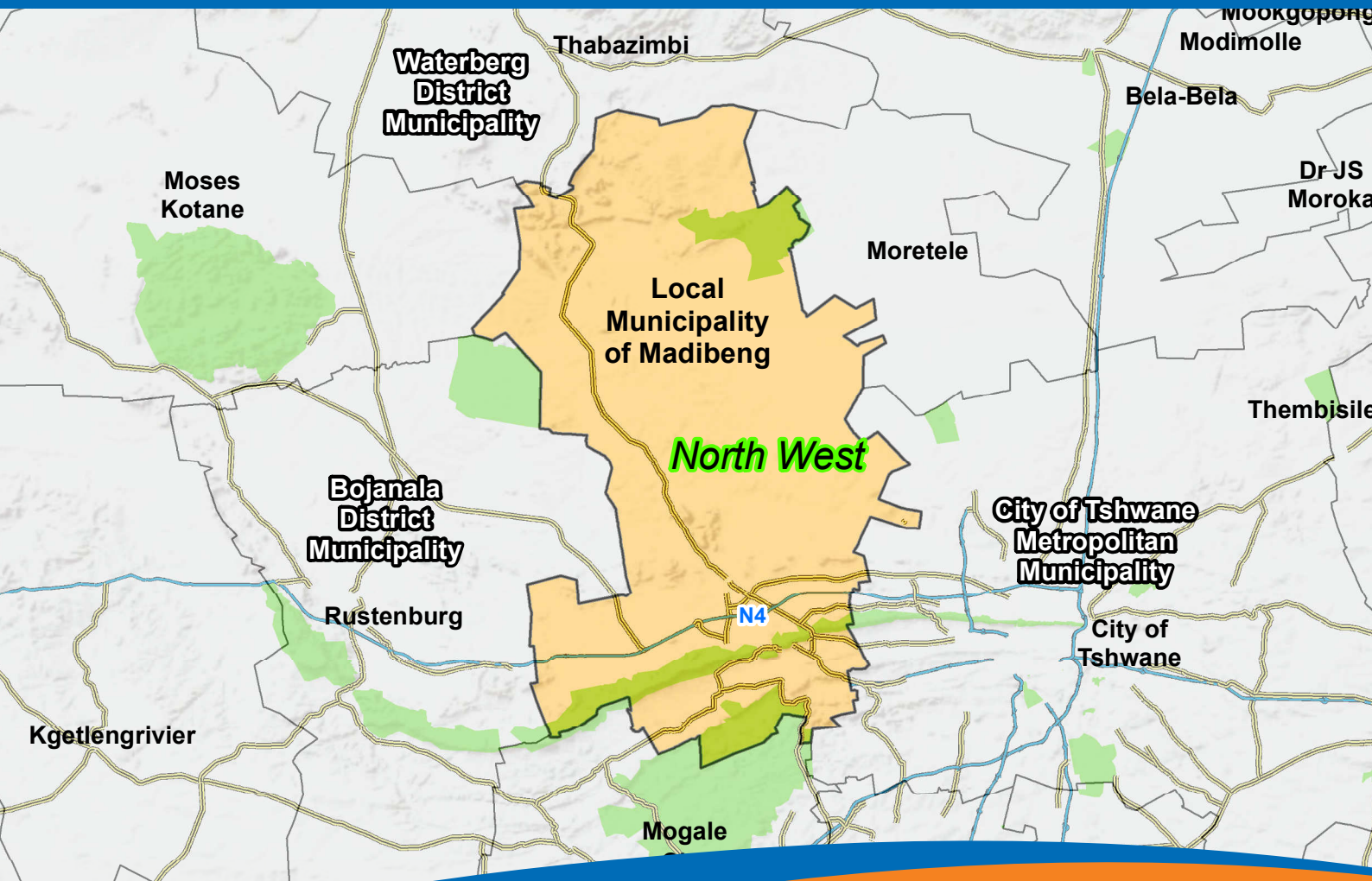
HDA
HOUSING DEVELOPMENT AGENCY
An agency of the National Department of Human Settlements

Working for integration



Madibeng – North West

Housing Market Overview
Human Settlements Mining Town Intervention
2008 – 2013

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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
NU – Non-Urban, a 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

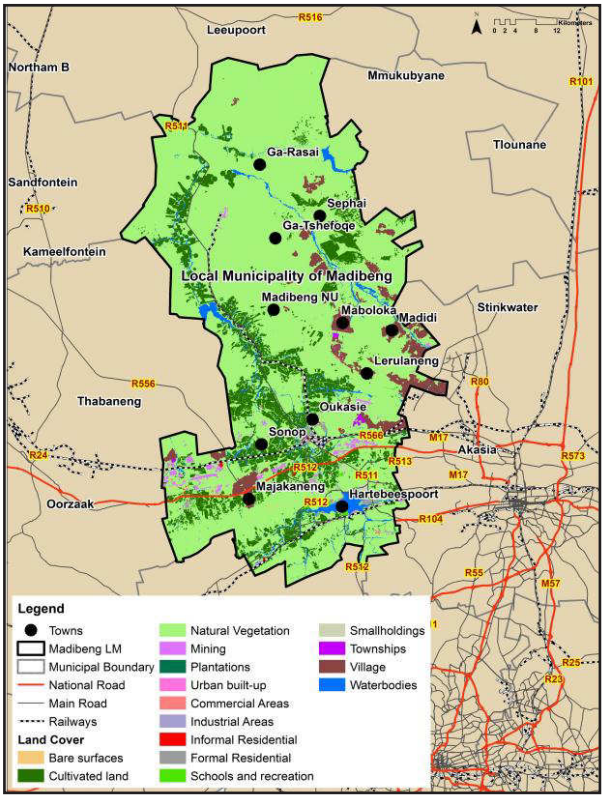
This report relies on the South African deeds registry as the basis for analysing local housing markets. Thus, the report **only measures the formal housing market**, which can be defined as those residential properties which have been formally titled to a specific owner or group of owners. While this 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.

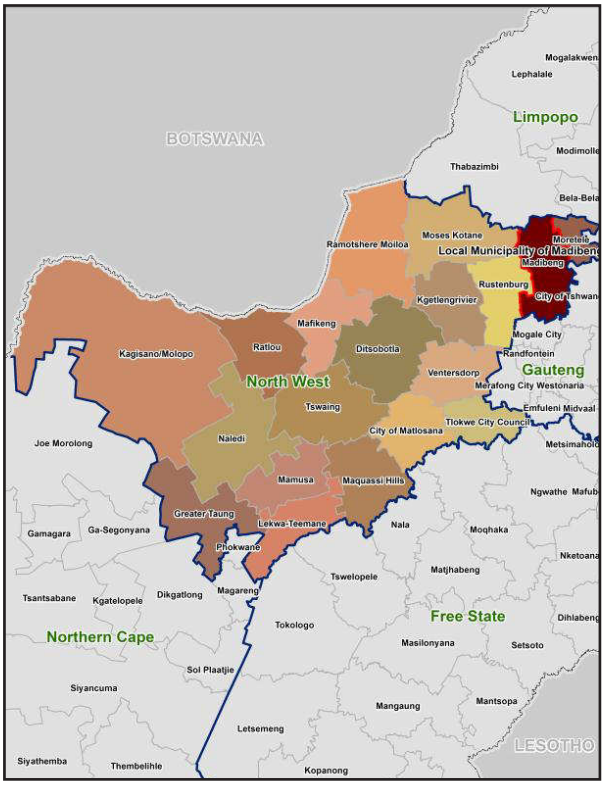
Taking into consideration the housing backlog from StatsSA, informal settlements and human mobility, housing markets are quite fluid and difficult to measure. Understanding housing markets more completely is one advantage of the titling initiatives recommended by many housing policy and planning advocates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





- "The economy of the municipality is reliant on mining, agriculture, manufacturing and tourism. Mining is predominant with Madibeng being the world's third largest chrome producer"
- "Hartebeespoort Dam is the second most visited place in South Africa after the Waterfront in Cape Town"
- "Due to a variety of industries, manufacturing is also viewed as one of the dominant sectors, along with mining"
- "It is strategically located in relation to Gauteng, Limpopo, Harare and the Maputo harbour"
- "Housing is one of the municipality's priorities as it is a major concern that was discussed in the IDP Representative Forum Meeting"

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:

- "Madibeng has a population of 477 381"
- "There was a 3.17% population growth between 2001 – 2011"
- "In 2011, over 30,4% of the population was unemployed and the dependency ratio was 44.4"
- "The mining industry makes up the highest share of the GVA and employment market"
- "There are 160 724 households in Rustenburg, with an average household size of 2,9 people"
- "59,2% live in formal dwellings"
- "27,2% of the households have flush toilets connected to a sewerage system, 22,2% have piped water inside the dwelling, 25,7% have weekly refuse removal and 81% have electricity for lighting"

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).

Madibeng is located in the Bojanala Platinum District within the North West Province between ancient Magaliesburg and the Witwatersrand mountain range. Mining is presently predominant with Madibeng being the world's third largest chrome producer and includes the richest Platinum Group Metals Reserve. The municipality's neighbouring towns include Pretoria, Johannesburg, Rustenburg and Krugersdorp, which are easily accessible through major road networks.

4.1 Mining Industry Profile

- "There are more than 45 mines identified in the Madibeng area"
- "The rich Platinum Metals Reserve is found on the southern part of Madibeng and is highly valuable in a mining perspective"
- "The mining in the area also affects tourist attractions as granite hills are being destroyed"

4.2 Housing in the Mining Sector

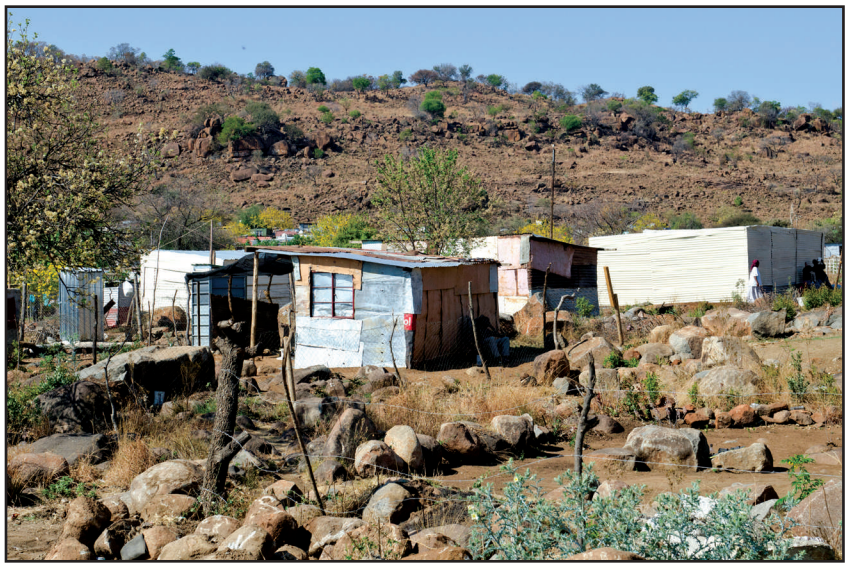
The remote locations of many mining operations means that mining companies have long histories of providing housing solutions for their employees, from executive management to miners. Different approaches to housing policies vary and are not discussed in specific terms. The knoweledge of the general 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. Thus, the housing markets within each town are driven largely by the business model of the specific mine company, rather than more familiar housing market dynamics. 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.

Madibeng is part of the Platinum Corridor which has the richest and most sought after platinum and chrome resources in the world, produced by various mining companies, namely: Xstrata; an Anglo American company; Aquarius Platinum. Their mine housing policies outline the following:

- "Aquarius Platinum offers a number of different housing options, ranging from housing allowances to houses built for employees"
- "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"
- "Xstrata has eliminated hostels and unsustainable ´mine villages'"
- "XCSA pays industry leading "living out allowances" (about R2000 per month) which are intended to offer employees with flexible housing options throughout the area"

5. Context: Housing

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



5.1 Housing Challenges:

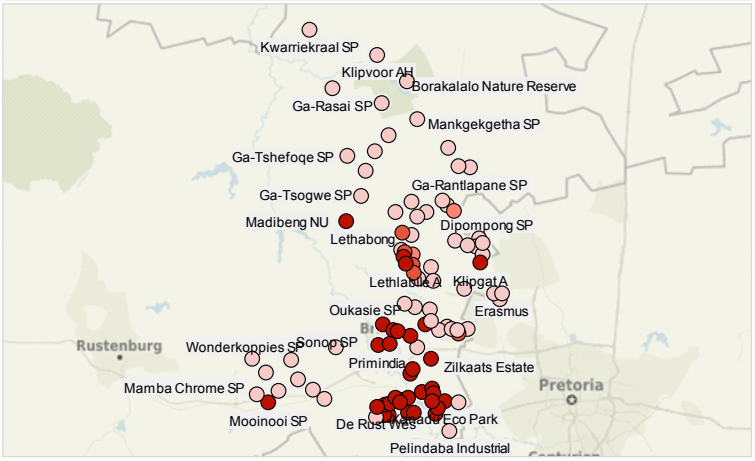
- "Migration from the cross-border areas from the north adds significantly to the housing need and the development of water and sanitation infrastructure"
- "The primary backlog in housing provision is due to unregulated settlement expansion"
- "Illegal occupation of RDP houses"
- "9 blocked projects which are as a result of the province not approving beneficiaries in time"
- "Request for more RDP houses"

5.2 Housing Strategies:

- "Expedite the implementation of all projects currently classified as 'blocked projects'"
- "Creation of sustainable settlements through integrated housing planning and delivery"
- "Eradication of informal settlements with on-going monitoring of informal housing areas"
- "Improve housing delivery and provision of range of tenure options"
- "Eradicate informal settlements with on-going monitoring of informal housing areas"
- "The municipality will, over the timeframe of its multi-year plan, take steps to initiate township establishment with a view of providing formal tenure arrangements"

6. Context: Market Reports

HDA Mining Town reports market coverage
Madibeng, Data by suburb of census and formal deeds registry data, 2013



Source: *Stats SA Census, 2011, South African Deeds Registry via Lightstone (Pty) Ltd, 2015.*

Data coverage
1 4

Madibeng Housing Market Report Coverage		
Total Census Subplaces (SP's)	104	
Total SP's with registered residential properties	42	40%
Total SP's with sales	40	38%
Total SP's with bonded sales	34	33%

Market Area by the Numbers	
Suburbs	104
Suburbs with residential properties	42
Households	1 60 724
Residential properties	32 345
Housing Backlog	N/A
Backlog as percent of all properties	N/A
Households to properties ratio	4.97
Average monthly income	R 12 600
Average property value	R 757 700
Average sales price	R 783 000
Total residential value	R 24.5 billion

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

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.

7. Key Findings: Housing Market Overview

The Madibeng **housing market experienced average growth during 2013 compared to all mining towns,** which is likely due to new growth and expansion of the mining sector and jobs in the chrome sector and the increasing urbanisation of previously undeveloped or rural areas within the municipality. In 2013, Madibeng was one of 5 affordable (under R500 000) markets doing better than their town overall. Madibeng's high growth in 2013, in the affordable housing markets, creates an opportunity for markets to be carefully assessed in order to best position the continued wave of growth.

Madibeng's affordability ratio of 2.4 is lower than the national average of 3 and the mining town average of 2.8. This is due, in part, to its below-average monthly income. There remain large disparities among incomes and affordable housing access in many areas within the municipality. This may prioritise housing strategies and solutions which propose creative financing tools and techniques to reduce financial barriers (such as down-payments, interest rates and principal requirements) as well as unlocking equity, rather than simply trying to push costs down.

Within Madibeng, 20% of all registered residential properties are Government-sponsored, **that is facilitated through a development initiative such as RDP.** 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. Average equity in these areas increase 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 low-cost acquisition loans.

The area has very little diversity and integration of housing values and property types, which suggests **a market which could be expanded to meet a wider range of needs and expectations.** 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.

Madibeng has experienced an increase in non-traditional lenders, which accounts for more than double the amount of all new lending in the municipality in 2013. With the presence of hundreds of RDP units, it will be an important strategy to encourage traditional and new lenders to develop creative loan programmes targeting those homeowners in order to make it easier for them to sell their homes, unlock the value of those homes and allow owners to move up the housing continuum.

The **opportunity for rental housing development within Madibeng is strong within specific areas.** Data indicates that 29% of households are renting. 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

The Madibeng **housing market experienced stable growth in 2013, compared to all other mining towns,** which is likely due to new growth and expansion of the mining sector and jobs in the chrome sector and the increasing urbanisation of previously undeveloped or rural areas within the municipality.

In 2013, Madibeng had one of only 5 affordable (under R500 000) markets doing better than their town overall. Madibeng's high growth in 2013, in the affordable housing markets, creates an opportunity for markets to be carefully assessed in order to best position the continued wave of growth. There is very little diversity in terms of housing options' distribution across the municipality.

8.2 Policy Implications

With a market growing as quickly as Madibeng, **meeting housing demand** will be a crucial factor in stabilising the town through this period of growth. In slow-growth neighbourhoods, where most of the lower-priced housing currently exists, housing will need to 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 metro.

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 metro 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).

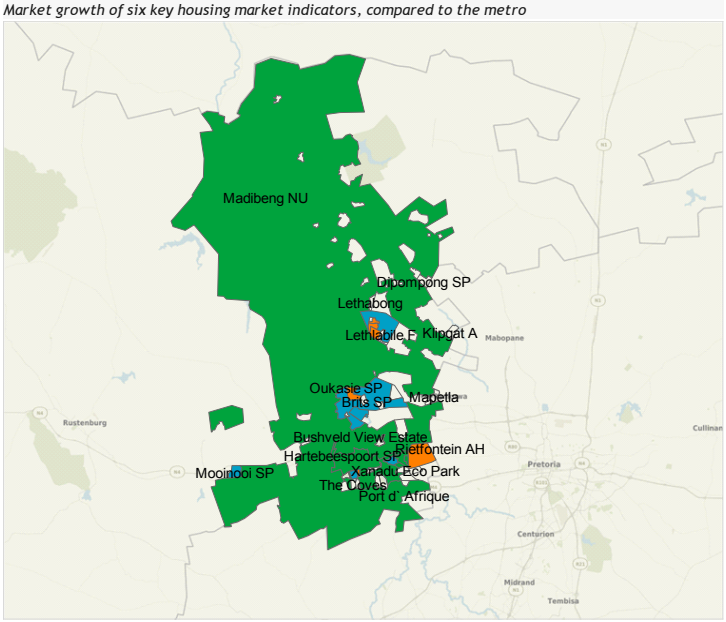
Housing Continuum: a range of housing options which are available to a wide range of income levels, budgets, housing types and ownership opportunities.

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 divided by the total number of properties.

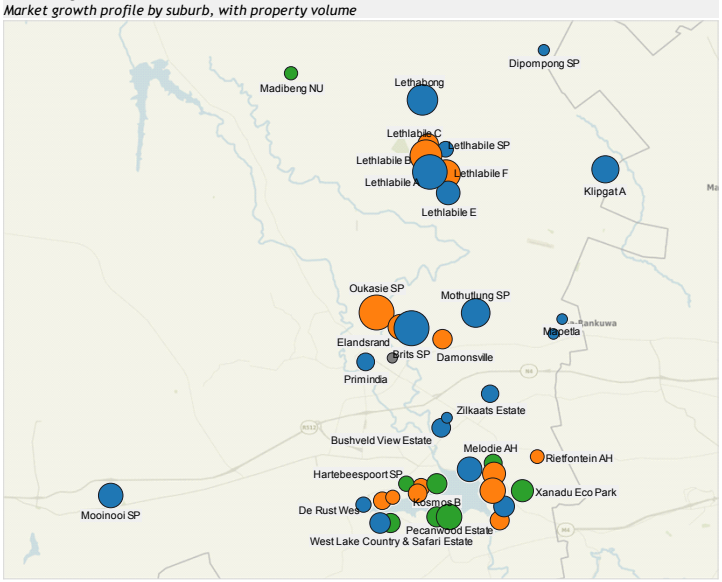
Housing Performance Index
Madibeng, 2013
Market growth of six key housing market indicators, compared to the metro



Source: *Centre for Affordable Housing Finance in Africa, 2015. All indicators reflect formal market data as reflected on the deeds registry.*

Housing Performance Profile
- Growing
- Stable
- Slow
- Null

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



Source: *Centre for Affordable Housing Finance in Africa, 2015. All indicators reflect formal market data as reflected on the deeds registry.*

Total Residential properties
- 0
- 1 000
- 2 000
- ≥ 3 000

Housing Performance Profile
- Growing
- Stable
- Slow
- Null

8.4 The Housing Performance Index (HPI)

This map identifies the Housing Performance Index by suburb (top) and total residential properties (bottom), 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.

CAHF Housing Performance Index

Indicator	Measured	Implies	Weight
Price	Average sales price	Appreciation	25%
Value	Average property value	Appreciation	25%
Transac-tions	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

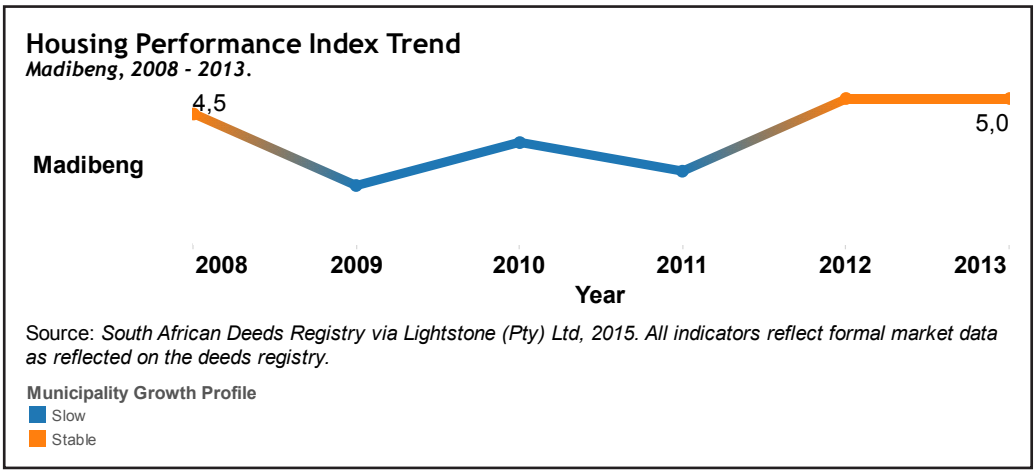
These charts provide the housing performance index by suburb, over time, using the six key indicators (price and value appreciation, sales and bonded sales, churn and new properties). Growth is relative to the metro (and change from the preceding year), so it is important to compare these lines to the area's overall performance and the direction in which the trends are headed. The city's growth overall (below) appears to be on a solid upward trend, as compared to the province.

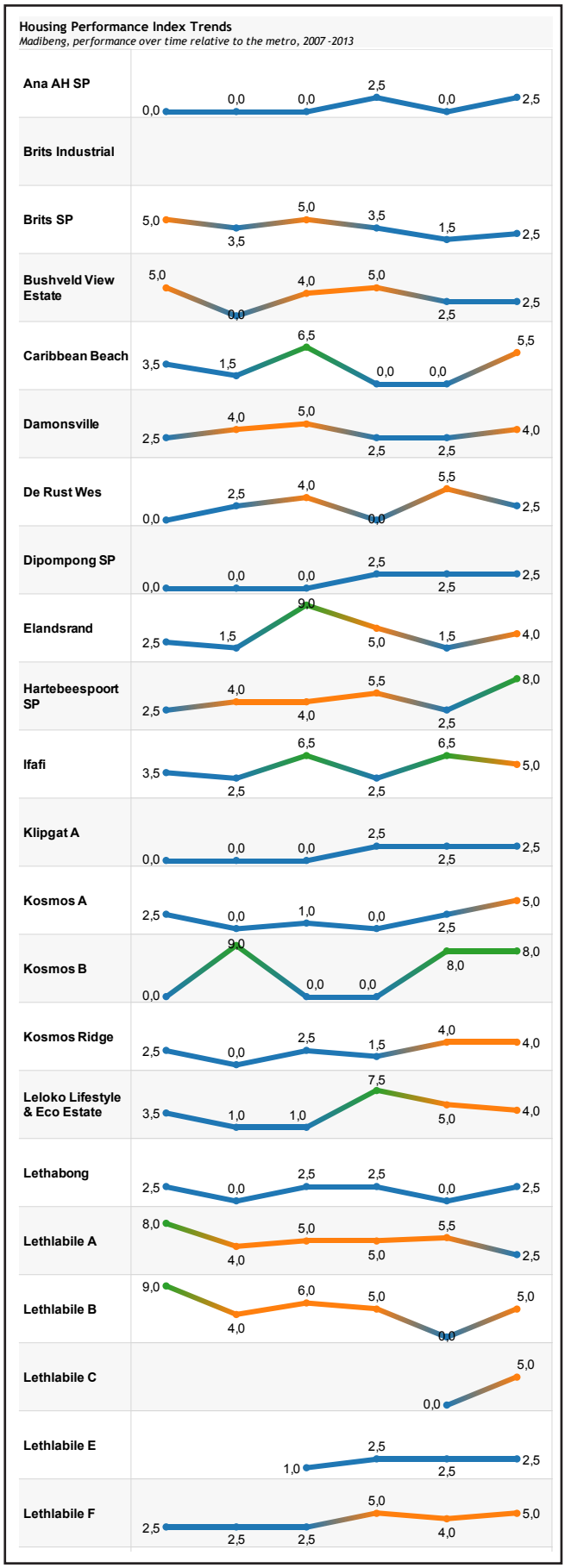
While most areas are experiencing either stable or slow growth, some housing markets grew in 2013 compared to the prior year (those places where the growth profile score was greater in 2013 than 2012), such as Hartebeespoort SP, Lethlabile B and C and Melodie and Melodie AH. The resurgence of mining in neighbouring towns and the mining sector may have restarted the overall market growth.

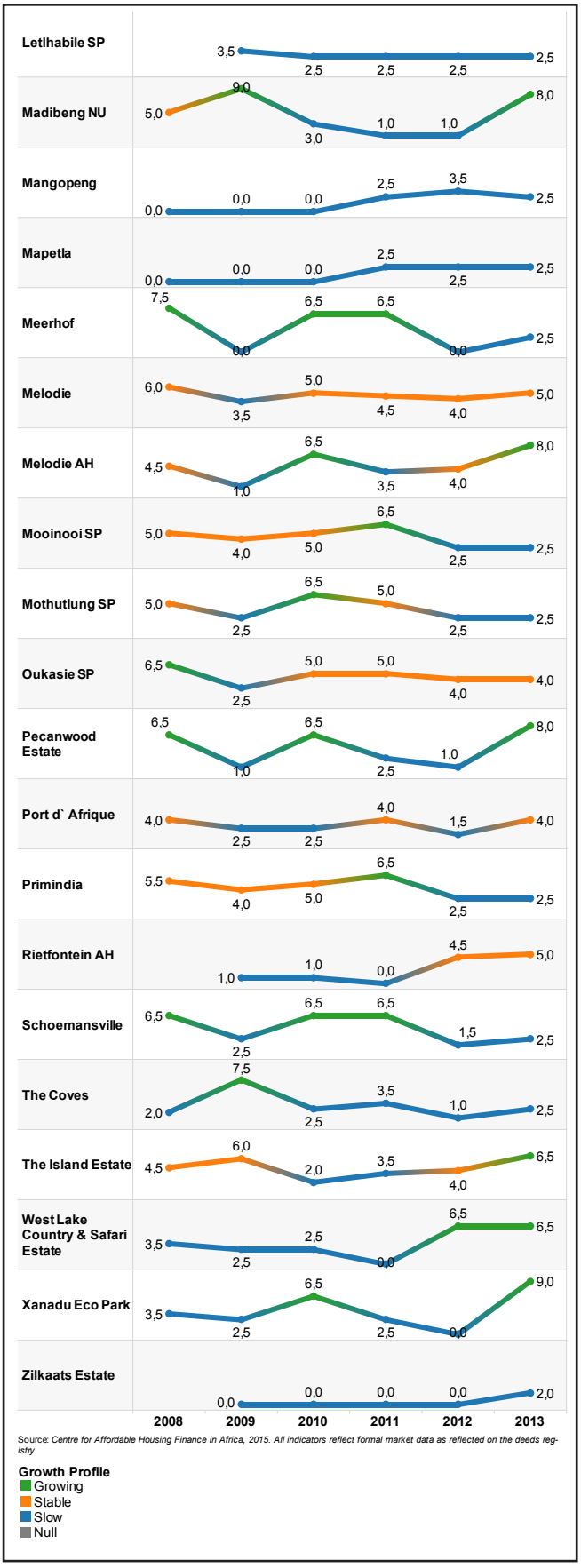
Madibeng has experienced more stable growth compared to the province.

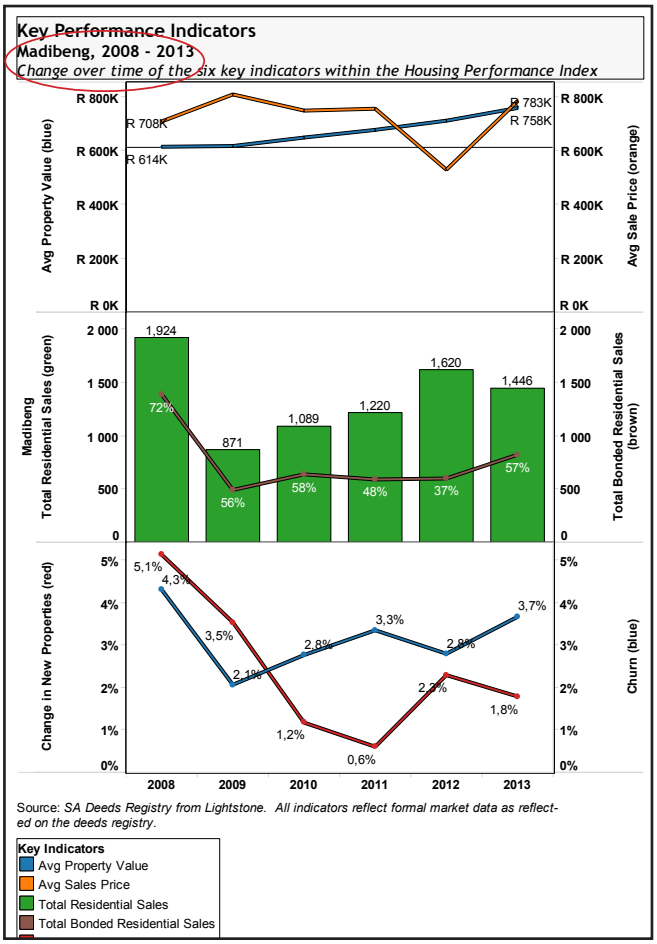
In considering development investment over the long term, stability of growth is often a more important consideration, when projecting future performance than high growth. The Building of housing opportunities between areas of high and low growth can better integrate housing markets overall. This information can help inform one how to create a more cohesive and stable housing continuum, with fewer spikes and drops – and where to begin.

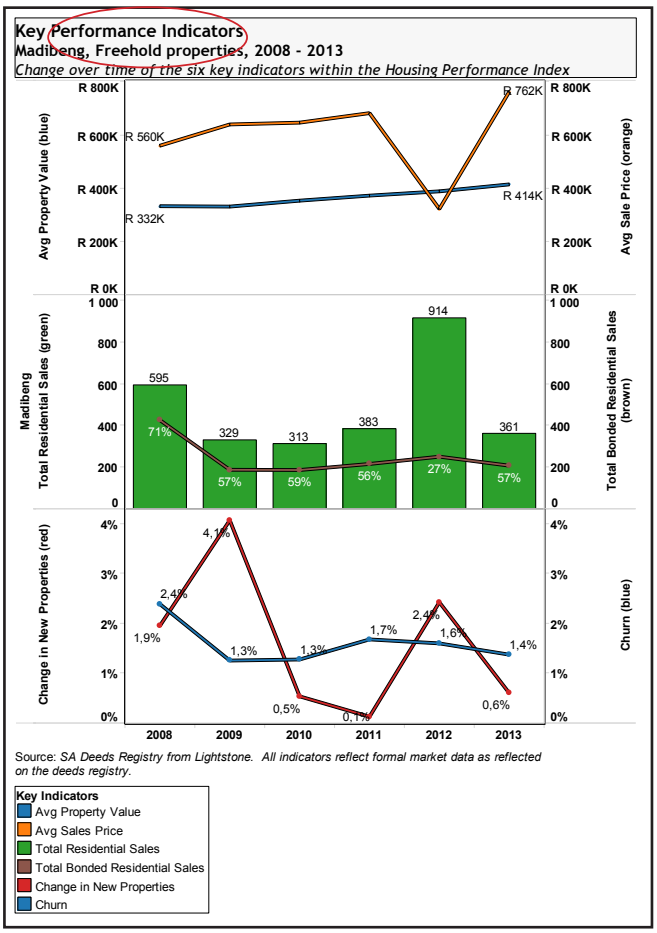
Areas with no data have no residential properties or sales, such as farms or open space, mines or industrial uses like power generation.




Housing Performance Index Trends
Madibeng, performance over time relative to the metro, 2007 -2013
Ana AH SP
Brits Industrial
Brits SP
Bushveld View Estate
Caribbean Beach
Damonsville
De Rust Wes
Dipompong SP
Elandsrand
Hartebeespoort SP
Ifafi
Klipgat A
Kosmos A
Kosmos B
Kosmos Ridge
Leloko Lifestyle & Eco Estate
Lethabong
Lethlabile A
Lethlabile B
Lethlabile C
Lethlabile E
Lethlabile F


Letlhabile SP
Madibeng NU
Mangopeng
Mapetla
Meerhof
Melodie
Melodie AH
Mooinooi SP
Mothutlung SP
Oukasie SP
Pecanwood Estate
Port d` Afrique
Primindia
Rietfontein AH
Schoemansville
The Coves
The Island Estate
West Lake Country & Safari Estate
Xanadu Eco Park
Zilkaats Estate
2008
2009
2010
2011
2012
2013
Source: Centre for Affordable Housing Finance in Africa, 2015. All indicators reflect formal market data as reflected on the deeds registry.
Growth Profile
Growing
Stable
Slow
Null



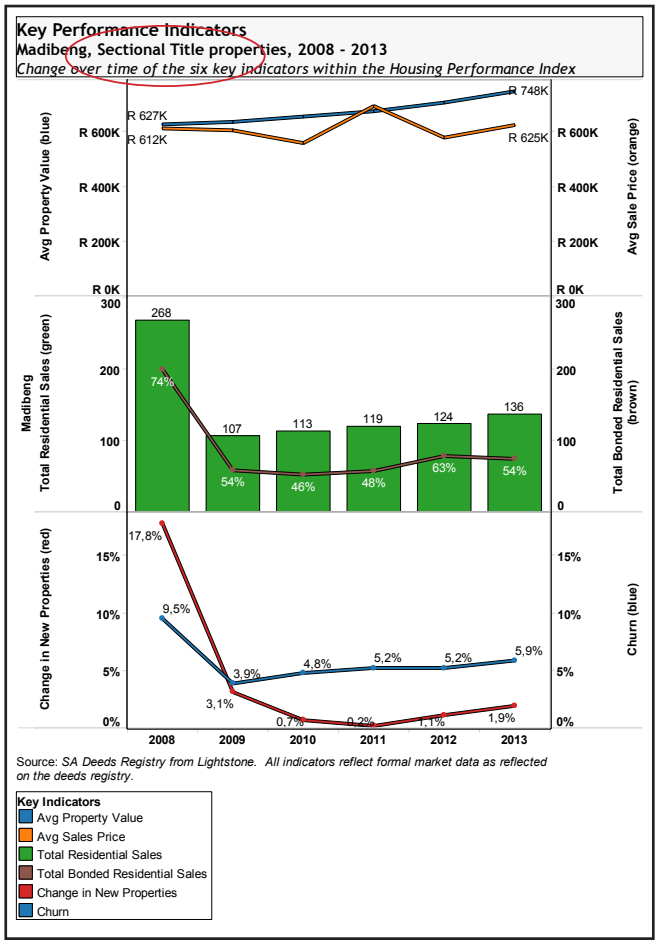


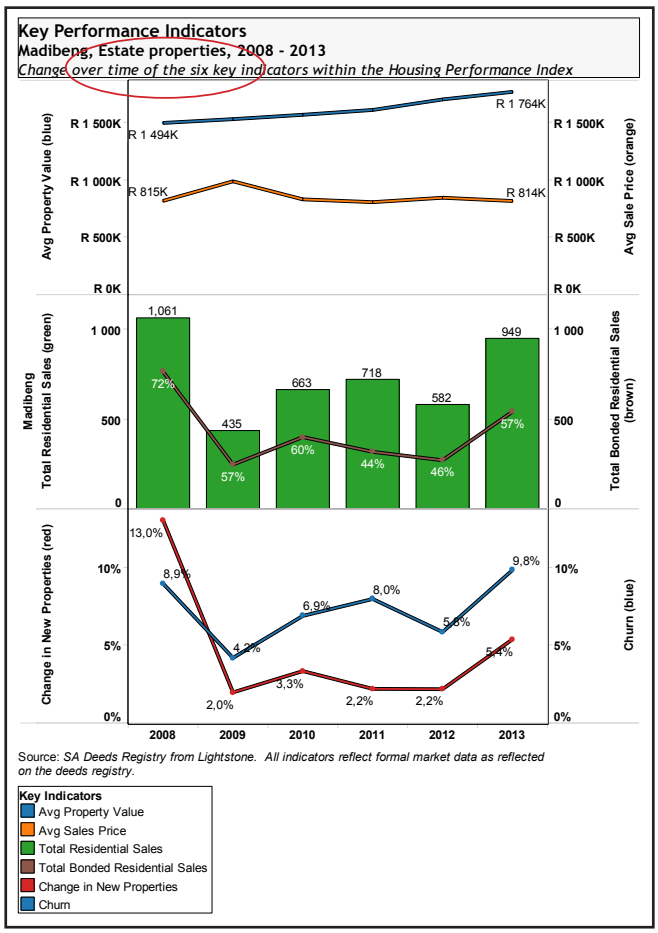
8.6 Housing Performance Indicators

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.

These charts compare the performance of three ownership types, namely freehold, sectional title and estate ownership. Sales more than halved in 2009 compared to the previous year. They did, however, continue to sell above their value until mid-2011. **The number of sales dropped by almost 200 in 2013 – though bonded sales increased by 20%. Overall, bonded sales dropped from 72% of all sales in 2008 (brown line) to 57% in 2013.**

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 increased (blue line), indicating growing turnover of existing homes over time as well, except for freehold properties which have dropped quite significantly.





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). **Madibeng's sectional title property values are generally above the average sales price. The sectional title market has experienced a drop in sales and bonds since 2008. Bonded sales dropped from 74% in 2008 to 54% in 2013.** However, churn rates (blue line) have been steadily increasing since 2009.

There is an active estate property market, which in all years except 2009 and 2012 represented more than half of all sales in the town this is likely to be the sale of the units which were registered in 2008 (the red line spike). Estate properties are experiencing the greatest increase in market activity, however, average sales prices are trending significantly below property values.

Lending is instrumental in the growth of housing markets and the ability to access bonds to buy estate properties has driven the growth of this housing type. The high percentage of bonded properties in 2013 might be due to a slight lag in recording bonds from the sales in the prior year. The high increase in churn (blue line) from 2012 to 2013 is a good indicator of high turnover of existing homes over time.

9. Market Size

9.1 Market Size: Key Findings

Madibeng'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 highly segregated between higher-priced, actively selling private growing markets in the south, lower income in the north, non-bonded Government-sponsored developments and informal settlements (not on the deeds registry).

The implied demand for housing is high. According to the IDP, 30% of the Madibeng population resides in informal 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

Governments can use this existing investment to identify areas of future development and entice private sector participation. 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 when 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.

Encouragement of 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 grouped 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.

Government-sponsored Housing: housing which was created through some Government intervention, from site and infrastructure provision, direct construction or finance such as Site & Service, RDP and BNG. While these homes are not recorded as such on the deeds registry, their presence is estimated based on surrounding registrations, timing, prices and volume of activity.

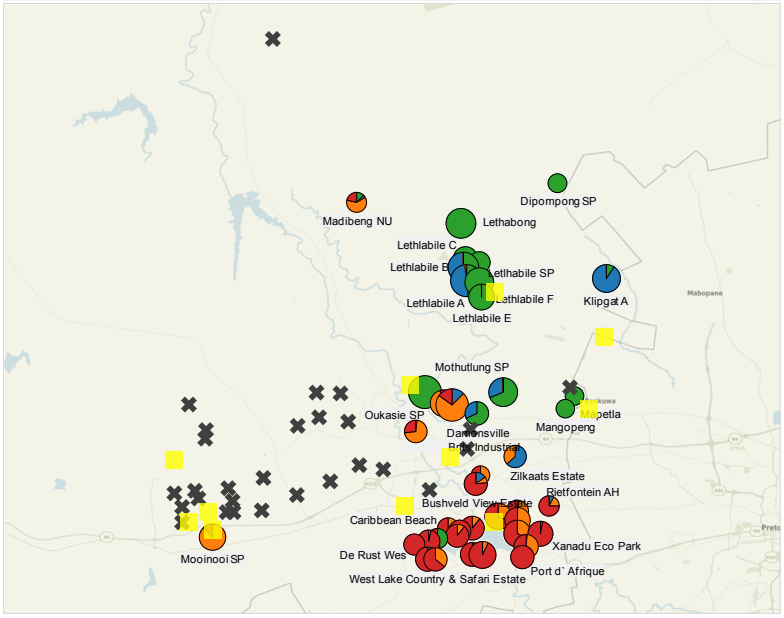
Freehold / Full Title: a permanent and absolute tenure of land or property by a person or entity (such as a corporation or trust) with freedom to dispose of it at will. Freehold or Full Title describes the assumption of full ownership rights when one owns a property, often including the building and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

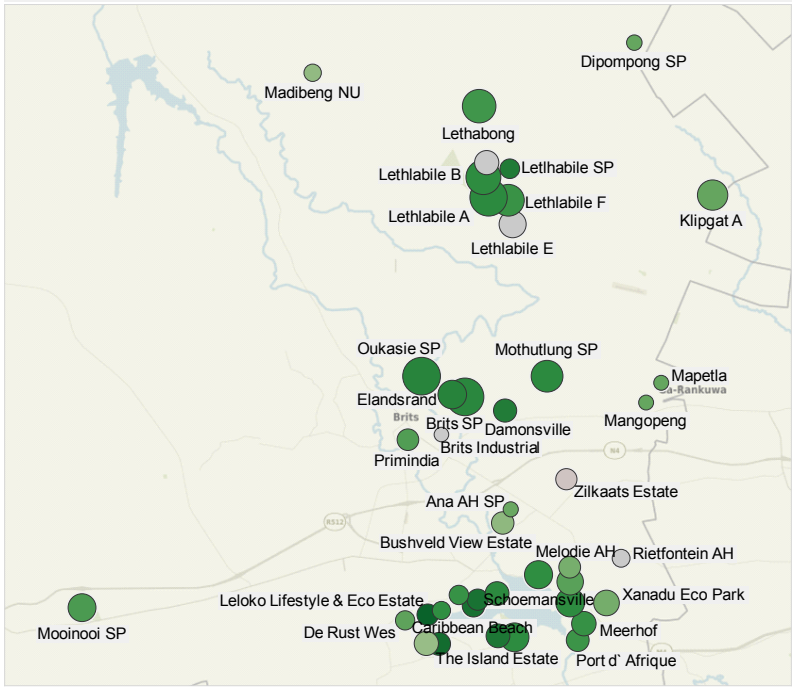
Distribution of Properties and Values by Suburb
Madibeng, 2013
Formal residential properties, informal settlements and mines, by suburb



Source: *South African deeds registry via Lightstone (Pty), Ltd; Housing Development Agency informal settlements and mines.*

Number of Residential properties: 0, 5 000, 10 000, 15 000
Type: Informal Settlement; Mines
Affordability: Under R250k; Between R250k - R500k; Between R500k - R1.2m; Over R1.2m

5 Year Equity Growth
Madibeng, 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.*

Total Residential properties: 0, 1 000, 2 000, ≥ 3 000
Avg value of Equity: -1,13% – 68,29%

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. Comparing the distribution of values to the housing performance map, several moderate income areas are growing faster than the municipality.

In Madibeng, properties with lower values are concentrated mostly in the north of town, away from transit corridors – where they coincide with Government investment in housing (map two). It is a very positive fact that **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. Interestingly, most informal settlements are located south of the town where there are high volumes of properties valued above R500 000 and active mines.

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 (see below), 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.

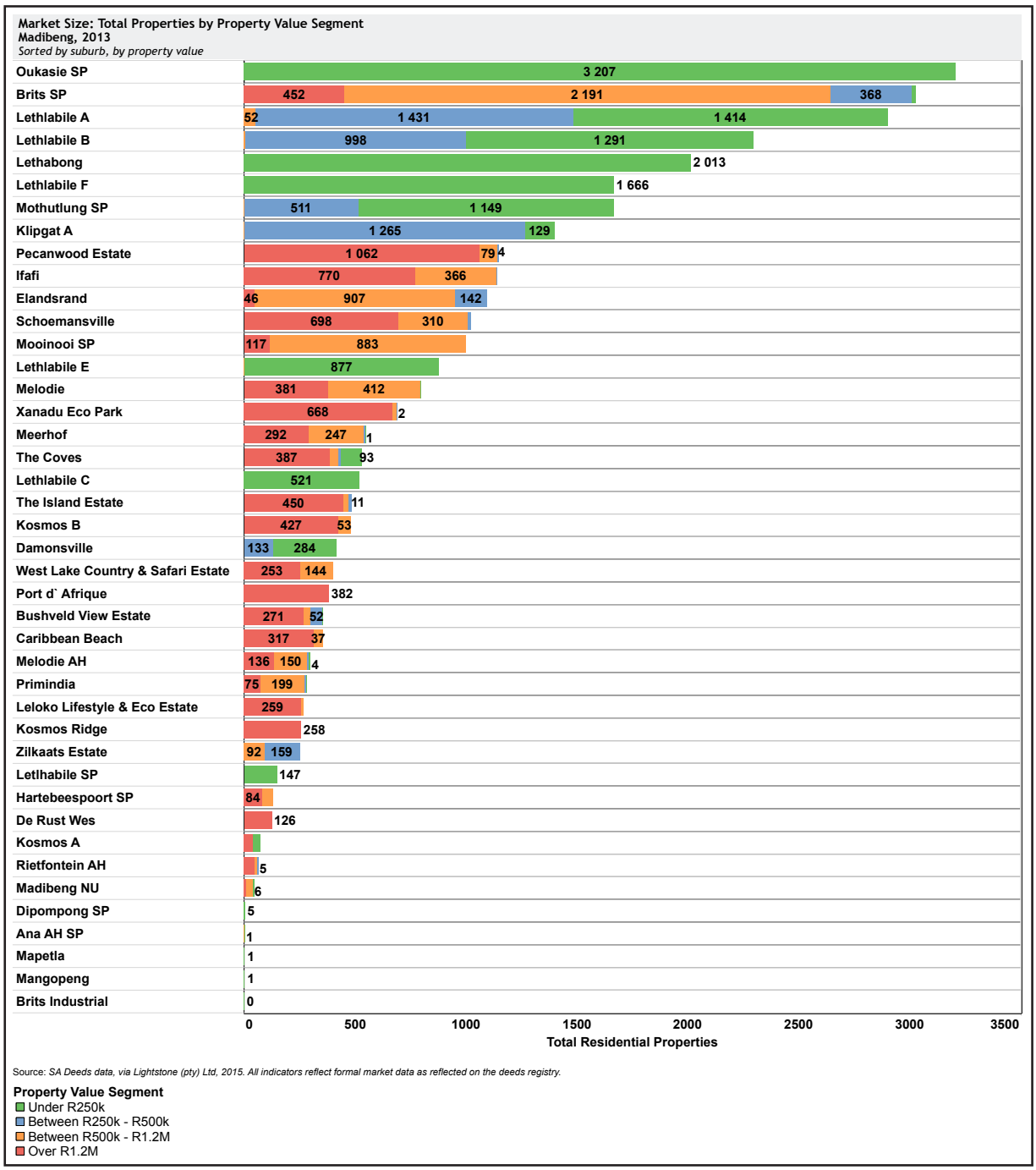
9.5 Market Size by Value Segment

These charts provide the total properties within each suburb by property value segment: below R250 000 (which includes most of the Government-sponsored housing); between R250 000 – R500 000; between R500 000 and R1.2 million and over R1.2 million).

Madibeng has both concentrated and segregated property values in various suburbs. Two areas (Kosmos Ridge and Port d'Afrique) have only the highest (red bar /over R1.2M) property value segments, while 6 areas have only the lowest (green bar (under R250 000) property value segments, further indication the market segregation of the town.

In small housing markets, Government interventions and programmes must be more targeted, as their impact will be greater on the market overall.

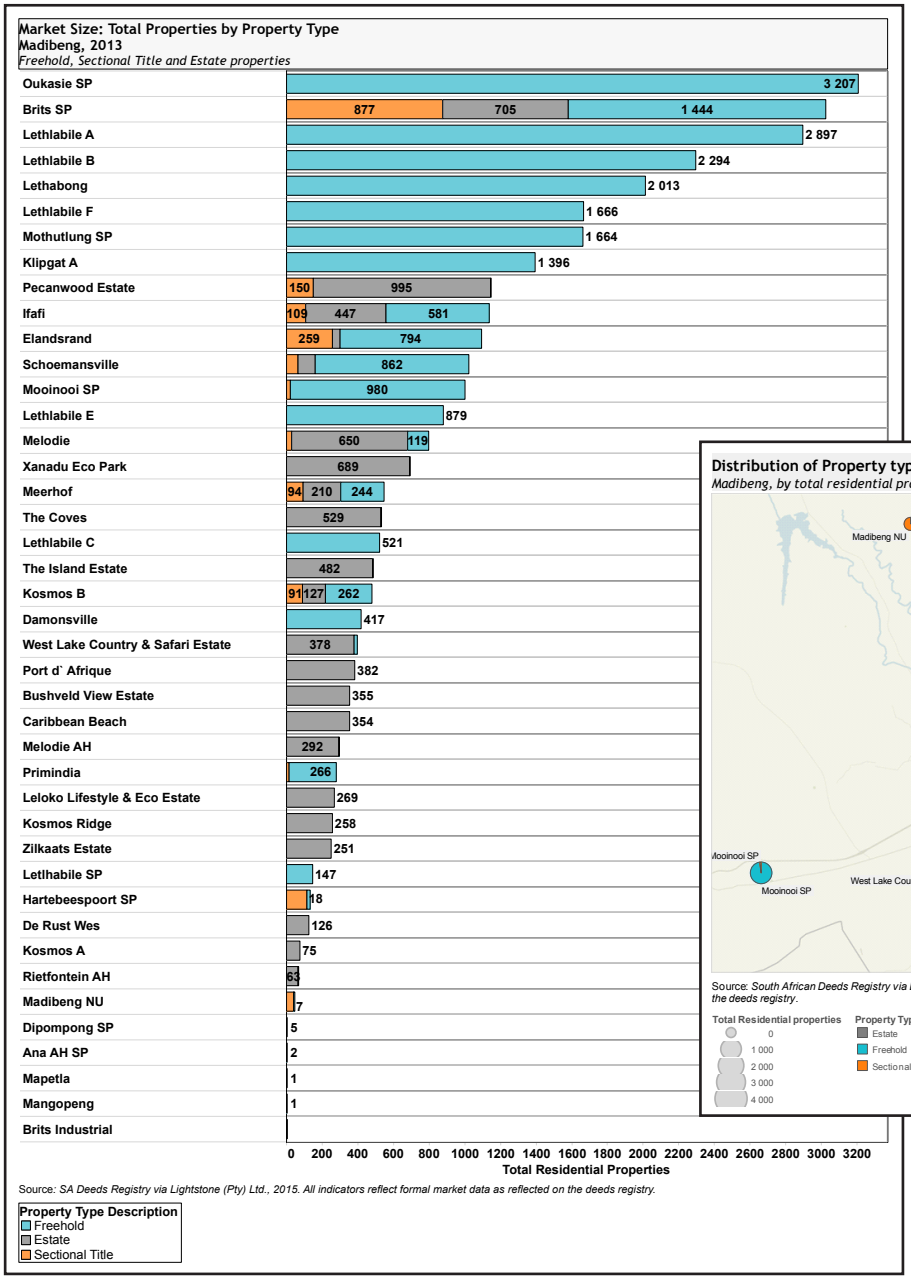
A diverse approach to housing options for mine employees may help to expand the diversity and distribution of housing options across town. Placing these housing options in between isolated suburbs can help bring markets together.

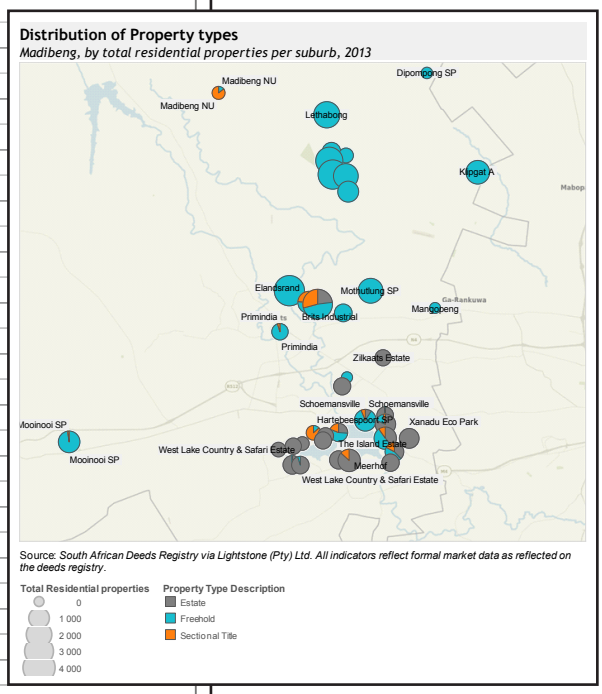


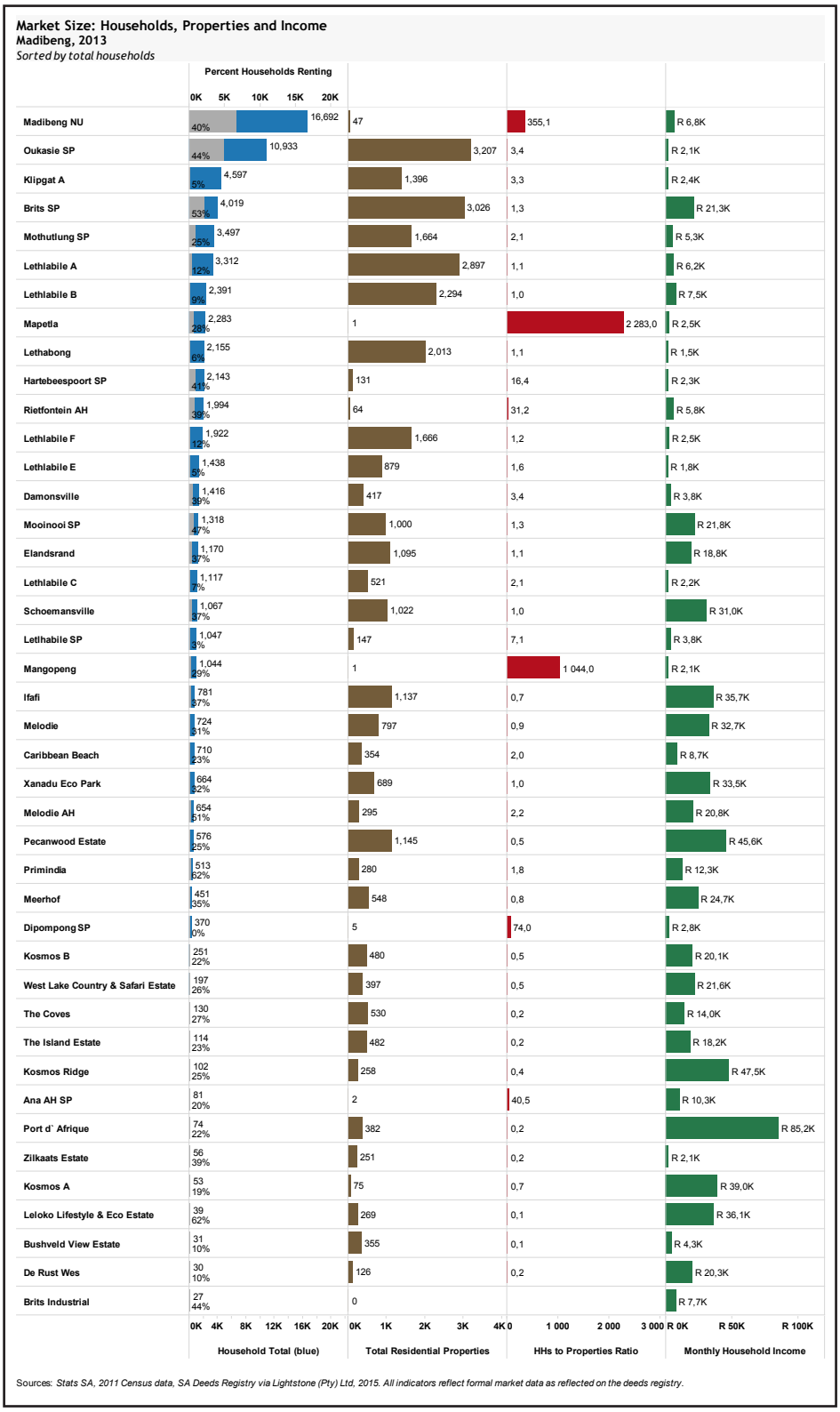
9.6 Market Size by Property Type

Madibeng residential properties are mostly freehold with a significant estate property market. Estate properties are concentrated in the south of town.

Sectional title properties are mostly in the south with a couple in the middle and one in the north of the town.







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

9.7 Market Size by Households and Income

The understanding of the distribution of households and incomes within Madibeng 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.

With 161, 700 households, Madibeng is the second largest mining town studied. According to census, almost 30% of all residents in Madibeng rent – close to the 31% overall average. Areas with high levels of renters (grey bars) **also very often have the highest household incomes, however in the case of Madibeng, the opposite is true – the highest incomes have lower rental levels** (such as Port d'Afrique and Kosmos A). We suggest these renters might be the combination of higher-income executives who rent (instead of own) their homes and support staff who rent nearby in backyard accommodation.

Areas with above-average renters and moderate incomes (Madibeng NU and Zlikaats Estate) might display families ready for more formal rental options.

Ratios of households (from StatsSA) to properties (from the deeds registry) – the red bar – can show degrees of limited supply or informality. The informal settlements in Mapetla and Mangopeng have high populations, few registered properties and low incomes. The suburb with the highest number of households, **Mapetla (with almost 2300 households) only has a single registered property in the area.**

10. Market Activity

10.1 Key Findings

Sales of units are concentrated in southern located suburbs, in mostly higher-income areas. Sales dropped across the Country after 2008 and have picked up slowly afterwards in Madibeng, mostly in upper-middle-priced housing.

Despite a significant portion of the overall property sales market, lower market bonded sales are a very small portion of bonded sales overall. Sales continue to be dominated by repeat sales and some new housing sales. Property value (the home's worth) and sales prices are closely related in active markets. 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 either 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 grouped 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.

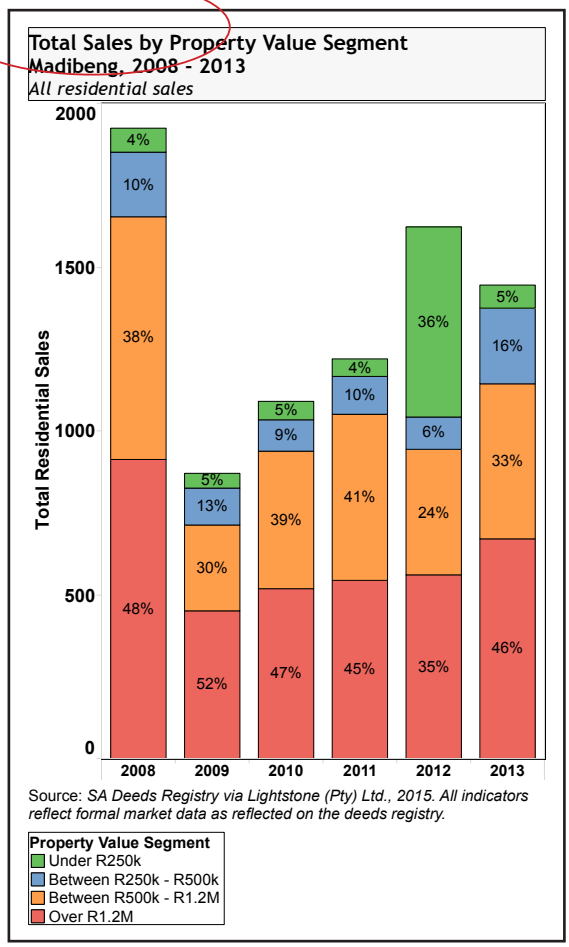
Bonded Sale: a transfer of deed on the deeds registry with an associated bond from a lender, including the property as collateral for the bond.

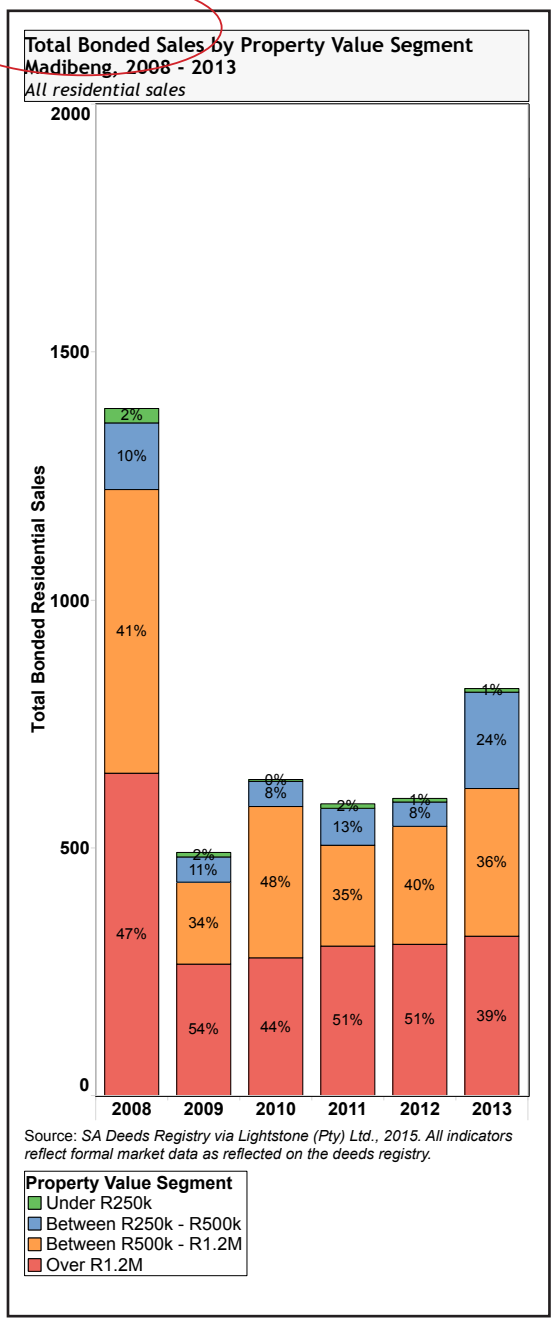
New sale / New Registration: the appearance of a residential property on the deeds registry for the first time. It might include new construction or previously existing units being recorded for the first time (such as previously built RDP homes).

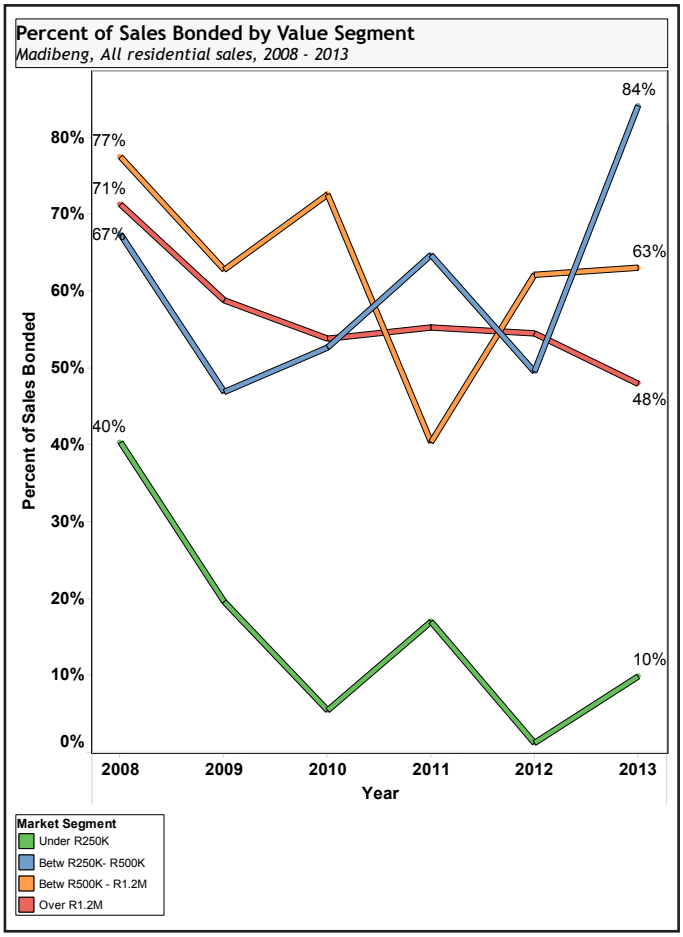
Resale / Repeat Sales: the sale or transaction of a property which has existed on the deeds registry before (as opposed to a new sale or new registration).

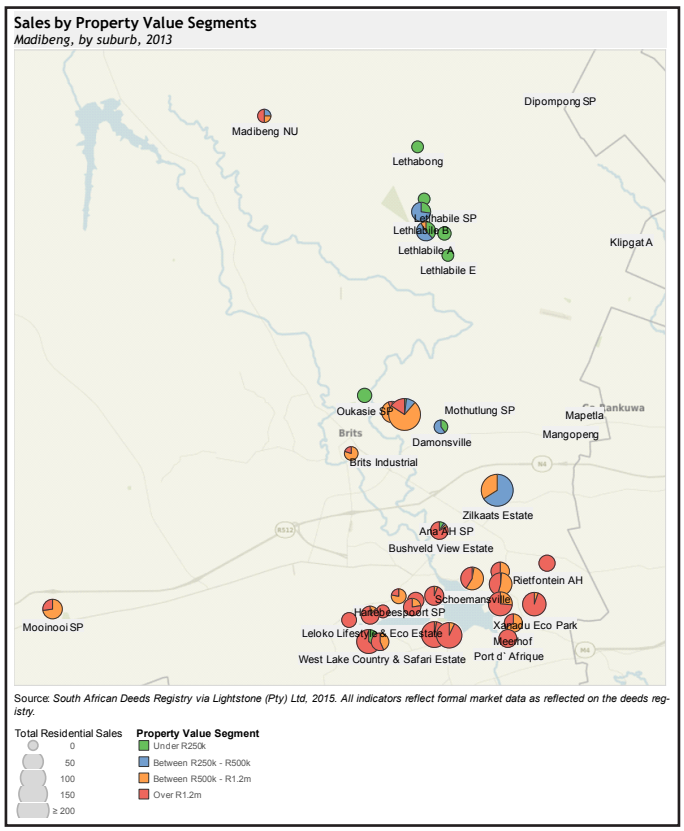
10.4 Sales and Bonded Sales by Property Value Segments

About 80% of all residential sales and 86% of bonded sales in Madibeng have been over R500 000 (the red and orange sections). Market share (the portion of the total) by property value segment has changed since 2008, suggesting an evolving housing market. 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 sales under R500 000 has increased over time, from 8% of all sales in 2010 to 25% in 2013.** This might be due to increased credit availability, or greater access to affordable homes to buy in 2013. 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 more dramatic.

Overall, the total sales receiving bonds in Madibeng went down over the six year period, but the drop was not evenly experienced across all property values. The R250 000 – R500 000 value segment is the one that experienced growth over the same period – growing by 17%. The lowest value segment (the green line) experienced the greatest drop, ie. 30%, in bonded sales since 2008, perhaps due to lack of access to credit or decreased supply of housing that falls within this segment. The upper property value segment, however, is the only one that experienced decreased levels of bonds in the past year, perhaps due to lack of new housing being offered for sale.

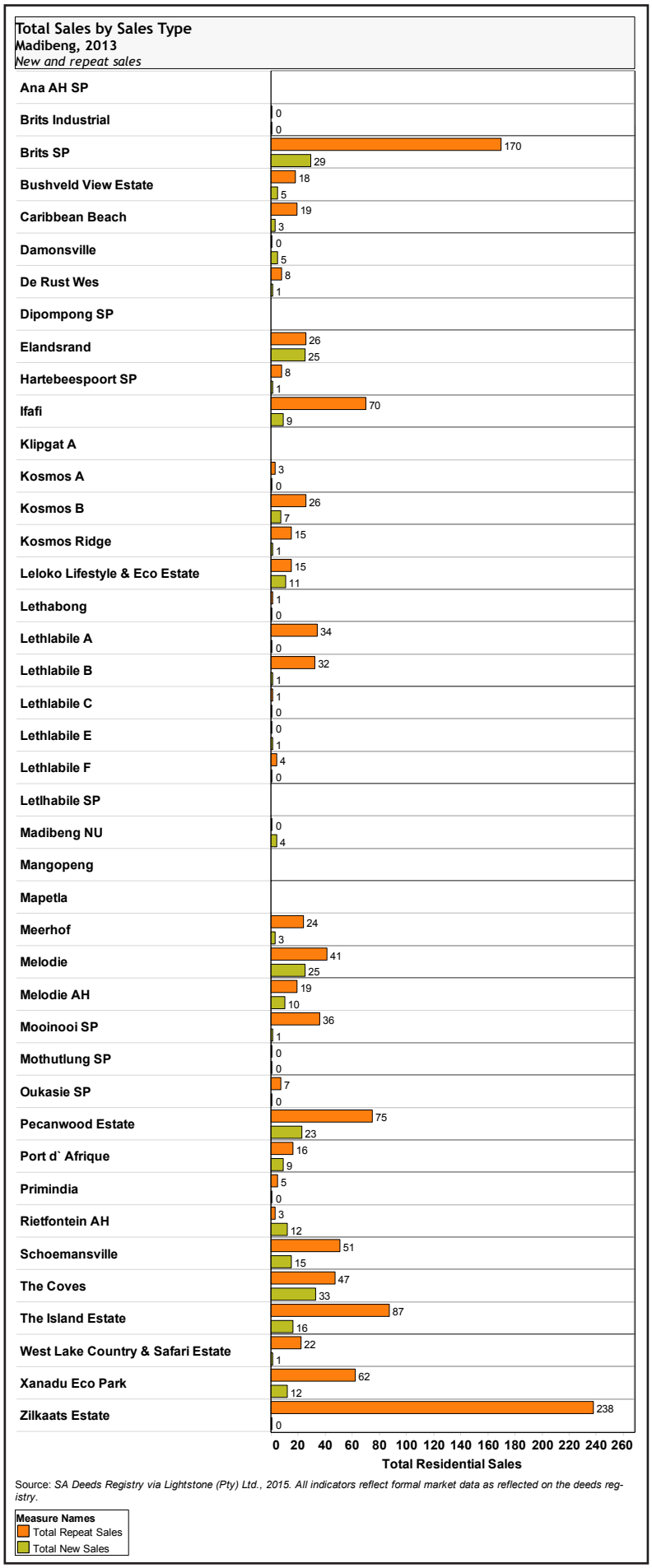
The lower middle (blue line) properties experienced the highest growth overall and appear to be on a steady upsurge.

The upper **tiered properties more closely reflect the activity of overall bonded sales rates across the Country.** Mid-range bonded sales experienced high spikes contrary to the other property segments since 2008, and currently appear to have an upsurge in bonding. Increasing access to bonds increases sales activity.

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 (the slices of pie). Most sales took place in the south east of town and surrounds. The higher-valued properties in the red and orange saw most activity, but some lower-priced homes (green and blue) also saw registered sales activity, a potential sign of active (increased) supply and steady demand.

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 key to 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. **The new sales in Madibeng appear to be spread out across various suburbs, although most of the areas are concentrated within the south of town.**

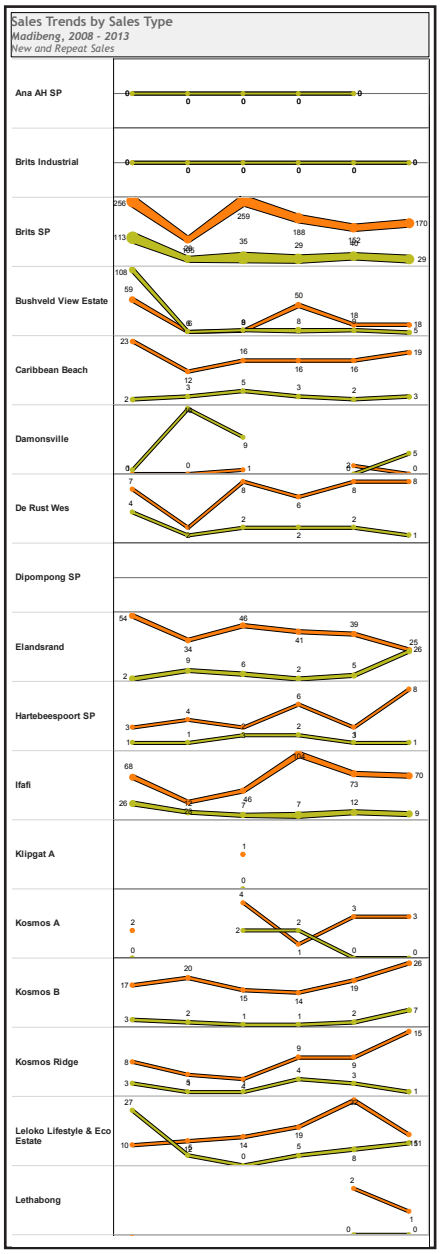
New sales can also show the recent registration of Government-sponsored housing investment, such as those new sales within Lethlabile (this should be confirmed). An important point is to recognise the impact of registered Government investment in housing. Often, these registrations may be perceived as 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.

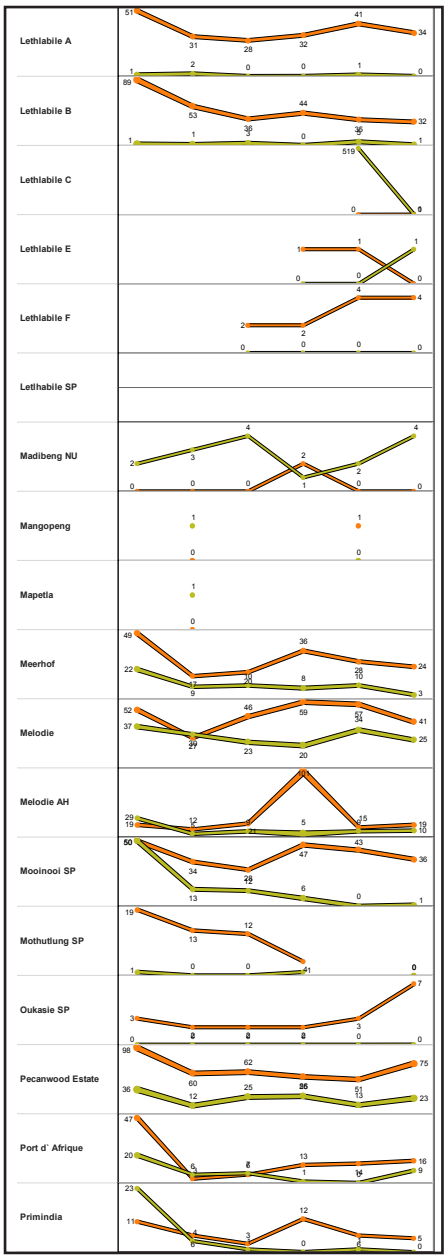
Suburbs with no data reflect areas with no sales or new registrations.

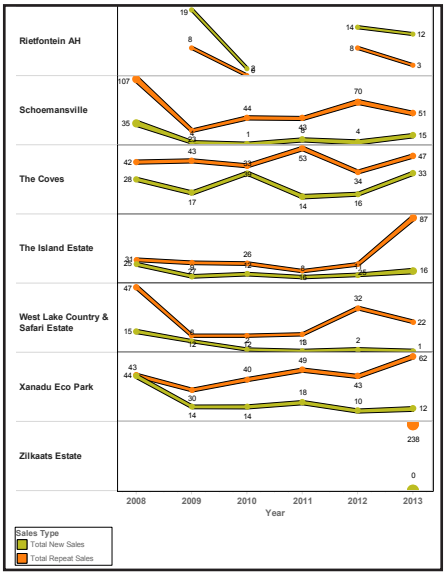
10.8 Market Activity amongst New and Repeat Sales

The **growth and maturity of housing markets can often be found by comparing new homes and resales 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 (for example, Melodie AH's uptick of resales in 2011). The understanding of how mining companies create new units helps one understand their existing and potential contribution to expand the local housing economy.





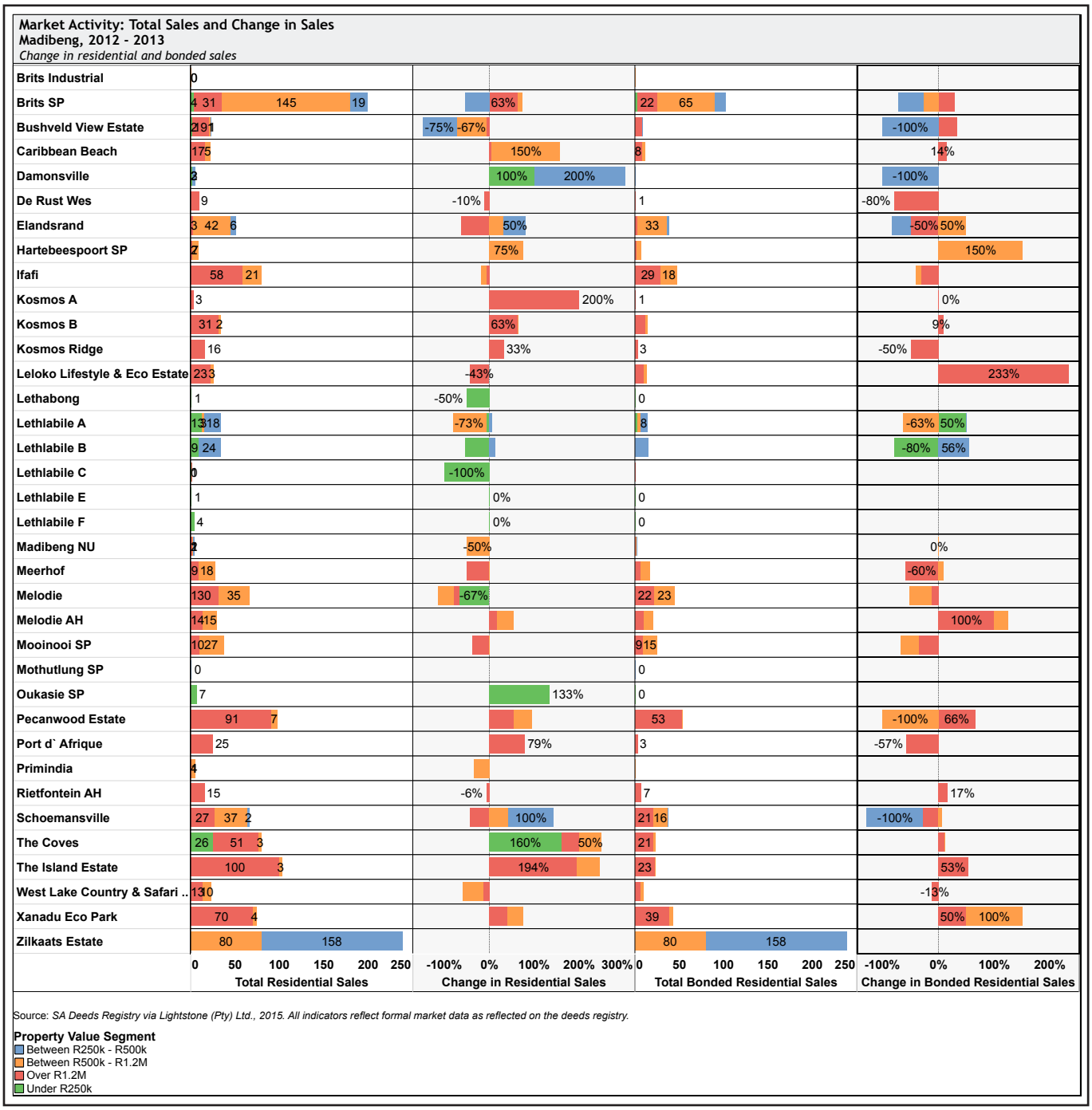


10.9 Total Sales by Property Value, Change from the Prior Year

This chart shows the change in activity for property sales (first two columns) and bonded property sales (third and fourth columns) 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.

Elandsrand, Hartbeesport and The Island Estate were amongst the various areas which experienced an increase in both sales and bonds from 2012 to 2013. All other areas either experienced a drop or an increase in one or the other.

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



10.10 Change in New and Repeat Sales

This chart shows the specific rate of activity of new and repeat sales from 2012 to 2013. New sales were concentrated in several areas such as Elandsrand, The Island Estate and The Coves.

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.

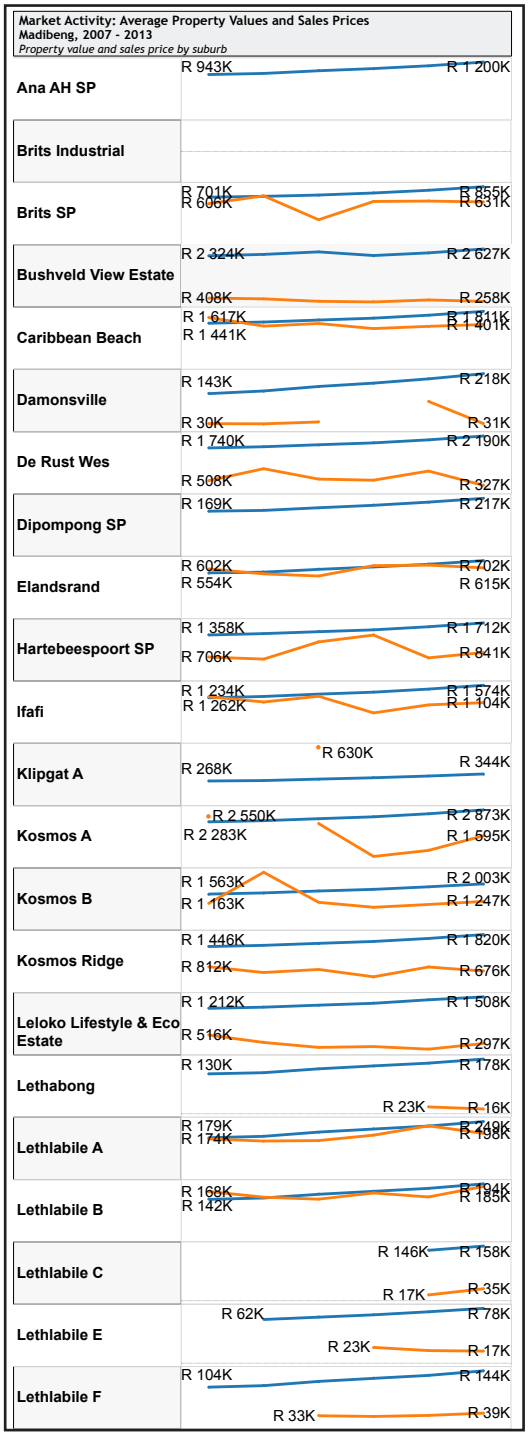
Suburbs with no information had no residential sales in the past two years.

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[1], 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 Melodie, Schoemansville and parts of Kosmos B. In most suburbs, sales prices were below property values.

Sales in many areas of Madibeng have been steady and values are rising in several areas, indicating steady active markets. 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 Madibeng, by area and loan size.** Bonded sales are almost entirely concentrated in housing and sales over R500 000, with those loans concentrated in the south eastern higher-priced housing markets. While the share of lending by each of the four major banks in the Country has remained consistent, **lending from non-traditional lenders doubled in Madibeng from 2010 to 2013,** perhaps due to new estate property developments as well as a decrease in lending by the existing institutions. Lending from Other Lenders was mostly concentrated in the newer estate property markets.

Affordability could be part of the challenge, as Madibeng has below average incomes compared to other mining towns and the 3rd highest average sales prices. It takes more than 5 times the average income to afford the average house in Madibeng.

11.12 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.

Programs should also make **creative finance available for rental projects**.

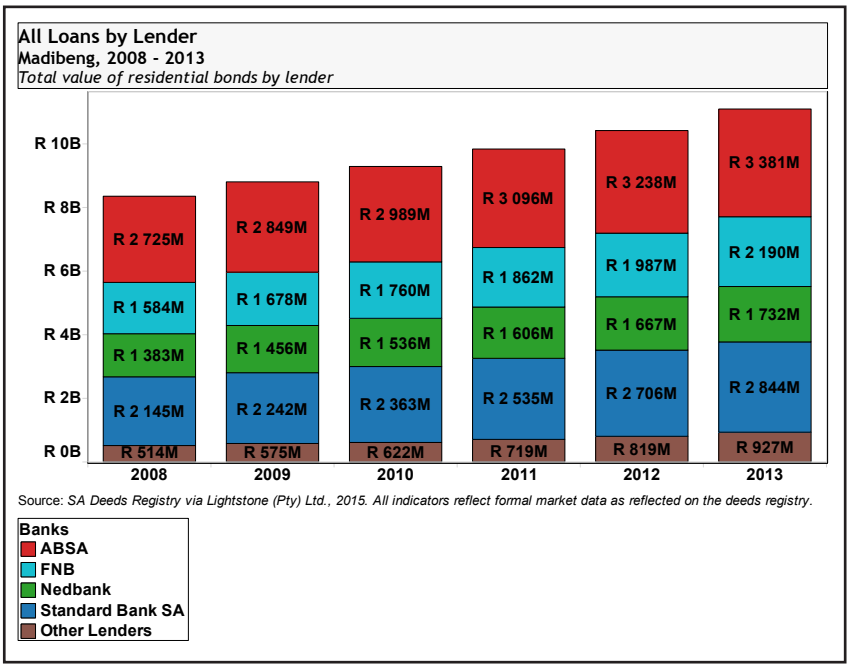
11.3 Quick Definitions:

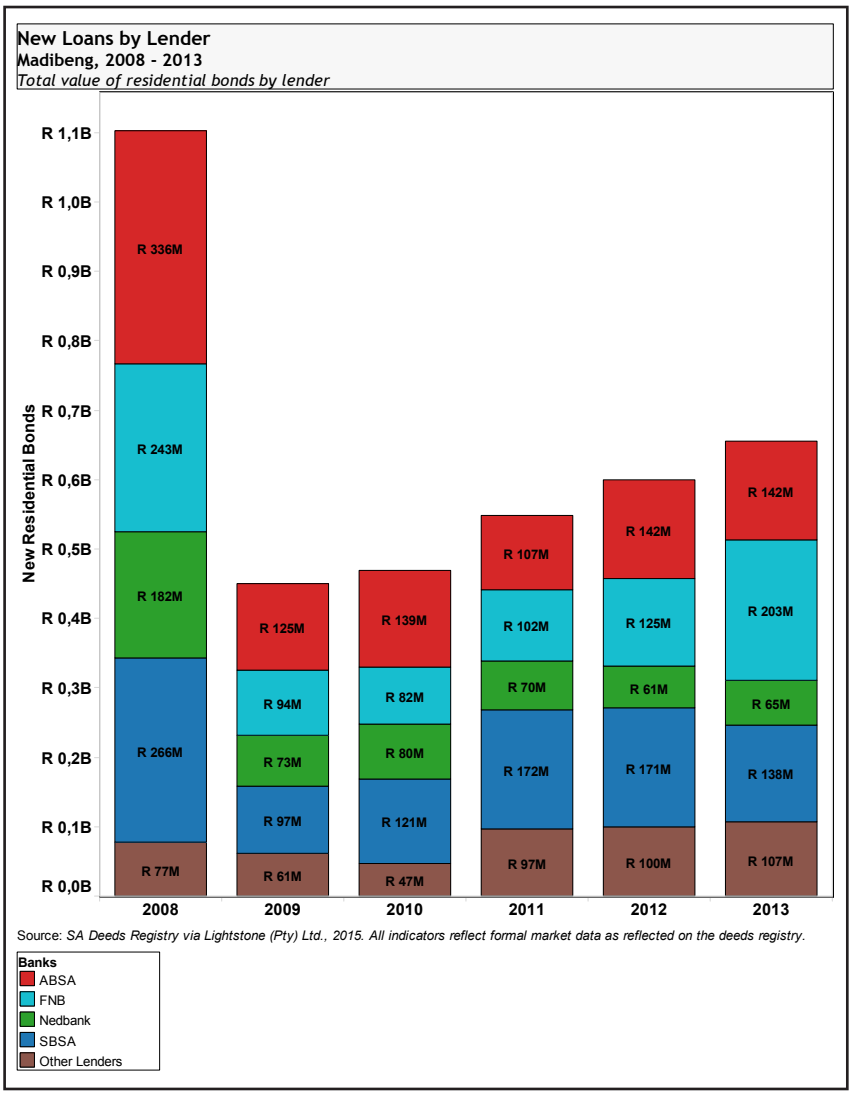
Lending Activity: the performance of key lending indicators over time, such as bond volume, new loans and bonded sales, by lending institution.

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 grouped 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 (lending activity by lender per year), it is possible to note that, while the lending in the area has mostly grown, the amount per year varies from lender to lender. As example, annual lending increased from 2009 to 2013 amongst most lenders.

Of note has been the infusion of other lenders into the area. **Since 2011, much of the annual increase in lending has been driven by other lenders. Notably, lending from other lenders more than doubled from 2010 to 2013.** These other lenders primarily from include companies providing home loan benefits to their employees. This is most often employer-assisted lending, primarily companies providing home loan benefits to their employees. The lending may reflect increased mining activity requiring staff deployment in the area.

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
Madibeng, 2008 - 2013
The value of new bonds by lender by suburb over time

		ABSA	FNB	Madibeng Nedbank	Standard Bank	Other Lenders
Ana AH SP	2008	R 0	R 0	R 0	R 0	R 0
	2009	R 0	R 0	R 0	R 0	R 0
	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 0
	2013	R 0	R 0	R 0	R 0	R 0
Brits Industrial	2008	R 0	R 0	R 0	R 0	R 0
	2009	R 0	R 0	R 0	R 0	R 0
	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 0
	2013	R 0	R 0	R 0	R 0	R 0
Brits SP	2008	R 47,184,232	R 32,786,853	R 32,749,646	R 34,928,514	R 3,950,000
	2009	R 20,053,042	R 5,508,550	R 16,052,570	R 6,801,000	R 2,400,000
	2010	R 17,886,528	R 4,470,212	R 9,973,501	R 18,102,730	R 2,830,000
	2011	R 12,923,500	R 5,434,250	R 4,551,491	R 30,858,640	R 11,620,000
	2012	R 24,288,450	R 8,388,200	R 4,971,900	R 28,031,630	R 9,937,500
	2013	R 10,728,000	R 16,119,650	R 8,211,800	R 28,423,960	R 7,658,400
Bushveld View Estate	2008	R 15,037,292	R 9,980,060	R 10,969,872	R 26,297,604	R 0
	2009	R 582,500	R 200,000	R 96,919	R 3,668,286	R 0
	2010	R 0	R 0	R 953,868	R 0	R 1,500,000
	2011	R 1,510,000	R 140,000	R 0	R 614,000	R 0
	2012	R 240,000	R 1,196,350	R 470,000	R 0	R 476,000
	2013	R 210,000	R 1,400,000	R 0	R 1,615,140	R 0
Caribbean Beach	2008	R 7,880,000	R 10,549,000	R 1,004,560	R 6,719,000	R 0
	2009	R 1,950,000	R 4,100,000	R 0	R 5,730,000	R 1,000,000
	2010	R 4,467,000	R 7,450,000	R 0	R 6,736,800	R 2,350,000
	2011	R 2,870,000	R 1,425,000	R 4,270,700	R 0	R 1,500,000
	2012	R 2,250,000	R 7,600,000	R 3,660,000	R 3,700,000	R 1,500,000
	2013	R 3,168,000	R 5,205,000	R 5,270,000	R 1,980,000	R 890,000
Damonsville	2008		R 0	R 0	R 0	
	2009		R 120,000	R 0	R 0	
	2010		R 0	R 0	R 0	
	2011		R 0	R 0	R 0	
	2012		R 0	R 0	R 210,000	
	2013		R 0	R 0	R 0	
De Rust Wes	2008	R 1,700,000	R 6,106,000	R 894,789	R 3,200,000	R 600,000
	2009	R 487,500	R 500,000	R 1,000,000	R 0	R 0
	2010	R 2,000,000	R 3,700,000	R 450,000	R 965,000	R 0
	2011	R 750,000	R 0	R 1,340,000	R 0	R 0
	2012	R 5,737,087	R 1,525,000	R 0	R 1,392,000	R 4,000,000
	2013	R 0	R 4,725,000	R 2,284,066	R 353,400	R 0
Elandsrand	2008	R 4,809,750	R 6,900,800	R 5,324,184	R 6,741,350	R 537,024
	2009	R 4,023,000	R 576,000	R 4,214,349	R 4,362,500	R 1,430,000
	2010	R 5,618,450	R 844,640	R 5,421,962	R 6,960,400	R 1,630,000
	2011	R 2,579,000	R 3,460,750	R 1,285,700	R 9,343,000	R 2,250,000
	2012	R 6,874,850	R 2,480,000	R 2,565,700	R 7,626,000	R 2,350,000
	2013	R 4,491,250	R 4,993,500	R 2,595,700	R 9,866,200	R 0
Hartebeespoort SP	2008	R 531,100	R 0	R 0	R 2,562,102	R 0
	2009	R 255,000	R 0	R 0	R 0	R 0
	2010	R 320,000	R 0	R 0	R 1,795,000	R 0
	2011	R 1,973,000	R 0	R 1,505,700	R 477,000	R 2,300,000
	2012	R 657,000	R 660,000	R 0	R 0	R 0
	2013	R 2,860,000	R 1,890,000	R 630,000	R 410,000	R 0
Ifafi	2008	R 30,097,864	R 20,445,400	R 9,474,239	R 21,630,424	R 4,660,000
	2009	R 6,846,000	R 12,190,000	R 6,090,440	R 4,002,000	R 17,160,000
	2010	R 7,428,000	R 2,650,000	R 10,258,208	R 20,007,500	R 4,850,000
	2011	R 8,115,678	R 4,592,500	R 11,282,195	R 14,705,000	R 9,300,000
	2012	R 15,803,000	R 8,125,000	R 480,000	R 32,110,165	R 13,040,000
	2013	R 8,809,000	R 14,329,000	R 6,185,700	R 13,944,000	R 9,970,000
Klipgat A	2008			R 0	R 0	
	2009			R 0	R 0	
	2010			R 0	R 0	
	2011			R 0	R 0	
	2012			R 0	R 0	
	2013			R 0	R 0	
Kosmos A	2008	R 600,000	R 1,800,000	R 3,500,000	R 0	R 0
	2009	R 0	R 0	R 0	R 0	R 0
	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 4,733,600	R 0
	2013	R 0	R 5,600,000	R 0	R 0	R 0
Kosmos B	2008	R 4,788,400	R 930,000	R 2,982,000	R 1,800,000	R 500,000
	2009	R 6,294,500	R 350,000	R 2,500,000	R 2,160,000	R 6,000,000
	2010	R 4,970,000	R 590,000	R 4,325,700	R 0	R 1,900,000
	2011	R 0	R 4,010,000	R 3,300,000	R 1,445,000	R 0
	2012	R 5,253,500	R 3,962,984	R 0	R 0	R 0
	2013	R 3,100,000	R 3,455,000	R 2,955,700	R 2,580,000	R 5,990,000
Kosmos Ridge	2008	R 1,795,500	R 1,492,500	R 1,137,457	R 400,000	R 2,600,000
	2009	R 0	R 2,700,000	R 0	R 0	R 1,500,000
	2010	R 0	R 1,996,900	R 0	R 0	R 0
	2011	R 0	R 0	R 1,225,000	R 0	R 0
	2012	R 1,000,000	R 1,580,000	R 0	R 0	R 1,400,000
	2013	R 150,000	R 800,000	R 1,000,000	R 0	R 2,000,000
Leloko Lifestyle & Eco Estate	2008	R 9,444,700	R 3,509,200	R 8,397,136	R 3,080,000	R 2,900,000
	2009	R 1,957,000	R 100,000	R 1,125,700	R 1,206,000	R 0
	2010	R 0	R 966,600	R 0	R 0	R 0
	2011	R 520,000	R 0	R 1,285,000	R 4,350,000	R 1,550,000
	2012	R 2,055,000	R 1,825,000	R 0	R 0	R 5,800,000
	2013	R 2,661,500	R 4,716,500	R 175,000	R 4,311,357	R 1,100,000
Lethlabile A	2008	R 1,100,000	R 1,524,209	R 2,666,930	R 2,222,701	R 280,000
	2009	R 180,000	R 331,000	R 1,350,611	R 775,000	R 755,773
	2010	R 35,000	R 1,149,000	R 80,330	R 1,942,000	R 0
	2011	R 130,000	R 120,000	R 0	R 2,741,000	R 780,000
	2012	R 650,000	R 470,000	R 0	R 5,334,600	R 0
	2013	R 0	R 1,112,000	R 410,700	R 2,371,000	R 0
Lethlabile B	2008	R 1,472,600	R 1,860,811	R 3,430,381	R 5,989,453	R 320,000
	2009	R 619,719	R 580,000	R 1,409,985	R 2,321,500	R 405,719
	2010	R 1,177,000	R 1,537,000	R 162,234	R 852,600	R 260,000
	2011	R 417,500	R 1,325,000	R 214,087	R 2,737,000	R 1,590,000
	2012	R 565,000	R 600,000	R 0	R 2,252,000	R 330,000
	2013	R 1,030,000	R 1,454,750	R 400,000	R 1,247,000	R 0

11.5 New Loans by Lender

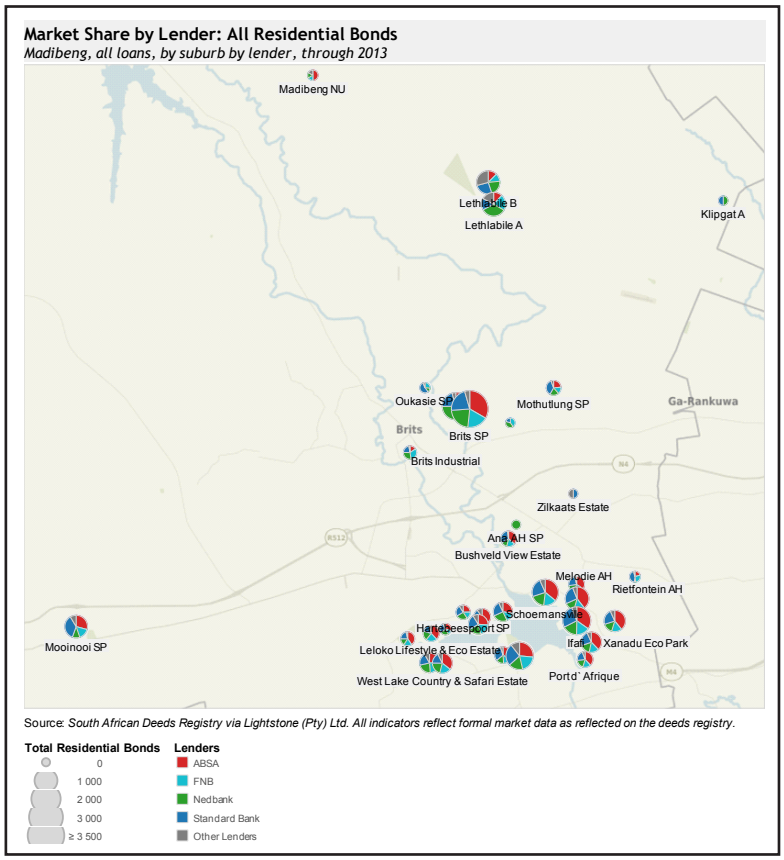
As markets shift, different lenders respond in different ways. These maps show the previous bar charts on a map. The first chart – all loans by lender – is represented on the top map. All loans made in 2013 – the second chart – is shown on the lower map. By comparing the two maps, it's possible to see where lenders invested loans in the last year (pies in the bottom map) and how that has changed from their overall portfolio in that suburb (pies in the top map). **In Mothutlung SP, several lenders hold loans but in 2013, only two lenders made new loans. Nedbank decreased their lending significantly in all areas while FNB increased theirs.**

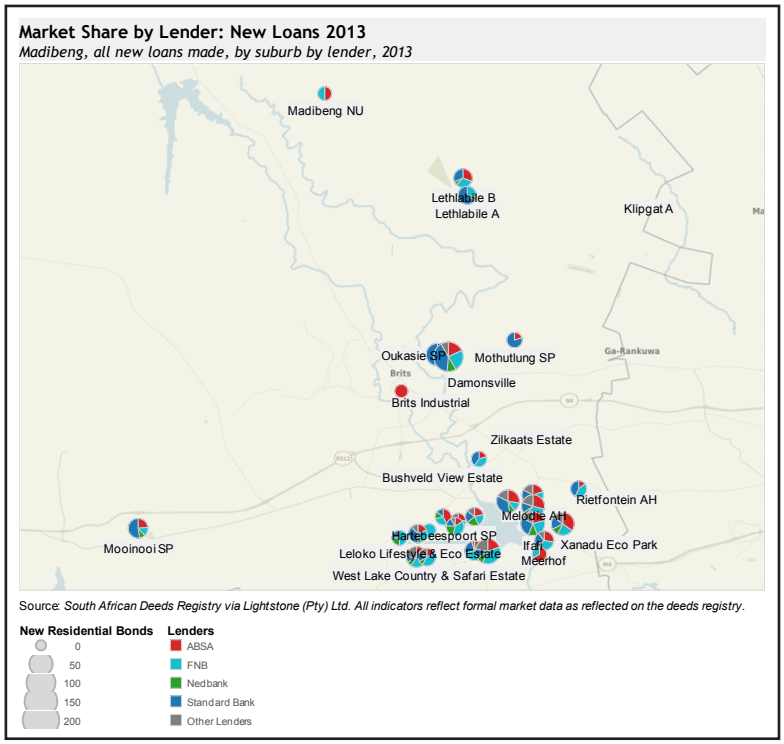
Non-traditional lenders, such as private equity funds and employer lenders, have more flexible regulatory environments and more creative, competitive financing tools. It will be important for Government to engage these investors as well to ease access to credit, lower costs of financing and share in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

Lethlabile B	2008	R 1,472,600	R 1,860,811	R 3,430,381	R 5,989,453	R 320,000
	2009	R 619,719	R 580,000	R 1,409,985	R 2,321,500	R 405,719
	2010	R 1,177,000	R 1,537,000	R 162,234	R 852,600	R 260,000
	2011	R 417,500	R 1,325,000	R 214,087	R 2,737,000	R 1,590,000
	2012	R 565,000	R 600,000	R 0	R 2,252,000	R 330,000
	2013	R 1,030,000	R 1,454,750	R 400,000	R 1,247,000	R 0
Madibeng NU	2008	R 1,320,000	R 700,000	R 0		R 0
	2009	R 1,800,000	R 0	R 0		R 1,600,000
	2010	R 1,200,000	R 1,300,000	R 0		R 0
	2011	R 0	R 0	R 0		R 1,000,000
	2012	R 840,000	R 0	R 0		R 0
	2013	R 2,428,000	R 970,000	R 0		R 0
Meerhof	2008	R 22,125,200	R 9,231,000	R 10,777,886	R 9,427,000	R 145,000
	2009	R 2,712,000	R 1,092,500	R 3,186,219	R 3,682,000	R 0
	2010	R 4,448,000	R 2,583,500	R 1,374,550	R 4,580,000	R 3,700,000
	2011	R 12,633,000	R 2,494,250	R 620,010	R 5,548,000	R 7,000,000
	2012	R 3,730,000	R 2,625,000	R 2,874,000	R 6,422,000	R 2,570,000
	2013	R 5,287,120	R 6,212,250	R 1,500,000	R 2,558,800	R 2,420,000
Melodie	2008	R 23,090,384	R 5,875,500	R 7,872,483	R 14,511,300	R 500,000
	2009	R 12,851,080	R 5,206,000	R 5,229,609	R 5,935,500	R 1,060,000
	2010	R 11,172,000	R 4,683,500	R 8,464,361	R 11,600,589	R 3,300,000
	2011	R 6,799,190	R 8,066,400	R 2,529,058	R 11,904,600	R 4,180,000
	2012	R 15,077,900	R 11,955,300	R 2,256,200	R 17,002,048	R 5,590,000
	2013	R 12,333,500	R 11,512,747	R 1,775,000	R 5,003,500	R 7,872,000
Melodie AH	2008	R 10,912,500	R 17,209,374	R 3,662,730	R 4,172,000	R 0
	2009	R 1,046,000	R 1,966,000	R 817,903	R 0	R 0
	2010	R 2,755,100	R 2,275,000	R 3,187,890	R 435,000	R 0
	2011	R 1,985,000	R 0	R 0	R 2,985,000	R 1,840,000
	2012	R 2,984,000	R 3,092,000	R 1,871,700	R 7,211,000	R 1,970,000
	2013	R 5,260,000	R 5,722,199	R 3,542,400	R 8,014,000	R 5,179,000
Mooinooi SP	2008	R 5,488,600	R 8,822,384	R 5,883,973	R 14,305,980	R 4,910,000
	2009	R 3,618,500	R 1,706,250	R 3,090,113	R 2,217,750	R 4,410,000
	2010	R 3,952,500	R 2,193,250	R 877,695	R 3,906,750	R 2,800,000
	2011	R 2,420,000	R 3,336,500	R 2,098,700	R 18,976,400	R 1,690,000
	2012	R 3,007,000	R 4,500,000	R 725,700	R 16,530,200	R 6,470,000
	2013	R 3,976,950	R 2,385,750	R 2,080,000	R 9,695,000	R 0
Mothutlung SP	2008	R 615,000	R 791,423	R 534,960	R 509,000	R 0
	2009	R 210,000	R 120,000	R 490,669	R 513,000	R 0
	2010	R 250,000	R 369,000	R 177,840	R 1,326,000	R 250,000
	2011	R 0	R 180,000	R 0	R 841,000	R 0
	2012	R 285,000	R 0	R 0	R 240,000	R 0
	2013	R 320,000	R 0	R 0	R 971,000	R 0
Oukasie SP	2008		R 0	R 0	R 389,000	R 37,000
	2009		R 0	R 0	R 0	R 0
	2010		R 0	R 0	R 0	R 0
	2011		R 0	R 0	R 0	R 0
	2012		R 0	R 0	R 0	R 0
	2013		R 0	R 0	R 0	R 0
Pecanwood Estate	2008	R 30,770,000	R 31,545,000	R 22,438,636	R 42,517,500	R 32,770,000
	2009	R 18,404,000	R 17,068,000	R 5,876,590	R 12,637,288	R 7,050,000
	2010	R 20,940,000	R 11,857,500	R 18,501,400	R 16,362,000	R 10,015,700
	2011	R 8,800,000	R 26,482,000	R 14,167,400	R 30,585,021	R 17,394,000
	2012	R 16,195,000	R 21,140,000	R 17,765,700	R 10,935,000	R 5,370,000
	2013	R 20,931,000	R 62,860,000	R 9,421,000	R 11,987,800	R 29,520,000
Port d` Afrique	2008	R 5,681,600	R 2,000,000	R 2,243,398	R 6,205,000	R 2,210,000
	2009	R 2,500,000	R 1,500,000	R 5,165,700	R 2,350,000	R 0
	2010	R 2,100,000	R 1,305,000	R 390,700	R 2,625,000	R 3,500,000
	2011	R 6,150,000	R 0	R 2,141,500	R 0	R 3,600,000
	2012	R 0	R 2,650,000	R 1,009,000	R 0	R 0
	2013	R 1,680,000	R 280,000	R 0	R 0	R 0
Primindia	2008	R 500,000	R 100,000	R 1,947,068	R 0	R 0
	2009	R 0	R 750,000	R 600,000	R 0	R 0
	2010	R 0	R 0	R 0	R 902,500	R 0
	2011	R 0	R 0	R 0	R 830,000	R 0
	2012	R 0	R 0	R 0	R 0	R 0
	2013	R 442,000	R 0	R 0	R 0	R 0
Rietfontein AH	2008	R 0	R 0	R 0	R 0	R 0
	2009	R 1,260,000	R 13,689,250	R 386,100	R 3,448,600	R 0
	2010	R 0	R 0	R 0	R 0	R 0
	2011	R 0	R 0	R 0	R 0	R 0
	2012	R 199,000	R 0	R 0	R 1,874,400	R 2,200,000
	2013	R 170,000	R 1,664,900	R 0	R 1,984,000	R 0
Schoemansvil..	2008	R 25,321,520	R 17,866,800	R 7,366,672	R 11,614,400	R 500,000
	2009	R 6,088,000	R 442,500	R 7,218,200	R 1,113,000	R 1,300,000
	2010	R 10,085,200	R 5,600,000	R 2,100,000	R 4,790,000	R 1,173,750
	2011	R 14,679,750	R 5,072,500	R 2,200,000	R 12,078,000	R 7,672,490
	2012	R 7,790,500	R 9,176,500	R 6,329,750	R 14,452,800	R 8,310,000
	2013	R 10,225,000	R 5,436,218	R 2,525,700	R 13,290,000	R 9,065,000
The Coves	2008	R 5,135,000	R 10,431,600	R 9,338,761	R 4,705,000	R 4,400,000
	2009	R 9,585,000	R 11,624,083	R 2,028,802	R 5,880,000	R 2,110,000
	2010	R 10,939,000	R 5,445,000	R 831,287	R 8,342,000	R 3,540,000
	2011	R 3,208,000	R 15,622,250	R 4,194,583	R 7,459,250	R 6,850,000
	2012	R 10,368,531	R 8,920,000	R 1,800,000	R 2,793,000	R 13,270,000
	2013	R 12,031,000	R 13,648,290	R 4,100,000	R 930,000	R 11,465,700
The Island Estate	2008	R 35,522,808	R 10,583,500	R 20,100,130	R 14,825,000	R 2,500,000
	2009	R 4,000,000	R 2,362,177	R 2,654,731	R 8,166,413	R 4,100,000
	2010	R 4,100,000	R 3,473,000	R 4,278,068	R 1,065,000	R 3,155,654
	2011	R 6,597,500	R 5,800,000	R 1,020,700	R 4,132,500	R 2,460,000
	2012	R 3,948,000	R 8,849,125	R 5,675,700	R 1,188,000	R 2,801,425
	2013	R 9,069,000	R 7,009,000	R 0	R 7,563,100	R 2,000,000
West Lake Country & Safari Estate	2008	R 16,158,000	R 22,247,000	R 5,022,778	R 9,769,000	R 2,400,000
	2009	R 3,430,000	R 2,565,000	R 302,337	R 13,156,427	R 6,820,000
	2010	R 4,080,000	R 5,500,000	R 2,520,000	R 0	R 0
	2011	R 0	R 6,000,000	R 1,985,700	R 363,750	R 4,150,000
	2012	R 3,300,000	R 2,490,000	R 4,815,700	R 1,170,000	R 1,000,000
	2013	R 2,710,849	R 4,446,000	R 2,550,000	R 1,405,000	R 5,120,000
Xanadu Eco Park	2008	R 26,718,000	R 7,583,500	R 1,782,919	R 16,594,360	R 9,800,000
	2009	R 14,230,000	R 6,692,250	R 2,561,010	R 7,066,900	R 2,050,000
	2010	R 19,269,500	R 10,310,000	R 5,364,820	R 7,539,000	R 500,000
	2011	R 12,191,600	R 8,130,000	R 9,027,108	R 9,061,147	R 7,970,000
	2012	R 9,220,000	R 11,630,698	R 3,420,000	R 5,858,000	R 11,960,000
	2013	R 18,274,000	R 14,831,500	R 7,560,000	R 7,807,000	R 7,190,000
Zilkaats Estate	2008				R 742,600	R 770,000
	2009				R 0	R 0
	2010				R 0	R 0
	2011				R 0	R 0
	2012				R 0	R 0
	2013				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





11.6 Market Share

The understanding of market share at the local level is key in understanding the potential for end user finance, where gaps might exist and how to make the case for more lending. **Most suburbs in Madibeng have experienced lending consistently over the past six years.** Other lenders show lending over the six years in several highly segregated areas with only one property type and higher values, such as The Island Estate, Brits SP and Pecanwood Estate.

Comparing lending over time and by suburb also shows which lenders perceive value or risk.

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 **Government-sponsored units within the municipality represents 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. About 20% of all registered properties in Madibeng were sponsored by the Government. The value of these homes, if sold in the private market, can be applied towards the cost of a new home.

This situation can be used to drive developers to build more gap housing, and financiers to finance low cost 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.

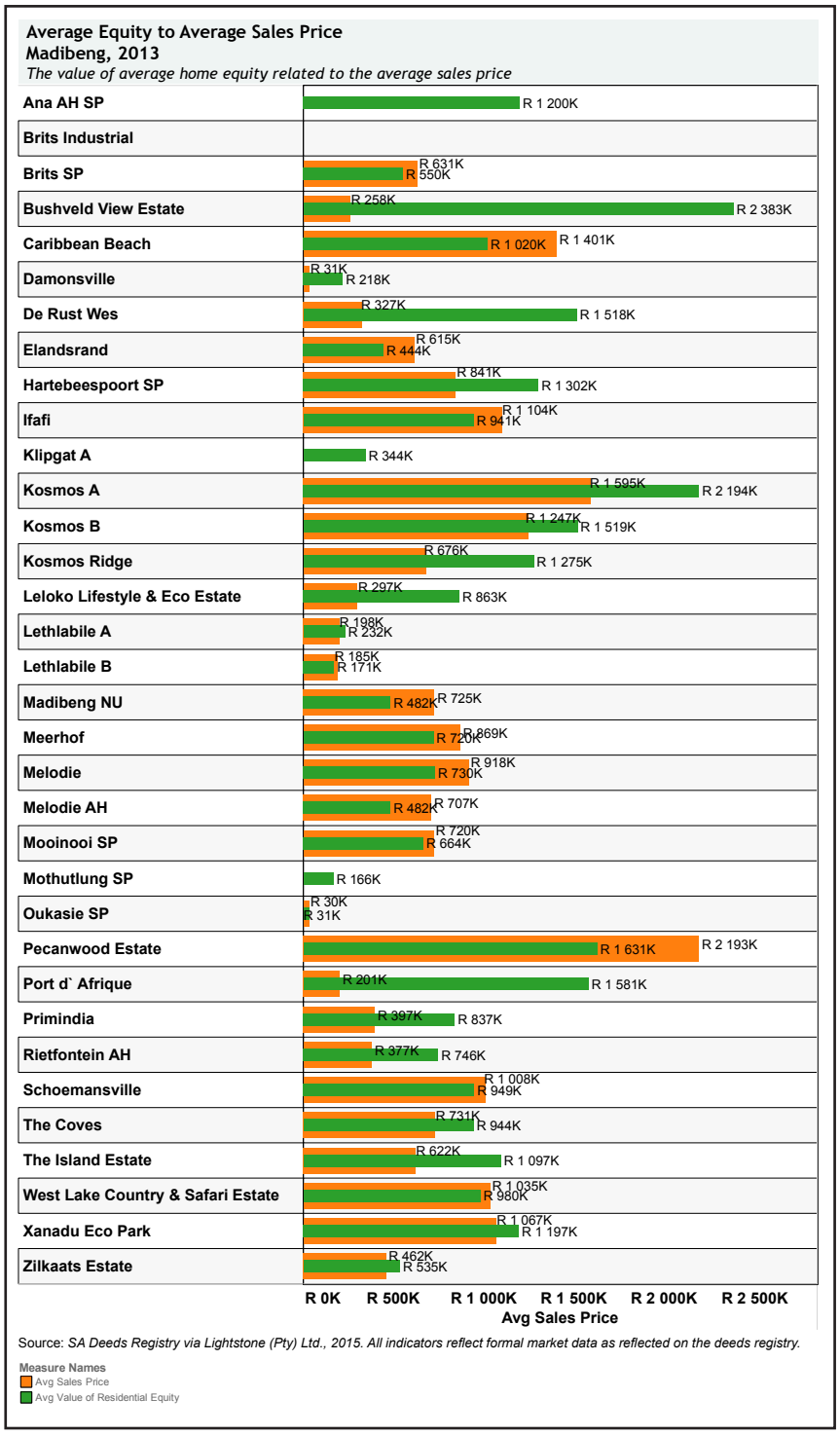
Governments can create programmes using funds pooled from a range of Government and private sector partners, that provide bonds for small properties and offset risks through loan guarantees, loan loss reserves and interest rate discounts. Funds can also be organise to implement homebuyer counselling,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

These programmes would work together in the mining towns to create better social, housing and economic integration. In Madibeng, this might be those areas between Damonsville and Melodie, those higher-priced more active markets and Brits SP.

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.

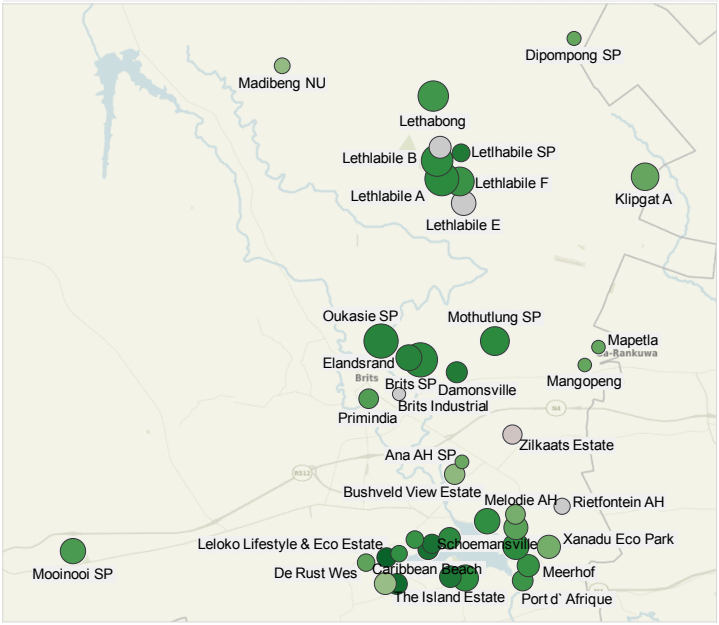
In Madibeng, equity outpaces sales prices because the property values currently exceed sales prices in most suburbs (as shown earlier).

As example, if a homeowner in Mooinooi SP wished to purchase a home in Melodie, they could sell their home and apply it towards the cost of the new home, reducing the amount they would have to borrow. Instead of borrowing over R900 000 (the average sales price), they would only need about R250 000 (the orange bar in Melodie minus the green bar in Mooinooi). Thus, equity makes homeownership in higher-priced neighbourhoods more affordable, expanding housing options. Equity closes the housing gap for these 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.

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.

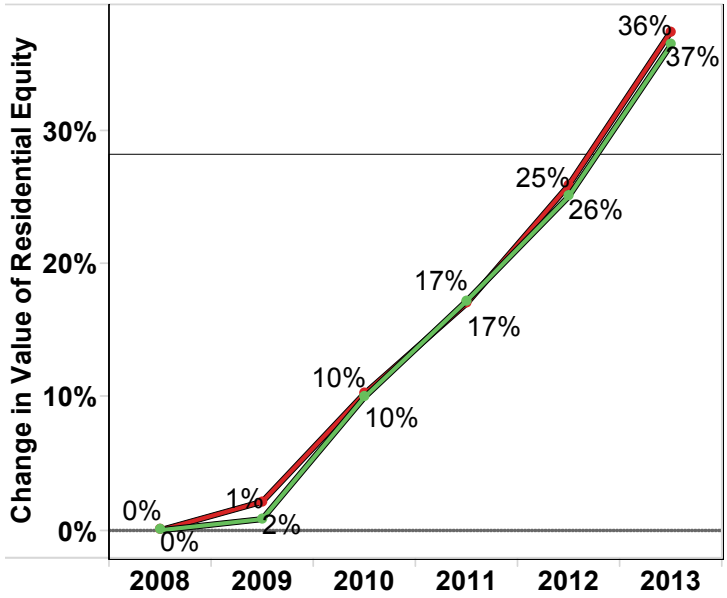
While averages in such diverse housing markets are hard to consider meaningfully, the picture does indicate that purchasing power increases – and gaps close – when equity is taken into consideration.

5 Year Equity Growth
Madibeng, 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
Madibeng, 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 which 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.

Madibeng's properties under R500 000 have experienced very similar growth in equity to the overall market, unlike most mining towns where equity growth of properties under R500 000 has excelled. However, those lower-priced homes can still be an important source of funding the next house up the housing ladder.

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

Madibeng's affordability ratio of 2.4 is below the mining town average of 2.8, meaning it is more than 2 times the average municipality income to afford the average house. Due to a below-average monthly income, there remain large disparities among incomes and affordable housing access in many areas within the municipality.

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.

13.2 Policy Implications

Affordability constraints, due to below-average **incomes, can be addressed through housing strategies and solutions which propose creative financing tools and techniques** that can reduce financial barriers (such as down-payments, 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 enablethem to cover the cost of producing and selling housing units and thus provides-many housing options, lower income families struggle because their income often does not adequately cover the cost of producing and selling a housing unit. 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 income 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
Madibeng, 2013
Affordability indicators per suburb

Subplace Name	Avg Monthly Income	Target house price	Average Sales Price	Affordable Price Gap	Affordability Ratio
Ana AH SP	R 23K	R 602K			
Brits Industrial	R 8K	R 217K			
Brits SP	R 26K	R 678K	R 631K	R 47K	0,9
Bushveld View Estate	R 7K	R 192K	R 258K	R -65K	1,3
Caribbean Beach	R 14K	R 368K	R 1 401K	R -1 033K	3,8
Damonsville	R 5K	R 120K	R 31K	R 90K	0,3
De Rust Wes	R 62K	R 1 643K	R 327K	R 1 316K	0,2
Dipompong SP	R 3K	R 66K			
Elandsrand	R 27K	R 710K	R 615K	R 95K	0,9
Hartebeespoort SP	R 3K	R 87K	R 841K	R -754K	9,7
Ifafi	R 38K	R 996K	R 1 104K	R -108K	1,1
Klipgat A	R 4K	R 96K			
Kosmos A	R 84K	R 2 222K	R 1 595K	R 627K	0,7
Kosmos B	R 24K	R 627K	R 1 247K	R -619K	2,0
Kosmos Ridge	R 75K	R 1 987K	R 676K	R 1 311K	0,3
Leloko Lifestyle & Eco Estate	R 44K	R 1 169K	R 297K	R 872K	0,3
Lethabong	R 3K	R 73K	R 16K	R 57K	0,2
Lethlabile A	R 10K	R 265K	R 198K	R 67K	0,7
Lethlabile B	R 10K	R 261K	R 185K	R 76K	0,7
Lethlabile C	R 3K	R 80K	R 35K	R 45K	0,4
Lethlabile E	R 3K	R 82K	R 17K	R 65K	0,2
Lethlabile F	R 4K	R 108K	R 39K	R 69K	0,4
Letlhabile SP	R 3K	R 92K			
Madibeng NU	R 8K	R 213K	R 725K	R -512K	3,4
Mangopeng	R 4K	R 97K			
Mapetla	R 3K	R 81K			
Meerhof	R 26K	R 697K	R 869K	R -172K	1,2
Melodie	R 42K	R 1 118K	R 918K	R 200K	0,8
Melodie AH	R 28K	R 742K	R 707K	R 34K	1,0
Mooinooi SP	R 27K	R 707K	R 720K	R -13K	1,0
Mothutlung SP	R 8K	R 206K			
Oukasie SP	R 3K	R 86K	R 30K	R 55K	0,4
Pecanwood Estate	R 80K	R 2 111K	R 2 193K	R -82K	1,0
Port d` Afrique	R 88K	R 2 316K	R 201K	R 2 115K	0,1
Primindia	R 15K	R 402K	R 397K	R 5K	1,0
Rietfontein AH	R 7K	R 182K	R 377K	R -195K	2,1
Schoemansville	R 37K	R 966K	R 1 008K	R -41K	1,0
The Coves	R 32K	R 840K	R 731K	R 108K	0,9
The Island Estate	R 32K	R 833K	R 622K	R 211K	0,7
West Lake Country & Safari Estate	R 56K	R 1 469K	R 1 035K	R 433K	0,7
Xanadu Eco Park	R 46K	R 1 220K	R 1 067K	R 152K	0,9
Zilkaats Estate	R 8K	R 208K	R 462K	R -254K	2,2

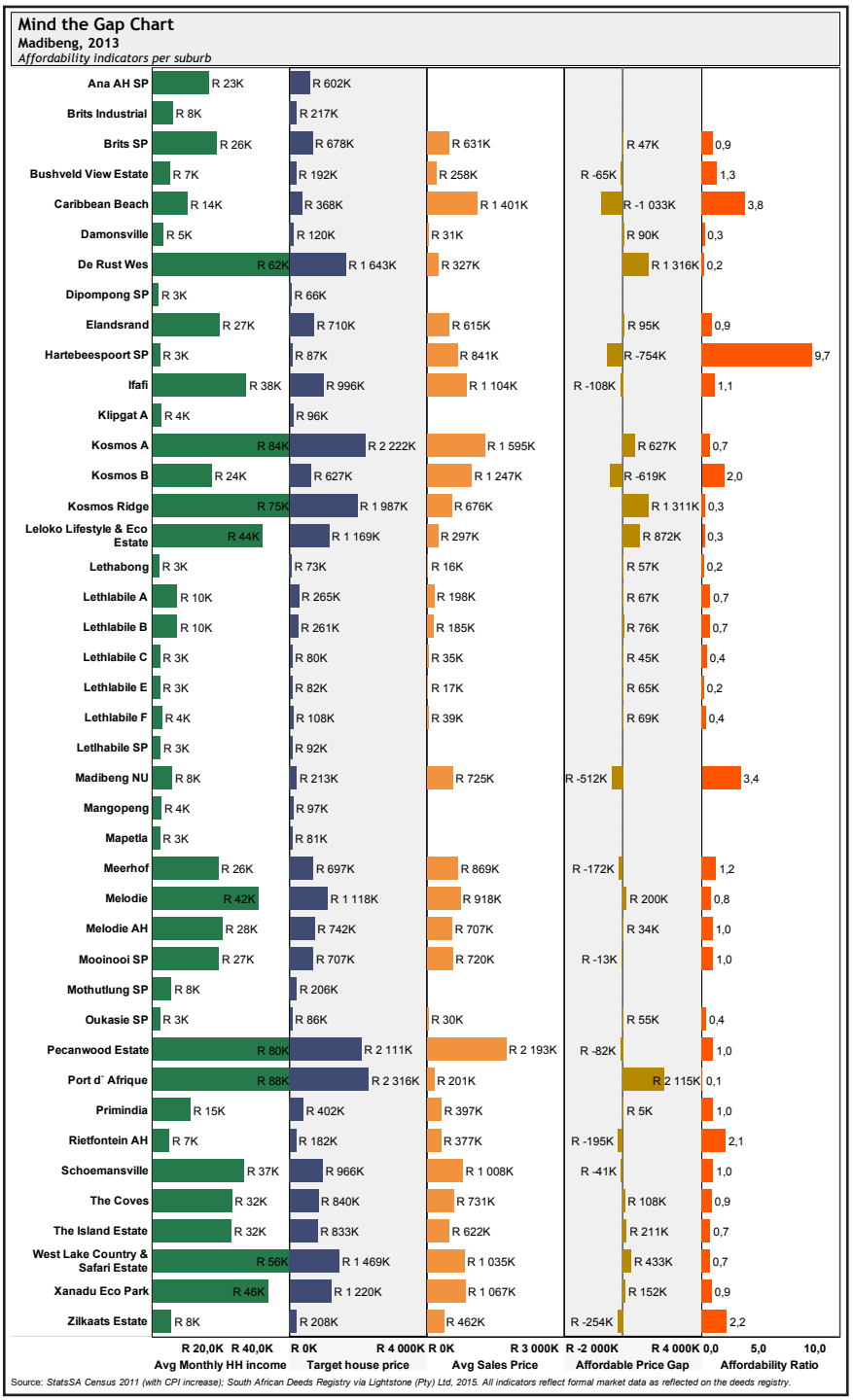
Source: *StatsSA Census 2011 (with CPI increase); South African Deeds Registry via Lightstone (Pty) Ltd, 2015. All indicators reflect formal market data as reflected on the deeds registry.*

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; within the mining towns, this ratio 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 sense of affordability levels and how well local markets might be meeting the needs of local residents.

In Madibeng, there appear to be gaps in affordability in many markets, as shown by the negative price gap, ie. the amount by which local sales prices are higher than what's affordable to local residents. Price gaps in most suburbs are negative, perhaps the result of more recent housing development which drove up recent sales prices past income levels and the inclusion of the informal settlements (such as Madibeng NU), which might have reduced the average income. The Madibeng NU represents all the non-urban areas surrounding the town, so it's not possible to pinpoint why or where prices and incomes are imbalanced.

The introducing of new products or strategies are more likely to be sustainable if they are responsive 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.

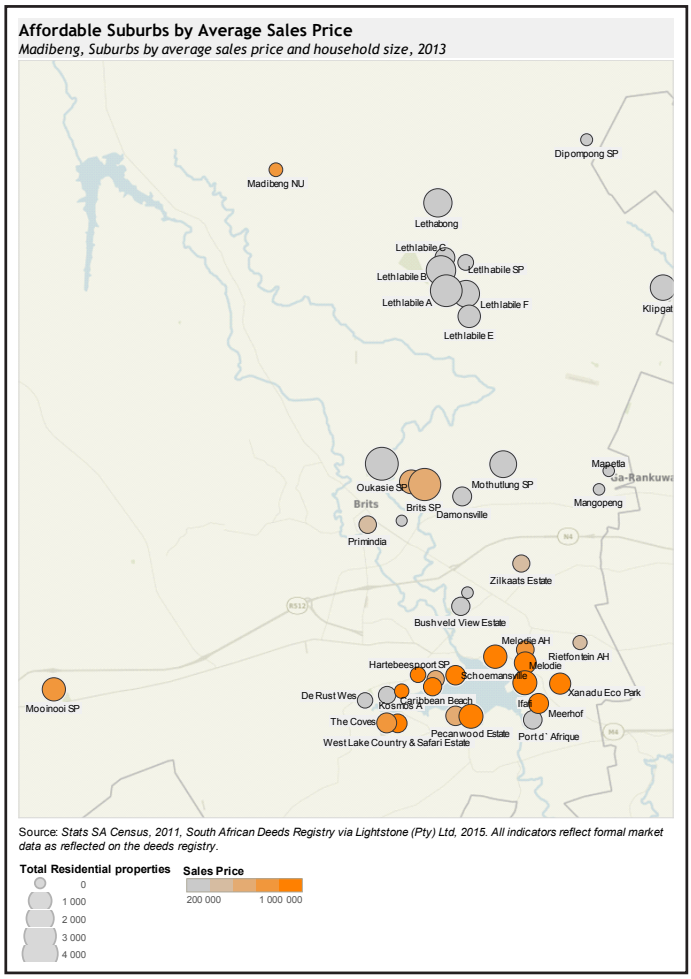


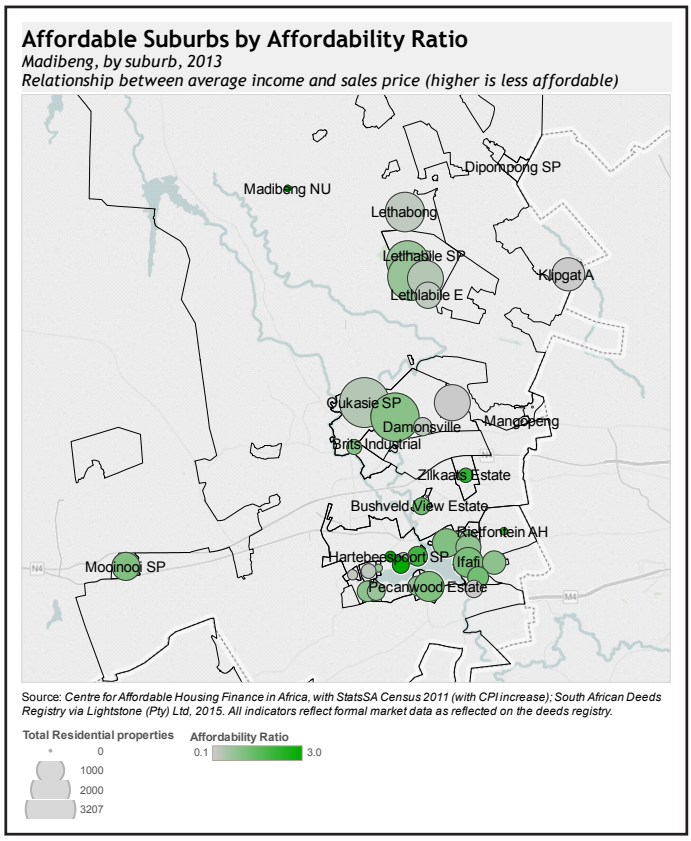
13.5 Mind the Gap

This chart is identical to the previous chart but shows bar lines to better visualise 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 example, in Hartebeespoort SP, its takes almost 9.7 times the average income to afford the average sales price, indicating most of the new housing being built there is not likely to be targeting local residents.

In Madibeng, the average income is about R12 600, the average target house price is R332 000 (how much house that income can afford) and the average sales price is R783 300. **Thus, in 2013, it took more than 2 times the average income to afford the average house.** 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, policies that encourage the sale of lower-cost homes can allow housing purchases further upstream for lower-income households.





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, with 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 (like much of Lethlabile B), they are not as affordable when considering local incomes (the same suburbs are 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.

14. Rental Index

14.1 Key Findings

In Madibeng, **29% of households rent**, according to the 2011 StatsSA census, which is the average range of 30% amongst the mining towns in the study.

The opportunity **for rental housing development within Madibeng is strong within specific areas.** 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 income households 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.

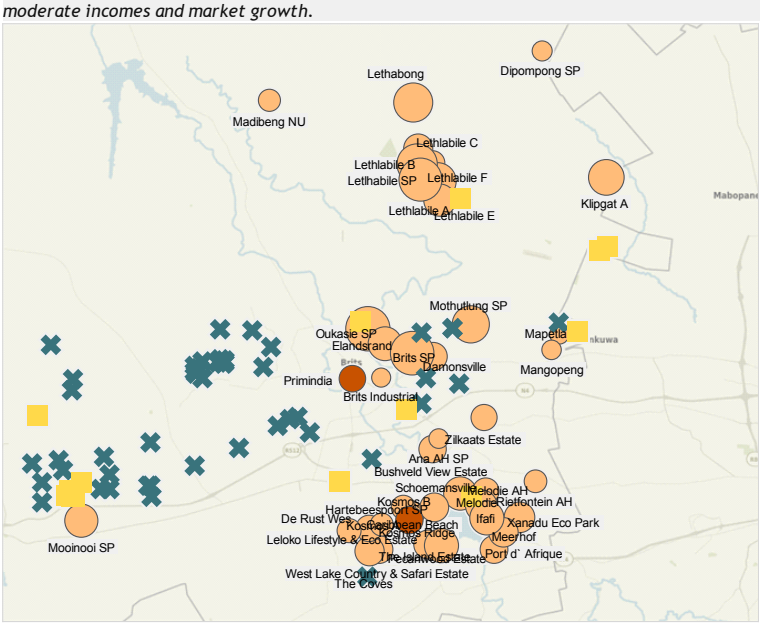
Housing Performance Index: the growth of the local suburb in six key housing market indicators as compared to the municipality growth. A higher number implies more growth.

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.

Rental Index
Madibeng, 2013
Areas which scored highly on a group of indicators targeting rental housing, including density, moderate incomes and market growth.



Source: *Centre for Affordable Housing Finance in Africa, 2015. All indicators reflect formal market data as reflected on the deeds registry.*

Total Residential properties
- 0
- 1 000
- 2 000
- 3 207

Type
- Informal Settlement
- Mines

Rental Perfomance
- High
- Low

Rental Index Indicator	Method	Implies	Weight
Median Income	80 -120% area median income	Affordability	35%
Population Density	Exceeds metro average	Density	35%
Housing Performance Index	Growing	Demand	15%
Affordability Ratio	Ratio exceeds metro average	Affordability	15%

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 way of meeting housing needs. While a social housing sector exists targeting 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.**

Several conditions are crucial for the creation of successful and sustainable rental markets: density, high demand and affordability. 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. It is possible to bundle those indicators and find those areas primed for rental housing.

14.5 Locating Rental Housing Markets

The map shows those areas more dense than others, with moderate incomes and housing market growth, all important factors when considering the placement and promotion of rental housing. **In Madibeng, a few areas (Madibeng NU, Bushveld View Estate and Mothutlung SP) appear as high rental areas. Primindia is closer to more mines and those jobs which might make rental housing there more suitable for the mining market, where Caribbean Beach is closer to the town centre and might more successfully target families.**

Security of tenure through a lease agreement means that residents have access to quality, accountable property management and consistent utility access and can even build up their credit history with positive rent and utility accounts. Rental housing providers must locate their properties competitively to ensure monthly occupancy, so rental housing provides affordable access to transport hubs, jobs and community services.

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 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 Government-sponsored Housing

Housing that was created through some Government intervention, from site and infrastructure provision, direct construction or finance, such as Site & Service, RDP and BNG. While these homes are not recorded as such on the deeds registry, their presence is estimated based on surrounding registrations, timing, prices, and volume of activity.

15.12 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.

15.13 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.

15.14 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.

15.15 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.

15.16 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.

15.17 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.

15.18 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.

16. Source List

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- Madibeng Local Municipality. Madibeng Local Municipality 2014/2015 Draft IDP. Madibeng.

Notes

Notes

human settlements

Department:
Human Settlements
REPUBLIC OF SOUTH AFRICA

HDA
HOUSING DEVELOPMENT AGENCY

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