

The implications of backyard housing for spatial planning policy in Johannesburg

Introduction

This policy brief focuses on a specific form of informal housing in South Africa. Backyard Housing – also referred to as backyard dwellings or backyard ‘shacks’ - provide small scale affordable rental housing opportunities to a spectrum of people in the country in a context where affordable housing alternatives are few and far between. Although the South African government has tried its best to address a low-income housing ‘crisis’ in the post-apartheid period through its Housing Programme, informal housing continues to characterise South African settlements, especially within metropolitan regions. Within this informal housing umbrella, backyard housing fulfils a crucial housing function: it provides flexible, affordable accommodation (generally built by tenants) with the comfort of better access to services such as electricity, water and sanitation (Crankshaw et al, 2000; Watson and McCarthy, 1998; Lemanski, 2009; Gardner, 2010; Shapurjee, 2010). Backyard housing is thus a natural and preferred progression from the often congested and unsanitary living conditions of informal settlements. The South African Institute of Race Relations (2008:1) confirms this trend stating that during the period from 1996 to 2007 ‘backyard informal structures as a proportion of total informal dwellings grew by 18%’.



This policy brief reports findings from a case study of Johannesburg’s backyard housing footprint, emanating from the Integrated Planning and Development Modelling (IPDM) project (see <http://stepsa.org>) – specifically from the Urban Simulation project component. Johannesburg, much like other large cities in South Africa is struggling to deal with an expanding informal housing problem. Joburg represents a place of opportunity for many migrants both within South Africa

Figure 1: Evidence of backyard housing in Devland, RDP Settlement south of Johannesburg
 Source: Google Earth, 2010)



as well as from all parts of the continent. This economic magnetism fuels the need for cheap, easy-accessible and mobile accommodation such as backyard housing. Presently, there are roughly 270 000 backyard housing structures identified within the city (City of Johannesburg, 2012). What does this mean for the City? How should the City respond with spatial and housing policies? Policy responses cannot be formed without first understanding the spatial context of the backyard housing phenomenon.

Making Sense of Findings

The CSIR team drew on geo-referenced spatial data published by GeoTerralImage (GTI) in 2011 to analyse the spatial extent of backyard housing in Johannesburg. GTI's Growth Indicator Dataset provides the most up to date land use classifications identified from satellite imagery. The identification of backyard housing as distinguished from informal housing provides a valuable addition to the data-set.

The correlation of informal settlements and backyard housing

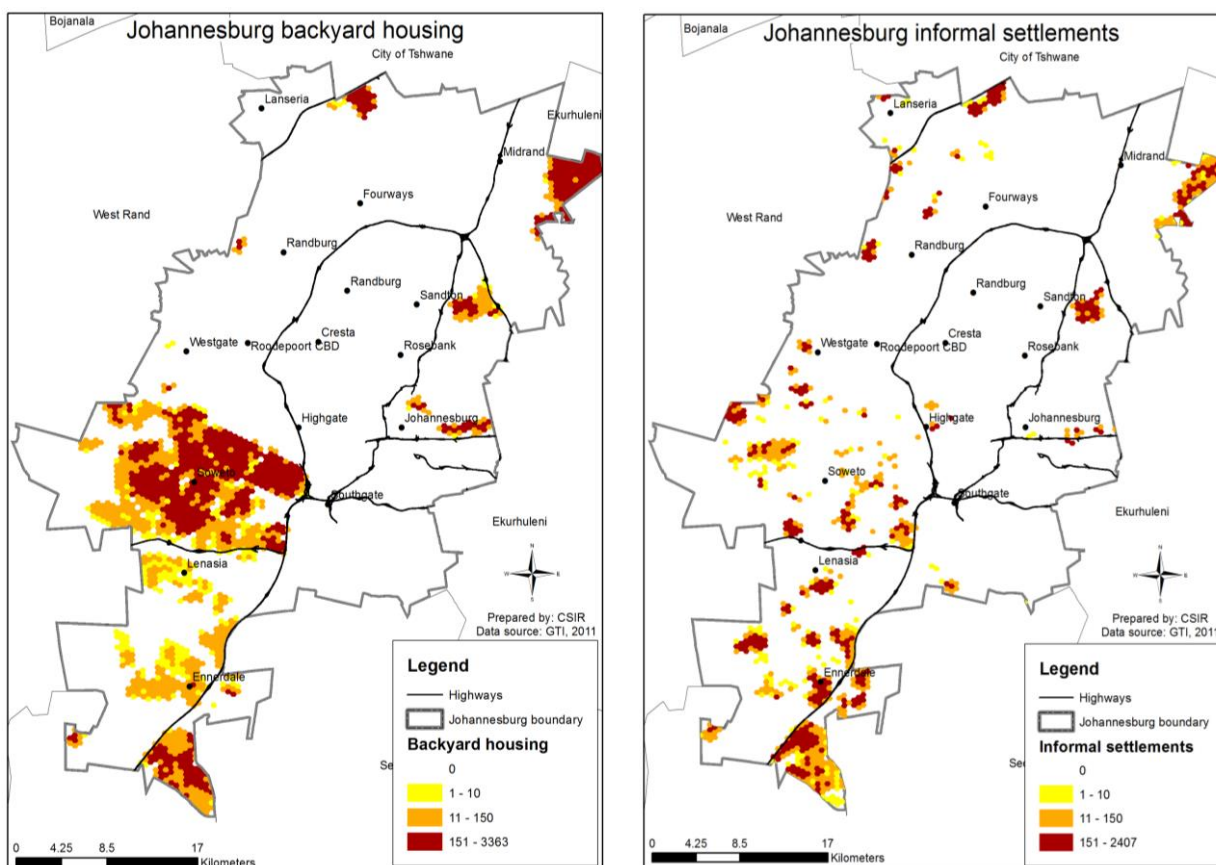


Figure 2: Spatial footprint of backyard housing relative to informal settlements in Johannesburg

Johannesburg's estimated 190 informal settlements are dispersed across the city. There is no pattern to their distribution, although the majority of informal settlements are located south of the Johannesburg inner city. The



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distribution of backyard housing on the other hand is more prominent and reveals the clustering of backyard housing units in certain geographic regions of the city such as: Orange Farm, Soweto, Alexandra, Ivory Park and Diepsloot.

Table 1: Characterising Backyard Housing Hotspots in Johannesburg¹

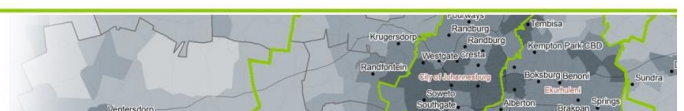
	Backyard Housing Hotspots				
	Alexandra	Soweto (includes Diepkloof and Meadowlands)	Ivory Park	Diepsloot	Orange Farm
Date of establishment	1912	1903 (Kliptown) with subsequent townships being established from the 1930s onwards	1990	1994	1995
Settlement size (ha)	727.56	12746.33	917	473.82	2715.66
Population size	178193	1175842	123893	53355	182625
Population density (persons/ha)	245	92	135	113	67
No. of backyard dwellings	6473	145145	43908	38631	19241
Backyard dwellings as % of total number of dwellings	23.01%	44.29%	63.62%	62.87%	30.71%
Ratio of backyard dwellings to formal dwellings	1: 1.55	1: 1.12	1: 0.34	1: 0.16	1: 1.45
Ratio of backyard dwellings to informal dwellings	1: 1.79	1: 0.13	1: 0.23	1: 0.43	1: 0.81

A summary of the quantitative status quo reveals that:

- The highest population density is recorded in Alexandra – this is expected given Alexandra’s location close to the economic hub of Sandton and the townships history. In addition, given the small land area and relative scarcity of land in the township, it is not surprising that population densities are the highest of all the backyard housing hotspots
- The largest backyard housing stock is located in Soweto – the largest settlement in land area relative to the other hotspots. Like Alexandra, Soweto has a rich backyard housing history

¹ Please note the following when interpreting the data presented above:

- Boundaries defined according to 2001 StatsSA main place or captured independently
- Backyards informal dwelling counts sourced from 2011 GTI dataset
- Formal dwelling counts sourced from 2009 GTI dataset



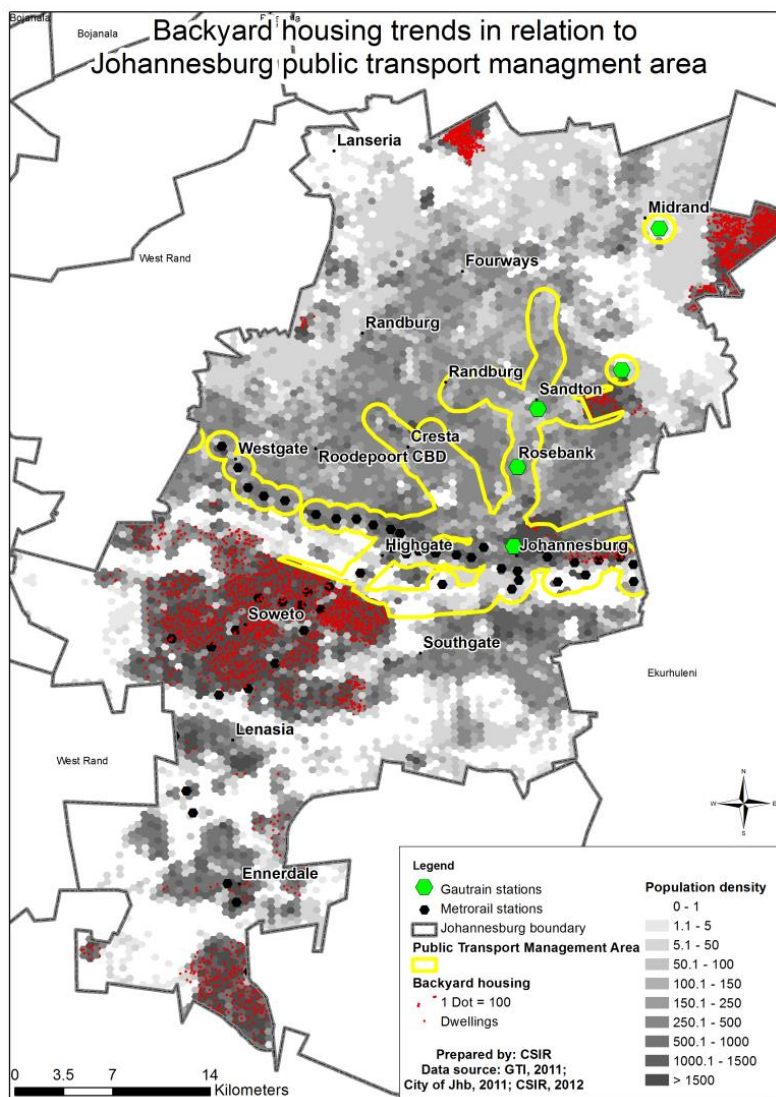


- In the newer settlements of Ivory Park and Diepsloot, backyard housing is a significantly dominant dwelling type
- Backyard dwellings outnumber informal dwelling structures in most of the hotspots except for Alexandra

Contextualising Backyard Housing against the City of Joburg’s spatial policies

Johannesburg’s spatial policies are strongly geared towards reversing the spatial inequalities of Apartheid planning and development. Public transportation is viewed as an important mechanism to bring people closer to jobs and economic opportunities. In recent years, significant public transport interventions have been put in place such as the Gautrain and the Bus Rapid Transit (BRT) routes. In order to ensure the success of these interventions, the City has earmarked areas in proximity to public transport routes for higher density developments. The higher the densities, the better the functionality and viability of public transport services.

The public transport management area (PTMA) is shown in Figure 2 and represents a corridor with a 1km buffer from Gautrain stations, current BRT routes and metro rail stations.



By overlaying the spatial footprint of backyard housing with the PTMA, it becomes evident that there is a mismatch between policy and reality because:

- Densification and infilling is happening **outside** of planned corridors and this development is occurring mostly informally and **without** state support (in terms of housing policy and infrastructure provision)
- Existing population densities are already high in backyard housing hotspots – warranting interventions for public transport routes.
- Population and dwelling densities are likely to occur outside the PTMA corridor because of a lack of affordable housing options within the corridor. High property prices and scarcity of land are two likely push factors in this regard.

Figure 3: Implications of backyard housing for growth management strategies





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Potential Solutions

Backyard housing is a phenomenon that exists within the larger, complex housing market. Backyard housing is able to function because of formal housing and in spite of housing policies. The fact that backyard housing continues to exist even within state subsidised housing settlements indicates the important role played by this housing sub-market. Whilst backyard housing has consistently been side-lined in housing policy discourse in the past (see Bank, 2007), this is no longer the case. There is consensus among local government that appropriate strategies need to be devised to improve living conditions in the backyards. Potential solutions could include:

- Support of backyard housing within the on-going policy advocacy for the broader small-scale rental housing market in South Africa (see Gardner, 2010 for detailed policy suggestions).
- Proactively planning bulk and reticulation services in areas where backyard housing growth is likely to occur in the future – for example in existing RDP housing neighbourhoods.
- In-situ upgrading of backyard settlements (alongside in-situ upgrading of informal settlements). Bulk infrastructure investments are required as well as long-term planning for community and social facilities.
- Awarding of building subsidies to homeowners/landlords – to be used to slowly improve the appearance of dwellings, together with their tenants.
- Revisiting building standards and building codes.
- Prioritising interaction over intervention – engage backyard communities both to uncover problems and to discuss solutions

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