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What are the complexities surrounding the provision of social infrastructure in South African metropolitan areas considering the Corridors of Freedom plan?

Case Study: Westbury, Johannesburg

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UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

DECLARATION

I hereby declare that this research report is my own work. It has not been submitted before for any degree or examination to any other University. It is being submitted for the fulfilment of a degree of Bachelor of Science with Honours in Urban and Regional Planning to the University of the Witwatersrand, in Johannesburg, 2016

……

(SIGNATURE OF CANDIDATE)

11 **NOVEMBER** **2016**

……..of……,……

(DAY) (MONTH) (YEAR)

DEDICATION

*This is for the **FAMILY***

Acknowledgements

First and foremost, I would like to thank and praise the name of the most high God, Jesus Christ, my faith in God has given me purpose far beyond any man can give. I would also like to thank my family for their support throughout my personal and academic life, without them, I would not have completed this report.

I extend my thanks to all my colleagues, friends, extended family and peers who supported and carried me throughout the process of writing the report. Special thanks to Ronwin, the research assistant, and a prominent member in the community of Westbury. Special thanks to National Research Foundation (NRF) for the financial support.

And finally, I would like to thank my supervisor, Neil Klug. Thank you for your motivating words and progressive outlook of life which gave me the strength to finish the project.

Thank you

Abstract

The City of Johannesburg has embarked on corridor-development plan to assist in spatially restructuring the spatially fragmented urban form of Johannesburg, which for a long time has disadvantaged poor inhabitants of city which live far from economic centres. The poor seem to be most affected by the inefficient urban form, and that means the city is at the forefront of the public mandate, to redress the past injustices and allow equitable distribution resources. The Corridors of Freedom plan is a corridor development plan aimed at transforming the city through specialised nodal developments along corridors (supported by Bus Rapid Transit (BRT). The research project will focus on the Empire-Perth corridor, particularly on the Westbury precinct. The focus will zero in on the precinct of Westbury, which lies along the corridor.

The research project involves assessing the norms and standards of social infrastructure provision in Johannesburg, with a focus on education, health and sport facilities. The assessment will be in correspondence with the Corridors of Freedom plans to provide social infrastructure facilities in Westbury, Johannesburg. Therefore this will be a two-fold assessment of 1) the current norms and standards of the provision of education, health and sport facilities, 2) evaluation of the technical, spatial specifications of the CoF proposed facilities to be provided in Westbury as part of the Strategic Area Framework (SAF).

Figure 1: Region B Headquarters Social Development, Westbury
Source*: Author, 2016*

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ACRONYMS

BRT - Bus Rapid Transit

CoF - Corridors of Freedom

CoJ - City of Johannesburg

GIS – Geographical Information Systems

IDP - Integrated Development Plan

NMT - Non-Motorised Transportation

NGO – Non-Governmental Organisation

SAF - Strategic Area Framework

SDF - Strategic Development Framework

TOD - Transit-Oriented Development

WNT – Western Native Township

WSAF – Westbury Strategic Area Framework

Chapter 1: Introduction

Brief Background: Johannesburg

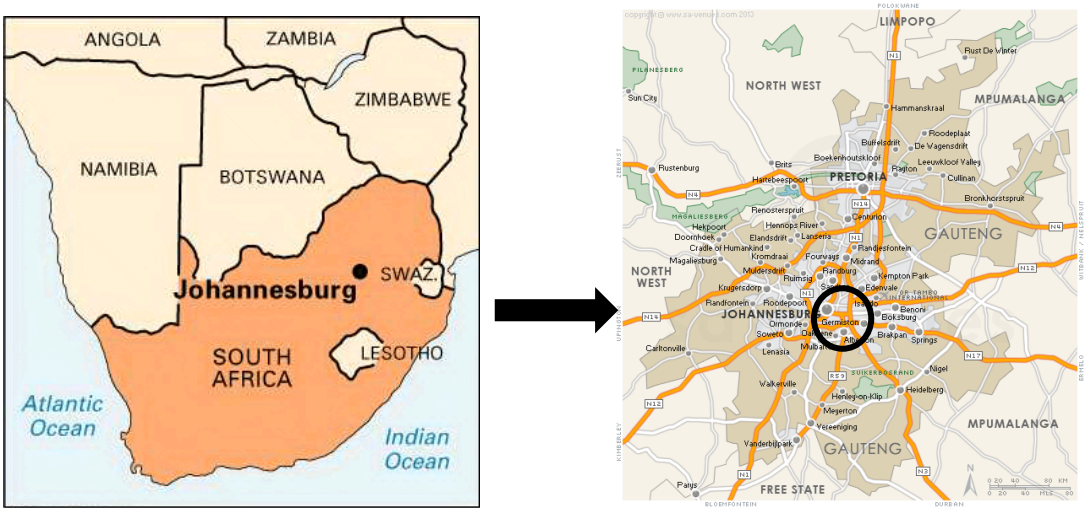

Figure 2: Location of Johannesburg in South Africa

Johannesburg is the largest city in South Africa and since its establishment in 1886; it has grown over the years to become the economic powerhouse of South Africa and Southern Africa. The city's population is rapidly expanding as a result of the urbanisation and migration of people from other provinces, in search of jobs, opportunities and better lifestyles. Despite this, the city is prospering greatly, but the spatial legacy of apartheid remains an undeterred terrain which continues to disadvantage the many residents of the Johannesburg.

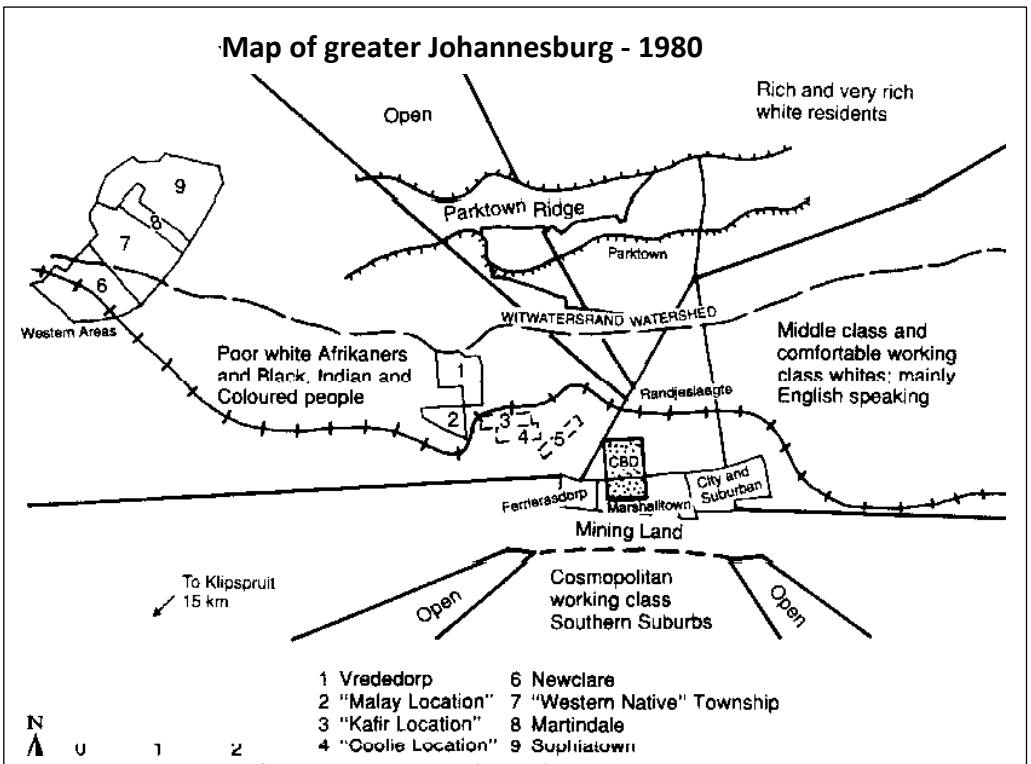

Figure 3: Positions of key suburbs and 'black' locations Source: Morris, 1980

As seen from the figure above, the western areas of Johannesburg were strategically placed quite a distance from the CBD. Despite its legacy as a segregated neighbourhood it is well located – less than 6km form Johannesburg CBD and this has affected the quality of lifestyles of these populations in diverse ways. Developments preceding this spatial form of Johannesburg and other cities in South Africa were forced to perpetuate the segregation and inequality in the city.

The city is home to the Corridors of Freedom, a transit oriented development plan, which is a responsive effort towards spatial restructuring of a previously racially segregated city through the system of apartheid. In literature, the legacy of apartheid's spatial planning is also well documented (Turok 1994). Johannesburg, like many other South African cities reflects an unequal distribution of resources, physical and economic infrastructure, accessibility, amenities. The spatial inequalities in cities was engineered to create long distances between the previously 'black areas' of residence and the city centres, and this was achieved through the legislative arsenals to prevent urbanization of non-whites to 'white' suburbs. Unfortunately this inefficient spatial pattern has since caused many difficulties and challenges which have deprived the cities' poor from accessing improved livelihoods.

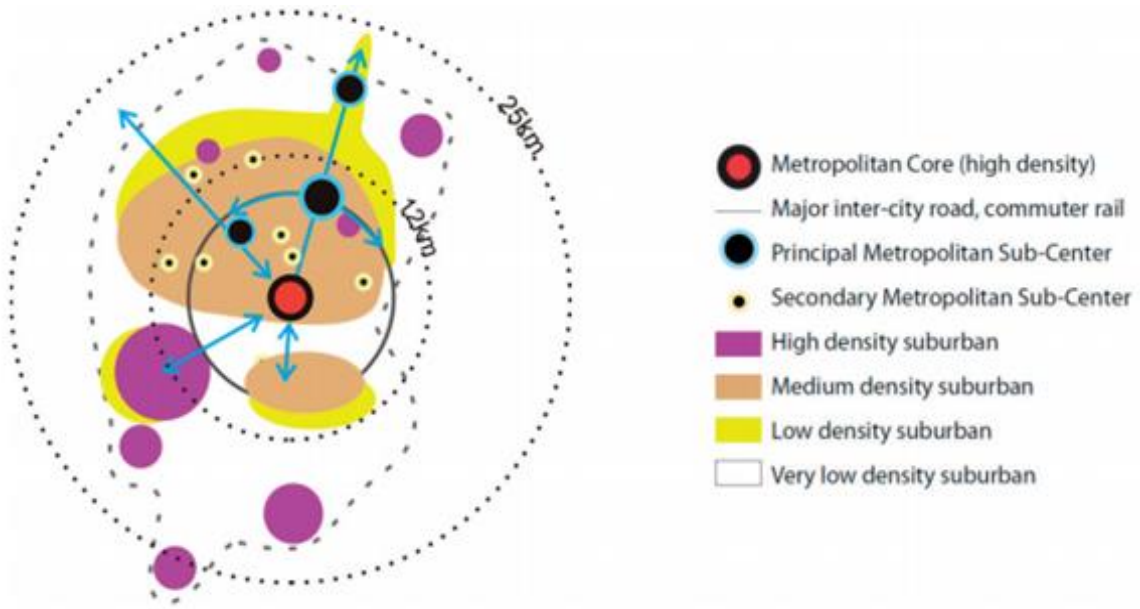

Figure 4: Johannesburg's current metropolitan structure of inverted polycentricity (Source: Urban Morphology Institute, 2015)

The project of integrating the city has been well in motion in the last decade of Johannesburg's Integrated Development Plans; the city has implemented various transit systems such as the Metrobus, Rea Vaya bus system and Gautrain (fast rail) which all seek to ensure easier accessibility and mobility in the city. According to the CoF document, the corridor developments rely on the transit system as an anchor to the developments. The 3 main corridors are; Louis Botha Corridor, Empire Perth Corridor and Turffontein Corridor. The study corridor is the Empire-Perth corridor, which is in region B of the CoJ. The corridor forms a vital link between the north (Alexandra) and the south (Soweto), and is a vital link for the western areas of Johannesburg with the inner city. Along the corridor, are vast districts and areas which are connected by the major road, namely the University of the Witwatersrand, South African Broadcasting Corporation (SABC), University of Johannesburg (UJ).

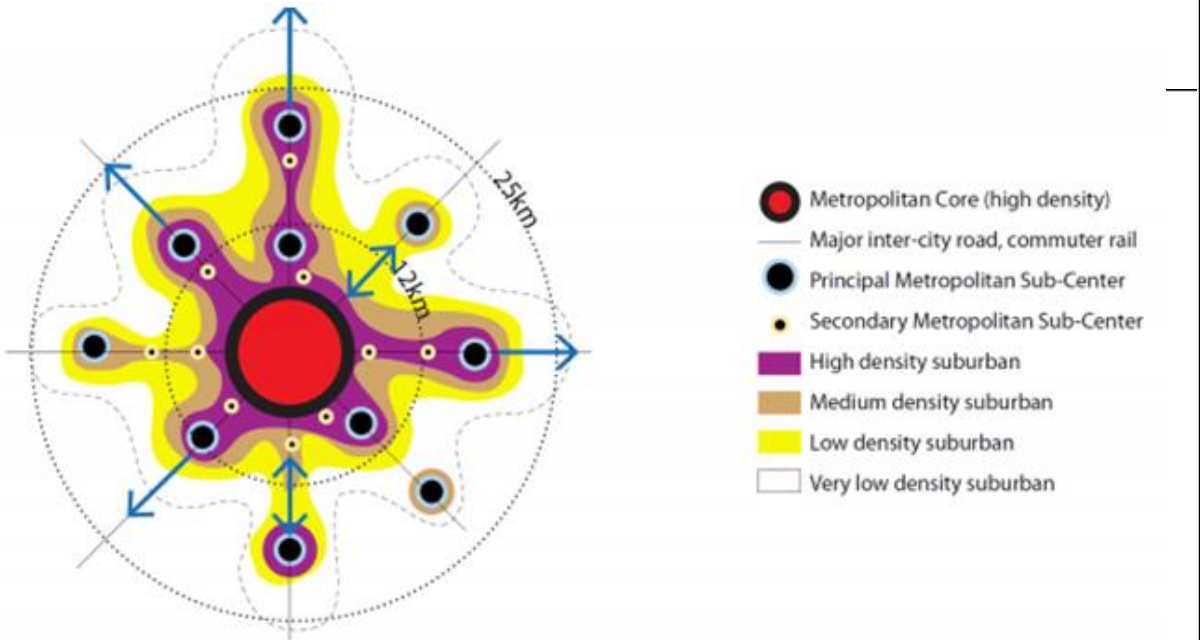

Figure 5: Johannesburg's current metropolitan structure of development corridors (Source: Urban Morphology Institute, 2015)

The aim of the corridor developments is to re-stich the city, hopefully to resemble the polycentric city model, which exemplifies the compact city model. Such a compact City is energy efficient, provides residents with greater access, promotes social cohesion and creates a vibrant urban environment. For the average Johannesburg resident, the option to

live in close proximity to public transport facilities with easy access to the City and to make use of an improved transport system can be a life-changing initiative.

Research Problem

The Corridors of Freedom proposes a 'vague' development plan for the Empire-Perth corridor, there is a lack of thorough analysis regarding the implementation of the plan. The study tackles the issue of implementation, regarding the existing mechanisms which are in place to support present development and trends, questioning how the proposed plan will be implemented in the community of Westbury. The research seeks to support the CoF plan by assessing the complexities surrounding education, sport and health, by scrutinizing the existing plan of action (CoF) and mechanisms currently in place to ensure effective provision of social infrastructure.

Research question: What are the complexities surrounding the social infrastructure provision in South African metropolitan areas, case study - Westbury

Sub questions:

1. How does a city provide social facilities in a context of rapidly planned density development?
2. What are the nuanced complexities of using standards as a measure of social infrastructure provision in South Africa, particularly in Johannesburg?
3. Are the current standards in use in Johannesburg Municipality appropriate in Westbury?
4. What is the subsequent impact of the continuation of the use of standards in communities of Johannesburg, such as Westbury?
5. How can the city improve social infrastructure provision in Westbury?

Provision of infrastructure in South Africa has for a long period of time been determined by one's colour of skin. The colour of skin determined where the individual lived, where the individual lived represented the collective lifestyle the people had, and subsequently standard of living of the majority. When considering social infrastructure provision in post-apartheid South Africa, one must be cognisant of the inherent, deeply held social, cultural and economic ties which the community is based upon. In many low-middle income coloured townships, race, language, tradition, incomes, etc., this has to be considered when providing infrastructure in these predominantly mixed race communities. This does not mean that infrastructure provision varies simply because of race, but it means that the status quo is very important determining the kind of infrastructure needed in any community, and a consideration of a community demographic profile is useful in the decision-making process (CSIR 2000).

Coloureds in South Africa

"Coloured people are quite colourful and straight with no refined traditions" – Dr. Renee Horne, 2013

The term coloured dates back from the apartheid demographic classifications, which categorised the groups under; blacks, coloureds, whites and Indians. The term is widely accepted in South Africa, and it refers to mixed race people. Unlike in Britain, or in the USA, where the term 'coloured' collectively referred to as 'mixed race' is classified under 'black', South Africa still has the traditional classification system of 'four races'. According to Mohamed Adhikari (2005), a leading scholar on Coloured identity, the concept of "Colouredness" functioned as a social identity from the time of the formation of the South African state in 1910 to the present (Horne 2013). The difficulty in imagining a communal identity is compounded for the Coloured community in South Africa by the fact that race has always been used as a marker of difference (Dannhauser 2006). Coloured people in South Africa are heterogeneous, with ancestral links that may include Khoisan, Xhosa people and European settlers, and they comprise of approximately 10% of the population of the national population.

The current situation coloured people face nationwide is the notion of not being 'white enough' during the National party's apartheid rule, a not being 'black enough' during the

ANC regime (Adhikari 2005). Post 1994, the government initiated a lot of programmes to redress past injustices, however due to Black Economic Empowerment (BBE) and other policies seeking to redress past injustices, precedence for jobs is most commonly for people of African descent. As a result, a proportion of the coloured has not progressed much, comparing to other races, from 1995-2001; this population ranks the worse than other groups since 1994 in income growths and university entrances. Research indicates that unemployment rates have been the worst for coloureds since the late 90s (Macdonald 2006:134). While in 1998, the unemployment rate was 15.8 percent, it rose to 22.4 percent in 2005. Among the black population, on the other hand, unemployment decreased from 32 to 31.5 percent (Amberger 2005). This relates the populations' education levels, in 2013, a reported 3,1% of students classified as coloureds account for university graduates nationwide. Even though all segments of races are now able to access Universities, which were previously reserved for whites, the proportion of coloured people graduating has not increased remarkably in the last decade to make a dent in the population education rates.

As a result of the marginalisation and alienation of the population post 1994, many residents in coloured communities express a similar tale of disenfranchisement and some have gone as far as to refer to coloureds as the uncared foster child of the new South Africa. Many of these communities have lost hope in the government effecting real change in their communities, and as such the young people resort to alcohol consumption, crime, drug abuse and theft as a means of survival. However is it crucial to realise that these are not the product of inherent characteristics of coloured folks, but are a result of several factors, mainly the severed coloured identity, detrimental alcohol history in wine fields which have perpetuated alcohol abuse, lack of opportunities, disparaging media stereotypes, and increasing socio-economic alienation of the population. Zimitri Erasmus (2001:18-19) discusses racial categories as they relate to coloureds, but also notes that 'colouredness is a residual entity', that which remains when we extract black and white. The Population Registration Act No 30 of 1950 defines 'Coloured' as neither White nor Native. In this respect, this social construct became a racial marker of difference. In apartheid South Africa, people determined what the categories will be, filled them up with human beings, and attached consequences to membership in those categories (Cornell and Hartmann(1998:25)). Unfortunately South Africa has not progressed much when

considering the engraved racial identities of apartheid South Africa, for this reason, the consequences of membership in the coloured category have remained stagnant since the beginning of the democracy.

The Corridors of Freedom plan for Westbury(predominantly coloured township) presents a strategic turn in the developmental history of the precinct, and as such it is relevant and crucial to understand the state and position of people who will benefit from the new developments. Such information is particularly relevant for service providers, in developing lasting relationships and building approaches to effectively engage with the community in order to advance the goals of the developments.

Rationale of study

Westbury is one of the strategic areas identified in the Empire-Perth corridor as a high priority investment area, so I saw fit to investigate the plan in this precinct, as a way to bring attention to the areas' growing social and economic problems, and the prospect of the plan in changing some of those prevailing dynamics in the community.

With the CoF plan already underway in the corridor, it is crucial to attempt to envision spatially what the plan will mean for the suburbs in and around the corridor. Besides the promised deliverables mentioned in the plan, one has to question if the plan will be implemented effectively, considering the existing standards of health, sport and education facilities, which dictate how many of such can be built in a measured space. More often than not, mega-plans such as the CoF, are often said to be devoid of social, economic and spatial conditions, however this study seeks to delve into these conditions in the context of social infrastructure provision. The study seeks to envision this plan realistically, by projecting population changes and the expected adjustments which concern the plan, such as the projected social infrastructure demands.

Delimitation of the study

As a result of the impending constraints of time, and the researchers' capacity to tackle all the aspects of the research topic, the study will mainly focus on the qualitative aspects of social infrastructure, while using quantitative facts such as census data and demographics. The approach requires detailed analysis of standards of facilities, however the research acknowledges the importance of analysing the condition, functioning and general state of facilities, as opposed to only recognising the fact that the facility exists.

There are many sub-topics under social infrastructure, and literature is varied, A thorough review of literature led the researcher to classify the gathered information into these three broad areas of study ; namely:

1) Norms and standards
2) Financial capital models
3) Operational and management

The research project focuses on norms and standards of social infrastructure, due to the researcher's capacity and given time frame of project, however some management aspects of SI will be considered later in the report.

By far, one of the biggest limitation to the study is the lack of relevant literature on norms and standards, as they relate to social infrastructure. Most literature focuses on the other two above topics (financial capital models of provision and operational aspects of SI), added to this, publications which discuss standards, are mainly focused on the state and quality of social facilities (qualitative) and neglect to review the space standards.

My inability to communicate fluently in the Afrikaans language, which is mainly spoken in Westbury, meant that I had to find someone to transcribe and translate the interviews and discussions, and I believe this compromised the authenticity and trust between the interviewer and interviewee in the information gathering process. This study limitation blurred the understanding that I could acquire from a particular individual, at times distorted their ideas, possibly losing some valuable meanings through translation.

The #FeesMustFall protests were a significant limitation of the study, the WITS campus shutdown over the 3 week period meant that all academic programmes were suspended. Computer labs and other school resources were inaccessible, and meetings with supervisors had to be postponed, thus delaying the research process.

Chapter 2: Methodology

Scope of the research

The research originally set out to fully understand the idea of using standards as the measure of social infrastructure provision, and subsequently developing the appropriate standards which the Corridors of Freedom, Westbury SAF had to be aligned with. The study now focuses solely on critiquing existing standards in the context of the CoF Plan, and highlighting the complexities of using uniform standards in communities of different socio-economic backgrounds.

The research utilised the qualitative methods of inquiry, as this was the most appropriate method. Qualitative method in the research allowed the diversification of the study, by aiming to capture perceptions, ideas, opinions, and juxta positioning this with policy analysis which together formed a vivid picture of providing infrastructure in the previously disadvantaged community of Westbury, Johannesburg.

Methods

Research methodology according to Williams, Money & Swartz (2002:28) refers to the procedural framework within which the research is conducted". Plooy (2005:44) describe this procedural process as following a logical and structured order. Leedy & Omrod (2010:93) explain that methodology is the extraction of meaning from data to respond to a problem or challenge. The researcher will employ qualitative research, but will also use quantitative data to further substantiate the research. Leedy and Ormrod (2010, p.94) suggest that researchers determine their research process and research methodology by choosing a board category of either a quantitative research approach or qualitative research approach.

Hammersley (1992) writes, that in all research we move from ideas to data as well as from data to ideas', therefore substantiating qualitative research involves observations and interrogation of perceptions, opinions and thoughts in order to gain an understanding of

human behaviour. Smith (1994: 491 as cited in Philip, 1998: 266) described qualitative research as "a set of tools developed to pursue the epistemological mandate of the philosophies of meaning. Quantitative research on the other hand is positivistic research which confirms and validates a certain claim, by testing the theory through deductive analysis.

As Du Plooy (2009:88) explains, qualitative research can also be explanatory design which examines values and needs, therefore being subjective. Due to the research's flexibility, exploratory research allows one to deduce significant insights which can lead one to develop new ideas and build new theories. The research will employ qualitative techniques of study, particularly surveys and semi-structured interviews. Surveys are often used to describe numerical distributions of variables, but the qualitative survey, as employed in this research, is used to determine the diversity of the topic in the defined population.

Since the research will seek to understand what can be understood as basic social infrastructure, considering the Corridors of Freedom, the research will also utilise qualitative methods such as interviews, unstructured discussion and document analysis to understand quantitative data. The research process will attempt to understand the complexities of using standards in metropolitan areas, through the use of a case study, Westbury in the City of Johannesburg municipality; the study will seek to position the challenge of standards in the broader context of development issues in the precinct. This will be done so that the reader is able to understand how the use of space standards in spatial forms of South African metropolitan areas can be problematic and complex. The aim of the research is not to develop 'basic' or 'satisfactory' standards for Westbury, but rather to shine the light on the complexities of using 'space standards' in a city such as Johannesburg.

Research Design

Yin (1994:19) asserts that a research design can be defined as a logical sequence that connects the empirical data to a study's initial research question and ultimately, to its conclusions. It is an action plan which one has to follow to move from A to B. The advantage of this type of this research is that it is procedural, therefore allowing the researcher's choices and actions to determine the design (Fouche 2005:268-269). Creswell & De Vos (2005, p.272) identify five designs that have proven to be representative of common practice in different disciplines applying qualitative research, which include biography, phenomenology, grounded theory, ethnography and case study.

Case study research according to Collis and Hussey (2003:68-70) involves explanatory research where the link between theory and practice is not clear, it is mainly used to understand why certain phenomenon occurs. Yin(1994) asserts that the sole tendency of using case studies is that it tries to illuminate a decision/s; why it was taken, how it was implemented, and with what result (Schramm 1971). The type of case study to be used is experimental case study research, in which the case study is the subject of the research, and the research outlines and evaluates the possible ramifications of implementing the CoF objectives in a particular context. The case study will assist the researcher in exploring various elements associated with the implementation of the grand-scale corridor development in Johannesburg and the resulting implication in previously deprived communities.

Data sources

The study required a fair amount of primary data, since it was contextually based, however secondary sources were also used to effectively the point across. Primary data was in the form of gathering perceptions, through semi-structured interviews, informal discussions and surveys. Burnard (2005:5) explains that a semi-structured interview is one in which either the interviewer refers to a sheet containing key areas to be covered in the interview, or uses a set of questions but is prepared to insert other questions into the interview so as to capture elaborations. Unlike a structured interview which has a set of fixed questions, with a given time, a semi-structured interview is more diversified, as the interviewer and interviewee can digress to other related issues, and allow for explanations and elaborations.

Burnard (2005) agreed with the above statement, stating that because structured interviews ask each respondent the same questions, there is no room for elaboration although the data from such interviews are much easier to process Informal discussions. Donalek (2005) observes that in a semi-structured interview, the researcher has a series of open-ended questions focusing on different parts of the particular research issue. Questions should merely be there to guide the researcher in the discussions, so as to guide the conversation in the desired direction, however should not limit the scope of the conversation. The research will also employ secondary research which involves the synthesis of existing research, from journals, publications, books, and other media.

Data Collection Method

The main method of analysis and data gathering is document analysis, and this is much concerned with analysing the existing policy documents on the CoF, social infrastructure provision, standards and so forth. Following this is an in-depth assessment of the social facilities in the study/focus area; this is to gage the need or lack thereof. I will undertake this analysis through methods of spatial analysis on GIS, desktop study, fieldwork and unstructured engagements with residents. This analysis will also evaluate thresholds, requirements, accessibility to facilities how the various departments distribute the facilities, e.g. every 1km, there should be a level 3 clinic/health facility and then assess whether that criterion was followed to implementation in Westbury. The next portion of information to be analysed is the technical spatial specifications of the information gathered above. This is the implementation of the Corridors of Freedom plan of provision, given the provision standards of the different departments and status quo analysis and any limitations found.

The next method of data collection is through semi-structured interviews with city officials, residents, and other stakeholders concerning Westbury.

According to Wilkinson et al. (2004) there are three different types of interviews; structured interviews and the depth interview on both sides of the scale, with the semi-structured interview sitting in the middle of these two, however selecting which type of interview to use will depend on the purpose of the study (Donalek, 2005:124). Semi structured interviews according to Bernard (1988) are a useful tool to gain people's perceptions about matters, as they provide rich and nuanced information. The other

method of gathering primary research is through surveys According to Creswell (2009:145) a sample survey is implemented in order to provide a description of a population by studying a smaller sample of that population.

The last method of data collection and analysis is spatial analysis; this method will interpret the data collected to a practical spatial understanding of the information. This part of the research is more about interpreting information rather than gathering raw data. It will involve interpreting the information stipulated in the CoF document and overlaying it with the data gathered from officials and community members. The collected data will be official norms and standards used for provision in the context of Johannesburg, also additional data regarding the demographic projections.

The two sections guiding the research;

a) Gathering of relevant data (primary + secondary data sources)
b) Technical Specifications of gathered information to study area (desktop study)

Various methods of data gathering techniques and analysis were used in order capture the various aspects of the research topic. However the most effective, in gathering data was the physical presence in precinct combined with discussions (classified under semi-structured interviews). The physical presence relates to the use of senses, hearing, seeing and touching, using these senses allows one to grasp certain esoteric aspects of the precinct which others are not able to comprehend.

The researcher employed a questionnaire, survey and semi-structured interviews to gather information from people. There were 15 people who given the survey to fill in, 2 people interviewed from the City of Johannesburg and 5 people who were interviewed. The 15 people who were given the survey were randomly picked from the community (random sampling), and ranged from ages 22 – 50(above age of consent). The 2 city officials were both from the urban planning department, in City transformation. Out of the 5 people interviewed, 1 was the councillor of Westbury; the 4 were from the social organisations based in Westbury(Abraham Kriel, Together Action Group, Transformation Development Centre and Social Development Unit).

Ethical considerations

In scientific research, there are 3 questions to consider regarding ethics (Singleton & Straits, 1999:513):

1. Is the researcher careful in research and honest in the reporting thereof?
2. Does the researcher comply with his/her responsibility to society?
3. Does the researcher treat the participants with respect and protect them from harm?

Participants(community leaders, members, organisations and city planning) in this research may well be concerned with how their views are expressed, or their interest as individuals or as a collective, along with this, is the concern for anonymity regarding their identity. The researcher is aware of such concerns, and will take precautionary measures in protecting the participants from participating in any harmful/threatening activities or information, this will be achieved through the use of pseudonyms and questionnaires do not require any personal information.

The study seeks to adopt these values from the Social Research Foundation (2003:53), and the WITS ethical considerations which will guide the ethical aspects of the study.

- Negotiation with those affected – Those who take part in the research in some way will not necessarily make a direct contribution to the research
- Protocol observation – Participants will be informed about the study in detail, and will be informed that their participation will not compensated financially
- Consent obtained for observation – Al individuals who take part in the research will be informed about the study
- Privacy and respect for individuals – All individuals treated fairly and equally
- Responsibility – confidentiality guaranteed to participants
- The student has right to report the work

Collins and Hussey (2009:39), citing Kevin 1992:38) provide a checklist to ensure that research is conducted in an ethical manner:

☑ Is there a possibility that the research will harm the participants directly, or indirectly?

☑ Are the findings of the study likely to bring harm to those involved?

☑ Are the community standards of conduct violated?

The first point of this checklist questions whether the research could harm the participants, the research does not in any way harm any of the participants, during and after which the information is published. In fulfilling the community standards of conduct, the researcher employed ethical behaviours of research and general values and etiquette in interacting with people.

Ethical considerations during Fieldwork

In conducting unstructured discussions with residents of Westbury, one had to be aware that there is a general lack of trust between people, and tensions run high between law enforcers and law breakers. During the first few weeks of fieldwork, many suspected that I was working for police, and some an undercover journalist, despite providing the school documentation verifying my identity. However as time passed, people became comfortable engaging with me, in fact some started to assist me with the fieldwork. In engaging with people, I often approached the discussion with some random questions, just to facilitate further discussions about the research. I learned that I needed to get to know the residents prior to the discussions and interviews, if I was to acquire valuable information. This consisted of visiting the people on random occasions just to partake in community events and build relationships, e.g. sports day at Westbury High School.

Research constraints

In the search for the exact standards used by the City of Johannesburg for the provision of Health, education and Sport facilities, the author learned that the there are no official social infrastructure guidelines set out by the City of Johannesburg, comparing to the City of Cape Town and EThekwini Municipality which have stipulated standards. The standards in use, are those provided by the Red Book and the CSIR guidelines, the red book bases its planning guidelines from a combination of engineering standards, urban design standards and roads standards. This was the biggest constraint, because it meant that the author had to make a compilation of the standards from the various documents and make comparisons. Even with

this at hand, it was not clear which standards are being adhered to. Another limitation was the researchers' inability to conduct an interview with Cheri Green, a leading expert in the field of social infrastructure provision; who was unavailable at the time. She is based in Stellenbosch, Western Cape and works for the CSIR. Literature on the topic was limited, particularly that which relates to the use of standards as a measure of provision. The limited time given for the completion of the research project also limited the scope of the work which could be done, as a result, the researcher only completed that which was possible in the given time.

Chapter 3: Literature Review

This chapter reviews the relevant literature that relates to social infrastructure provision in South Africa and internationally. The chapter seeks to locate the topic in theory and state the arguments, debates and discussions surrounding social infrastructure, and also highlight the authors which write about the topic .

South Africa's historical legacy of apartheid has led to an unjust post-apartheid spatial portrait, which has invariably segregated people by class and race, and the result is communities which are economically differentiated. Municipalities are the bodies at local government which have to contend with the inequitable distribution of facilities. In many areas informal settlements and townships have no developed facilities, even though there is the greatest concentration of people in those areas, compared to the previously 'white' suburbs, where there sufficient infrastructure. This legacy of inequality remains engrained in most of Johannesburg's communities, as a result, the conversation around social infrastructure provision in previously disadvantaged suburbs needs to evolve towards implementation techniques rather than mere discourse. However problems in Sport facilities cannot be solved using the same type of thinking used in the apartheid regime. While there is a rapidly increasing population in Johannesburg, there is also an expected increase in demand of recreational facilities.

The city of Johannesburg in 2011 embarked on a new spatial vision for the city in line with its growth and development Strategy 2040, to redress past injustices as they relate to the provision of infrastructure, which was previously denied to certain communities. It is primarily based on a corridor Transit- Orientated Development (TOD) (CoF 2011). This plan guarantees the following rights to inhabitants of Johannesburg:

- Citizens have the right to hold the city of Johannesburg accountable and become active participants in the delivery of services.

- The Right to a Spatially Integrated and United City – in which we rebuild and reconnect the divisions created by decades of Apartheid spatial planning
- "The Right to Developmental Service Delivery – where the city maintains and improves existing infrastructure, while expanding new infrastructure".
  (Bickford, 2014: 19).

The approaches which will support this development are large scale transport arterials across the city – through the Bus Rapid Transport (BRT).There is a strong focus on mixed use developments and high density developments in this corridor, as a way to're-stitch' the city, by supporting the creation of social and economic opportunities along the corridor so that working class people and poor citizens are closer to opportunities. The research report will rely on and assess the stipulated promises/lack thereof of the CoF policy document, critically questioning the practicality and feasibility of the plan in Westbury. The Corridors of Freedom document highlights a planned development corridor which will pass through Westbury, a formerly 'coloured' township in the West of Johannesburg, bordered by Westdene, Crosby and Sophiatown. The area is in a state of social and economic decline, it is plagued social ills such as gangsterism, high drug use and general violence. Against this background, the study will mainly focus on norms and standards of social facilities, namely; health, education and sport facilities.

The proposed plan is to densify and diversify along the BRT stations, as a strategy to create equal development by also creating affordable housing stock in the Far East and west. In Westbury the identified development street is a continuation of Empire Perth street, which is Fuel Street. It is unavoidable that with densification comes an increased population, which means an increase in social facilities needed as a result, however it is not clear how this plan will deal with the projected population increases and adjustments thereafter in infrastructure.

Social infrastructure is critical to the development of sustainable communities, it is loosely defined as infrastructure used to increase the social comfort and to act on the economic productivity; these include: schools, structures for public safety, council flat, plant of waste disposal, hospitals, sport structures, green areas, and so on (Hansen, 1965). It also refers to the community facilities, services and networks which help individuals, families, groups and

communities meet their social needs, maximise their potential for development, and enhance community wellbeing. While the provision of housing, potable water and electricity are vital for meeting basic human needs, other services such as schools, transport and health care are important for ensuring the long term satisfaction of residents. “Social Infrastructure is that which is developed at a household or community scale, is intended for the delivery of basic services and which has a direct and/or indirect impact on the quality of life” (DEAT 2004) .SI in its wider sense refers to a number of issues;

these include:

• Universal facilities and services such as education, health recreation and sport facilities

• Lifecycle-targeted facilities and services, such as those for children, young people and older people

• Targeted facilities and services for groups with special needs, such as families, people with a disability and Indigenous and culturally diverse people.

Socio-economic development, according to Familoni (1996) can be facilitated and accelerated by the presence of social and economic infrastructures. Argy (1999) further differentiates social infrastructures into hard and social infrastructure, claiming that soft infrastructure consists of social security, while hard infrastructure consists of schools, and hospitals. This paper will solely focus on literature on hard infrastructure, mainly education, health and sport facilities, since they are the three most basic infrastructures of all developing communities.

Health and education are two dominant social infrastructures which can have profound effects on social and economic development of communities. According to Mukherjee and Banerjee (2009) assert “that education and health comprise the social sector, and social development of any region is highly dependent on the performance of the social sector”. They also argue that education and health can be important instruments of social change. In fact education levels affect the proper utilisation of health care services, and therefore these factors cannot be separated. The Millennium development Goals in the World Summit on Sustainable Development held in South Africa, 2002 also emphasise the importance of the social sectors, as prerequisites to achieving the stipulated goals.

Following in Nelson Mandela's words in a speech at the launch of Mindset Network (2003) stated that "Education is the most powerful weapon we can use to change the world", education is considered a good social and economic investment which enhances the stock of human capital (Denison 1962).The role of education as a social infrastructure and as a stimulant of growth and development can be enhanced only if it qualitatively provided. Similarly health is important when engaging in the argument of socio-economic production function; in this case there is a general understanding that health is the major determinant of productivity and efficiency in all facets of life. Sport facilities are particularly important for children, youth and young adults, these development stages are fostered by a healthy balance of physical activity in sport centres and education in schools.

Norms, Standards and Guidelines

Norms can be loosely defined as the typical, usual or expected behaviour in a particular environment. The Department of Public Service and Administration (2013) defines 'norms' as the 'usual or average level of performance'. They do not have to be formal; however they are general understandings, which are culturally accepted by society at large. Standards, on the other hand are quantifiable, and act as a measure of quality, therefore a binding level of attainment. Standards are not only ubiquitous, but they are also normative. The Department of Public Service and Administration (2013) defines standards as the 'basis of measurement, something desired and achievable'. 'By creating 'ideals' and 'norms', standards also create the 'less-than-ideal' and the 'abnormal' (Gorur 2013). They are the 'level of attainment', threshold which all related things must contain or be able to uphold. The Webster third International Dictionary (1966) states that standards, in general, designate any measure by which one judges a thing as authentic, good or adequate. It refers to any authoritative rule, principle, or measure used to determine the quantity, weight, extent, value or quality of a thing. The American Heritage Dictionary of the English language (1969) defines a standard a measure of comparison for quantitative or qualitative value, norm or criterion; it also refers to a degree or level of requirement, excellence or attainment. They may also be interpreted as the measure of appraisal, a stimulus future developments or simply a model procedure. (Hirsch 1970)

The Department of Public Service and Administration (2013) lists the three broad categories of standards:

a) Structure standards – regarding personnel or finance
b) Process standards (generic) – regarding minimum service levels
c) Outcome standards (specific) – regarding front office services

The research focuses on the process standards, which are the minimum levels of service which the relevant government agencies seek to attain in the provision of infrastructure.
Standards encourage conformity to the ideal and dictate how things ought to be, restricting decision-making, setting parameters and narrowing choice (Gorur 2013). Generally they are criticised because they are seen to limit human capacities, instead creating standardisation, and reducing human creativity, imagination and thought. Gorur (2013) argues that the more we use standards, the more they are less visible, and as such they have been woven and institutionalised into all aspects of our existence. Sociologists in the field of Science and Technology go as far as to say standards are 'recipes for reality' (Busch, 2011), they are 'performative', in that they are structuration and stratification tools. Standards have replaced human relations at multiple levels, in that their original aim was to assure quality in different spaces, however this has destroyed trust, honesty and integrity among people, instead some restrictive rituals of legitimation have replaced these.

Busch (2011) identifies 4 types of standards: (1) Olympic standards (creates one winner, many losers), (2) filters - creates two categories; included and excluded, (3) ranks, arrange categories into hierarchies and (4) divisions, classifies entities into unranked categories. Standards, as they relate to social facilities can be classified as ranks, these are standards which have hierarchies, and space standards in this context depend on hierarchies of settlements. The challenge for planners when the standards are not contextually responsive is then to destabilise such standards which more often than not is created by distant 'others', who are removed from the context in which the standards operate in. Bursch elaborates that the problem with these standards is that civil servants are not able to effect real change in the built environment due to the rigid standards which are removed form context.

The rapidly developing and changing context of African cities calls on local governments to thoroughly engage with development dynamics of infrastructure provision in such a way

that equitable distribution is prioritised. Urban planners are at the focal point of this endeavour, in that they are required to provide infrastructure in communities with varied contexts, yet adhere to a set of guidelines and norms. The norms and standards of social infrastructure provision in planning provide a framework and a benchmark in strategic forward planning, and are useful in allocating suitable land for particular uses, developing capital budgets within an area, regardless whether provision is from public or private developers. In respect to planning over the long term, access standards, threshold guidelines and site sizes are increasingly important in ensuring that sufficient land has been reserved for essential facilities in terms of future growth and development without being wasteful and/or encouraging the illegal use of underdeveloped land (Green and Argue 2012:8). They become a yardstick against which space has to measure up to, and is useful when designing and constructing structures in space, with the understanding that numerical data alone will not solve the problems, but is a good starting point. The goals of providing standards which departments adhere to, is to ideally provide equitable distribution of resources and services. However it is useful to note that be it, that they are legally prescriptive and binding, provision of infrastructure should always respond to local contextual conditions, taking into account neighbourhood, suburb, district and city scales.

Normative standards should ideally serve four purposes, to: (Green and Argue 2012)

1) Determine the threshold populations for facilities and basic land requirements;

2) Serve as a departure point for negotiations with respect to land provision between developers and the City; and,

3) Provide a basis for developing a spatial distribution network for a facility – but without this being the final determinant of the scale and detail location of a facility which would require more local input.

4) Provide an input to prioritise capital investment based on relative backlog with respect to standards.

Hierarchies of settlements	**Catchment size (no of people)**	**Examples – settlement sizes**
Metropolitan cities/regions	➢ 1 000 000	Johannesburg, eThekwini,

		Cape Town
Large cities, small metros	350 000 – 1 000 000	Port Elizabeth, Bloemfontein
Large towns/ regional service centres	100 000 – 350 000	Nelspruit, Newcastle, Witbank
Small to Medium towns/regional service centres	60 000 – 100 000	Grahamstown, Ermelo, Mosselbay
Small towns/ isolated regional service centres	10 000 – 100 000	Beaufort West, Kokstad
Villages	5 000 – 25 000	Stella

Table 1: Settlement sizes according to population sizes Source: *CSIR (*2012)

Planning standards generally refer to the provision of land uses, community facilities, and it is expressed through population sizes and threshold requirements.

Hierarchies of settlements are essential understanding norms and standards because the premise of standards lies in hierarchies, such as ranges of sizes, population threshold sizes and levels of specialisation provided by facilities. There are some social facilities which transcend across various settlement sizes, and therefore require attentive planning methods which accommodate the complexities of inter-regional planning, e.g. sports stadiums.

Casey (2005) outlines the advantages of establishing standards for social infrastructure, these include;

- Replacing ad-hoc decision making with rational processes of decision-making
- Achieving consistency in the strategic development plans within the city's methods of provision
- Establishing a baseline to guide and assist development by identifying appropriate tools and methods of provision
- A useful tool to inform planning a budget mechanisms

Standards are a complex phenomenon, in that they are essentially a measure of 'perfection' (maximum level of attainment), or 'adequacy' (minimum level of attainment) (SRSA 2010).

The creation of the two levels, and everything in-between is the complex part, perspectives of individuals and organisations differ. Due to high levels of specialisation, standards have become a contentious issue because what may be adequate to some, but is sub-standard to some. However standards have evolved from the modernist perspective of planning which insisted on implementing scientific based standard with a disregard for thorough analysis. The post-modern thought however introduced the multiple levels of reasoning, which acknowledges context as a factor of influence for interventions.

Sport Facilities

According to Sports and Recreation South Africa (SRSA 2010), the definition of sport and recreational facilities is a difficult one, as it depends on a number of factors, e.g. those facilities, such lakes, dams, beaches where people could participate in sport and recreation activities, are excluded from the definition of a sport facility, however stadiums, motor tracks, bowling alleys and recreation facilities constitute sport facilities (SRSA 2010). These are areas generally considered as enclosed public assembly areas/arenas, for entertaining or non-entertainment purposes where people congregate in large groups for sporting events. Essential to the definition is 'enclosure' and controlled access to the facility, thus beaches and lakes do not qualify in the classification of sport facilities, also having a place for spectators and participants, i.e. stadiums and bowling alleys.

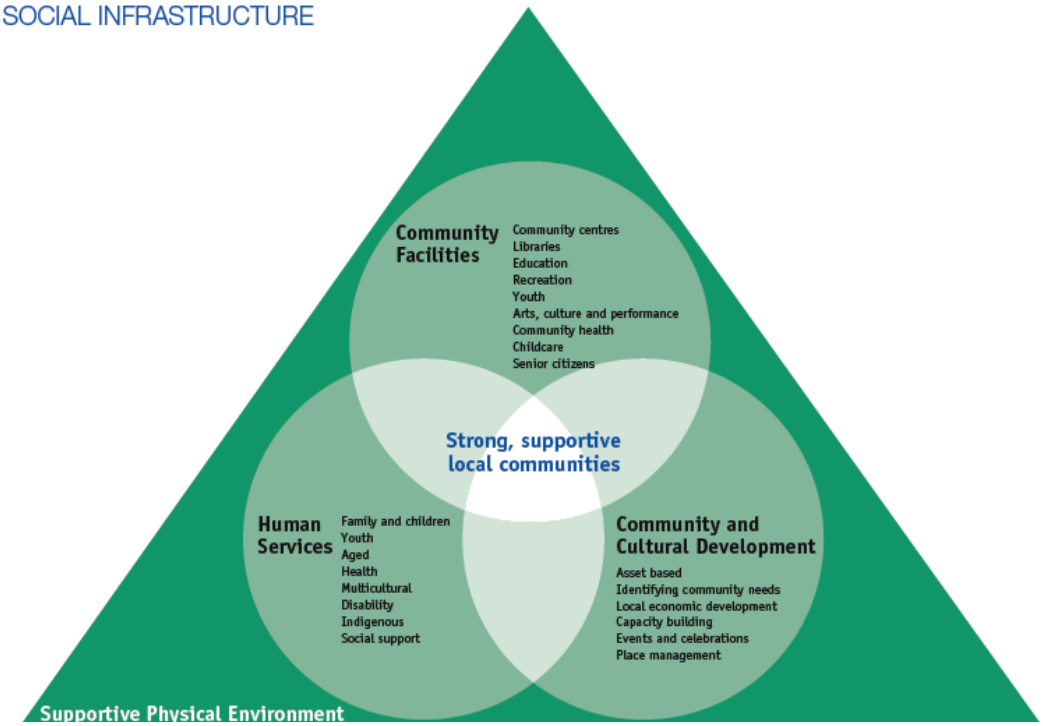

Figure 6: Approach to Social Infrastructure provision and Community for urban growth areas (2012) Source: Planning for social infrastructure

Nelson Mandela once said: "Sport has the power to change the world. It has the power to inspire. It has the power to unite people in a way that little else can. Sport can awaken hope where there was previously only despair." (Mandela 2000:5) "Sport is a universal language that can bring people together, no matter what their origin, background, religious beliefs or economic status" (Annan 2005). Against this background, it is clear that sport is a world renowned activity which has crucial elements of nation building and unification outside race, gender and class. With South Africa hosting the 2010 FIFA World Cup, resources were poured into sport facilities, through upgrading of sport infrastructure and the construction of new stadiums. This infrastructure is still in existence, however at a much more local level; there has been lagging effort towards creating sustainable environments for children and the youth, through the provision of contextually responsive facilities.

There is strong correlation between good provision of social infrastructure in communities and the overall wellbeing of the inhabitants of that community. Social facilities are described as a variety of built environment structures and public utilities necessary for the general wellbeing and development of the community (Uduku 1993). The lack of facilities and resources thereof to maintain facilities at schools and inaccessibility to the community facilities has resulted in high levels of inactivity among children and youth and the absence

of structured sport at schools in the historically disadvantaged communities .The problem is even more serious for young adults after their school days (SASR 2012). One can proceed further by speculating that in communities where there are high concentrations of youth and young adults who are idle, without access to economic and social opportunities, there is a tendency for substance abuse, violent crimes, and reduced social ties. Ilhamdaniah (2005) conducted a study in Ahmeddabad, India where he assessed present provision of social infrastructure in terms of spatial distribution and accessibility to the facilities through GIS techniques. It is quite interesting to note that in the analysis he conducted he highlighted the importance of placing social infrastructure in close proximity to transport infrastructures, as he believed that the infrastructure would be ineffective if it is inaccessible to the intended users, which in his case where the youth and young adults

Planning for social infrastructure provision in South Africa is an issue which requires comprehensive approaches which take into account the many facets of social infrastructure in order for it to be effective. The above diagram describes the comprehensive approach which the government of South Australia adopted to looking at social infrastructure as a whole. The intersection of the three aspects; physical facilities, human capital and social support services (Institutional support) is the basis of this research report, however only the following aspects have been selected In the approach. Community (physical) facilities are the required spaces which all interventions are conceptualised and resources are poured into (health, education and recreation). The human services is the community, the hands that combine to work on the way forward (youth, families, etc.) and finally the community and cultural development are the mechanisms put in place to achieve the community goals, e.g. local economic development and place management. The intercession of these three aspects creates a comprehensive approach to development.

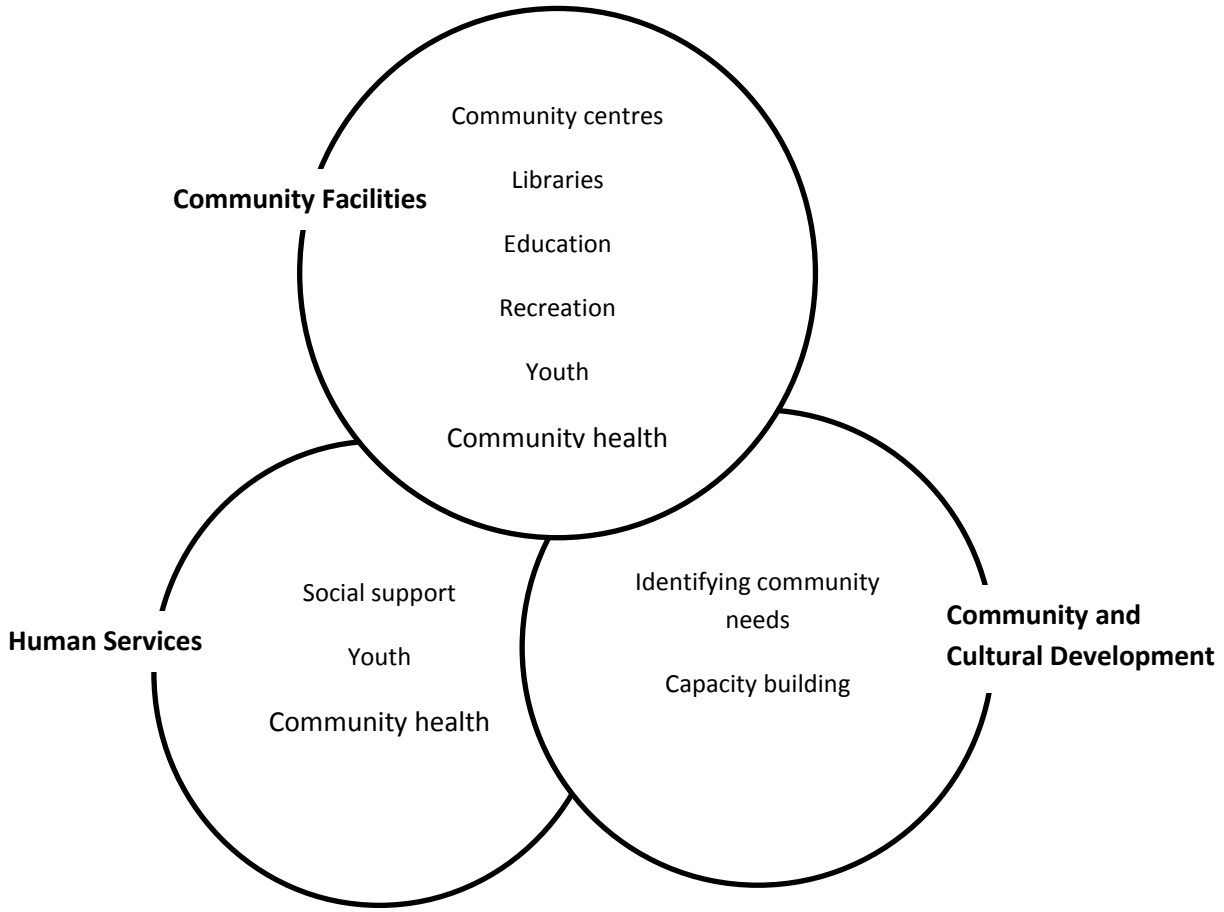

Figure 7: Selected elements of social infrastructure applied throughout the research

Adapted from: *Planning for social infrastructure and Community for urban growth areas (2012)*

Sports and Recreation

Curtis and Kraus (2000: 85) stated that "since recreation involves the voluntary choices of participants, it is essential that all programme activities and services be keyed to the actual wishes or desires of community residents or organisation members and that they are perceived as potentially enjoyable or valuable in other ways." Driver (1991:5-105) lists the benefits of sport and recreation into 5 categories, these are; psychological, economic, environmental, physiological and social benefits.

Balmer and Clerk (1997:10-11) on the other hand list the following benefits of participation in sport and recreation activities;

- Recreation reduces anti-social behaviour and while discouraging destructive behaviours
- Promotes a healthy lifestyle – determinant of health status
- Improve one's quality of life

- Key to developing balanced human development, especially for children and young adults
- Reduces social services, justice and health care costs
- Useful for ecological survival

Scholtz adds that in the provision of sports and recreation, the following principles need to be considered;

1. The equality of opportunities in the provision of sport infrastructure must be regardless of sex, race, disability or age
2. Joint provision of the infrastructure – community, authorities, education institutions, private business sector and individuals
3. Provision of infrastructure must be cognisant of spatial and demographic considerations
4. Long term relationships between communities and service providers, so as to improve standards and foster fair and balanced provision
5. Promotion of public interest in decision-making process

<u>Legislative framework and policy imperatives</u>

The Constitution of the Republic of South Africa, Act 108 of 1996

Schedule 5, Part A of the Constitution lists functional areas of exclusive provincial legislative competencies, which includes provincial recreation, provincial sport, municipal parks and local sport facilities. The implication of this legislative competence is those provinces have exclusive competence to pass legislation as it relates to the governing of sports and recreation. However this competence is governed by national government which legislates so that provinces are aligned with those goals, this is in accordance to s 147(2) which states that national legislation in s 44(2) prevails over matters listed in schedule 5.

Municipalities also have a role to play, which is mainly to create by-laws governing aspects of sports and recreation at a local level. However according to s 139(1) of the Constitution, provinces have a supervisory responsibility and mandate over local government as it pertains to norms and standards.

The National Sport and Recreation Amendment Act, 18 of 2007

This act places responsibility on the Minister of Sport and Recreation to ensure upgrading of sports facilities, creation and providing funds, oversee and management of sport and recreation facilities in South Africa, s 8 (a) (b). NSRA also provides the framework for relationships between the Department and other related clients, as a way to boost sporting activities.

Legislation to be considered in the NSRA (2011/12):

1. South African Combat Sports Bill.

2. National Sport and Recreation Amendment Bill (2ND) (based on outcomes of 2011 National Sports Indaba).

3. South African Boxing Repeal Draft Bill.

<u>Health Facilities</u>

There is an old saying that 'health is wealth', this implies that health and mental wellbeing of any human translates into a resource and human capital which can be useful in some way to the community. This means that good health directly correlates with productivity, wellbeing and economic growth. The World Health Organisation (WHO)(1994:2) defined health as 'a state of physical, mental and social wellbeing and not merely the absence of disease or infirmity, rather a continuous balancing of these various components in an effort produce happiness and higher quality of existence '. Health facilities are essential to the health of any community, and appropriate measures need to be enforced to ensure adequate facilities are provided for people, especially in the previously disadvantaged communities of South Africa. The provision of adequate basic health care services, particularly in urban contexts, is becoming harder because of (1) the rapid growth of cities and their population and (2) the available resources for the provision of medical care services (Amer, 2007).

Chatterjee (1990) has pointed out that the health status of the people is generally determined by the intersection of four factors need, perception, ability and availability

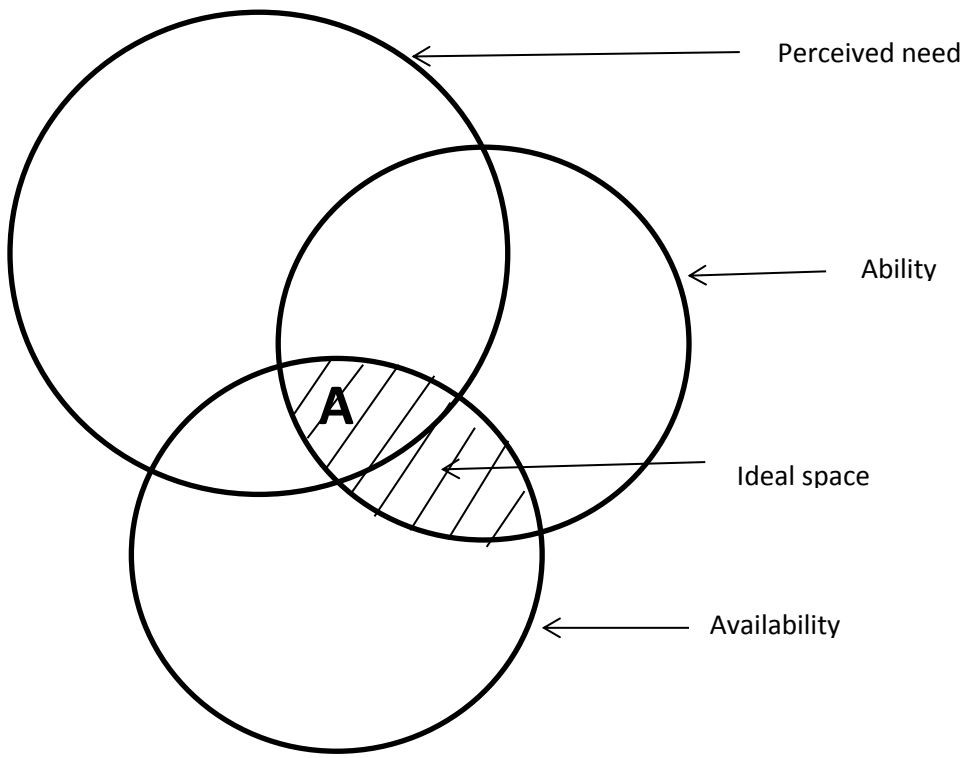

Figure 8: Determinants of Health Status (Adapted from: *Chatterjee 1990*)

The need for health services in the above diagram refers to the allocation of resources or environmental pollution, Perception of the need relates to socio-economic and cultural factors, e.g. income level and social background. The factors which affect perception also determine a person's ability to recognize the health need and get it attended (Chatterjee 1990). Availability of health care services is reflected in the physical manifestation of health care facilities, e.g. hospitals and dispensaries. In service provision of health facilities, one has to consider the contextual needs, the perceived needs (service providers determine these based on desktop study), ability of the government to provide services within the available resources.

Legislative framework and policy imperatives

The Constitution of the Republic of South Africa mandates the state to ensure the realisation of the right to access health care and other socio-economic rights. Health services fall under schedule 4, Part A of the constitution as a concurrent national and provincial legislative competence, meaning that provincial and national government are able to pass legislation as to the regulation and management of health care.

Section 9 of the Constitution states that everyone has the right to equality, including access to health care services.

Section 27 of the Constitution states: with regards to health care, food, water and social security:

1. Everyone has the right to have access to –
   a) Health care services, incl. reproductive health care
   b) Sufficient food and water
   c) Social security, incl. if unable to support themselves, and their dependents
2. The state must take reasonable legislative and other measures within its available resources to achieve the progressive realisation of each of these rights
3. No-one may be refused emergency medical treatment

Section 28 of the Constitution states that every child has the right to basic nutrition, shelter, basic health care services and social services.

National Health Act, 61 of 2003

This act provides a basic framework for uniform health care provision and management in South Africa

<u>Education</u>

Education is a social investment, because it enhances the stock of human capital (Familoni 1996). Even though education may be a social investment, it is also an economic investment since it enhances the stock of human capital Denison, (1962). Again, the role of education as a social infrastructure and as a stimulant of growth and development can be enhanced only if it is qualitatively provided.

Historically, inequality was mainly exacerbated through the provision of a much lower education standard (Bantu education) and subsequently lower school infrastructure, as a means to realise the apartheid vision. Education reform has been a priority in South Africa since the establishment of the Government of National Unity in 1994 and has played a key role in redressing the injustices of Apartheid. The enforcement of this educational system

meant that for decades 'blacks' and 'coloureds' were systematically deprived of the basic right to access adequate education. Essentially these economic, infrastructural and educational inequalities robbed many of the ability to participate in public discourse and engage in state programmes. While progress has been made to redress inequalities pertaining to distribution of resources inputs and outcomes through institutional and policy reforms, there is still more to be done to truly realise the mission and vision of the Department of Education.

Legislative framework and policy imperatives

The Constitution of the Republic of South Africa, 1996 specifies the 3 spheres of government; the national, provincial and local sphere, and the Constitution mandates the spheres to work together, being interdependent and interrelated in their relations. It provides that the national sphere has exclusive legislative responsibility for tertiary education and shares concurrent responsibility with the provincial spheres for all other levels of education (OECD 2008).

According to Section 29(1) of the Constitution, everyone has the right:

a) To basic education. To further education, and the state must through reasonable measures, make progressively available accessible
b) These rights place a duty on the state to respect an individual's right to education. It also imposes a positive obligation on the state to promote and provide education by putting in place and maintaining an education system that is responsive to the needs of the country.

The norms and standards for school infrastructure are not just for the profit of providing an equitable distribution in communities of all sizes, but also assist in enhancing teaching effectiveness and student learning outcomes. In 2008, the SA government allocated 17 billion over 2008 medium term expenditure framework to upgrading existing unsafe structures, improving physical infrastructure and bettering learning processes, and norms play a big role in directing such investments. One of the key challenges of the education system of South Africa relates to the lack of an integrated system of delivery, e.g. while physical infrastructure might be put in place, studies indicate that demand for schooling is

mainly determined by the academic track record of the school. Therefore norms and standards should include 'capital works' required to provide the services and operational and management aspects in order to adequately serve the needs of the system rather than the schools (FFC 2009).

The Department of Education in 2013 released a draft of the minimum norms and standards of public school infrastructure; this aim of the document was to provide clear and concise norms and standards in the provision of education infrastructure from the 2008 version. According the rights listed above, everyone has the right to basic education, and at this point 'basic education' becomes contested. Section 29(1a) of the Constitution includes the use of internet and other infrastructure necessary, also section 29(1b) states reasonable measures required to realise the goal of further education , and that includes infrastructure and skills for internet use, as a way to realising 'further education'

Some argue that access to internet is a way to realise other rights such as access to information and Freedom of expression, and therefore restriction of the right to internet access, would be violating other rights.

Standards: Inner city schools

Many South African inner city schools are subject to deteriorating, poor academic achievements, increased school violence, mismanaged bureaucracies and low extracurricular activities (Wasserman & William, 2002:26). Many inner city school principals do not have time engage students in meaningful extracurricular because they are too busy trying to raise the academic achievement. Gauteng Education Member of Executive Council(MEC) Angie Motshekga, 2006, after visiting the inner city schools as part of a campaign for effective teaching and learning, expressed shock at the condition of some of schools, stating that some were located along busy streets, making it an unconducive learning environment.

Extracurricular activities are part of the holistic learning environment which is as crucial to youth development as the academic programmes, if not more; therefore the standards need to be effectively implemented in inner city schools, to some degree, if academic achievements of inner city schools are to improve. As a result of lack of physical space to

conduct physical activities, the schools opt to engage in activities which do not require much space, such as drama, music, chess or dance (Inglis & Straton, 1994:112; Nkosi, 2005:21). Hellison (2000) claims that supervised school-based recreational opportunities for youth from low income inner city neighbourhoods are often lacking. Watkins makes the claim that engagement in school sponsored activities means more supervision from teachers, preventing them from falling prey to inner city vices(Watkins 2004:4). The school environment of inner city schools challenges schools to implement solid extra-curricular activities, in order to retain attention and improve the holistic physical and mental state of children. It is a valuable substitute to gangs, delinquency or idleness. It is a key intervening factor in dropping out. (McNeal (1999:50-53) and Rentz 5 (1996:309) for instance points out that sports participation correlates with higher levels of self-esteem, improved racial relations, feelings of control over one's life and lower delinquency rates among learners. Holt et al. (2008) found the following three types of life skills were associated with participation on the team: learning to take initiative, respect, and teamwork/leadership, and as such these skills could also be transferable to other areas of life. Researchers acknowledge that further research is needed to understand how to instil such skills in the school setting.

Inner city schools are forced to share facilities with the public and as a result of the lack of resources across the broad spectrum, the pupils are forced to engage in extracurricular activities at home or in their own time (Haliimah 2011). The importance of standards comes into question when one considers traditional education facilities in the townships or even suburban parts of the city. The application of standards can prove problematic because the school sizes will differ significantly along with the infrastructure that follows. For example, it is recommended that the minimum size of a high school is 2,4ha, including sports field, but this cannot be achieved by inner city schools due to the price of land and availability. As a result of this trade-off to opt for physical education spaces rather than sports facilities, inner city youth programmes tend to focus more on academic programmes, rather than extra-curricular activities.

<u>Methods of provision:</u>

Cluster concept

The Red book vol 1, suggests a model of provision for inner city schools that involves shared facilities. This model of provision can be highly beneficial only if implemented in partnership with other schools.

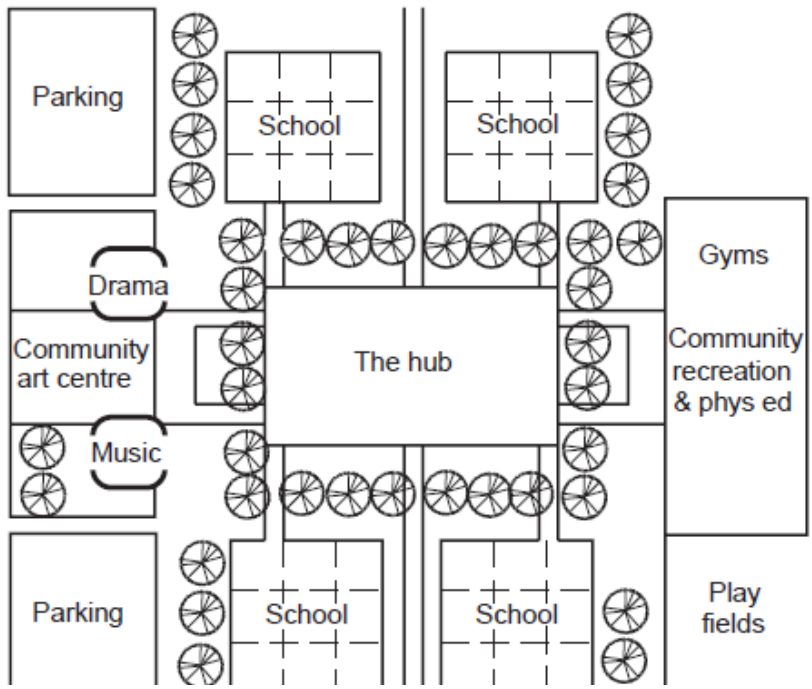

Figure 9: Functional cluster for educational facilities in the inner city Johannesburg Source: *Red Book, vol 1*

The functional cluster concept is reasonable measure to ensure that inner city schools have extracurricular activities which are so vital to children's academic performances. The Red Book volume 1, lists some of the advantages of clustering functional facilities;

- Convenience
- Reduction in inequalities of provision
- Sharing of specialised facilities
- Minimum maintenance costs

The functional cluster method of provision is an alternative form of provision which can be utilised in urban areas, predominantly cities where there is little space for sports fields, and the urban form does not allow for low density developments. The cluster development utilises minimum space, yet allowing for maximum densities. In utilising space standards for education facilities, it is recommended that due to the complex nature of the urban form,

the city embarks on developing specialised standards which are directed towards the spatial vision.

Thusong centres

There are various ways of providing social infrastructure; however it varies in each residential settlement because the conditions, both physically and socially differ. This section will deal with the alternative ways of looking at social infrastructure, innovative and sustainable methods of provision.

Figure 10: Example of a Thusong service centre.

The most sustainable way of killing two birds with one stone when working with social infrastructure is through the sharing of infrastructure. For example, a shared facility between two schools. Shared facilities may include; specialised facilities (e.g. main hall), sport facilities (swimming pool and tennis courts).These shared facilities are also accessible to the public, although responsibility is delegated to the schools that use it. According to the Red Book I, this presents opportunities for clustering of facilities into one centralised area; it can range from a metropolitan node, to a local cluster of sports fields or schools. Multipurpose facility clusters are multifaceted facility under one roof (Red Book vol 1, 2000).These are often strategically located along transport interchanges or central markets/squares. Thusong centres (formerly known as Multi-Purpose Community Centres-MPCCs) are a good example of sustainable provision of services. The centres aware commissioned in 1999, to reduce distances people had to travel to access basic government services. They are one stop, multipurpose development centres where local, provincial and national government seek to empower the previously disadvantaged by bringing these centres with information from government, NGOs, and business agencies. Thusong centres

usually have services from Department of Health, Department of Education, South African police Services, NGOs and community based organisations.

FACILITIES	Educational facilities	Creche/Nursery school	Primary school	Secondary school	Tertiary facilities	Adult learning centres	Health facilities	Mobile clinics	Clinics	Hospitals	Recreation facilities	Playgrounds	Sports fields	Sports clubs	Sports stadiums	Cultural facilities	Libraries	Community centres	Religious centres	Cemeteries	Administrative facilities	Magistrates court	Municipal offices	Post offices	Police stations	Fire stations	Old age home	Children's home	Information centres
																													FACILITY
																													Educational facilities
		●	●	●	●	●		●	○	●		●	○	○	⊕		●	●	●	⊕		⊕	⊕	⊕	⊕	⊕	⊕	●	○	Crech/Nursery school
			●	●	○	●		●	●	○		●	●	●	○		●	●	○	⊕		⊕	⊕	⊕	⊕	⊕	⊕	⊕	○	Primary school
				●	○	●		●	●	○		●	●	●	○		●	●	○	⊕		⊕	⊕	⊕	⊕	⊕	⊕	⊕	○	Secondary school
					○	●		○	●	●		○	○	○	●		○	○	○	⊕		⊕	⊕	⊕	⊕	⊕	⊕	⊕	○	Tertiary facilities
						●		○	○	○		●	○	○	⊕		●	●	○	⊕		⊕	⊕	⊕	⊕	⊕	⊕	⊕	○	Adult learning centres
																													Health facilities
								●	●	○		○	○	○	⊕		○	○	○	⊕		⊕	○	⊕	⊕	⊕	●	●	○	Mobile clinics
									●	●		●	○	○	⊕		○	○	○	○		⊕	⊕	⊕	⊕	⊕	○	○	○	Clinics
										●		○	○	○	⊕		○	○	○	○		⊕	⊕	⊕	⊕	⊕	○	○	⊕	Hospitals
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														●	○		○	●	○	⊕		⊕	⊕	⊕	⊕	⊕	○	○	○	Sports fields
															●		⊕	⊕	⊕	⊕		⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	Sports stadiums
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																											●	⊕	○	Old age home
																												●	○	Children's home
																													●	Information centres

Key:
● Compatible
○ Neutral
⊕ Incompatible

Picture 1: Compatibility of social facilities (Guidelines for Human Settlement Planning and Design, Red Book vol 1)

The clustering of facilities in the provision of services needs to be properly and carefully implemented because the facilities need to be compatible with each other for the development node to be highly successful. Picture 1 shows a compatibility matrix which outlines the different facilities and how they relate to each other. The degrees of compatibility are outlined below:

- *Incompatible* – unsuitable interrelationships between the facilities, due to their contradictory uses
- *Neutral* – no perceived relationship between the uses, no benefits and disadvantages to clustering them together
- *Compatible* – good interrelationships between the facilities, therefore can be clustered together

Picture 1 is merely a guideline used to cluster facilities, to ensure compatibility of facilities in asocial hub or cluster. It is an alternative way of providing social infrastructures, as opposed to the conventional method which supplies on an individual facility basis in a designated space. This method of provision provides for flexibility of standards, and increases accessibility to various services in one designated area.

Transit Oriented Development

This concept was originally codified by Peter Calthorpe in the late 80s, who originally defined it as a simple, moderate and high-density housing along with complementary public uses, jobs, retail and services, are concentrated in mixed-use developments at strategic points along the regional transit system (Calthorpe 1993). There has been no universally accepted definition of the concept; but it development centred around transit stations, promoting concentration of mixed uses, all in an attempt to increase ridership on public transport. The key components of TOD are as follows, (as summarised from "*The Next American Metropolis*" by Calthorpe and Poticha):

- Organize growth on a regional level to be compact and transit-supportive
- Place commercial, housing, jobs parks, and civic uses within walking distance of transit stops
- Create pedestrian-friendly street networks that directly connect local destinations
- Provide a mix of housing types, densities, and costs
- Preserve sensitive habitat, riparian zones, and high-quality open space
- Make public spaces the focus of building orientation and neighbourhood activity

In an attempt to create a sustainable compact city, the transit-oriented development along major transport route presents major opportunities for increasing the densities, land uses

and public spaces. In a neighbourhood where youth unemployment exceeds 60%, the TOD will be vehicle of economic growth, through the provision of opportunities, choices and variety. Social and economic amnesties are a crucial in all TODs, moreover the provision of these facilities will be much easier, while also maximising its use at the same time.

The success of TODs depends highly on a successful transit system; this is so because, an efficient public transport system is likely to motivate private car users to use public transport, therefore increasing ridership. At the same time, this encourages the use of non-motorised transport and cycling, which is environmentally sustainable. The Rea-Vaya and metrobus transport systems in Johannesburg have been crucial in expanding TODs.

Measuring the effects of TOD according to Belzer and Autler (2002:4) is through the functional characteristics:

- Access to jobs
- Lifestyle changes as a result of the infrastructure
- Choice and variety of transportation modes
- Housing typologies

The provision of social infrastructure in Transit Oriented developments will require careful planning which entails a comprehensive demographic understanding of population dynamics. The transport system is key in this understanding; standards of provision will be inclusive of population thresholds, distances and accessibility to facilities through the transport system. Multi-purpose facilities will have to be considered because of the limited space and the high rents along TODs.

Management of social facilities

In the management of social facilities, the sizes and types of facilities is dependent of the size and character of the community. Flood(1993) makes the argument that in the provision of facilities, communities must be considered as ‘customers’ and ‘clients’, this type of thinking would increase community involvement, effective implementation and finally

community upliftment. Flood (1993) urges the government to understand communities as internal and external clients, those directly involved in the programmes are internal clients, while those who are beneficiaries are external clients, and all community groups are clients. He suggests this with the argument that when government considers people as clients, they will automatically satisfy their client's needs.

According to Paul (1987), community participation serves the following functions;

- Increase project effectiveness
- Building beneficiary capacity – operational responsibility
- Desire to share costs of project
- Instrument of empowerment, people are able to initiate actions, therefore influencing outcomes
- Promote agreement, co-operation and interaction

According to William (1983), when communities are given a stake in the planning and constructing a system, they will also take charge of managing and maintaining it. This element of management is essential when considering any project involving or affecting people livelihoods.

Segaloviciene (2012) outlines 8 key management principles which need to be considered in the development of social infrastructure;

Rural Social Infrastructure management principles	1. Coordination of approach "bottom to top"
	2. Satisfaction of social needs & local initiatives
	3. Partnership and division of responsibility
	4. Involvement of local residents & decentralization of decision-making processes
	5. Continuous study, professional development and stimulation of self esteem
	6. Integrity and hierarchy
	7. Innovations, readiness for changes, efficiency
	8. Ecology

Table 2: Rural social infrastructure management principles Adapted from Segaloviciene (2012)

Key principles;

1. Bottom-up approach – This approach is one which prioritises the involvement of the community as the main stakeholder in the decision-making process. Local authorities simply guide, supervise, inform, consult and sponsor the public interest
2. Satisfaction of social needs and local needs – In order to satisfy social needs of residents, communities have to actively engage in the innovation process in order to improve the quality of SI initiatives.
3. Partnership and division of responsibility – Partnerships of local development entities is essential for the success of local SI projects, this mainly involves Public-Private Partnerships (PPP), joint ventures of private entities and NGOs. Division of responsibility relates to assigning tasks to internal clients, as a way to ensure the longevity of implemented projects.
4. Decentralisation of decision-making process – This involves public participation methods which seek to understand the needs of the community, and this is taken into consideration in deliberation process during project conception.
5. Continuous study and stimulation self-esteem – Informed communities are able to effectively communicate ideas to service providers, while also taking responsibility that comes with certain projects.
6. Ecology – sustainability and green infrastructure should always inform infrastructure projects, preservation of the natural environment, landscape and protected areas should be taken into consideration at all times in the process.

<u>Summary</u>

The provision of social infrastructure in South African metroplitan areas is a pressing issue which has an increasing demand as the city is rapidly expanding and developing. The need for adequate social infrastructue in every community is without doubt, a crucial aspect essential for people's general wellbeing. As a result, the infrastructure must be responsive to people's needs and desires, targeted to all age groups of society, with a greater focus on children and young adults. The challenge arises when offcials have to determine the needs of each community and meet this need without depleting resources needed for other

communities. The use of standards at this point becomes useful in determining the threshold which each community should have according to its size, population density, etc.

Approaches to social infrastructure need to be cognisant of other related infrastructure, as a way to ensure integration and sustainability, thus giving way to stronger community interventions. The literature discussed in this chapter helps to contextualise the topic in a theoretical framework of social infrastructure and general provision of infrastructure. In uncovering the complexities surrounding social infrastructrure, this literature review section

Chapter 4: Case Study, Westbury

Brief background

The township of Westbury is located South of Sophiatown, west of Mayfair and west of the inner city of Johannesburg. Commonly known as the Western Areas and comprising of Sophiatown, Martindale, Newclare, and the Western Native township (now known as Westbury). Sophiatown was initially established as a whites-only suburb but stands sold slowly due to their close proximity to the municipal sewerage works. After a previous blanket-restriction on black people owning land in new suburbs was lifted, black occupation grew rapidly and by 1913 there were 700 mostly black families living there(IYER 2014)

The area was then developed by the City of Johannesburg around the 1920s, as an African township, and was the only place in Johannesburg exempt from the 1913 Native Urban Areas Act. As a result, there was a massive flock to Sophiatown, since Africans could own property, and also became notorious as a place of resistance, where the policies of the times governing African behaviours and actions where challenged. At that time, Sophiatown was characterised by overcrowding, rapid urbanisation, rent racketeering, sanitation concerns and gangs (IYER 2014). The Western areas of Johannesburg and Sophiatown became notorious for its gangs, intense violence and brutality and radical politics. The Western areas comprised of Newclare, Sophiatown and Western Native Township (WNT), commonly known as Westbury. The township came into existence in 1919, although formally established in the 1960s. The population explosion in 1930/40s came with an increasing in the number of churches and schools, predominantly in Sophiatown and Westbury. Along with the population increase, was a rapid flow of migrants in search of employment opportunities and a better life (IYER 2014).

"The late 1920s and early 1930s saw increased concern over violence in the Western Areas, yet officials could still refer to W.N.T. as a 'model' location as late as 1930-1. Thereafter criminality seems to have increased markedly, but it was only in the middle of the decade that the Western Areas became noted for crime, particularly violence and theft."Goodhew (1990:14). Beginning in the 1930s the Johannesburg City Council began attempts to expropriate the land to get better control of the situation. (Goodhew 2004, 146). By the 1960s, all land had been cleared in order to make way for coloured, Indian and white

neighbourhoods and it is at this time that there was the Western Native Township (Westbury). Some critics argue that the violence caused by the spread of gangs and drugs in the neighbourhood, which was predominantly 'coloured' was exacerbated by the media reports, which unjustifiably perpetuated the stereotype of 'coloured' as inherently violent and unruly. Today the township of Westbury has not made much improvement, considering media reports and general perceptions of the area. However, it has transformed to become a vibrant precinct, which is still dominated by coloured population. Despite the glories of Westbury (Steven Pienaar, Don Mattera and Keagan Dolly), the community is continues to be plagued by high youth unemployment rates, drugs, violence and gangs which have torn the reputation of the township. (Dannhauser 2006)

Figure 11: Western Native Township 1958 Source: Chapman after Beinart (1975:160)

Despite being located near the National Broadcaster, the community has not been the subject of rigorous scrutiny other than reports of crime, gangsterism and violence(Dannhauser 2006) . In 2011, the launch of the Corridors of Freedom gave way to new spatial developments along 3 corridors: Louis Botha corridor, Empire-Perth corridor and Turffontein corridor. During this time, Westbury was identified as a priority development area along the corridor, and the Westbury Precinct Development Plan was completed the following year. As such the above historical background is very useful for any prospective developments in the area.

Policy Analysis

Growth and Development Strategy 2040

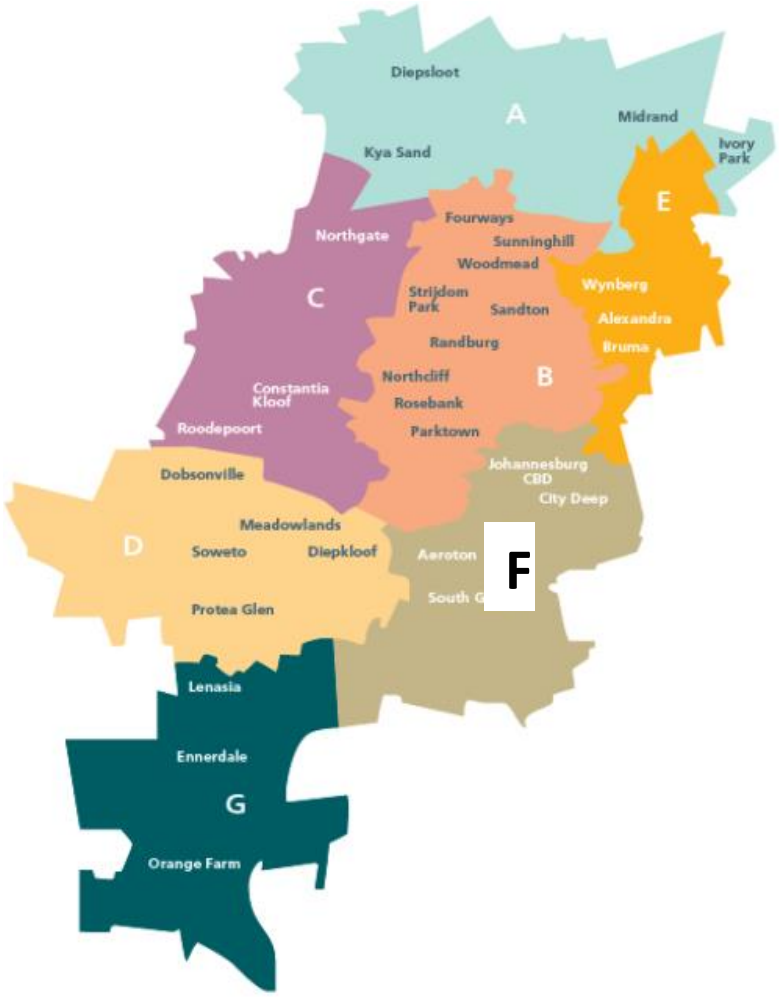


Figure 12: seven regions of Johannesburg, with region F as the focus of the study source: *City of Johannesburg, 2011*

The city of Johannesburg is comprised of seven regions (A-F), each region contains local municipalities which are responsible for sub areas. Developing a holistic plan which integrates the various municipal visions and growth plans can be quite challenging, especially in a metropolitan municipality such as the CoJ. The Growth and Development Strategy 2040 (GDS 2040) picks up from the first issue which was published in 2006. Originally the document served to consolidate the various plans and strategies of development into an integrated city strategy.

The GDS 2040, has evolved towards providing a long-term development framework, guiding strategic plans such as the Human Development Strategy (HDS) and Integrated Development Plans (IDPs).

Although the GDS is a long term strategy it is neither a statutory plan nor a spatial vision. It is does however aim to express a future strategy of a 'desired' Johannesburg, while also setting a strategic directon for medium term plans. It also "frames operational and programmatic choices in the short and medium term" (City of Johannesburg 2016:27) The plan acknowledges the inequalities of provision of services in the greater Johannesburg region, in this regard, the plan is guided by non-racial, democratic and inclusive principles of sustainability, liveability, resilience and competetiveness. The strategy involves confronting past injustices created by the apartheid planning regime, while confronting future

challenges at both a national and global level to create a multi-cultural, multi-racial just city. The GDS's aspirational aspect is expressed through the ambitious vision which the city aims to have reached by 2040. The vision states that "Johannesburg – a World Class African City of the Future – a vibrant, equitable African city, strengthened through its diversity; a city that provides real quality of life; a city that provides sustainability for all its citizens; a resilient and adaptive society" (City of Johannesburg, 2011: 35)

The city acknowledges through the GDS that in re-stitching the apartheid city model, a highly effective, reliable and safe public transport system is crucial to the success of development corridors. The mass transport system will connect people and places, mainly the assisting previously disadvantaged residents to new opportunities in economic nodes. With the introduction of the country's first Bus Rapid Transit (BRT) system (the Rea Vaya BRT) and the high speed rail system, the Gautrain, transport holds tremendous potential for integrating a divided city such as Johannesburg(City of Johannesburg 2011:67). The Joburg 2040 Strategy suggests that the provision of the Rea Vaya BRT system provides "opportunities for corridor development and transit-oriented development", with a number of nodes already identified (City of Johannesburg, 2011: 71). Despite this, the city faces two realities; many people do not have cars, therefore are forced to use taxis, buses, rail , while the middle class is car –oriented, and this is supported by the 60% increase in car usage since 1980 (Harrison 2011). There has been no viable transport system to encourage the middle-class to shift to public transport, hence private care usage continues to increase.

Integrated Development Plan (2016/21)

Integrated Development Plans (IDPs) are a statutory form of planning, a tool of 'developmental local government'. The White Paper on Local Government (1998) defines it as a development plan for the short, medium and long term. The Integrated Development Plan (IDP) is a municipal tool that is used as an incremental five-year plan that is able to facilitate the achievement of both long- and medium-term goals (City of Johannesburg, 2011). They are a tool for municipalities to facilitate integrated and co-ordinated delivery within their locality (WPLG 1998). The IDP is a medium term tool to deliver the goals of the GDS. The Joburg 2040 framed the IDP, therefore the vision of the IDP will be similar, since it is a realisation of the vision of the GDS. This synergy between these two policy documents

highlights a progressive effort to ensure Johannesburg progresses towards the world class city vision.

The approach undertaken towards the achievement of the spatial vision is through the "on-going expansion and extension of Rea Vaya BRT" as well as "the restructuring and integration of all public transport modes across the Gauteng City Region and increased focus on, and support for, walking and cycling" (City of Johannesburg, 2013a: 36).

Transit Oriented Development (TOD) was formally adopted as a planning strategy in 2008 and received increasing momentum with the Corridors of Freedom initiative in 2013 (City of Johannesburg 2011:62). According to the IDP, the urban form of Johannesburg will be knit only through mass transit system which will connect the various parts of the city. The prioritised corridors are Empire-Perth, Louis Botha and Turffontein corridor, with Empire-Perth being the most important to the study.

Figure 13: Empire Perth corridor along BRT route Source: http://theheritageportal.co.za

The IDP goes further to clarify that this corridor development will consist of mixed use housing, community facilities, puiblic centres and clinics, changing the form of the city through high density residential near transit stops, as a way to not only encourage public transport use, but to also encourage people to live in the corridors in order to access services in the nodes. "The corridors will support inclusivity (varied residential typologies,

tenure options and income groups) and high intensity mixed use developments to reduce commute times and costs" (City of Johannesburg, 2013: 91). The case study, Westbury is a useful priority area to explore in Johannesburg because it is a strategically located place, along transport interchanges, economic nodes and education institutions. Investment in such an area therefore requires careful consideration and various factors which will impact the development.

Spatial Development Development 2012/16

The SDF specifically "provides the policy basis for assessment and determination of development proposals and applications that fall outside the scope of prevailing Town Planning Schemes" that provide "citywide perspective of spatial challenges and interventions within the City" (City of Johannesburg, 2010: 2). The Municipal Systems Act describes an SDF as a part of Integrated Development Plans, which all municipalities have the mandate to adopt according to section 125(1) of the said Act.

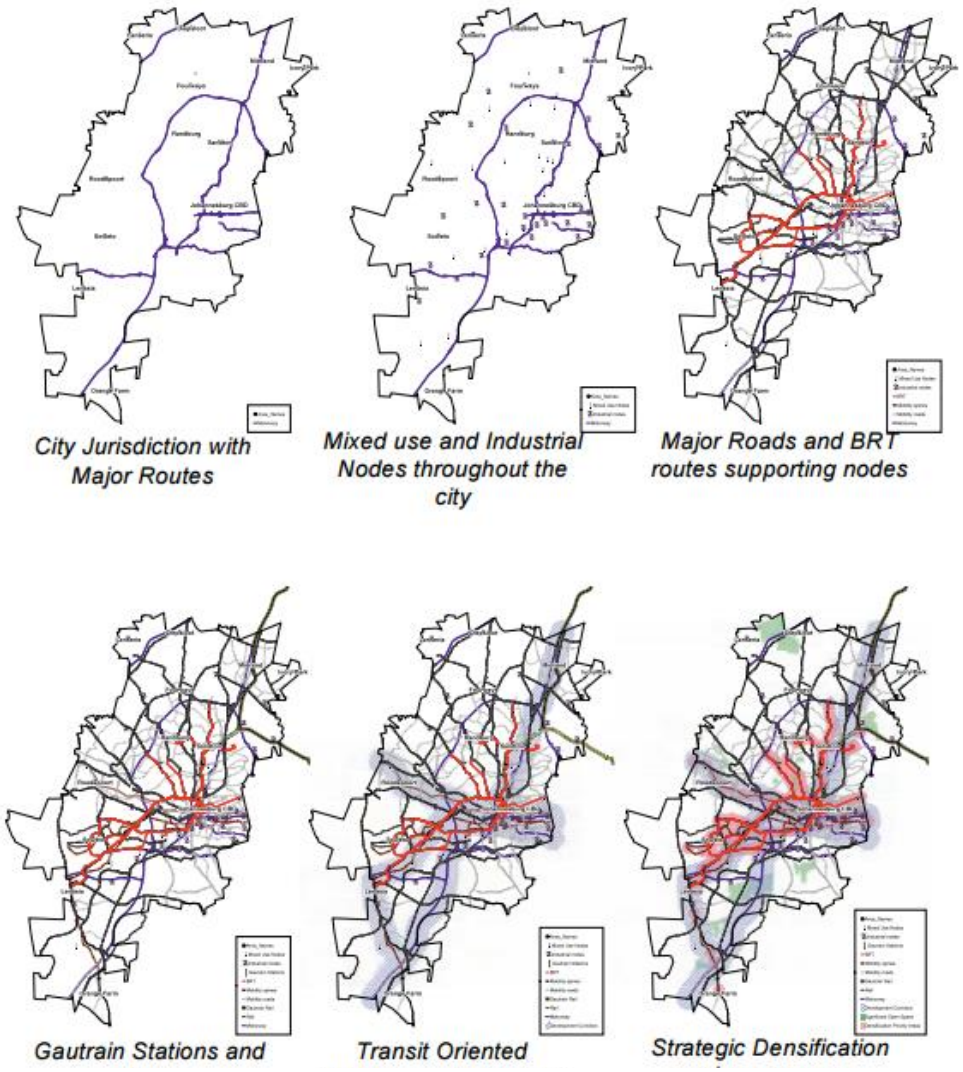


Figure 14: Identification of BRT routes, transport stations and development corridors
Source: *City of Johannesburg (2012)*

The Corridors of Freedom: Westbury Strategic Area Framework

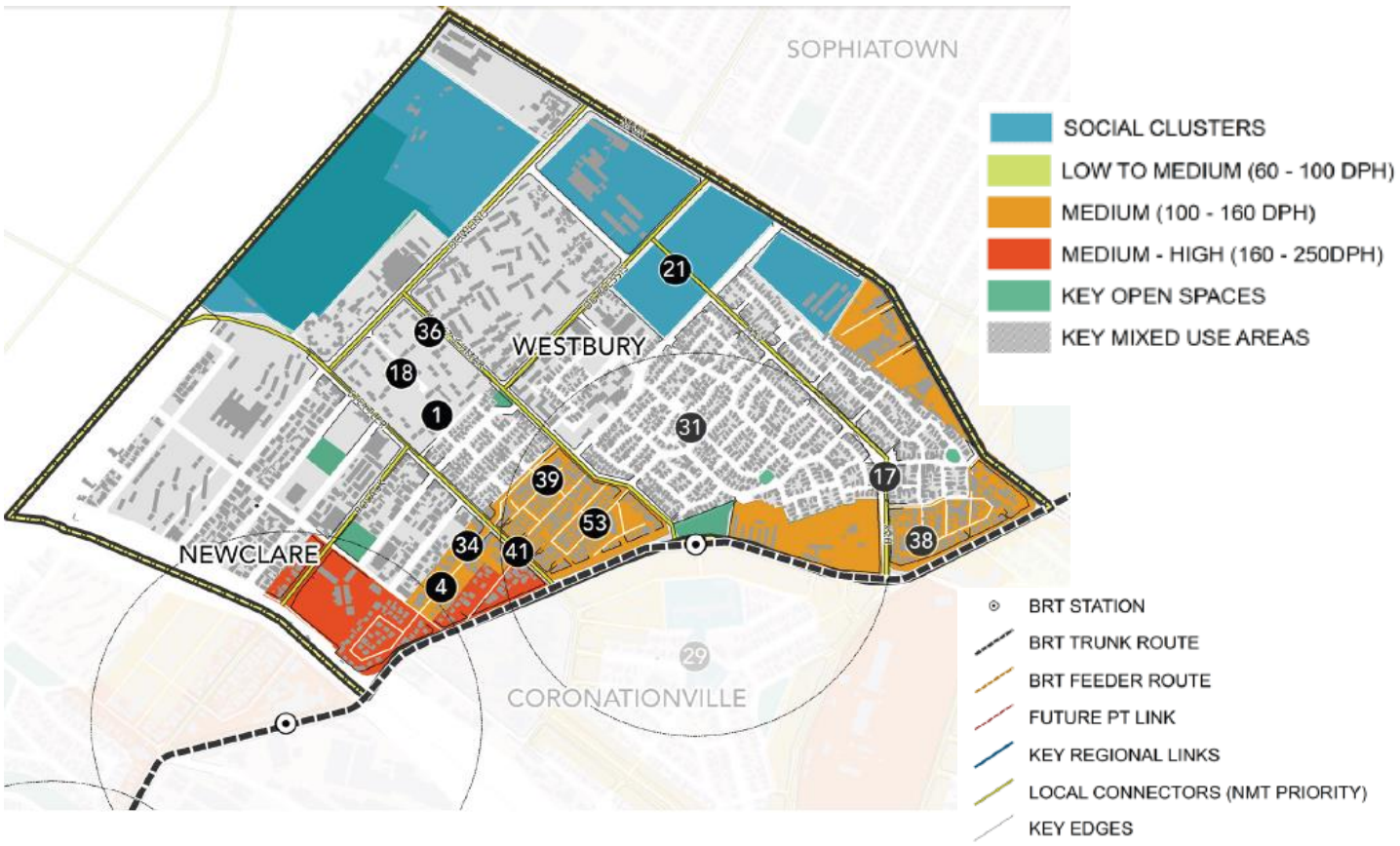


Figure 15: Proposed density levels Source: *Westbury SAF (2014)*

The Corridors of Freedom was officially launched in 2013, by Mayor Parks Tau in the State of the City address. The City of Johannesburg through this plan, would embark on a vision, guided by the Growth and Development Strategy 2040, a plan based on Transit Oriented Development (TOD) development strategies (City of Johannesburg 2011). However the Strategic Area Frameworks are the vehicles for the realisation of the plan, in that they provide spatial tools for implementation of Corridors of Freedom plan.

The Westbury precinct forms part of the Empire-Perth development corridor, the CoF has identified the precinct as a strategic priority area which requires immediate intervention. The primary objective of the development as stated in the precinct plan is to "create a more liveable neighbourhood that can accommodate higher affordable housing supply, to create high quality NMT links, to develop community infrastructure and implement improved

security measures (City of Johannesburg 2014:32). The strategic Area Framework is the vehicle of development for the CoF plan.The following are the key initiatives for the SAF:

- The construction of Westbury's multi-million rand new healthcare centre, which is set to be one of the City's model clinics.
- The upgrade of Westbury's sports stadium and recreational park.
- The construction of "complete streets" with pedestrian-cycling infrastructure on Kretzschmar Street, Dowling Avenue and Steytler Road.
- The construction of pedestrian-cycling infrastructure along Du Plessis Street and Main/Dublin Road as well as along Millar Street, Victoria/Ludlow Road, Edward Road and 4th Avenue in neighbouring Sophiatown and Wesdene.
- Various housing developments, including the renovation and redevelopment of apartments as well as new housing.

The above initiatives identified in the strategic area framework are noble, in that they are a direct response to the many strengths and weaknesses of the precinct, however they lack substance for such a culturally- rich, striving neighbourhood. Apart from the densification of housing stock and subsequent social infrastructure development, the initiatives do not adequately address the many pressing problems facing the precinct, for example high youth unemployment and crime rates, little job opportunities, high alcohol and substance abuse, subsequently leading to an idle and unmotivated youth population. Westbury presents a number of strengths, namely its accessibility to the inner city, close proximity to higher education institutions, earmarked for CoF development, along major transport routes (public transport), many external and internal agencies operating in the precinct (social networks) and underutilised well-located parcels of land. Some of the weaknesses are the social deterioration (drugs/alcohol abuse/violence/gangs), High rates of youth unemployment, large tracts of wasted land between high density housing, deteriorating physical infrastructure. Promoting a pedestrian spine is very useful for the residents, however I believe that the community requires more responsive, and rigid interventions which effect real change in people’s everyday lives.

The next section of the chapter will exclusively deal with the precinct study and evaluation of the Corridors of Freedom, Westbury SAF as a vehicle to development and implementation of the strategies.

Quantitative Analysis

<u>Existing education facilites</u>

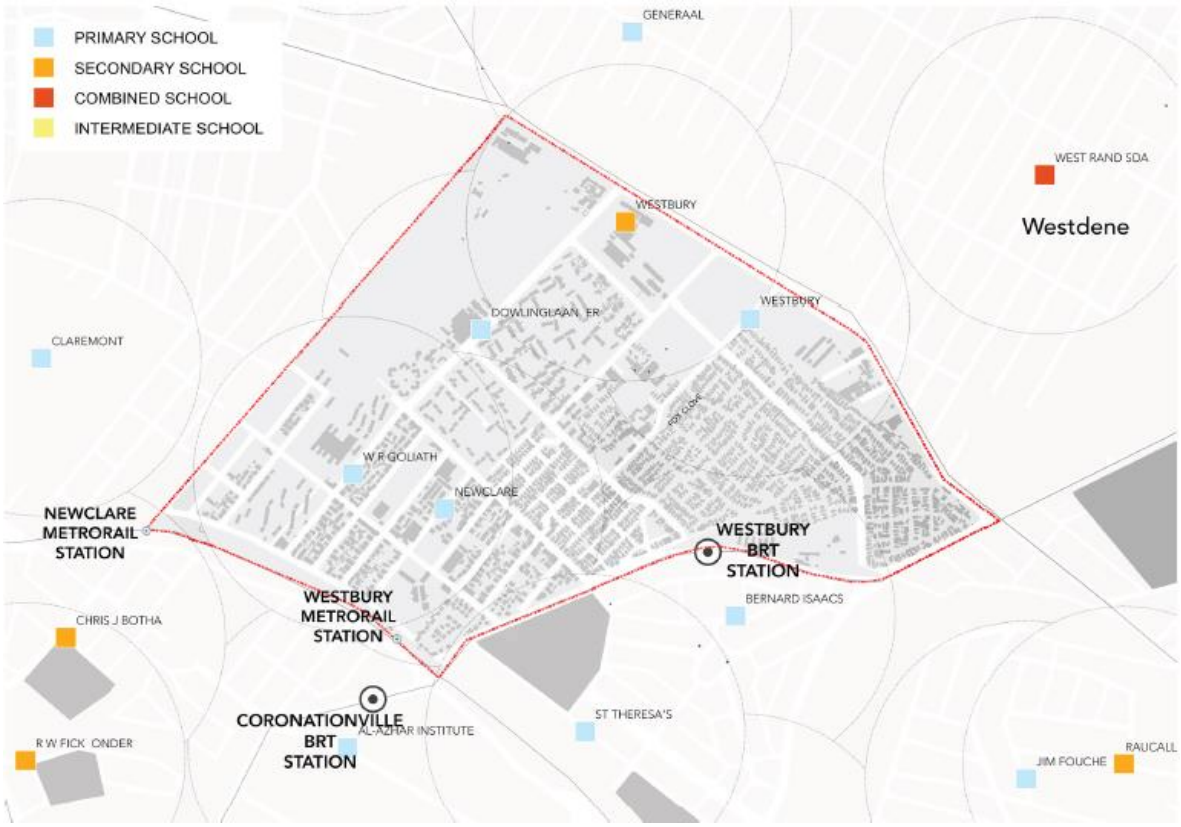


Figure 16: Education facilities in Westbury Source*: Westbury SAF 2014*

The precinct is home to 3 primary schools, and I high school, all in in a space of 1 ha, serving a population of 13 461 people, and 2727 households. Since its conception, the township has been renowned for its concentration of schools, churches and social organisations in the small space.In retrospect, quantitatively, the area is well served by education facilities, however there is a qualitative aspect which I believe is just as important. Unfortunately the study will not delve into these aspects of social infrastructure, which are related to the state of the facilities, functions and qualitative standards of perfomance and achievement. This is has been done because when we begin to consider standards of service and perfomance, there is a detachment with the built environment standards and thus would be uninformed by the literature.

Related projects

An education facility was opened next to Westbury Library, it is part of the City of Johannesburg's Vulindlela eJozi programme, which aims to break barriers to opportunities for the youth of Westbury. The programme is in patnership with Harambee Youth Employment, a Non-Governmental Organisation (NGO) in the community which specialises in job placements for unemployed youth. The Massive Open Online Varsities (MOOV) is the online system which forms a major part of the programme, it offers various online courses from the World's best universities. Six of the 11 centres are already underway in the community's libraries, in White City Jabavu, Alexandra, Joburg Inner City, Westbury, Emndeni and Orange farm. According to the City of Johannesburg, the system is aimed at the youth without matric or those who wish to rewrite.

Figure 17: Westbury Library, next to the Vulindlel' eJozi MOOV facility Source: *Author, 2016*

The construction of the pedestrian bridge across Fuel road is currently underway; this project forms part of the corridors of freedom development plans for the Westbury precinct. The pedestrian bridge connects fuel road with Kowie Street and Kretzschmar Street, in an attempt to assist over 500 pedestrians crossing fuel road daily, mainly the school children which normally attend the nearby school Bernard Isaacs Primary school, and the Coronationville swimming pool.

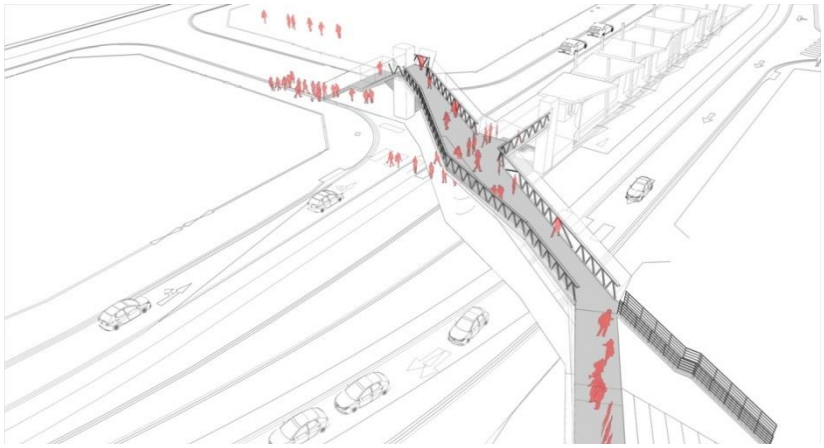


Figure 18: Artist's impression of the new bridge, directly connecting with the BRT station and the park source: www.jda.org.za

The pedestrian bridge, according to the respondent 1(23 August 2016) is a major accomplishment for the community, he fears that it will become a crime hotspot, since the design of the bridge presents many blindspots for criminals. Reported crimes of muggings and assaults with deadly weapons have already been reported in the vicinity of the bridge. He stated that" the lifts will be very problematic for people using the bridge because it is already the perfect crime spot for criminals,a mere 5 -10 seconds out of sight of the public can cause much damage to the victims".

<u>Existing sports facilites</u>

Figure 19: Sports Facilities in Westbury Adapted from: Westbury SAF (*2014)*

Westbury has a number of sports facilities, most notably the stadium Westbury secondary School Sports Field located on 421 and the Oval Stadium on erf 422 Westbury Extension 3, on the north-westedge of the Precinct. The social condition of Westbury is a collection of deep rooted historical systems of oppression which characterised the coloured people, however sport infrastructure nation-wide has proved to be instrumental in bridging social gaps.(Online:Mandela 2000) Sporting talent in the neighbourhood is a segment of the society which I believe has the opportunity to build an empower communities.

Steven Pienaar, originally born in Westbury has become one of South Africa's football legends, after conquering the local soccer scene, he progressed to play overseas for notable teams such as Everton. He is one of the many examples of the young people who have come from the community, and become prominent people in society.

The existing facilities need to be upgraded to an acceptable standards, however they are currently being used despite the challenges. Sports has also been a tool used in many other communities in Johannesburg, to ensure the youth are kept busy on the grounds,engaged in beneficial activities, and are kept away from the city vices.

Community sporting grounds – commonly used to play soccer Source: *Author (2016)*

Community sporting grounds – used for golf lessons …… Source: *Author (2016)*

Community chess ground, but without the pierces to play Source: *Author (2016)*

Poorly maintained Union stadium, used for soccer purposes Source: *Author (2016)*

The state of the recreational facilities in Westbury is appalling, with exception to the newly renovated community park. The oval stadium has open fields around which are vacant; the fields have not been renovated in a long time. The Steven Pienaar tournament is the only important soccer activity which some youth are involved in, however respondent 3(23 August 2016) contends that there is no exposure for the numerous soccer talents. A claim of corruption in funds, and scouting has been blamed for the lack of exposure for the talented youth.

Related projects

Figure 20: Gauteng Sports and Recreation: Mabaleng project opening

A flagship project called Operation Mabaleng is underway, Westbury will be the first to benefit from the flagship project, which aims to build 10 multimillion state of the art facilities in the next 5 years. The Union stadium has been identified in the flagship project as a facility in dire need of revamping and improvements. According to Gauteng Sports and Recreation, the Mabaleng project will change how sport is played, it will allow communities to engage in sporting activities even at night.

Existing health facilites

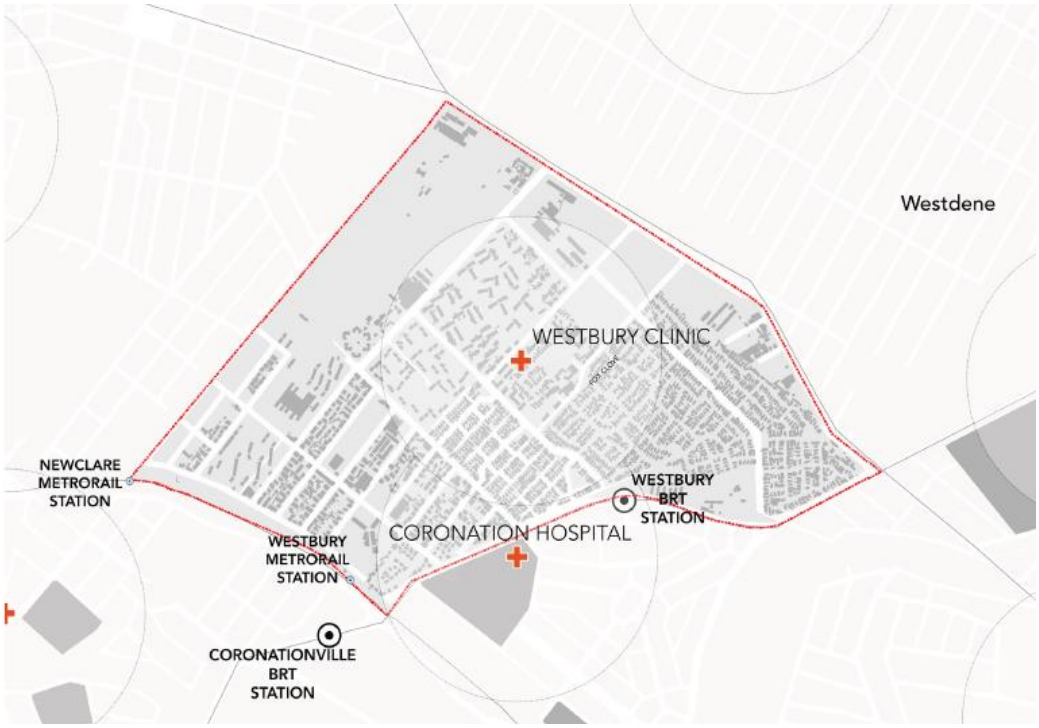


Figure 21: Health facilities in Westbury Adapted from: Westbury SAF *(2014)*

Westbury has one primary health-care clinic, along Kretzchmar street, which is not a 24-hour clinic, however there is a provinvial hospital in coronationville, across the street from westbury, Rahima Moosa Mother and Child hospital and Helen Joseph Hospital, which is located in Westdene, which is within walking distance from Westbury. The health care is currently undergoing an upgrade, which is going to be very beneficial for the residents. Respondent 2 (23 August 2016) is concerned more about the operating times, claiming that early morning, the elderly are forced to queue outside the hospital, just to ensure that they are served and have a bed secured.

Current projects

Due to the high rates of unemployment, the upgrading of the Westbury clinic presents a new opportunity for those who could not access health care in nearby hospitals to be attended to. Many residents are unable to afford medical aid payments, therefore opt to use community clinics as a last resort. The drug problems of westbury are well-known, however treatment centres for the drug addicts are few and far between. The new clinic is has much bigger internal space, and according to the City of Johannesburg, it will be one of

Johannesburg model clinics, meaning the service will be of good standards. There is an opportunity to create a drug center within the hospital, one that will be well resourced to assist drug addicts, and provide youth counselling services to disenfranchised individuals.

Westbury health care facility upgrade in progress Source: *Author, 2016*

Westbury Clinic **before** the upgrade Source: Google maps

Artist's impression of the Westbury clinic **after** the upgrade Source: www.akweni.org.za

Figure22: Development of Westbury Clinic

<u>Standards</u>

The CSIR produced a document detailing facility standards for various types of facilities. The Red Book also details quantitative guidelines for various facilities. The City of Johannesburg uses these guidelines as benchmarks for the provision of infrastructure. Below are the standards which are used to deliver social infrastructure;

	School	Buildings	Recreational	Classroom
Space(Ha)	**2,4**	**1,4**	**1**	
Dimension(m2)				**50**

Distance(km)	**<1,5**			
Population	**3000 - 4000**			**40**

Table 3: Standards for primary schools *(Adapted from: Guidelines for Human Settlement Planning and Design, Red Book vol 1*

	School	**Buildings**	**Recreational**	**Classroom**
Space(Ha)	**4,6**	**2,6**	**2**	
Dimension(m2)				**50**
Distance(km)	**<2,25**			
Population	**6000 - 10000**			**40**

Table 4: Standards for High schools *(Adapted from: Guidelines for Human Settlement Planning and Design, Red Book vol 1*

The space standards provided by the city of Johannesburg are that that a primary school needs a minimum space of 2, 4 ha, whilst serving a population threshold of 3000 people, and it includes sports facilities (1ha). However these standards are not prescriptive, instead they should be contextually adapted to suit the demands of the community. According to a city officials in the City of Johannesburg,

"The above standards are merely guidelines, they indicate benchmarks/ best practise only, the City takes them into consideration and tailors them to suite the actual needs of the communities. There is no 'one size fits all' solution as the communities in the City are unique in their complexities. To 'copy and paste' the standards without contextualisation is short-sighted and will result in ineffective interventions. The standards are guidelines; they should never be taken as being prescriptive in how facilities are developed. They are good as guidelines or benchmarks for the provision of services but ultimately each area will have its own unique needs that require contextually sensitive responses" (extracted from a

questionnaire addressed to the city officials in the appendix, 10 October 2016, the questionnaire was emailed to the city official: Thabang Sithole in the planning department.)

It is clear that CoJ does not readily utilise a prescribed set of standards for education facilities, however they do refer to the Red Book and the CSIR Social Infrastructure guidelines as a point of departure. The ideal of standards is a complex issue which ultimately is dictated by context, it is very difficult to implement standardised levels of provision for an entire metro. It is however useful to create a framework which recognises the physical, social and economic dynamics of each area.

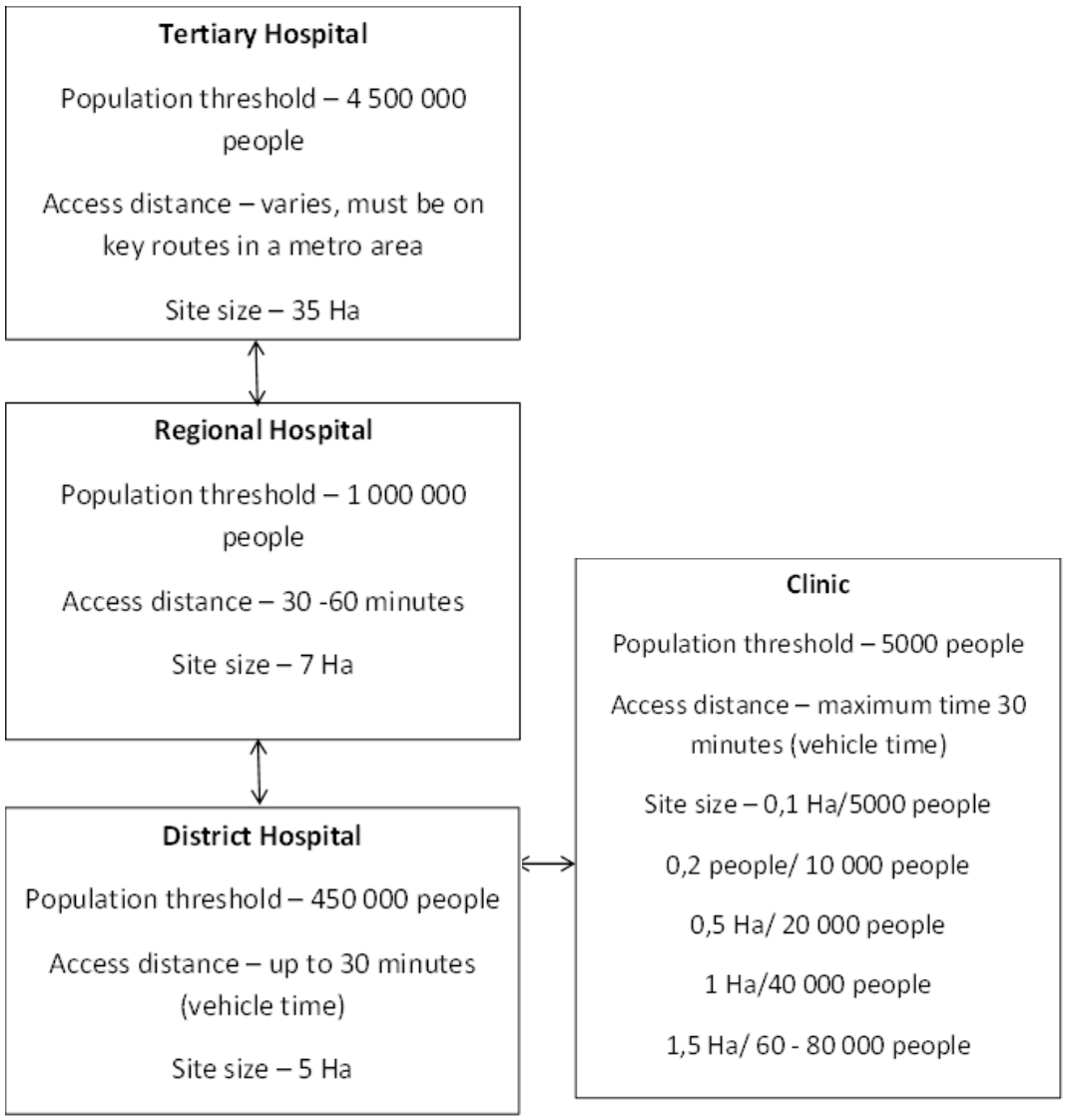


Figure 23: Standards of Health facilities in Johannesburg Source: CSIR (2012)

The built form standards above are the standards that are used in Johannesburg, however they merely assist in grounding development. They act as benchmarks in the provision of social infrastructure. They were adapted from the CSIR Social Infrastructure guidelines, along with the Red Book quantitative guidelines for health facilities. In an interview with a city official on the development of these standards, the official stated

"The standards were developed in consultation with Municipalities and relevant stakeholders, taking various factors into consideration such as but not limited to population growth, densities and supporting/ supplementary infrastructure."

Although the Red Book is outdated, the book was developed in conjunction with engineering, design and planning consultants, as well as government departments. The book continues to be very instrumental in governing the development of settlements in the City of Johannesburg.

Sports Facility types	Ha/One facility	No. of neighbourhood	No. for community /sub-district	No. for district/sub-regional	Total number
Soccer practice fields	0,55	20	4	0	24
Soccer fields(500 spectator pavilion)	1,5	0	4	4	8
Stadium(soccer field, athletic track, pavilion 3000)	3,0	0	0	1	1
Tennis courts	0,065	10	8	2	20
Combi-court	0,065	20	16	0	36
1 cricket oval	1,6	0	2	1	3
Netball fields	0,065	10	0	2	12
Swimming pools(1.25-25m)	0,18	0	0	1	1

Table 5: Standards of Sports facilities in Johannesburg Source: *CSIR (2007 and 2010)*

Standards for sports and recreational facilities detail space requirements for the provision of infrastructure, from the perspective of the size of the settlement. However sports facilities provision can be more complex, when we start to consider the size of facilities, the function of facilities and the catchment sizes. For example, stadiums are provided at a regional scale, meaning that they by-pass neighbourhood scale, they are shared facilities. In the provision of stadiums one has to consider population threshold beyond the neighbourhood, access to transport networks, space and function.

Prevailing standards in the precinct

TYPE OF FACILITY	"POPULATION TRESHOLD"	"NO. OF FACILITIES REQUIRED	EXISTING	SHORTFALL IN NO. OF FACILITIES
HOSPITAL L1 (DISTRICT)	450,000	0.1		0.1
SPORTS STADIUM (REGIONAL)	200,000	0.1		0.1
TERTIARY TRAINING NOT UNIVERSITY	100,000	0.3		0.3
GOVERNMENT OFFICES / CIVIC CENTRE	100,000	0.3		0.3
FIRE STATION (DISTRICT)	100,000	0.3		0.3
COMMUNITY HEALTH CENTRE	60,000	0.4		0.4
CHILDRENS HOME	60,000	0.4		0.4
POLICE STATION	60,000	0.4		0.4
SWIMMING POOL	60,000	0.4		0.4
CEMETERY (REGIONAL) (MEDIUM)	50,000	0.5		0.5
OLD AGE HOME	50,000	0.5		0.5
LOCAL LIBRARY	40,000	0.7	1.0	-0.3
PRIMARY HEALTH CLINIC	30,000	0.9	1.0	-0.1
COMMUNITY HALL	30,000	0.9	1.0	-0.1
SECONDARY SCHOOL WITH SHARED SPORTS FIELDS	12,500	2.1	1.0	1.1
PRIMARY SCHOOL WITH SHARED SPORTS FIELDS	5,500	4.8	4.0	0.8
CRECHE / EARLY CHILDHOOD CENTRE	3,000	8.8		8.8

Table 6: Standards in Westbury Source: Westbury SAF (*2014)*

From strictly quantitative perspective, the provision of existing facilities in Westbury does tend to align with prevailing standards, although future population growth will place pressure on existing facilities (City of Johannesburg 2014). The above standards (sports, education and health) are taken from various documents, notably the CSIR guidelines and

Red Book, however for a 1 km²) site, with a population of approximately 13 461 people, the standards do not in any way to into account the context of the precinct.

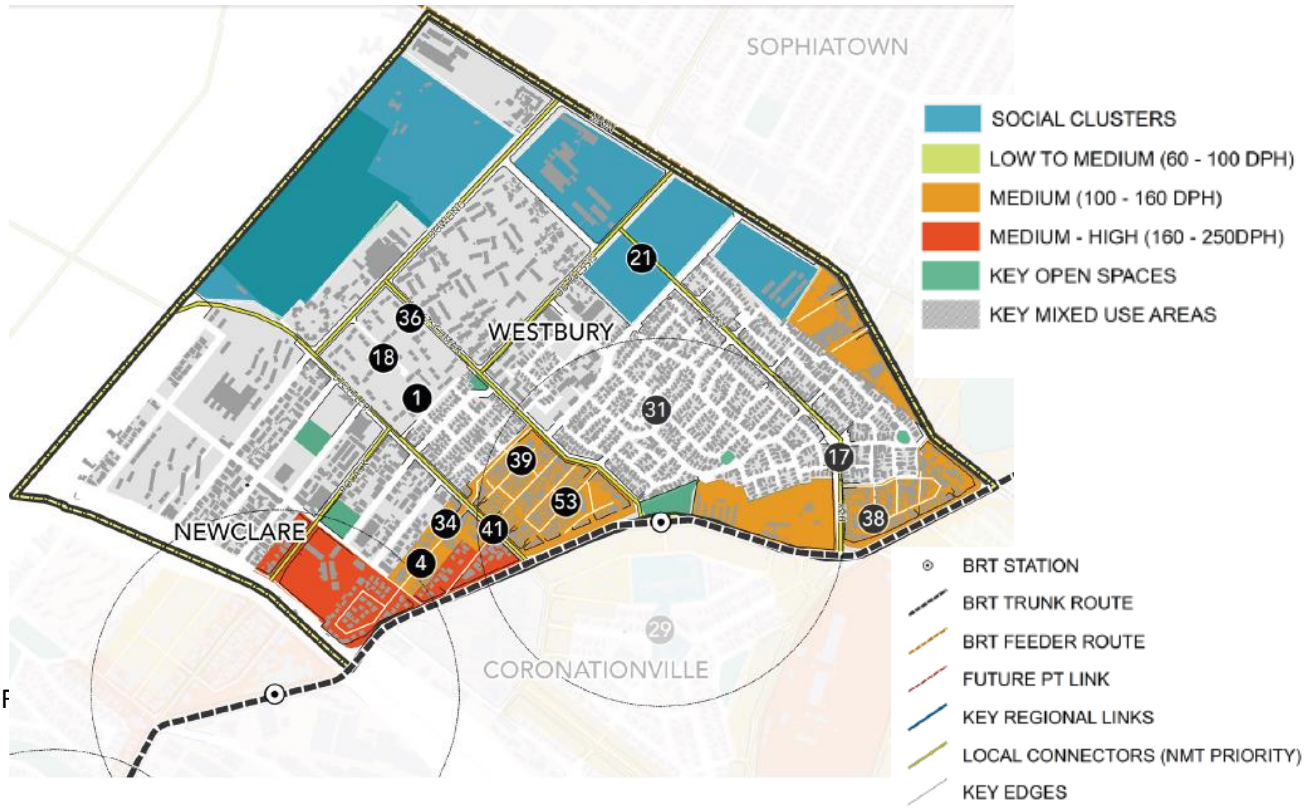


Figure 24: Proposed density levels Source: *Westbury SAF (2014)*

The proposed height for the densification strategy along Fuel road is 8 storeys; the measure of density measurement in the CoF +document is density per hectare (dph). Measures of Density broadly refer to people, gross floor area, ground floor area, etc. This measure has been used for decades in measuring urban densities, but has proved problematic as researchers are finding that it does not account for mixture of uses (popular urban trend) or the actual size of the dwellings.

According to CoF, the low-medium densities range from 60-100dph, the medium 160-250dph and the medium to high 160-250dph. Along the transit development, the projected storeys are 8 story developments.

According to the City of Johannesburg (2011), “the average population in the 3 corridors will increase from 7 436 people per square kilometre to 41 632 people per square kilometre”. This is a population increase of up to 5, 59 times.

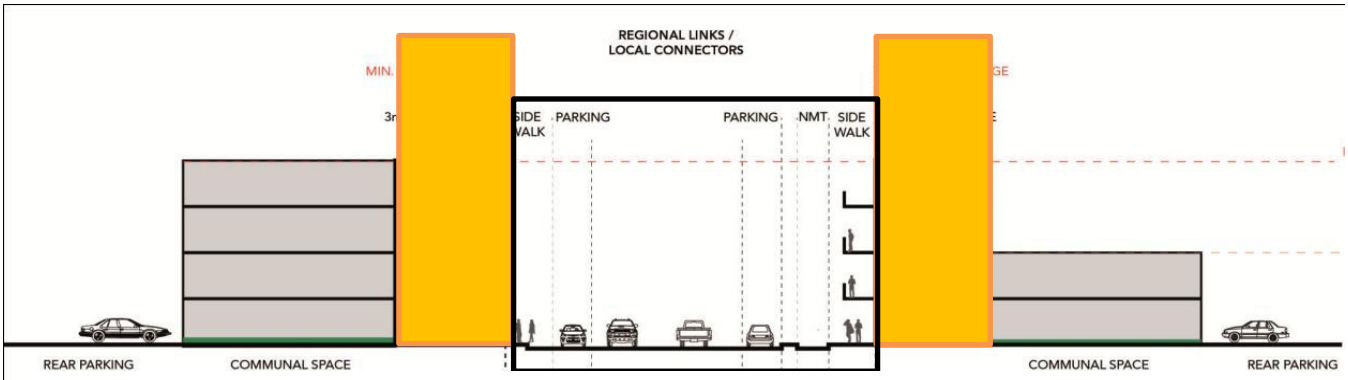


Figure 25: Densification along transport routes Source: IYER 2014:55

The above cross section represents a densification plan of up to four storeys on a transit street; the Westbury plan proposes a densification of up to 8 storeys along fuel road, as it contains the Bus Rapid Transit (BRT). The development will take the form of a Transit Oriented Development (TOD).

<u>Projected demands</u>

Households = 2727 (2646.71 per km²) Space = 1.03 km²

Average h/h size = 3, 7 people Expected pop. Increase = 5,59x on corridors

Population = 13461 (13064.68 per km²)

TYPOLOGY UNITS		POPULATION BASED ON H/H SIZES		
		@4 PPD	**@6 PPD**	**@ 8 PPD**
RES 1	1299	5169	7794	10392
RES 4	834	3336	5004	6672
TOTAL	2133	8532	12798	17064

Table 7: Typology units and corresponding population projections Source: Westbury SAF (2014:17)

YEAR	GROWTH PROJECTIONS		
	1.5 %	**2,5 %**	**3,5 %**
2001	19171	19171	19171
2014	23265	26427	29982
2025	27404	34675	43773

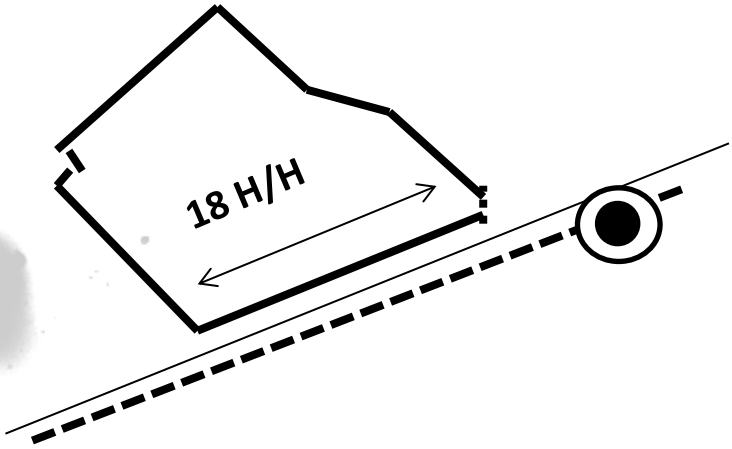
2040	34262	50219	73336

Table 8: Westbury population growth projections Source: Westbury SAF (2014:17)

73336 – 29982 = 43354

(43354/ 73336) X 100 = 59,11%

The population growth rate of Westbury (2014 to 2025) is expected to be 59,11% in 2040



Chapter 5: Findings

Chapter Outline

The research question was focused on evaluating what is considered basic social infrastructure provision in South African metropolitan areas, using a case study of Westbury, Johannesburg. The research unravelled this topic by exposing the complexities of understanding and using 'standards', and using Westbury as a site of analysis, interrogated the standards in the Westbury Strategic Area Framework and finally gathered residents and institutions' perspectives on the matter.

This chapter outlines the findings from the study conducted, particularly regarding the field work that the author conducted which was mainly focused on understanding the precinct. In an attempt to grapple with the complexities of Westbury, the author had a research assistant who is an avid participant and trusted member of the community. Through the help of the research assistant, the author was able to manoeuvre the challenges which were presented by the community, particularly the impending violence and crime in the community.

After gathering information also from social organisations(Abraham Kriel Foundation, Transformation Development Centre and Together Action Group) it is evident that there is an uphill battle between the residents, NGOs and state institutions. The following chapter highlights the many complexities which characterise the neighbourhood, with a focus on perspectives of the various stakeholders, most importantly, the author concludes by combining this information into readable diagrams which aim to simplify the above.

Sports and Facilities

Fieldwork consisted of various tasks which were at hand, but the most important part was gathering the different voices of the community. Part of this was getting the residents' thoughts and opinions on the existing facilities; however it was impossible to avoid the qualitative state of the facilities, as it kept being mentioned repeatedly by the respondents.

Residents consensually agreed that it is not a matter of facilities being deficient, but rather they are not well maintained, and this demotivates a lot of youth population from participating. Others stated confidently that there is no visionary leadership among the sports centres, and this causes stagnation. Some explained of corruption among this leadership as the root cause of stagnation and disorganisation, claiming that "scouts come to just drink with the coaches" (Respondent 4: 25 August 2016). Another point raised by the young women in the community is that the sports facilities in the community are mainly targeted towards the males. (Respondent 5:25 August 2016) stated that "this sends a message to the young women, that there is nothing else for you to do, other than to get pregnant". The gender priority in social infrastructure provision is mainly young and adult males, this being an issue which stems from the traditional understanding that males are the pillars of the community. While others may agree or disagree with this statement, it is important to note that the recognition of women in the last century as more than just breeding machines in society has shown us that women can also play an essential part in the building and sustenance of communities.

One of the crucial findings regarding sports, extracted from the residents was that the number of facilities is not the issue, nor is the state of the facilities, but rather that there was providing the facilities did not effect much change, the problem was beyond merely increasing the number of facilities. The talent is numerous among the youth; however the individuals do not go anywhere after winning a couple of tournaments, there are little to no opportunities for them to progress further in that sport. Support programmes and infrastructure is lacking. One mother (Respondent 6: 28 August 2016) attributed this to the idleness of the young boys (pointing to a few individuals), and proceeding to tell me about how talented they are in soccer, but have fallen into drugs as a result of a lack of initiative by government. The alternative to this, according to many people in the community, are sports facilities which offer variety of sports, not only soccer. The results from the questionnaire prove that a proportion of people advocate for more sports such as rugby, tennis, basketball and chess. The provision of soccer facilities in communities nationwide only increases the competition for scouts and soccer clubs, so it becomes very challenging to advance children further in the sport when every child on the street is an aspiring soccer

player. There is a stigma that 'white' children play rugby, and 'blacks' play soccer, however, as seen in Westbury, other sporting activities are desperately needed.

The Corridors of Freedom presents opportunities for sports developments, however many residents are not informed about it and other sport-related initiatives such as the Mabaleng flagship project which aim to upgrade sports facilities in Westbury. People who are knowledgeable on these subjects are community leaders, ward councillors and others who participate in community affairs, which is a relatively small percentage of the population. The state of community participation is a major issue in this community which currently is causing some disagreements concerning particular projects implemented by the Johannesburg Development Agency (JDA) and Johannesburg Road Agency (JRA), e.g. the Westbury Bridge. In the case of the Westbury Bridge, Respondent 5: 23 August 2016, explained her understanding of the participation process, whereby the city only consulted the council comprised of ward councillors and community leaders. As a result the people are now revolting against its completion because of crime cases being reported in the area.

The Mabaleng project according to residents provides major opportunities for development and growth of the community, however there is a fear that the people who will manage these places will not be able to properly guide the players towards the big leagues. Respondent 3 and 4 grew up in Westbury stated that even since they were children, the administration of the soccer facilities has always been the major hindrance towards the success of the programmes, and today they perceive the same problem. The Steven Pienaar soccer tournament has much praise and anticipation, respondent 3 explained with much conviction that the administration embezzles much of the funding meant for the winning teams. They further explain that the procedure which people follow to procure positions in the administrative departments is that they simply buy votes. Since they should be consideration of public votes for individuals to take a certain position, friends usually vote for each other, by mobilising their other friends.

From the perspective of sport agency (Union Stadium cluster), particularly the soccer-oriented organisations, there are little resources being poured in currently to the development of sports facilities, the closure of some sports grounds at Union Stadium is due

to lack of funds and limited use of the facilities. They contend that it is the fault of residents; they do not motivate their children to participate in sporting activities, consequently leading them to a life of gangs and drugs. Sport has been identified as a crucial aspect of overall community development, and the Corridors of Freedom plans present great prospects for Westbury community.

Union Stadium Cluster

The union stadium cluster includes the stadium, the public gym and the non-functioning basketball and netball courts. The Union stadium is of course the main attraction, and it is home to the Steven Pienaar tournament. According to management, the public gym is used by many people from the community; however it closes at 12:00pm – 16:00pm, and this is due to the low traffic volumes between these times. The courts behind the stadium have been closed for a number of years due to lack of maintenance, consequently degradation. In front of the stadium is a huge open space, and adjacent to the stadium entrance is an open space which used to be the old Sophiatown Police Station. Both these spaces have the potential to be integrated into the Union Stadium cluster since they lie adjacent to each other. The success of the Mabaleng project does not depend on simply upgrading existing facilities, but through planning, design and partnerships, create an integrated sporting/education hub of Westbury which is able to maximise on youth talent and bring sport and education exposure to the community.

Education and facilities

Education facilities include mainly primary schools and secondary schools, however in the case of Westbury, there are 'supporting' initiatives and programmes to furthering education goals, and I believe these are important to take note of. There are adequate primary schools in and around the precinct, however it is not just about quantity but rather quality. Except for the state of the infrastructure in some of the schools, primary schools have been considered of good and acceptable standards.

The problems lie with the high schools in the precinct, these are; Westbury High School, Vorentoe Hoerskool, and CJ Botha Secondary school. These schools cater for residents of Westbury, Bosmont, Coronation and Newclare, however learners from other schools also

attend in these schools. The secondary schools are plagued by high rates of violence with deadly weapons, drugs and teenage pregnancies. In December 2014, a viral video was released from CJ Botha high school, entitled '*Yizo Yizo*' which reflected the state of the high schools in the western areas of Johannesburg. The students enacted scenes from the popular TV show, the video shows students smoking weed, sniffing white powder, fighting and having sex on the corridors. The school had a failure rate of 95% at the time, but has since improved slightly. In 2014, the Gauteng Department of Education, together with South African Police Service (SAPS) raided Westbury High School in an effort to reduce the crime rates caused by gangsterism rife in the area. They confiscated dagga, hookah pipes, knives and weapons from both boys and girls. In 2012, a grade 12 pupil was stabbed to death by a gang of 5 young men, who were all later arrested.

Unemployment in the area is big problem which is significantly affecting the youth of the community, however many state that the answer is education. This may be true, but there are aspects that need to be addressed in the schools, besides the delinquency. School subjects have been standardised to basic Maths, English, Afrikaans, etc. Similarly to sports, variety is lacking in the school subjects. Students are different, and therefore respond differently to different subjects, but one has to take into account that not all students like readings; therefore it is necessary to re-introduce subjects such as art, woodwork, Technical drawing and religious education. Training programs and courses in physical courses such as welding and plumbing are crucial tools which can be taught to the youth, and thus encourage self-sufficiency.

Findings on education reflect that quality is always better than quantity, in ensuring quality, school subjects offered in the schools are not stimulating for students, and therefore are leading to demotivation and consequently high dropout rates.

<u>Together Action Group (TAG)</u>

TAG is an NGO which operates in Westbury, the centre mainly assists young adults through the pursuit of skills development. The facilities runs an after school programme, which bridges the gap of schools, particularly regarding the after school programme. The most interesting aspect of the role of this organisation however is the restorative justice programme for young offenders, which works with young addicts, offenders involved in

criminal activities. The organisation used to work with the Sophiatown Police Station, instead of convicting young people to jails, they were sent to this facility where there would be a rehabilitation programme which would afford them a second chance to be re-introduced back into society, without a criminal record. The partnership between the police station and the NGO ended for unknown reasons, and this has subsequently led to a higher incarceration rates of youth offenders.

The organisation presents major opportunities for the advancement of educational initiatives for the community, however due to lack of funds; the NGO has been forced to cut down the sporting activities, such as the Road races and sports days. It has since then adopted a strictly educational focus which is facilitated by volunteers from University of Johannesburg and the community.

Figure 26:Together Action Group (TAG), located on Fuel Road Source: *Author, 2016*

Health and facilities

Westbury is home to one clinic, which is currently under construction; it is surrounded by two health facilities, Rahima Moosa Mother and Child Hospital and Helen Joseph Provincial Hospital. The new Westbury model clinic is still being constructed; in the meantime, the Westbury recreation centre is being used as a temporary clinic space.

Transformation Development Centre (TDC)

The TDC is located in the precinct of Westbury; it is also the Region B headquarters of Social Development. The TDC has been earmarked to be a world class social cluster, which will be both a tourist attraction and social pillar of development. The facility current houses various initiatives in the enclosed space, the Early Learning and Development centre, The Little Achievers day-care centre, Senior citizens facility, Library centre for children, food garden, sewing and skills development programmes. Unfortunately, one of the most important units, especially for Westbury, the Target Based Unit (TBU) – one which works with homeless children, is not located in Region B. This unit is most crucial in an area such as Westbury, where drugs have pushed many to a state of homelessness. Drug addicted youth, especially females have resorted to living in blanket houses, on the outskirts of the community, as a result of hopelessness regarding the state of their addiction.

Figure 27: Homeless people (mostly drug addicts) living next to Union stadium

Source: *Author, 2016*

The social cluster is earmarked for renovation and expansion; however for the organisation to impact, their role should not be limited to simply monitoring and co-operating organisations, but should be given authority to influence the running of the facilities. Currently the Child care unit simply ensures crèches are run accordingly, checking staff training and suitability, but should be given authority to enforce relevant authority to the

sub-par facilities, since they represent a credible authority, the Department of Social Development.

The social cluster, particularly the unit involving the social workers and community welfare has been accused of inaction by claims of most respondents, claiming that the social workers never leave the facilities to intervene in the community. They have been accused of 'laziness', whether true or false, the social development cluster needs major restructuring and improvement, not just aesthetically, but administratively. This is to ensure that the cluster is not just there to make the located look visually appealing, but to effect real change in a community which desperately needs change. The corridors of freedom improvement programme must not only expand current services, but also introduce new services, ones which operate with community organisations. Currently the centre is not fully engaged in community social affairs, the gap needs to be bridged through the introduction of social programmes which involve fieldwork and interaction with community members.

Abraham Kriel Childcare, Westbury campus

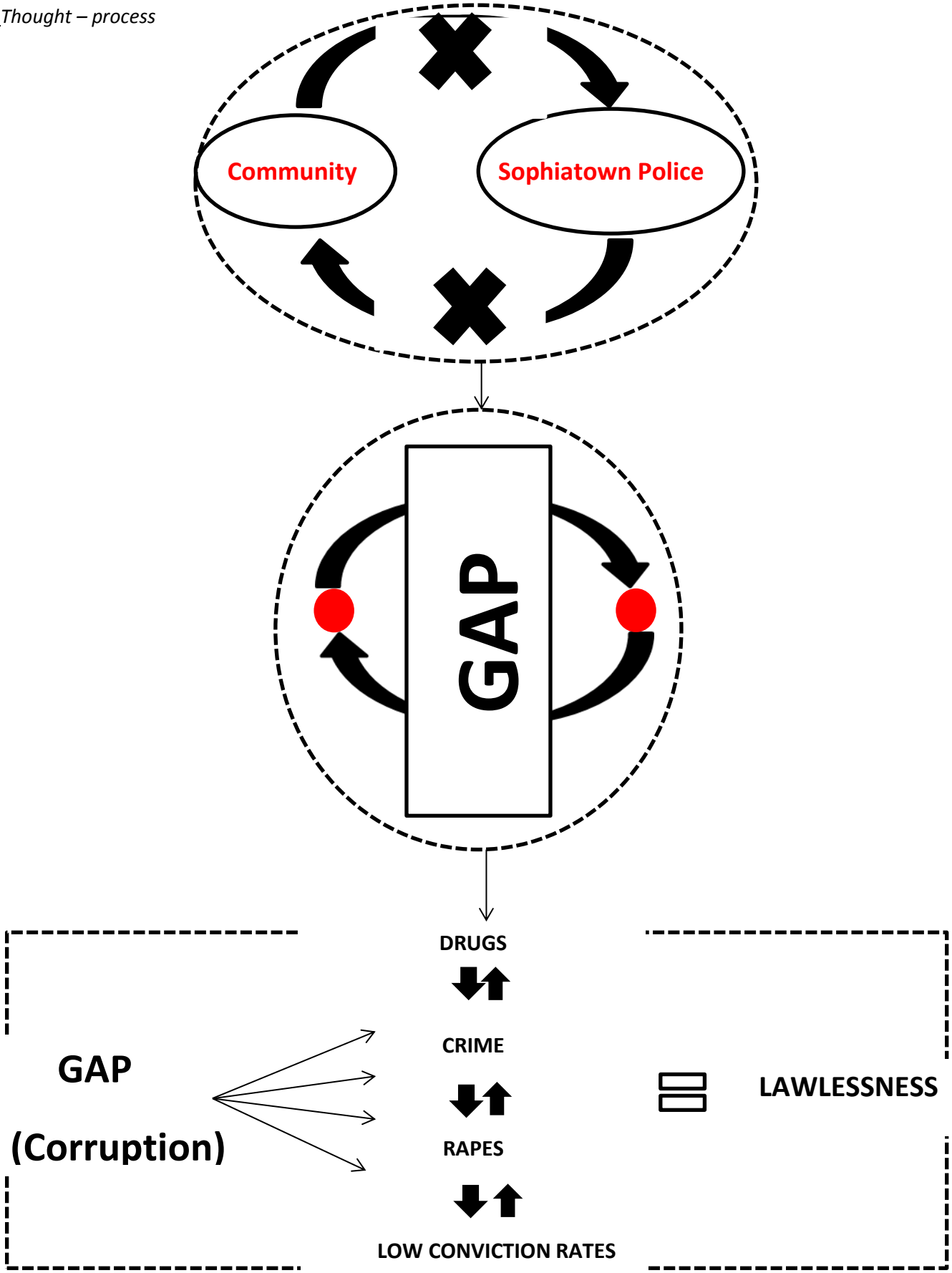
According to residents, this is one of the most impactful organisations in the community, together with TAG; the organisation involves a taking care of about 500 HIV/AIDS affected children in Westbury. The two types of HIV/AIDS programmes are Home based care and drop-in centres. The organisation assists the children with ARV treatments, social grants, counselling and so forth. The educational aspect of the organisation involves after-school programme and remedial teaching, and the organisation is thriving because in 2013, it achieved a 100% matric pass rate.

Figure 28: Abraham Kriel foundation, Westbury Source: *Author, 2016*

COLLABORATIVE SOCIAL PROJECTS

The Westbury problem –

Thought – process

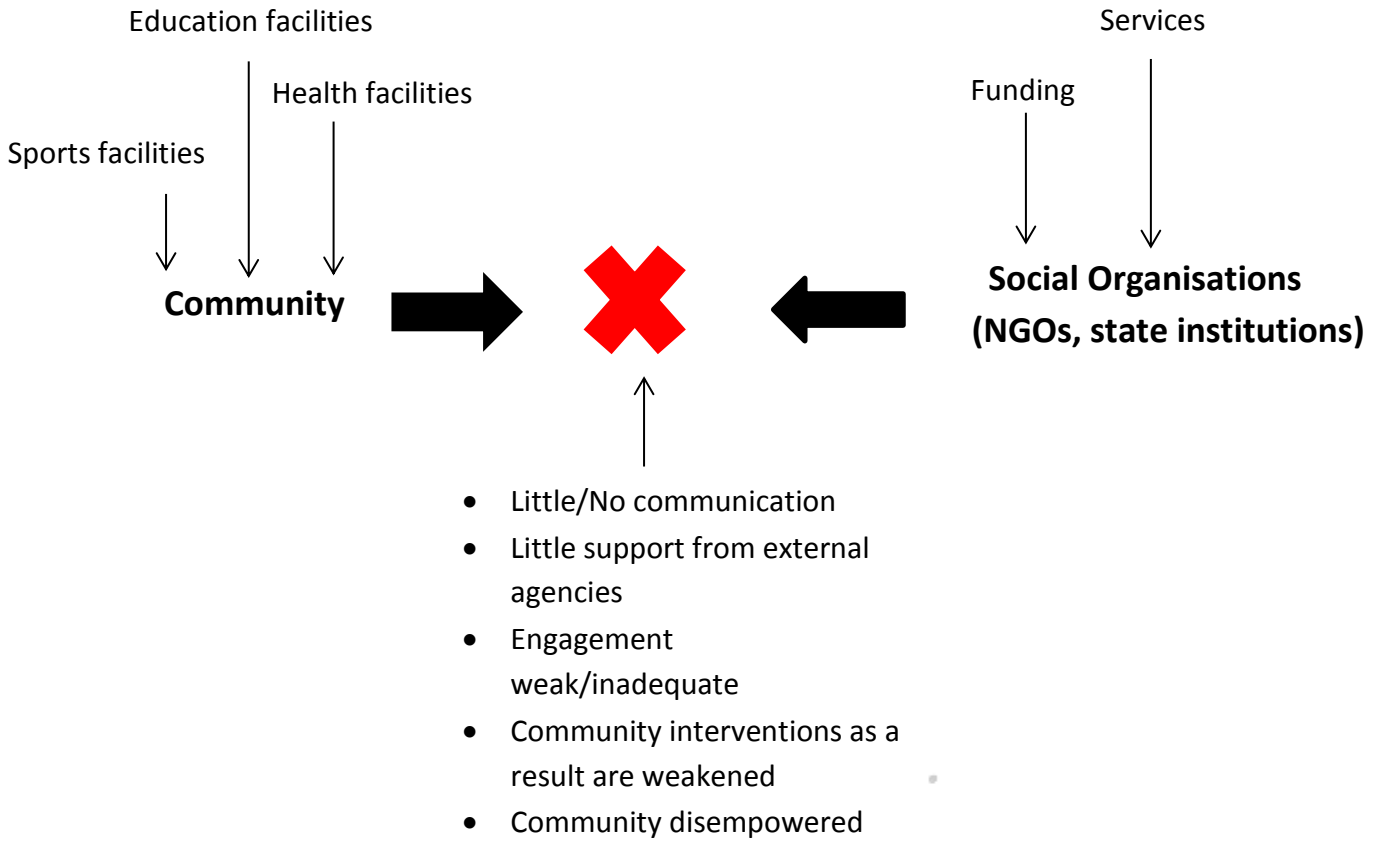


Social Infrastructure in the wider sense refers to any infrastructure which aims to enhance the social comfort and wellbeing of the community, they are services and networks which help individuals, families, groups and communities meet their social needs. The police station is a social organisation which aims to maintain order and protect people's rights by criminalising illegal activities and substances, in order for the sanctity and wellbeing of the people to be protected. It is one of the most important state institutions in any communities, and its role is vital to the sustainability of life in communities.

Westbury faces a major problem concerning suspected corrupt officials in Sophiatown police station, and at times entire departments suspected to be perpetually aiding the use of drugs, weapons and social degradation.(Respondents 2, 3, and 4) Many protests have taken place over a period of 5 years, with angry residents taking to the streets to boycott the so called corrupt Sophiatown Police Station. During fieldwork, where the researcher conducted semi-structured interviews regarding social infrastructure in the community, many (approximately 85% of those interviewed, 13 out of the 15 respondents interviewed) expressed views on Sophiatown Police Station as being the reason for perpetuating the use of drugs and gangs. They explained that the use of social infrastructure, particularly education and sport facilities are compromised by the police station, because they take bribes from drug lords, therefore allowing them to freely sell the drugs, and recruit young boys and girls from schools and play areas. According to an SABC report (9 September 2016), a resident stated that the two alleged rival drug dealers in the community (suspected to be Keenan and Finch) are the ones allegedly responsible for the violence which has increased this year. The resident further stated that he allegedly saw the drug dealer being escorted by the Sophiatown Police to Campus Square, in order to deposit his money.

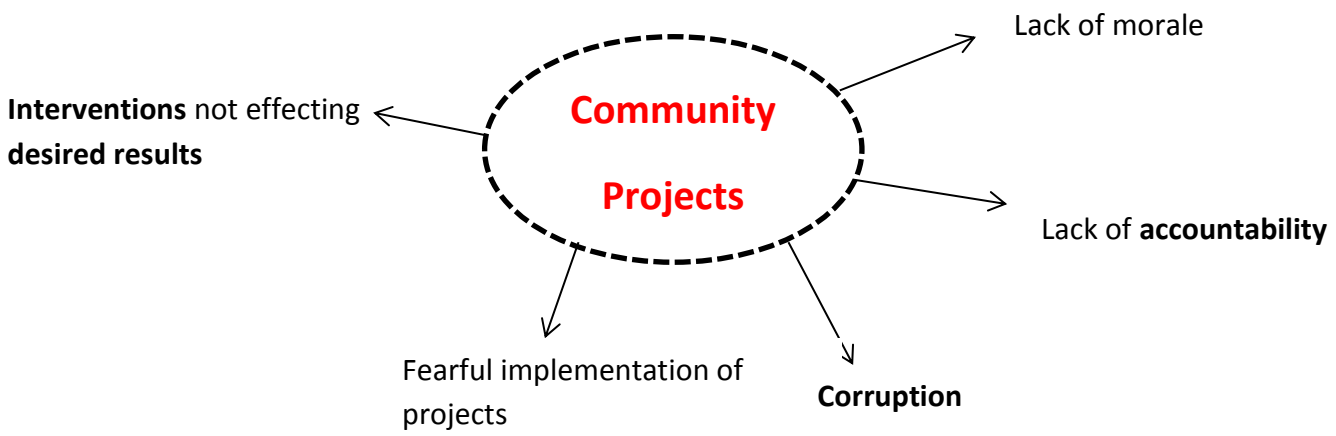
One can clearly see that this matter requires immediate action, not by local police but by the combined efforts of the Provincial and National Commissioner.

As seen from the above chapters, the challenge of social infrastructure in the 1, 03 km^2 site transcends far beyond administrative issues, but also touches on related institutions which are out of the jurisdiction of social infrastructure provision.



Based on community claims, inadequate/improper diagnostic of problem on the side of organisations and institutions leads to Inadequate/improper inadequate solution, thorough research into the area and surrounding networks is currently lacking. This means that the interventions will not be very effective, since there is a lack of contextual background.

COMMUNITY SOCIAL PROJECTS



Conclusion

The findings of this chapter reveal interconnections which the author has been exposed to, personally, from residents, community leaders and other stakeholders. The aim of the findings was to locate the topic in the wider scope of the research project, the author did this by highlighting that the development of appropriate standards for facilities in the community does not solve much, however , as the diagram illustrates, other pressing issues prevent the success of these initiatives.

As highlighted in the previous chapter, quantitatively, Westbury is well-resourced when considering the number of facilities; however, as a result of the socio-economic challenges which plague in the community, the effectiveness of the current and upcoming social infrastructure projects is compromised. This is particularly relevant for the CoF Plan, which is already underway in the precinct. The success of the plans for Westbury, as uncovered in the findings, is dependent on strong public participation with the community, at this point; the interventions need to be developed from the ground. These will require rigorous support from existing social facilities. Basically, the effectiveness of the plans will require strong collaborative efforts from the all stakeholders, with the largest and powerful being the residents of Westbury.

Chapter 6: Conclusion and Recommendations

Introduction

The research evaluates what is considered basic social infrastructure, however the research does not propose ideal standards for provision of infrastructure, and it reveals the complexities which surround the use of standards. In chapter 4, the research broadens by beginning to highlight the social, economic and political dynamics of the community. The author does this because he understands that this research topic is very crucial and valuable for future projects in the precinct, however, it would be short-sighted to consider and interrogate such as topic in isolation to the stark environment which it is investigated in.

In understanding perspectives and use of sports, health and education facilities, the author learned that the provision of the facilities is only a miniature aspect of human and infrastructure development of Westbury; these dynamics were highlighted in the findings chapter.

Chapter one basically introduces the research report, in which it questions what is considered basic social infrastructure in metropolitan areas, using Westbury, Johannesburg as the case study. The chapter mainly outlines and interrogates relevant literature which speaks on standards. The literature review section revealed that the ideal of standards is a complex issue, which is very useful as a yardstick for equitable distribution of facilities. Every municipality requires standards, however as seen from the interviews, community needs take precedence over standards. Setting standards requires thorough interrogation of context, implementation of these standards must consider what the community requires. Standards are developed to act as a measure of perfection for the provision of facilities.

Chapter two outlines the process which the author followed in the research. The research method involves two parts of the research problem, a) The two parts which involve the research are; a) Gathering of relevant data and literature and b) Technical Specifications of

gathered information. It also outlines the process which was followed in the gathering of data, particularly literature and statistics which relate to the standards.

Chapter three pertains to the case study area, Westbury, Johannesburg. This chapter is relevant in that it is about collecting contextual information of the precinct, this involved interrogating CoF (Empire-Perth corridor) documents, visiting the site on numerous occasions, interviewing city officials, carrying out discussions with residents, community leaders and activists. The chapter exposes the many complexities which challenge developments, and also discusses the proposed CoF Westbury Strategic Area Framework. The main aim of the chapter is to understand the precinct perceptions, at ground-level, and the state-level. The gap that exists between the two levels is the probable cause of the disjuncture between these two stakeholders.

Chapter four is the findings of the research, relating and picking up from chapter three. The chapter reveals and broadens the scope of the research topic by exposing the thoughts, ideals and opinions given by the stakeholders which are mainly; residents, the state, NGOs and community social agencies.

This last chapter concludes that the determination of 'basic' or appropriate' standards for social infrastructure is possible, however due to the complex nature of our inherited spatial legacy and unequal provision of facilities, it is not possible to develop standardised standards which cut across neighbourhoods. The structure of neighbourhoods does not allow for municipalities to standardise provision, however it is necessary that standards adequately respond to the historical injustices. Priority, as highlighted in this document, must be given to areas previously disadvantaged because when assessing standards in the traditional northern suburbs versus the previously black and coloured areas, the infrastructure gap is very astounding, and thus requires immediate attention. In the case of Westbury, Johannesburg, standards of maintenance are crucial to the advancement of the community, since most of the infrastructure has not been maintained, replaced or upgraded. However as mentioned in the previous chapter, the priority list of challenges is long and at this point in time, mere provision of facilities will not change the socio-economic state of the community.

Recommendations

Figure 29: Overall Precinct Framework & Projects Source: *Westbury SAF (2014)*

Sport

The development framework of Westbury is very noble, considering that the plan initially maximises on the community's strategic location and the access routes which link the precinct to major transport and economic nodes. One of these is the sports cluster which is set to include a number of various sporting facilities. The cluster is near a major road connecting far western areas to Westbury and the inner city; this presents major opportunities for the development of the cluster into a model sports hub. The success of this cluster lies in the flagship partnership projects which will be formed after operations in the facility begin. One of the most important aspects in the operation of facilities is responsibility and accountability; these aspects ensure longevity and sustainability. More than leadership, Westbury facilities are plagued by management which is idle, incompetent and not accountable for their actions. This sporting facility will require a stringent administrative system which seeks to reduce gaps of corruption and embezzlement. This

can be achieved by developing a strategic plan of accountability and concise division of responsibilities.

A notable feature of the parks in Westbury is concrete flooring; many of these are mainly used by children under the age of accountability, meaning that without supervision, they are at risk of getting hurt if they fall to the ground. Concrete flooring requires little/no maintenance; however grass/carpet flooring materials are useful alternatives which turn a concrete block into a useable and enjoyable public space. In a high crime area, such as Westbury, it is crucial in designing public spaces that they do not become privatised, or separated from people through high wall and fences. However none of the parks have some sort of enclosure, and this needs to change because many of children that use the parks do not have parents directly watching their activities, a fence subconsciously acts as a barrier to the busy streets or sidewalks.

The issue of choice and variety needs to be addressed when planning for sport infrastructure in this particular community because it is diversified in nature. Soccer is the main sporting activity among the boys; however the girls do not have any activities to keep them occupied. As mentioned in the previous chapter, many have the high teenage pregnancy rates to this, and I agree with this statement. This may be so, but in planning forward, we must acknowledge that both boys and girls require sport interventions which cater to their general interests and needs. While it may be true that there are more girls than boys in Westbury, according to census (2011), the sporting cluster must accommodate both genders in an attempt to counter teenage pregnancies and idleness.

Figure 30: Examples of sporting activities to add to the sport cluster for both boys and girls

Education

One of the most important findings in education facilities relates to the after school programs/extra-curricular activities. The author discovered that since primary school, up until high school, the extra-curricular activities are not a priority for the students. There are sports days held in the community, but a culture of using sports and schools as a deterrent from drugs and alcohol is not instilled in the local schools. I believe that many children and young adults are involved in these things because there is no other alternative, when a tight schedule that involves schools and sports facilities is created, we will see a decrease in the use of drugs/alcohol among school children. I recommend that interventions involving any school in the community centre their focus on developing solid after school programs, this will be a stimulating activity to the children and will eventually become an alternative to aimlessly walking the streets after school.

Collaborative efforts between schools and related social agencies need to be established, if one is to effect any real change in the community. For example Together Action Group runs an after school program for school children, during which they are able to do their homework with the assistance of student tutors. These efforts need to be increased throughout the community, possibly the schools can work with the NGO to expand this service to other students.

The Massive Open Online Varsity (MOOV) e-learning programme offers international courses online is great opportunity to address the issue of unemployment and low literacy rates. The facility is located behind the Westbury Library and Recreation centre; however there is no signage outside signalling the presence of the facility. Community members are unaware of the programme, only a few individuals nearby are aware of this development. Such initiatives I believe need to be implemented in collaboration with existing educational institutions, for example, Westbury High School students need to be informed about such a programme, so that those who do not attend college after graduating are able to register for courses. One resident expressed that;

"*The programme does not accommodate users who do not know how to use computers; they simply open the course and expect you to learn quickly".*

In the provision of adequate education, the question of 'adequate' comes into question, school subjects have been standardised to maths, English, Afrikaans, History, etc. The high dropout rates should be an indication that the system is not accommodating all the learners. A viable alternative are the N courses, which are issued by the National Department of Education. The technical courses are offered by TECHNISA and they range from N1 – N6, the courses range from business, Tourism, engineering courses, mining and health. Entry into these courses requires a completion of standard 7(grade 9) subjects. Access to these technical courses is crucial for the many disenfranchised youth, considering the unemployment rates of the community, the advancement of these skills among youth dropouts, matric graduates and those without any education will be a major leap in fighting poverty, crime and idleness.

Westbury is strategically located near higher education institutions, particularly the University of Johannesburg and the University of the Witwatersrand (WITS); this creates opportunities for tutoring and mentoring programmes to benefit the school pupils of the community. WITS society called Uplifted Life runs a pilot tutoring program in Protea and Zola, with two high schools currently under their leadership and mentorship, the project involves students teaching Maths and English on Saturday at the high schools, and this will be done over a period of 3 years, taking the grade 9 pupils until the completion of matric. Such initiatives I believe can be implemented for the high schools in Westbury and surroundings. Collaboration between WITS and UJ student societies will facilitate the inception of such community projects, with the assistance of government institutions (i.e. DoE which are willing to fund the projects, e.g. transport, food, etc.

Sport

One of the findings noted was that sports facilities are inadequate in the community, and this excludes public spaces. In an effort to promote after school programs which keep the children busy after school, I noted that there is a need for collaborative efforts between schools and sports facilities in order to achieve this goal. Sport in early child development is useful in enhancing motor skills and educational potentials, and it is crucial in teaching children about:

- Competition (winning/losing)

- Honesty
- Integrity
- Fair play

A study done in Namibia revealed that students involved in sports were more likely to pass in their grade 10 examinations, other studies support this claim. It is evident that educational success does not necessarily mean increased provision of facilities, but rather collaborative efforts between the two to develop an integrated programme of development.

Finally, The Sophiatown South African Police Service (SAPS) has a big role to play in combating crime by working closely with the community residents, and developing integrated programmes which seek to reduce youth violence. The SAPS needs to be actively organising random school searches which span over a long period of time, the longevity of the programme will determine its effectiveness in creating awareness and instilling a vision of safe schools in Westbury, for there is no success without succession.

Figure 31: Sophiatown South African Police Services (SAPS) Source: *Author, 2016*

15 out of 15 respondents claimed that the Sophiatown Police Station has turned a blind eye to the matters of Westbury, and as a result many innocent lives have been lost and many families destroyed. The prospect of providing more infrastructures in the community targeted to enhance people's livelihoods will inevitably fail, if the social issues of the area are not dealt with immediately. This matter requires immediate action, not by local police but by the combined efforts of the Provincial and National Commissioner. Without this

intervention, future social infrastructure efforts will not be effective in making a difference in the people's lives.

Health

As has been established, quantitatively, there are adequate health facilities in the precinct. Currently a model clinic is being constructed, one which can accommodate more than the population size of approximately 14 000 people. The high number of teenage pregnancies calls not for more facilities, but for the health clinic to get involved in the development of teenagers by educating them in primary and high schools. A programme, in collaboration with schools needs to be developed, one that will do monthly check-ups, blood donations, counselling services, drug addiction assistance and tertiary education opportunities in the health sciences field.

The improvement of health infrastructure is already underway in Westbury, and this seen through the construction of the model health facility along Kretzchmar Street. The facility will be one of two hospitals in close proximity to the precinct, Helen Joseph Hospital and Rahima Moosa Mother and Child Hospital. Despite this, residents of Westbury (mainly the youth) lack proper information about health measures to protect against HIV/AIDS and pregnancy, among many other issues. Thusong centres have been earmarked for previously disadvantaged communities, Westbury is a previously disadvantaged community, which one would not perceive as deprived from an aesthetic point of view. The community deeply requires a Thusong centre, as this will enable the people to have access to government services in close proximity.

<u>Way Forward</u>

All stakeholders concerned with the community of Westbury must look through the contents of this report because it offers a peak into the socio-economic dynamics of the precinct. Thereafter service providers must seek to identify the related people and organisations that may assist in implementing holistic and contextually responsive interventions. One must always be cognisant of the importance of the participation community members as a crucial ingredient in success and sustainability of any community project.

Developing social infrastructure standards for communities require rigorous examination of contextual needs, which should also be supported by; demographics, updated data, consultations and field studies. Provision of social infrastructure must be informed by the above points, however provision should always take place on notice of relevant institutions, so that any further developments in related developments take note of prior changes.

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Annexures

PARTICIPANT INFORMATION SHEET

Research question: Case Study Westbury, Johannesburg: What is considered basic social infrastructure provision for Health, Education and Sport facilities in South African Metropolitan Areas, considering the proposed Corridors of Freedom plan?

Introduction

I would like to invite you to participate in this project, which investigates the norms and standards of social infrastructure in Johannesburg, assessing the viability of the proposed Corridors of Freedom plan against current norms and standards for provision in Westbury, Johannesburg

What will you have to do if you agree to take part?

1. We will arrange a time to meet, which is convenient for you and in your own space if that is appropriate.
2. There will be one, single interview with myself during which I will ask you questions from the short questionnaire. The interview is expected to last no longer than half an hour and is a one-off event.
3. When I have completed the study I will produce a summary of the findings which I will be more than happy to send you if you are interested.

Do you have to take part in the study?

No, your participation in this project is entirely voluntary. You are not obliged to take part, you have been approached as a planner in the municipality/active member or resident of the Westbury with a view that you might be interested in taking part; this does not mean you have to. Although your participation would be greatly appreciated, and your contribution will greatly enhance the research significantly. If there are questions in the questionnaire which you do not feel are appropriate to the study, you are not forced to answer them, simply inform me and will skip the selected questions or simply stop the interview/questionnaire. I would like to audio-record this interview

Please feel free to contact me (Ralph Ngoma), or my supervisor (Neil Klug) if you have any further inquiries/questions about the study

Contact details:

Ralph Ngoma: email. 721517@students.wits.ac.za

Neil Klug: email. Neil.klug@wits.ac.za landline no. 011 717 7729

SURVEY (RESIDENTS ONLY) - Sport facilities

1. Have you heard of the **Corridors of Freedom plan?**
   YES ☐ NO ☐

2. If yes, what have you heard?

   _____

   _____

3. Before going forward, please look at an extract from the corridors of freedom plan for Westbury

4. Do you think there are adequate sports facilities/centres in this community for the youth?
   YES ☐ NO ☐

   Please explain:

   _____

   _____

   _____

5. What do you think is the impact of having adequate sport centres for the youth of Westbury?

   _____

   _____

   _____

6. Do you use any of the sport facilities?
   YES ☐ NO ☐

7. If yes, which one/s

   _____

_____ _____

Signature Date

QUESTIONNAIRE (City officials/Spatial planners)

1. What are the current norms and standards for the provision of social infrastructure in Johannesburg?
   ☐ Department of Education
   ☐ Department of Health
   ☐ Department of Social Development

2. Which standards did you utilise in the production of the Corridors of Freedom document?

3. How were these standards developed?

4. As a practitioner, do you think that they are appropriate in Johannesburg?

   ☐ YES ☐ NO

5. Are the standards adequately responding to the needs of expanding communities of Johannesburg?

PARTICIPANT:

_____

Signature Date _____

Researcher (Ralph Ngoma) – 084 486 6281
Alternative number: 011 717 70090
Supervisor (Neil Klug) – 011 717 7729

FORMAL (SIGNED) CONSENT FORM – SEMI-STRUCTURED INTERVIEW

I hereby confirm that I have been informed by the student researcher of the purpose, procedures, and my rights as a participant. I have received, read and understand the written participant information sheet. I have also been informed of:

- The nature and the goals of the research
- Aim and purpose of research
- My contribution as a participant to the overall research

☐ the nature of my participation in the form of a semi-structured interviews
☐ the place and duration of the study
☐ the reasons for why I was selected to participate in the study
☐ the voluntary nature, refusal to answer, and withdrawing from the study
☐ no payment or incentives
☐ no loss of benefits or risks
☐ anonymity
☐ confidentiality
☐ how the research findings will be disseminated

I AGREE/DO NOT AGREE to audio-recording during the interview

PARTICIPANT:

_____
Printed name

_____
Signature Date _____

SCHOOL OF ARCHITECTURE AND PLANNING
HUMAN RESERCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE
PROTOCOL NUMBER: SOAP94/24/06/2016

PROJECT TITLE:	Case Study Westbury, Johannesburg: What is considered basic social infrastructure provision for Health, Education and Sport facilities in South African Metropolitan Areas, considering the proposed Corridors of Freedom plan?
INVESTIGATOR/S:	Ralph Ngoma (Student No. 721517)
SCHOOL:	Architecture and Planning
DEGREE PROGRAMME:	BSc Honours Urban and Regional Planning
DATE CONSIDERED:	19 July 2016
DECISION OF THE COMMITTEE:	APPROVED
EXPIRY DATE:	19 July 2017

CHAIRPERSON _____
(Professor Daniel Irurah)

DATE: 27 July 2016

cc: Supervisor/s: Neil Klug

DECLARATION OF INVESTIGATORS
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to endure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

Signature _____ **Date** 27 July 2016

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Memorandum

TO	:	Ralph Ngoma University of the Witwatersrand Bachelor of Science in Urban and Regional Planning
FROM	:	Enoch Mafuyeka Deputy Director: Employee Relations and Development
DATE	:	06 July 2016
SUBJECT	:	**RESPONSE ON THE REQUEST TO CONDUCT A RESEARCH ON TOPIC:" WHAT IS CONSIDERED BASIC SOCIAL INFRASTRUCTURE PROVISION FOR HEALTH, EDUCATION AND SPORTS FACILITIES IN SOUTH AFRICA METROPOLITAN AREAS, CONSIDERING THE PROPOSED CORRIDORS OF FREEDOM PLAN?"**

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1. The above matter refers to the letter received on the 22 June 2016 in which a request was made to conduct a research in the City of Johannesburg.

2. The City of Johannesburg hereby grants permission to conduct the above-mentioned study, on the provision that proof of granting ethical clearance be provided prior to commencement of the study.

3. NB. On completion of the study, a copy of the research report should be submitted to the City of Johannesburg in honour of your commitment.

4. The City of Johannesburg wishes you the best during the period of research.

Please do not hesitate to contact us if we can be of further assistance.

Kind Regards

Enoch Mafuyeka
Deputy Director: Employee Relations and Development
Tel: (011) 407 -7250
Fax: (011) 339 – 5721
Email: Enochm@joburg.org.za