

Gauteng: Informal settlements Status (2013)



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DISCLAIMER

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

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List of abbreviations

CORC	Community Organisation Resource Centre
EA	Enumeration Area
GHS	General Household Survey
HDA	Housing Development Agency
IES	Income and Expenditure Survey
LaPsis	Land and Property Spatial Information System
NDHS	National Department of Human Settlements
PSU	Primary Sampling Unit
Stats SA	Statistics South Africa

PART 1

Introduction

In terms of the HDA Act No. 23, 2008¹, the Housing Development Agency ("HDA"), is mandated to assist organs of State with the upgrading of informal settlements. As part of the informal settlements upgrading programme, the HDA commissioned this study to update existing analysis on the profile of informal settlements in South Africa, nationally and provincially as well as for some of the larger municipalities. The analysis draws heavily on newly released Census 2011 data and also explores other data sources available at a national, provincial and municipal level to characterise conditions in informal settlements and to identify key trends. This report summarises available data for Gauteng province

¹ The HDA Act No.23, 2008, Section 7 (1) k

PART 2

Overview of census and survey data

This chapter describes the key data sources used in this study and outlines relevant limitations of the data as a precursor to exploring the data in more detail. As noted in the introduction, a primary objective of the study is to explore findings of the recently released 2011 Census with respect to informal settlements in South Africa, and to use that data to assess trends in terms of the number of households that live in informal settlements, their characteristics and access to basic services. The 2011 Census is thus the core data set explored in this review.

Aside from census data, the analysis is supplemented by other survey data sources including the 2010/11 Income and Expenditure Survey as well as the 2011 General Household Survey.

2.1 Limitations of the Statistics South Africa data

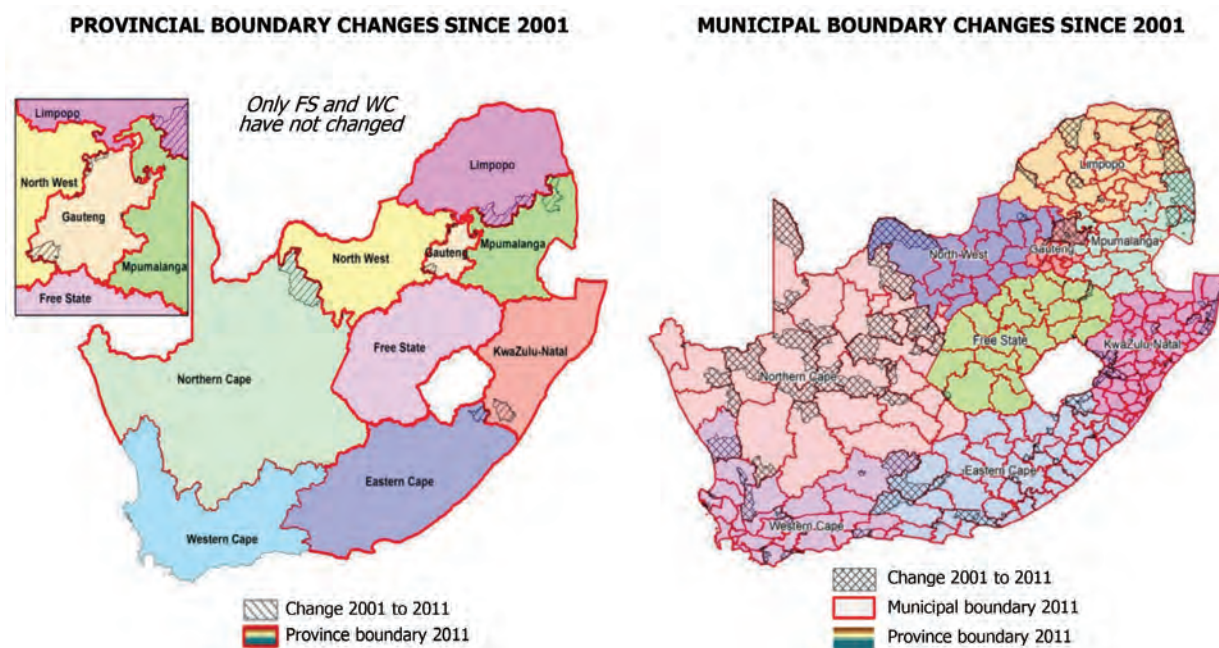
Currently the 2011 Census data is available for analysis using Statistics South Africa's SuperWEB or SuperCROSS software. This system is not fully interactive; not all variables can be cross tabulated. By way of example, education and employment data cannot be analysed by type of main dwelling people live in. There are also variables that appear in the questionnaire that are not available at all for analysis. Most pertinent to this analysis, these include construction material of main dwelling, age of the dwelling and relationship to the head of the household. The 2011 Census 10% sample which will allow for a full interactive analysis will only be available towards the end of 2013.

As noted a key objective is to identify trends. Because of provincial and municipal boundary changes since 2001 the comparison of the Census 2011 with previous censuses requires alignment of that data to 2011 municipal boundaries. Statistics South Africa has not yet publicly re-released Census 2001 data in line with these adjusted boundaries. Tables were produced with the assistance of Statistics South Africa².

² Angela Ngyende of Statistics South Africa provided on-going assistance in this regard

CHART 1

PROVINCIAL AND MUNICIPAL BOUNDARY CHANGES SINCE 2001



Source: Map sourced from Stats SA's "Census 2011 Methodology and highlights of key results"; Data sourced from MDB (Municipal Demarcation Board) 2011

Aside from census data, as mentioned previously the analysis is supplemented by other survey data sources including the 2010/11 Income and Expenditure Survey as well as the 2011 General Household Survey. These data sources may contain a bias, with older, better established informal settlements over-represented as the underlying sample frames may not include newer settlements.

2.2 Definition of informal settlements

As a starting point it is critical to have a working definition of "informal settlements" that can be used to identify an appropriate proxy variable across the census and survey data sets. There are a number of definitions, some of which are summarised in the table below. While there is some variance across definitions, in most cases definitions emphasise the dwelling type; with temporary structures or dwellings that are built out of rudimentary materials as a dominant feature of informal settlements. In addition, several definitions refer to ownership of the land, the nature of land tenure and formal demarcation.

TABLE 1 DEFINITIONS OF INFORMAL SETTLEMENTS	
Data source	Definition of an informal settlement
Statistics South Africa	<p>"An unplanned settlement on land which has not been surveyed or proclaimed as residential, consisting mainly of informal dwellings (shacks)."</p> <p>Definition of an informal dwelling : "A makeshift structure not approved by a local authority and not intended as a permanent dwelling"</p>
National Department of Human Settlements	<p>The 2009 National Housing Code's Informal Settlement Upgrading Programme identifies informal settlements on the basis of the following characteristics:</p> <ul style="list-style-type: none"> • Illegality and informality; • Inappropriate locations; • Restricted public and private sector investment; • Poverty and vulnerability; and • Social stress
City of Johannesburg Metropolitan Municipality*	<p>No formal definition, however the following working definition is used: An informal settlement comprises "An impoverished group of households who have illegally or without authority taken occupation of a parcel of land (with the land owned by the Council in the majority of cases) and who have created a shanty town of impoverished illegal residential structures built mostly from scrap material without provision made for essential services and which may or may not have a layout that is more or less formal in nature."</p>
City of Tshwane Metropolitan Municipality**	<p>"Informal settlement means one shack or more constructed on land, with or without the consent of the owner of the land or the person in charge of the land."</p> <p>"Shack means any temporary shelter, building, hut, tent, dwelling or similar structure which does not comply with the provisions of the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977), the regulations promulgated under that Act and the Municipality's Building Control By-laws and which is primarily used for residential purposes."</p>
Ekurhuleni Metropolitan Municipality***	<p>"As a basic characteristic, the occupation of the land is unauthorised. In addition, the use of the land may be unauthorised, and in most cases the construction standards do not comply with building regulations."</p>

Source:* John Maytham, Project Manager: Informal Settlement Formalization Unit, Development Planning and Urban Management

Source:** City of Tshwane Metropolitan Municipality, By-laws Relating to the Management and Control of Informal Settlements

Source:*** Study into supporting informal settlements, Main Report, 28 August 2004 Prepared for Department of Housing, Pretoria by the University of the Witwatersrand Research Team

A further challenge relates to the boundaries of the settlement itself. Unlike suburbs which are formally proclaimed and demarcated, the boundaries of an informal settlement can be fluid particularly as the settlement grows. In some cases large areas are divided into a number of settlements, although it is not always clear on what basis the boundaries between settlements have been determined.

Census and survey data is not typically gathered and reported for settlements as such. Rather the data is collected from households that are located within a given Enumeration Area ("EA"). An EA is specific area allocated to one fieldworker to gather survey or census data in an allotted period of time. EAs typically contain between 100 and 250 households. EAs form the basis of sub-places which can be aggregated into larger areas known as main places, then into local municipalities, districts and provinces.

In some cases an informal settlement will coincide with a sub-place while in others a settlement might coincide with an EA. More commonly, however, there is no direct match between a settlement as defined by a community or municipality and a sub-place or an EA. Stats SA survey and census data therefore cannot enable us to explore individual informal settlements as a defined unit of analysis.

An analysis of informal settlements based on Stats SA survey and census data requires researchers to use a proxy variable. In the census there are two candidates. The first is based on the enumeration area while the second is based on the nature of the dwelling.

With regard to EAs Stats SA classifies each of the 103,576 EAs into one of ten EA Types in line with the status of the majority of visible dwellings at the time of demarcation. These are summarised in the table below.

TABLE 2 2011 ENUMERATION AREA TYPES	
2011 EA types	EA land-use/zoning
Formal residential	Single house; Town house; High rise buildings
Informal residential	Unplanned squatting
Traditional residential	Homesteads
Farms	
Parks and recreation	Forest; Military training ground; Holiday resort; Nature reserves; National parks
Collective living quarters	School hostels; Tertiary education hostel; Workers' hostel; Military barrack; Prison; Hospital; Hotel; Old age home; Orphanage; Monastery
Industrial	Factories; Large warehouses; Mining; Saw Mill; Railway station and shunting area
Smallholdings	Smallholdings/Agricultural holdings
Vacant	Open space/ stand
Commercial	Mixed shops; Offices; Office park; Shopping mall; CBD

Source: Statistics South Africa

While some informal settlements are located in areas demarcated as urban informal areas, many are not. A further disadvantage of this proxy is that it is not available in other Stats SA surveys.

The second option is to use shacks not in a backyard as a proxy variable. This too is an imprecise proxy; some dwellings located in informal settlements are formal dwellings, or backyard shacks.

There are clearly weaknesses in both proxies. In the interests of aligning with other analysis and the common practice within municipalities, we will predominantly, although not exclusively, rely on shacks not in a backyard as a proxy for households living in informal settlements. As noted in the introductory comments, not all analysis can be undertaken by dwelling type given the limitations relating to the format of available Census 2011 data.

PART 3

A context for the findings: Broad housing trends 2001 to 2011 in Gauteng

Before reviewing data for informal settlement specifically it is useful to explore key trends with regard to the growth in the number of households, as well as the primary dwellings they occupy for the province as a whole.

As noted by many researchers, any analysis of households must be prefaced by a comment on the nature of households and the interdependency between housing opportunities and household formation. A household is not an exogenous variable. In forming households, individuals respond to various factors, including economic and housing opportunities.

According to census data the number of households in Gauteng has increased from 2,791,270 in 2001 to 3,909,022 in 2011. At the same time the total population has increased from 9,388,854 in 2001 to 12,272,263 in 2011. Households have grown faster than the individual population (3.4% CAGR³ for households compared to 2.7% for individuals) and household sizes have continued to decline from 3.8 in 1996, to 3.4 in 2001, and 3.1 in 2011⁴. Driving the growth in the trend towards smaller average household sizes is the noticeable increase in the proportion of one-person households. In 2001 22% of all households were comprised of one person living alone while in 2011 30% of all households were comprised of one person. These one-person households are in many cases attached to other households living elsewhere. According to the IES 43% of one-person households in Gauteng either send or receive remittances indicating financial interdependency across dwelling-based households. How many of these households would reconstitute as multiple member households (including families) if suitable accommodation became available is a matter of conjecture.

Migration, presumably for economic reasons, has played a significant part in shaping the population distribution across the province. According to Statistics South Africa's 2011 mid-year population estimates, Gauteng has seen the largest positive net migration between 2006 and 2011. There are roughly two in-migrants for every one out-migrant.

³ Compound annual growth rate

⁴ Census 2011 Statistical release – P0301.4 (revised)

TABLE 3 ESTIMATED PROVINCIAL MIGRATION STREAMS OF PEOPLE IN GAUTENG: 2006 – 2011				
	Out-migration		In-migration	
	Province in 2011	Percentage	Province in 2006	Percentage
KwaZulu-Natal	58 943	19%	118 568	18%
North West	49 544	16%	101 430	15%
Western Cape	48 951	16%	40 097	6%
Mpumalanga	42 729	14%	99 764	15%
Limpopo	34 742	11%	166 621	25%
Eastern Cape	32 925	11%	83 012	12%
Free State	32 325	10%	54 098	8%
Northern Cape	7 904	3%	11 549	2%
Total	308 063	100%	675 139	100%

Net migration: 367 076

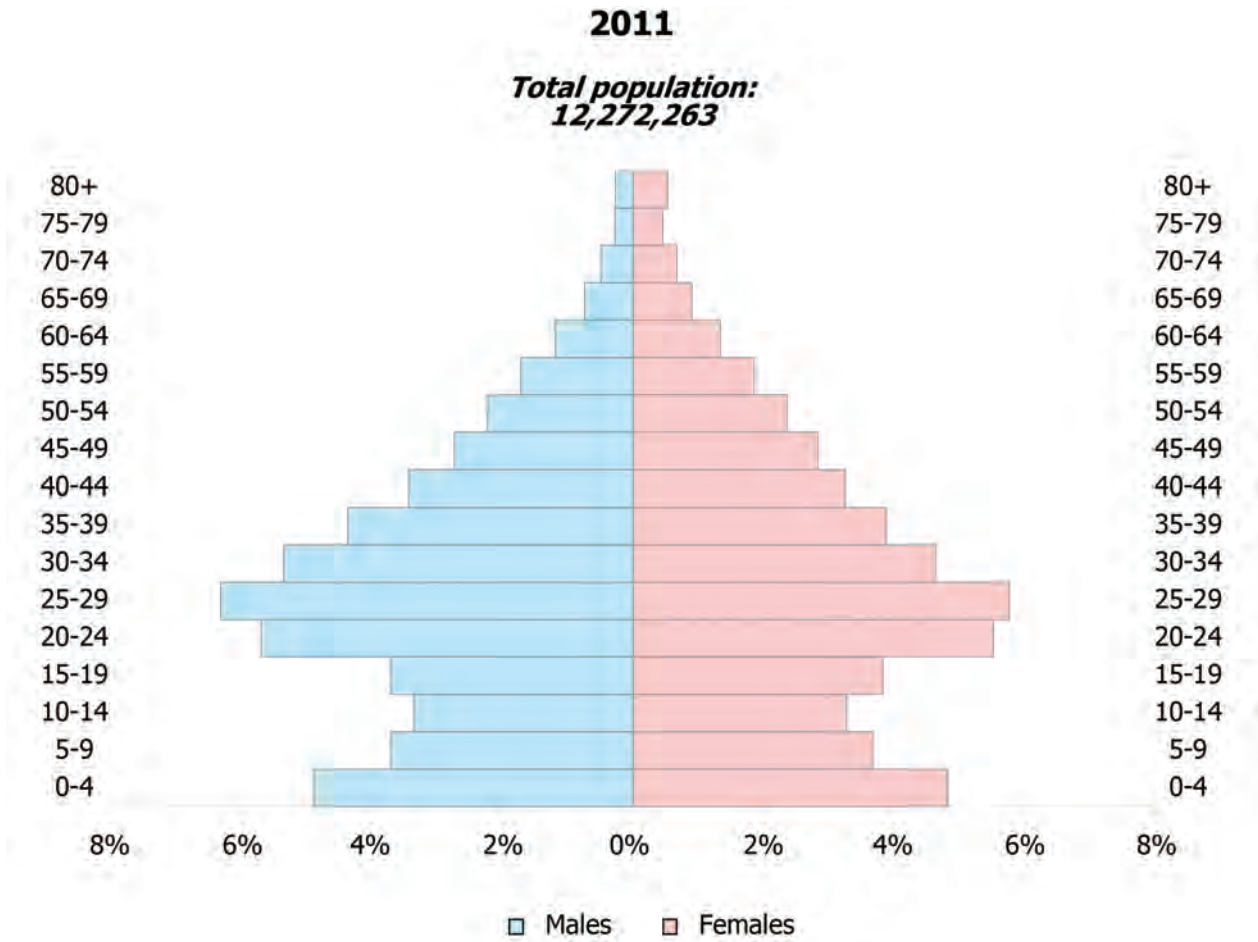
Ratio of in-migration to out-migration 2.2

Source: Stats SA mid-year population estimates 2011

Note: These estimates do not incorporate foreign migrants

According to the 2011 Census, in Gauteng 8% of the population have moved from a different province since 2001 (4% moved from outside of South Africa). There is a noticeable bulge in the 20-34 age group for both men and women.

CHART 2 POPULATION PYRAMID: GAUTENG



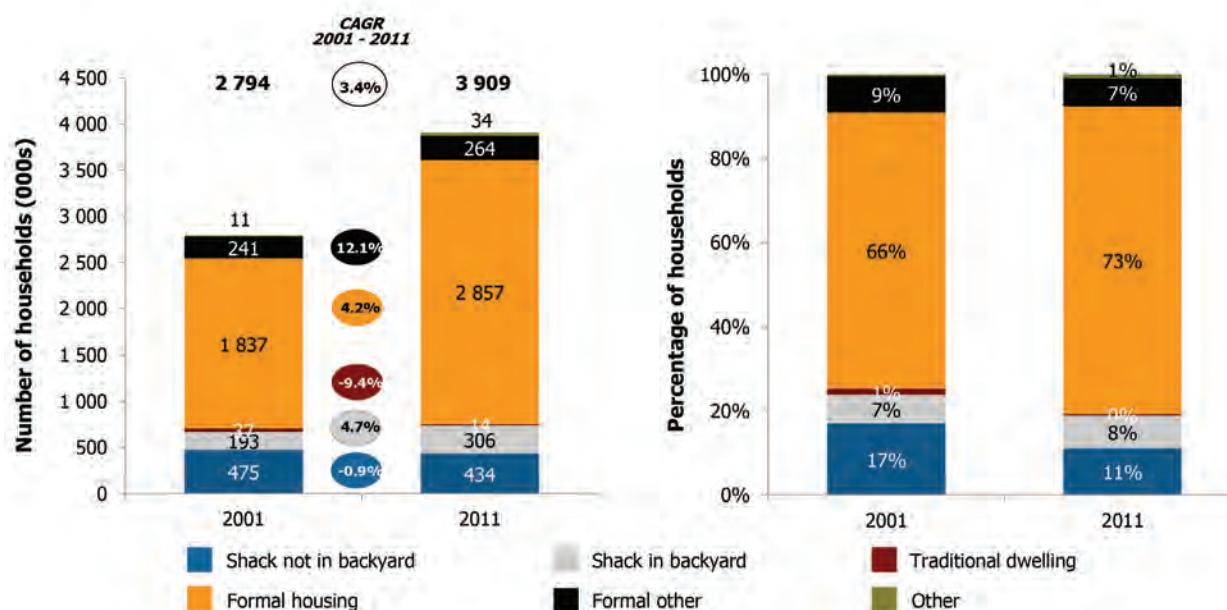
Source: Census 2011

Note: The vast majority (97%) of the Gauteng population live in urban areas. The remaining 2% of the population live in tribal/traditional areas or on farms (1% in each).

The total number of households living in formal dwellings has increased by 1,043,437 over the ten years between 2001 and 2011. In 2001 74% of households lived in formal dwellings⁵. By 2011 this had increased to 80%. The number and proportion of households living in shacks not in backyards has declined.

CHART 3

TYPE OF MAIN DWELLING IN GAUTENG



Source: Census 2001, Census 2011

Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

The additional number of households living in formal housing is a useful proxy for the growth in the housing stock. Between 2001 and 2011 Stats SA reports that formal private sector residential new build amounted to approximately 179 000 housing units. The balance, namely 821 000 units, are either units that are not registered with Stats SA or are units that have been built by the State as part of its extensive RDP housing delivery programme.

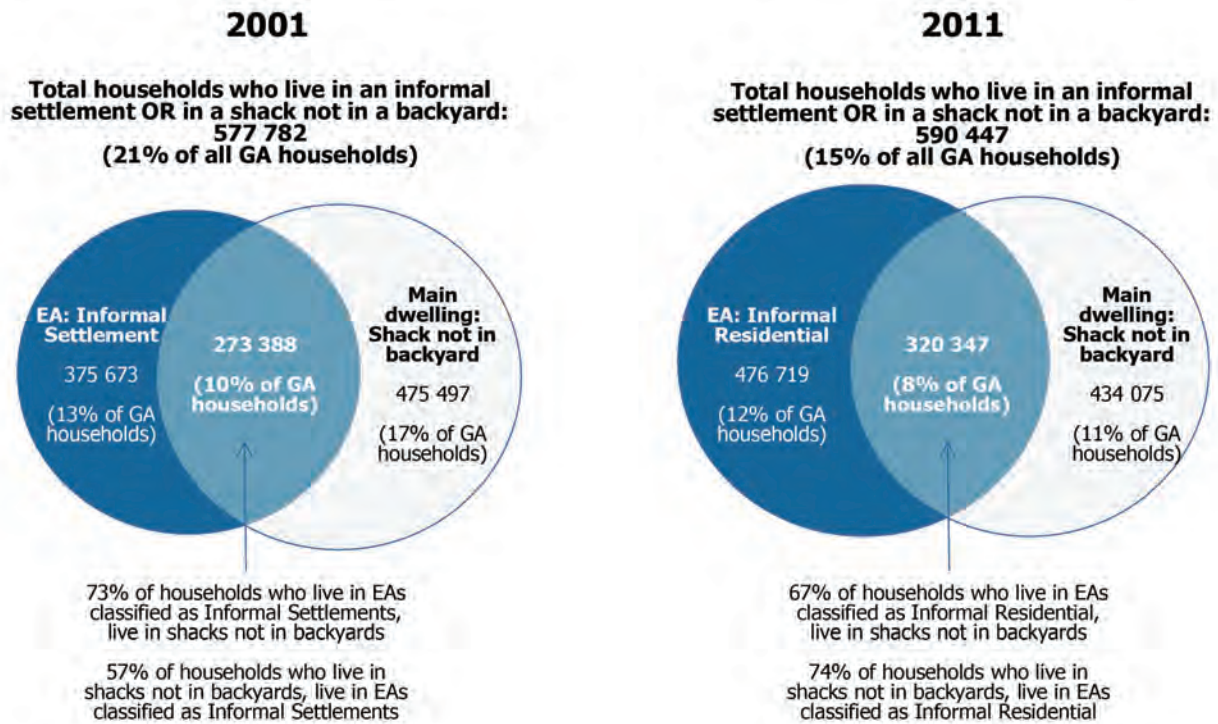
It appears that the number of households living in informal settlements proxied by dwelling type (shack not in backyard) has declined while the number of households living in informal settlements proxied by EA type (informal residential) has increased in Gauteng. In 2001 there were 475,497 households living in shacks not in backyards compared to 434,075 in 2011. With regard to EAs, 375,673 households lived in areas demarcated by Stats SA as informal settlements in 2001 compared to 476,719 in 2011 in areas demarcated as informal residential⁶

⁵ Formal dwelling contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment, House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

⁶ The name changes in some EA types (including 'Informal settlement EA' changing to 'Informal residential EA') is due to a change in terminology and not a change in methodology

CHART 4

HOUSEHOLDS LIVING IN INFORMAL SETTLEMENTS IN GAUTENG



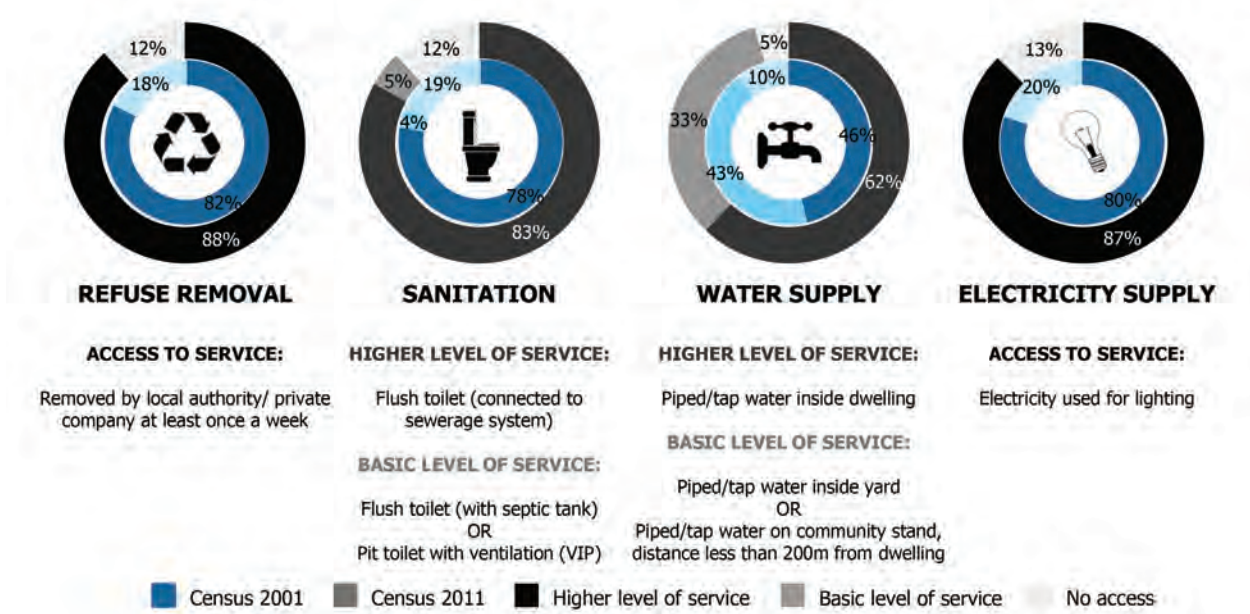
Source: Census 2001, Census 2011

At the same time there has been a significant increase in the number of households living in backyard shacks. The number of households living in this type of dwelling has increased at a rate of 4.7% per year. In terms of total households, Census 2011 indicates a total of 305,683 households living in shacks in backyards, compared to 192,568 in 2001.

Across the province, the proportion of households who had access to refuse removal services increased from 82% in 2001 to 88% in 2011, while access to sanitation and piped water also improved noticeably. Likewise, access to electricity increased from 80% of all households in 2001 to 87% in 2011.

CHART 5

ACCESS TO SERVICES IN GAUTENG 2001 VS. 2011: ALL HOUSEHOLDS



Source: Census 2001, Census 2011

Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

Census data also indicates a noticeable shift towards rental accommodation for all dwelling types. In 2001 roughly 28% of households in Gauteng rented their primary dwellings. This had increased to 37% in 2011.

TABLE 4

HOUSEHOLDS LIVING IN GAUTENG: TENURE STATUS BY TYPE OF MAIN DWELLING

	Census 2001			Census 2011			
Western Cape	Owned	Rented	Occupied rent-free	Owned	Rented	Occupied rent-free	Other
Formal dwelling	60%	29%	11%	49%	36%	12%	3%
Traditional dwelling	51%	24%	25%	36%	43%	17%	4%
Shack in backyard	20%	62%	19%	15%	67%	16%	2%
Shack not in backyard	31%	12%	57%	34%	20%	43%	4%
Other	38%	26%	36%	20%	51%	23%	6%
Total	52%	28%	20%	44%	37%	16%	3%

Source: Census 2001, Census 2011

The balance of the document will explore some of the key trends highlighted in this overview in more detail specifically with regard to informal settlements.

PART 4

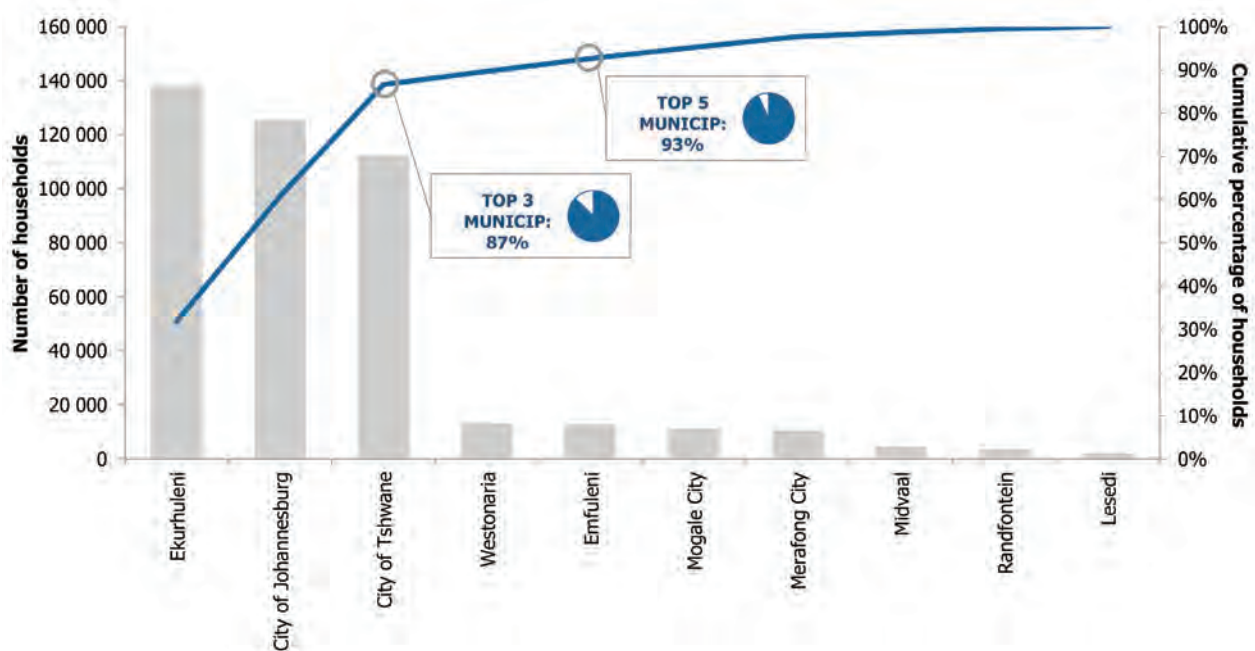
Number of households living in informal settlements in Gauteng

The data indicates that there are a total of 434,075 households, containing 1,062,848 individuals who live in shacks not in backyards. As noted in the previous chapter, census data indicates that the number of households living in shacks not in backyards has declined in Gauteng.

Provincial statistics mask very different housing conditions, and significant shifts at a district and local municipality level. The data indicates that shacks not in backyards tend to be concentrated in key municipalities. An estimated 87% of households living in shacks not in backyards in Gauteng can be found in the province's three metropolitan areas, Ekurhuleni, City of Johannesburg and City of Tshwane. This is in line with the proportion of households in the province that live in these metros⁷.

CHART 6

HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS BY LOCAL MUNICIPALITY IN GAUTENG



Source: Census 2011

⁷ An estimated 86% of all households in Gauteng can be found in these three municipalities

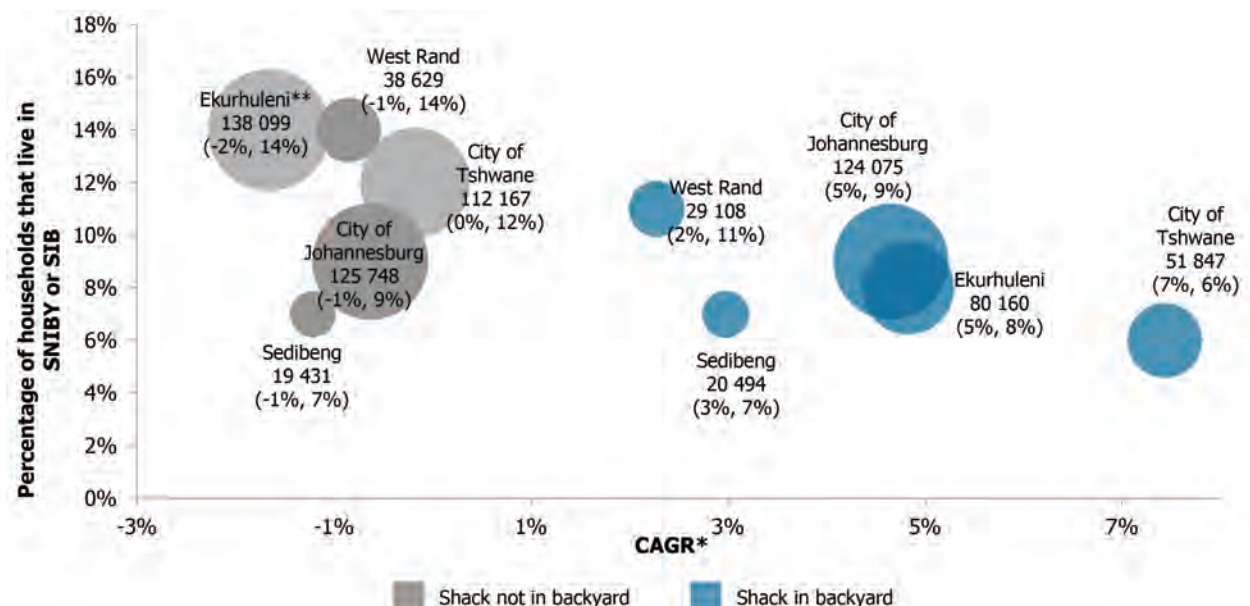
Ekurhuleni and the West Rand have the highest proportion of households who live in shacks not in backyards (14%) across the municipalities in the province. The number and proportion of households living in shacks not in backyards by district municipality is summarised below. Together, shacks in backyards and shacks not in backyards accommodate almost 20% of all households in the province.

Municipality	Shack not in a backyard		Shack in a backyard	
	Number of HH	Percentage of HH that live in SNIBY	Number of HH	Percentage of HH that live in SIB
Ekurhuleni	138 099	14%	80 160	8%
City of Johannesburg	125 748	9%	124 075	9%
City of Tshwane	112 167	12%	51 847	6%
West Rand	38 629	14%	29 108	11%
Sedibeng	19 431	7%	20 494	7%
Gauteng	434 075	11%	305 683	8%

Source: Census 2011

Across the province, the number of households living in shacks in backyards is increasing while the number of households living in shacks not in backyards is declining, or as in the case of Tshwane, stabilising.

CHART 7 HOUSEHOLDS LIVING IN SHACKS BY DISTRICT MUNICIPALITY IN GAUTENG: GROWTH RATES



Source: Census 2001 & 2011

Note: Bubble size represents total households 2011 in SNIBY or SIB. Labels in brackets (x%, y%) : x% refers to CAGR*, y% refers to households in SNIBY or SIB as a proportion of total households

Note: *Compound Annual Growth Rate

Note: ** Read as: Ekurhuleni district municipality had 138 099 households living in shacks not in backyards in 2011. This has declined by a rate of 2% compounded annually between 2001 and 2011. 14% of households in Ekurhuleni live in shacks not in backyards

According to the 2011 Census⁸, roughly 34% of households living in shacks not in backyards in Gauteng regard themselves as owners, with 43% who say they occupy the dwelling for free. There is no data to determine whether self-assessed ownership reflects formal status and if not, through what mechanisms the household has come to own the dwelling. Twenty per cent of households say they rent their dwellings⁹.

⁸ In the questionnaire, the following statement is included with the question: "Refers to the main dwelling structure only and not to the land that it is situated on"

⁹ Four per cent responded 'other' – there is no indication as to what this entails

PART 5

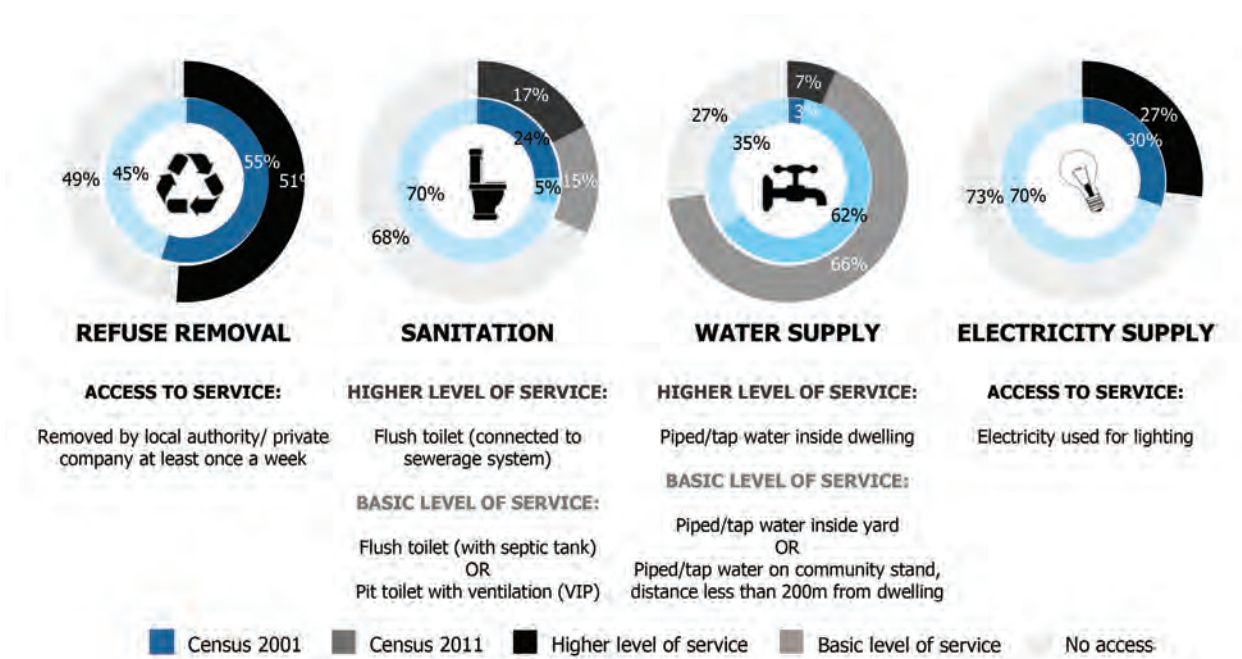
Profiling informal settlements in Gauteng

5.1 Access to services

Access to water and sanitation services have been categorised into higher and basic levels of service. Current and historic levels of access are summarised below for households living in shacks not in backyards. Access to sanitation and electricity are particularly low.

CHART 8

ACCESS TO SERVICES IN GAUTENG 2001 VS. 2011: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



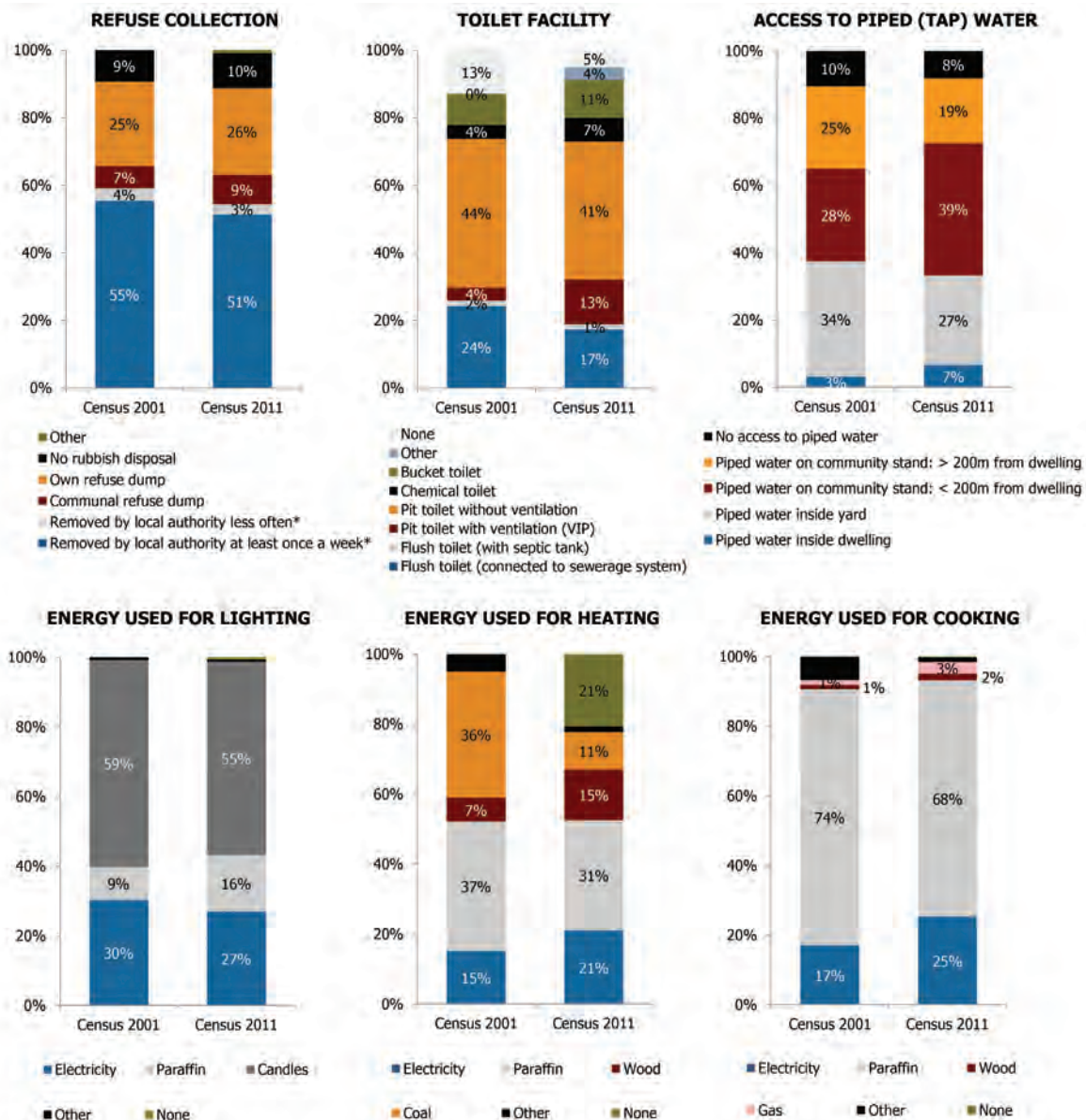
Source: Census 2001, Census 2011

Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

With the exception of access to piped water, access to services for households living in shacks not in backyards in Gauteng has not improved between 2001 and 2011. More detailed data on the nature of services is summarised in the charts below.

CHART 9

ACCESS TO SERVICES IN GAUTENG: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



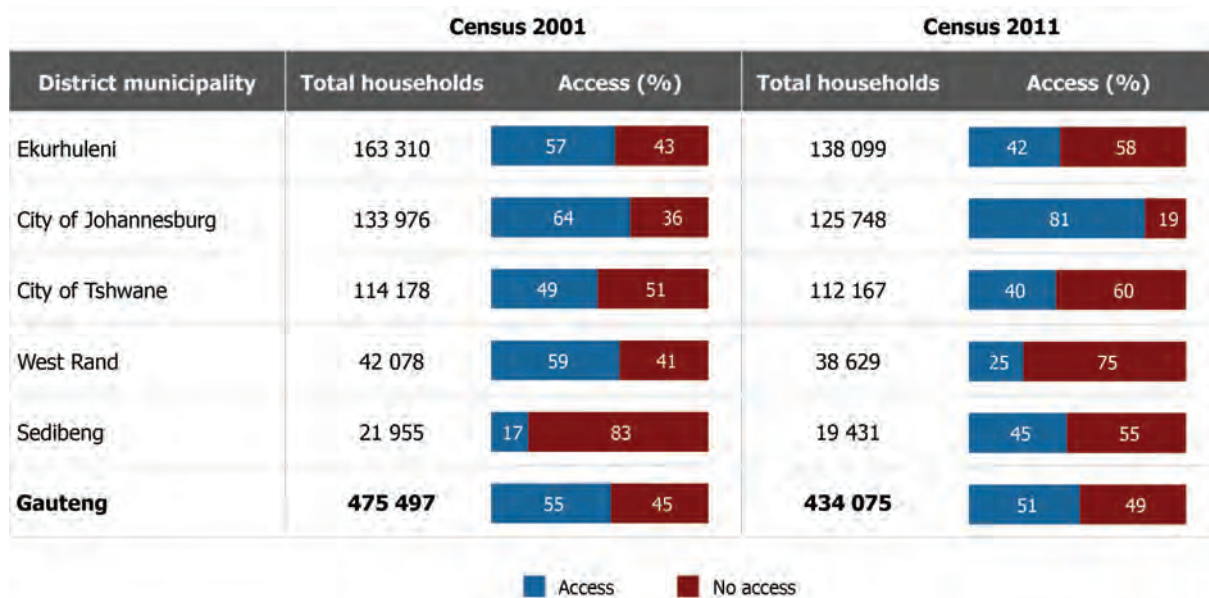
Source: Census 2001, Census 2011

* In the Census 2011 these include refuse removed by private company

There are noticeable differences across the province in terms of levels of access and rates of change with regard to municipal services. Measured in terms of the proportion of households, access to refuse removal for those living in shacks not in backyards varies considerably within the province and has declined noticeably in some places.

CHART 10

ACCESS TO REFUSE REMOVAL IN GAUTENG: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



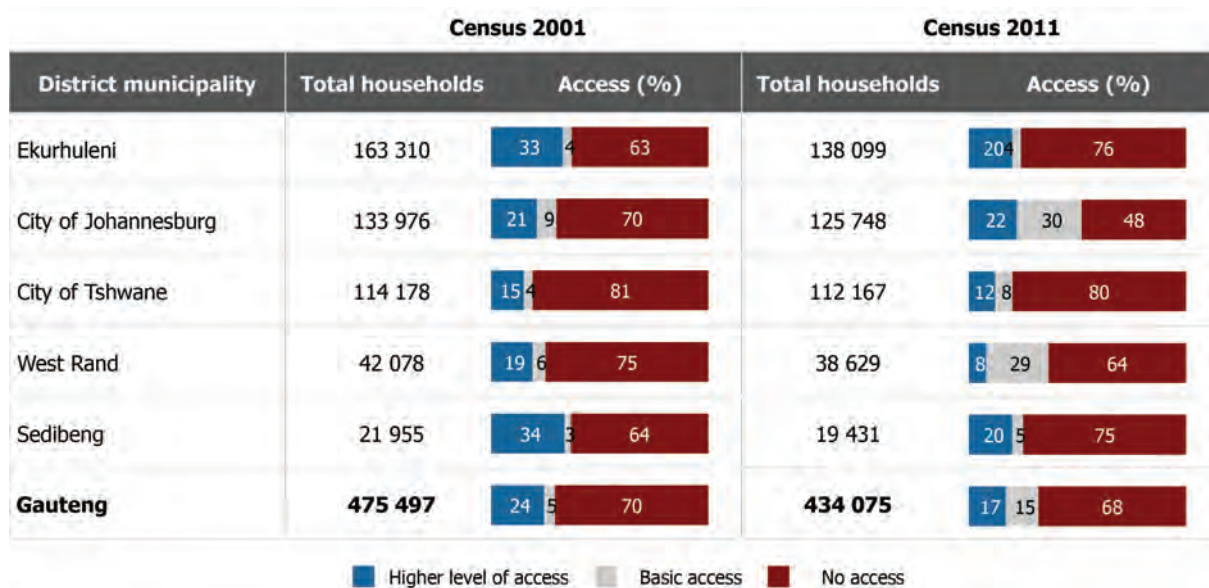
Source: Census 2001, Census 2011

Note: Access to refuse removal: Removed by local authority/private company at least once a week

Access to sanitation has improved in the City of Johannesburg. It remains low and has even declined noticeably in some areas.

CHART 11

ACCESS TO SANITATION IN GAUTENG: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



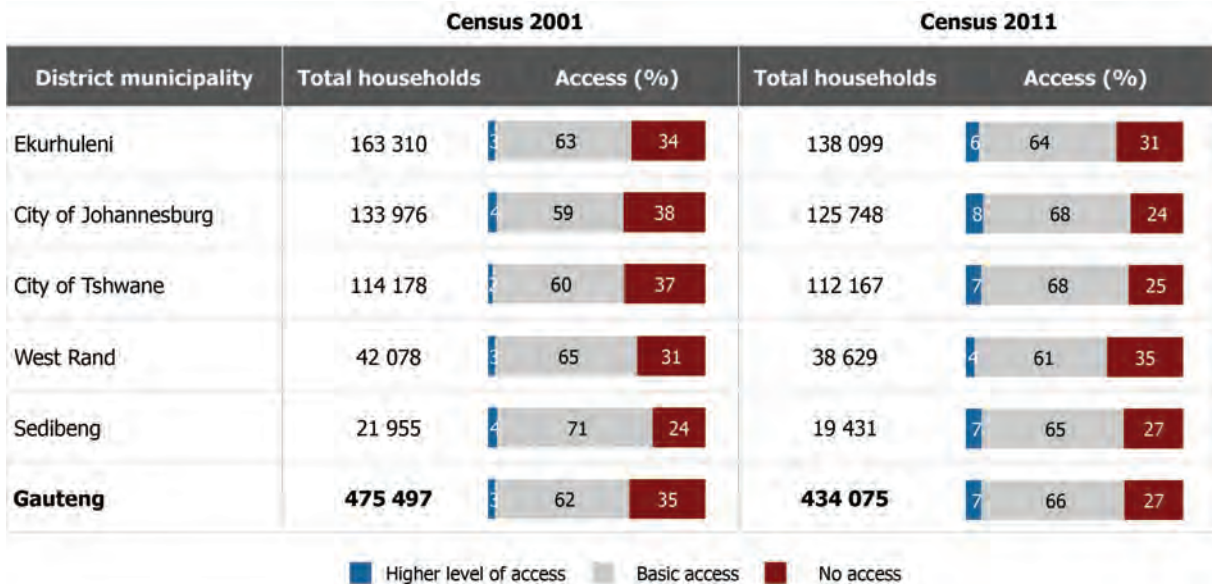
Source: Census 2001, Census 2011

Note: Higher levels of service: Flush toilet (connected to sewerage system); Basic levels of service: Flush toilet (with septic tank) / Pit latrine with ventilation (VIP)

Access to piped water has increased in most district municipalities with the exception of Sedibeng and West Rand.

CHART 12

ACCESS TO WATER IN GAUTENG: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



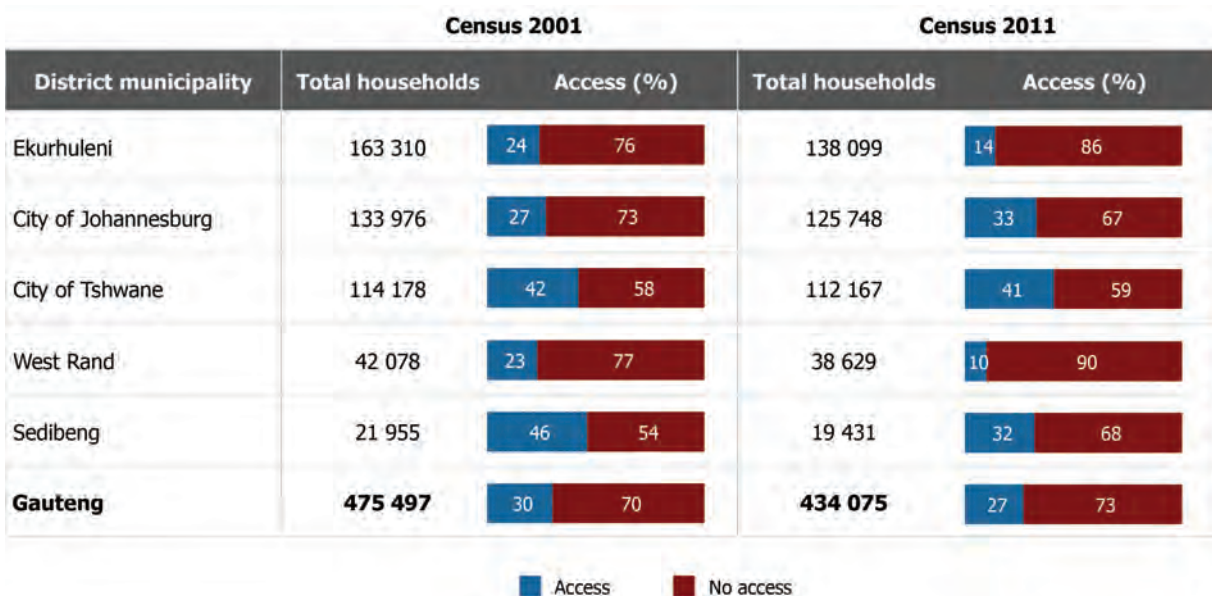
Source: Census 2001, Census 2011

Note: Higher levels of service: Piped (tap) water inside dwelling; Basic levels of service: Piped (tap) water inside yard / Piped (tap) water on community stand: distance less than 200m from dwelling

Access to electricity has declined in all district municipalities with the exception of the City of Johannesburg.

CHART 13

ACCESS TO ELECTRICITY IN GAUTENG: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



Source: Census 2001, Census 2011

Note: Access to electricity: Use electricity for lighting

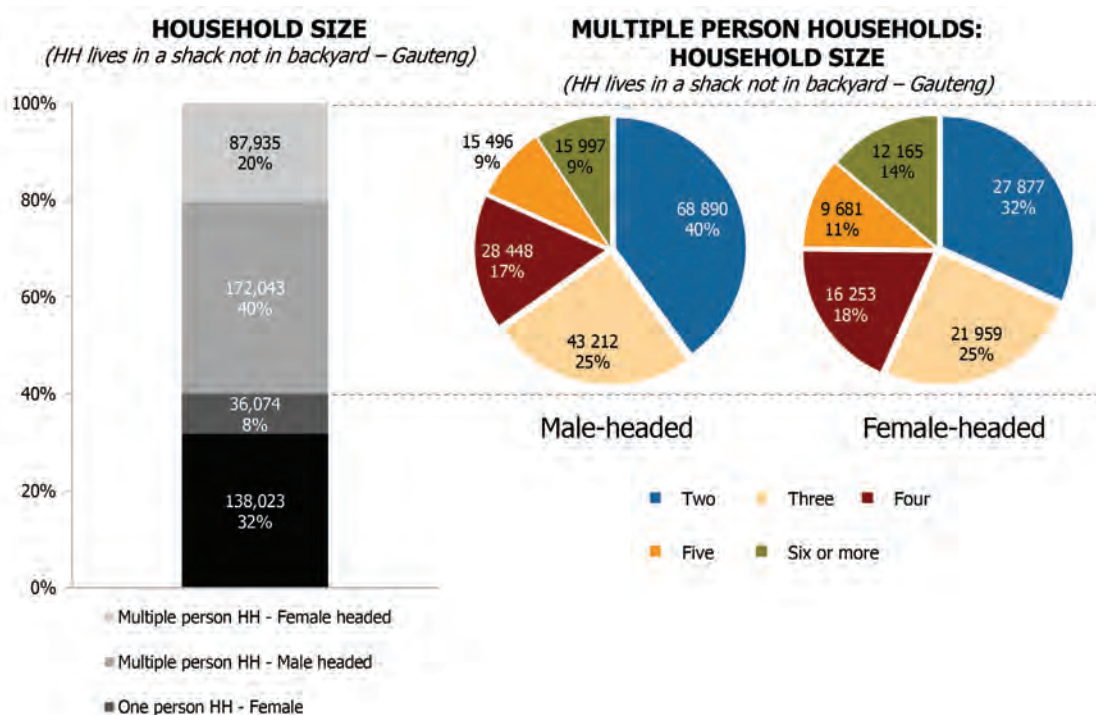
5.2 Household characteristics

The average household size for households who live in shacks not in backyards at 2.5 is slightly lower than the provincial average of 2.9. This reflects the high proportion of one-person households who live in shacks not in backyards. Census 2011 indicates that roughly 40% of households who live in shacks not in backyards in Gauteng are one-person households; for households in the province as a whole this proportion is 30%.

The size distribution of households living in shacks not in backyards from the census together with data on the gender of the head of the household is summarised below. More than two thirds of households (71%) are male-headed. Of those households comprising more than one person, female-headed households are noticeably larger.

CHART 14

HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN GAUTENG: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



Source: Census 2011

Data on number of rooms in the dwelling together with data on the number of people who live in the household can be used to assess over-crowding. Assuming that dwellings that contain more than two individuals per room are over-crowded, 21% of all multi-person households who live in shacks not in backyards in Gauteng live in over-crowded conditions.

5.3 Children in informal settlements

Census 2011 data on children has only been released for EAs, and not by dwelling type. The analysis of children therefore focuses on informal residential EAs. Census data indicates that there are 359,112 children under the age of 18 who live in informal residential EAs accounting for 10% of all children in Gauteng. There is a slight skew towards very young children in informal residential areas; 40% of all children are under the age of five, compared to 35% for the province as a whole.

TABLE 6 NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN GAUTENG				
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage
0 - 4	144 352	40%	1 191 418	35%
5 - 6	42 270	12%	395 135	12%
7 - 10	66 275	18%	678 482	20%
11 - 14	59 822	17%	643 897	19%
15 - 17	46 392	13%	514 279	15%
Total	359 112	100%	3 423 211	100%

Source: Census 2011

According to the census, 83% of children under the age of 15 in informal residential EAs in Gauteng have both parents still living¹⁰ (the corresponding proportion for the province as a whole is 84%¹¹).

School attendance for those aged 7 to 17 living in informal residential EAs is high, and with the exception of those aged between 15 and 17 is not significantly different than for the province as a whole. Eighty nine per cent of children aged 7 to 17 living in informal residential EAs in Gauteng currently attend an educational institution.

TABLE 7 CHILDREN AGED 7 - 17 YEARS IN GAUTENG: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL INSTITUTION		
Children 7 - 17	Informal residential EA	All children
7 - 10	92%	94%
11 - 14	92%	94%
15 - 17	81%	88%
Total*	89%	92%

Source: Census 2011

Note: * Total school attendance aged 7 - 17. Census reports this for children aged 5 and up

5.4 Migration

Census 2011 contains data on how long individuals have lived in their current dwellings but analysis using the current variables available make this difficult to interpret. Nevertheless we can look at those individuals who moved into their current dwelling after 2001 and who currently reside in informal residential EAs (data on migration by type of dwelling is not available). Roughly 32% of all individuals who live in informal residential EAs moved between 2001 and 2011. Of these, 20% corresponding to 78,490 individuals have moved from outside South Africa. The table below summarises findings in this regard.

¹⁰ For children in the country as whole living in informal residential EAs this proportion is 81%

¹¹ For children in the country as a whole this proportion is 80%

TABLE 8 MIGRATION IN GAUTENG	
Total number of people who moved between 2001 and 2011	3 955 478
Number of people who moved between 2001 and 2011 who live in informal EAs	398 714
Proportion of those who live in informal EAs who moved between 2001 and 2011	32%
Proportion of total who moved between 2001 and 2011 who live in informal EAs	10%
Provinces most moved from (informal EAs)	Gauteng (38%) Outside SA (20%)

Source: Census 2011

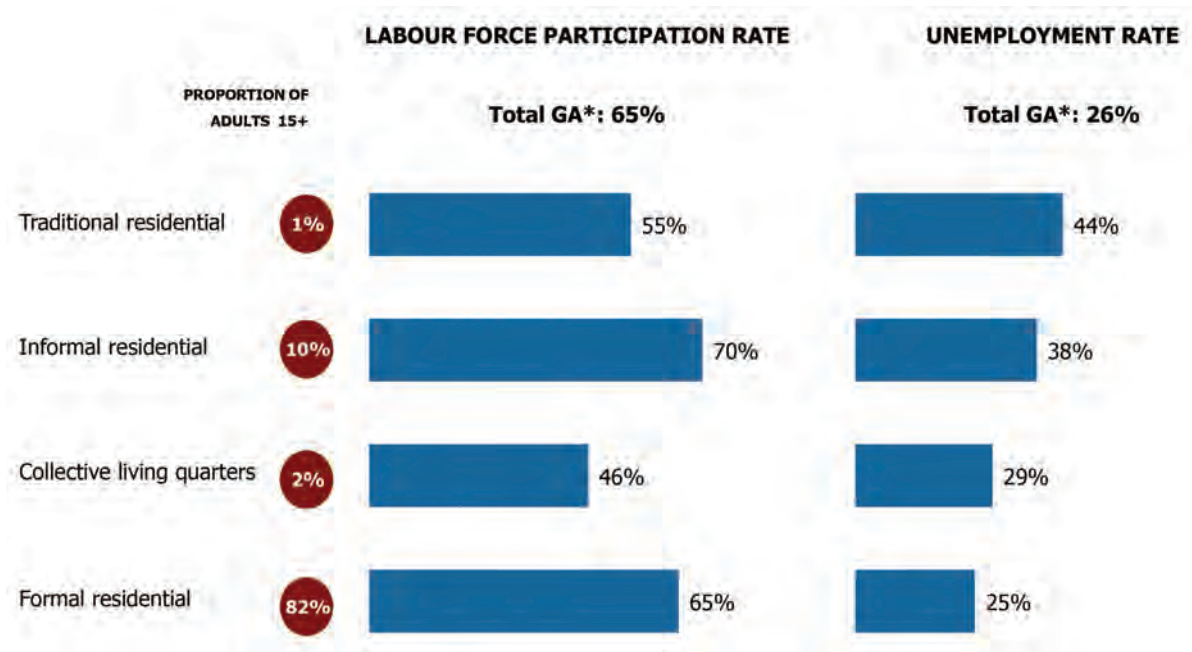
5.5 Employment and income

5.5.1 Employment

Census 2011 data on employment has only been released for EAs, and not by dwelling type. The analysis of employment therefore focuses on informal residential EAs. According to Census 2011, labour force participation rates are higher in informal residential EAs than in formal residential EAs and unemployment rates are noticeably higher. This is consistent with informal settlements acting as 'arrival cities' accommodating those seeking an entry point into the labour market.

CHART 15

ADULTS AGED 15+ IN GAUTENG: LABOUR FORCE PARTICIPATION RATES AND UNEMPLOYMENT RATES BY TYPE OF ENUMERATION AREA



Source: Census 2011

Note: * Total GA also includes: Small holdings (2%), Commercial (1%), Farms (1%), Industrial (0%), Vacant (0%), Parks and recreation (0%). Brackets show proportion of adults 15+ living in EA type

On the whole, a lower proportion of employed adults living in informal residential EAs is employed in the formal sector compared to all employed adults.

TABLE 9 SECTOR OF WORK IN GAUTENG: PERCENTAGE OF EMPLOYED ADULTS 15+				
	Formal Sector	Informal Sector	Private household	Don't know
Informal residential EA	67%	15%	15%	3%
All employed adults in province	77%	9%	12%	2%

Source: Census 2011

There is no data on the specific industries of employment.

Education levels are noticeably lower for adults aged 15 or older who live in informal residential EAs than for adults in Gauteng as a whole. Sixty six per cent of employed adults living in informal EAs in Gauteng do not have a matric.

TABLE 10 ADULTS 15+ IN GAUTENG: EDUCATION LEVEL BY EMPLOYMENT STATUS										
	Informal residential EA					All adults				
	No schooling	Less than Matric	Matric	Technikon, University or other post matric	Other	No schooling	Less than Matric	Matric	Technikon, University or other post matric	Other
Employed	5%	61%	30%	3%	0%	2%	35%	36%	25%	1%
Unemployed	5%	66%	26%	3%	0%	3%	54%	35%	8%	1%
Discouraged work-seeker	6%	68%	24%	2%	0%	3%	58%	33%	6%	1%
Other not economically active	8%	69%	20%	3%	1%	4%	54%	26%	9%	7%
Total adults 15+	6%	65%	26%	3%	0%	3%	45%	32%	17%	3%

Source: Census 2011

5.5.2 Income

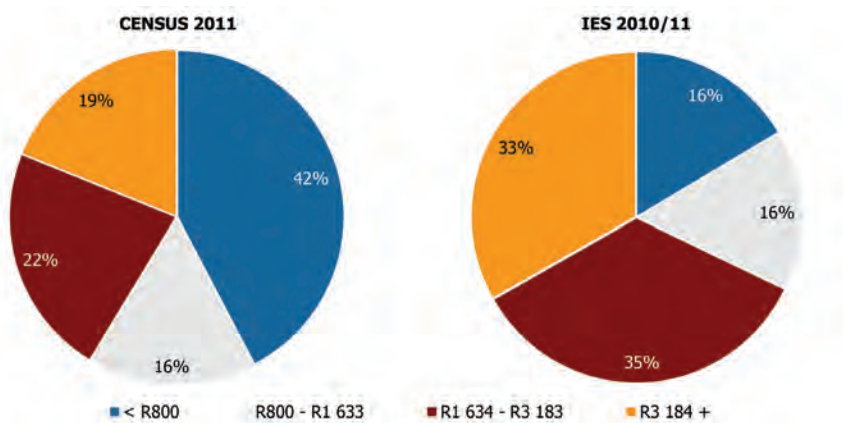
According to the 2011 Census 42% of households living in shacks not in backyards earn less than R800 per month. However the quality of census data on household income is relatively poor. Each respondent is asked to report their individual income in one of twelve fairly wide bands¹². Household income as reported by the Census is a derived variable, calculated by adding together the individual incomes of all members of the household¹³. A far more detailed source of data on incomes is the IES¹⁴. That data source indicates that 16% of households living in shacks not in backyards earned less than R800 in 2011. However, a limitation of the IES is its sample frame, which is drawn from the Census 2001. The data source may well contain a bias towards older more established informal settlements, which may contain a higher earning sample of households.

¹² "What is the income category that best describes the gross monthly or annual income of (name) before deductions and including all sources of income? (e.g. Social grants, UIF, remittances, rentals, investments, sales or products, services, etc.)"

¹³ As individual incomes were recorded in intervals rather than exact amounts, a fixed amount was allocated to each range in order to calculate household income. This is summarised in the appendix

¹⁴ Analysis of income in the IES excludes imputed rentals for housing

CHART 16

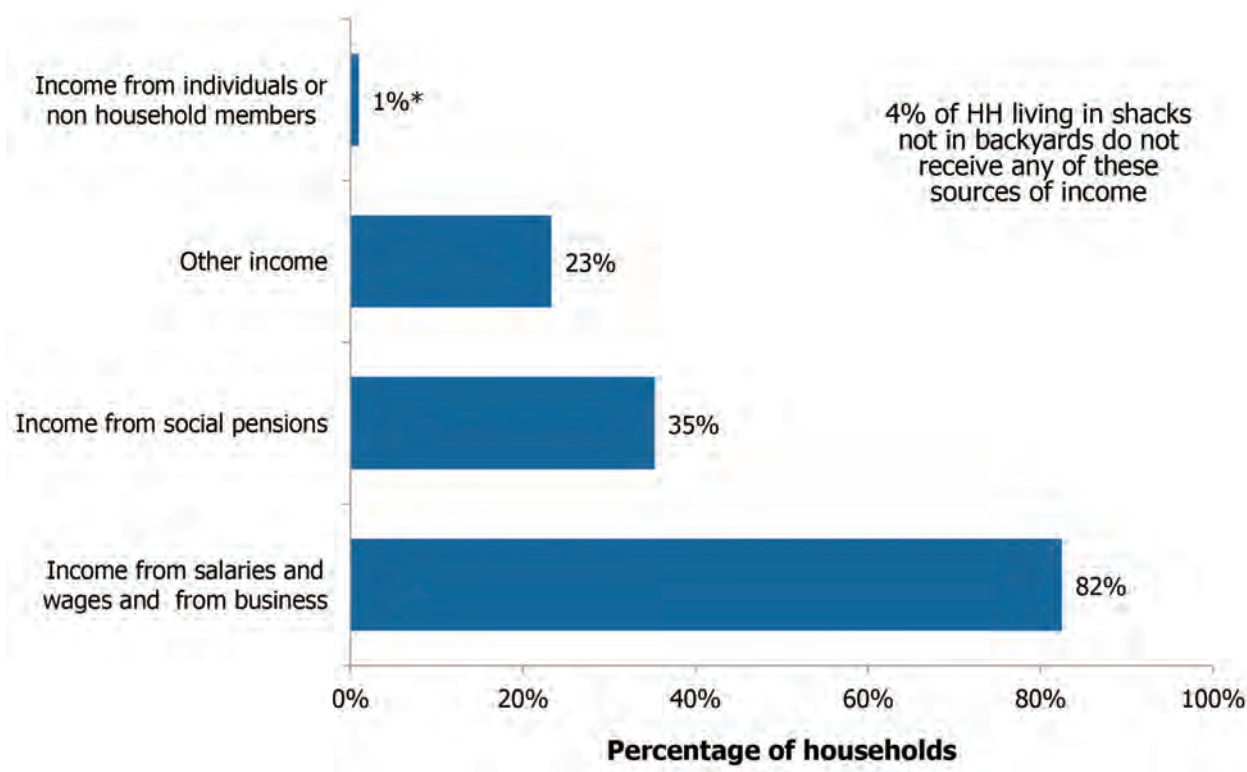
HOUSEHOLD LIVES IN A SHACK NOT IN BACKYARD IN GAUTENG: MONTHLY HOUSEHOLD INCOME¹⁵

Source: Census 2011, IES 2010/11

According to the IES, 69% of households in shacks not in backyards in the province have a household income of less than R3 500 per month.

The IES indicates that the primary income source for households living in shacks not in backyards in the province is salaries/wages. Around 35% receive government grants.

CHART 17

HOUSEHOLD LIVES IN A SHACK NOT IN BACKYARD IN GAUTENG: SOURCES OF INCOME

Source: IES 2010/11 (* less than 40 observations)

¹⁵ In the IES 2010/11 for the province as a whole, these proportions are: < R800 (10%), R800 - R1 633 (10%), R1 634 - R3 183 (17%), R3 184 - R6 366 (20%), R6 367 + (43%). In the Census 2011 they are: < R800 (25%), R800 - R1 633 (11%), R1 634 - R3 183 (17%), R3 184 - R6 366 (14%), R6 367 + (33%)

5.6 Housing waiting lists and subsidy housing

There is no data available in the census on housing waiting lists and subsidy housing. According to the GHS, 43% of households in shacks not in backyards in Gauteng have at least one member on the waiting list for an RDP or state subsidised house. Data from the same survey can be used to quantify the number of households who live in shacks not in backyards that might be eligible to obtain a subsidised house. Criteria include a household income of less than R3 500 per month, a household size of more than one individual, not having another dwelling, and no previous housing subsidy received. Using these criteria, around 40% of households living in shacks not in backyards in the province appear to qualify for subsidy housing.

PART 6

Profiling informal settlements in the City of Johannesburg

Data summarised for the City of Johannesburg focuses mainly on household level data. Data for individuals in the municipality has been included in the appendix.

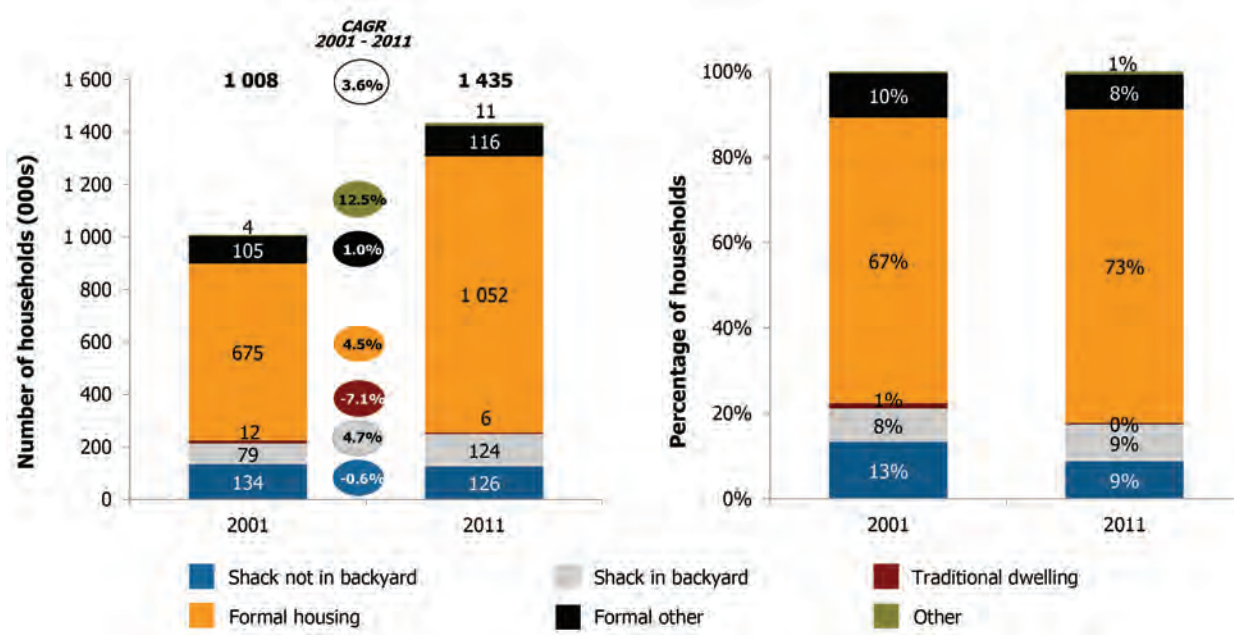
6.1 Number of households

According to the Census there has been a significant increase in the number and proportion of households living in formal dwellings in the City of Johannesburg since 2001¹⁶. In 2001 77% lived in formal dwellings. By 2011 this had increased to 81%. The number living in shacks in backyards has increased at a faster rate, albeit off a lower base.

The number of households living in shacks not in backyards has declined by 8,228 from 133,976 to 125,748 over the ten year period while the proportion of households living in shacks not in backyards has declined from 13% in 2001 to 9% in 2011.

CHART 18

TYPE OF MAIN DWELLING IN THE CITY OF JOHANNESBURG



Census 2001, Census 2011

Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

¹⁶ Formal dwelling contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment, House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

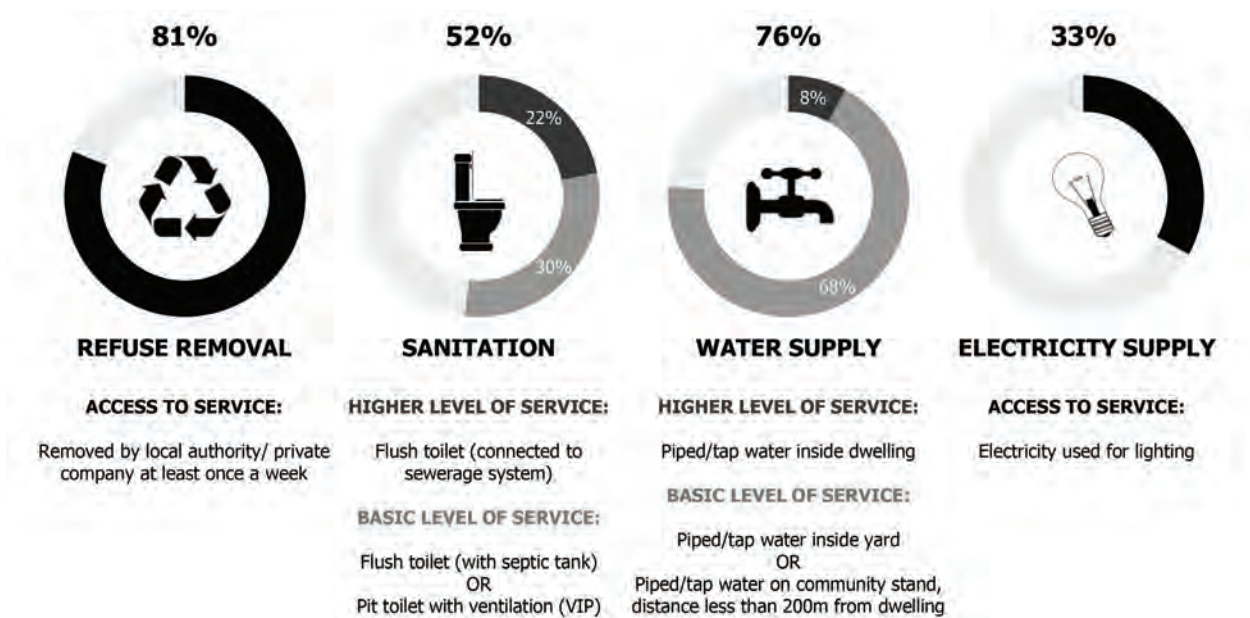
According to the 2011 Census, roughly 31% of households living in shacks not in backyards in the City of Johannesburg regard themselves as owners, with a further 43% who say they occupy the dwelling for free. Twenty one per cent of households say they rent their dwellings¹⁷.

6.2 Access to services

Access to water and sanitation services have been categorised into higher and basic levels of service. Current levels of access are summarised below for households living in shacks not in backyards in the City of Johannesburg.

CHART 19

ACCESS TO SERVICES IN THE CITY OF JOHANNESBURG 2001 VS. 2011: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



Source: Census 2011

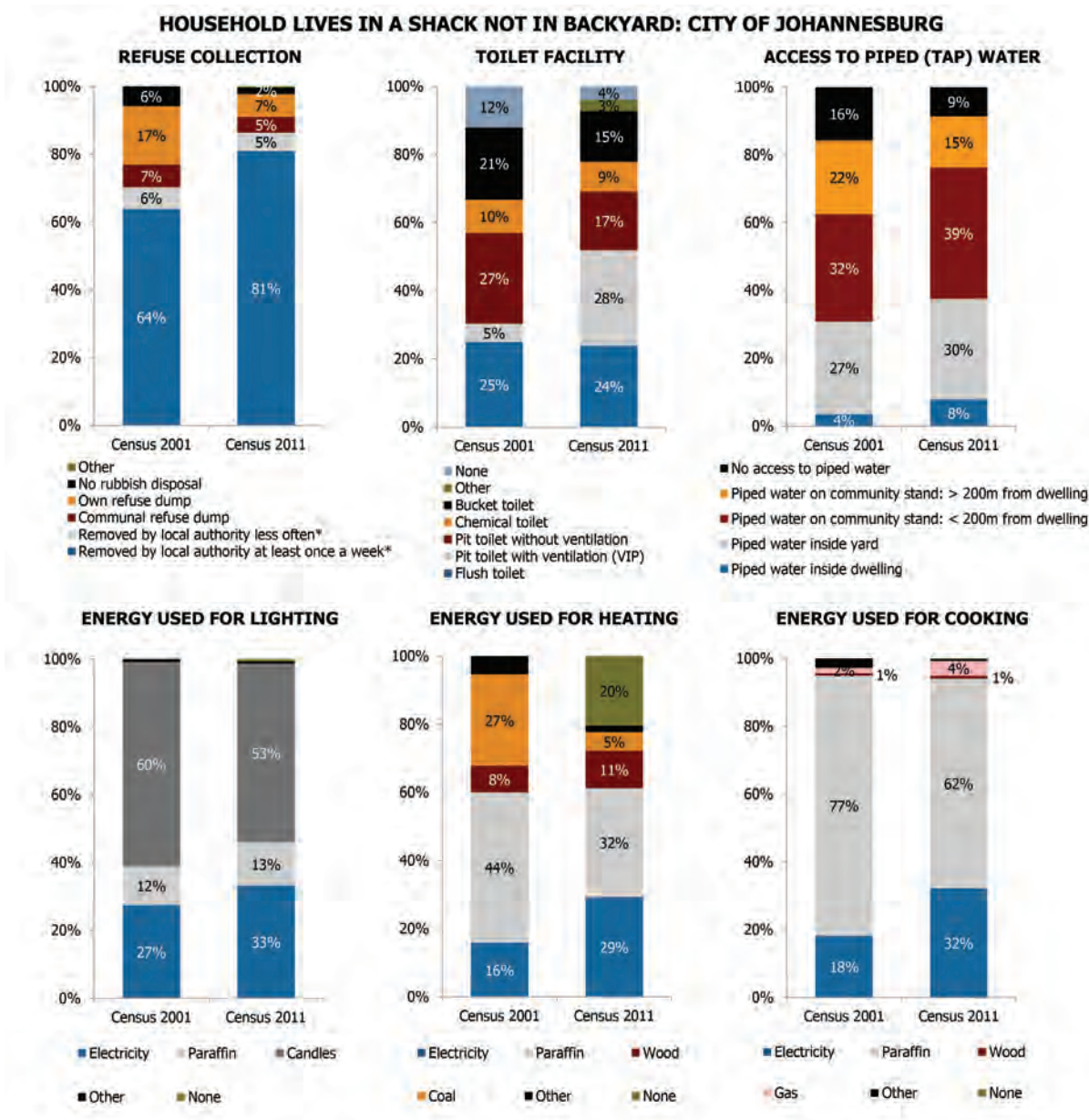
Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

On average households living in shacks not in backyards in the City of Johannesburg appear to live under better conditions than in 2001. There have been some noticeable improvements in services for those who live in shacks not in backyards, particularly access to refuse removal and piped water. Use of electricity for lighting by these households increased from 27% in 2001 to 33% in 2011. More detailed data on the nature of services is summarised in the charts below.

¹⁷ Four per cent responded 'other'

CHART 20

ACCESS TO SERVICES IN THE CITY OF JOHANNESBURG: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



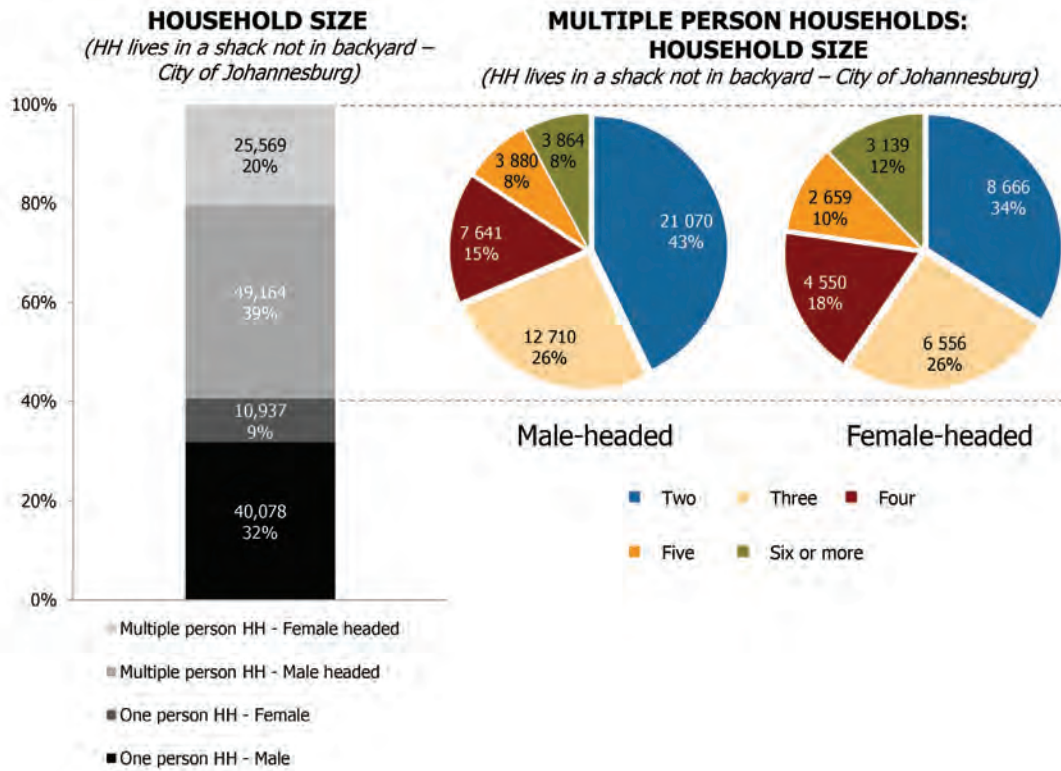
6.3 Household characteristics

The average household size for households who live in shacks not in backyards in the City of Johannesburg at 2.4 is slightly lower than the metropolitan average of 2.8. This reflects the high proportion of one-person households who live in shacks not in backyards. Census 2011 indicates that roughly 41% of households who live in shacks not in backyards in the City of Johannesburg are one-person households; for households in the metro as a whole this proportion is 31%.

The size distribution of households living in shacks not in backyards from the census together with data on the gender of the head of the household is summarised below. More than two thirds of households (71%) are male-headed. Of those households comprising more than one person, female-headed households are noticeably larger.

CHART 21

HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN THE CITY OF JOHANNESBURG: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



Source: Census 2011

PART 7

Profiling informal settlements in the City of Tshwane

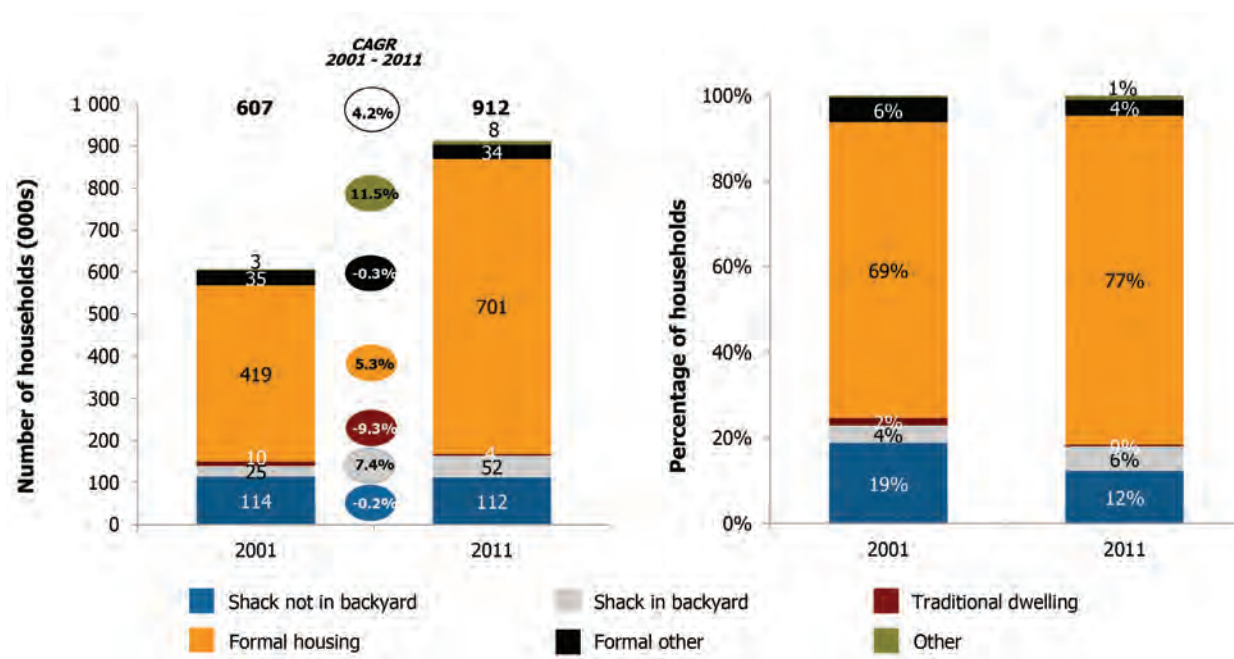
Data summarised for the City of Tshwane focuses mainly on household level data. Data for individuals in the municipality has been included in the appendix.

7.1 Number of households

According to the Census there has been a significant increase in the number of households living in formal dwellings in the City of Tshwane since 2001¹⁸ with 281,104 more households living in such dwellings. The number living in shacks in backyards has increased at a faster rate, albeit off a lower base.

The number of households living in shacks not in backyards declined slightly over the ten year period and the proportion of households living in shacks not in backyards has declined more noticeably from 19% in 2001 to 12% in 2011.

CHART 22 TYPE OF MAIN DWELLING IN THE CITY OF TSHWANE



Source: Census 2001, Census 2011

Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

¹⁸ Formal dwelling contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment, House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

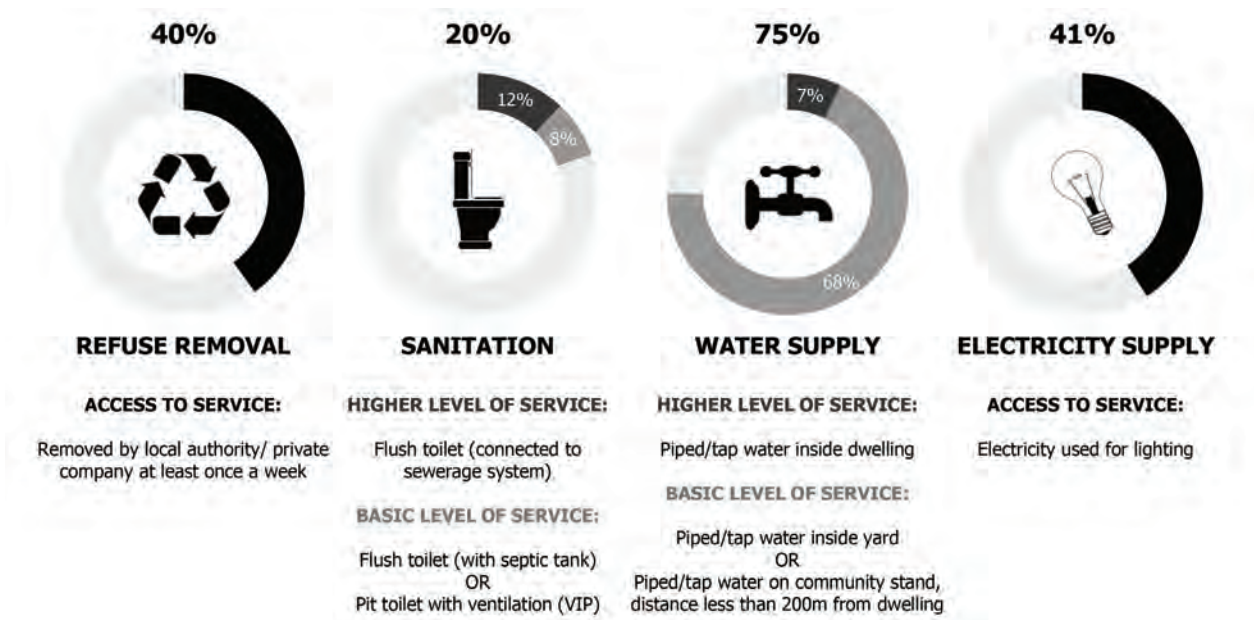
According to the 2011 Census, roughly 44% of households living in shacks not in backyards in the City of Tshwane regard themselves as owners, with a slightly lower 39% who say they occupy the dwelling for free. Fourteen per cent of households say they rent their dwellings¹⁹.

7.2 Access to services

Access to water and sanitation services have been categorised into higher and basic levels of service. Current levels of access are summarised below for households living in shacks not in backyards in the City of Tshwane.

CHART 23

ACCESS TO SERVICES IN THE CITY OF TSHWANE IN 2011: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



Source: Census 2001, Census 2011

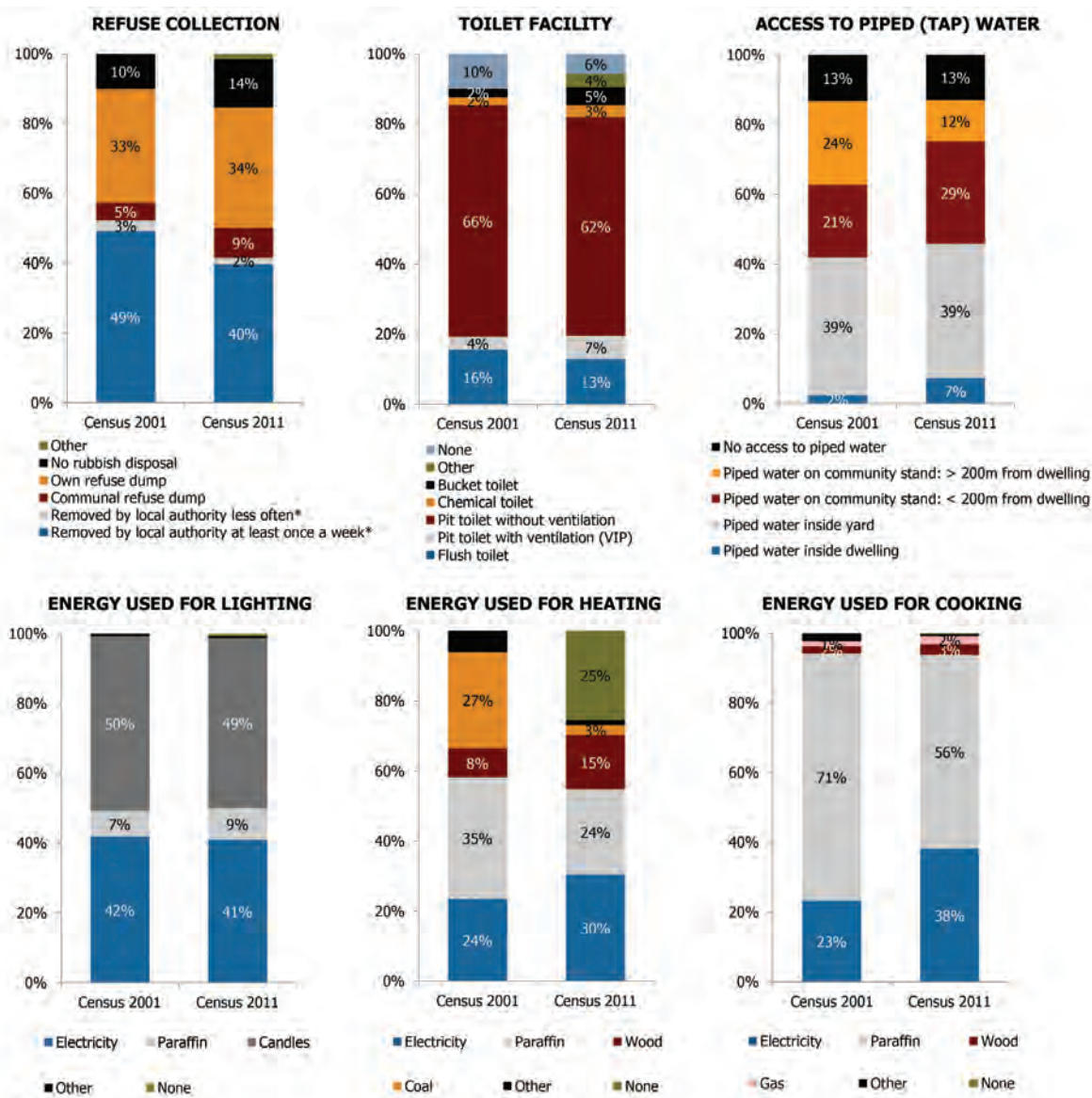
Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

On average, access to services for households living in shacks not in backyards did not improve between 2001 and 2011.

¹⁹ Four per cent responded 'other'

CHART 24

ACCESS TO SERVICES IN THE CITY OF TSHWANE: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



Source: Census 2001, Census 2011

* In the Census 2011 these include refuse removed by private company

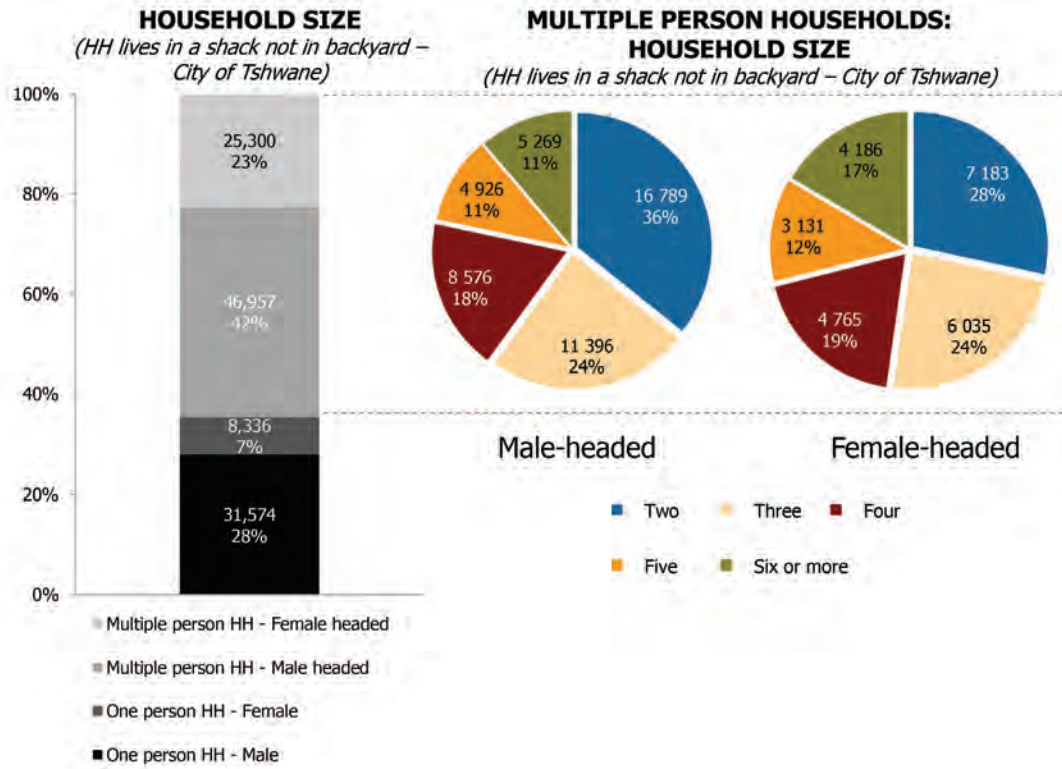
7.3 Household characteristics

The average household size for households who live in shacks not in backyards in the City of Tshwane at 2.7 is slightly lower than the metropolitan average of 2.9. This reflects the high proportion of one-person households who live in shacks not in backyards. Census 2011 indicates that roughly 36% of households who live in shacks not in backyards in the City of Tshwane are one-person households; for households in the metro as a whole this proportion is 29%.

The size distribution of households living in shacks not in backyards from the census together with data on the gender of the head of the household is summarised below. Seventy per cent are male-headed. Of those households comprising more than one person, female-headed households are larger.

CHART 25

HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN THE CITY OF TSHWANE: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



Source: Census 2011

PART 8

Profiling informal settlements in Ekurhuleni

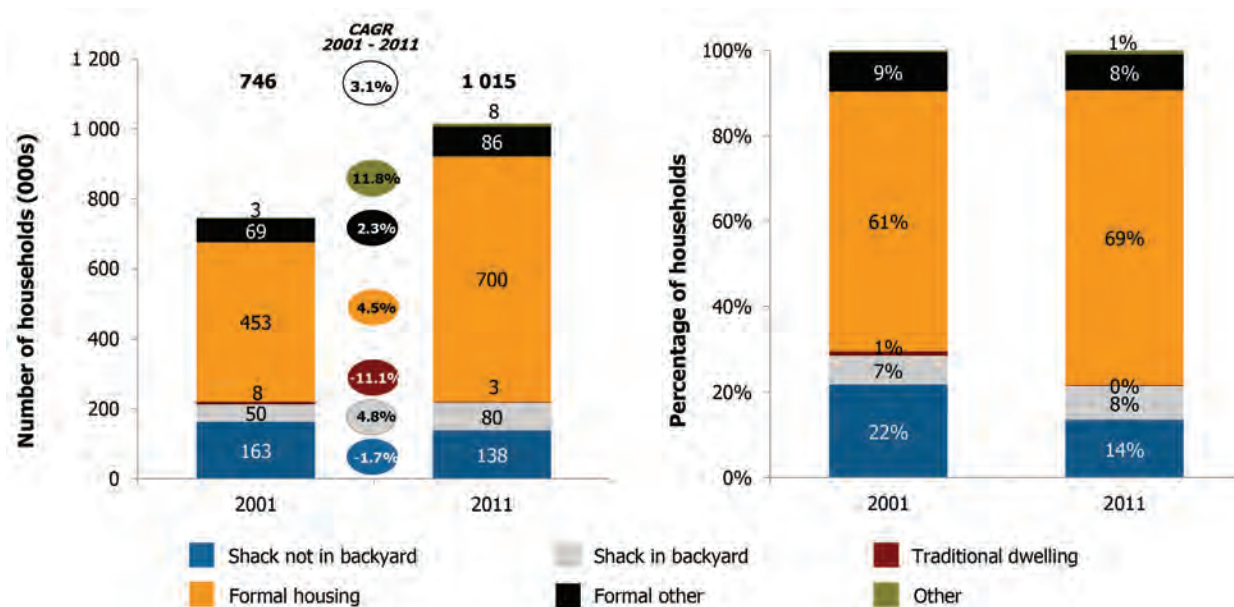
Data summarised for Ekurhuleni focuses mainly on household level data. Data for individuals in the municipality has been included in the appendix.

8.1 Number of households

According to the Census there has been a significant increase in the number of households living in formal dwellings in Ekurhuleni since 2001. The number living in shacks in backyards has increased at a faster rate, albeit off a lower base.

The number of households living in shacks not in backyards has decreased by 25,211 over the ten year period and the proportion of households living in shacks not in backyards has declined considerably from 22% in 2001 to 14% in 2011.

CHART 26 TYPE OF MAIN DWELLING IN EKURHULENI



Source: Census 2001, Census 2011

Note: Formal housing contains: House or brick/concrete structure on a separate stand or yard, Town / cluster / semi-detached house, Flat or apartment. Formal other contains: House/flat/room in backyard, Room/flatlet on a property or larger dwelling/servants quarters/granny flat

According to the 2011 Census, roughly 30% of households living in shacks not in backyards in Ekurhuleni regard themselves as owners, with a considerable 44% who say they occupy the dwelling for free. Twenty one per cent of households say they rent their dwellings²⁰.

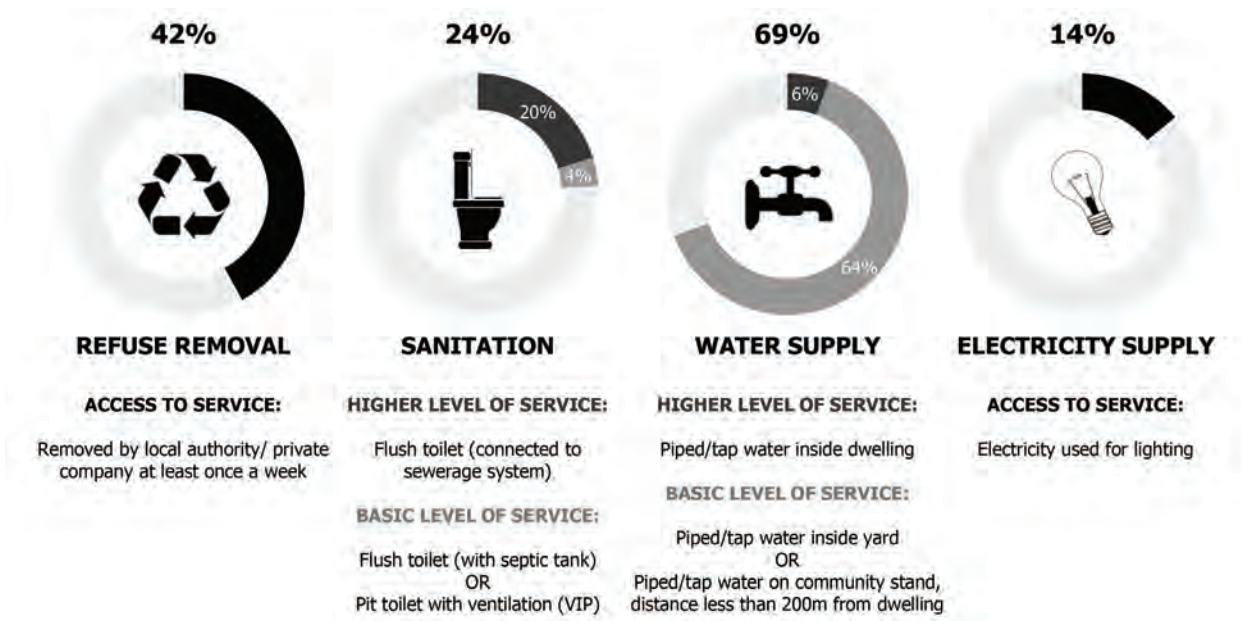
²⁰ Three per cent responded 'other'

8.2 Access to services

Access to water and sanitation services have been categorised into higher and basic levels of service. Current levels of access are summarised below for households living in shacks not in backyards in Ekurhuleni.

CHART 27

ACCESS TO SERVICES IN EKURHULENI IN 2011: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



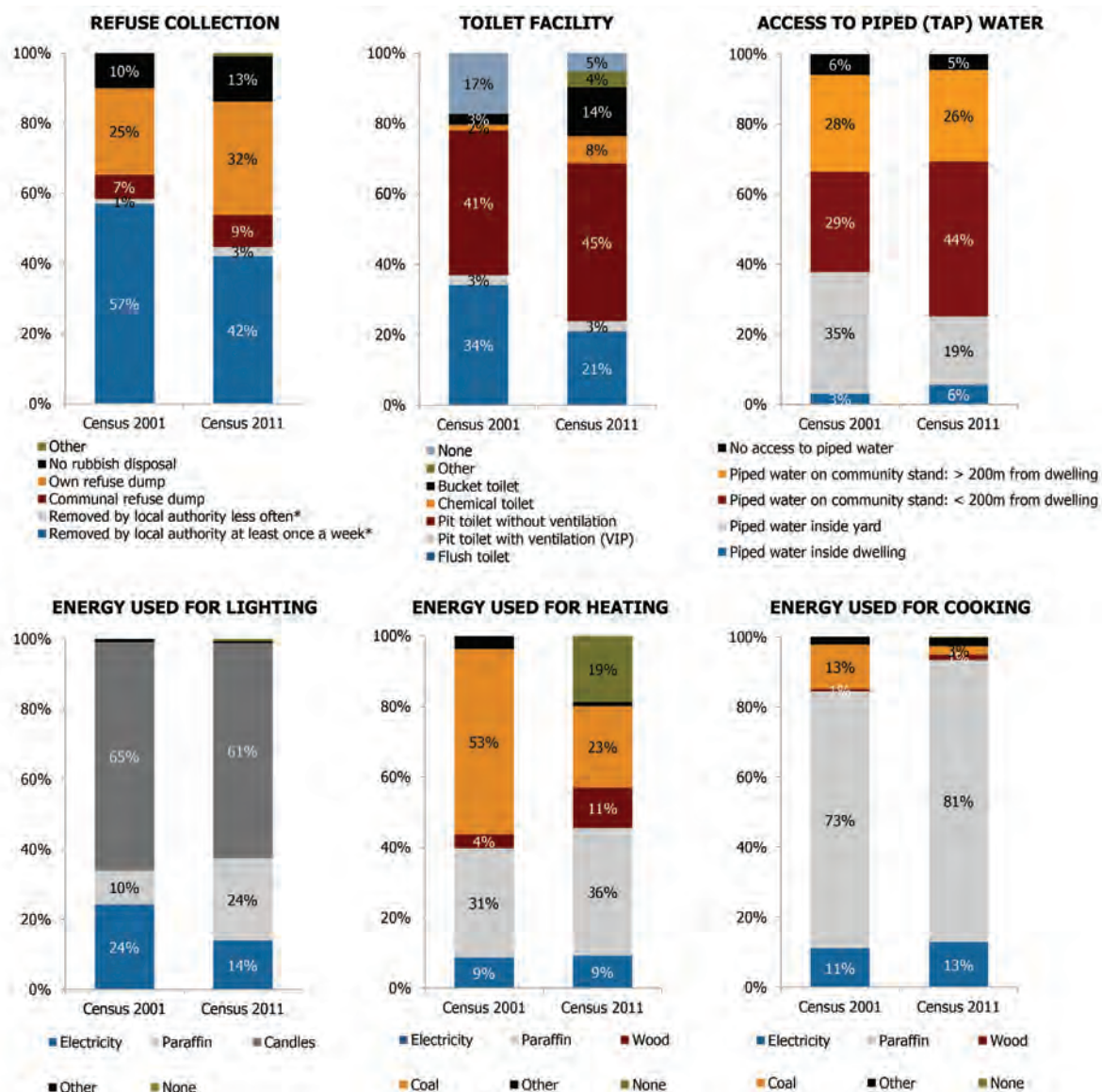
Source: Census 2011

Note: There is no indication as to the location of the toilet (in the dwelling, in the yard, and so on)

On average access to services did not improve between 2001 and 2011. More detailed data on the nature of services is summarised in the charts below.

CHART 28

ACCESS TO SERVICES IN EKURHULENI: HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS



Source: Census 2001, Census 2011

* In the Census 2011 these include refuse removed by private company

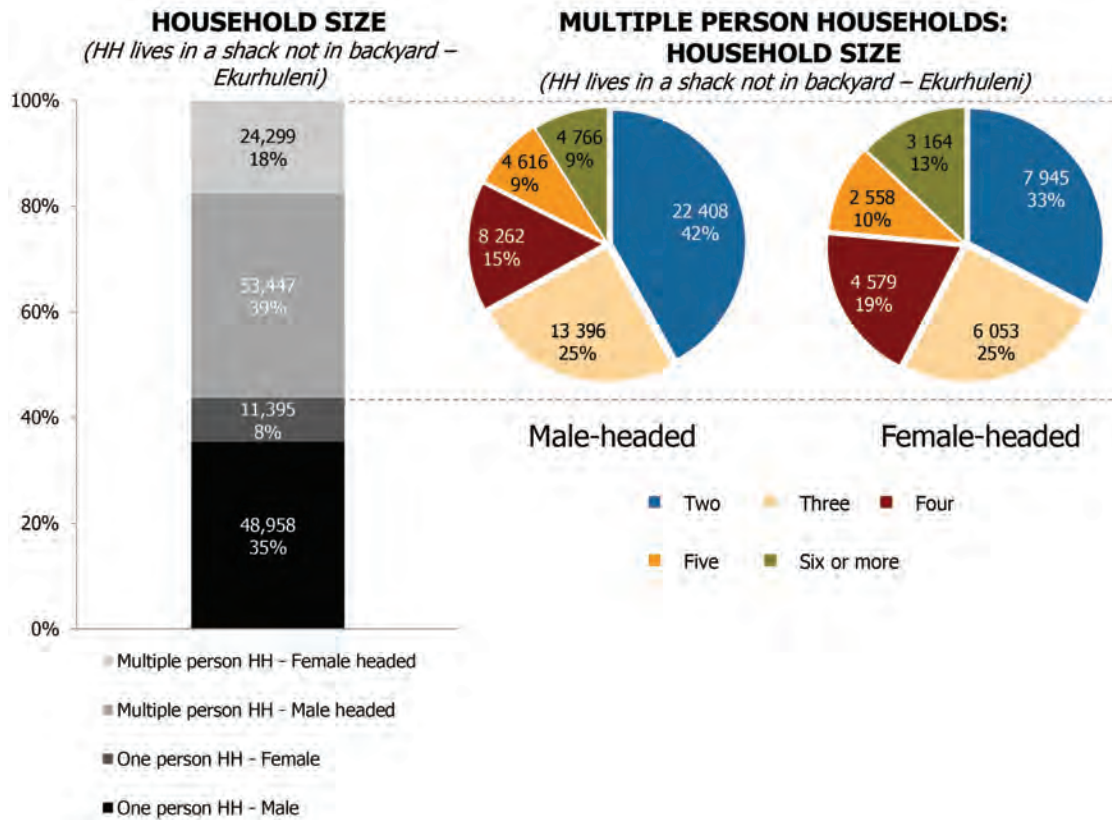
8.3 Household characteristics

The average household size for households who live in shacks not in backyards in Ekurhuleni at 2.3 is slightly lower than the metropolitan average of 2.9. This reflects the high proportion of one-person households who live in shacks not in backyards. Census 2011 indicates that roughly 44% of households who live in shacks not in backyards in Ekurhuleni are one-person households; for households in the metro as a whole this proportion is 30%.

The size distribution of households living in shacks not in backyards from the census together with data on the gender of the head of the household is summarised below. Nearly three quarters of households (74%) are male-headed. Of those households comprising more than one person, female-headed households are noticeably larger.

CHART 29

HOUSEHOLDS LIVING IN SHACKS NOT IN BACKYARDS IN EKURHULENI: SIZE OF HOUSEHOLD, BY GENDER OF HOUSEHOLD HEAD



Source: Census 2011

PART 9

Other non-survey data sources

Other non-survey data sources have been explored, including the Housing Development Agency, Eskom and other providers of data. Additionally, data is available from the City of Johannesburg, City of Tshwane and Ekurhuleni.

9.1 Land and Property Spatial Information System (LaPsis)

LaPsis, an online system developed by the HDA, builds on data gathered by the NDHS and overlays onto it land and property data including cadastre, ownership, title documents and deeds (from the Deeds Office), administrative boundaries (from the Demarcation Board) and points of interest from service providers such as AfriGIS²¹. The informal settlements layer was last updated in November 2011. The data indicates there are 561 informal settlements in Gauteng; 6% of these have a household or shack count.

9.2 Eskom's Spot Building Count (also known as the Eskom Dwelling Layer)

Eskom has mapped and classified structures in South Africa using image interpretation and manual digitisation of high resolution satellite imagery. Where settlements are too dense to determine the number of structures given the resolution of the satellite imagery the area is categorised as a 'Dense Informal' area. These areas are often informal settlements although Eskom does not have a specific definition in that regard. Identifiable dwellings and building structures are mapped by points while dense informal settlements are mapped by polygons. The dataset was last updated in November 2011.

Data provided by Eskom revealed 325 polygons categorised as Dense Informal in Gauteng, covering a total area of 19.1 square kilometres.

9.3 Community Organisation Resource Centre (CORC)

CORC is an NGO that operates in all provinces across the country, with the aim of providing support to "networks of communities to mobilise themselves around their own resources and capacities"²². In order to provide a fact base to enable communities to develop a strategy and negotiate with the State with regard to service provision and upgrading, CORC profiles informal settlements and undertakes household surveys. These surveys have been conducted in areas across the country by community members in these settlements. Community members are trained by CORC and are provided with a basic stipend to enable them to do their work. Improvements are made to questionnaires using community consultation and professional verification. This ensures

²¹ AfriGIS was given informal settlements data by the provincial departments of housing to create the map layers

²² See <http://www.sasdialliance.org.za/about-corc/>

that comprehensive and relevant data is collected. CORC also gathers other settlement level data on service provision including the number and type of toilets and taps. A list of settlements that have been enumerated recently in Gauteng is summarised below, together with household and population estimates.

TABLE 11 ENUMERATION OF INFORMAL SETTLEMENTS BY CORC IN GAUTENG			
Name of settlement	Date of enumeration	Number of households	Population
Alberton	2009	265	1 024
Harolds Farm	2009	93	261
Montic	2010	50	186
Thulasizwe	2010	65	243
Marlborough	2011	1 534	4 602
Meriting	2011	274	790
Riverside	2011	84	266
Silahliwe	2011	524	858

9.4 Municipal data: City of Johannesburg

The City of Johannesburg does not have a formal definition of informal settlements; however the following working definition is used²³: an informal settlement comprises “An impoverished group of households who have illegally or without authority taken occupation of a parcel of land (with the land owned by the Council in the majority of cases) and who have created a shanty town of impoverished illegal residential structures built mostly from scrap material without provision made for essential services and which may or may not have a layout that is more or less formal in nature.”

The City of Johannesburg has a detailed database comprising 189 informal settlements across all regions of the City, totalling 242,863 shacks (although coverage is not complete)²⁴. The latest available dataset was published in April 2013. In many cases maps and aerial photographs are available over time. Settlement data includes:

- Informal settlement name
- Ward
- Physical address
- Number of structures
- Services (water, sanitation, refuse)
- Land ownership
- Year established
- Settlement status

Household estimates for 2011 are based on projected data from 2007 figures (187,758 households) at 20% growth. The 2011 estimate for the number of households in these 189 settlements is 224,189.

According to the City of Johannesburg's 2012/16 Integrated Development Plan (IDP), trends in the metro show increased densification of informal settlements rather than the creation of new settlements.

²³ John Maytham, Project Manager: Informal Settlement Formalization Unit, Development Planning and Urban Management

²⁴ Previous estimates from May 2010 indicated 180 settlements comprising 195,474 shacks. Those shack counts were based on 2009 aerial photographs

9.5 Municipal data: City of Tshwane

Documents²⁵ used by the City of Tshwane define an informal settlement as follows; “Informal settlement means one shack or more constructed on land, with or without the consent of the owner of the land or the person in charge of the land”. A “shack” is defined as any temporary shelter, building, hut, tent, dwelling or similar structure which does not comply with the provisions of the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977), the regulations promulgated under that Act and the Municipality’s Building Control By-laws and which is primarily used for residential purposes.

The City of Tshwane provided a list of informal settlements along with the number of shacks marked in each settlement. According to that data set there are 66 informal settlements in the municipality with 278,910 shacks in these settlements.

9.6 Municipal data: Ekurhuleni

Reference documents²⁶ used by the Ekurhuleni Municipality define an informal settlement as; “As a basic characteristic, the occupation of the land is unauthorised. In addition, the use of the land may be unauthorised, and in most cases the construction standards do not comply with building regulations”.

Ekurhuleni has a detailed database of informal settlements data. This includes:

- Name of informal settlement
- Detailed description of location (town, nearest suburb, GPS co-ordinates)
- Date established
- Number of households
- Status (in-situ upgrade, relocation, time frames)
- Land ownership
- Vulnerabilities and other issues

According to its data set there are 119 informal settlements in the municipality with 162,982 households living in these settlements.

Ekurhuleni uses aerial photographs and surveys to profile informal settlements. This data has been compiled since 2003 and updated with new information as this becomes available (for example, new ortho-photos or shack counts). Where shack counts are not done, a perimeter is drawn around each settlement on the GIS and the area calculated. The settlement is then plotted with a grid overlay and a sample of one hectare sized blocks is counted. An average density per hectare is established and used across the area. The last image count is based on 2010 photos. Previous estimates using 2007 photos were also updated / verified by means of shack counts for the chemical toilet roll-out that took place²⁷. More ortho-photography will be generated in 2013.

A tender has recently closed for a ‘Housing Backlog Study’ which will provide revised informal settlement and backyard counts as well as socio-economic data.

²⁵ City of Tshwane Metropolitan Municipality, By-laws Relating to the Management and Control of Informal Settlements, Definitions

²⁶ Study into supporting informal settlements, Main Report, 28 August 2004 Prepared for Department of Housing, Pretoria by the University of the Witwatersrand Research Team

²⁷ That data set indicated 160,336 households living in 114 informal settlements in the municipality

9.7 Summary of estimates

There are discrepancies between the various estimates of the number of informal settlements in Gauteng. For example, LaPsis 2011 estimates that there are 108 informal settlements in the City of Tshwane compared to the municipal estimate of 66. It is not clear whether the definitions of informal settlements are aligned.

TABLE 12 NUMBER OF INFORMAL SETTLEMENTS		
	Number of informal settlements	
	LaPsis 2011: Informal settlements atlas	Municipal estimates 2012
City of Johannesburg	157	189 (2011)
City of Tshwane	108	66 (unknown)
Ekurhuleni	137	119 (2010)
Metsweding **	25	
Sedibeng	49	
West Rand	85	
Gauteng	561	

** Metsweding District was disestablished at the time of the 2011 municipal elections, and its constituent local municipalities absorbed into the City of Tshwane Metropolitan Municipality

Note: According to Eskom's Spot Building Count last updated in November 2011, there are 325 polygons in Gauteng classified as "Dense Informal"

Note: Refer to the full report for an overview and explanation of data coverage and methodology for each of the data sources

Provincial estimates of the total number of shacks, derived primarily from shack counts, do not align well with Census data on the number of households living in shacks not in backyards. For example the municipal estimate of shacks in informal settlements in the City of Johannesburg is 243,000 shacks compared to the Census estimate of 126,000 households living in shacks not in backyards. This is most probably because definitions don't align.

TABLE 13 NUMBER OF HOUSEHOLDS/SHACKS IN INFORMAL SETTLEMENTS				
	Number of households in informal settlements			Number of shacks in IS
	Census 2011: HH in shacks not in backyards	Census 2011: HH in informal residential EAs	Municipal estimates	Municipal estimates
City of Johannesburg	125 748	159 503	224 189 (2011)	242 863 (2011)
City of Tshwane	112 167	115 320		278 910 (unknown)
Ekurhuleni	138 099	140 656	162 982 (2010)	
Metsweding **				
Sedibeng	19 431	26 597		
West Rand	38 629	34 644		
Gauteng	434 075	476 719		

PART 10

Appendix: Municipal data on children and employment

10.1 City of Johannesburg

Children in informal settlements:

TABLE 14 NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN THE CITY OF JOHANNESBURG				
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage
0 - 4	47 224	41%	432 722	36%
5 - 6	13 300	12%	139 704	12%
7 - 10	20 926	18%	237 430	20%
11 - 14	18 586	16%	218 955	18%
15 - 17	14 692	13%	173 792	14%
Total	114 728	100%	1 202 604	100%

Source: Census 2011

TABLE 15 CHILDREN AGED 7 - 17 YEARS IN THE CITY OF JOHANNESBURG: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL INSTITUTION		
Children 7 - 17	Informal residential EA	All children
7 - 10	90%	93%
11 - 14	90%	92%
15 - 17	81%	87%
Total*	87%	91%

Source: Census 2011

Note: * Total school attendance aged 7 - 17. Census reports this for children aged 5 and up

Employment:

TABLE 16 EMPLOYMENT STATISTICS IN THE CITY OF JOHANNESBURG: LABOUR FORCE PARTICIPATION RATE AND UNEMPLOYMENT RATE FOR ADULTS AGED 15+		
	Labour force participation rate	Unemployment rate
Informal residential EA	72%	36%
All adults in province	66%	25%

Source: Census 2011

TABLE 17 SECTOR OF WORK IN THE CITY OF JOHANNESBURG: PERCENTAGE OF EMPLOYED ADULTS 15+				
	Formal Sector	Informal Sector	Private household	Don't know
Informal residential EA	67%	14%	15%	3%
All employed adults in province	77%	8%	13%	2%

Source: Census 2011

10.2 City of Tshwane

Children in informal settlements:

TABLE 18 NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN THE CITY OF TSHWANE				
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage
0 - 4	39 300	40%	273 866	34%
5 - 6	11 735	12%	92 464	12%
7 - 10	18 194	18%	158 463	20%
11 - 14	16 333	17%	152 316	19%
15 - 17	12 917	13%	123 742	15%
Total	98 479	100%	800 852	100%

Source: Census 2011

TABLE 19 CHILDREN AGED 7 - 17 YEARS IN THE CITY OF TSHWANE: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL INSTITUTION		
Children 7 - 17	Informal residential EA	All children
7 - 10	92%	94%
11 - 14	92%	94%
15 - 17	82%	89%
Total*	90%	92%

Source: Census 2011

Note: * Total school attendance aged 7 - 17. Census reports this for children aged 5 and up

Employment:

TABLE 20 EMPLOYMENT STATISTICS IN THE CITY OF TSHWANE: LABOUR FORCE PARTICIPATION RATE AND UNEMPLOYMENT RATE FOR ADULTS AGED 15+		
	Labour force participation rate	Unemployment rate
Informal residential EA	67%	37%
All adults in province	63%	24%

Source: Census 2011

TABLE 21 SECTOR OF WORK IN THE CITY OF TSHWANE: PERCENTAGE OF EMPLOYED ADULTS 15+				
	Formal Sector	Informal Sector	Private household	Don't know
Informal residential EA	67%	15%	16%	3%
All employed adults in province	75%	10%	13%	2%

Source: Census 2011

10.3 Ekurhuleni

Children in informal settlements:

TABLE 22 NUMBER AND PERCENTAGE OF CHILDREN BY AGE GROUP IN EKURHULENI				
Age group of children	Children in Informal residential EAs	Percentage	All children	Percentage
0 - 4	38 344	41%	316 977	35%
5 - 6	11 045	12%	103 977	11%
7 - 10	17 041	18%	179 968	20%
11 - 14	15 595	17%	171 541	19%
15 - 17	11 727	13%	135 927	15%
Total	93 752	100%	908 391	100%

Source: Census 2011

TABLE 23 CHILDREN AGED 7 - 17 YEARS IN EKURHULENI: ATTENDANCE OF CHILDREN AT AN EDUCATIONAL INSTITUTION		
Children 7 - 17	Informal residential EA	All children
7 - 10	93%	94%
11 - 14	93%	94%
15 - 17	80%	89%
Total*	90%	93%

Source: Census 2011

Note: * Total school attendance aged 7 - 17. Census reports this for children aged 5 and up

Employment:

TABLE 24 EMPLOYMENT STATISTICS IN EKURHULENI: LABOUR FORCE PARTICIPATION RATE AND UNEMPLOYMENT RATE FOR ADULTS AGED 15+		
	Labour force participation rate	Unemployment rate
Informal residential EA	71%	41%
All adults in province	66%	29%

Source: Census 2011

TABLE 25 SECTOR OF WORK IN EKURHULENI: PERCENTAGE OF EMPLOYED ADULTS 15+				
	Formal Sector	Informal Sector	Private household	Don't know
Informal residential EA	69%	14%	14%	3%
All employed adults in province	78%	9%	11%	3%

Source: Census 2011

PART 11

Appendix: Statistics South Africa Surveys

11.1 Censuses 2011 and 2001

Census 2011

- Demarcation → Classification → Listing (Dwelling Unit, Business, Park, and so on)
- Demarcation for the 2011 Census involved subdividing the country into Place Names and Enumeration Areas based on specifications of administrative boundaries, size and population density
- Data used in the demarcation process included Dwelling Frame data from Stats SA and various external data sources, including:
 - Aerial photography, satellite imagery
 - Addresses (Place Names)
 - Cadastral data
 - Administrative boundaries
- Demarcation produced a total of 103,576 EAs which were classified into ten EA Types in line with the status of the majority of visible dwellings at the time of demarcation:
 - Formal residential
 - Informal residential
 - Traditional residential
 - Farms
 - Smallholdings
 - Industrial
 - Parks and Recreation
 - Vacant
 - Collective living quarters
 - Commercial
- The EAs were demarcated according to specific rules and guidelines per EA Type. Where the data was incomplete or missing, Spot 5 satellite images were used resulting in some larger EAs being split further during the verification and listing fieldwork

Census 2001

- Demarcation for the Census in 2001 resulted in ten EA Types based on its geographic location as well as the land use and type of dominant dwellings within each EA
- Ten EA Types were categorised in 2001:
 - Urban settlement
 - Informal settlement
 - Tribal settlement
 - Farms
 - Smallholdings
 - Industrial
 - Recreational
 - Vacant
 - Institution + Hostel
- The name changes in some EA Types is due to a change in terminology and not a change in methodology

Censuses 2001 & 2011

- Enumerator Area Summary Books were printed, containing a map and/or aerial photographs of each EA, an orientation map for each EA (route from the nearest town), a list of all dwellings in the EA with their addresses where applicable, or some type of identifying description
- The EA Summary Book is used during the listing phase to record each residential and non-residential structure found in the EA as well as vacant stands
- In the instance of collective living quarters, each room / ward / cell / dormitory / section was listed
- Extra dwellings found not on the list were to be added and enumerated

11.2 Census 2011: Derived household income

Household income in the Census is a derived variable, calculated by adding together the individual incomes of all members of the household. The result for each household is then reallocated into the relevant income category. A fixed amount had to be allocated to each income range in order to derive household income. These amounts were as follows:

Range	Proxy values calculated
No Income	0
R1 - R 4 800	3 200
R 4 801 – R 9 600	7 200
R 9 601 – R 19 200	13 576
R 19 201 – R 38 400	27 153
R 38 401 – R 76 800	54 306
R 76 801 – R 153 600	108 612
R 153 601 – R 307 200	217 223
R 307 201 – R 614 400	434 446
R 614 401 – R1 228 800	868 893
R1 228 801 – R2 457 600	1 737 786
R2 457 601 or more	4 915 200

11.3 General Household Survey 2011

- The 2011 GHS is a survey covering a broad array of topics including housing conditions, tenure and access to services, household composition, grants, disability, education and schooling, health and access to health facilities, general indicators of well-being and employment
- In some instances, small sample sizes limit the extent to which data can be interrogated
- In the case of the Western Cape, the sample for all households is 2,898 while the sample size for households in shacks not in backyards is 161
- The sample frame is based on Census 2001 EA level data
- This has been augmented throughout the past decade through additional listings, including work done for the 2007 Community Survey
- There are continuous changes across Primary Sampling Units (PSUs)
- PSUs comprise several EAs grouped according to geotype
- Three different sample designs were used over the years: 2002-2004, 2005-2007, 2008-present
- Sample may be biased toward older, more established settlements if the sample design does not explicitly incorporate newer informal settlements
- The target population of the GHS is private households in all provinces of South Africa as well

as residents in workers' hostels. The survey does not cover other collective living quarters such as students' hostels, old age homes, hospitals, prisons and military barracks

11.4 Income and Expenditure Survey 2010/11

- The 2010/11 IES is a survey of income and expenditure patterns
- It is based on a combination of the diary and recall methods of capture
- In some instances, small sample sizes limit the extent to which data can be interrogated
- In the case of the Western Cape, the sample for all households is 2,970 while the sample size for households in shacks not in backyards is 136
- This survey was conducted between September 2010 and August 2011
- The sampling frame for the IES 2010/11 was obtained from Stats SA's Master Sample based on the 2001 Census Enumeration Areas (EAs). The Master Sample is designed to cover all households living in private dwelling units and workers living in workers' quarters in South Africa
- The IES 2010/11 sample is based on an extended sample of 3,254 PSUs which consist of the 3,080 PSUs in the Master Sample and an additional 174 urban PSUs selected from the PSU frame
- The estimates in the IES have not been weighted to Census 2011; rather the survey has been weighted to mid-March 2011 population estimates
- The IES uses an integrated weighting system not tailored to estimate households; therefore it is advisable to use proportions and averages rather than actual population numbers
- Stats SA is confident that estimates are representative of the sample on the ground and that shacks are covered well in the IES (as well as the Census)

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