Conflicting Rationalities in Densifying the Corridors of Freedom.
The case of the Knowledge Precinct.

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Declaration

I Livhuwani Waren Tshiashi declare that this is my own unaided research report with guidance from my supervisor. It has never been submitted before for any examination or degree at any University. It is a compulsory research report for the Bachelor of Science with Honours in Urban and Regional Planning degree at the University of the Witwatersrand, Johannesburg. And it was only submitted to the institution.

Signature
Abstract

The City of Johannesburg’s spatial structure still resembles the apartheid spatial configuration. The marginalized are still mostly located at the outskirts of the city without the monetary means to move to well-located areas and closer to economic opportunities. The City has highlighted the daily hardships of the poor as a major problem. Furthermore, the majority of the working class have to spend approximately 20 per cent of their monthly income on transport (City of Johannesburg, 2015). The lack of affordable housing in close proximity to the inner city further adds to the challenges.

The City seeks to address these challenges through Corridor and Transit Oriented developments (TOD). According to the City, through the use of cheaper, efficient transportation systems, people will be able to spend less time commuting to and from work (City of Johannesburg, 2015). However, transportation forms only but one part of the plan to try and bring people closer to economic opportunities. The City seeks to accommodate people of different socio-economic stature along the proposed developmental corridors.

TOD builds on densification as a tool to increase populations around transport systems in order to maximize public transport use. They create an environment that stimulates the use of alternative transport to private cars. Through mixed land-use, the City seeks to create integrated neighbourhoods where people will ‘live, work and play’ without having to travel long distances (City of Johannesburg, 2015). However, TOD is often associated with rising property prices (Curtis, et al., 2009). In a context where there is a need for affordable housing in well-located areas, there is a risk that TOD will result in higher property prices and pose a threat to the inclusion of low-income residents in the City.

People living in cities in Africa have often looked at bottom-up approaches to solving their problems. Despite being regarded as ‘informal’ these practices are a norm and they are an important component of the city fabric (Jenkins, 2013). Backyard housing is an example of these practices and it significantly reduces the housing demand in South Africa (Lemanski, 2009). Furthermore, it is an affordable housing alternative that performs various roles for poor households.

The aim of this research is to find out how people in the Corridors of Freedom perceive densification and their position on the proposed densification policy in light of the need for affordable housing in the Knowledge Precinct. It draws on the characteristics of TOD and questions the feasibility of achieving affordable housing through TOD and whether or not ‘unconventional’ or ‘informal’ ways to densification have a place in the Corridors of Freedom. The research concludes by drawing on the possible impacts of TOD on housing affordability and provide recommendations on how affordable housing could be achieved in the Corridors of Freedom.
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_Ndo livhuwa_

_Thank you_
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Chapter 1

1.1. Introduction
The Corridors of Freedom is a spatial vision that is based on Transit Oriented Development. It emphasizes a future with well-planned transport routes linked to interchanges and focused on mixed-use developments that are characterized by high-density accommodation, office buildings and retail development as well as recreational and leisure opportunities. The major goal being to “re-stitch the city” – allowing people to live in close proximity to the city and their workplace, enabling them to live, work and play without having to resort to private motorization. This spatial vision arises from the need to rectify the apartheid spatial injustice. This research explores the manner in which the city proposes to create a more inclusive city. It acknowledges that through the provision of affordable housing and transport systems, the marginalized can be included in the city fabric. However, my interest is on the housing aspect of the spatial vision and the manner in which it responds to the existing housing backlog in the city. Therefore, I am more interested in the densification strategies proposed by the city, their applicability and feasibility in a context where there is backyard accommodation and communes as a form of densification.

The research explores the phenomenon of backyard housing1 as another form of densification and identifies its characteristics. The focus of this study is on the ‘Knowledge Precinct’ (comprising of the areas of Auckland Park, Cottesloe, Rossmore and Westdene), where this kind of densification is evident. The Knowledge Precinct is an area within the Empire-Perth corridor development2. As a precinct, it is prioritized for Transit Oriented Development (TOD). The Special Development Zone (SDZ) is a detailed pilot project on how to fast-track and achieve this development in the Knowledge Precinct. The research goes on to outline the ideas underpinning the backyard housing phenomenon. While there is a lack of literature linking backyard housing to the Corridors of Freedom, the research acknowledges that backyard housing is an integral part of the housing sub-market that reduces the housing demand.

1.2. Problem Domain
The research is situated within the City of Johannesburg’s housing problems that characterize most of South African cities. These include issues of housing backlog, as well as housing densities that are too low to support city functions and poor location of settlements, which makes it hard for people in these settlements to access opportunities and social facilities (Massyn, et al., 2015). South African cities also have a similar character with regards to the relationship between cost and distance of property. The further away from the city centre, the cheaper the land (Massyn, et al., 2015).

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1 Backyard housing refers to an additional dwelling behind a main residential structure.
2 Empire-Perth Corridor is a specific developmental corridor in Johannesburg. It lies along two roads Empire Road, Kingsway Avenue and Perth Road in Westdene.
These problems are largely attributed to the apartheid spatial planning which created a fragmented and sprawling city. The other contributing factor is the design of current state-led housing programmes (Rubin & Charlton, 2017). These attempts to address the housing backlog have resulted in further segregation given that the state provides houses in the periphery due to affordable land prices (Massyn, et al., 2015). The provision of these houses in the periphery results in structural adjustments for economic reason – a trait that unsettles the state (Rubin & Charlton, 2017). Adjustments made by occupants of state-provided social houses include the addition of outside rooms or businesses in the property (Rubin & Charlton, 2017). These unauthorized changes to the houses unsettle government authorities and have contributed to the variety of responses (Rubin & Charlton, 2017).

The City of Johannesburg tries to counter these responses by providing high-density affordable housing in close proximity to areas of opportunity. The Corridors of Freedom Project (CoF) is one intervention that adopts these ideas through the notion of “re-stitching the fragmented city” (City of Johannesburg, 2015). This ambitious project also aims to link transport modes in the city with high-density accommodation, itself supported by retail developments, office buildings, opportunities for education as well as leisure and recreation (Gibbs, 2013). In addition to the City’s problems of providing affordable housing in well located areas, the project depends on private developers to aid in the provision of affordable housing (City of Johannesburg, 2017). However, private developers’ proposals come across as high quality apartments rather than affordable housing (Huchzermeyer, 2017) – that is, their developments cannot be afforded by low-income populations. This also has policy implications where development needs to adhere to developmental principles outlined in Chapter 2, section 7 of SPLUMA of 2013. These include the principles of spatial justice, spatial resilience, efficiency, spatial sustainability and good administration. The above-mentioned principles guide and ensure an inclusive development.

Within the drafting process of Spatial Development Frameworks (SDFs), land use management systems, land development applications and developmental principles are relevant. There is a need to consider these in order to determine which ones apply in a given context. However, these principles or their components may or may not apply depending on the context (Laubscher, et al., 2016). In the Corridors of Freedom context, with particular attention given to its affordable housing proposals, there seem to be conflicting rationalities between the project’s intentions on the one hand, and proposals from private developers on the other. Private developers are profit driven and their housing provision is not affordable (Huchzermeyer, 2017). Dwelling owners accommodate more people through affordable backyard accommodation and communes. This shows a conflict in both the provision of affordable housing and densification mechanisms. Property developers respond to a densification mechanism proposed by the City (multiple storey buildings) and rent out spaces at a higher price. The property owners subdivide and add more dwellings in their backyards to
accommodate more people, especially students at a lower price. The CoF\textsuperscript{3} project seeks to provide high-density affordable housing alongside the improvement of access to opportunities, improved public transport facilities and provision of liveable spaces – places where people can live, work and play in close proximity (City of Johannesburg, 2015). The conflicting rationality becomes apparent where proposals by private developers are not in line with the development principles (Huchzermeyer, 2017). An example can be drawn from a new apartment block in the Brixton area which was criticised by Huchzermeyer (2017) in that it does not adhere to the developmental principles. The apartment reserved a lot of space to parking and it is quite expensive. This raised questions of spatial justice and of sustainability as the plan clearly did not adhere to the needs of low-income populations and through the use of space for private mobiles.

Some segments of the Corridors of Freedom including Auckland Park, Rossmore, Cottesloe and parts of Westdene (collectively making up what is referred to as the ‘Knowledge Precinct’) highlight conflicting rationalities in approaching densification in the area. This broader area, which forms part of my study, is one out of the two Special Development Zones (SDZ). The SDZ acts as a mechanism and catalyst for redevelopment and densification (City of Johannesburg, 2017). As part of its densification approach, the SDZ outlines specific objectives. These include: 1/ being inclusive and allowing private house owners and big commercial developers to take part and benefit from the re-development of the area; 2/ preserving the historic character of the neighbourhood; 3/ encouraging inclusivity so that the community can benefit from the densification of the neighbourhood; 4/ encouraging development that accommodates the sub-economic settlement patterns, ownership and leasing models currently happening in the city. Therefore contributing to economic inclusivity for current and future residents; 5/ contributing to sustainable and rejuvenated neighbourhoods through densification that stimulates growth of both the community and local economy. Since the project provides the details of the densities required and land use patterns, there will be no re-zoning process required (City of Johannesburg, 2017). Furthermore, the fast tracking of development rights is used as a way to encourage residents to redevelop their dwellings. This is set out in a way that will best benefit the developers including single landowners. However, despite these policy intentions, there has been very little vertical densification due to the current horizontal densification, often in the form of backyard accommodation and communes. The key question is why is this the case?

\textsuperscript{3}CoF is used throughout the paper as an alternate for Corridors of Freedom.
1.3. Problem Statement
As a response to the apartheid spatial legacy where low-income populations live far away from opportunities, the City has envisioned ‘a compact polycentric city’ (City of Johannesburg, 2016). Here the “inner city would form a strong urban core that is linked by an efficient public transport to dense, mixed use (residential and commercial) sub-centres, situated within a protected and integrated natural environment” (City of Johannesburg, 2016: 11). The ‘Knowledge Precinct’ forms part of the SDZ which serves as a mechanism to realizing this dense, mixed use development. Its location in close proximity to the University of Johannesburg and other various nodes such as the
SABC, Helen Joseph Hospital and the city centre explains the dominant young professional population in the area (City of Johannesburg, 2017). In light of the proposed densification proposals in the Knowledge Precinct, densification trends in the area and challenges of providing affordable housing in close proximity to opportunities, the current densification proposals hint at a progression further towards exclusion of the low-income population. Perhaps backyard accommodation and communes hold the key as densification mechanisms that provide accommodation at an affordable price.

1.4. Research question
How do property owners in the Knowledge Precinct perceive densification and position themselves in the densification proposal in light of the need (and demand) for affordable housing in the area?

1.5. Sub-questions
What kind of population is associated with the Knowledge Precinct?

How is densification occurring in the Knowledge Precinct?

What is the densification vision for the Knowledge Precinct?

Is the CoF densification proposal applicable in the Knowledge Precinct?

How do the SDZ and CoF respond to the housing issues?

- How are they responding to the housing backlog?
- Is it inclusive for the variety of socioeconomic groups?

What are the limiting forces?
Chapter 2

2.1. Introduction
This chapter gives a theoretical background of my study. It begins by examining the notions of Corridor development and Transit Oriented Developments (TOD) as mechanisms in which densification in cities can be achieved. It looks at the characteristics of the two phenomena in order to learn about the theoretical underpinnings of the Corridors of Freedom. Still on the Corridors of Freedom (CoF), it then looks at the applicability of TOD and of Corridor Developments in the context of Johannesburg. The argument is based around ‘rectifying the fragmented city’ and draws on the issues of the apartheid spatial configuration and the marginalization of the low-income groups from areas of opportunity. Scrutinizing the difficulties of achieving affordable housing in well located areas, especially in TOD and corridor developments, I look at the extent to which the CoF can potentially exclude the low-income populations. I then turn to a more trusted mechanism of both densifying and providing affordable housing in South Africa. The chapter acknowledges that ‘unconventional’ responses are quite a norm in African cities and that they need to be considered as important elements of the city fabric (Jenkins, 2013). Therefore, backyard housing and communes should not be overlooked as they can both provide affordable housing while densifying areas. The chapter concludes by providing a conceptual framework in order to understand the feasibility of achieving high-density affordable housing in the CoF and explores the role of backyard housing and communes within the CoF.

2.2. Corridors
‘Corridor’ is a term with different meanings for different disciplines but in planning it is often used to describe a linear development (Jordaan, 2003). The idea is based on the rationale that major activities are concentrated around access to transportation in a linear configuration (Jordaan, 2003).

Commonly used in planning as an ‘urban corridor’ it is at least a kilometre wide band of mixed-use activities, concentrated around a single or interlinked system of transportation routes of various lengths whereby at least one is attributed to public transportation (PPDC, 2007). It is often linked to urban design principles of access and place-making in order to improve access to all modes of transportation and the integration of land-uses with transportation (Curtis & Tiwari, 2008).

2.2.1. Characteristics of Corridors

I. Land uses
Corridors integrate different land uses where some land uses can dominate others such as retail, residential, industrial, and commercial or office space. In some instances however, land uses can be fixed or mixed (PPDC, 2007). Fixed land uses in this case refer to the mono use of land such as residential. Corridors need to provide a wide range of land uses that not only aim to attract but can also act as focal points along a route (Jordaan, 2003). Furthermore,
land uses need to be mixed, designed or developed in a manner that encourages harmonious interaction. This can be achieved through the development of destination\(^4\) or catalytic projects\(^5\), connected by a mode of transport (Jordaan, 2003). Density in this context is intertwined with the land uses of the corridor as it provides a minimum density of uses, economic activities and high density populations that support the corridor functions (Jordaan, 2003).

II. Transportation modes
A successful corridor is one that provides a wide range of transportation options. The variety of transportation options allows for the increased usage of the corridor, allowing it to be better accessed by a variety of income groups and the general population through the stimulation of public transport usage (Jordaan, 2003). Interconnection of different transportation modes is an important element of corridor intersection. In these intersection points, there is a need for transport interchanges to allow quick movement and easy access of pedestrians and commuters through a variety of transportation modes (PPDC, 2007). Simultaneously, the intersection of pedestrians with corridor or transit interchanges need to stimulate pedestrian movement through the development or location of primary generators (such as libraries, clinics and schools) that increase the attractive function in the location (PPDC, 2007). These developmental corridors aim to achieve the following objectives (Del Mistro; 2001):

- Increase land use and transportation,
- Increase or maximize accessibility,
- Increase modal choice,
- Shorter, fewer and safer trips,
- Increase the use, efficiency and quality of public transport,
- Increase modal integration and
- Increase or maximize mobility.

Furthermore, the shape of the corridor can also define its characteristics or functions. Corridors can function as:

- Activity strips or street,
- Development corridor,
- Mobility, movement and transportation corridor,
- Activity spine and
- Access or activity corridor (PPDC, 2007).

III. Scale

\(^4\) Destination project is a term commonly used to describe the redevelopment of a place i.e. a University Hall as a node (Kenney, 2013).

\(^5\) Catalytic Projects refers to a network of developments that complement each other. They can be undertaken by private entities or the government. They aim is to renew underused buildings and to stimulate development of underdeveloped areas (City of Portland, 2014).
Corridors can operate at various scales for various reasons. They can be implemented at both metropolitan and local scales. At a larger metropolitan scale, they provide an opportunity for higher density developments and multimodal transportation systems that link various activity nodes (Curtis & Tiwari, 2008). At local scales, they are not only limited to vehicular movement, but they also function as ‘place-making’ mechanisms of a street in order to enhance the ‘sense of place’ as they build stronger communities (Curtis & Tiwari, 2008).

IV. Forces of attraction
Corridors are often defined by the activities (forces) that attract people to them and they depend on these forces to be successful (PPDC, 2007). Furthermore, a corridor can consist of a single, dual or multiple attractors (nodes) even if a multiple attractor can comprise of multimodal corridor or strip attractor (PPDC, 2007).

V. Connectivity and linkage
Corridors link places and nodes i.e. township with the CBD (PPDC, 2007). It can be used to connect a suburb to another suburb or to the CBD (PPDC, 2007). A corridor needs to have decisive connectivity and interaction between the nodes within the corridor and those outside it. This increases access to the job market and new opportunities (Jordaan, 2003).

VI. Integration
Transportation should not be divorced from land uses, especially when planning for sustainable development (Holmes & van Hemert, 2008). Corridor development can be linked to sustainability and transportation plays an intricate role in achieving sustainable development (Curtis & Tiwari, 2008). In order for transportation to be sustainable, it needs to be integrated to land uses. Likewise, the mixture of land uses reduces the need for travel. Furthermore, the provision of public transportation in close proximity will encourage the development of an urban environment that promotes cycling and walking (Curtis & Tiwari, 2008).

2.3. Transit Oriented Developments (TODs)
Transit Oriented Developments are a mechanism in which land use development can be integrated to transportation modes and they often occur around transport stations i.e. bus or railway stations (Curtis, et al., 2009). The concepts of TODs have become an integral part of city management, governing the preparation of land use patterns as well as transport planning strategies (Wilkinson, 2006). As a broad definition, TOD is understood as the agglomeration of urban development around transport stations in the hope to support transit use as well as the development of transit systems that connect the existing and future cluster of developments (Curtis, et al., 2009).

The TOD concept usually unfolds as a moderate and high-density housing, coupled with complementary public uses, retail, services and jobs, where everything is connected in mixed-use developments at strategic points along the regional
transportation system (Calthorpe, 1993 in Curtis, et al., 2009). Furthermore, it is a straight-forward concept comprising of a mix of moderately dense and pedestrian friendly development around transport stations in order to facilitate transit riding, bicycle travel and increased walking as well as other alternatives to the use of private vehicles (Cervero, 2009). However, there is no strict definition of what a TOD is (Belzer & Autler, 2002).

Transit-Oriented developments (TODs) are focused around medium to high density developments and typically feature mixed-use blocks such as offices, apartment units, and retail spaces. They also include low density spreading outward for one-quarter to one-half mile, which is the maximum approximate distance expected for pedestrians to commute (Brendel & Molnar, 2010). TODs are developmental patterns focused on reliance of and proximity to high-frequency transit (Bishop, 2015). In their quest to promote neighbourhood connection, these developments are not limited to transit systems but equally emphasise biking networks and safe walking environments (Bishop, 2015).

Transit users, municipalities, developers, pedestrians, cyclists and drivers all benefit from TODs. New developments associated with TODs bring more tax revenues to the city, allowing it to compete with suburban locations (Bishop, 2015). Reliance on the transit system is aimed at reducing dependence on private vehicles, limiting consequent urban sprawl (Curtis, et al., 2009), making streets safer, reducing pollution and promoting environmentally friendly cities (Bishop, 2015). Therefore, they result in greater activity, vibrancy and community life in the centre through the agglomeration of people living together and interacting more than when they lived far apart (Curtis, et al., 2009). Furthermore, public transport acquires fare revenues which allows them to provide better services\(^6\).

"Support for TOD fits in with a broader concern about sustainable lifestyles, the future and others, and a concern about social injustice and equity issues, as TOD enables the young, elderly, poor, and disabled to access services where services are clustered together and served by efficient public transport" (Curtis, et al., 2009: 174).

Higgins et al (2014) argue that TODs aid in redirecting growth to be oriented towards city centres thus promoting smart growth principles in the region. TODs also increase land values around stations (Curtis, et al., 2009). The value of land in these areas can escalate upto 30 percent higher due to the availability of the transit system (Curtis, et al., 2009). Hence TODs threaten affordability in these strategic areas.

Urban sprawl causes a major challenge to the efficiency and sustainability of cities (Bishop, 2015). Its effects can be seen through the cost of living associated with it. The study conducted by Sustainable Prosperity in Canada shows that households living in the periphery spend $2000 more annually to operate than those in the central

\(^6\) The more people use these public transport systems, the greater the revenue the transport system will make. This allows the transit system to generate more income and reinvest in the running of the transit system. In turn, greater use and greater income, facilitates better infrastructural services provided by the transit system.
areas. This means that transportation, emergency services, utilities and others cost 2.5 times more in periphery areas than in the centre (Cairns, 2013). This fits into the increasing need for TODs and these developments form a major part of future cities (Bishop, 2015).

Figure 1 shows a breakdown example of the general expenses in suburban areas compared to urban areas (Cairns, 2013).

A project has to have a standard benchmark in order for it to be successful (Belzer & Autler, 2002). However, the success of a project that implements TOD can be skewed depending on what it managed to achieve (Belzer & Autler, 2002). Therefore, it is important to understand the framework guiding the development and success of TOD projects. Nonetheless, a project can also be considered to be a success even if it only achieves a single element of the TOD (Belzer & Autler, 2002).

Transportation in TOD has an important role of linking individual places to the broader region. This gives the transit-oriented-developments a dual task of acting as a node within a larger metropolitan system or region and a ‘good place’ in its own right (Belzer & Autler, 2002). TOD as a ‘good place’ can be measurable through the following functional characteristics (Belzer & Autler, 2002: 4):

- Lifestyles,
- Choice of transportation modes,
- Access to services and jobs,
- Housing types,
- A high degree of satisfaction in residents and visitors and
- Fewer negative impacts of the automobiles.

Characteristics of Transit-Oriented-Developments

Characteristics of TODs include (Wilkinson, 2006):

- Quality public transit facilities and services,
- Transit centre at the centre of a destination that has a diverse, mixed use development,
- Walkable, high-quality pedestrian movement that integrates street-scaping,
- Carefully located, well designed and managed parking,
- The highest housing densities located in close proximity to the transit centre in order to decrease sprawl and promote compactness.

Transit oriented developments can also be found at both the metropolitan and local scales and they comprise of small activity nodes that connect to a city-wide network of transport corridors (Wilkinson, 2006). At a metropolitan scale, it allows for the restructuring of the urban system in order to achieve a compact urban development through the improvement of social, economic and environmental benefits (Wilkinson, 2006).

I. Land uses
   
   A land use pattern is important where there is a variety of transportation choices (Curtis, et al., 2009). TODs should improve access of residential, commercial or mixed use areas to public transport (Holmes & van Hemert, 2008).

II. Public Transportation
   
   TOD is centred along a form of public transport, either, a bus station, railway station, or metro station. The transit system is typically surrounded by high-density development that decreases as it spreads out from the centre (Holmes & van Hemert, 2008). It hopes to decrease vehicular dependency which in turn could alleviate traffic congestion. It prioritizes the provision of competitive alternatives to vehicles by increasing flexibility, especially with regards to public transportation and the provision of effective non-motorized transportation (Curtis, et al., 2009).

III. Accessibility and integration
   
   TODs emphasize the integration of transportation to land use pattern in order to increase the quality of urban life through the provision of a “sense of urbanity”, where people can become less dependent on private vehicles and interact in the public space (Curtis, et al., 2009). Accessibility is an important principle guiding TODs as it focuses on city movement without reliance on private cars (Curtis, et al., 2009).

IV. Density
High density is prioritized around the transport stations and it should decrease with distance from the stations (Wilkinson, 2006).

V. Walkability
TODs emphasize the use of transit systems and reduction of private vehicular dependency, suggesting that an area needs to be pedestrian friendly (Holmes & van Hemert, 2008). It is suggested that a pedestrian is more likely to walk to transit stations if the city blocks are narrower in contrast to longer blocks, which make walking seem longer (Holmes & van Hemert, 2008).

2.4. Application of Corridor Developments and TOD in Johannesburg context – re-stitching the city

2.4.1. Existing Johannesburg’s spatial structure
Johannesburg’s settlement patterns still emphasise the spatial inequality as low income populations continue to be situated away from areas of opportunity (City of Johannesburg, 2016). There is a housing-job mismatch that contributes to the inequality as the majority of the residents’ access to economic opportunities is tied to costly, long distance commuting (City of Johannesburg, 2016; Rubin & Charlton, 2017).

Some of the highest housing densities in the city, known as ‘townships’ from their apartheid spatial policies, are also regarded as the most disadvantaged areas in the city (Rubin & Charlton, 2017). Mainly residential in use, there is a lack of land use diversity in these areas and their location, far from economic opportunities, adds to the strain (see figure 2). The other major spatial discontinuity is the mining belt that adds to the north-south divide (City of Johannesburg, 2016).

Rubin & Charlton (2017) argue that Post-Apartheid social housing delivery has exacerbated the apartheid spatial development patterns. The primary logic of land availability and value govern the location of these housing projects, resulting in poor households continuing to live far away from economic opportunities (Massyn, et al., 2015; Rubin & Charlton, 2017). This challenge is exacerbated by the state’s subsidized housing projects that look to spend less in the provision of affordable housing (Massyn, et al., 2015). The rationale is that the further away from the inner city, the lower the price of land and consequently the more financially feasible the housing project will be (Bertaud, 2009). Furthermore, the private sector’s car-oriented developments such as gated residential estates, office parks and malls have exacerbated spatial segregation (Landman, 2004; Bertaud, 2009; Landman & Schonteich, 2010; Landman & Badenhorst, 2012; City of Johannesburg, 2016). Persisting to meet the developmental demands through sprawling developments not only worsens the current spatial inequality and socioeconomic disparities but it also contributes to the natural environment pressures and increased costs of infrastructure provision, to both build and maintain them (City of Johannesburg, 2016).
2.4.2. Johannesburg’s spatial vision – a compact polycentric city

A compact polycentric city is “an urban structure that is characterized by a dense urban core interlinked by efficient transit networks to dense complementary sub-centres” (see figure 3) (City of Johannesburg, 2016: 4). The vision is based on a growth projection of the City from 4.3 million to 7 million people by 2040. Here growth is estimated to be concentrated in the compact urban core, around transformation areas and TOD nodes. The inner city will form a strong urban core linked by efficient public transport to dense, mixed use sub-centres. High housing densities are proposed around the core gradually decreasing outwards (City of Johannesburg, 2016). The vision is aligned to the broader provincial goals (see annexure 5). The Gauteng province hopes to integrate the city cores to their neighbourhoods through transit
systems in order to encourage socioeconomic integration. Similar to the City’s spatial vision, the Gauteng Spatial Development Framework (GSDF) emphasises urban spatial restructuring, although at a different scale. It seeks to integrate the spatial plans for different municipalities and their connect them to a larger context i.e. the connection of Gauteng to other provinces. Regional corridors such as the Maputo corridor (along the N1) receive great attention as they provide an opportunity to the surrounding areas along them (Gauteng Spatial Development Framework, 2011). Furthermore, the Gauteng Provincial Government (GPG) outlines the objectives that the municipalities, such as the City of Johannesburg, should follow (Gauteng Spatial Development Framework, 2011). These objectives include socioeconomic integration and spatial restructuring among others.

2.4.3. Manifestation of the TOD in Johannesburg – the Corridors of Freedom Project

Corridor implementation is influenced by different socio-political and geographic contexts (Croese, 2016). With reference to Curitiba, Ottawa, Bogota and Guangzhou, Croese (2016) argues that there are a few cities that had concrete TOD objectives in their corridor development plans and some cities (i.e. Lagos) have only just begun to incorporate these objectives into their corridor development plans. Only in a few cases in South America (Curitiba and Bogota) were principles of social equality considered in the corridor development process (Croese, 2016). These cities are similar to Johannesburg given their emphasis on employment generating initiatives and the provision of affordable housing for low-income households as a mechanism to foster social inclusion and spatial transformation.

The Corridors of Freedom is a spatial plan based on corridor development. It proposes a city that consists of well-planned transport arteries. These arteries will be linked to interchanges where mixed-use developments will be the major focus. The mixed-uses will consist of high density accommodation, retail developments, supported by office buildings and recreation and leisure opportunities (City of Johannesburg, 2017).

In this envisioned future, people in the city will have the opportunity to live closer to their place of work, enabling them to work, stay and play without having to resort to private motorized transport (City of Johannesburg, 2017). The emphasis is on safe, convenient and affordable buses, pedestrian and cycling activities that will replace carbon-burning private vehicles. The project will transform peri-urban settlement patterns that have marginalized the majority of the city’s poor residents, keeping them away from economic opportunities and access to jobs and development (City of Johannesburg, 2017).

This project is people centred with the needs of the communities, their safety, economic well-being, and comfort portrayed as being at the core of planning and delivery processes. Furthermore, the policy seeks to reduce poverty of the majority of the city’s residents who spend approximately 20 per cent of their monthly income on transportation (City of Johannesburg, 2017).
The key features of the Corridors of Freedom include the creation of safe neighbourhoods for pedestrians and cyclists, coupled with sufficient facilities and street conditions that are attractive. Traffic calming features will help control the vehicle speeds with the ultimate goal of discouraging the use of private transportation systems. This will also be achieved through the limitation of parking spaces (City of Johannesburg, 2017). Mixed-use developments will consist of residential areas with schools, office parks, shops and public services placed in close proximity to stimulate economic activity and generate opportunities for upcoming entrepreneurs (City of Johannesburg, 2017). Housing options will include a range of types and prices which also include rental accommodation. Lastly, there will be convenient stations and transit stops. A clean break with the apartheid spatial distribution is envisioned, with people in the periphery moving closer to economic opportunities (City of Johannesburg, 2017). The CoF policy proposes high density housing that will support the SMMEs sector and small scale operators in the informal economy (City of Johannesburg, 2017). Residents will benefit, as they will be closer to opportunities, thus spending less on transportation. Street hawkers and shopping centres will also benefit from the projected influx of people coming into the areas (City of Johannesburg, 2015). The unemployed will at last have the opportunity to seek jobs through the improved access to economic opportunities (City of Johannesburg, 2015).

Despite the CoF mentioning in passing the role and importance of Small, medium and micro enterprises (SMMEs) and the informal sector, the City stresses their importance. The Executive Mayor Herman Mashaba called for private developers and investors to aid in their quest to regenerate the inner city (City of Johannesburg, 2017). He said that “When you invest your money you must know you have the government’s support. I have dedicated resources to turn the city around and I need your help to do it. Together we have the potential to succeed and make the city full of opportunities for entrepreneurs and artisans”7. Furthermore, R5.8 million have been invested into the masterplan, R9 million for informal trading and a further R35 million have been set aside for the SMMEs. This shows that the City considers SMMEs and the informal sector as integral stakeholders in the development of the City. However, in reality the measures seem to benefit the larger businesses as private developers seek to make profit through the development of structures that fall outside the ‘affordable rental market’ (Huchzermeyer, 2017).

The spreading density is envisioned in this manner (also see Map 2): mixed-use high density encompassing areas 5 minutes around the transport station see figure 4 (150 – 300 Dwellings Per Hectare), medium density within the range of 5 -10 minute walk from the station nodes see figure 5 (100 – 150 DPH) and low density located 10 – 15 minute walk from the station see figure 6 (<100 DPH) (City of Johannesburg, 2017).

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Map 2 shows the SDZ densification proposal for the Knowledge Precinct (City of Johannesburg, 2017: 11).

Figure 4 3D and cross-section of the proposed high density (City of Johannesburg, 2017)

High densities comprise of areas within 5 minutes walking distance around a transport station and a historical retailed corridor. The intention is to create a mixed-use environment with retail at street level, and offices and residential apartments above. It aims to serve the precinct as the heart for movement and activities (City of Johannesburg, 2017). This environment is targeted at young professionals and students.
Medium densities comprise of areas within the range of 5 to 10 minutes’ walk. It serves as an attractive part of the neighbourhood due to its proximity to the BRT feeder routes along High Street and Portland Avenue located further south of the precinct (City of Johannesburg, 2017).

Low densities are prioritized at the outskirts of the neighbourhood, 10 to 15 minutes’ walk from a transport station. This area will consist of quiet, pleasant streets appealing to families (City of Johannesburg, 2017).

2.5. The challenge of developing high density, affordable housing in well located areas
The challenge of providing affordable housing at higher densities in well located areas\(^8\) is closely linked to the relationship between property prices and proximity to the inner city (Massyn, et al., 2015). The closer the land is to the inner city the more expensive

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\(^8\) Well-located areas in this report refers to areas of opportunity or economic hubs in Johannesburg. These include the inner city, Rosebank, Sandton and areas directly along corridor developments.
it becomes (Harvey & Jowsey, 2004) even though it is somewhat negotiable in some contexts. An example of this can be derived from the location of Sandton in Johannesburg. It acts as a financial core and is located away from the traditional inner city of Johannesburg. This is created from the high demand and low supply of land (Harvey & Jowsey, 2004). Privately driven, mortgage-financed housing exacerbates the situation as it follows low density, private vehicle driven suburban developments (Massyn, et al., 2015). Therefore the failure to provide low-income affordable housing in well located areas can be attributed to the lack of understanding of urban economics (Massyn, et al., 2015). Meaning that where land is expensive, one needs to build multiple storeys on a small plot thus the cost will in turn be covered by the multiple floors (when selling or renting space) (Massyn, et al., 2015). In order for this housing provision to be met, there are two imperatives; development needs to be targeted at submarkets. These markets accommodate the majority of low-income households. The second imperative is that the final value of the development needs to exceed the cost of the development (Massyn, et al., 2015). This relationship between value and cost is critical.

The value of a property is calculated on the basis of its net income earned over its economic life (Massyn, et al., 2015). This means that the value of a residential building becomes a function of selling prices and rentals that households are prepared to pay to live in them. This market value needs to take into account the profits required to compensate the developer's risks of undertaking the development as well as foregone investment opportunities (Massyn, et al., 2015). Lower-income households have minimal spending power coupled with the competing needs of their low incomes. The result is that they can only attribute a small fraction of their income to housing. However, this amount is often too low to give compensation to the developer for the costs incurred in supplying the units (Massyn, et al., 2015). Affordable housing is defined as housing that is priced below R500 000 (Massyn, et al., 2015). According to the Department of Human Settlements (DHS) affordable housing should cater for populations that are over qualified for social housing and do not meet the requirements for a home loan. These include people earning over R3500 and less than R15000 per month. Johannesburg Social Housing Company (Joshco) defines affordable housing as providing for populations earning between R3500 and R7000 per month (Mahlaka, 2015). These rental prices range from R850 to R3500 (subject to 2016 market value).

And with the current unit selling prices within close proximity to the inner city around R800 000, the property prices in these areas is well over the limit for affordable housing (Massyn, et al., 2015). In light of these current market conditions and the unlikelihood of household incomes changing in the short to medium term, the lack of affordable housing near the inner city is not surprising (Massyn, et al., 2015). By substituting cheaper capital which includes vertical floor space, high land prices could be overcome (Bertaud, 2010). Therefore, affordable housing near the inner city can be achieved by building vertically at higher densities (Bertaud, 2010). The rationale is that the unit cost of a building will gradually decrease with the increasing number of floors because the fixed costs are equally spread across the larger floor area. It is therefore
financially feasible to develop taller buildings upon considering rates of return (Massyn, et al., 2015).

2.6. Densification trend and contemporary city management
Jenkins (2013) uses the term ‘alternative formalities’ instead of ‘informal’ as the latter suggests a non-compliant norm, judged as a sub-standard practice, exceptional and inappropriate. He notes that, what is termed ‘informal’ in African Cities is actually the norm due to its dominance. Despite contestations over the appropriateness in the use of the term ‘informal’ which has come to be a valuable shorthand to describing practices in the city, ranging from forms of transportation, housing and economic activities, the engagement with these informal practices and their meaning for the city is an important part of contemporary city management (Jenkins, 2013).

Although work in the informal sector usually does not pay well, a lot of people still depend on these activities in Johannesburg (Todes, et al., 2016). In the context of globalization, the street has become a place for employment for the urban poor (Brown & Lyons, 2010). The informal and formal sectors do not operate in isolation as there are also links. The informal sector has some merits to it. It provides convenience for smaller purchases and provides flexibility for poor consumers. It also acts as a platform for a much needed income. These unconventional practices are evident in the Knowledge Precinct and provide a valuable option for low-income individual who seek affordable accommodation.

The attitudes of authorities to the growing form of economic activities linked to residential areas, whether through selling in one’s property or accommodating others in the backyards for an income, remain ambiguous (Charlton, et al., 2014). There is a continuation of bottom-up approaches in low-income housing developments and trying to overcome the limitations of housing developments under the conditions of high unemployment and poverty (Charlton, 2013; Charlton et al., 2014; Lemanski, 2009). These changes made by home dwellers in state provided houses represent a new form of urbanism (Ghannam, 2002; Tipple, 2000; Schlyter, 2003). These changes include the addition of separate rooms in the same yards for rentals. The dwellings can be transformed to double storey versions of backyard housing (Rubin & Gardner, 2013).

2.7. Bottom-up approaches to the persistent housing backlog – backyard housing
In recent years, backyard dwellings have continued to grow faster than informal settlements in old and new low residential areas (Huchzermeier, et al., 2014). This constitutes a new way in which densification of the built-form continues to happen in Johannesburg (Todes & Turok, 2015). Furthermore, this form of densification provides a crucial layer of cheap accommodation for diverse populations and forms part of crucial income for the small-scale landlords (Rubin & Gardner, 2013). There is a growing need to recognize backyard housing as an integral part of low-income housing that will be important further into the future (Todes, et al., 2016). We need to
understand better how backyard housing operates and how services are shared in these settings in order to develop frameworks for them (Rubin & Gardner, 2013).

In unpacking the topic, these key elements, which form part of the on-going densification trend (backyard housing and communes), are crucial:

<table>
<thead>
<tr>
<th>Key words</th>
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<td>Population, Income, Location, Size, Market, Tenure, Density</td>
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**Population**

Low income and temporal city resident groups are seen to be mainly associated with backyard housing (Gardner, 2009). These structures are constructed in close proximity to opportunities. Morange (2002) argues that backyard housing is indicative of an ever increasing housing demand. It is a phenomenon that is emerging in a context where subsidized housing delivery is too slow to meet the accommodation needs of the urban poor. This bottom-up response helps reduce the accommodation crisis as it decreases the demand through the provision of accommodation to individuals or households that are best suited for rental accommodation. The populations are not uniform but they typically include younger or single-headed households, students, and migrants (Gardner, 2009).

**Backyard housing as a source of income**

Post-Apartheid South Africa has seen a great need for spatial as well as socio-economic justice (Shapurjee & Charlton, 2013). This resulted in state-funded housing for the poor which altered the nature of backyard housing as we know it, creating a new class of cash-poor home owners who depend largely on the income they generate from their backyard dwellers’ rent (Lemanski, 2009). Income generation from backyard housing forms part of the power pendulum between landlord and tenant. It defines who can occupy the room behind the main house in more advantageous locations and also serves as an income to the struggling or opportunistic main house owner (Lemanski, 2009). Thus, the South African housing programmes and their aim at addressing poverty through homeownership by providing land and a house enable poor households to view backyard housing as a source of income (Shapurjee & Charlton, 2013).

**Tenure**

Backyard housing fulfils a crucial function of providing flexible and affordable accommodation alongside comforts of better services than those within the informal settlements such as electricity, sanitation and water (Lemanski, 2009). It requires rent payments to be able to stay in these houses (Yasmin, et al., 2014). Additionally, they provide a small-scale rental opportunity to low income people in the country and in a
context where affordable housing is limited (Rakodi, 1995). As a result backyard housing is predominately characterized by rent and short term leases as the form of tenure.

Location and densities

In buying a place, one has to take into account the amount of return the place will generate for the property owner, therefore location becomes an important factor to why people choose specific areas (DeSimone, 2013). For the City of Johannesburg and the Corridors of Freedom project location is also a paramount factor. Since it is looking to rectify the apartheid spatial configuration by using a transport system that will be supported by greater densities, Empire-Perth has been identified as one strategic area that would benefit from the project (City of Johannesburg, 2017). Public transport is viewed as an important mechanism to bring people closer to economic opportunities as well as to jobs (Yasmin, et al., 2014).

Markets

Backyard Housing is a phenomenon that exists in the complex housing market and indicates the importance of the housing sub market (Alan & Owen, 1999; Lemanski, 2009; Morange, 2002; Owen & Gilbert, 2000; Rakodi, 1995; Shapurjee & Charlton, 2013; Yasmin, et al., 2014). Backyard housing in the South African context takes an informal nature (Yasmin, et al., 2014). The relationship is mostly constrained to the house owner and the tenant with no regulation. Even if, in most cases, it cannot be traced to the formal house market, it still fulfils an important role in decreasing the housing demand. Therefore there is a need to support the housing market within the policies and the small-scale rental housing market (Rakodi, 1995; Yasmin, et al., 2014).

In the South African context the main ideas concerned with backyard housing include housing policy that is constantly overlooking the phenomenon (Lemanski, 2009). Backyard housing needs to be seen as an opportunity rather than a failed modernity (conventional densification mechanisms such as multi-storey buildings). Jenkins (2013) argues that, what we consider ‘informal’ is actually a norm in cities across Africa. These informal responses to the challenges facing African cities are increasingly becoming important for contemporary city management (Todes, et al., 2016). Rapid urbanization in the 1970s forms the root of these settlements in order to cater for the increasing population numbers (Lemanski, 2009).

Looking at South Africa and Chile, Crankshaw & Gilbert (2000) argue that there are similarities to backyard housing in developing countries. The difference is that Sowetans do not have relationships with the people of the main structure while Chileans do. This shows that, in the South African context, backyard housing is for people who seek temporal accommodation. Backyard housing is not likely to disappear in the near future (Gilbert & Crankshaw, 1999). Even though government policies aimed at providing subsidies for low income populations in South Africa is helpful, it does not help those who are not eligible, therefore the ‘informal’
accommodations will continue to increase (Gilbert & Crankshaw, 1999; Rubin & Charlton, 2017) as they are an important part of the housing sub-market.

2.8. Conceptual framework guided by literature

![Conceptual framework](image)

Figure 7: Conceptual framework questioning the place of backyard housing as a form of densification mechanism and the provision of affordable housing in the Corridors of Freedom. By the Author (2017).

The literature review above shows that population growth in an area results in the densification of a space (Future Cape Town, 2011). In turn, this results in the need for housing mechanisms that will accommodate the growing population. The closer the area is to the city the more expensive the land becomes (Harvey & Jowsey, 2004). This is the major reason behind the lack of affordable housing near the inner city in South African cities (Massyn, et al., 2015). This is further exacerbated by the failure to understand urban economics (Bertaud, 2010). In South Africa, the state’s approach to providing social housing exacerbates the situation by looking for cheap land away from the inner city in the hope to develop housing projects at a low cost (Bertaud, 2009). Bertaud (2010) argues that, the higher the building and depending on the foundations required, providing affordable housing near the inner city is possible. However, there is a new dynamic emerging in the form of an affordable rental market near the inner city. Backyard housing and communes provide an option to the low-income populations that need low-cost accommodation.

The Corridors of Freedom as a form of TOD emphasise the provision of high-density developments along a transit route (City of Johannesburg, 2017). Drawing on Bertaud’s (2010) arguments, claiming that it is possible to build affordable housing in these strategic areas, it provides hope to the feasibility of the Corridors of Freedom project in bringing low income populations closer to the inner city in other ways than transportation. However, this research is based on the Knowledge Precinct where there are on-going densification processes which Jenkins (2013) may term ‘alternative formalities’. This creates a complex situation as backyard housing often has its own underlying rationalities. One of the ideas behind backyard housing is their existence and function as a source of income (Todes, et al., 2016).
In turn, population growth results in the densification of the area and subsequently the need for affordable housing. The dominant educational facilities in the Knowledge Precinct attracts students into the area. These are annual migrants coming into the area for educational purposes and thus seek accommodation in proximity to the university campuses. The existence of the university nodes has facilitated a growing student population and a need for affordable housing. In the context of South African development policy and housing demand (low-cost housing), the City has proposed the CoF as a mechanism that will bring people closer to opportunities. However, developments along TODs may threaten to gentrify and exclude the low-income population who, as a result, will be unable to afford high rentals. Perhaps backyard housing and communes become a natural response to affordable housing needs and population growth. Is there a future for affordable housing within the Corridors of Freedom in light of the current ‘non-formal’ densification processes in the site? Perhaps the Corridors of Freedom densification policy needs to be revised in such a way that it accommodates other forms of densification.
Chapter 3

3.1. Introduction
This part of the research details the process followed to obtain data. I position myself in the research and outline reasons behind my interest in this research. It describes the methodology used towards obtaining the research findings and reasons why I adopted this method. The chapter begins by outlining my personal interest in the topic, thereafter I will state the theoretical underpinnings of the methodology used as well as my approach in seeking to collect data in the field. Subsection 3.3 forms the heart of the chapter as it arranges the methodology used into three sections: Literature review, desktop data and observation data. The last section of the chapter describes the considerations and precautions adopted with regards to research ethics. This section will also consider the challenges encountered during the research process.

3.2. Personal Interest in the topic
Since the early years as an urban and regional planning student, I have been exposed to the Corridors of Freedom project. In 2014, as part of a project course, we were tasked to re-envision a site in Auckland Park which currently operates as the University of Johannesburg’s, Kingsway Campus parking space. In our quest to re-imagine this space, we had to consider the surrounding areas of Westdene, Rossmore, Melville, Brixton and the neighbouring nodes. This would allow us to place the site in context and thus the ability to come up with something meaningful for the site.

It was interesting how every student emphasized the need for more residential developments in the area. Due to the site’s location in close proximity to a University campus and developmental project with potential to raise property prices, as well as the great number of student accommodation advertisement boards around the site, our hypothesis was that there is a need for more residential apartments at a lower cost in order to accommodate the student population.

Particularly, we argued that the area needed more student accommodation and as part of our visions, we adopted a vertical stance to development (high-rise, mixed use development linked to TOD). These visions came as a result of the on-going developmental trends (backyard accommodations and communes) in the area, but we chose not to acknowledge them as an important component of the area that addresses real issues and discarded them for a new way of thinking for the area – mixed use developments.

Even though I recognize that the purpose of that project was to impart to us the skill of analysing space and envision its future in context, I ended up accepting densification as taking only one form, namely the vertical. In so doing, I saw other forms of densification like communes and backyard accommodation as failed attempts of densifying an area.

I later came to the realization that it is not only backyard accommodations and communes that are discarded as real solutions to on-going problems. Rather,
discarding everything that is less pleasing to the eye or is not in line with the norm of Johannesburg’s vision of creating “a world class African city”. For instance, ‘Operation clean sweep’, initiated by the city and which saw street traders being forcefully evicted from their spots because they did not have proper facilities, is one example of discarding pragmatic solutions in our societies.

In this research I was persuaded by the sentiments shared by Jenkins (2013) on ‘informality’ in African countries as stated in chapter 2 of this report. Thus the idea behind this research is to understand the role of backyard accommodations and communes in the Knowledge Precinct in light of the proposed densification mechanisms. After consultations with my lecturers and supervisor I decided to confront this research from a housing affordability point of view. I began to look at literature on achieving affordable housing in close proximity of opportunities. All the while taking into account the Corridors of Freedom project and the manner in which it aims to bring people closer to opportunities at lower costs. After further consultation, I started to review literature on the concepts of affordable housing, organic city growth, urban informality and Transit Oriented Developments (TODs).

In this research I therefore question the position of the dwelling owners in this densification proposal and their perceptions of backyard housing and communes. Alongside understanding the rationalities behind these kinds of accommodations, this research is interested in the thoughts and perceptions held by tenants towards these rationalities as well as the proposed densification mechanisms.

3.3. Research methodology and rationale
In addition to the review of the Corridors of Freedom project, the Special Development Zones and literature on the benefits and limitations of Transit Oriented Developments, the likelihood of achieving high density affordable housing in close proximity to opportunities, urban informality and organic city growth in the developing counties, I conducted a series of interviews with residents and property owners within the Knowledge Precinct. The findings enabled me to gauge the perceptions of the densification proposals for the area in light of the on-going densification trends.

Qualitative Methodology: The Application of Contextual data

Contextual analysis is not a method but rather a methodology based on epistemological and ontological assumptions on how to best develop scientific knowledge (Svensson & Doumas, 2013). Epistemological assumptions consider the notions of truth, belief and justification. It argues that we can consider something to be true only if we cannot find any false prepositions. Therefore, in order to consider something as knowledge it must have a truthful nature (Svensson & Doumas, 2013). Ontological assumptions form part of the metaphysics. This is a philosophical stance

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9 Organic city growth in this research refers to the bottom-up approaches used to solve the housing problem in the Knowledge Precinct (i.e. communes and backyard housing), which occur without state intervention.
that looks at the very nature of things; their being, cause and identity (Svensson & Doumas, 2013).

Contextual methodology is characterized by being both analytic and contextual in an integrated way (Cresswell, 2003; Svensson & Doumas, 2013; Welman, et al., 2005). This implies that it is case based where data of each case is considered together in relation to each other and within a case as a whole (Svensson & Doumas, 2013). Consequently, the densification proposals will be analysed at a broader South African housing context and within the context of TODs in general. In understanding the rationalities behind the current backyard and communal accommodations as well as the perceptions of the densification proposal, it was essential to use contextual data to gauge the relevance of the proposal in a context where affordable housing is in demand.

A contextual methodology was therefore needed to unpack backyard accommodation and communes as densification options within the context of the Corridors of Freedom. The research was based on the Knowledge Precinct as a case study. I focused on plots located immediately north and south of the Kingsway Avenue (approximately 200 m) with special attention given to plots with backyard housing and single storey houses that serve the area as communal student accommodation. These dwellings were identified through the advertising boards that recruit people seeking accommodation in the area. The reason being, this immediate area is prioritized for high-density (4-8 storey high) buildings but they are currently being used as single storey housing, with growing number of houses turned into student accommodations (City of Johannesburg, 2013).

Information needed

Qualitative approach comprises of the use of constructivist knowledge claims, ethnographic design, and empirical research where behavioural patterns of participants are observed over a period of time (Cresswell, 2003).

Empirical data include:

- Population (type, overall).
- Number of plots with backyard dwellings.
- Number of communal student dwellings.
- Dwelling owners willing to densify vertically.
- Tenure Status.

Qualitative data include:

- Residents’ thoughts on backyard dwelling and communes.
- Owners’ take on vertical densification and the impact on their ‘business’ (in light of the fact that it is more expensive to build vertically than extend horizontally).

Data collections
Desktop study

Desktop data forms a large portion of the data acquired. The information includes census data of the areas forming part of the Knowledge Precinct and, thus, access to overall population size, income groups and dwelling types. A further look at the maps of the area since 2001 aided in grasping the growth of the Precinct and its morphological changes over the years. This information helped me understand the demographic composition and socioeconomic changes that resulted in the physical transformation of the Knowledge Precinct.

The understanding of the changes in the demographic and socioeconomic composition aided the rationalities underpinning the current densification trends in the area and the need for affordable housing. A further look at the comments on the Corridors of Freedom project by the residents of the Precinct provided a more textured look at their perceptions of the project and their attitude towards them.

Observation Data

My encounter with the site allowed me to gather additional information that I would otherwise have missed. During the course of my fieldwork, I came across challenges that would have denied me the answers I wanted. However, the recent activities occurring in the site gave a hint of the ideas and perceptions of the proposed projects and their place in the area as some of the dwellings are beginning to adopt the ideas. I also had a chance to observe the physical morphology which proved fruitful as it added another element to the findings.

In my eight encounters with the site, I was looking at dwellings that have advertisement boards outside or a sign suggesting rental activities. Initially I would go to the site on Mondays in order to align my schedule with a colleague of mine who stays in the site and is familiar with some residents in backyard dwellings. She introduced me to three students who stay and have stayed in backyards accommodations. This schedule continued for three weeks as she would show me around some parts I was not familiar with. The next four encounters were in a single week (from Monday to Thursday) where one day I went to the site with my classmate and learnt about the extent to which the residents are sceptical about people they do not know. I returned to the site weeks later to gather additional evidence in form of pictures.

While conducting the interviews, some people would react awkwardly to certain questions. This gave the impression that they were not comfortable with the questions. Since my questions would pierce into the history of the interviewee, some student tenants would be jumpy when I asked for their reasons behind staying in the backyard accommodations and communes, due to the financial
aspect attached to the question. Observing their behaviour in these interviews added an important element to my synthesis.

Interviews

The reason behind conducting the interviews was to enable me to find out the kind of people residing within the Knowledge Precinct and how they are accommodated in the area. This included questions pertaining to their tenure status and reasons behind their choosing to stay in the area. Learning about these gave me an idea of the kind of site the Knowledge Precinct has become. Some questions were open ended, asking about the residents’ thoughts about the densification proposals for the area and whether or not they had a place considering their socio-economic status. However, this part of the interview, when undertaken with the tenants, did not contribute much to the research.

A similar question was asked to the dwelling owners in the area and the responses were dynamic, something that provided a rich aspect to the findings. However, there were difficulties in accessing the targeted number of interviewees in this domain. Therefore, comments provided by the Corridors of Freedom official website on the residents’ responses towards the proposals for the area was an important aspect of the research. They provided me with information that I needed for my analysis.

3.4. Assessment of the densification proposal for the area

As part of data collection, I looked into the project proposal for the Knowledge Precinct. This included the analysis of policy documents at various scales, with the most common being; the municipal, regional and precinct level. I interrogated the Johannesburg Spatial Development Framework (SDF) in order to learn the broader municipal plans and the reasons underpinning them. However, my focus was on the housing aspect of the document and this was largely addressed within the densification plans for the municipality.

Comprehensive reading of the Corridors of Freedom (CoF) policy was essential in gaining knowledge about the densification proposal at a regional scale. This is due to the fact that it is seen as a tool expected to re-stitch the fragmented city (City of Johannesburg, 2016). Through the use of Transit Oriented Development, it seeks to bring people closer to opportunities. My emphasis however, was on the east-west running Empire-Perth corridor. This corridor houses the old suburbs prioritized for redevelopment. These suburbs, among others, include: Auckland Park, Melville and Westdene.

The Special Development Zone (SDZ) is a detailed pilot project providing clues about how densification in the Knowledge Precinct is supposed to occur. A great interrogation of this document was essential in assessing its validity in the context of the SDF and CoF. In addition to my reading about the densification
proposals for the area it was important to understand the broader vision concerning the corridor proposals. Therefore, constant consultations with my peers whose focus was on the application of the Corridors of Freedom project, was beneficial.

3.5. Data collection, ethical considerations and research challenges.
Prior to my engagement with the residents of the site, I had to draft a Participation Information Sheet (PIS) that explained my reasons for the research and why I chose a certain category of people to engage in the interviews. I was looking for either owners of the dwellings in the area or residents. Those who agreed to partake in the interview were made aware of the educational nature of the research and that there were no benefits whatsoever in partaking in the interview. Furthermore, it was important to mention the voluntary nature of the interview with an option to stop the interview at any moment. The interviewees were made aware of the confidential and anonymous nature of the interview. Before the interview commenced, the interviewees were handed the PIS and consent form. Only after they had agreed, would the interview begin.

However, there were a great deal of challenges in my attempts to gather information through interviews. The biggest challenge was getting a hold of dwelling owners from the dwellings I had set to investigate. People would not respond to my knocks at their gates despite trying at varying times. Interviews with dwelling owners took part over phone calls and emails as I could not meet them in person. However, this also proved a challenge since they would claim to be busy during the time slot they had set which delayed attaining the findings. I also faced the difficulty of accessing the site at varying times as I used public transport to travel to the site. The privacy nature of dealing with people’s homes meant that I could only go to site during the late morning until late afternoon to avoid finding residents fresh out of bed or being stuck in someone’s residence late in the day. This put a cost strain on me as I had to visit the site regularly.

The people I managed to get a hold of made it difficult to view their living arrangements and to take pictures (in the case of backyard accommodations and communes) as they were sceptical of my intentions. Thus interviews were conducted at the gates. Two ladies I had bumped into entering into a gate I had just knocked at seemed distrustful of my intentions. In order to gain their trust, I, together with my colleague stepped away from them and suggested that they lock their gate if it would make them comfortable speaking to us. It was only after they locked us out that they agreed to participate in the interview. However, after the interview, they invited us to their place if ever we needed additional information.
Chapter 4
4. Case Study

4.1. Introduction
This chapter provides an in-depth description of the case study area – referred to as the Knowledge Precinct. It begins by locating the site within the City of Johannesburg and Empire-Perth Corridor. It then offers a brief background of the Corridor and its mandate. In addition to the Corridor’s historical stance, the chapter unpacks the areas forming part of the Knowledge Precinct, their background and the histories of the areas that are part of the precinct. It introduces the ideas of the educational character of Cottesloe and Rossmore as well the cultural makeup of the suburbs of Auckland Park and Westdene. The chapter concludes by analysing the findings from the fieldwork.

4.2. Empire-Perth Development Corridor
The Empire-Perth Development Corridor includes some historic northern and western residential areas in the City. These residential areas include Auckland Park, Braamfontein Werf, Brixton, Cottesloe, Coronationville, Crosby, Hurst Hill, Jan Hofmeyr, Melville, Newclare, Parktown, Richmond, Rossmore, Westbury and Westdene (Tsica, et al., 2016). The Corridor also houses momentous university campuses that comprise of significant 20th century architecture and other notable nodes such as a well-established media, television, film and broadcasting hub, an important industrial centre, noteworthy natural and man-made conservation areas and sites associated with the struggle against colonial and apartheid oppression.

The Corridor also serves as an example for the 19th and 20th century urban migration where both the Afrikaner and black ‘underclass’ settled on undesirable locations in the western areas (Tsica, et al., 2016). These include disused or leftover grounds in-between sewage works, garbage dumps, cemeteries, mine dumps and in locations close to railway lines. Thus the Corridor runs through a number of historic suburbs that provide architectural, cultural, social, economic and political development of the city.
4.3. Introducing the Knowledge Precinct

The Knowledge Precinct is a centrally located area within the Empire-Perth Development Corridor. It includes parts of Auckland Park, Cottesloe, Rossmore and Westdene (City of Johannesburg, 2017). The precinct is bordered by areas of Melville, Richmond and Westdene to the north, Mayfair, Crosby, Jan Hofmeyer and Vrededorp, to the south, Hurst Hill to the west, Brixton cemetery and Jan Hofmeyer to the east. In addition to residential areas, the Knowledge Precinct includes a significant provincial hospital and a nurses training college, two university campuses, a cluster of media and broadcasting institutions and facilities. This educational character gives the area its name.
Map 4 shows the land use proposals for the Knowledge Precinct. The initial plan, outlined in the Strategic Area Framework (SAF), depicts high densities along the BRT route, medium densities along main roads, low densities further away from public transport routes and mixed use areas supporting the corridor. The project emphasizes a connected neighbourhood where residents rely on alternative modes of transport instead of private vehicles. These densification plans are adopted in the SDZ (see chapter 2 Map 2).

4.4. Historical background of the Precinct
The Brixton Bridge along the southern section of the Knowledge Precinct lies on a watershed (City of Johannesburg, 2013). The geology and topography of the area is also important for the creation of the vistas and views that are characteristic of the landscape from Cottesloe through to Auckland Park, Brixton, and Crosby Ridges. This forms the area’s cultural landscape (City of Johannesburg, 2013). In essence, the morphology of the area partly explains the Iron Age settlements on hilly areas around Melville, where grazing land and water resources defined areas for settlement (Tsica, et al., 2016). The establishment of the Braamfontein farm in the 19th century highlights the start of the precinct’s history.

The discovery of gold later in the century saw the expansion of Johannesburg where wealthier residents preferred to stay in the valleys and ridges north of the city while the working class residents settled in the western suburbs next to the mining belt and main railway lines (City of Johannesburg, 2016). This resulted in the emergence of various suburbs which include: Auckland Park in 1888, Melville, Richmond and Vrededorp in 1896, Brixton and Parktown West in 1902 and Cottesloe in 1904. The growth would further expand with areas of Westdene in 1910, Rossmore in 1925 and Jan Hofmeyer emerging in 1936 (Tsica, et al., 2016).
4.4.1. Auckland Park – An idyllic holiday resort for the gentry.

The growth of Johannesburg saw wealthier residents moving away from dusty and polluted areas of the city, first on a temporal basis before it escalated to permanent migration. The drive to move away from mining dominated areas resulted in the establishment of Parktown and Auckland Park around 1890 (Tsica, et al., 2016). Actually Auckland Park had been planned for prior to the 1890 settlement as it was first surveyed in the 1880s and sale of stands being advertised in 1888. However, these initial plans were aborted (Smith, 1971). The turn into the 1890s saw more development occurring in the area (Tsica, et al., 2016). In 1894 a total of seven avenues with numbered stands were advertised. By 1896, the original farm-house had already been turned into a hotel and a lake was constructed.

Auckland Park remained a holiday get-away-area for the elite, far from the hustle and activities of the city after the South African War (Smith, 1971). A racing course, a hotel and a boating house, which forms the current Country Club, completed the picture of a peaceful holiday (Tsica, et al., 2016). The area was well known for its quietness. This quiet character earned it its exclusive reputation to house the early names such as the 1925 Prince of Wales, and it kept the character for some time. Like Parktown, Auckland Park retained its genteel reputation during apartheid and its situation in-between Rand Afrikaans University (RAU) campus to the west and SABC complex to the east attracted wealthy figures from the academic, cultural, entertainment and media sectors (Tsica, et al., 2016). The area continued to attract new residential and commercial investors. The new investors facilitated the change of the built environment as a consequence of the new gentrification. Today, Auckland Park is a suburb in transition where large stands are being redeveloped for student
accommodation and old residences are demolished if not redeveloped (Tsica, et al., 2016), threatening the historical character of the area.

4.4.2. Cottesloe – an educational hub.

Cottesloe is supposedly named after a suburb in Perth, Australia. The year 1928 saw the completion of one of Johannesburg’s finest industrial complexes, the Chamber of mines for injured mine workers and a cluster of cottages for World War I Memorable Order of Tin Hats (MOTH) veterans (Smith, 1971). Simultaneously, the Con Cowan School was built, which set the tone for future development of educational facilities (Smith, 1971). First the Goudstad College of Education was constructed in in 1961, then the Witwatersrand Technikon and later the University of Johannesburg (Tsica, et al., 2016).

In a fight against apartheid in 1960, a student residence once accommodated an international gathering of the World Council of Churches given that the area allowed interracial gathering within the city.

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10 Memorable Order of Tin Hats (MOTH) was founded in Durban, South Africa and it refers to the WWI veterans. see [http://www.moth.org.za/about-us/](http://www.moth.org.za/about-us/) [Accessed 11 October 2017]
Employment statistics for the precinct (Stats SA, 2011).

Majority of the population within the precinct are classified as not economically active. This adds to the arguments pertaining to the educational character of the area. It also hints to the sort of developments that may occur in the area. With the precinct prioritized for different densities, it is no surprise that there is a growing need for student accommodation within the area.
In the late 1920s, the area was characterized by single storey brick houses for the elite who wanted to escape the chaos of the city (Tsica, et al., 2016). It is no surprise that house brick structures still dominate the area. However, the increased educational facilities and media sites resulted in the need for more residential spaces to cater for the growing population. The data below shows that, currently, there is an increased
number of people coming into the area. This is despite the migrants originally coming from various parts of the province. This explains the large number of people renting spaces other than home ownership (see figures 21 & 22). Perhaps (Tsica, et al., 2016)’s arguments on a new kind of gentrification in the area resulting in specific kinds of developments had some merits to it. They argue that the increased student population facilitates development and changes within the morphology of the area. The precinct is increasingly being dominated by young professionals and a student population which has called for ‘a change in the built environment’ – a new gentrification\(^\text{11}\) (Tsica, et al., 2016).

Today, the site is dominated by communes, backyard accommodations and increasing number of flats (see images 3 & 11). This is increasingly changing the character of the precinct with new proposals for the area stimulating different reactions to them.

![Figure 15](image-url) The area is increasingly being occupied by temporal occupants who rent residential spaces around the site – a sample of ward 57 data (stats SA, 2011).

\(^{11}\) New gentrification is used to describe the new demographic characterizing the area. It refers to the dominant student population coming into the Knowledge Precinct and resulting in backyard housing to accommodate this new population that needs affordable housing. New gentrification thus refers to the new wave of gentrification post 1994.
Figure 16 Even though the area is dominated by South Africans, residents come from various parts of the country on a temporal basis (stats SA, 2011).

Image 1 Aerial photograph of a part of Westdene before the arrival of the BRT (2007). Source: Google Earth
The images (see figures 1 & 2) indicate that there is not much change in the morphology of the area over the past 10 years. However, consultation with the residents of the area indicate that the increase in the population is being accommodated within existing buildings which are subdivided (communes) to house students. Other people see the proposal as an opportunity and they build more residential spaces for accommodation.
Evidence of student accommodation along Kingsway Avenue (Tshiashi, 2017).

Main dwelling converted into a commune (Tshiashi, 2017).
Image 7 Main dwelling converted into a commune (Tshiashi, 2017).

Image 8 Main dwelling converted into a commune (Tshiashi, 2017).
Evidence of student accommodation (Tshiashi, 2017).

Evidence of new vertical accommodation in properties along Kingsway Avenue, opposite Helen Joseph Hospital (Tshiashi, 2017).

Accommodation targets students and young professionals (Tshiashi, 2017).
Evidence of new vertical accommodation in properties along Kingsway Avenue, opposite Helen Joseph Hospital (Tshiashi, 2017).

A building that was being renovated into a walkup throughout the fieldwork period (Tshiashi, 2017).

Shows barriers to accessing the building and security measures taken around the fieldwork site (Tshiashi, 2017).
My colleague analyzing the difficulty of accessing the dwelling (Tshiashi, 2017).

Image 18 shows a dwelling providing student accommodation and indicating 'no NSFAS' (Tshiashi, 2017).
Image 16 Evidence of backyard accommodation in the area (Tshiashi, 2017).

Image 17 Evidence of backyard accommodation in the area (Tshiashi, 2017).
Interaction with the Knowledge Precinct

10th July 2017

Observation data

Prior to my attaining permission to interview the residents of the site (clearance), I asked a friend of mine who also stays around area (Brixton) to show me around. On our first day we noticed that dwellings directly along the Kingsway Avenue have been turned into student accommodations and apartments (see images 3 & 10). Three dwellings were already converted into three storey buildings (see images 11 & 12) and one was still under construction (see image 13). The two finalised ones (shown in images 11 & 12) appeared to be new with a modernized style of architecture. They also had communication equipment at the gates where one dials in order to access the dwelling.

The properties along the Kingsway Avenue were closed off with high walls and in some cases, electric fences (see image 14). The gates were impermeable and we could not peak into the properties. This hinted towards the difficulty we would face when acquiring information or trying to access the residents (see image 15). The hard edges12 also hinted at a safety and security issue the area might be facing.

17th July 2017

Scheduled interview

My friend organized an interview with a former backyard dweller in Westdene who had moved to a flat in Brixton (same flat as my friend). When I asked her why she had moved from a backyard dwelling to a flat she said;

“Last year I did not have residence funding and my bursary only covered tuition. My family was paying for my accommodation.”

– Respondent 1

Despite the presence of my friend who happens to be respondent 1’s roommate, she did not seem comfortable about being interviewed. The interview was conducted near the UJ Kingsway campus parking gate and I thought that she just did not appreciate being interviewed in front of passing people. Thus abstained from asking about personal information (e.g. could you stay in the current residency without outside funding). From her response and body language I deduced that backyard accommodation appealed to her at that time because it catered for her economic capabilities.

I began to ask her the questions I had outlined in the questionnaire; instead of asking about her tenure status, I asked her where she was from and how often she went home?

12 Hard edges refers to impermeable walls and gates.
“I am from Limpopo and I normally go back home twice a year, in June and in November. Sometimes I do go on a ‘Good Friday’ for church.”

– Respondent 1

I then asked her to elaborate on the reasons why she chose to stay in a backyard dwelling?

“I am here for educational reasons and I needed accommodation close to campus. I started searching for accommodation with my friend and we happened to find space in a backyard room.”

– Respondent 1

Why didn’t you stay at a campus residence?

“Like I told you before, I did not have funding last year and the residence I found was cheap.”

– Respondent 1

How much was the university residence and how much was the backyard room?

“The one from the university started from R2700 sharing with 3 others. I paid R1800 at the backroom I was staying in.”

– Respondent 1

I asked her if she was aware of the densification proposal for the area. After showing that she did not know about it, I explained it to her and asked her what she thought about it?

“Well, it seems like a good project and if it will provide more houses it should be done. It’s a pity that I might not be here (Johannesburg) when it happens. I am just glad that more student housing will be available.”

– Respondent 1

Do you think it accommodates different income groups and you as an individual?

“Yes, if it’s targeting the poor I think everyone is automatically catered for.”

– Respondent 1

What do you think about backyard housing and communes in the area?

“I think they are affordable but they are also too small. I hate the fact that I have to share the bathroom with a lot of other people.”

13 Good Friday is a holiday used by ZCC members to gather at a church in Limpopo.
Observation data

I returned to the site with my friend. This time around we were investigating the southern part of the precinct (areas of Cottesloe and Auckland Park). This area was interesting because it was almost completely different from Westdene and Rossmore. It was quiet with an old style of architecture. The roads were aligned with trees and consisted of a fairly uniform morphological makeup (single storey buildings). This area had the highest evidence of communal activity (despite little evidence of backyard dwellings) given that there were advertisements of rental spaces within the dwellings.

28 August 2017

A visit to the site with my peer Lesley Mashiri. As anticipated, it was a challenge to access the dwellings and get hold of people whom I planned to interview (see image 15). We tried calling out from the gates in order to get the attention of the residents but we had no luck. As we moved away from one dwelling, we walked past two ladies who happened to stay at the dwelling we had just tried to access. We turned back and approached them. They did not seem comfortable speaking with us and I suggested that they lock us out and listen from the other side of the gate if it would make them comfortable participating in the interview I was conducting. By taking my suggestion, the thought that they were not at ease became clear. Only after locking us out did they listen to what we had to say. I explained my research to them and why I wanted them to take part. They seemed interested and asked if I could come back the following day for the interview.

We used the rest of the visit to walk around the site writing down contact details from the advertisement boards. Later that day I started calling those numbers to set up appointments. Only two of the contacted showed interest and scheduled interviews for later in the week.

29 August 2017

I went to the site on my own to conduct the interviews. I was also relaxed since I had already met the respondents and they were aware of my intentions. I arrived just before the scheduled time (11:12am) for an interview scheduled for (11:30am). I knocked at the gate using the padlock they use to lock the gate and one of them came to open for me. I was interviewing two women.

I started the interview by asking how they knew each other.

“We met here in varsity. We are in the same class and she’s (referring to the other lady) the one I got used to first in class and yeah we became friends.”

– Respondent 2
Instead of asking them about their tenure status, I prompted to ask about where they were from?

“I am from Ladysmith, Kwazulu-Natal and I am here to study.” – Respondent 2

“I am from around Johannesburg, Soweto.” – Respondent 3

I asked them why they chose to stay there (they stay at a double storey apartment directly along the Kingsway Avenue).

“We thought we should get a place where we could stay together. We didn’t get space at the school residence and found space here.” – Respondent 3

I asked them if they knew about the proposals for the area and they said they were not aware of it prior to what I had told them the previous day (via the Participation information sheet). I explained it further and asked what they thought about it?

“I really don’t know.” – Respondent 2

“I think the Rea Vaya is good. It was quite convenient for me last year when I used to travel from home to campus. Increasing accommodation around the area will be helpful for students coming here.” – Respondent 3

I asked them if they thought the densification proposal accommodated different income groups in light of the rental prices between backyard accommodation and apartments in the area.

“I don’t see much of a difference. They charge almost the same and when I come here I just want to get accommodation since I come from far. So if there is going to be cheaper accommodation that’s also good.” – Respondent 2

“Yes I agree with her.” – Respondent 3

I asked them if the proposal accommodated their socioeconomic status.

“I don’t know. I mean if I didn’t get a bursary this year, I would probably be travelling every day. So I guess it is a good idea to provide cheaper accommodation.” – Respondent 3
I asked what they thought about backyard accommodation and communes. They hesitated about speculating on backyard accommodation since they had never stayed in one.

“Sharing with other people is quite challenging. You need to get someone you know and understand in order for it to be better. That is why I asked her (respondent 3) to be my roommate when she said she was also looking for accommodation. It works better because we also attend the same class and have the same schedule. The only problem is that we have to share kitchen and bathroom with two other people.”

– Respondent 2

30th & 31st August 2017

Interviews with property owners through phone calls. It was challenging for a number of reasons: firstly, I could not get additional data I would otherwise get in a face to face interview from the interviewee’s body language in response to certain questions. The second reason is that I had to get straight to the point without follow-up questions for financial and time constrains. These interviews were structured and rigid.

They both said that they fully owned the properties in question.

How long have you lived there?

“I lived there for 20 years before I moved in 2009.”

– Respondent 4

“I never lived in the area. I bought it in 2011 seeing a business opportunity.”

– Respondent 5

Why did you decide to convert your dwelling to accommodate more people?

“I had already decided to move that year and did not see the need to sell the property. The increasing number of student accommodations in the area encouraged me to invest in a commune to accommodate students.”

– Respondent 4

“I thought of it as an opportunity to accommodate people. The area was already filling up with student accommodations and when I found a property, I decided to provide accommodation for other people.”

– Respondent 5

When did you convert it?

“In 2009.”

– Respondent 4

“In 2011.”
What kind of population do you accommodate and why?

“Students. Because the house is close to UJ and students need accommodation.”

– Respondent 4

“Anyone seeking accommodation.”

– Respondent 5

I asked them about the densification proposal for the area and they both were aware of it and they had similar feelings towards it.

What do you think about the proposal? (also see annexure 4 on comments from the SDZ public meeting)

“The area has a lot of students. In the case of University of Johannesburg students, some have to catch a school bus in the morning from areas like Braamfontein and Doornfontein where they stay. So I think it is a good opportunity to provide more accommodation in the area.”

– Respondent 4

Do you think it accommodates different income groups?

“Yes, as a plan its targets the low-income but it is still too early to say if will work or not.”

– Respondent 4

“It is wishful thinking that the desired affordable housing will be achieved. I mean property prices are always on the rise.”

– Respondent 5

How have buildings changed in the past 10 years?

“People started to accommodate students in their dwellings. More backyard accommodation and communes started to dominate, that is the reason I decided to subdivide my dwelling as well to accommodate students. In recent years, people started redeveloping their buildings but there hasn’t been any drastic changes.”

– Respondent 4

“For the time that I have been here I have seen a number of buildings change in size. More double storey buildings are being constructed.”

– Respondent 5
Conclusions on fieldwork findings

The area recognizes the housing shortage and tries to reduce the demand by accommodating people in the backyard dwellings and communes. Some owners are also beginning to buy into the City's idea of vertical densification in the area by reconstructing their buildings to multiple floors. The responses from the residents and evidence from advertisement boards make it difficult to define what constitute affordable housing in the area (refer to respondent 1 on accommodation price and reasons to stay in backyard dwelling). Students with without financial backing and those receiving assistance from the state seem to be facing challenges in terms of getting accommodation they can afford in the area (refer to images 10 and 18 on high prices and exclusion of NSFAS\textsuperscript{14} students respectively). However, backyard accommodations and communes remain dominant in the area, serving as alternative student accommodation.

\textsuperscript{14} NSFAS is an acronym for National Student Financial Aid.
Chapter 5

5.1. Introduction
As the name suggests, the Knowledge Precinct is renowned for its educational character (see chapter 4). The availability of various university campuses and colleges forms a major part of this character. However, the University of Johannesburg is the single most influential node contributing to the knowledge-based character of the area. Furthermore, the morphology of the area has evolved from single household residential dwellings to providing an alternative for the student population coming into the Knowledge Precinct (Tsica, et al., 2016). This alternative is provided in the form of backyards, through subdivision of the dwellings and through the changing of dwellings and converting them into flats and apartments in order to house more people. Not only do these responses show the need for more accommodation within the Knowledge Precinct, but they also indicate that the area has come up with its own responses to dealing with the housing shortage.

Coming up with pragmatic solutions without state intervention is no new phenomenon in African Cities. Arguing against the use of the term ‘informal’, Jenkins (2013) states that the engagement with these informal practices and their meaning for African Cities is an important part of contemporary city management. More importantly, there have been different discussions by scholars in unpacking horizontal densification as a common phenomenon in African Cities. Robins (2002) and Lemanski (2009) argue that this practice can be viewed as a reversion from formal living to informality. More common is the argument that these responses are necessary adaptations that enable households to generate income in order to support the cost of living formally (Rubin, 2002; Lemanski, 2009; Charlton, 2013). Furthermore, they provide a form of cheap rental accommodation (Watson, 2009). They are a significant supplementation to landlords’ income (Watson, 2009). Backyard accommodations are a means of densifying neighbourhoods initially realized as problematically low density areas (Gardner, 2015). They are important for the transformation of areas from mere housing developments to human settlements (Rubin, et al, 2014). They also serve as a rude reminder of the failure of planners, policy makers and developers to acknowledge the complexity and heterogeneity of everyday social life and lived experience (Rubin, 2002). This chapter draws from the above arguments to analyze the densification mechanisms in the Knowledge Precinct.

5.2. South Africa’s housing plan: A turn into democracy
A turn into a democratic South Africa resulted in the government promoting home ownership as a solution to informal housing regardless of the fact that private renting is more accommodative to low-income households (Lemanski, 2009). Despite attempts at encouraging home ownership through social housing, small-scale

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15 Horizontal densification refers to single storey residential buildings in a form of communes and backyard accommodations.
landlords have continued to house approximately two million households, of which sixty per cent is accommodated in backyard dwellings (Gordon & Nell, 2006). The increased accommodation through small-scale landlords rather than the national housing subsidy scheme since 1994 (Gordon & Nell, 2006) has shown the importance of unconventional housing typologies in reducing the housing demand.

In addition, Lemanski (2009) argues that the national housing subsidy scheme is failing to meet the housing demand. This results in overreliance of low-income households on rental and or informal accommodation, including backyard dwellings. In the context where backyard accommodation preceded the housing subsidy system, the policy itself has shaped a new supply of backyard space because the beneficiaries are cash-poor (Lemanski, 2009) and in the case of the Knowledge Precinct, transient. The result is that backyard spaces are being seen as an economic opportunity where landlords can generate an income.

5.3. Backyard dwellings as a source of income
The rental housing subsidy scheme has created a more equal and interdependent relationship between the landlords and tenants whereby the very poor homeowner landlords depend on their tenants’ rent therefore reducing the past backyard exploitation (Lemanski, 2009). Evident within the Knowledge Precinct, backyard housing has become a more permanent and market based form of housing (also see comments from respondent 5) (Lemanski, 2009). Similar to the economic rationalities of constructing additional rooms in one’s backyard at any context, the Knowledge Precinct appears to share similar economic motives of earning an income from renting out the space in their backyards.

However, the Knowledge Precinct differs from the ideas presented by (Lemanski, 2009) who argues that, in addition to backyard dwellings being market based and reflected in higher rents, they are increasingly detached with less communal tenant – landlord relationships (refer to comments from respondent 4). There appears to be no communal tenant and landlord relationships in the Knowledge Precinct as the owners tend to move out and rent out their spaces entirely. In some instances the main dwelling is subdivided to accommodate individuals and the additional rooms in the backyards are rented likewise. Nonetheless, the tenants in the Knowledge Precinct enjoy the proximity of services to a much larger extent than in instances found in townships (Lemanski, 2009).

Furthermore, conventional characteristics of backyard accommodation include overburdened infrastructure capacity as a result of additional households. This leads to reduced service connection and the absence of public ablutions reduces the access of backyard tenants to sanitation, leading to an overreliance on landlords (Lemanski, 2009). These landlords perceive tenants as a market based business management instead of a social arrangement (see comments from respondent 5) (Crankshaw & Gilbert, 2000; Lemanski, 2009). This also indicates disinterest in the needs of the tenants by landlords.
The Knowledge Precinct looks at backyard accommodation as a form of reducing the student accommodation demand in the area (see image 18). However, the precinct tends to differ from conventional characters of backyard dwellings as owners look to improve living conditions and attract the predominant student population which migrate on an annual basis (refer to respondent 2). In some instances additional services are included to cater for the additional tenants. In terms of services, there is little reliance on the owners who often leave the area. In South Africa, backyard housing is developed fundamentally as an opportunity to earn an income. Furthermore, there is minimal communal or social relations between the owners and tenants, with the only relationship between the two being the tenants’ reliance on owners for dwelling maintenance.

5.4. Upgrading of backyard accommodation and potential gentrification
Backyard housing has proved itself as an affordable form of housing in South Africa. However, quality of services, living arrangements and their ‘informal’ nature have raised questions while often been ignored by the state as an alternative housing option in the past. The fact remains that this form of housing has become an important part of city management as it provides an option to low-income households. Furthermore, it acts as an alternate source of income for poor households (Lemanski, 2009). Undoubtedly, the improvement of access to services for backyard households is necessary and it is commended that there be a participatory nature between the landlords and tenants when it comes to agreements between them. However, physical upgrading of backyard accommodation from shacks to formal structures will threaten their affordability and therefore, weaken their contribution to the housing stock for the poor households (Lemanski, 2009). Evidence can be drawn from the Knowledge Precinct where the predominant form of backyard accommodation is comprised of formal brick structures with improved services for tenants and the prices are well above the regular rent paid in townships (see image 10, an example on prices paid for renovated spaces for renting). Normally a tenant living in a backyard shack pays approximately R700 in the townships which is less by more than half (R1800) of the amount paid in the Knowledge Precinct (refer to respondent 1 on rental prices). Furthermore, this approach to developing backyard accommodation could facilitate gentrification especially in well located areas and further compromising the housing stock for the poor (Lemanski, 2009). If improving backyard accommodations raises alarms to the inclusion of the poor, one only wonders what complete redevelopment of an area would do to property prices and in turn, the affordability of the new apartment dwellings.

5.5. Densification rationale along TODs
TODs have become an important part of city management and they influence how cities prepare their land use patterns and provide transport planning strategies (Wilkinson, 2006). The same has been adopted in the City of Johannesburg where, through the Corridors of Freedom, the city hopes to link the marginalized areas to areas of opportunity (City of Johannesburg, 2017). In addition, the Knowledge Precinct
is a strategic area where there are already plans to guide development along the key corridor node (City of Johannesburg, 2017).

As stated is chapter 1

*The success of any project that implements TOD can be skewed because in order to determine the success of a project, there has to be a standard benchmark for the project’s perceived success. Therefore, it is important to understand the framework guiding the development and success of TOD projects. However, a project can also be considered to be a success even if it only achieves a single element*16 of the TOD (Belzer & Autler, 2002).

The major threat to the success of the Corridors of Freedom with regards to the workings of the Knowledge Precinct, is achieving the desired densification benchmarks outlined in the SDZ. The current densification mechanism in the area seems to be dealing well with the housing backlog and preservation of the neighbourhood character. The three most striking comments by the residents with regards to the multiple storey buildings being constructed in the area include;

“*Height of buildings is an invasion of privacy and safety factor – it blocks sunlight.*”

“*6 storeys out of character in residential area.*”

“*Historic buildings in high density area will be encroached by larger buildings.*”

– *Comments from the SDZ public meeting.*

These are some of the residents’ views on the proposed densities which indicate some attachment to the current character of the Knowledge Precinct.

However, the solution to these rising concerns can be drawn from the common densification mechanism in South Africa – backyard accommodation and communes. These responses seem to be the clear contenders to deal with densification aspect of achieving TOD in the Knowledge Precinct and despite their dominance in the area and support from policy some residents remain concerned over them. One resident in response to the question asked about their dislikes about the project responded that

“*Allowance of backyard shack buildings will cause overcrowding, compromise hygiene and safety.*”

– *Comment from the SDZ public meeting.*

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16 TOD in Johannesburg is implemented as a mechanism for social inclusion and spatial transformation *(refer to section 2.4.3 of the report)* therefore it prioritizes the integration of different neighbourhoods to areas of opportunity. The BRT as a component of TOD has worked in integrating the marginalized areas (i.e. Soweto) to areas of opportunity (i.e. inner city) and this needs to be viewed as a success of some sort. It saves frequent riders such as Malesabe Makgothi approximately R500 per month. [https://www.reavaya.org.za/news-archive/september-2015/1214-rea-vaya-makes-a-big-difference-for-teacher-from-soweto](https://www.reavaya.org.za/news-archive/september-2015/1214-rea-vaya-makes-a-big-difference-for-teacher-from-soweto) [accessed 12 October 2017].
In the context where there is a need for affordable housing and student accommodation, it was no surprise to me that the majority of the student residents I interviewed said that they did not care about the project, as long as there is a provision for affordable student accommodation (see responses from interviews in chapter 4). Furthermore, there seems to be a growing consensus over the provision of affordable housing where some of the comments from the residents include (also refer to respondent 1 & 4 on their thought about the densification proposal);

“Council should look into providing accommodation for the very poor of the area in the red zone.”

“Could specific space be reserved for student accommodation?”

“Rossmore, needs to be high (red) or medium (amber) density due to proximity to university.”

“Great opportunity to provide housing for many people across different income brackets.”

“I support low income, mixed income and inclusionary housing.”

“Densification is inevitable. I recognize the need to upgrade the suburbs near the inner city.”

“There is a need to ensure low socio-economic sectors are catered for.”

“High rise student accommodation!”

– Comments from the SDZ public meeting.

Taking into account that we are dealing with a student population comprising of predominant annual migrants (refer to respondents 1, 2 &3), some home owners have taken a liking to the proposal as they see it as an opportunity.

“I am keen to develop, I like the fast tracking of rezoning process.”

– Comment from the SDZ public meeting.

Furthermore, there have been new developments in the area, targeting the student population (see image 5). In the context where the state has limited resources and is not a dominant participant in the housing market (Morange, 2002), it is quite encouraging to see that the residents are responding positively to the cause.

However, TOD in this context is intertwined with affordable housing and achieving this will be no easy task. This is because corridor developments are often associated with increasing property prices (Curtis, et al., 2009) and this poses a threat to the housing affordability in the area (see image 10, a new development with rental prices above the affordability range of less than R3500). Perhaps the state needs to buy into the argument posed by Belzer & Autler (2002) in that, the success of a TOD does not
necessarily have to respond to all the elements of the phenomenon but rather the success of one element could be a success of sorts. Furthermore, corridors can work at various scales for different functions. At a metropolitan scale, they look to provide higher density options and multimodal transport system, linking different activity nodes and neighbourhoods (PPDC, 2007; Curtis & Tiwari, 2008). At a local scale their function is to create a ‘sense of place’ through community building (Curtis & Tiwari, 2008).

The Corridors of Freedom has proved itself through the Rea Vaya bus system that continues to link the low-income areas to areas of opportunity in the city at a low cost. Its infrastructure is unparalleled in comparison to other affordable modes of transport in the city and that needs to be viewed as an achievement. The only limitation to this transport system has been its accessibility in different neighbourhoods which leaves commuters highly dependable on taxis (Croese, 2016). On the other hand, achieving the desired densification will be difficult but not entirely impossible. My only concern is the affordability of the rental units that would be available. Perhaps the city needs to adopt what Jenkins (2013) terms REALPOLITIK which loosely relates to ‘working with what we have’. This is a bottom-up approach to solving situations and the Knowledge Precinct has backyard accommodation and communes as a densification mechanism and it is responding well to the housing backlog at an affordable rate (see respondent 1 on affordability).

5.6. Conclusion
In the context of South Africa’s housing shortage, Lemanski (2009) stressed the importance of backyard dwellings and suggests that government policy post 1994 and the emphasis on home ownership only works because backyard dwellings provide sufficient income for poor home owners which enables them to cope with formal living demands. Backyards dwellings’ specific needs require recognition from the public and support (Lemanski, 2009). The main aim being to improve the tenants’ tenure security as they constantly need to negotiate their access to services through their landlords, which can be revoked at any time.

The potential impact of vertical densification and backyard dwelling upgrading is positive from the landlords’ perspective. From the arguments discussed earlier in this chapter, landlords would benefit from the potential high rental income and vastly improved asset that would be transferred somewhat unfairly from the ownership of shacks which would be built by tenants to already asset rich landlords (Lemanski, 2009) needless to mention the potential benefits from rising property prices along the TOD (Curtis, et al., 2009). This will undoubtedly exacerbate the already weak financial status and tenure security of the backyard tenants. Furthermore, constant engagement of policy with landlords and the ignorance of tenants continues to overlook the needs of backyard dwellers, who continue to be “one step removed” from

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17 Vertical densification refers to the multiple storey buildings.
state interface and forced to negotiate their political position through their landlords (Beall, et al., 2002). Clearly, policy exists to support small-scale landlords and not the tenants, and it addresses half the needs of those involved in backyard dwellings (Gordon & Nell, 2006).

In essence, the focus on vertical densification and upgrading of backyard accommodation instead of provision of affordable housing ensures that the policy provides a housing solution for small-scale landlords and public officials, but exacerbates housing problems for poor households. Furthermore, it fails to recognize increased informality in government policies, which will potentially increase in well-located settlements (Lemanski, 2009).
Chapter 6: Conclusions and Recommendations

6.1. Concluding remarks
Urbanization has become a frequent phenomenon in South African cities and it exerts a strain on infrastructure in these areas. This is also evident in the City of Johannesburg as the increased populations exert tremendous pressure on the housing market. The need for affordable housing has resulted in pragmatic responses to try and deal with the housing demand and these populations are often accommodated in the less formal forms of accommodations (informal settlements and backyard accommodations). Jenkins (2013) argues that ‘informality’ has become a common term used to describe the pragmatic responses in African cities despite their dominance (see chapter 2). However, ‘informality’ has become a norm and in my research on densifying the Corridors of Freedom I found that the Knowledge Precinct is no different despite its proximity to the inner city and its strong historical idyllic character for the elite.

The research looked at the feasibility of achieving affordable housing in close proximity to the inner city and within the contexts of a corridor development. With reference to existing literature, I make use of phenomenon such as backyard accommodation and communes as well as concepts of ‘informality’ and organic city growth to argue for the viability of densifying while providing affordable housing within the contexts of corridor developments. Furthermore, I make use of urban economics to explain the viability of vertically densifying areas around the inner city while providing affordable housing, though gentrification poses a threat to this approach.

My research findings show that some of the property owners and residents have taken up the ‘informal’ route in dealing with the housing demand as owners tend to rent out their backrooms or subdivide the main house to accommodate the student population in the Knowledge Precinct. The dominant student population participate in these forms of accommodations as they view them as affordable and well located. These findings form a basis for my strong stance in that these kind of developments need to be embraced within our development policies as pragmatic responses to affordable housing demand.

The research has shown a flexibility in the housing options around the city to accommodate people in contexts where dwellings would have otherwise housed a single family. It also paints a picture of how the lack of affordable housing in close proximity to economic opportunities is a problem for low-income city dwellers. Therefore, the unconventional ways of accommodating a dominant student population in the Knowledge Precinct reduces this housing demand. They have proved their resilience in a context where there is an increasing call for densification and affordable housing (in a case of student accommodation). Backyard accommodation and communes have proven to be responsive to the needs of the increasing rental seekers in the Knowledge Precinct both in terms of socio-economic and spatial aspects required in achieving sustainable livelihoods that the City is proposing.
This chapter aims to discuss a way forward through ‘encouragement’ instead of intervention on the current development trends that respond to the housing demand and overall vision for the Knowledge Precinct. In my attempts to answer the question of whether vertical densification proposed by the Special Development Zones (SDZ) in the Knowledge Precinct is the solution to countering the housing demand while achieving affordable housing, I scrutinize the benefits of both the horizontal and vertical forms of densification and their limitations. Deeply inspired by Jenkins’ (2013) ideas of unconventional responses to city management as pragmatic solutions to African Cities’ problems, I argue for the recognition of these ‘informal’ responses to the housing demand as integral components of contemporary African City management.

I adopt comments made by Professor Jenkins in a debriefing lecture in Maputo (March 2017). In his comparison between Johannesburg as a city and Maputo, he stated that “Johannesburg is colonized in its ways”18. Analyzing that statement in a context of inclusivity, I understood that Johannesburg’s policy and general way of operating does not necessarily adhere to the poorest of city dwellers. A most common example being the “operation clean sweep”, which was a way of removing street traders from operating on the streets. Prioritization of vertical densification and negligence of horizontal densification is another form of putting aside pragmatic solutions. In unpacking the notion of ‘the colonized Johannesburg’ I looked at (Harrison, et al., 2008) who argues that planning is based on imported models that do not necessarily fit into the context.


In addition to the cognition of backyard dwellings as integral components of the housing market for cash-poor households, there is a need for infrastructure upgrading in areas with backyard housing (Lemanski, 2009). And in the context where there is a plan to develop an area with an emphasis on vertical densification, policy developments needs to take into account the kind of populations associated with the area in order to avoid exclusion. Therefore, infrastructure upgrading in the Knowledge Precinct needs to be in-situ and to prioritize better living conditions for backyard accommodation rather than changing the character of the area which can result in increased property prices.

While these recommendations oppose the government’s emphasis on home ownership and eradication of instead of the support for ‘informality’, they respond to the realities of poor households’ (landlords and tenants) daily needs (Lemanski, 2009; Jenkins, 2013). Furthermore, government policy seeks to destroy rather than support

18 “Johannesburg is colonized in its ways” refers to how Johannesburg operates as a city. It disregards of bottom-up approaches and informality in its quest to attaining “a world class” status. In this way it differs from Maputo, which accepts informality as an important component of the city fabric. This informal sector provides an alternative for the labour market and it should be viewed as an important sector in contexts where the state is struggling. – Professor Jenkins in a Maputo debriefing (2017).
the informality of backyard housing (Lemanski, 2009). However, there have been policy responses to backyard rentals by the government which seeks to upgrade backyard shacks into formally, fully-serviced structures and identifies landlords as beneficiaries (Gauteng Department of Housing (DoH), 2008). The pursuit of formalizing backyard dwellings and emphasis on landlords rather than tenants potentially weakens the tenants’ legal and financial status (Lemanski, 2009).

Stakeholder cooperation essential in the provision of high-rise affordable housing

Urban economics dictates that land prices gradually decrease from the city centre – that is, the further away from the city centre, the cheaper the land (Massyn, et al., 2015). This appears to be the rationale behind the construction of state provided houses away from the city centre since it would be cheaper to construct them. However, (Massyn, et al., 2015) provides a different view to achieving high-rise, affordable housing in the inner city. They argue that while land prices are high in the inner city, it is not entirely impossible to provide affordable housing in these areas. It is quite cheaper and more beneficial to construct multiple storey accommodations in the inner city since the cost of developing the building would be subdivided among the many floors that the building will have. Therefore, instead of occupying a larger land area with single storey buildings, you rather pay less for the land and invest in building multiple floors. The accommodation thus becomes affordable due to the shared cost over the multiple floors (Massyn, et al., 2015). While this might work in the inner city, the residents of the Knowledge Precinct are concerned about losing the historic and idyllic character of the area. Furthermore, there is an existing densification mechanism in the area that both responds to the population vision for the area and does not come at an expense of significant buildings.

The problems to achieving high-rise low income housing could be mitigated through rent controls which could be implemented and monitored by public authorities (Lemanski, 2009). However, this approach appears to be futile given the limited public resources as well as the state’s withdrawal from the housing market (Morange, 2002). This poses a threat to affordable housing since the single most active participant in the housing market, the private developer, often proposes developments that appeal more as high-quality apartments instead of affordable housing (Huchzermeyer, 2017). Thus, redirecting state investment from building social housing that in turn needs to be backed by transportation to providing these accommodations in strategic suburban areas such the Knowledge Precinct would be beneficial. This would in turn allow the state to dictate the kind of prices that could be charged.

However, land ownership in the Knowledge Precinct acts as a limitation because land is privately owned. This calls for increased stakeholder engagement where owners spearhead development, and the state, through subsidies, needs to contribute by reinvesting in the catalytic projects around the corridor. This will limit the construction of social housing away from areas of opportunity and in turn, gives the state a voice in advocating for affordable rental prices.
References


Gauteng Department of Housing (DoH), 2008. *Backyard rental policy: Final draft*. s.l.: s.n.


Rubin, M. & Charlton, S., 2017. State-led housing provision twenty years on: change, evolution and agency on Johannesburg’s edge. 16 March.

Rubin, M. & Charlton, S., 2017. State-led housing provision twenty years on: change, evolution and agency on Johannesburg’s edge. 16 March.


Cover photo influenced by Mavuso (2015).
Annexures

Annexure 1: Response from the public meeting on the dislikes about the project (City of Johannesburg, 2017).

### Brixton + Empire Perth Area Comment Cards Summary

#### What Do You Dislike About the Project?

<table>
<thead>
<tr>
<th>CARD NUMBER</th>
<th>TOTAL COLOR CARDS</th>
<th>TOTAL PERCENTAGE COLOR CARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42</td>
<td>41.18%</td>
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</tbody>
</table>

#### Annexure 2 Public Participation Comments Cards (City of Johannesburg, 2017)

<table>
<thead>
<tr>
<th>CARD NUMBER</th>
<th>TOTAL COLOR CARDS</th>
<th>TOTAL PERCENTAGE COLOR CARDS</th>
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<tbody>
<tr>
<td></td>
<td>102</td>
<td>41.16%</td>
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#### Total Comments

<table>
<thead>
<tr>
<th>TOTAL COLOR COMMENTS</th>
<th>TOTAL PERCENTAGE COLOR COMMENTS</th>
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<tbody>
<tr>
<td>264</td>
<td>16.67%</td>
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#### Total Cards

<table>
<thead>
<tr>
<th>TOTAL CARDS</th>
<th>102 CARDS</th>
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<tr>
<td>264</td>
<td>16.67%</td>
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## Annexure 3 Response from the residents on what should be added to the SDZ (City of Johannesburg, 2017)

### BRITON EMPIRE PERTH AREA COMMENT CARDS SUMMARY

**DO YOU FEEL ANYTHING HAS NOT BEEN CONSIDERED OR FORGOTTEN?**

<table>
<thead>
<tr>
<th>TYPOLOGIES</th>
<th>TRANSPORT</th>
<th>AMENITIES</th>
<th>ECONOMIC</th>
<th>SOCIAL</th>
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<tbody>
<tr>
<td><strong>Annexure 3</strong></td>
<td><strong>Response from the residents on what should be added to the SDZ</strong></td>
<td></td>
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<tr>
<td><strong>A</strong></td>
<td>A. Several new housing blocks, not the within an area that was previously marked as medium density, but low density area. The DP of 10 to 10 is 3 bedrooms for a stock of flats. What do you think?</td>
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<td></td>
<td>Building infrastructure will continue fuelling the housing system.</td>
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<td></td>
<td>Storm water, sewage infrastructure will continue fuelling the housing system.</td>
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<td></td>
<td>The cost of new housing in the area other than the low/middle income.</td>
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<td></td>
<td>This will cost less than the low/middle income.</td>
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<td></td>
<td>The residents of this area have done a survey to make a affordable room for a</td>
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<td></td>
<td>milk. Public green space and heritage preservation is very important. What</td>
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<td>will this value be incorporated?</td>
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<td>Within the feasibility study columns, how was the land value calculated per</td>
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<td><strong>CARTRIDGE</strong></td>
<td><strong>City of Johannesburg, 2017</strong></td>
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<td><strong>B</strong></td>
<td>Several new buildings, should be medium density. Gentle steps (upward) from high to medium to low density</td>
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<td>High Turn Windermere or Thornton (up) not sufficient for increased traffic.</td>
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<td>Public transport (bus route) due to increase of people.</td>
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<td>How will parks, there are no new</td>
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<td><strong>C</strong></td>
<td>Road accident to the development proposal. It is experiencing depreciation</td>
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<td></td>
<td>and deterioration.</td>
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<td>Low traffic.</td>
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<td>Road and sidewalks dig up in October Rct = Constitution Rct, not repainted for 4</td>
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<td>months.</td>
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<td>Road, waste infrastructure was only rescaled, what about maintenance?</td>
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<td></td>
<td>Against allowing development above 3</td>
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<td>Stories.</td>
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<td><strong>D</strong></td>
<td>Housing project irregularities; A traffic calming plan has been done to</td>
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<td></td>
<td>improve pedestrian and cycling flows.</td>
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<td></td>
<td>Other management. Start an initiative with key stakeholders.</td>
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<td>Who are the new public green spaces? What is the correct rate (between green/</td>
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<td></td>
<td>residential space). Is this set out in the City budget?</td>
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<td>Against typology 1.4.</td>
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<td><strong>E</strong></td>
<td>Heights of buildings is an invasion of privacy.</td>
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<td>They are considered adequately.</td>
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<td>Noise, disturbance, party</td>
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<td>issues/controls/management?</td>
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<td>Add a option where neighbors combine and build 3 stories, but only</td>
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<td>for backyards. Build self smaller developments.</td>
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<td><strong>F</strong></td>
<td>Limiting high density areas around the summit, for example along</td>
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<td>Mabola's road. This area promotes public transport</td>
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<td>and not requires extensive parking. Massive areas should be allowed to</td>
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<td>develop.</td>
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<td>Place value is not considered in the development.</td>
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<td>Series steps to residential areas.</td>
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<td><strong>G</strong></td>
<td>Overpopulation</td>
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<td><strong>H</strong></td>
<td>Local specific, space be reserved for student accommodation?</td>
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<td><strong>I</strong></td>
<td>Against allowing development above 3</td>
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<td></td>
<td>Stories.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>J</strong></td>
<td>Of High Rise Building, needs to be at High Park or medium density areas no more than 20 stories.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Controlled by the City.</td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>K</strong></td>
<td>Potential for office use, would like to be visible and attractive due to proximity to various activities.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Moderate buildings in this vicinity and will be encouraged for larger buildings.</td>
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<td></td>
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<tr>
<td><strong>L</strong></td>
<td>The area would like the area to form part of a zoning area. Future hotel and car park</td>
<td></td>
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<tr>
<td></td>
<td>areas.</td>
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</tr>
<tr>
<td><strong>M</strong></td>
<td>This is the medium density area with 400m².</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>No sensitive areas, not more than 1 block away from the City's Council of Freedom.</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>O</strong></td>
<td>Residential housing is in the medium density area with 400m².</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P</strong></td>
<td>Developments must be sensitive to areas, not more than 1 block away from</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>the City's Council of Freedom.</td>
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</tr>
<tr>
<td><strong>Q</strong></td>
<td>Land value is calculated per</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>R</strong></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>TOTAL COMMENTS</th>
<th>24</th>
<th>8</th>
<th>7</th>
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<th>9</th>
<th>7</th>
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<tbody>
<tr>
<td>PERCENTAGE TOTAL</td>
<td>75.0%</td>
<td>6.9%</td>
<td>7.3%</td>
<td>0.6%</td>
<td>9.6%</td>
<td>7.5%</td>
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SA: RECEIVED AFTERWARDS: 74
## Annexure 4: Response from the residents on what they like about the SDZ (City of Johannesburg, 2017)

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>TRANSPORT</th>
<th>AMENITIES</th>
<th>ECONOMIC</th>
<th>SOCIAL</th>
<th>TYPOLOGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Great opportunity to provide housing for many people across different income brackets.</td>
<td>Focus on pedestrian-friendly environment planning, rather than corridors accommodating for heavy traffic flow.</td>
<td>Great opportunity to provide housing for many people across different income brackets.</td>
<td>Development of the park around the area was successful. Feel a sense of history in the Woolworth's.</td>
<td>That high density has been limited to 6 storeys.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>B.</td>
<td>Home to a very high density plan that emphasises sustainability.</td>
<td>Public transport.</td>
<td>Great opportunity for home owners to save more income.</td>
<td>Development of the park around the area was successful. Feel a sense of history in the Woolworth's.</td>
<td>I am happy about the typologies that were developed here to follow.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>C.</td>
<td>A good initiative from planning board in place.</td>
<td>Able to see a pencil of JHB and provide positive financial growth.</td>
<td>Able to see a pencil of JHB and provide positive financial growth.</td>
<td>Promotion of a university town.</td>
<td>Promotion of a university town.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D.</td>
<td>I have submitted a SDZ for my property for a 6-storey because the area was previously zoned as a medium density area, now it is treated as high density.</td>
<td>I support low income, mixed income and voluntary housing.</td>
<td>I support low income, mixed income and voluntary housing.</td>
<td>Focus on pedestrian-friendly environment planning, rather than corridors accommodating for heavy traffic flow.</td>
<td>High-rise student accommodation.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>E.</td>
<td>Said that Thornton and north of the area is excluded from the development.</td>
<td>To develop with assistance.</td>
<td>Being sensitive to the skyline of the suburb.</td>
<td>To develop with assistance.</td>
<td>Being sensitive to the skyline of the suburb.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>F.</td>
<td>That high density has been limited to 6 storeys.</td>
<td>Focus on 6-storey new structures.</td>
<td>Focus on 6-storey new structures.</td>
<td>Focus on 6-storey new structures.</td>
<td>Focus on 6-storey new structures.</td>
</tr>
<tr>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>G.</td>
<td>As a homeowner, residents, citizen development is important.</td>
<td>Support low income, mixed income and voluntary housing.</td>
<td>Support low income, mixed income and voluntary housing.</td>
<td>Support low income, mixed income and voluntary housing.</td>
<td>Support low income, mixed income and voluntary housing.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
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</tr>
<tr>
<td>CASE NUMBER</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>I.</td>
<td>New typologies in place.</td>
<td>I recognize the need to upgrade the suburbs near the inner city.</td>
<td>I recognize the need to upgrade the suburbs near the inner city.</td>
<td>I recognize the need to upgrade the suburbs near the inner city.</td>
<td>I recognize the need to upgrade the suburbs near the inner city.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>J.</td>
<td>There is a need to ensure low socio-economic areas are catered for.</td>
<td>There is a need to ensure low socio-economic areas are catered for.</td>
<td>There is a need to ensure low socio-economic areas are catered for.</td>
<td>There is a need to ensure low socio-economic areas are catered for.</td>
<td>There is a need to ensure low socio-economic areas are catered for.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>K.</td>
<td>There might not be enough units and opportunities.</td>
<td>There might not be enough units and opportunities.</td>
<td>There might not be enough units and opportunities.</td>
<td>There might not be enough units and opportunities.</td>
<td>There might not be enough units and opportunities.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
<td>CASE NUMBER</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>M.</td>
<td>A must to develop, make the last hectares of zoning open.</td>
<td>Support low income, mixed income and voluntary housing.</td>
<td>Support low income, mixed income and voluntary housing.</td>
<td>Support low income, mixed income and voluntary housing.</td>
<td>Support low income, mixed income and voluntary housing.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>N.</td>
<td>113 Caroline St., Brixton, in the area. I would like to develop next year, except the to be zoned as Woolworth density.</td>
<td>Makes sense, it will assist developers and the city to regenerate the area.</td>
<td>Makes sense, it will assist developers and the city to regenerate the area.</td>
<td>Makes sense, it will assist developers and the city to regenerate the area.</td>
<td>Makes sense, it will assist developers and the city to regenerate the area.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>14</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>O.</td>
<td>Value added to conserve heritage buildings.</td>
<td>Value added to conserve heritage buildings.</td>
<td>Value added to conserve heritage buildings.</td>
<td>Value added to conserve heritage buildings.</td>
<td>Value added to conserve heritage buildings.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>P.</td>
<td>Being sensitive to the skyline of the suburb.</td>
<td>Being sensitive to the skyline of the suburb.</td>
<td>Being sensitive to the skyline of the suburb.</td>
<td>Being sensitive to the skyline of the suburb.</td>
<td>Being sensitive to the skyline of the suburb.</td>
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<tr>
<td>CASE NUMBER</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q.</td>
<td>In favour of planned and controlled development to uplift the area.</td>
<td>In favour of planned and controlled development to uplift the area.</td>
<td>In favour of planned and controlled development to uplift the area.</td>
<td>In favour of planned and controlled development to uplift the area.</td>
<td>In favour of planned and controlled development to uplift the area.</td>
</tr>
<tr>
<td>CASE NUMBER</td>
<td>17</td>
<td>17</td>
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<td>17</td>
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</tr>
</tbody>
</table>

**TOTAL COMMENTS:** 20  2  2  5  4  6

**PERCENTAGE TOTAL:** 39.23% 3.95% 0.00% 9.00% 7.84% 11.76%
Annexure 5 Integration of different neighbourhoods through Corridor Developments (GSDF 2030; 2016)