income housing options which offer much-needed internal cross subsidisation to keep prices affordable will likely do very well and this bodes well for a market less reliant on Government and mining intervention.



Lending is highly concentrated in Greater Tubatse by area and loan size. Bonded sales are almost entirely concentrated in housing and sales over R500 000. While the share of lending by each of the four major banks in the Country has remained consistent, lending from non-traditional lenders in Greater Tubatse has also consistently increased, perhaps to make up for the lack of lending by the existing institutions. Due to the presence of hundreds of RDP units, it will be an important strategy to encourage traditional lenders to develop creative loan programmes targeting those homeowners in order to unlock the value of those homes and allow owners to move up the housing continuum.



In Greater Tubatse, 15% of households rent, according to the 2011 StatsSA census; this is half the mining town average of 30%. The **opportunity for rental housing development within Greater Tubatse is not particularly strong within a specific area.** However, those areas with greater density, modest incomes and affordability challenges are more likely to support quality, professionally managed, affordable rental housing. Rental housing also provides flexibility to employers and workers as mining markets expand and contract from time to time.

8. Housing Performance Profile



8.1 Key Findings: Housing Performance Index

Greater Tubatse's **housing market has experienced slow growth**, which appears to be largely attributed to the number of subplaces with slow growth surpassing those with stable and growing markets – only one subplace out of 17 has been consistently growing since 2010 – this may suggest lack of development and/or rural areas within the municipality.

This decline does, however, create an opportunity for markets to be carefully assessed in order to best position the next wave of growth. Housing options are not currently diversely distributed across the municipality.

8.2 Policy Implications

With an estimated housing backlog of 251% of all registered residential properties in Greater Tubatse, **meeting housing demand** will be a crucial factor in stabilising the town through this period of decline. In slow-growth neighbourhoods, where most of the lower-priced housing currently exists, housing will be built more affordably but will need to be situated well to better integrate housing markets. Site development initiatives should include rental housing to meet the increased demand.

8.3 Quick Definitions:

Housing Performance Index (HPI): provides an understanding of local housing market performance by tracking six key indicators which most effectively convey fundamental components of real estate markets and are then compared to the results for the entire municipal property market to determine areas of growth or strength relative to the entire municipality.

Housing Performance Profile: this describes the housing market performance of local areas as growing (those areas where the index is 6.5 or higher), stable (the index is 4 or higher) or slow (the index is less than 4) compared to the municipality in which it is located.

Formal Housing Market: residential properties that are registered on the South African deeds registry. This does not include informal settlements or other houses otherwise not on the deeds registry.

Indicators: suburb-level measures used to convey a more complete understanding of housing markets, sometimes a point of data (such as number of properties), or a calculated factor (such as the housing index or the affordability ratio).

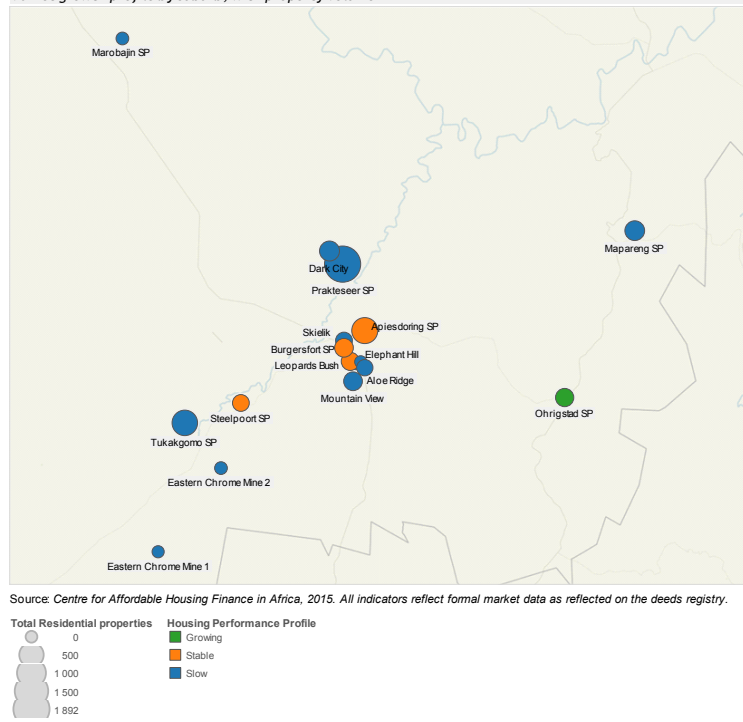
Housing Continuum: a range of housing options which are available to a wide range of income levels, budgets, housing types and ownership opportunities.

Bonded Sales: the total residential properties that were transacted with a bond collateralised or secured by that property.

New Registrations: residential properties that have never appeared on the deeds registry before. This is an important indicator of the growth of a market, whether the property has just been built or was built previously and never registered.

Churn: an indicator of the sales activity within an area similar to turnover, it is the number of residential sales transactions divided by the total number of properties.

Housing Performance Index Greater Tubatse, 2013 Market growth profile by suburb, with property volume



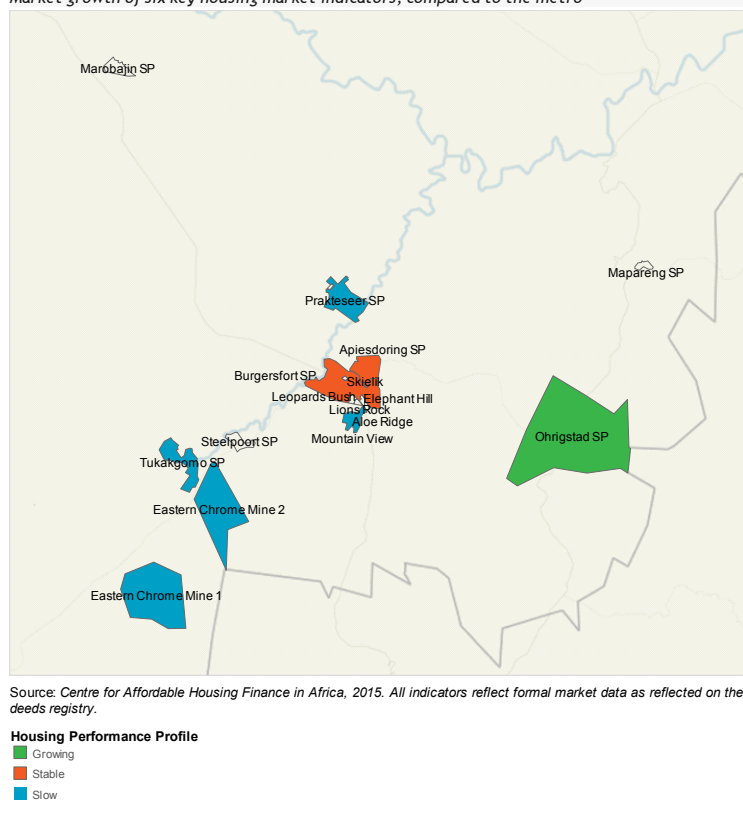
8.4 The Housing Performance Index (HPI)

These maps on the left identify the Housing Performance Profile by suburb and total residential properties, to provide a sense of how local property markets are performing compared to the municipality as a whole. The housing performance index (HPI) provides a glimpse of the formal housing market only and does not include any demographic information. The weights were determined by how well the indicator reflects activity, increased investment and demand (and how reliably the indicator can be measured).

This information is useful in understanding how the formal market is behaving (which is influenced by the presence of mines, informal settlements and the people who move in and around the towns). This picture is intended to help one understand how key housing sector partners (developers, investors) seek and measure opportunity, in order to better inform and coordinate Government planning processes and private sector motivation.

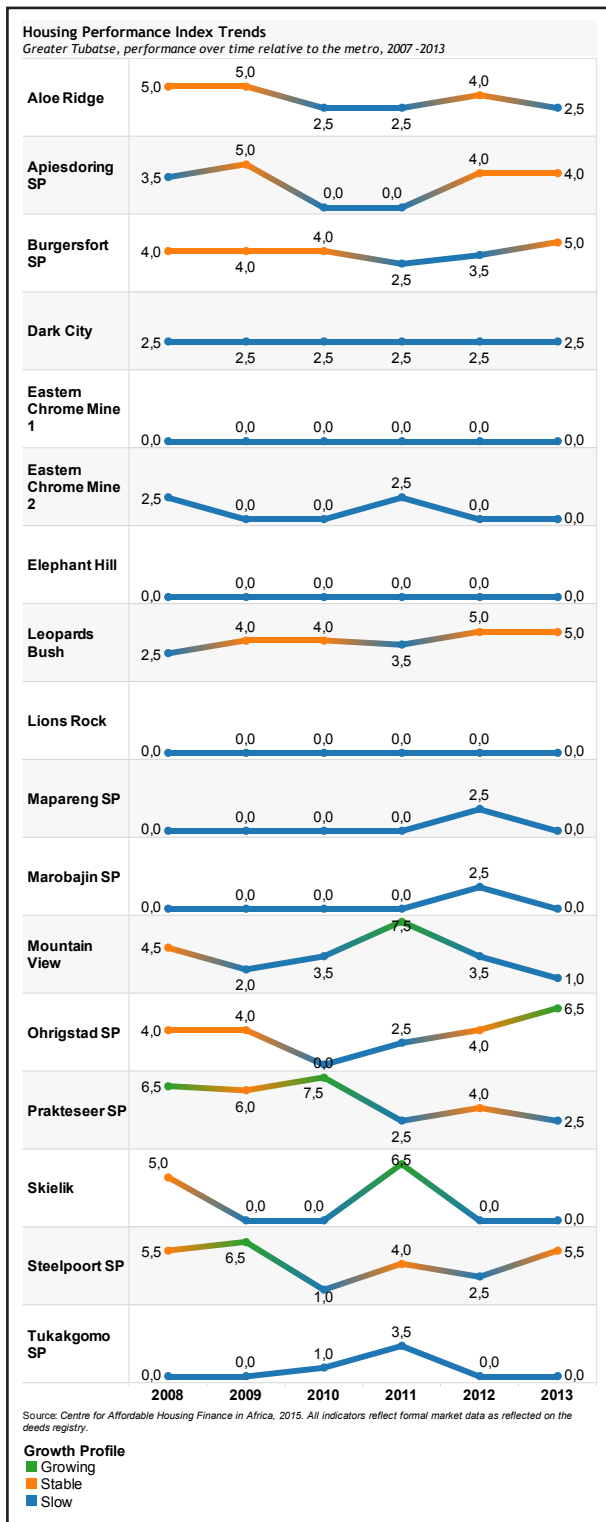
“Growing” suburbs are areas which exceed the municipality’s rate of change in any four of six key market indicators. **“Stable”** areas meet or beat the municipality in at least three indicators and **“Slow”** areas are growing at rates less than the municipality in two (or fewer) of the six indicators. While an index provides quick understanding, it is important to look more closely at the indicators themselves to understand more clearly the underlying factors affecting market growth and stability.

Housing Performance Index Greater Tubatse, 2013 Market growth of six key housing market indicators, compared to the metro



CAHF Housing Performance Index

Indicator	Measured	Implies	Weight
Price	Average sales price	Appreciation	25%
Value	Average property value	Appreciation	25%
Transactions	Number of sales	Demand	15%
Percent bonded	Bonds per sales	Investment	15%
Churn	Repeat sales as a percent of total properties	Activity	10%
New Properties	New properties added to the registry	Growth	10%



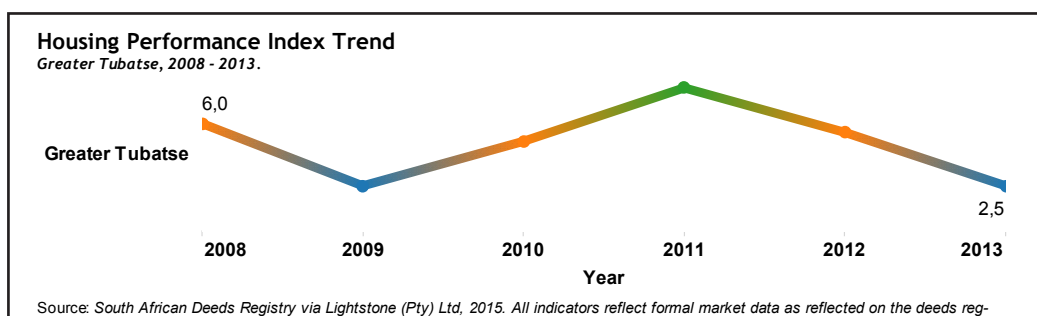
8.5 Performance Over Time

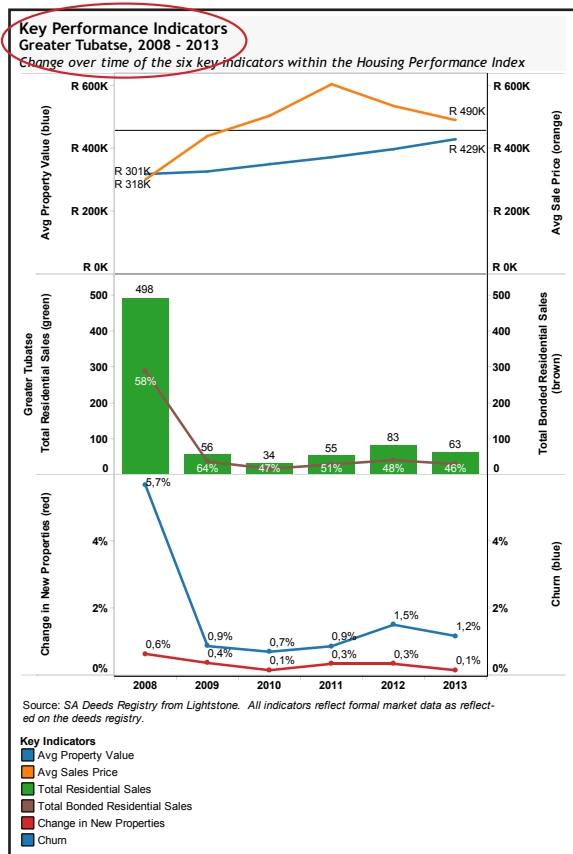
These charts provide the housing performance index by suburb, over time, using the six key indicators (price and value appreciation, sales and bonded sales, churn and new properties).

Growth is relative to the municipality (and change from the preceding year), so it is important to compare these lines to the area's overall performance and the direction in which the trends are headed. **The city's growth overall (below) appears to be slow and declining in relation to the province.**

Only three subplaces have experienced spikes in growth in 2013 ie. Burgersfort SP, Ohrigstad SP and Steelpoort SP. Steelpoort is also one of the only four stable subplaces in the municipality; all other subplaces are either slow, declining or inactive. Ohrigstad is the only subplace which appears to be consistently growing since 2010. In considering development investment over the long term, stability of growth is often a more important consideration when projecting future performance, than high growth. Notably, lower-cost suburbs are more impacted by investment and thus their performance often outpaces the municipality, whether the growth is stimulated by Government or private sector investment. This information can help inform one how to create a more cohesive and stable housing continuum, with fewer spikes and drops – and where to begin.

Areas with no data have no residential properties or sales transactions, such as farms or open space, mines or industrial uses like power generation.



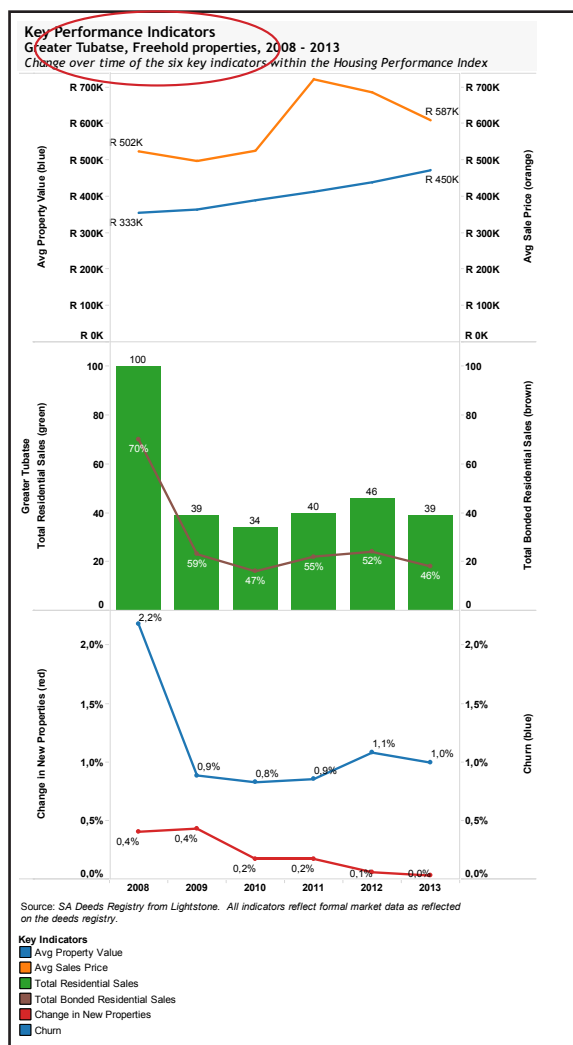


8.6 Housing Performance Indicators

Six indicators – price and value appreciation (top orange and blue lines), total sales and bonded sales (middle green bars and brown line), change in new properties and churn (bottom red and blue lines) – are the most telling of growing, active housing property markets. The relationship between indicators provides clues as to what may be driving performance and what that might mean for future development potential – and how it might affect or be influenced by different housing types, prices or target incomes. **The city's growth overall (see HPI Trend) appears to be slow and declining, with sales slowing down; there were only 63 sales in 2013 from 498 in 2008.**

These charts compare the performance of three ownership types, namely freehold, sectional title and estate ownership. The market appears to be slowing down, consistent with most markets across the Country. Interestingly, **residential properties are selling at prices much higher than their value, which may be the result of a much larger number of low-income housing properties affecting the average property value.** The town's churn (rate of sales turnover) and new registrations are very low, indicating not much housing activity, generally. **The number of sales has dropped significantly, with the greatest decline in estate properties, although freehold units have had the highest volume of total residential sales, ie. after 2008, showing continued preference of this property type.**

Housing markets are very sensitive to access to credit, so lending information will be helpful in understanding this more closely (see Lending below). Churn rates have steadily dropped (blue line), indicating slower turnover of existing homes over time as well.

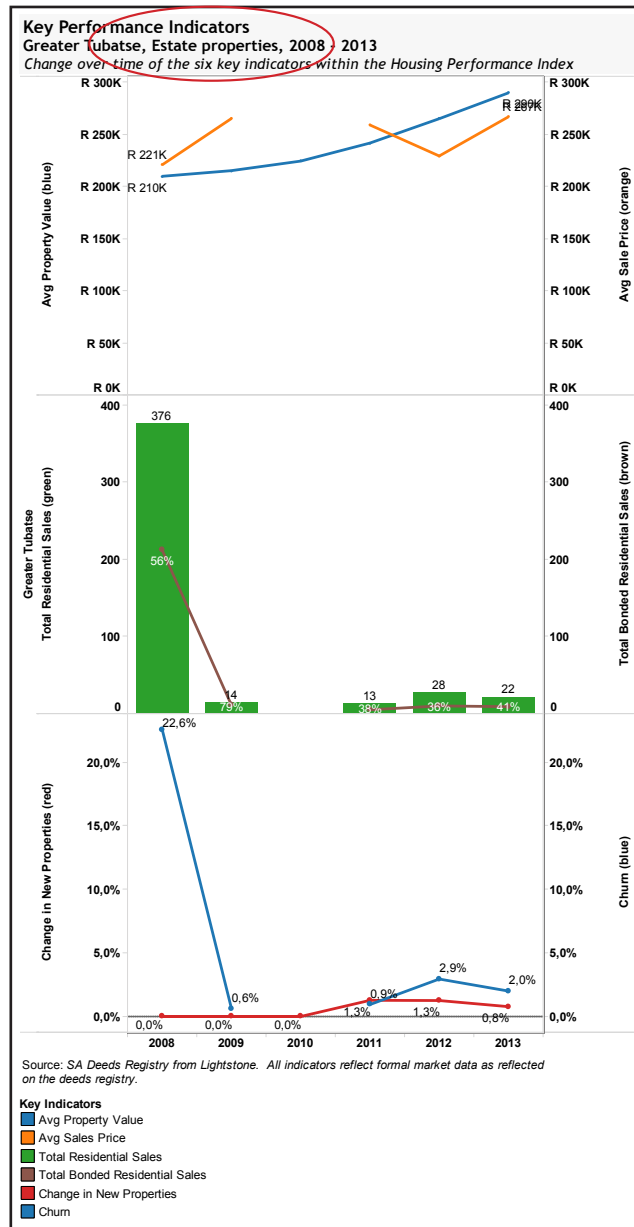
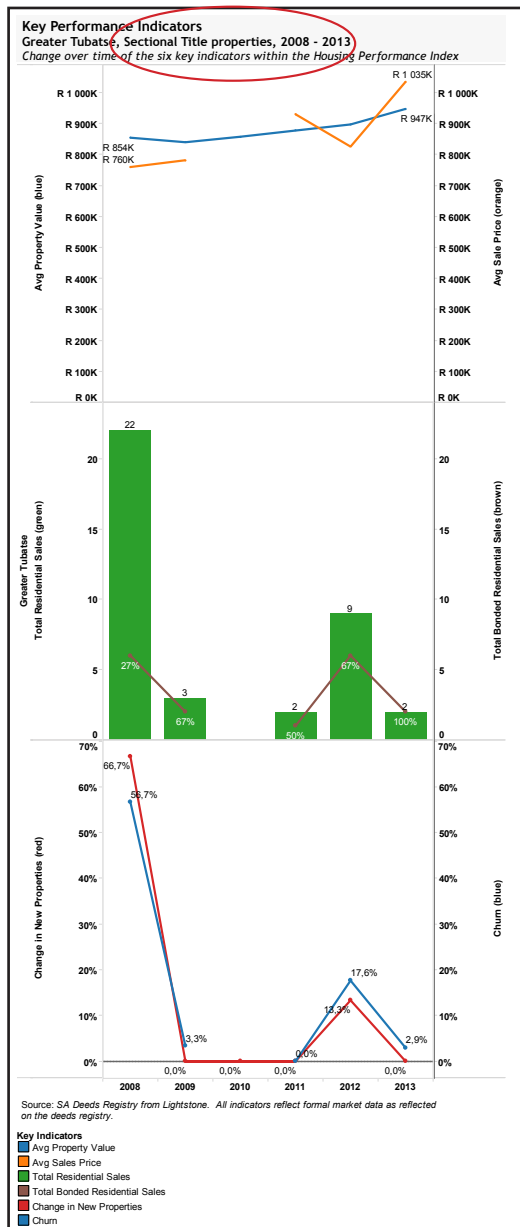


8.7 Housing Performance Indicators by Property Type

Different housing markets perform in different ways, including freehold (free-standing) homes and sectional title (sub-units within a single property). The area is predominantly freehold (see Market Size below), yet sectional title market and estate activity is growing in terms of sales transactions, lending and rates of new properties added to the registry (red line).

Although sale prices have been increasing, **the percentage of bonded sales has dropped for most property types – dropping by 12% overall and 24% for bonded freehold sales specifically – however, bonds associated with freehold units appear to be steadier.** Churn rates (bottom blue line) and the rate of change of new properties (bottom red line) for sectional title properties is consistently similar and runs almost parallel. **Greater Tugatse appears to have an active emerging estate property market, with total residential sales outpacing sectional title properties; estate properties also have the highest rate of change in new properties of all property types.** Lending is instrumental in the growth of housing markets and the ability to access bonds to buy sectional title houses has driven the growth of this housing type. Sectional title is also an important affordable homeownership option.

Sectional title properties have experienced the highest churn rates (blue line), despite having the lowest volume of residential sales. This suggests a robust market in the sale of sectional title estate properties. Sectional title sales are 20 times less than estate properties, but have also experienced the highest rate of change in new properties of all the property types; this further affirms the strength of the sectional title market.



9. Market Size



9.1 Market Size: Key Findings

Greater Tubatse's housing market is essentially three markets: Government-sponsored housing built as part of the national housing initiative over the past 20 years, privately traded and financed homes and informal settlements. Markets are diverse although the diversity is between higher-priced, actively selling private growing markets, with further flung lower-income, non-bonded Government sponsored developments and informal settlements (not on the deeds registry) concentrated to the north of Greater Tubatse.

The need for housing is high. The current estimated housing backlog represents about 251% of the town's current total formal residential properties. Demand creates opportunities for new housing supply to be positioned between the existing segregated markets to better integrate the town's spatial, income and housing markets.

9.2 Policy Implications

Existing **Government investment in housing can be leveraged** to guide new development opportunities, if and when those homes can be sold to new buyers and the proceeds then used to purchase new housing further up the housing continuum. As example, **governments might prioritise new development between government-dominated and private markets** for more integration into mixed-income sites and fill spatial gaps within the town. Governments can use this existing investment to identify areas of future development and entice private sector participation.

Encouragement the expansion of financing to lower income families will allow for those homes to be sold and the proceeds then used to support housing development further up the housing continuum.

Rapidly changing housing demand, driven by mining activities, makes a strong case for prioritising quality rental housing. If rental housing is well-situated and convenient to transport and centrally located in dense areas, it can bring social and economic cohesion to housing markets over the longer term.

9.3 Quick Definitions:

Market Size: the total number and distribution of important aspects of areas, including average home prices, home values and total households in order to inform the potential scale of housing intervention strategies and the impact of proposed development schemes.

Property Value Segment: in order to better understand the performance of housing markets, data has been aggregated into four property value bands: properties valued under R250 000; between R250 000 and R500 000; between R500 000 and R1.2 million; and over R1.2 million. This helps one to understand the various trends and strengths inherent in each segment and to see how properties are integrating across the housing continuum, especially over time.

Freehold / Full Title: a permanent and absolute tenure of land or property by a person or entity (such as a corporation or trust) with freedom to dispose of it at will. Freehold or full-title describes the assumption of full ownership rights when one owns a property, often including the building and the land it is built on.

Sectional Title: separate ownership of units or sections within a complex or development. These are often comprised of mini subtype houses, semi-detached houses, townhouses, flats or apartments and duet houses. These are governed by the Sectional Titles Act and managed by a body corporate comprised of elected representatives from the sectional title owners in the development.

Absorption: the pace with which homes to be developed might be sold in a specific market during a given period of time. This can be calculated by dividing the total number of available homes coming on line by the estimated number of sales per month, often based on the rate of sales nearby.

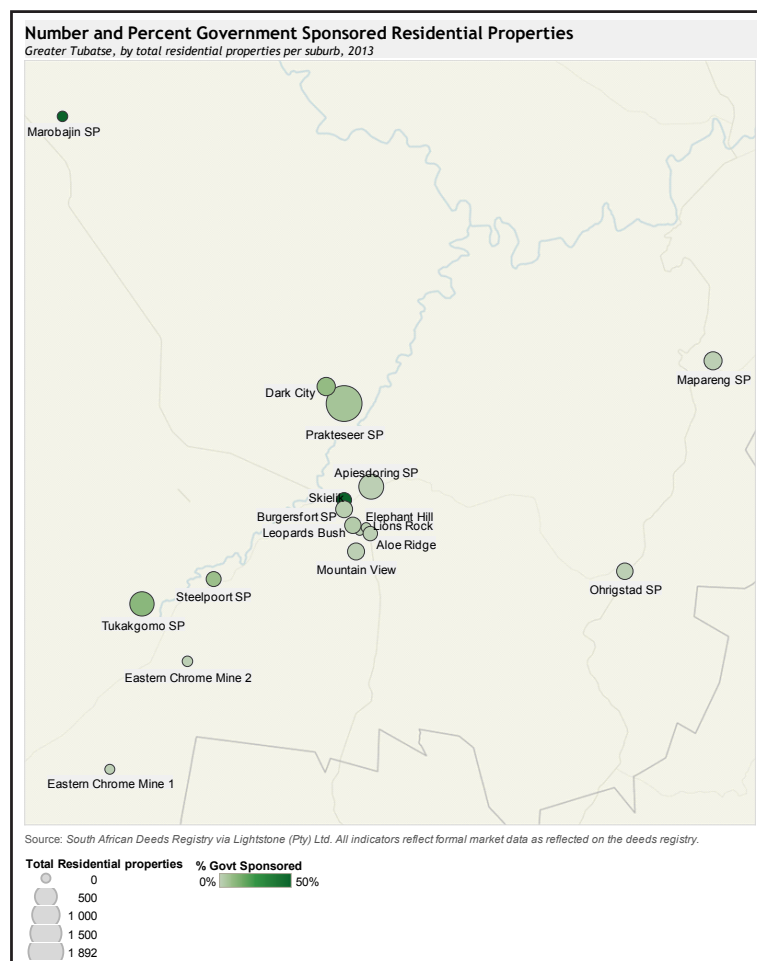
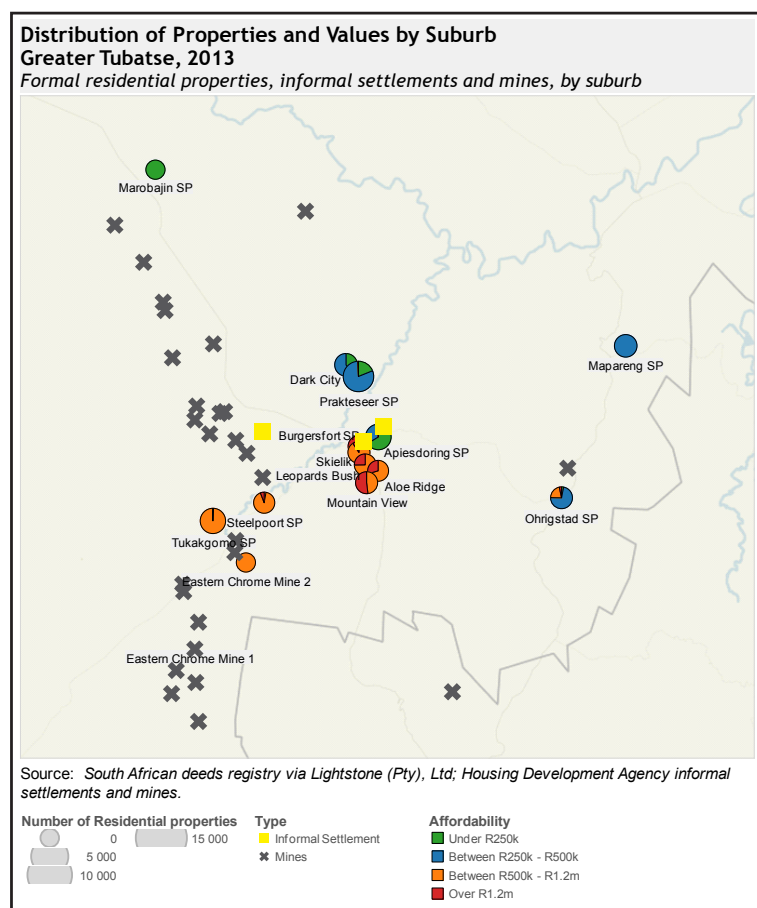
Households to Properties Ratio: the total number of households (as reported by the census) divided by the total number of residential properties on the deeds registry. This is a quick, easy relative indicator of household density and formality of a suburb as compared to other areas.

9.4 Market Size and Government Investment in Housing

Market size measures the distribution of home prices, households and values in order to inform the potential scale of housing intervention strategies and the impact of proposed developments on the surrounding area. It can also show the impact of Government investment in housing markets.

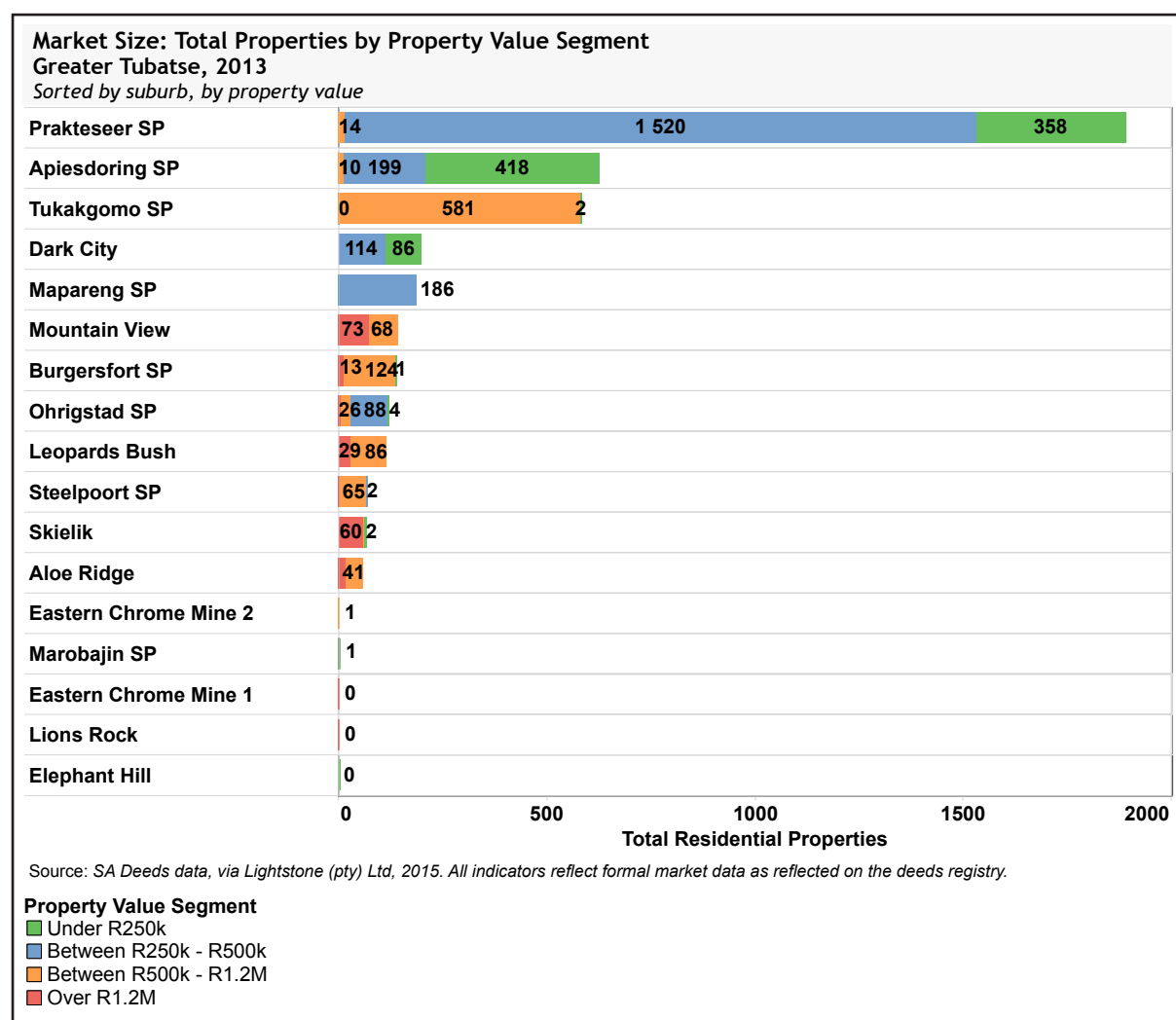
In Greater Tubatse, properties with lower values are concentrated in the north, with Government investment in housing widely distributed throughout the municipality (map two). It is a very positive fact that so **many Government-sponsored housing units are on the deeds registry**. Often, these homes are undervalued, for two reasons. The subsidy value was often noted as the sales price (rather than the cost), or sales prices are driven low because buyers lack access to credit with which to purchase the homes at a more realistic sales price and must pay with the cash they have.

The encouragement of the resale of Government-sponsored housing is an important means of expanding housing options – for the sellers, who can move up the ladder with the equity from the sale of their property, to the first-time homebuyer purchasing the existing home. More activity in these markets will also raise the value of the home which is often a family's most valuable asset.



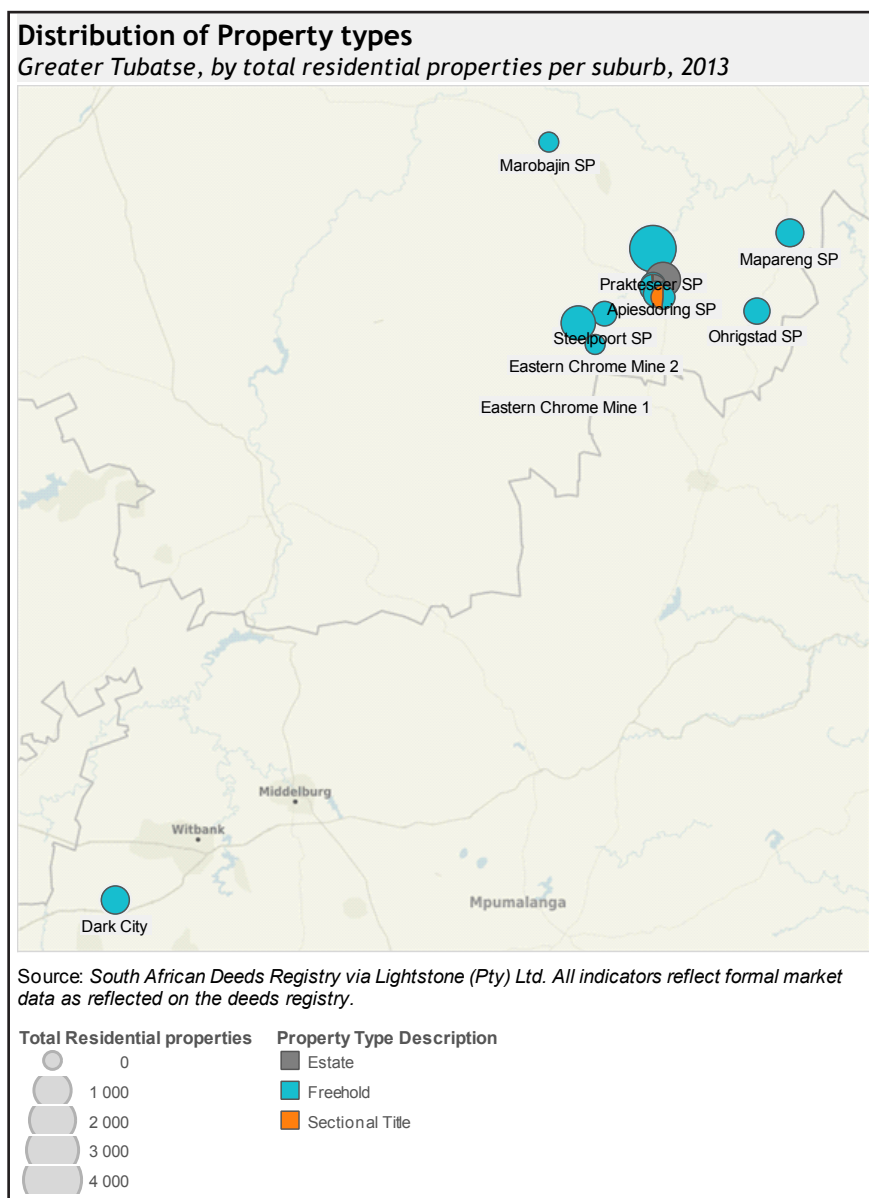
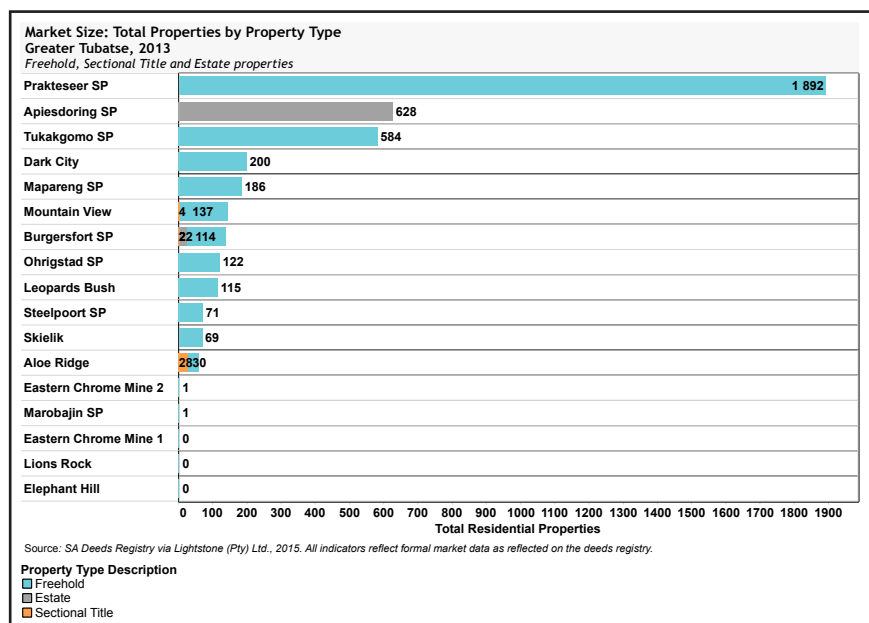
9.5 Market Size by Value Segment

These charts provide the total properties within each suburb by property value segment: below R250 000, (between R250 000 – R500 000; R500 000 – R1.2 million; and over R1.2 million). Greater Tubatse has a wide range of property values throughout the municipality, with a few suburbs hosting only one range of housing values. Although Government sponsored housing is apparent throughout the municipality, the volumes may be considerably low as they do not show up on the above graph. Increasing the volume of Government-sponsored housing may diversify the market, availing affordable housing options to more people. In small housing markets, Government interventions and programmes must be more targeted, as their impact on the market overall will be greater.



9.6 Market Size by Property Type

Residential properties are predominantly freehold in Greater Tubatse. Where those sectional title units are located might provide important information on where different housing options would be best located. Apiesdoring is the only subplace with estate properties dominating the market. Interestingly, it is also one of the only four subplaces with stable growth. Burgersfort SP, which has a combination of freehold and sectional title units, is also among the four subplaces with stable growth.



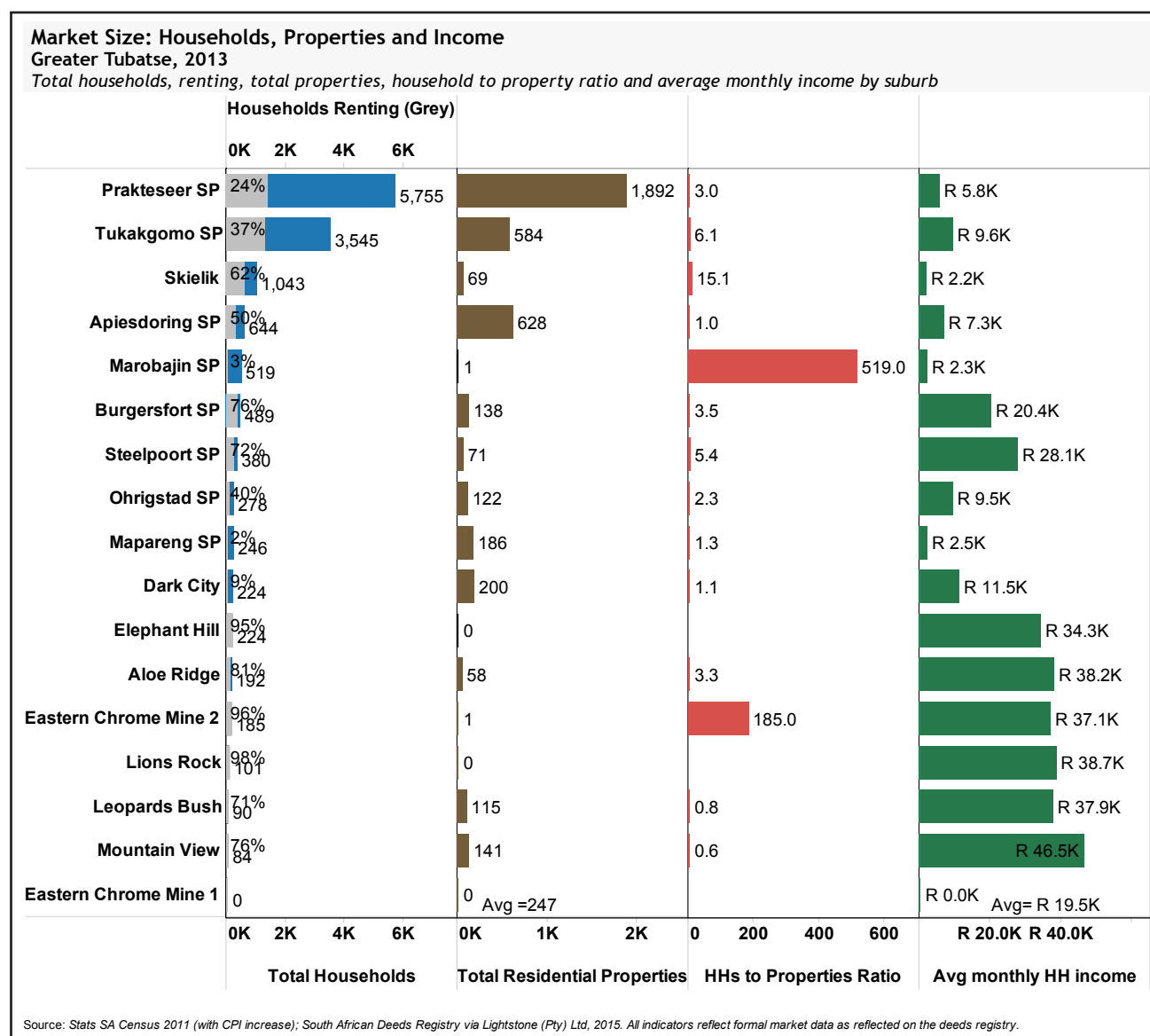
9.7 Market Size by Households and Income

The understanding of the distribution of households and incomes within Greater Tubatse helps to inform one of scale, development impact and programme targets. Census data is useful as the only source of demographic information consistently available at the suburb level and provides interesting insights into local differences.

Areas with high levels of renters (grey bars) also very often have the highest household incomes (such as Lions Rock with 98% households renting). All subplaces with average incomes with are above R20 000 have rental percentages of at least 70%. We suggest these high levels of renters might be the combination of mining executives who rent (instead of own) and support staff who rent nearby in backyard accommodation.

Interestingly, Skielik has one of the lowest average incomes at R2 200; and significantly high rental activity, at 62%; and a large number of properties in the above R1.2million value segment. This suggests a new development in the area which may have shot up the property values.

Ratios of households (from StatsSA) to properties (from the deeds registry) – the red bar – can show degrees of limited supply or informality. Inversely, in the case of Eastern Chrome Mine 2, where 96% of the households rent and the average income is R37 000, this may suggest a residential development for executive mine employees. Contrasted with Marobajin, which has the highest households-to-properties ratio and the second lowest average incomes in the municipality – this suggests an informal settlement.



10. Market Activity



10.1 Key Findings

Sales of units are centrally located in predominantly upper income areas. Sales dropped across the country after 2008 and sales in Greater Tubatse have continued to drop; with higher priced residential properties experiencing decline.

Bonded sales in lower markets are an extremely small portion of the bonded market. Sales continue to be dominated by repeat sales with very few new housing sales. Property value (the home's worth) and sales prices are closely related in only one subplace, ie. Leopards Bush. In less active markets, sales prices are significantly less than their suggested value.

10.2 Policy Implications

Focus on increasing **access to lending**, determining what barriers exist to **make credit more accessible** through lower-cost products, more flexible terms and/or inclusion of existing debt into a mortgage loan product.

Create financing products which can **bring down the cost of quality rental housing** as an affordable alternative to homeownership for lower-income families.

10.3 Quick Definitions:

Market Activity: performance of key housing property market indicators over time, such as sales, bonds, registrations and churn.

Market Share: the portion of the market according to certain indicators, such as loans, types of properties, or property values.

Property Value Segment: in order to better understand the performance of housing markets, data has been aggregated into four property value bands: properties valued under R250 000; between R250 000 and R500 000; between R500 000 and R1.2 million and over R1.2 million. This helps one to understand the various trends and strengths within each segment and to see how properties are integrating across the housing continuum, especially over time.

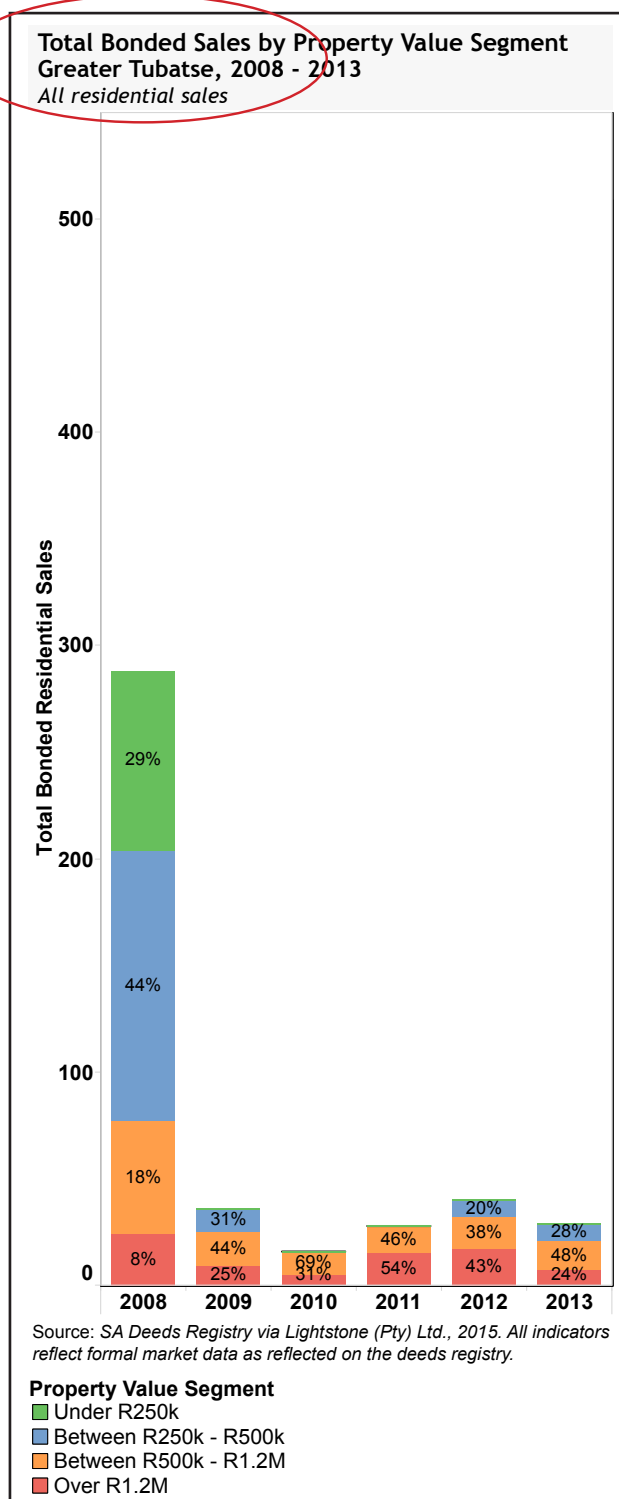
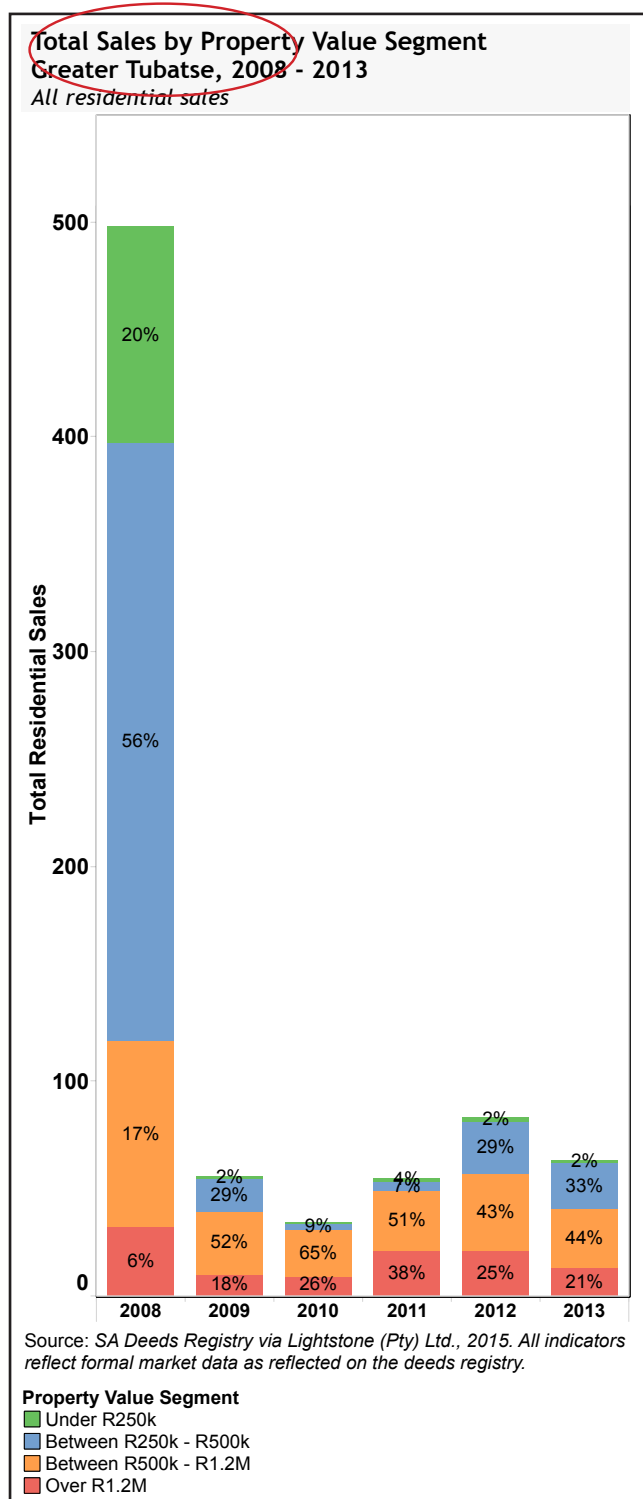
Bonded Sale: a transfer of deed on the deeds registry with an associated bond from a lender, including the property as collateral for the bond.

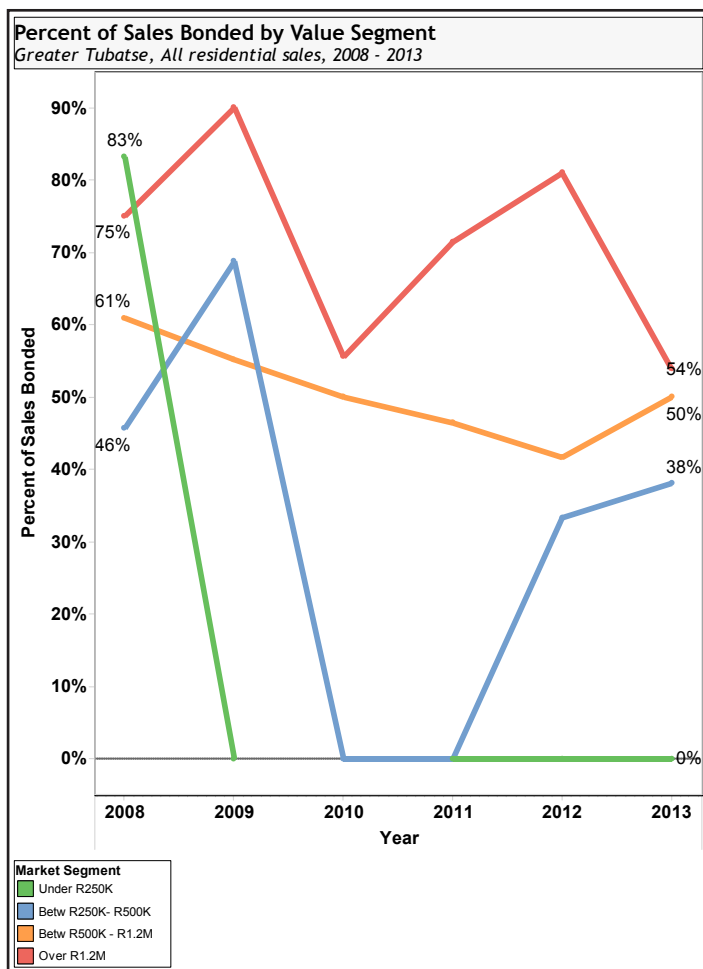
New Sale / New Registration: the appearance of a residential property on the deeds registry for the first time. It might include new construction or previously existing units being recorded for the first time (such as previously built RDP homes)

Resale / Repeat Sales: the sale or transaction of a property which has existed on the deeds registry before (as opposed to a new sale or new registration).

10.4 Sales and Bonded Sales by Property Value Segments

Residential sales and bonded sales in Greater Tubatse have almost exclusively been over R500 000 (the orange and red sections) after 2008. Market share (the portion of the total) by property value segment has shown decline since 2009, maintaining its focus on the R500 000+ segments. The relationship between sales and bonds shows the importance of access to credit to growing housing markets, in particular the lower valued segments. **The share of bonded loans under R500 000 has dropped over time, from 73% of the market in 2008 to 28% in 2013.** This might be due to credit indebtedness which disproportionately impacts lower-income borrowers, or lack of access to affordable homes to buy. Policies that help expand access to credit and provide more housing opportunities under R500 000, can expand sales within that band in the lower bands.





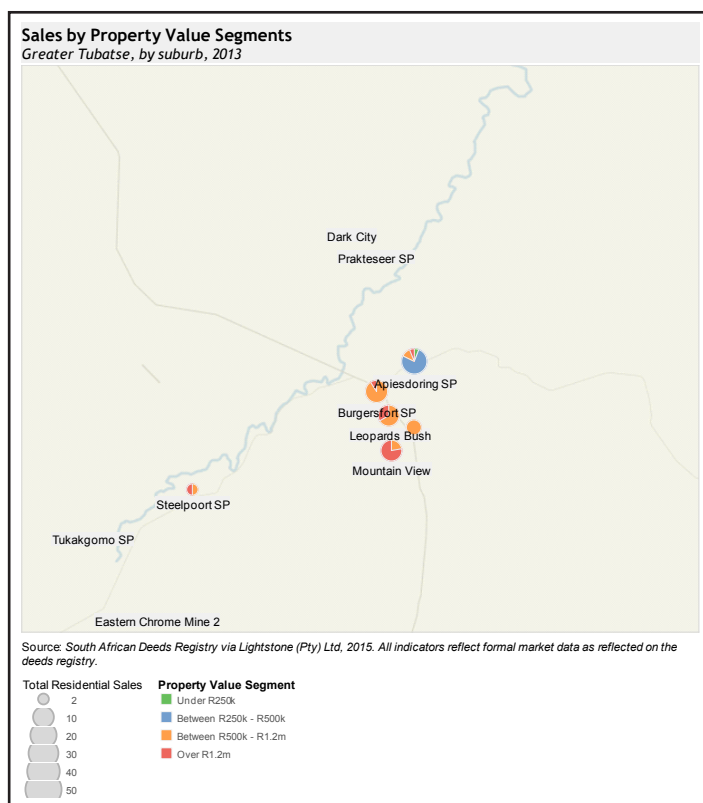
10.5 Lending per Property Value Segments

This chart shows (by contrast to the previous charts) the percent of bonded sales within the various property value segments. The relatively few formal bonded sales in the town make the trend lines move dramatically.

Overall, the total sales receiving bonds in Greater Tubatse went down over the past six years in all categories but the drop was not evenly experienced. The lowest property value (the green line) experienced the greatest decrease since 2008, dropping by 83%, perhaps driven by decreased access to credit or decreased supply of housing that falls within this segment.

The upper-priced properties continue to decline, perhaps due to market overexposure, or fewer eligible buyers.

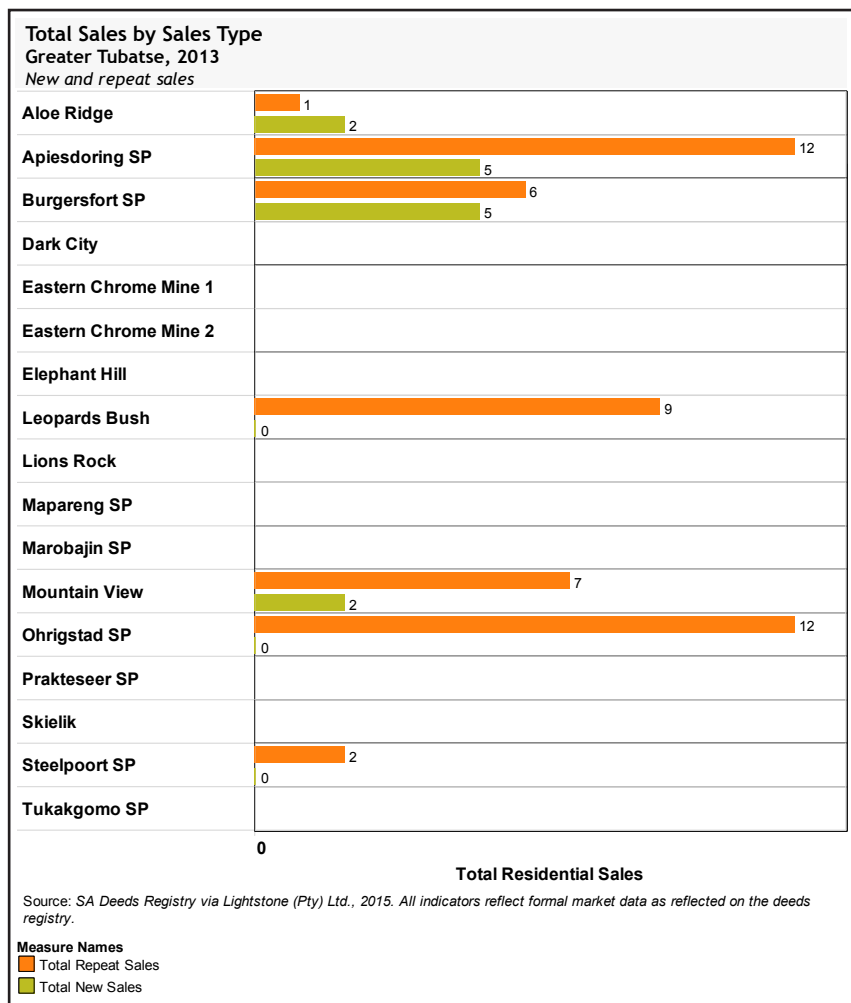
The market generally seems to be focused on the upper-priced properties with little to no bonded sales activity in the lower property segments.



10.6 Sales by Property Value Segments

This map shows the **volume of sales activity (the size of the dot) by suburb, across the town, by property value segment.** Almost all sales took place in the centre of the municipality, with no apparent sales in the lower valued property segments.

Access to credit is a significant boost or barrier to housing market growth. While some suburbs offer a range of housing price options, pinpointing product prices and types to specific areas, especially considering local affordability, is important in ensuring programme success.

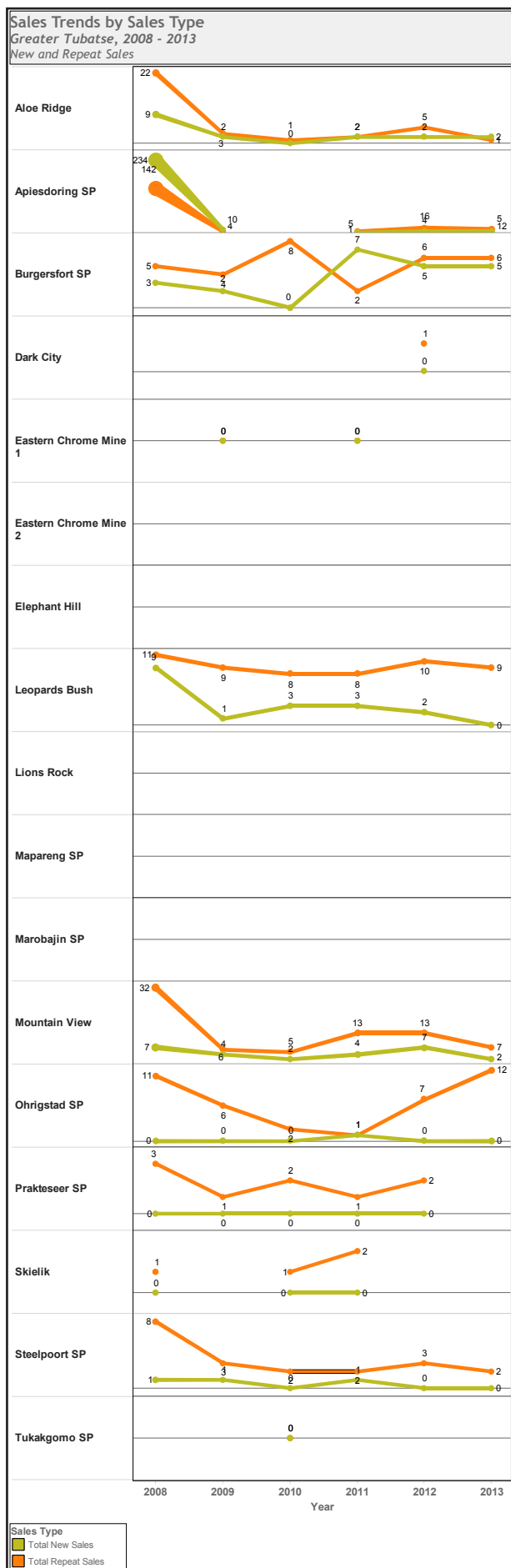


10.7 Sales by New and Repeat Sales

An important distinction in market performance is the sale of new homes (which have never appeared on the deeds registry) and the resale of existing homes. The chart shows new (green) and repeat sales (orange) by suburb. In most mining towns, new registrations are clustered in only a few suburbs. **In Greater Tubatse, repeat sale and new sale activity took place almost exclusively in subplaces with stable growth, ie. Apiesdoring, Burgersfort, Leopards Bush and Steelpoort.** Interestingly, the only growing subplace has no new sales, ie. Ohrigstad.

New sales can also show the recent registration of Government-sponsored housing investment. An important point is to recognise the impact of newly registered Government investment in housing. Often, these registrations may be perceived as being a market distortion but the deeds issued on Government-sponsored housing represent real assets which can now be traded and loaned against and are key to moving up the housing ladder. Thus, the housing market has in fact grown.

Suburbs with no data reflect areas with no sales or new registrations.



10.8 Market Activity amongst New and Repeat Sales

The **growth and maturity of housing markets can often be found by comparing new and resale market transactions over time.** The growth of existing home sales (the orange line) indicates sustained interest of housing markets by borrowers and lenders. The thicker lines reflect areas with more sales.

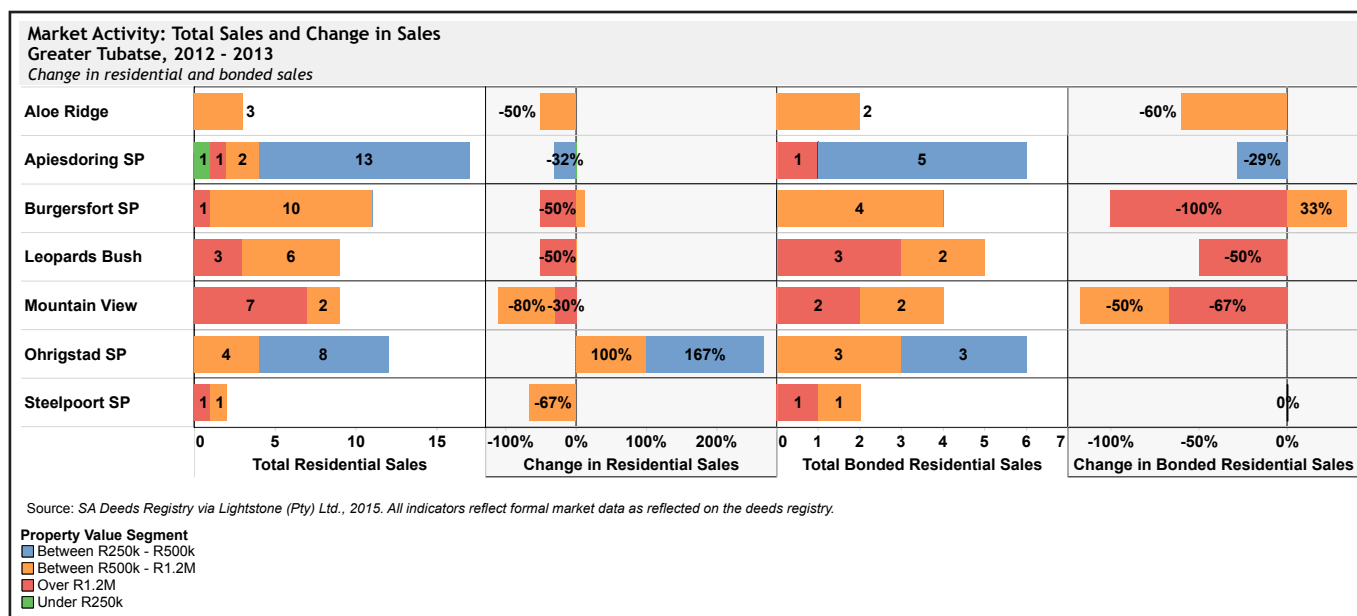
Often, volumes of new homes in prior years become resales in later years. As an example, Apiesdoring had a small uptick in resales from 2011, after a spike in new sales in 2008. Understanding how mining companies create new units helps one to understand their existing and potential contribution to expanding the local housing economy.

10.9 Total Sales by Property Value, Change from the Prior Year

This chart shows the change in activity for property sales and bonded property sales from 2012 to 2013. It is possible to see important market shifts by comparing the change in activity within particular property markets from one year to the next.

Bonded sales dropped in the last year throughout the municipality, most of which were in the +R500 000 segment. The highest change in sales has been in the R250 000 – R500 000 value segment. Additionally, bonded sales to this value segment were significantly high. **It is also important to note that residential sales and bonded sales to the under R250 000 value segment are almost non-existent.**

Suburbs with no information had no residential sales transactions in the past two years.



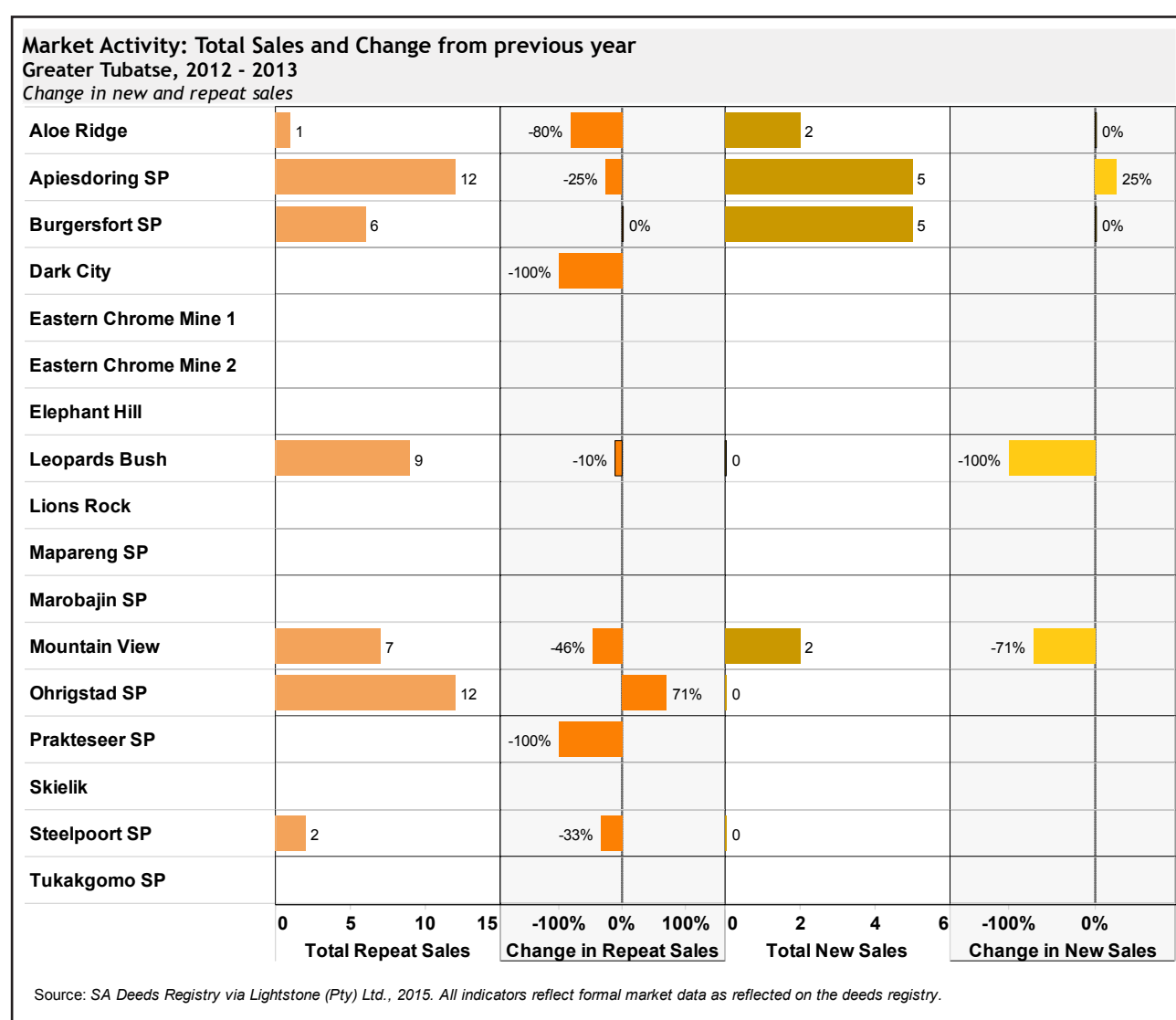
10.10 Change in New and Repeat Sales

This chart shows the specific rate of activity of new and resale properties from 2012 to 2013. Many of the developments built by the Government are heading into their 8th year and become eligible for resale by their owners.

By understanding when those units come on line for resale, Government can align policies that encourage the sale and development nearby, which can help leverage that prior investment, expand housing options and stimulate movement up the next rung on the housing ladder. Resales are an important means of recycling existing homes to make available more housing options.

Ohrigstad is the only subplace with an increase in total residential sales (refer to the graph on the previous page), specifically an increase in repeat sales.

Suburbs with no information had no residential sales in the past two years.



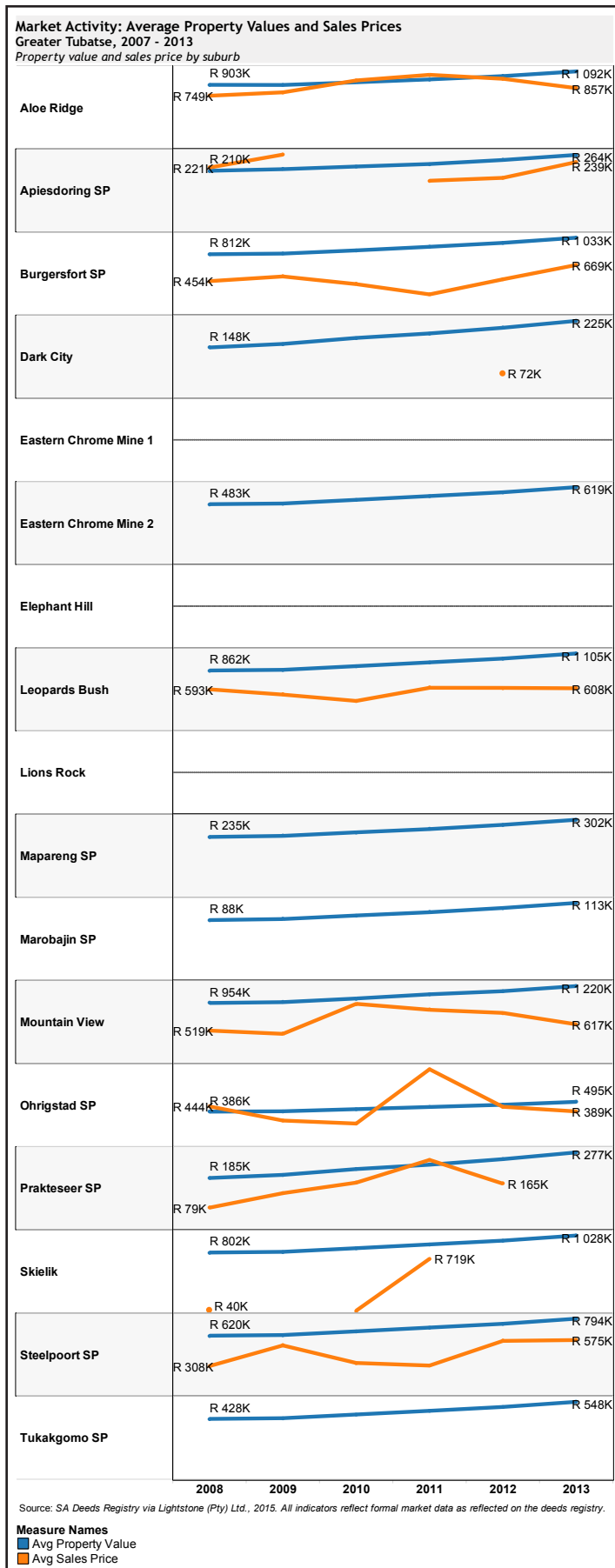
10.11 Average Property Values and Sales Price

The relationship between local sales prices (orange lines) and average property values (blue lines) can tell much about the activity and integration of supply and demand. Every house in a suburb has a value, determined by the number of sales, changes in prices, churn (repeat sales) and other factors present in a robust housing market. Only houses that have been sold have sales prices but this lowers the value of homes in markets with fewer sales.

As markets formalise and strengthen, these trends inform each other more effectively and the trend lines become almost parallel over time (such as Aloe Ridge).

Subplaces with a high volume of properties under the R500 000 value segment experienced increased property values, yet minimal sales price increases, eg. Apiesdoring and Dark City. Constrained credit access for this segment of the market limits the sales prices, which is further affirmed by the 45% decrease in bonded sales for this segment.

Rising sales prices in affordable areas can reflect improved access to credit as well as increasing interest in the neighbourhood.



11. Lending Activity



11.1 Key Findings

Lending is highly concentrated in Greater Tubatse, by area and loan size. Bonded sales are almost entirely concentrated in housing and sales over R500 000. The share of lending by each of the four major banks in the Country has remained consistent and similarly so with lending from non-traditional lenders in Greater Tubatse, which has increased at a similar rate since 2008, perhaps to make up for the lack of expanded lending by the existing institutions.

11.2 Policy Implications

Policies and programmes should target expanding access to credit, including the creation of new funds, with broader investment guidelines and possibilities and small loan programmes with which to make financing more accessible to lower-income households. Existing lenders should take lower incomes into account by reducing finance costs.

Loans to entice the development of more middle market housing would create more integrated markets. Financing, to build affordable rental housing options, could offset some of the credit accessibility issues in the market overall.

11.3 Quick Definitions:

Lending Activity: the performance of key lending indicators over time, such as bond volume, new loans and bonded sales, by lending institution.

Portfolio Size: the total number and value of loans given out by particular lending institutions in the study area

Property Value Segment: in order to better understand the performance of housing markets, data has been aggregated into four property value bands: properties valued under R250 000; between R250 000 and R500 000; between R500 000 and R1.2 million; and over R1.2 million. This helps one to understand the various trends and strengths inherent in each segment and to see how properties are integrating across the housing continuum, especially over time.

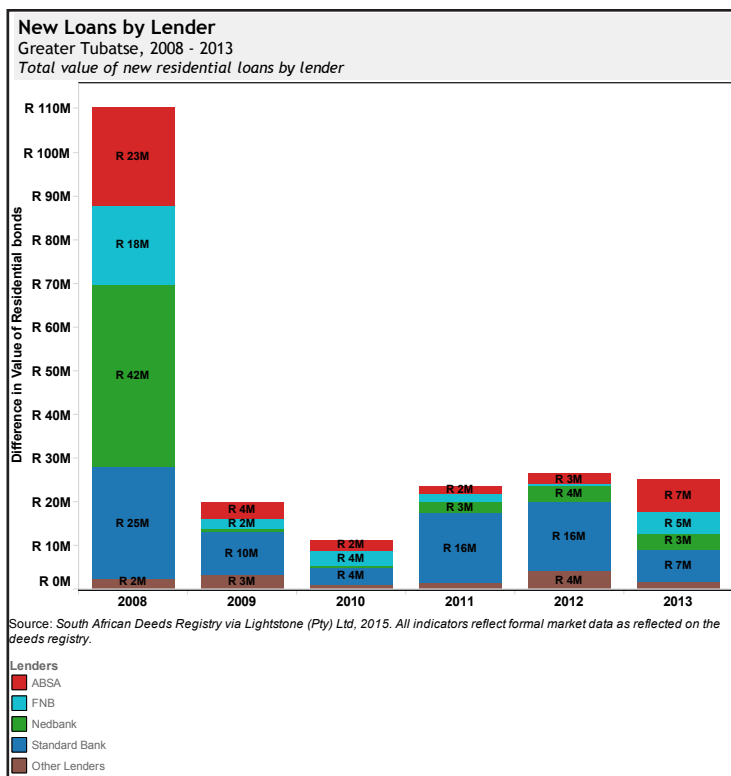
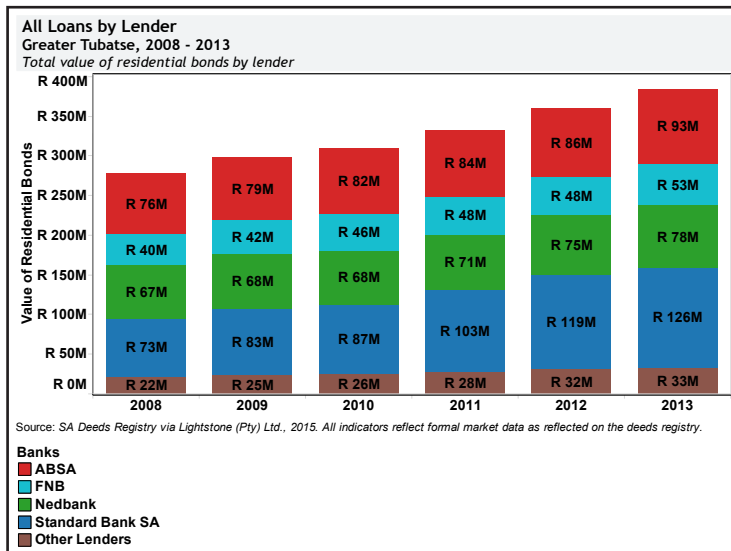
Residential Bond: a loan made for the intention of acquiring a property, which is secured by the title to the property. These are determined by the property address and the timing with which bonds and sales transactions are recorded on the deeds registry.

11.4 Lending Over Time

Loan data taken from the deeds registry can provide lending activity by lender, which has grown consistently in the area. By comparing the top chart (all loans held by each lender), to the bottom chart (activity by lender per year), it's possible to see that lending in the area continues inconsistently and the amount per year varies significantly from lender to lender. For example, lending increased significantly across the board since 2008. **Other lenders in the area have made loans more consistently over time than within other comparably sized cities.**

In 2009, after the recession while most lenders significantly decreased their lending, **other lenders modestly increased their annual portfolio.** These other lenders primarily include companies providing home loan benefits to their employees. **Lending by other lenders appears to be strategically located (predominantly) within subplaces with steady growth.**

The following charts explore lending by bank by suburb to understand more specifically where bank investment has been made by suburb and what that may mean about financing availability for various development sites and scenarios.



New Loans by Lender Greater Tubatse, 2008 - 2013 <i>The value of new bonds by lender by suburb over time</i>						
		Greater Tubatse				
		ABSA	FNB	Nedbank	Standard Bank	Other Lenders
Aloe Ridge	2008	R 1,600,000	R 2,691,500	R 1,188,000	R 3,180,000	R 0
	2009	R 892,500	R 0	R 0	R 738,000	R 0
	2010	R 0	R 0	R 0	R 0	R 0
	2011	R 928,000	R 1,100,000	R 0	R 900,000	R 0
	2012	R 0	R 0	R 870,000	R 2,718,000	R 920,000
	2013	R 0	R 800,000	R 0	R 1,631,500	R 0
Apiesdoring SP	2008	R 17,125,713	R 7,880,497	R 31,948,233	R 15,328,626	R 0
	2009	R 1,464,302	R 1,030,000	R 0	R 418,333	R 500,000
	2010	R 0	R 0	R 0	R 0	R 0
	2011	R 0	R 0	R 0	R 0	R 0
	2012	R 0	R 0	R 0	R 0	R 247,200
	2013	R 0	R 0	R 0	R 1,568,300	R 230,000
Burgersfort SP	2008	R 0	R 689,620	R 2,566,931	R 0	R 0
	2009	R 0	R 0	R 0	R 1,400,000	R 0
	2010	R 0	R 0	R 0	R 630,000	R 1,000,000
	2011	R 0	R 0	R 225,893	R 3,239,843	R 240,000
	2012	R 1,100,000	R 0	R 0	R 2,079,350	R 1,000,000
	2013	R 1,020,000	R 1,000,000	R 0	R 1,226,490	R 0
Dark City	2008					R 0
	2009					R 0
	2010					R 0
	2011					R 0
	2012					R 0
	2013					R 0
Eastern Chrome Mine 1	2008				R 0	
	2009				R 0	
	2010				R 0	
	2011				R 0	
	2012				R 0	
	2013				R 0	
Leopards Bush	2008	R 1,740,000	R 0	R 1,192,321	R 1,407,100	R 1,720,000
	2009	R 0	R 420,000	R 0	R 2,151,250	R 0
	2010	R 1,230,000	R 0	R 0	R 3,190,000	R 0
	2011	R 0	R 875,000	R 0	R 4,189,000	R 0
	2012	R 1,120,000	R 0	R 0	R 4,517,000	R 0
	2013	R 1,477,000	R 3,396,250	R 0	R 1,066,800	R 1,250,000
Mountain View	2008	R 1,842,000	R 5,296,000	R 1,687,166	R 3,492,500	R 275,000
	2009	R 587,500	R 790,000	R 0	R 4,386,500	R 0
	2010	R 1,197,000	R 3,260,000	R 0	R 247,500	R 0
	2011	R 700,000	R 0	R 2,289,008	R 3,918,800	R 1,300,000
	2012	R 0	R 0	R 3,150,700	R 3,665,000	R 1,847,423
	2013	R 2,028,000	R 0	R 2,800,000	R 510,000	R 0
Ohrigstad SP	2008	R 0	R 312,000	R 2,157,132	R 670,000	R 500,000
	2009	R 0	R 0	R 605,580	R 315,000	R 0
	2010	R 0	R 369,000	R 0	R 0	R 0
	2011	R 0	R 0	R 0	R 960,000	R 0
	2012	R 0	R 0	R 0	R 2,450,000	R 0
	2013	R 1,695,000	R 0	R 620,000	R 965,000	R 0
Prakteseer SP	2008	R 0	R 133,112	R 443,192	R 342,600	R 0
	2009	R 0	R 62,736	R 200,000	R 84,900	R 0
	2010	R 0	R 0	R 0	R 0	R 50,000
	2011	R 0	R 0	R 0	R 500,000	R 0
	2012	R 280,000	R 0	R 0	R 185,000	R 0
	2013	R 0	R 0	R 0	R 320,000	R 0
Skielik	2008					R 0
	2009					R 0
	2010					R 0
	2011				R 1,400,000	
	2012				R 0	
	2013				R 0	
Steelpoort SP	2008	R 206,000	R 1,063,600	R 604,332	R 850,000	R 0
	2009	R 850,000	R 0	R 0	R 260,000	R 2,507,000
	2010	R 0	R 0	R 0	R 0	R 0
	2011	R 0	R 0	R 0	R 800,000	R 0
	2012	R 0	R 0	R 0	R 320,000	R 0
	2013	R 950,000	R 0	R 0	R 0	R 300,000
Tukagomo SP	2008			R 0	R 170,000	R 0
	2009			R 0	R 0	R 234,025
	2010			R 0	R 0	R 0
	2011			R 0	R 0	R 0
	2012			R 0	R 0	R 0
	2013			R 0	R 0	R 0

Source: South African Deeds Registry via Lightstone (Pty) Ltd, 2015. All indicators reflect formal market data as reflected on the deeds registry.

Banks	
■	ABSA
■	FNB
■	Nedbank
■	Standard Bank
■	Other Lenders

11.4 Lending Over Time Continued

Only two suburbs – Leopard's Bush and Ohrigstad SP – have experienced steady increases in lending since 2009.

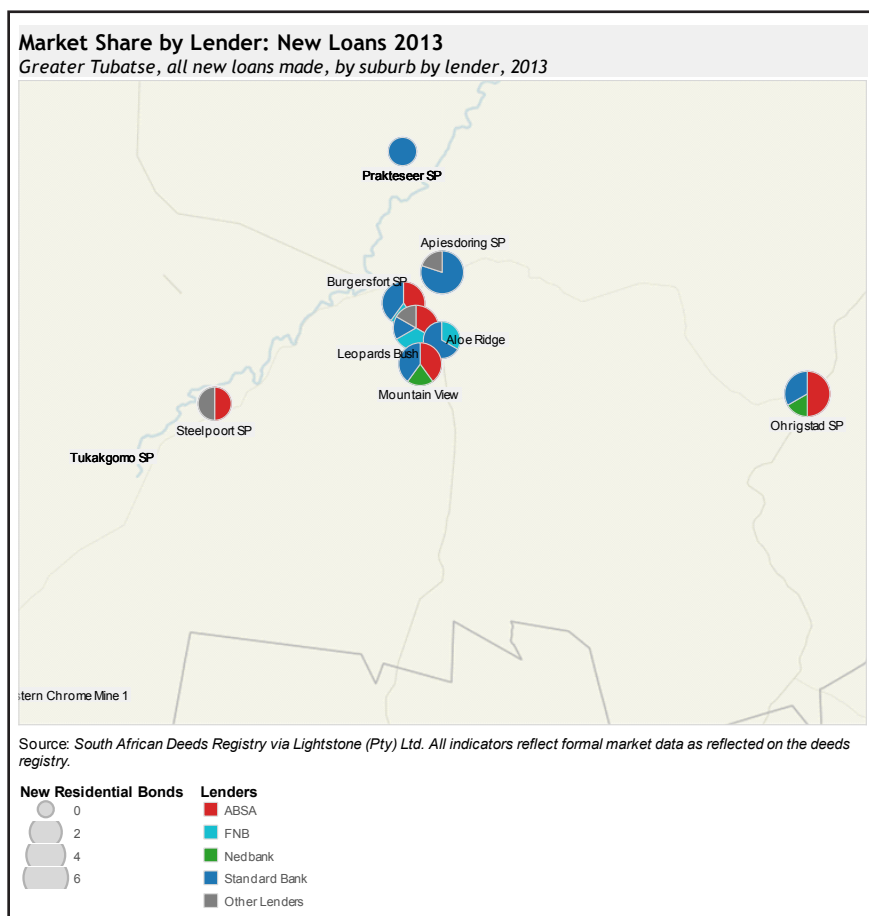
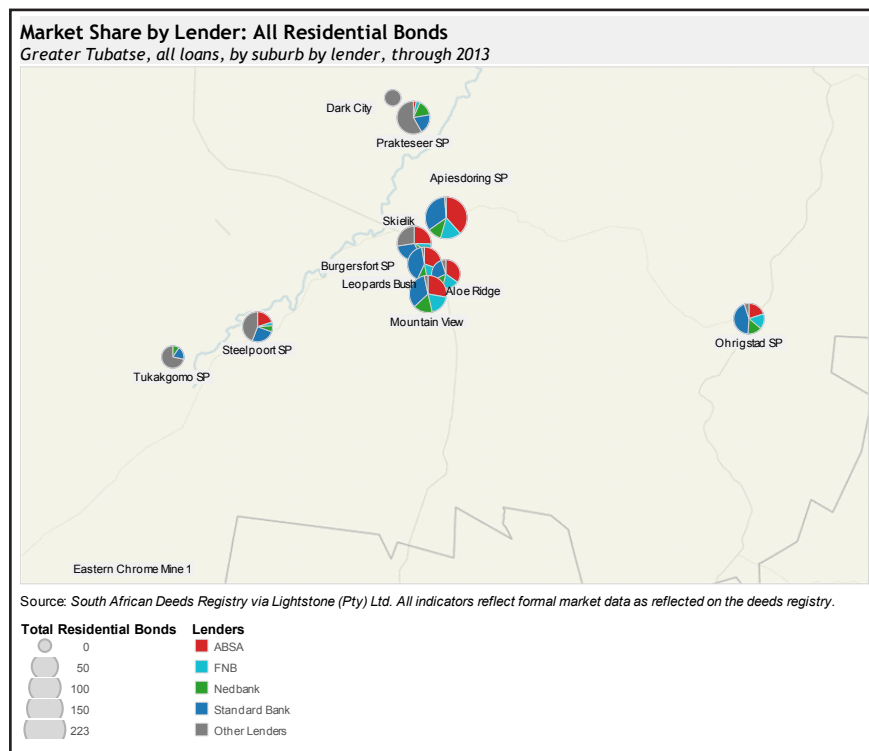
11.5 New Loans by Lender

As markets shift, different lenders respond in different ways. These maps show the previous bar charts on a map. The first chart – all loans by lender – is represented on the top map. All loans made in 2013 -the second chart – are shown on the lower map. By comparing the two maps, it's possible to see where lenders invested loans in the last year (slices in the bottom map) and how that has changed from their overall portfolio in that suburb (slices in the top map).

An important trend to note is the rise of “other” lenders and the growing portions of the market they are active in – such as Leopard’s Bush, Mountain View, Steelpoort and Tukakgomo, the suburbs of which are in the region of the mining corridor.

Non-traditional lenders, such as private equity funds and employer lenders, have more flexible regulatory environments and more creative, competitive financing tools. It will be important for Government to engage these investors as well to ease access to credit, lower costs of financing and share in the commitment towards growing housing markets in the mining towns.

The areas with no dots have no residential properties on the deeds registry – they are farms or open space, mines or power plants, or informal settlements.



12. Leverage



12.1 Key Findings

The presence of older **RDP units within the municipality represent an important opportunity to leverage that investment** in affordable housing in the years ahead, as owners seek to sell and move up the housing continuum if opportunities are positioned properly. **Equity in properties under R500 000 is at least 10% higher than the percentage of equity in all residential properties highlighting an opportunity to move up the housing continuum.** The value of these homes, if sold in the private market, can be applied towards the cost of a new home. Interestingly, the subplaces with the highest lending from Other Lenders almost entirely have 100% equity, ie. Dark City, Prakteseer, Skielik, Steelpoort and Tukakgomo where more than half of the lending is by Other Lenders; all of which are in the region of the mining corridor.

This situation can be used to drive developers to build more gap housing and financiers to finance RDP acquisition loans.

12.2 Policy Implications

Policies should focus on **enticing developers to build more housing in the gap market** and encourage lending to the RDP and other lower-cost home markets.

To encourage an increase in the supply of gap housing, governments can unlock sites, supply infrastructure or grants, or hook-up fee discounts. Governments can also **reduce the cost** of construction finance, which can all be passed down to the buyers in the form of lower sales prices.

Governments can create programmes using funds pooled from a range of Government and private sector partners, that provide bonds for small properties and offset risks through loan guarantees, loan loss reserves and interest rate discounts. Funds can also be organised to implement homebuyer counselling, debt consolidation and moderate rehab costs of the existing home to ensure loan performance of the portfolio.

12.3 Quick Definitions:

Leverage: the ability to use the percentage of the property that has been paid off as a down-payment for another property

Equity: the value of the residential property less the outstanding balance of the bond. This represents the value of ownership built up in a property and is often used as the down-payment for the owner's next house purchased up the housing ladder.

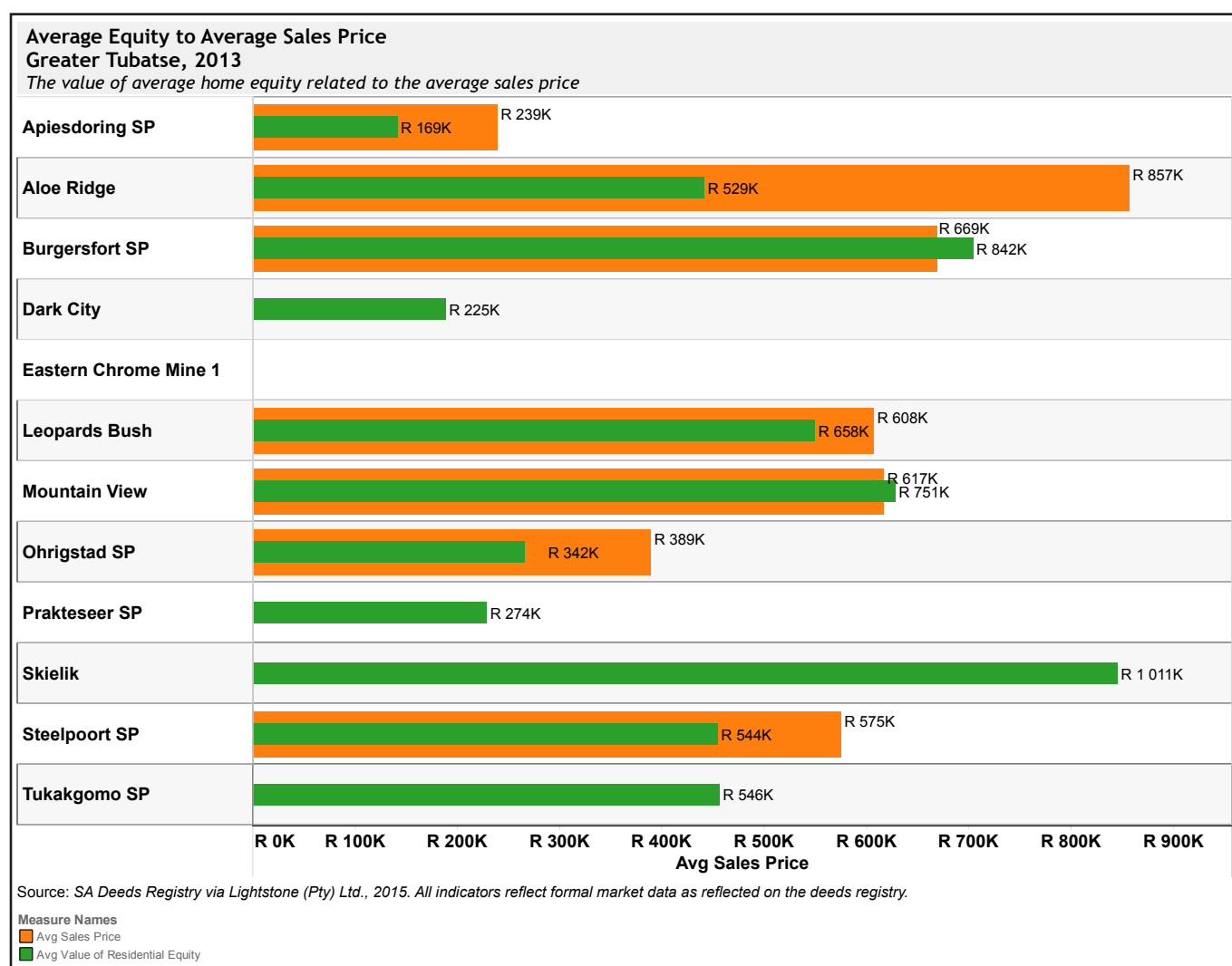
12.4 Equity Fills the Gap

Equity is the value of one's home less the amount owed to the lender. The chart shows the average equity per suburb (the green bar) compared to the average sales price per suburb. This helps to show what portion of the sales price might be paid for by homeowners' equity. If a homeowner in Dark City wished to purchase a home in Ohrigstad, they could sell their home and apply the equity towards the cost of the new home, reducing the amount they would have to borrow. Instead of borrowing over R389 000 (the average sales price), they would only need about R164 000 (the orange bar in Ohrigstad minus the green bar in Dark City). Thus, equity makes homeownership in higher-priced neighbourhoods affordable, expanding housing options. Equity closes the housing gap for less affluent homeowners because their properties are less likely to have a bond and those markets have experienced more appreciation of value. It is important to consider this value in addition to a homeowner's income.

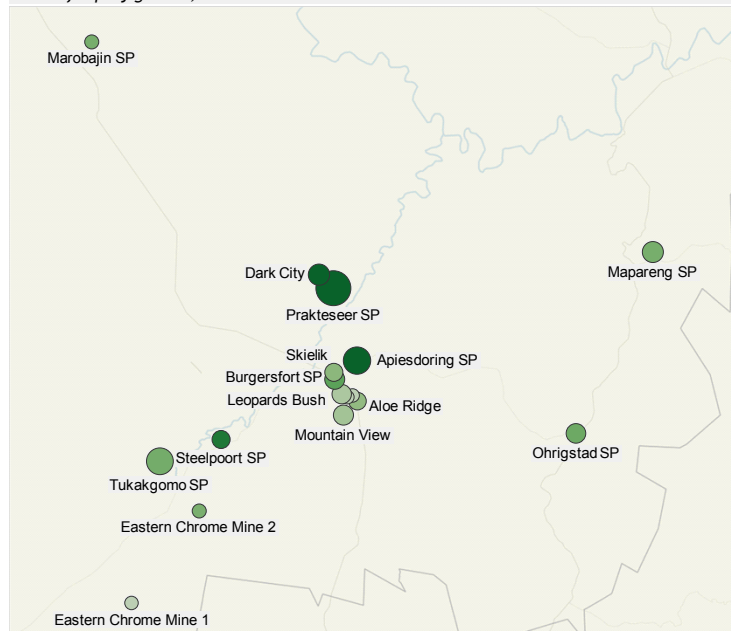
Interestingly, the subplaces with the highest lending from other lenders almost exclusively have 100% equity, ie. Dark City, Prakteseer, Skielik, Steelpoort and Tukagomo where more than half of the lending is by Other Lenders – all of which are in the region of the mining corridor.

Equity invested by homeowners also **reduces risk by increasing their financial stake in their home**. This is the same way upper income families move up the housing continuum, and is now available at scale for lower income families as well, thanks to the massive Government investment in homes for the poor. This requires financing available for the lower income buyers, something to explore with lender partners.

While averages in such diverse housing markets are hard to consider meaningfully, the picture does indicate that purchasing power increases – and gaps close – when equity is taken into consideration.



5 Year Equity Growth Greater Tubatse, 2013 Rates of equity growth, since 2007 to 2013

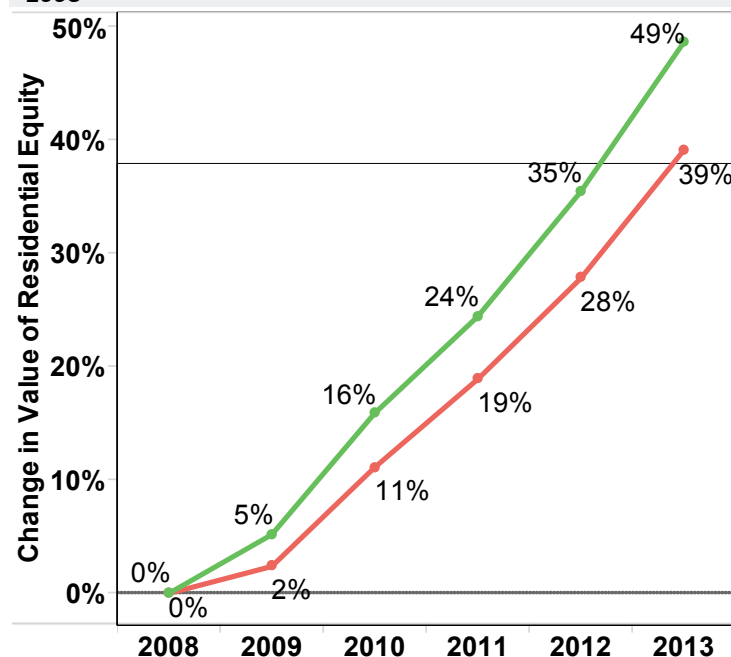


Source: Stats SA Census, 2011, South African Deeds Registry via Lightstone (Pty) Ltd, 2015. All indicators reflect formal market data as reflected on the deeds registry.



Growth in Equity Greater Tubatse, 2008- 2013

The change in the value of average home equity from 2008



Source: SA Deeds Registry via Lightstone (Pty) Ltd., 2015. All indicators reflect formal market data as reflected on the deeds registry.

Change in Equity

- Affordable properties (under R500 000)
- All residential properties

12.5 Accessing equity Closes the Housing Gap and Can Drive Demand

Understanding the difference in equity growth rates on a map allows a better understanding of which property markets can be leveraged to support more new development. Many higher-priced areas have experienced modest equity growth (grey areas) – or loss (red areas) – over the past five years, likely due to increasing sales prices (rather than amortisation as new buyers tend to have less equity and this market has been very active recently). The greatest equity growth over five years (green areas and green lines) has been in less developed areas with fewer sales and values have accrued to the existing homeowners. Homes worth less than R500 000 typically have fewer loans, a faster-growing value and an initial housing cost that was low or free (thanks to Government investment in housing). Homebuyers can reduce the amount they have to borrow through savings or the equity in their home, if they have an existing house that they can sell. This lowers their monthly payment or increases the price they can afford. Leverage is the practice of using this equity to increase their housing affordability. This indicator thus becomes very useful for meeting – and closing – the housing gap.

In Greater Tubatse, equity in properties below R500 000 is at least 10% higher than the equity of all residential properties.

Constraints to using leverage in affordable housing markets include the availability of credit for potential buyers to pay the full value of the house, maximising the equity available to the homeowner, the availability of homes up the housing ladder to buy and, in the case of RDP owners, the ability to sell Government-subsidised stock (which comes with an eight-year resale restriction). Other constraints include household indebtedness and the willingness of existing homeowners to sell their most important asset.

However, policies that address these constraints can expand the housing ladder in remarkably quick and cost-effective ways. Closing cost assistance, interest rate write-downs and loan loss funds all cost a fraction of new construction and put the opportunity – and choice – in the hands of the homeowner, rather than the Government.

13. Affordability Profile



13.1 Key Findings

In Greater Tubatse, several subplaces do not have registered sales activity, despite having incomes; there remain large disparities between incomes and affordable housing within the municipality. Ohrigstad appears to have the largest disparity with an affordable price gap of R139 000 and an affordability ratio of 1.6, the highest in Greater Tubatse.

In some areas, sales prices used to determine affordability are very low, probably the result of lack of credit access, forcing sellers to sell for whatever cash might be offered regardless of how much the house may be worth. In many areas of town, there are simply no sales.

13.2 Policy Implications

Affordability constraints, due to below-average incomes, can be addressed through housing strategies and solutions that propose **creative financing tools and techniques which can reduce financial barriers (such as down-payment assistance, interest rates and principal requirements) as well as unlocking equity rather than simply trying to push costs down.**

Lowering the cost of financing can also increase the amount that can be borrowed, which can increase sales prices and the amount of equity a home seller will be able to access to buy their next home.

Lack of adequate affordable supply in areas with very low incomes can often be quickly addressed through the **carefully considered provision of well-located, quality rental housing.**

13.3 Quick Definitions:

Affordability: affordability is generally defined as the ability to allocate less than 25-30% of a household's monthly income towards housing costs. While upper-income families' incomes enable them to cover the cost of producing and selling housing units and thus provide many housing options, lower income families struggle because their income often does not adequately cover the cost of producing and selling housing units. Supply is limited and others must collaborate to provide decent affordable housing.

Affordability Ratio: the purchasing power of local incomes to afford local sales prices. The local average sales price is divided by the target house price. This shows the relationship between local incomes and local sales prices – a larger number means that local sales prices are harder for local incomes to afford, implying a mismatch between local housing options and residents.

Housing Gap: the shortfall between the target house price a household can afford and the sales price (or construction cost) of a house. This can be calculated by the difference between the target affordable price and the cost or price of the house.

Target House Price: the sales price affordable to local households, which is calculated using the average area median income available for housing (25% of monthly income) using standard underwriting criteria (typically 20 year amortisation at 11%, with 5% down).

Mind the Gap Table

Greater Tubatse, 2013

Affordability indicators per suburb

Subplace Name	Avg Monthly Income	Target house price	Average Sales Price	Affordable Price Gap	Affordability Ratio
Aloe Ridge	R 38K	R 1,009K	R 857K	R 152K	0.8
Apiesdoring SP	R 7K	R 192K	R 239K	R -48K	1.2
Burgersfort SP	R 20K	R 539K	R 669K	R -130K	1.2
Dark City	R 12K	R 304K			
Eastern Chrome Mine 1	R 0K	R 0K			
Eastern Chrome Mine 2	R 37K	R 980K			
Elephant Hill	R 34K	R 905K			
Leopards Bush	R 38K	R 1,001K	R 608K	R 393K	0.6
Lions Rock	R 39K	R 1,022K			
Mapareng SP	R 2K	R 65K			
Marobajin SP	R 2K	R 62K			
Mountain View	R 47K	R 1,228K	R 617K	R 611K	0.5
Ohrigstad SP	R 9K	R 250K	R 389K	R -139K	1.6
Prakteseer SP	R 6K	R 152K			
Skielik	R 2K	R 59K			
Steelpoort SP	R 28K	R 740K	R 575K	R 165K	0.8
Tukagomo SP	R 10K	R 252K			

Source: StatsSA Census 2011 (with CPI increase); South African Deeds Registry via Lightstone (Pty) Ltd, 2015. All indicators reflect formal market data as reflected on the deeds registry.

13.4 Affordability

Actual affordability relies on the understanding of local household income to determine what is reasonably afforded by existing residents, how much of a gap exists and what is required to ensure more realistic affordability. The Affordability Ratio is determined by dividing the purchase price affordable to the average household income, by the average sales price. **Nationally, it takes three times the average income to afford the average sales price and the affordability ratio for mining towns is 2.8.** This doesn't mean that families are paying that, it means that most homes on the deeds registry are not affordable to the majority of South Africans. However this indicator provides an important benchmark, by providing a degree of affordability. We can measure that disparity at the local level as an indicator of how well local markets might be catering to local residents.

It is worth noting that most subplaces in Greater Tubatse do not have sales activity with which to measure housing affordability. The affordability ratio is 3.4 when calculated using the average sales price and average target house price for the entire municipality, which takes into account all the households located in areas with no sales. However, the lack of registered sales activity in some areas highlights the need for new products or strategies which would be more responsive and sustainable to current residents.

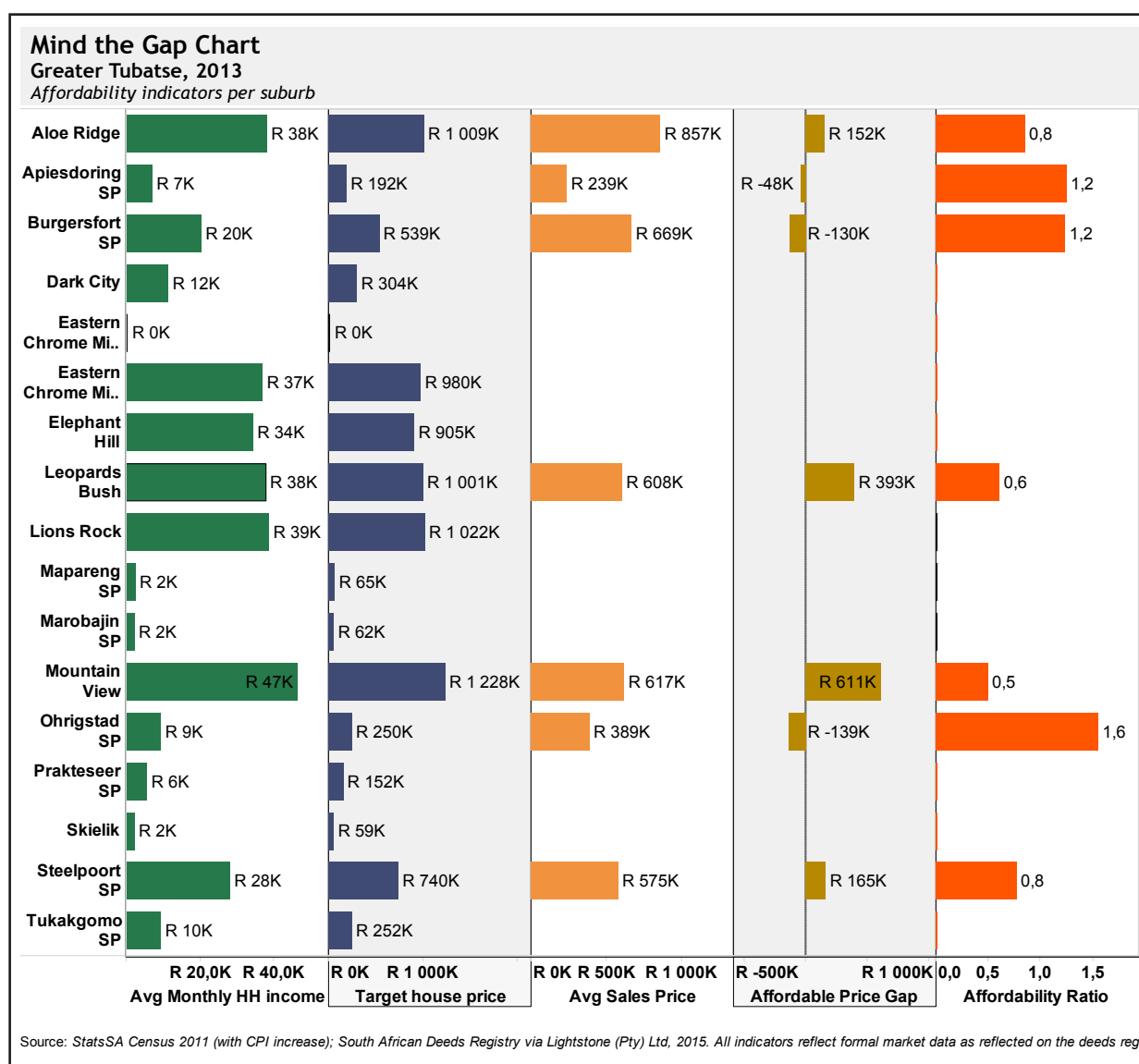
The target home price in column 2 can also be compared to estimated potential per-unit construction costs to determine the amount of subsidy which may be required to build and sell the units to local residents.

13.5 Mind the Gap

This chart is identical to the previous chart but shows bar lines to better visualise a difference across the area. These tables measure relative affordability for each suburb in the target area in three ways: starting with the average income (column 1), it calculates the average sales price affordable to the average family using standard underwriting terms (5% down, 11% for 20 years, up to 25% of household income, column 2). It compares that to the area's average sales price (column 3). Column 4 ("Affordable Price Gap") shows the difference between the average sales price and the local target (affordable) house price. Column 5 divides the two values to show the affordability ratio, the number of times it might take the local income to afford the local sales price. As an example, in Ohrigstad, it takes 1.6 times the average income to afford the average sales price.

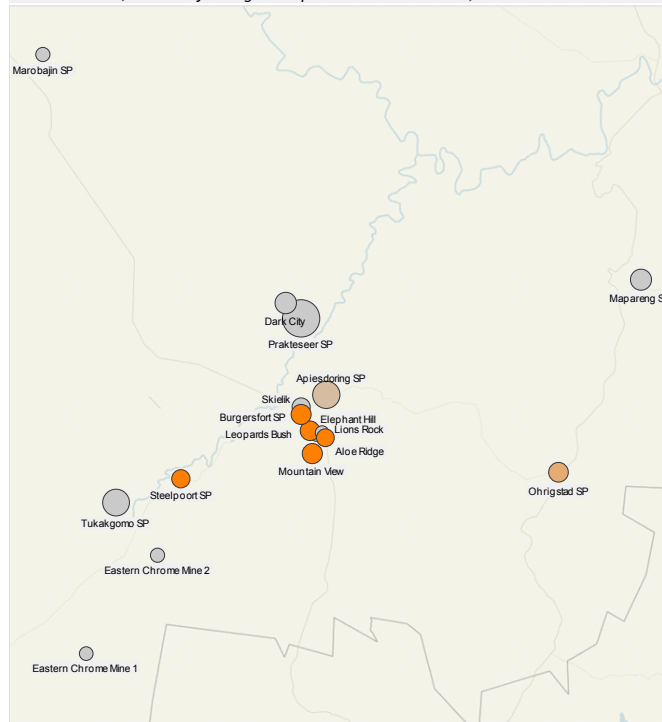
In Greater Tubatse, the average income is R5 400, among the lowest of the 22 mining towns, however not all subplaces have sales activity. **This average income can afford a target house price of R143 000 which is significantly below the average sales price of R490 000** – highlighting a large disparity between affordability and actual sales prices. Overall, suburbs appear affordable for households in those specific suburbs as they can afford those houses. However, at the citywide level, the overall average income is much lower, therefore the few average sales are unaffordable. These very high level indicators are useful when comparing affordability, to see which areas are more or less affordable. This helps one to understand how housing strategies need to address affordability within the town, including what resources or policies might be required to help fill these gaps (ie., affordable financing, buyer subsidies).

When affordability is an issue, perhaps equity of existing homeowners can help fund the gap. Policies will need to encourage the sale of lower-cost homes that can allow housing purchases further upstream for lower-income households.



Affordable Suburbs by Average Sales Price

Greater Tugatse, Suburbs by average sales price and household size, 2013



13.6 Mapping Affordability

These maps show the importance of taking local household income, or purchasing power, into the understanding of affordability. The first map shows average sales prices by suburb, with the darker areas having higher prices. The second map shows the same area by affordability ratio, the darker areas (those with higher affordability ratios) showing greater difference between suburb incomes and suburb sales prices. **While some areas appear affordable by sales price (such as Apiesdoring), they are not as affordable when considering local incomes (the darker green on the second map).** These analyses do not take into account the indebtedness of potential buyers, an important factor in determining bond eligibility. Rental housing, therefore, might be an important option towards providing well-located and professionally managed affordable housing in those areas.

The areas with no dots have no residential properties on the deeds registry – they are farms or open space, mines or informal settlements.

Affordable Suburbs by Affordability Ratio

Greater Tugatse, by suburb, 2013

Relationship between average income and sales price (higher is less affordable)



14. Rental Index



14.1 Key Findings

In Greater Tubatse, **15% of households rent**, according to the 2011 StatsSA census, which is mid-range amongst the mining towns in the study.

The **opportunity for rental housing development within Greater Tubatse is strong within specific areas**. However, only one subplace (ie. Skielik) scores high on the rental index, highlighting that this specific area has high potential for rental housing. Those areas with greater density, modest incomes and affordability challenges are more likely to support quality, professionally managed, affordable rental housing. Rental housing also provides flexibility to employers and workers as mining markets expand and contract from time to time.

14.2 Policy Implications

Due to the cyclical, commodity- and demand-driven nature of these towns' primary industry, rental housing becomes a very important housing solution.

Rapidly changing housing demand, driven by mining activities, makes a strong case for prioritising quality rental housing. If rental housing is well-situated and convenient to transport and centrally located in dense areas, it can bring social and economic cohesion and vibrancy to housing markets over the longer term. The densifying of housing markets requires infrastructure upgrades and financial mechanisms which provide for long-term affordability and sustainability.

14.3 Quick Definitions:

Rental Index: A tool used to measure the potential suitability of local areas for rental housing, as measured by a group of five indicators which support rental housing including density, area median income, the affordability ratio and market growth as measured by the housing performance index. A higher score implies greater success for rental housing.

Affordability Ratio: the purchasing power of local incomes to afford local sales prices. The local average sales price is divided by the target house price. This shows the relationship between local incomes and local sales prices – a larger number means that local sales prices are harder for local incomes to afford, implying a mismatch between local housing options and residents.

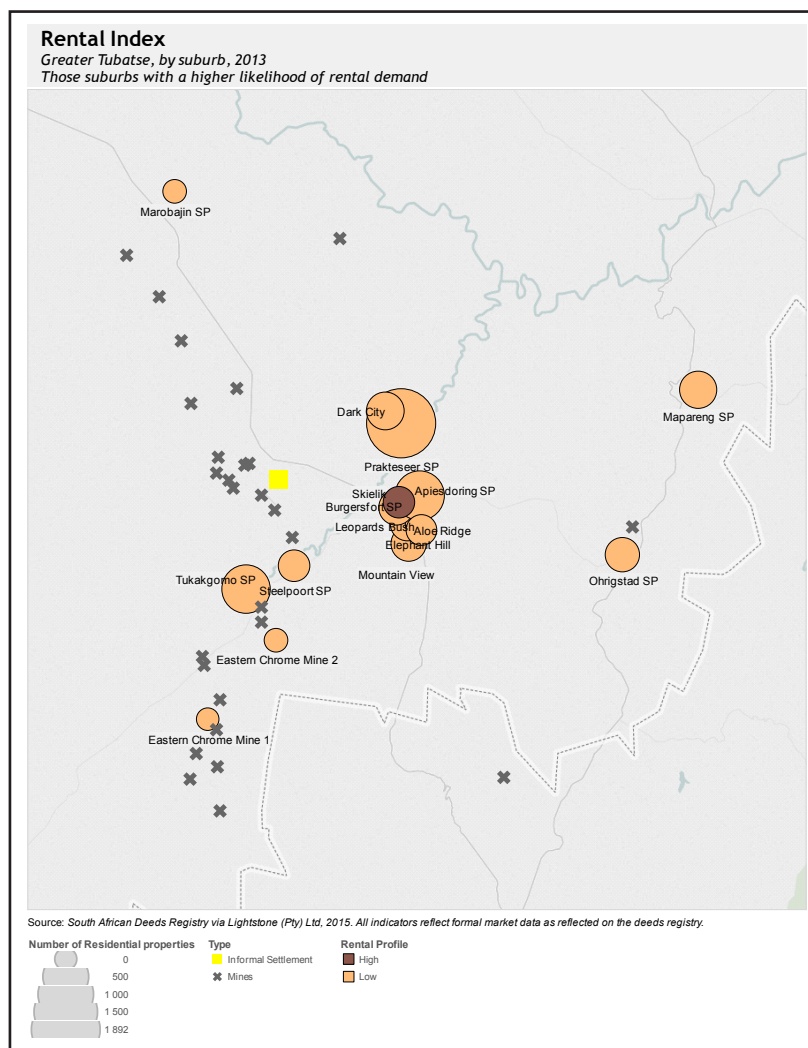
Area Median Income: the percentage of the average local income to the municipal average income, which allows for understanding of the income relative to the market overall and across many municipalities.

Housing Performance Index: the growth of the local suburb in six key housing market indicators as compared to the municipality growth. A higher number implies more growth

Percent households renting: the number of surveyed households that rent divided by the total number of households, per StatsSA census 2011. This includes everything from bedrooms and backyard shacks to single family homes and sectional title units.

Population Density: the number of people per square hectare of the suburb, as provided by StatsSA.

Tenure: the terms under which land or buildings are held or occupied, eg. rental, ownership, etc.



14.4 Rental Housing: Driving an Affordable Housing Option

Rental housing is one of the most efficient and effective ways to provide affordable accommodation. In most South African towns, this means backyard shacks, an important but very inefficient means of meeting housing needs. While a social housing sector exists which targets lower-income families in multi-unit buildings, these are primarily in large metropolitan areas. Many private developers and investors are considering expanding significantly into the rental segment. If the demand is better understood, governments can meet housing backlogs quickly and affordably by promoting policies which target affordable rental housing. **In Greater Tūbatse, only Skielik scores high on the rental index, highlighting that this specific area has high factors of success for rental housing including density, lower incomes and existing households renting.**

Security of tenure through a lease agreement means that residents have assurance of quality property management, consistent utility access and can even build up their credit history with positive rent and utility accounts. Owners of rental housing must locate their properties competitively to ensure monthly occupancy, rental housing must provide affordable access to transport hubs, jobs and community services. By bundling a set of housing market indicators, it is possible to find those places where a rental strategy might be well-suited. The map shows those areas with above-average densities, moderate incomes and above average households' currently renting, all important factors when considering the placement and promotion of rental housing.

Rental Index Indicator	Method	Implies	Weight
Median Income	50 - 80% area median income	Affordability	25%
Population Density	Exceeds metro average	Density	25%
Housing Performance Index	Growing	Demand	20%
Percent Households renting	Exceeds metro average	Demand	15%
Affordability Ratio	Ratio exceeds metro average	Affordability	15%

Several conditions are crucial for the creation of successful and sustainable rental markets: density, high demand and affordability. By using existing housing performance indicators, it is possible to prioritise the presence of those indicators intentionally to pick up those areas primed for rental housing. In order to sustain rental housing at scale, projects must be able to achieve density to keep costs down and access ready markets with good proximity to jobs, transport and educational opportunities to keep projects running smoothly.

15. Key Concepts

The definitions of the concepts used in this profile are set out in alphabetical order below.

15.1 Affordable

Traditionally, affordable refers to housing or areas with prices or values below the overall market which target below-average incomes. It is often defined as R500 000 or less (but can be higher or lower depending on intent) because this is the amount that a household earning less than R16 000 on average can afford, which is the target limit of many Government subsidy schemes. Affordability is the relationship between the cost of housing (a mortgage bond payment or rent) and the income of the tenant or owner. Affordable housing is that which can be rented or purchased within certain constraints: in this report, with a mortgage equal to 28% of the borrower's income, at 11% over 20 years, with 5% of the sales price paid as down-payment. Areas where the average income can afford the average sales price or more, are considered affordable.

15.2 Affordability Ratio

This ratio measures relative affordability by comparing the **AVERAGE** sales price to the average income within the same area – higher ratios meaning less affordability. The average sales price is divided by the **AFFORDABLE** sales price, which is calculated as the present value of typical mortgage terms using 28% of the average income (95% of the average sale price, at 11% for 20 years). A ratio of 1 means that the average home price is exactly equal to the average household income. Ratios over 1 represent the number of times by which the average income must be increased to afford the average home.

15.3 Appreciation

The rate, or percent change, over time between two values (most often price or value) is calculated by dividing the difference between the beginning and end values of the property in the timeframe, by the beginning value. The result is the percent by which the property value or price changed. It is a valuable means of comparing the rate of change across very different property markets, areas or market sizes.

15.4 Average

The result obtained by adding several amounts together and then dividing this total by the number of amounts. For instance, average sales price is calculated by adding up all sales within an area and dividing this total by the total number of sales within an area. The average is useful for comparing and understanding different areas, market sizes and property types.

15.5 Benchmark

An indicator that is calculated in the same way across a larger level (such as national or municipal levels) to compare with smaller areas (such as main places or suburbs). Benchmarks are useful for understanding the performance of housing markets because they provide a consistent means of comparing markets to each other and to larger areas. As an example, local markets perceived as having modest appreciation rates may actually be growing quickly when compared with other areas, the metro or the Country as a whole. Benchmarks are key components of the housing performance index, which uses them to determine whether local areas or metros are changing faster than, about the same as, or slower than the metros or the Country.

15.6 Bonded Sale

A sales transaction transferring ownership of a property which includes an associated mortgage bond, used by the buyer to purchase that property and which the lender requires to be secured by that property. Bonded sales reflect lender investment in an area and perceptions of market strength and risk levels.

15.7 Churn

The total number of homes sold within an area over a one-year period, divided by the number of homes within that area. Similar to turnover, churn represents active market interest, a large pool of eligible buyers and willing sellers and ready access to mortgage financing. In affordable areas, lower churn can reflect reduced housing mobility rather than less marketability, as the result of fewer upward housing options for potential sellers and less access to bond financing for potential buyers. Other indicators (such as bond rates or types, loan to values, equity rates and income) can help differentiate marketability from pent-up market mobility.

15.8 Equity

The value of ownership interest in a property, primarily the current **VALUE** of a property minus the current value of any bonds or other claims on the property. Equity value grows as mortgage balances are paid down and property values increase. Equity is realised when a house is sold and is most often used to purchase another property, by increasing the amount available to purchase or lowering monthly mortgage payments (or both). Individual circumstances within neighbourhoods may vary widely but areas with higher aggregate levels of equity represent greater opportunity for upward mobility, both for existing residents who can sell and invest the equity in a new home and for lower income households able to purchase the existing home.

15.9 Equity Growth

The rate at which an owner or investor's equity value has changed over time, calculated by dividing the difference between the values of equity at the beginning and end of the period by the beginning year's equity value. Growth in equity (along with income levels) can be used to determine market potential, as equity significantly boosts the purchasing power of potential buyers. Circumstances that increase equity return include prices that appreciate faster than debt is paid down, less debt and registrations of new properties with no debt.

15.10 Formal Housing Market

A formal housing market is an area where owners sell or otherwise transfer residential properties (which have been registered on the national title and deed registry) to willing buyers who become the legal owners of those properties. Housing markets also include residences that are rented, traded, bartered or otherwise swapped, or legally occupied. This report tracks formal housing markets, as it only uses actual sales reflected on the South African deeds registry. It is estimated that 25 – 50% of all properties in South Africa are not registered.

15.11 Housing Continuum

The housing continuum includes all ranges and options of housing, from temporary shelter and informal housing to the highest variety of housing ownership and occupancy models and prices. A continuum implies a continuous, connected marketplace of housing options, which serve the full range of conceivable housing demands as people's lifestyles and life circumstances change over time. In reality, most housing markets are an uneven distribution of housing supply and housing demand.

15.12 Leverage

Leverage is the practice of purchasing something by borrowing part of the total cost and it is measured by the degree to which a buyer has borrowed funds to purchase a home. Also called gearing, leverage can be measured in several ways (such as loan to value or equity ratio) but all compare bond amounts to the housing value. Generally, homes or neighbourhoods that are highly leveraged are understood to be higher risk because owners lose less equity if they default. Areas with lower leverage rates are generally considered as being more attractive because lenders have less risk, while owners have more invested and have more potential **EQUITY** to invest in new housing options.

15.13 Market Segment

This refers to the aggregate of all properties within a certain Rand value. Properties are grouped by their value to better understand the unique dynamics of these market segments. Values are divided into four bands: values under R250 000; between R250 000 and R500 000; R500 000 to R1.2 million; and over R1.2 million. Generally, properties at or below R500 000 are considered affordable because the estimated monthly housing cost (R15 000 to R16 000) is considered the maximum income eligible for many Government subsidy programmes, above which potential buyers must access the unsubsidised housing market.

15.14 Market Share

Market share is the percentage of a market accounted for by a specific entity in that market. Lending market share is determined by the number of all loans in an area or bond portfolio originated or held by a single institution divided by the total number of bonds in the area or portfolio. Market share can reflect the business model or the prevailing attitudes of particular lenders towards opportunity within certain areas. Lenders track their market share by area and value carefully: too high could mean that they are at greater risk if values decrease, while too low means that the lender may be losing business to competitors.

15.15 Rental Index

A score calculated for each suburb, to measure the potential suitability of local areas for rental housing, as measured by a basket of six indicators which are more favourable towards rental housing. A higher score, between 1 and 10, implies a greater likelihood of success. These indicators include density, the number of households currently renting, area median income, the affordability ratio, households to properties ratio and market growth as measured by the housing performance index. The index gives higher weight to aspects more suitable to rental housing, such as density and income, and moderate weight to the current number of households renting (as reported to the census), the local income as a percentage of the municipal median income, affordability (the relationship between local incomes and sales prices) and the number of households in the area to formal housing units on the deeds registry.

15.16 Suburb

A neighbourhood (within or beyond the central metropolitan area), with an identifiable name, often socially accepted borders and common characteristics. This report uses suburb boundaries as established and demarcated by StatsSA (and referred to in its documentation as sub-places). In 2011, there were about 22 000 sub-places within South Africa.

15.17 Value or Worth

The value of a property as determined by several factors, including recent comparable sales nearby, **CHURN**, lending activity in the area, specific and area property details such as the size, age and amenities. A property's worth is often related to the amount of information available to make an appropriate determination, which is a contributing factor in undervaluing affordable areas where details on formal market activity are inconsistent. This study uses Lightstone's (www.lightstone.co.za) proprietary valuation methodology to determine value.

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Department:
Human Settlements
REPUBLIC OF SOUTH AFRICA



An agency of the National
Department of Human
Settlements

Department of Human Settlement

240 Justice Mahomed Street
Govan Mbeki House
Sunnyside, Pretoria
0002

Private Bag X645 (Minister)
Pretoria
South Africa, 0001

Phone: +27 12 421 1311

Website: www.dhs.gov.za

The Housing Development Agency (HDA)

6 - 10 Riviera Road
Riviera Office Park, Block A
Killarney
Johannesburg, 2193

PO Box 3209
Houghton, South Africa, 2041

Phone: +27 11 544 1000

Fax: +27 11 544 1006/7

Website: www.thehda.co.za