University of Pretoria

An investigation into the development potential of student accommodation in the Hatfield Student Village

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Treatise submitted in fulfilment of the requirements for the degree of

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in the Faculty of Engineering, the Built Environment and Information Technology

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Department of Construction Economics

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Declaration

I, the undersigned, hereby confirm that the attached treatise is my own work; and that any sources are adequately acknowledged in the text and listed in the bibliography.

I accept the rules of the University of Pretoria, as well as the consequences of transgressing them.

This treatise is submitted in fulfilment of the requirements for the degree of MSc Real estate at the University of Pretoria. It has not been submitted before for any other degree, or for examination at any other University.

Signature of acceptance and confirmation

Anrike Coetzee

17 October 2019

Abstract

Title of treatise	:	An investigation into the development potential of student accommodation in the Hatfield Student Village
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Over the past decade, the demand for student housing in the Hatfield Student Village, situated between the Hatfield and Hillcrest campuses of the University of Pretoria, has grown to a point, where the demand greatly overshadows the supply. Local developers, who recognised the need for housing among students, have made great progress in filling this gap. It has come to a point, where the University of Pretoria has the second largest supply of student housing in South Africa, after the University of Cape Town.

This study has sought to determine whether there is still development potential for student housing in the Hatfield area, and also to develop a 10-year masterplan for the future development of accommodation in the Hatfield and Hillcrest areas.

Prominent development companies in the student-housing industry were contacted; and interviews were conducted with 8 high-ranking individuals in 8 different companies. The interviews determined the developers' appetites for the further development of student accommodation in an area, which is already highly competitive. Interviews were also conducted with various role-players in Hatfield, such as the CEO of Hatfield CID, as well as prominent Estate Agents working in the area. Further data were collected on the various occupancy levels in the existing student accommodation, in order to determine the need for future development.

The results showed that developers have developed the area to supply about 11 315 beds to the market. With 4 178 beds in line to enter the market within the next 5 to 10 years, the supply will be much larger than the demand. Opportunity must be given to the economy to

recover; and thereafter, further development of student accommodation must concentrate on providing units for low-income students.

A 10-year masterplan, divided into short-, medium- and long-term time periods, provides a potential road-map to follow, for the future of student accommodation in the Hatfield Student Village. The plan elaborates on future development and the type of development, which would ensure a successful student community for the University of Pretoria.

Keywords: *student accommodation; Hatfield; development potential; student housing; Masterplan.*

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NOMENCLATURE

ABBREVIATIONS AND ACRONYMS:

DHET	Department of Higher Education and Training
CID	City Improvement District
HEI	Higher Education Institution
ICT	Information and Communications Technology
IEASA	International Education Association of South Africa
JV	Joint Venture
LSM	Living Standards Measurement
NSFAS	National Student Financial Aid Scheme
PBSH	Purpose-Built Student Housing
PICC	Presidential Infrastructure Coordinating Commission
PPP	Public-Private Partnership
RSDF	Regional Spatial Development Framework
SS	Sectional Title Scheme
UCT	University of Cape Town
UP	University of Pretoria

DEFINITIONS:

Accredited:	Officially recognised or authorised (Oxford, 2001).
Business rescue:	Business rescue is a procedure aimed to facilitate the rehabilitation of a financially distressed company. The company is placed under the temporary supervision of a business-rescue practitioner, who manages the affairs of the company (STURNS, 2018).
City Improvement District (CID):	“A non-profit organisation operating within a defined geographic area within that property owners agree to pay a levy for supplementary and complementary services set to enhance the physical and social environment of the area.” Also known as a Special Ratings Area (SRA) (City Improvement, 2009).
Configuration:	A method for the arrangement of space (Oxford, 2001).
Construction cost:	Costs incurred when developing a property, relating to the physical construction activities, for which the main contractor is responsible. Construction cost excludes costs, such as professional fees, marketing cost, cost of capital, legal fees, plan-scrutiny fees and town-planning fees.
Development Potential:	Capable of happening or being used, or make, or become bigger or better (Oxford, 2001).
Hatfield Student Village:	An area defined by Hatfield and Hillcrest, which is home to the resident students of the University of Pretoria.
ICT:	“ICT refers to technologies that provide access to information through telecommunications. It is similar to Information Technology (IT); but it focuses primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication media” (TechTerms, 2010).
Landlord’s market:	This occurs when there is a very high demand for rentable space and an extremely low vacancy rate.

	This allows landlords to drastically increase their rentals for the available supply (Cloete, 2016).
Liquidated:	To close down a business and divide the value thereof between the creditors (Oxford, 2001).
Operational cost:	The operational cost is the cost incurred, usually monthly, to keep the building operational during its life cycle. This will typically include costs such as utilities, salaries, maintenance and marketing.
PICC:	"A campaign that promotes infrastructural development initiatives across South Africa, whilst show-casing the tangible benefits in terms of job creation and mainstreaming access to social services" (Economic Development Department, 2018).
Tenant's market:	This occurs when there is a very slow demand for rentable space and a high vacancy rate – so much so, that landlords are lowering their rentals, in order to make their space more attractive to potential tenants (Cloete, 2016).
Vacancy rate:	Vacancy rate is the ratio of empty rooms, units, or in the case of commercial property, the space that is not rented out to tenant/tenants, in relation to the total rooms, total units or total space available in the building.

CHAPTER 1 - **INTRODUCTION TO THE STUDY**

1.1. INTRODUCTION

Universities across the world have some of the largest property portfolios (Grabar, 2018; Greenwood & Adams, 2018; Small, 2018), and the University of Pretoria (UP) is no exception. UP was established in 1908; and over the past 110 years, it has purchased a large number of the properties in the area surrounding the Hatfield Campus in Pretoria. These properties include educational space, office space and residential accommodation used to enhance the services the university has to offer. The UP Department of Facilities is attempting to determine the development potential of student accommodation in the area known as the Hatfield Campus Village.

This study will aim to determine the development potential of student accommodation in this Village. The following chapter will broadly establish the background of the Hatfield area and its anchor institution as well as the research elements which will be considered for the study.

1.2. BACKGROUND

The Hatfield Campus Village is located between UP's Hatfield and Hillcrest campuses. This area is identified by its high-density student accommodation, multiple shopping destinations and various residential homes, largely owned by UP. It is also a major business hub located just East of the Pretoria City Centre (City of Tshwane Metropolitan Municipality, 2017).

Universities are considered anchor institutions. Once the institution has taken root in an area, it is almost impossible for it to move to a different location. Their spatial immobility has resulted in student-oriented communities developing around their fixed locations. Over many years, universities build up a large property portfolio; as they expand to accommodate the growing influx of students (Maurrasse, 2016).

In order to accommodate the masses of students flooding to Hatfield each year, the University has to provide enough student accommodation to host the students that do not live close to UP. The number of students enrolling per year increases annually; but the amount of student housing provided does not, thereby essentially creating a lack of supply to satisfy the demand (University of Pretoria, 2017).

There is no statistical database that states how many beds are available in Hatfield to be leased by UP students throughout the year. With no standardised leasing strategy among student-housing facilities, public and private, there is no way to determine the effectiveness and development potential of Hatfield's student accommodation.

It is for this reason that the Facilities Department of UP is looking at how best to enhance the potential of student accommodation in the Hatfield Campus Village (Adendorff, 2019).

1.3. RATIONALE OF THE RESEARCH

The UP is 110 years old (University of Pretoria, 2018 (A)). When the region around it originally started to develop, there was no concept of how much the area would grow within the next century. Due to the vast growth experienced by Hatfield, the available area has been overwhelmed by masses of students coming to study every year. Although, there has been major growth in the provision of student accommodation in the past ten years (Adendorff, 2019), there is no study that has determined the development potential of student accommodation in the area. Currently, the student accommodation available in Hatfield, each follows a different rental strategy than those owned by UP. These differences will be explored in Chapter 4: Data Analysis and Discussions.

In order to determine how best to move forwards in the development of the Village, it is important to identify what student housing is currently owned by UP and what could possibly be purchased in the near future, in order to fully develop the potential of accommodation in the area, and to improve the use of limited space. It would be advantageous to determine whether any other accommodation properties – or properties fit to be converted to accommodation – need to be purchased by the UP, and then be brought under the same rental strategies, as those of the existing UP properties.

1.4. PROBLEM STATEMENT

The preliminary investigation indicates that it would be advantageous to the UP to determine their current student accommodations' development potential, as well as to determine what other potential property acquisitions would improve the student housing provision in the Hatfield Campus Village.

The problem statement for this study is the following:

What is the development potential of student accommodation in the Hatfield Student Village?

Due to the lack of Greenfield areas within the Hatfield CID, it is important to use the existing buildings to their maximum potential. If new properties are developed for student accommodation, usually Brownfield development, it is imperative to develop it in the best way possible, in order to optimally use the space available, and to build, according to the Spatial Development Framework of the area.

The Greenfield and Brownfield developments can only be done to the highest and best potential when there is a structured and well-defined masterplan developed for the area.

1.5. RESEARCH QUESTIONS

The research questions of the study are as follows:

1. What is the current need for student accommodation at the University of Pretoria?
2. What are the current rental and management strategies of privately owned student accommodation compared with those of the University?
3. What 10-year masterplan must be implemented, in order to promote a more effective student accommodation model in the Hatfield student Village?

1.6. AIM AND OBJECTIVES OF THE RESEARCH

The aim of the research is to conduct a due diligence study of all the university- and privately-owned student housing properties in the Hatfield Campus Village. The study will be used to determine the most effective masterplan for future student accommodation implementation at UP.

The research objectives are the following:

- Conduct a literature review to determine whether any other universities have done a similar study on their provision of student accommodation.
- Analyse the current capacity for student housing (residences, flats, and houses belonging to UP).
- Determine what the need is for future development with regard to a 2030 vision of the facilities for postgraduate students.
- Source rental and other accommodation models implemented by private developers.
- Compare the developers’ models with the current University models.

- Determine the number and location of properties that have been offered to the UP to purchase and compare with the need for student accommodation, as calculated above.
- Devise a strategy over 10 years for the possible construction or purchase of student accommodation, and the creation of joint ventures with developers or private-property owners for the optimal student housing plan.

1.7. RESEARCH PARADIGM AND PHILOSOPHY

This study is a pragmatist study which will comprise a combination of qualitative and quantitative research approaches. This study will be guided by practical considerations, rather than ideals.

1.8. IMPORTANCE OF THE RESEARCH

The UP's Facilities Department is aiming to do a due diligence study of the entire Hatfield Student Village, in a joint venture with the Hatfield City Improvement District. This study is only the first step in this procedure, seeking to ascertain where the situation of student accommodation in the area is fully evaluated, as well as to provide an enhancement strategy.

1.9. LIMITATIONS, DELIMITATIONS AND ASSUMPTIONS OF THE STUDY

This study will rely on the Tshwane Municipality's website to obtain the information required for the various properties in the Hatfield area. If there are errors on this website, the errors will reflect in the study. It will be assumed that the information is correct. In 2016 and 2017, there was a major boom in the construction of student accommodation in the Hatfield area. The construction of high-rise student housing has showed signs of slowing down, which could indicate that there is a reduced interest in student accommodation in the Hatfield area. This could influence the results of the study. This study will be done over the course of one year.

1.10. PROPOSED RESEARCH APPROACH AND STRATEGY

The research will start with a comprehensive literature review, to identify any previous or similar studies done at other universities or colleges. An investigation will be implemented, in order to determine the maximum student accommodation capacity in the Hatfield Student Village, that being private or public housing.

Once the existing capacity in the area has been determined, the probability of new development will be discussed. This section will determine whether it is a feasible idea to construct more student accommodation, and for whom such development would be the most important (post-graduate students, lower-income students, and other). Future development up to 2030 will be considered.

For the following step, ethical clearance will be required. It will be beneficial to the study to have discussions with some of the local private developers that are still active in the Hatfield area, with regard to their rental accommodation models. Discussions will refer to the terms of their lease contracts, their social and educational provisions within such facilities, as well as their plans for future development.

After the discussions with private developers have been completed, their models will be compared with that which the university is currently providing to their students with regard to housing, social and educational facilities. The zoning of each of the university's facilities will also be investigated, in order to ensure correlation between the existing zoning and the existing development.

Finally, the need for student housing will be determined from all the data collected, as discussed above, and a 10-year implementation plan will be devised, in order to create a strategy for the future construction, purchasing and re-development of student housing. Due to the existing presence of private developers and owners in the area, joint ventures could be a major consideration for the effective, efficient and appropriate development of the student housing community around the UP.

1.11. CONCLUSION

The UP is an anchor institution; and it will remain an anchor in Hatfield. Potential development must create and maintain a sustainable, student-friendly and safe environment for all the future minds that would be passing through. It is therefore imperative to determine how best to further develop the Student Village surrounding UP, in order to create an optimally functioning zone with adequate accommodation for all the students.

CHAPTER 2 - **THE LITERATURE REVIEW**

2.1. INTRODUCTION

Chapter 2 will provide a broad foundation on which the research of this study will be based. It is important to consider the literature available, in order to determine the most prominent aspects, upon which the research and the data would be based.

This chapter will aim to explore more of the research problems that were identified in Chapter 1, by considering previous studies done on similar topics, and identifying where there is a lack of information.

2.2. STUDENT ACCOMMODATION IN SOUTH AFRICA

There is a direct relationship between the number of students enrolled in public tertiary educational institutions and the amount of student accommodation that needs to be provided around those public institutions. The literature on student housing is scarce, especially literature on South African student accommodation (Ong, et al., 2013; Department of Higher Education and Training, 2011).

Universities are considered anchor institutions; since they play a vital role in their local economies and communities. Due to their spatial immobility, they remain in their geographical locations, even as the environment changes around them. They are extremely vital assets to their local neighbourhoods; and they have a role to play in their towns, cities and regions. They are expected to aid their communities and to become active participants in the amelioration of their surroundings (Maurrasse, 2016).

Rising student numbers and increased competition from national and international competitors have resulted in universities investing in higher quality, mixed use and multi-faceted environments around campuses, in order to achieve long-term strategic goals (Kershaw, 2017).

As was discussed at the Student Housing Symposium at the University of Pretoria in 2016 by the, then, Higher Education and Training Minister, Dr Blade Nzimande, the entire South African tertiary education system is facing challenges in providing housing for its students; and this challenge has been present and consistent ever since 2011. This is due to insufficient funds (South African Government, 2016; Department of Higher Education and

Training, 2011). There is a demand for quality affordable accommodation at every South African higher educational institution (Booysen, 2018). Dr Nzimande said that, although the government is prioritising accommodation for students, it needs support from the private sector. The current student housing supply is only servicing about 20% of the people that need accommodation while they are studying (Respublica, 2015).

In a presentation given by Dr Iain L'Ange, the Principal Researcher of the Ministerial Committee and Executive Director of Infrastructure, Operations and Finance, for the *Ministerial Committee for the Review of the Provision of Student Housing at South African Universities,* he said that, "It is important to understand university residences, as being much more than just bricks and mortar. They are social structures located in learning institutions that in turn are embedded in a variety of South African communities. These communities bring with them into the universities and residences the complete range of socio-economic problems that exist in society. There remain limited understandings between individuals and communities from different racial groups, not to mention gender, impacting upon the ability of universities to create mixed living spaces. There are huge differences between the expectations of affluent or middle-class students and those of poorer students from families with little experience of post-school education. Universities are part of our communities; and they share all the problems and possibilities of society; and it is in this context that some very difficult choices will have to be made with regard to the provision of student housing" (L'Ange, 2017).

From 2013 to 2016, a combined amount of R2.3 billion has only provided 9 000 additional student accommodation beds. Every year in January, 450 000 students migrate to the 4 major cities of South Africa – Pretoria, Bloemfontein, Cape Town and Johannesburg – to study at tertiary educational institutions. Some of these students would be able to stay at home; but most of them need a place to live that is close to the universities.

This has resulted in a shortage of housing for at least 200 000 students at tertiary educational institutions (South African Government, 2016).

Student accommodation is a relatively profitable sector, according to Redefine chief executive Andrew Konig; but it is not as profitable, as was originally thought. The "fees must fall" movement of 2016 has put major pressure on student-accommodation providers to provide high quality housing at lower prices (Cokayne, 2018). Recent trends have emphasised the importance of 'living-learning' communities, safety and security, more mixed and flexible housing forms, sustainable student accommodation developments, and greater consideration for the diversity of student housing needs (Department of Higher Education and Training, 2011).

This has resulted in a finite interest in developing student housing by private developers, placing more pressure on the existing structures to provide occupational space to the ever-growing student numbers.

According to the Department of Higher Education's (DHET) Annual Report for 2016, South Africa had 26 public Higher Education Institutions (HEIs) in 2016, with 975 837 students that enrolled with public HEIs. These public HEIs produced 203 076 graduates in 2016 – 11 552 more than 2015's 191 524 students, and 57 692 students more than those in 2009.

In 2016, two thirds of all the students enrolled at Public HEIs were enrolled through contact-mode education, at 65.4%, or 638 001 students. In 2016, the UP had 48 921 students enrolled for contact-mode education.

Student enrolment for the period of 2009 to 2016 was mainly for undergraduate degrees; whereas doctoral degrees increased by 10 981 students (104.3%), Masters' degrees increased by 3 567 students (31.0%); and Honours degrees increased by 17 371 (23.3%) students (Department of Higher Education and Training, 2018).

A global commercial real-estate investment firm in the UK, Jones Lang LaSalle, has reported that student accommodation became the largest sub-sector of non-standard real-estate investment in the United Kingdom in 2017 (McBride, 2017). The growth recorded in the higher education sector has led to a higher demand for student accommodation; while the inability of these higher educational institutions to accommodate the rising numbers of students has resulted in a greater dependence on the private market to satisfy this demand.

In the U.K. an average of 24% of students lived in higher educational institution's property. Similar results were found in the United States. This has placed major pressure on the private housing market located near these educational institutions (Ong, et al., 2013).

Student housing performs the practical purpose of providing extra places of residence to students. Investment in this housing sector also shows university administrators the potential advantage for their campuses (McBride, 2017).

The universities are expecting an increased growth in the number of students in the near future; and the building of new residences is consequently extremely important. Land available for such development by a university is extremely limited. It has become common practice to demolish old buildings and remove parking lots, in order to construct new buildings (Ong, et al., 2013).

Many institutions in South Africa have reached critical student-accommodation provision levels. This housing crisis is mostly affecting international and far-travelling students. In addition to this crisis, those students who find it difficult to acquire accommodation are over-charged with their rentals. When a student is lacking accommodation, or living in an unsafe environment, the student will not be able to excel at his or her studies. It is, therefore, essential for universities to provide enough accommodation to ensure the safety and success of their students (Mathebula, 2017).

A study done by the DHET in 2010 showed that South African institutions have a 19.8% residence capacity compared to the USA's 23.5%, Western Europe's 10% and Canada's 16.8% residence capacity. This same study showed that South Africa is the only country not regulated by some kind of national student-housing policies and regulatory frameworks. While this status has changed in 2015 with the introduction of the Policy of the Minimum Norms and Standards for Student Housing at Public Universities (Department of Higher Education and Training, 2015), many of South African residences have been constructed many years before the implementation of this policy, leaving this issue largely non-compliant (Department of Higher Education and Training, 2011).

From the report published by the DHET, it can be confirmed that there are significant arrears in the supply of student housing, and that students, in some instances, are staying in horrific conditions. Institutions have not been able to sufficiently invest in the maintenance of their infrastructure; and only a fleeting number of students are housed. Substantial investments are required, in order to cope with the arrears that currently exist. The government is primarily responsible for this; and, where feasible, the universities also have a role to play (L'Ange, 2017).

2.3. MINIMUM REQUIREMENTS OF STUDENT HOUSING

In the Policy of the Minimum Norms and Standards for Student Housing at Public Universities, published by the Department of Higher Education and Training in 2015, there are various regulations with which student housing must comply.

The most effective way to ensure that student housing at universities is up to the required standard is to build new accommodation facilities. Although repurposing and renovating existing buildings into student accommodation is more cost-effective, student needs are very specific. Facilities that are purpose-designed can be customised to meet these specific demands, as well as the requirements of the students (Respublica, 2015).

These regulations specify various categories, the criteria of which must be adhered to (Department of Higher Education and Training, 2015):

1. Physical Infrastructure
    a. Sites of residences
    b. Design of residences
2. Health and Safety
3. Furnishing and Fittings
4. Construction, Repairs and Maintenance
5. Student Well-Being and Support
6. Student Housing Governance and Management
    a. Governance of student housing
    b. Staffing levels
    c. Professional development of student housing
    d. Policy, procedure and agreement
    e. Student discipline
    f. Residence admissions and allocation policies
7. Financial Control and Management of Student Housing
8. Compliance with Minimum Norms and Standards

The following sections will go into deeper detail on what the policy states. Only Categories 1 and 2 will be discussed here.

2.3.1. Sites of residences

The policy states that the location of student accommodation has a major impact on the equity, access and redress for students who require housing, in addition to having a positive effect on their academic success. It is therefore recommended that the accommodation be situated within the university campus-security perimeter, in order to enable students to fully utilise the academic, cultural, social and sporting programmes without limitation.

In those cases where on-site accommodation is not available, the accommodation must be situated within a radius of no more than 20 kilometres from the campus. In this case, secure and affordable transport must be provided to run at regular intervals from early morning to late night – for housing that is situated further than 5 kilometres from the campus. The security, safety and well-being of the students must be kept in mind, when choosing student housing locations that are not situated on the campus (Department of Higher Education and Training, 2015).

2.3.2. Design of residences

The following minimum standards of design are applicable in student accommodation (Department of Higher Education and Training, 2015):

a. “New residences must accommodate, at most, two students per room;
b. Single rooms may not be smaller than 8m^2; and double rooms must be no smaller than 14m^2;
c. Dormitory, or hall-type residences must comply with the following minimum requirements for ablution facilities:
    - 1 Wash basin per 4 students;
    - 1 Shower cubicle per 7 residents;
    - 1 Lavatory per 5 students;
    - Shower and lavatory cubicles must be designed in such a way that individual privacy is provided;
    - Telephones and/or alarm bells must be located in accessible and strategic locations, so that students with disabilities are not disadvantaged;
d. The following minimum social spaces must be provided:
    - A minimum of 1.5m^2 of communal space per student resident for the first 100 students, thereafter 1m^2 per student for every student more than 100. Such communal spaces should comprise a combination of some, or all of the following: communal lounges, games rooms, television rooms, dedicated group study spaces, gymnasia, computer centres, meeting/seminar rooms, or other appropriate spaces.
    - Smaller TV/ meeting rooms must be at least 9m^2;
e. For self-catering residences, the following minimum food preparation standards must be adhered to in separate kitchens:
    - Suitable food storage, preparation and kitchen space must be provided;
    - A minimum of a 320 litre capacity fridge/freezer combination is required, as a minimum per 8 students;
    - 1 sink per 5 students;
    - 1 lockable cupboard per student;
    - 1 microwave oven per 15 students;
    - Countertop space must be sufficient for 25% of the capacity of the students residents for simultaneous usage;
f. The most cost-effective internet access, as determined by the university, must be provided in all residences. It is preferable that all student rooms should have access

to the internet for study purposes. All communal spaces designed for study purposes must have access to the internet; and

g. Where self-catering facilities are provided for students with disabilities, a universal design must include consideration of space, to allow for the independent movement of the student in the bathrooms and in the food-preparation area. The positioning of all announcement features, such as intercoms, telephones, counter loops and induction systems for those with hearing impairments, door handles, gates and warning signals must be considered to ensure universal design and barrier-free access to all pathways, entrances and doorways (Department of Higher Education and Training, 2015)."

2.3.3. Health and safety

The policy states that all suppliers of student accommodation must comply with all the legal requirements, whether these be national, regional and municipal, that regulate health and safety at all times.

Furthermore, the policy provides additional requirements expected to be provided in student housing. Certificates of compliance must be acquired from the relevant authority on a yearly basis, with regard to the following services (Department of Higher Education and Training, 2015):

a. "Electricity and gas installations;
b. Fire-safety, prevention and detection mechanisms and procedures;
c. Security staff, mechanisms and procedures;
d. Monthly internal hygiene inspections of all food preparation facilities, communal self-catering facilities and areas at the University, and at the ablution facilities should be carried out, in addition to annual municipal or equivalent hygiene audits;
e. Each student room, as well as the building itself must be secure;
f. Universities must liaise with the local enforcement agencies dealing with the safety of students; and
g. A certificate of compliance must be obtained, with occupational health and safety regulations: and an evacuation diagram must be displayed on notice boards at all times."

2.3.4. Challenges in implementing the minimum-standard policy

The DHET has identified various challenges that have been experienced in implementing the minimum-standard policy for student housing. The challenges are the following (L'Ange, 2017):

- Large backlogs;
- The majority of the existing stock is run down; and it is not fit for the purpose;
- The subsidy and fees provided are insufficient to cover the life-cycle maintenance cost (Total cost of ownership), as well as to provide well-administered and well-managed student accommodation;
- The donors are not interested in funding bricks and mortar;
- Cheaper alternative building/construction methods (modular construction) exist;
- There is a need for "decanting" residences of sufficient bed capacity during renovations; vacation periods are not long enough for refurbishments; and it also has an impact on the 3rd stream income generated for the residence budget;
- Many of the South African institutions have insufficient land, poorly located sites; and these have an impact on security and safety, proximity to university resources, transport costs and transport issues.
- The safety of the students has proved problematic; and there is a need for security at the access to the residences/groups of residences;
- The cost of compliance with the regulations (older, heritage stock not compliant with latest legislative requirements);
- The capacity to meet management and administrative standards;
- The remuneration of student-housing staff;
- The ongoing professionalisation of student-housing staff;
- Providing a reliable supply of municipal services;
- Municipal bureaucracy (intervention of PICC);
- Accessibility for persons with disabilities, including the cost and existing design of housing;
- The monitoring of compliance with student-housing policy;
- Catering vs self-catering accommodation;
- Insourcing;
- The legacy of apartheid – advantaged vs disadvantaged institutions.

2.4. THE FUTURE OF HIGHER EDUCATION IN SOUTH AFRICA

The requirements and skills needed in the working world are changing very fast. Unfortunately, the rules and regulations of higher education are sometimes slow to adapt. These changes in technology and the working world will require people to be skilled and reskilled far more in the years to come (Viljoen, 2018).

Tertiary education institutions will have to be able to provide for a new type of student. Currently, the majority of students belong to the 19 to 24 years age bracket; but the future student will come from all age brackets. Higher learning institutions will have to accommodate all ages in the future; and therefore, there is a need to create processes, offerings and systems that accommodate the needs of a wider group of people (Viljoen, 2018).

Since its establishment, roughly 20 years ago, the International Education Association of South Africa (IEASA) has played a significant role in the positioning of the higher education system in South Africa, in order to reconnect with the community of higher education worldwide, and to be part of the knowledge society, as well as the opportunities it provides. The International Education Association of South Africa (IEASA) is a non-profit, non-governmental institution with a widespread interest in the internationalisation of tertiary education (Kishun, 2007).

Tertiary education must provide training and education, in order to develop innovation and the skills necessary for successful participation in, as well as the national development of the global economy. The goal is to prepare human resources that make South Africa a partner in a globalised world, rather than to merely serve external needs (Kishun, 2007).

While it is extremely important for the South African tertiary education system to be partnered with the global education system, public and private Higher Education Institutions (HEIs) should not ignore the local challenges and opportunities arising from the country's political and economic variability, the evolution of teaching and learning curricula, and the changing requirements of the academic profession (Karodia, 2019).

2.4.1. Higher Education and Finances

In mid-December 2017, the previous president of South Africa, Jacob Zuma, announced that free higher education will be provided in 2018 to first year students, who come from families that earn less than R350 000 per year (Tjønneland , 2017), due to the turbulence that was experienced in the public higher education sector with reference to the nationwide #FeesMustFall protests. The protests arose as a result of the magnifying demand for affordable, quality and accessible higher education. With reference to the tough economic climate and the high unemployment rate in South Africa, value-for-money, quality-assured and high-impact education offerings will progressively be demanded (Karodia, 2019).

The financing of tertiary education is a major challenge in the country. Students are required to cover part of their education costs through tuition fees. These fees are relatively low when compared to those of Europe, or North America; but for the majority of SA students, these fees are far beyond the reach of their household income, thereby making higher education more accessible for richer families (Tjønneland , 2017).

South Africa has a financial aid scheme in place, called the National Student Financial Aid Scheme (NSFAS), which seeks to provide bursaries and loans to eligible students. Financial assistance is provided to students whose combined household/ parent income is less than R120 000 per year. Although impressive when compared to other developing countries, this only supports a sparse number of those students who require financial assistance (Tjønneland , 2017).

The previous finance minister, Malusi Gigaba, announced that the funding allocated to fee-free higher education might well increase the number of South African undergraduate students at universities, who need to be supported by the government. This will result in an increase from 230 469 students in 2017-2018 to more than 1 123 000 students over the medium term (Harmse, 2018).

The capacity of universities across the country is capped at 208 000 students. This is a negotiated figure between the Department of Higher Education and the universities. The question consequently arises: How will space be made for 2 million students in colleges and universities that the government plans to support? (Harmse, 2018)

The government's strategy for funding all of these grants will have a massive impact on the daily lives of every South African. Families who have not had to choose between milk and bread, will soon have to. This is due to the severe measures taken to collect all the funds, such as VAT and fuel-levy hikes. The cost of living will increase exponentially; and poor families will be the hardest hit (Harmse, 2018).

The development of fee-free higher education is likely to worsen the student accommodation situation; since the demand for housing will increase. In order to support the increase in the demand for student housing, solutions beyond that of brick and mortar need to be investigated (Kanye, 2015).

2.4.2. Transformation

Transformation is not directly related to the construction industry and the situation of student housing at South African Universities; but it is connected to the other points discussed in section 2.4. It will therefore also be discussed.

Since 1994, there has been a vast variety of transformation-oriented initiatives that sought to effect change in institutions. Some of these initiatives include the definition of the goals and the purposes of tertiary education, the major reconfiguration and restructuring of higher education institutional landscapes and of institutions, the enactment of new regulations and laws, extensive research, the formulation, adoption and implementation of policies in the areas of governance, academic programmes, structure, quality assurances and funding. Initiatives like these have often examined the capabilities and the capacities of the HEIs; and they have influenced the nature, outcome, as well as the pace of change (Badat, 2010).

As part of the "vision of a non-racial, democratic, transformed, and non-sexist system of higher education" (Badat, 2010), higher education has been called upon to improve specific goals. These goals are:

- "Increased participation and access for blacks, women, disabled and mature students; while removing all forms of unfair discrimination and accelerating the redress for past inequities (Badat, 2010)."
- "To create an enabling institutional environment and culture that is sensitive to, and that declares the diversity, protects individuals' dignity from racial and sexual harassment, promotes reconciliation and respect for human life, and condemns all forms of violent behaviour (Badat, 2010)."
- "To conceptualise and plan tertiary education in South Africa as a single, co-ordinated system; and to ensure diversity in the institutional landscape, and in its organisational form."
- "Restructuring the higher education system and the institutions to meet the needs of a progressively technologically-oriented economy (Badat, 2010)."
- "To implement and develop funding mechanisms in support of the goals of the national higher education plan."
- "To support a democratic ideology and culture of human rights by educational practices and programmes that are conducive to critical discussions and creative

thinking, cultural acceptance, as well as a common commitment to a humane non-sexist and non-racist social society (Badat, 2010)."

- "To promote quality and quality assurance through the accreditation of programmes, programme evaluations and institutional audits; and to ensure that the curricula are representative of the national and regional context (Badat, 2010)."

Over the past decade, it has become increasingly clear that public funding for tertiary education is inadequate to correct the past inequities, or the new demands and expectations of universities. More ear-marked funding is required for the improvement and provision of high quality academic development initiatives, transformation and renewal, in order to enhance the capacity of institutions to meet the needs of society and the economy, curriculum innovation, the promotion of multilingualism and for producing the next generation of academics (Badat, 2010).

Infrastructure funding to universities has been provided since 2008; and it has been used for academic buildings, scientific equipment and student accommodation. It was a contribution to ensure certain, consistent and continuous effective and long-term planning on the basis of transparent criteria. Even with these contributions, the extent to which these funds can be creatively applied to provide more funding for universities must be explored – in the face of the infrastructure challenges experienced by most universities in South Africa (Badat, 2010). It is imperative that institutions are provided with the necessary capacities, in terms of equipment and infrastructure for effective teaching, learning, the production of high quality graduates and the effective transformation of all South African Universities (Badat, 2010).

2.4.3. E-learning in Public Higher Education Institutions

E-learning is an ICT-enhanced system used in universities, ranging from email provision, networked journals, online journals, to the development of information-management tasks. Soft-ware solutions used in research, in teaching, and in the systems of administration. In the South African context, e-learning practices are linked to new policies and structures, budgets and vocabulary. E-learning has resulted in major social changes through digitisation. It is ideal for learners' needs, preferences and requirements; as it provides access to webinars, game-based learning and Massive Open Online Courses (MOOCs) (Bagarukayo & Kalema, 2015).

Distance education is seen as the education mode of delivery most likely to grow exponentially in the immediate future; since it is a mode of delivery that can reach large numbers of students. It is an important tool of social integration; as it creates a space in which multiple types of people can meet and learn from one another, where they can respond to the social and economic challenges of society (Bruwer, 2018).

The success and survival of universities financially has been linked directly to their ability to deal with influential factors, like rising student numbers, the increase in female students and growing applications for admission from international students. There has been an increase in competition among universities; as the traditional face-to-face institutions enter the distance or online educational space (Bruwer, 2018).

The UP was one of the first universities to include e-learning into its daily systems with the WebCT Learning-Management System that was implemented in 1998. In 2015, UP had 48 000 campus-based learners and over 24 000 off-campus part-time and distance learners, who used the long-distance programmes using video-conferencing, broadcasting, multimedia and web-based courses (Bagarukayo & Kalema, 2015).

With the continuously increasing student numbers (Bruwer, 2018), and the lack of expansion space, South Africa will have to assess the feasibility of E-learning at higher learning institutions. The first step would be to determine which programmes can be provided on a non-contact basis. For example, the University of Johannesburg launched its first e-learning programme, MCom Strategic Management, in 2018. A study by universities should further unearth the infrastructural requirements for off-campus learning centres (Kanye, 2015).

Many potential students are turned away from public tertiary institutions, because there is high competition for a limited number of spaces. The distance-learning concept addresses the lack of access to residential institutions and universities, as faced by many young South Africans (Bruwer, 2018).

The deployment of e-learning in HEIs should be done in parallel with the pre-existing efforts by the institutions and the Department of Higher Education and Training to build residences, and for finding alternative off-campus options. The ideal solution for universities would be e-learning postgraduate programmes which would ultimately reduce the need for student residences, with models that have proved successful when introduced in undergraduate programmes in the future (Kanye, 2015).

Research has shown that distance learning encourages students to be self-starters, and to take the initiative; but it requires personal discipline; it fosters ambition in the students; and it improves time management (Bruwer, 2018).

Online learning has been called “the future of education” in the World Economic Forum’s Global Shapers report; as it helps in making education more accessible; and it assists in providing “education for all”, especially for those people living in South African rural areas with restricted access. In South Africa, new universities cannot be constructed on the scale in relation to population growth; therefore alternative education forms will have to become a default option, providing certifications, online training and short courses (Karodia, 2019).

E-learning provides students and educators with access to resources they would not have otherwise had, regardless of location or status. Technology is advancing; but it will never be flawless; and E-learning will therefore face its own challenges, as it evolves. Although E-learning can be described as an educational equalizer, it will never be a replacement for the traditional classroom. The traditional classroom and E-learning will one day form a union: where the one compensates, where the other falls short (Reddy, 2018).

If E-learning would take over the traditional classroom, this would have a major impact on the student accommodation situated around a university. Once every module is done entirely through E-learning (similar to UNISA), no students would be expected to attend classes; and classrooms will then become redundant. Similarly for student housing; as no student would then need to be close to the campus, in order to attend classes. Future student accommodation would have to adapt to the changing educational landscape, by implementing Information and Communication Technology, similar to that which the universities are implementing, with fast internet and online video communication systems to communicate with the lecturers. Temporary housing would become a larger market; as students would only be required to come to the university to write the exams.

2.5. THE UNIVERSITY OF PRETORIA AND ITS COMMUNITY

The UP was established in 1908. As the university steadily grew in student numbers and size, the Hatfield precinct has become a major hub of student life, which covers a 652-hectare precinct (Hendricks & Flaherty, 2018). U3 Advisors, a nationally recognised consulting company that provides real estate and economic development solutions to community-anchor institutions, did an investigation on the Hatfield Student Village in 2015. The following discussions will contain a large amount of the information collected from that investigation.

Hatfield is currently the host of some of the largest student housing facilities in South Africa, with sizes ranging from small communes to facilities hosting 3 000 students, with more developments in the pipeline. This is due to the presence of the UP's Hatfield and Hillcrest campuses. The UP has a total of 48 105 contact students enrolled, with 34 669 students (University of Pretoria, 2019) attending class on the UP Main Campus, is there enough housing to accommodate all those students requiring living space close to the university?

Accordingly, the UP has developed an urban-renewal plan to socially transform the area around the Hatfield campus by envisaging correlative benefits for Hatfield and itself by aligning important goals. This initiative aims to undertake a process of achieving a long-term goal for UP. This goal is to enable the university to grow, while creating a safe residential area for students and staff (Hendricks & Flaherty, 2018).

Through the collaboration with community stakeholders and local government, the UP developed plans to establish a mixed-use precinct, called the Hatfield Campus Village (Hatfield Student Village). The aim of these plans is to establish a sense of community, enhanced security, and to improve the growth of the local economy (Hendricks & Flaherty, 2018).

UP recognises, as an engaged university, the mutual benefit and importance of collaborating with the community stakeholders, industry and the government to strengthen its impact on, and responsiveness to, the socio-economic development of the area. Integrating the university more closely with the local community is the goal envisaged by the Hatfield Campus Village precinct (Hendricks & Flaherty, 2018).

Previously, there was a 70-hectare precinct identified in the area between the Hatfield (Main) and Hillcrest campuses, which consisted of largely residential properties zoned for further development. This precinct also includes a commercial corridor. In order to fully reach the goal of the urban-renewal plan, the university has pursued the policy of acquiring houses as they become available in the area. UP's current property portfolio (as in 2015) consists of roughly 50 residential buildings, as well as the Nedhill Building (currently known as the Enterprise Building on the corner of Jan Shoba Street and Lunnon Road) and a property belonging to the municipality, which is currently being used by a football club (Hendricks & Flaherty, 2018).

There are 28 student residences that belong to the university on and off the Hatfield and Hillcrest campuses. The largest portion is located on the Hillcrest campus at the South end. These residences can host about 9 000 students, with four facilities dedicated to host approximately 1 000 postgraduate students. The high demand for student accommodation is driving the real-estate sector in Hatfield, due to an increasing number of students looking for private student housing. This housing often takes the form of communes; and, more recently, dense high-rise housing developments located in the street grid between the Hillcrest and Hatfield campuses (Hendricks & Flaherty, 2018).

The student housing demand and the profits, resulting from satisfying these high demands, have led to the focus on more densely occupied developments constructed specifically for students. This focus on high-density student housing has resulted in the crowding out of other uses, such has non-student housing and commercial buildings, which has resulted in a real estate monoculture. Consequently, the prospects for greater community engagement and stability in Hatfield have been undermined (Hendricks & Flaherty, 2018).

After completing their investigation, U3 Advisors stressed the need to create and implement a robust urban design framework in the Hatfield area. This framework would include the following excerpt from the U3 Advisors report (Hendricks & Flaherty, 2018):

- "Diversified housing choices that allow more university staff and affiliates to live near the campus;
- Sustainable non-automobile transport systems, such as buses and shuttle services. The university should also review its parking policy. Providing under-priced, exclusive parking is exacerbating the lack of supply on the campus;
- 'Porous' campus borders, which may be created by locating appropriate university services – such as UP's bookstore, galleries, and entrepreneurial initiatives – on the edges of the campus, in order to engage the surrounding community;
- Establishing more student housing in the southern part of the Hillcrest campus, in order to reduce the private market for such accommodation along the Burnett Street corridor;
- Civic commons. The university should foster the creation of more public spaces in the precinct, where people from different backgrounds can mix 'outside the fence'. Accordingly, proposed actions to develop the precinct include:
- Moving parking from the Hatfield campus to the undeveloped areas of the sports campus, with an increased shuttle service to provide connections;
- Expanding the university's control of housing stock in the grid between the Hatfield and Hillcrest campuses, and leveraging this to encourage more young professionals and recent graduates to live here;
- Continuing to pursue the development of innovation centres on the Experimental Farm;
- Preserving the low-density, high-quality residential nature of Brooklyn for housing university staff, thus encouraging recruitment and retention."

Universities want to invest in the learning and living environments of their staff and students, but most importantly to host more students around the campus. UP tries to manage the residences in the context of academic excellence, while creating an environment in which students can participate in student life and achieve academic success in a safe and balanced manner. Over UP's five campuses, it has thirty residences, hosting a mere 10 000 students (Van Zuydam, 2014). This number accounts for about 15% of the total UP student population (University of Pretoria, 2019). With this number of students in official UP accommodation spaces, UP is known as the largest residential university in South Africa (University of Pretoria, 2019 (B)).

2.6. TYPES OF STUDENTS AND THEIR REQUIREMENTS

There are different types of students at the UP, from day students to students requiring yearly accommodation and postgraduate students requiring temporary accommodation four times a year. Student accommodation ranges from traditional university residences to city-university partnerships, public-private partnerships (PPPs) and the re-using of old buildings, which have been adapted to student housing. The various types of student accommodation that exist currently has been summarised in the Report on the Ministerial Committee for the Review of the Provision of Student Housing at South African Universities (The Student Housing Report). These types are as follows (Department of Higher Education and Training, 2011):

- Residence halls that consist of a large number of individual or twin rooms with shared bathrooms on each floor; there may be a shared kitchenette if self-catering.
- Flats that can be identified as units of between two and 10 single or twin rooms including bathrooms in each unit.
- Student villages, which consist of apartment complexes or townhouses. These units are able to house between eight and ten students in single or double rooms. These students usually share the kitchen and bathroom facilities.
- Off-campus privately owned student accommodation that may vary from communes, and that consists of houses, sectional title flats, or rental model accommodation.

The following private student accommodation types were identified by The Student Housing Report (Department of Higher Education and Training, 2011):

- Home accommodation, where the students stay with family members or guardians;
- When the university leases a building from a landlord; but the occupancy risk lies with the university; while the ownership of the building remains with the landlord. This is known as privately owned residence accommodation type A;
- Privately owned residence accommodation type B is characterised by students from HEIs, who enter into a lease agreement with the landlord; while the landlord maintains the risk for the occupancy levels of the building.
- Single studio or apartments, where students and the landlord of the subject building enter into a lease agreement.
- When residences are developed and leased by the university for a fixed period of time at a previously negotiated escalation rate; and at expiry of the lease agreement, this becomes the property of the university; this is known as public-private partnership accommodation.
- "Digs" accommodation is used, when students jointly rent a house or stay in a commune.

2.6.1. Advantages of placing students in university accommodation

There are various advantages for the student when they stay in university accommodation for the duration of their studies:

- They are provided with a safe, clean and hygienic environment when the residences are managed by effective leadership, management and administration;
- The students have access to proper and healthy nutrition;
- The residences are often situated in close proximity, or within easy access to university support and amenities;
- There is a complex relationship between academic success and student housing; but being housed in a well-managed and safe residence is an advantage for students; as they are then in a living-learning community;
- Residences provide opportunities for first-year students to obtain support with their studies;
- Due to the academic environment, university accommodation contributes to academic success.

2.6.2. Typology for student housing at South African universities

There are three different typologies for student accommodation, as recommended by The Student Housing Report (Department of Higher Education and Training, 2011):

- Type 1 Campus: Off-campus housing is unsuitable and/or unavailable; and these campuses are usually located in poorer or rural areas, with a shortage of suitable housing for the area's residents, let alone for the students. These campuses have to be able to house 80% of their total student enrolment in the short to the medium term, and 100% in the long-term.
- Type 2 Campus: These campuses have limited suitable off-campus housing available; and they should thus be able to house 50% of their total student enrolment in on-campus accommodation.
- Type 3 Campus: These campuses have restricted space for on-campus housing; but there is limited, but suitable, off-campus accommodation available for students. Ideally, PPP student accommodation villages are encouraged and supported in the short and medium term.

2.7. THE HOUSING MARKET AND ITS CYCLES

The residential real estate market can be described as cyclical in nature. It has four distinct phases, each with specific characteristics. These can be recognised by changes in the property market. These cycles result from a complex interplay between various demand and supply forces (Cloete, 2016).

The following phases can be identified in the real-estate cycle (Cloete, 2016):

Phase 1: Recovery Phase – Low levels of construction, high absorption rates:

- As demand begins to increase, vacancy rates decline; and rental rates increase.
- This phase is also characterised by high interest rates, which appear to be increasing.

Phase 2: Expansion Phase – Limited availability of space, peak demand:

- Demand is too high; and the available supply of rental space cannot meet the. Demand.
- This phase is known as the "landlord's market", as competition among tenants is so steep that landlords can ask higher rentals for space.

- Vacancy rates reach their lowest point, while rentals remain high.

Phase 3: Decline Phase – Excessive new construction and development

- Supply increases, as construction levels rise, resulting in an oversupply of space.
- Rental prices decrease. The prices stabilise or start to trend downwards.
- Vacancy rates increase and properties fail to perform.

Phase 4: Recession Phase – Demand is slow; while vacancies reach unacceptable levels.

- With extremely high supply and very low demand, the rental prices decrease.
- This phase is known as the "tenant's market", as the rental rate reductions could potentially be called "free rent".
- Construction slows down to minimum levels.
- This phase contributes to the start of a new cycle; as the demand slowly absorbs the supply; until it makes inroads into the oversupply.

Real estate demand is dependent on other economic activities for its substance. The real estate cycle is very volatile; and it lags slightly behind the economic cycle, which is also cyclical, due to the long lead times required to construct buildings (Cloete, 2016).

The construction industry has been in its recessionary phase for the past 2 years, with various large construction companies going into business rescue, or being liquidated. The Cape-based firm, NMC Construction, went into liquidation in January 2018; and Basil Read Construction, Esor Construction and Gauteng-based Liviero Group all went into business rescue during the past 12 months. Esor and Liviero were ultimately liquidated. Aveng and Group Five also faced financial difficulties (Cokanye, 2018). Many of these companies are listed on the Johannesburg Stock Exchange (JSE).

As discussed previously in Section 2.2, the government has pleaded for assistance from private construction and development companies, in order to improve the student accommodation situation in South Africa. Unfortunately, the construction of student housing is linked to the real estate market, as discussed above. With many of the top construction companies experiencing financial difficulties, the construction of student housing has also declined.

2.8. CONCLUSION

There are various factors affecting the provision of student housing in South Africa. With a confirmed undersupply in student accommodation, a solution needs to be developed, in order to ensure that students have a safe and clean environment in which to study.

The immediate future of universities is safe, with these institutions still being considered as anchors to the cities in which they are located. The biggest long-term threat would be the development of e-learning, which could result in fewer students applying for face-to-face courses. The implementation of fee-free higher education could result in limited funds becoming available for universities to improve their existing accommodation, and/or to construct new student housing facilities to the standards required by the Policy of the Minimum Norms and Standards for Student Housing at Public Universities.

The real estate construction sector is slowly starting to move out of its recessionary phase, as the demand for student housing is filling up the available space. It is safe to assume that within the next five years, many new student-housing structures will be visible on the horizon of the Hatfield Student Village.

CHAPTER 3 - RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

The research design and the method of the study will be discussed in this chapter. This study is largely generic qualitative research; but it has a small quantitative section. The study consists of two sections during which the data are collected. The first part will be to determine the amount of student housing beds available in the Hatfield area; while the second part will be to determine what developers believe to be the future of student accommodation in Hatfield. These two sections will be divided into various steps, in order to obtain the most accurate results.

The research questions of the study are as follows:

1. What is the current need for student accommodation at the University of Pretoria?

2. What are the current rental and management strategies of privately owned student accommodation compared to that of the University?

3. What 10-year masterplan must be implemented, in order to promote a more effective student accommodation model in the Hatfield student Village?

In order to answer the above research questions, the following research objectives has been identified:

- Analyse what is the current capacity for student housing (residences, flats, and houses).
- Determine what the need is for future development in the student housing industry in Hatfield, with regard to a 2030 vision 10-year plan), as well as the facilities for postgraduate students.
- Source rental and other accommodation models implemented by private developers.
- Compare the developers' models with the current University models.
- Determine the number and location of properties, which have been offered to the UP to purchase and compare with the need for student accommodation, as calculated above.
- Devise a possible strategy over 10 years for the construction, or the buying of student accommodation and the creation of joint ventures with developers, or private property owners for the optimal student housing plan.

3.2. THE RESEARCH DESIGN

3.2.1. The Research method

This study is cross-sectional in nature, which is the study of a phenomenon at a particular time. The research questions and objectives are the main determinants of the time horizon of this study, which considers the student accommodation environment in Hatfield in 2019, rather than for various years. This is due to the cycles that occur in the housing market (refer to section 2.7). The final conclusions of this specific year will be used to determine whether there is still development potential for student housing in the Hatfield area, and to produce a five or ten year plan for student housing close to the UP. The boundaries of the specific area in Hatfield will be discussed later in this chapter.

As discussed in the introduction, this study consists of mostly qualitative research and limited quantitative research. Qualitative research can be seen as an umbrella term for various different types of research methods, including generic qualitative research, ethnographic research, case-study research and grounded theory research, amongst others (University of Pretoria, 2019 (A)). Qualitative research is defined by Plano Clark & Creswell (2015) as "research design comprises a set of procedures for the collection, analysis and reporting of qualitative data, in order to answer the research questions about a specific phenomenon, by exploring the participants' views on the phenomenon being investigated" (University of Pretoria, 2019 (A)).

Quantitative research is a "structured way of collecting and analysing the data obtained from different sources" using "computational, statistical and mathematical tools to derive the results" (SIS International Research, 2018). The quantitative research section of this study will be small and simple. This method will be used to determine the number of student housing beds available in the Hatfield Student Village. The most common techniques used for the collection of data for quantitative research is through observation, questionnaires, interviews, scales and physiological measurements. The results obtained from these methods must be able to be analysed numerically and statistically (Kotzé, 2007).

3.2.2. The interview

In qualitative research studies, interviews are often used as the primary means to collect the data. It can be seen as a discussion with a purpose, in which the researcher obtains a participant's perspectives, opinions or experiences of a specific topic, or the phenomenon being investigated (University of Pretoria, 2018 (B)).

An interview can be either: structured, semi-structured or unstructured. Structured interviews consist of a number of set questions, without any opportunity for further discussion; whereas semi-structured interviews have a discussion guide that contains a list of open-ended questions that the researcher plans to ask the participant during the interview (University of Pretoria, 2018 (B)).

Interviews can be done telephonically or face-to-face. Face-to-face interviews are often longer and richer in information than technologically mediated interviews. Face-to-face interviewing also allows one to observe the participant's non-verbal communication (University of Pretoria, 2018 (B)).

Proper preparation must be made before conducting an interview, to ensure that the researcher knows how to approach the participant, and to know all the questions that need to be answered. If the researcher is not properly prepared, the participant may lose interest in sharing their knowledge on the topic being discussed (University of Pretoria, 2018 (B)).

The participants in the interviews of this study were chosen through purposive sampling to ensure that the recruited participants are "information rich" with regard to the topic of the study.

3.3. THE RESEARCH METHODOLOGY

3.3.1. Contacting developers in the student accommodation industry

There are various developers who are prominent in the student accommodation industry. These companies have great knowledge and experience in the field of students' needs and wants. Due to the different generations, which pass through tertiary education and the constantly evolving technology associated with the storing and sharing of information, daily activities of the average student and changing preferences in universities. These developers have to ensure that their developments are capable of evolving with all the changes associated with housing students.

In order to contact the developers, electronic mail was sent to a high ranking individual in the development company (or their assistants) to state the aim of the research; and that interviews would have to be conducted, in order to obtain more information about the evolving industry. It was then asked that the individual contacted should please state whether they would be interested in participating in the research. If they do agree to participate, the researcher will ask for a letter signed by the person contacted. This states that the individual has agreed to participate in the interview. Nineteen developers were contacted, whereas 8 agreed to participate. Each interview lasted about 30 minutes and the interviews where done over a 2 month period in June and July. These interviews were recorded with permission and later transcribed.

3.3.2. Identifying the Hatfield Student Village Boundaries

The Hatfield Student Village is located in between the Hatfield and Hillcrest campuses of the UP. For this study, the Village will be defined by the following parameters (Figure 3.1):

- Arcadia street to the North;
- Richard Street, Jan Shoba Street and Duxbury Road to the East;
- Lynnwood Road to the South;
- Herold Street, Hilda Street and Festival Street to the West.

This area contains the majority of the student accommodation in Hatfield; therefore, the study will only concentrate on the student accommodation, which can be found within these boundaries. Take note that this area does not include all the student housing in the area; and that there is other student accommodation outside these parameters.

Figure 3.1: The borders of the Hatfield Student Village that will be used in the study.

Student housing, which borders the roads named and indicated above (refer to Figure 3.2) will be included, for example: The red block, which is currently the Apartments on William (AoW) and borders Lynnwood Road, will be included; whereas the blue block, currently IQ Brooklyn, will not be included. The green area at the top of Figure 3.2 is the Southern border of the Hatfield Student Village, as indicated in Figure 3.1.

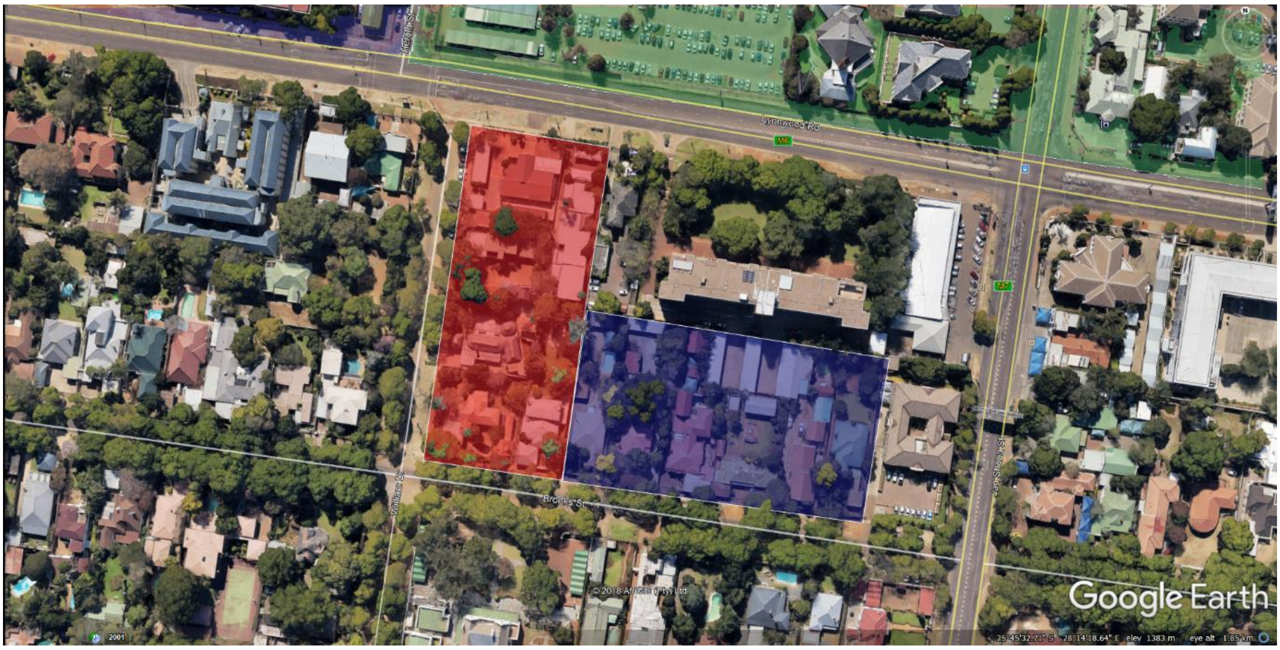


Figure 3.2: An example of the properties that will be included in the study (red) and those that will not be included (blue).

3.3.3. Identifying all student accommodation within the boundaries

This section of the research will have to be done very accurately; while being relatively difficult to determine. Some of this information can be obtained on the internet through property websites; but not all the accommodation is listed. It is also possible to identify student housing through Google Maps™; but these are often outdated; and they do not have the most recent buildings registered on the database. The remaining option would be to drive around Hatfield within the borders, as identified in section 3.3.2, and to take note of all the student accommodation, their location and the names of the buildings.

3.3.4. Determine the number of beds in each of the identified accommodations

The number of beds available in Hatfield will be used to determine whether the market has been satisfied; or whether there is still a demand for new student housing. The number obtained will be compared with the number of students currently on the Hatfield campus and the number of first-year students who enter yearly. The projected student growth for the next 5 or 10 years will also be taken into account, to determine whether the number of student accommodations currently available would be able to satisfy the changing demand.

This section will be partially answered through the interviews with student accommodation developers. The remaining buildings' capacities will be obtained from their respective real estate agents.

3.3.5. Interviewing student-housing developers

This study will make use of structured, face-to-face interviews to obtain the data; although there should be the potential for the participant, after the structured questions, to discuss any further issues he/she considers to be important. The developers who are interviewed for this study, will be kept anonymous, in order to protect their ideas and perceptions of the student housing available in Hatfield. Each question in the interview is discussed below, in terms of its reasoning, impact and processing:

1. In the existing student accommodation buildings owned by you, what is the total number of beds available to students in each building?

This question aims to determine the capacity of student accommodation in the Hatfield area. The developers who have agreed to participate in this study do not make up the entirety of the student housing owners; but they have developed a large number of the student accommodation sites in the area. The remaining capacities will be determined, as discussed in 3.3.4.

2. How many beds are currently occupied?

The demand for student accommodation in Hatfield is the most important determinant in the results of this study. If there are very few beds open, it may be assumed that there is a demand for more housing; but if many beds are vacant, the market has already been saturated.

3. What is the accommodation strategy implemented by your company, when it comes to student housing? (10-month contract / 12 month contract, benefits, configuration, disabled units, post-grad sections.)

During the December holidays, Hatfield often becomes a ghost town, due to the vast majority of students who stay in residences or student housing returning home for their vacation. The remaining students whose contracts are still in effect (12-month contract), must operate on a daily basis with fewer students on the street when going out for entertainment, which could be a major security issue. By determining the accommodation strategy, it is possible to determine whether there are ways to streamline all the student accommodation in the area's rental contracts.

4. What is the price range or target market for your student housing?

Finance for student housing is often a major limitation to tertiary education. This question aims to determine the average price range of student accommodation, and whether it is affordable for the poorer student community and the National Student Financial Aid Scheme (NSFAS) students. If the student accommodation provided in Hatfield only caters for higher income students, the masterplan should include the development of lower-income student housing units.

5. Do you see any further development of student accommodation in the Hatfield Student Village for the next 5 or 10 years?

This question directly answers whether there is still development potential for student accommodation in Hatfield; and whether it remains a lucrative development option. Developers have a great understanding of the property cycles, economic conditions and market needs, which will provide vital information to this study. When the developers decide that it is not the appropriate economic conditions for new student accommodation, the masterplan would have to consider and implement this factor.

6. Would you, as a developer, be interested in the following scenarios in the current economic conditions:

    a. New student accommodation?

    b. Revamping existing student housing buildings?

This question also relies on the developers' understanding of the country's economic conditions. If the developer would rather revamp the existing accommodation than building new ones, it may be concluded that the market is saturated, and no longer profitable. On the other hand, if the developers only do new accommodation, this shows that the market needs companies that are willing to revamp the existing student accommodation.

7. In your opinion, what is the potential for turning the existing non-residential buildings in Hatfield into student accommodation?

Hatfield is a host to various different types of property usages, including diplomatic buildings and office parks. This question will determine whether the developers see any potential in the conversion of other usages into student accommodation, if these buildings are to be made available to the market for purchase.

8. Would you advise a developer to purchase sectional titles schemes, where this developer is currently part of the Body Corporate, in order to become the sole owner and to manage the building as rental housing?

The UP owns several units in sectional title schemes around Hatfield. This question will determine whether there is any potential in purchasing an entire sectional title scheme, in order to run it as leased student accommodation. Many of these sectional title units are owned by individuals, as investment properties; and they might not want to sell these units.

9. Are there any other properties in Hatfield that could potentially be purchased by a developer for purposes other than residential use?

This question is not directly associated with student accommodation; but it remains important. With the number of students and staff on Hatfield Campus of the UP growing in number every year, considerations have to be made with regard to the expansion of the campus in terms of additional classrooms, or office space.

10. If you could give any advice to a new developer with regard to student accommodation, what would it be?

Question 10 is an open discussion, which gives the developer an opportunity to provide any advice on the student housing industry; since it is such a complex industry in which to operate. It opens the floor to any issues or concepts that have not been covered in any of the other questions in the interview.

11. Would you be interested to go into a joint venture with the UP, or any other developer for future development in the Hatfield area?

The UP has a vast understanding of its students and their requirements, as do the student accommodation developers. Entering into a joint venture with the university might create the ultimate student accommodation team of the future. This question aims to determine whether developers will be willing to enter into a joint venture with the UP, or other developers.

12. Are you accredited with the University of Pretoria's Residence Affairs and Accommodation Department?

"The Department of Residence Affairs and Accommodation is responsible for Residence Management and Student Life, Finance Administration, Placement Management, Accommodation and Maintenance Management, Student Support – Residences, Residence Systems and Food Services" (Department of Residence Affairs and Accommodation, 2019). In order for the department to have control over the provision of student accommodation for the university, they require developers to register at the department and to become an accredited student-housing provider.

13. Does your current student accommodation comply with the Policy on Minimum Norms and Standards for Student Housing at Public Universities, as published in the Government Gazette in 2015?

In 2015, a policy on the requirements for student accommodation was published in the Government Gazette. This question will determine whether the developers are aware of the policy and whether are implementing the stipulated norms and standards.

3.4. ASSUMPTIONS

The following assumptions will be considered in this study:

1. In sectional title schemes, it will be assumed that there is 1 student per unit, unless stated otherwise by the developer or the real estate agent.
2. It will be assumed that the information on Tshwane's website for the zoning of property is correct.

3.5. LIMITATIONS

There are limitations to every study; and frequently these limitations are introduced, to ensure that the study is done in the most fact-true and correct way possible. The following limitations have been identified in the study:

1. Not all communes are registered and listed on the internet; and some might not be according to regulations; therefore, communes will not be included in the study.
2. The methods used to determine all the student accommodation in the Hatfield Student Village may not be able to give perfectly correct results.
3. Not all of the developers that are contacted will give their consent to take part in the interview, which would reduce the sampling size.
4. Any student accommodation that falls outside the boundaries of the area identified in 3.3.2, cannot be considered, as part of the student housing provision to the Hatfield Campus of the UP.
5. Students' opinions on the demand for student accommodation in the Hatfield Student Village will not be taken into consideration as the research will only be focused on the developers' appetites for further development of the area.

3.6. DATA PRESENTATION

The data gathered from the interviews and from the real estate agents, will be organised and analysed, to ensure that the results are well presented. The interview allows for short answers, as well as for more discussion-type answers. The method in which the answers will be analysed is discussed below:

- Questions 1,2 and 4: These questions are purely quantitative; as they determine the capacity and the financial bracket for which the student accommodation provides.
- Question 3: This question requires the developers to share their accommodation strategies. It will be analysed by using quantitative, as well as qualitative methods.
- Questions 5, 8, 11, 12 and 13: These questions require yes or no answers; but the developers will be provided with an opportunity to explain their choice. The questions will be analysed quantitatively and qualitatively.
- Question 6: This question will compare developers' appetites with new student accommodation, or for revamping the existing housing.
- Questions 7, 9 and 10: These questions are open-ended discussions; and the

developers can share their opinions on the topic at hand. These will be discussed qualitatively.

The remaining student housing capacities will be analysed and discussed quantitatively.

The results of all the data collected will be presented by the use of graphs; and the discussion points will be amplified. These graphs will provide accurate comparisons between the different developers and their opinions on the student-accommodation industry. The results that are to be discussed qualitatively, will be explained in detail; and they will be concluded in a written format.

Finally, all the results will be concluded in a 10-year masterplan that allows for an efficient student housing provision in the area, and which provides a structure for the construction of new housing. This plan will also consider the revamping of the existing student accommodation; whilst providing a better understanding of the market for student accommodation in the Hatfield Student Village.

The aim of the research is to provide key role-players in the Hatfield Student Village an overview of the student accommodation environment relating to the anchor institution and what the future holds for further development of the market. No other study of its kind has been done within the boundaries of Hatfield. Similar studies could not be found for other universities.

3.7. CONCLUSION

This chapter has discussed the methods for collecting the data, and how they will be analysed, once the data collection is complete. It will also establish the boundaries within which the study will be done.

The interviews that will be conducted with the student accommodation developers will be able to provide in-depth information on the student housing industry, the current economic conditions, as well as the future and needs of this industry. The combination of the developers' knowledge, as well as the student housing capacity in Hatfield, will be used to develop the student accommodation masterplan. The results of the study will be provided in Chapter 4; and the masterplan will be developed once all the results have been analysed and discussed in detail. Whether there still is development potential for student accommodation in the Hatfield Student Village will be determined in the next chapter.

CHAPTER 4 - DATA ANALYSIS AND DISCUSSION

4.1. INTRODUCTION

This chapter will discuss the results obtained through the data-collection methods as discussed in Chapter 3. The focus of the data will be placed on the various role players found in the Hatfield Student Village, such as the Developers, the University, Real Estate Agents and the Hatfield CID.

The first section of the chapter will consider the residential offerings provided by the university and its current vacancy rates. This section will be followed by an investigation into the properties in Hatfield that have been offered to the university and their potential uses.

Thereafter, the total provision of beds in the Hatfield Student Village will be investigated, as well as the vacancy rates related to these buildings. This vacancy rate will be used to determine whether there is any need for the further development of student accommodation.

Interviews were held with those developers that are very active in the Hatfield area. The information provided by these role-players will be discussed in detail. In order to protect the identities of the developers, discussion points highlighted by a single developer will not be referenced to that specific developer. The highlighted points will be discussed together, as a singular opinion.

Finally, the opinion of the remaining role players in Hatfield, the Hatfield City Improvement District and Local Real Estate Agents, will be discussed.

4.2. UNIVERSITY OF PRETORIA RESIDENCES

The University has 28 residential buildings catering for a total of 10 000 students (Department of Residence Affairs and Accommodation, 2019). These residences are divided among the six campuses belonging to the UP; while the majority are located between the Hatfield and Hillcrest Campuses.

The UP has recently entered a phase of transformation (University of Pretoria, 2019 (B)). Part of this process has been the changing of names of several of their residential buildings. The old and new names of the UP residences are provided below, in order to assist the reader, who is only familiar with the residences' old names, to adjust to the new names. The new names came into effect in October 2018. The house names listed in the tables below are applicable to this study; as they are located at or on the Hatfield and Hillcrest Campuses of UP.

Table 4.1: This table indicates the names of the residences that have changed due to the transformation process occurring at the University of Pretoria.

Old Name	New Name
Erika	Erica
Jasmyn	House Khutso
Katjiepiering	Azalea
Klaradyn	House Nala
Magrietjie	House Mags
Boekenhout	House TAU
Kollege	College
Maroela	Morula Legae
Mopanie	Mopane
Olienhout	Tuks Ekhaya
Taaibos	The Tower
Protea	Protea Mbalenhle

Table 4.2: This table indicates the names of the residential buildings that have remained the same since the transformation process.

Same Name
Asterhof
Madelief
Nerina
Jacaranda
Tuksdorp
Tuks Village

The sample of UP residences is located next to the Hatfield Campus, or on the Hillcrest Campus. Figure 4.1 shows the occupancy levels of the UP residences located in Hatfield and Hillcrest.

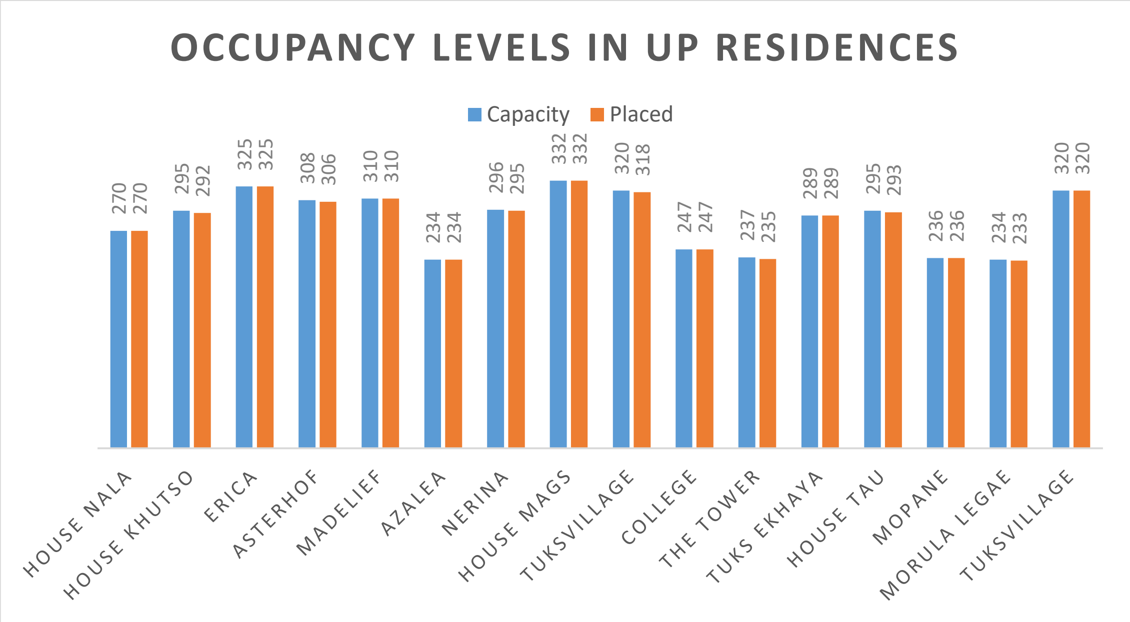


Figure 4.1: Occupancy levels in University of Pretoria Residences located at the Hatfield and Hillcrest Campuses.

The residences of the UP are almost fully occupied; and they have a vacancy rate of 0.29% for all of the buildings for the year of 2019. The residential buildings above provide 4 548 beds to those UP students, who study at the Hatfield and Hillcrest Campuses. Only 13 beds are vacant, which is equal to a 0.29% vacancy. These data were recorded in February 2019. These amounts could vary slightly; since students tend to drop-out or change residences after the first semester of the year is completed.

These residential buildings are intended for undergraduate students. Units are available for postgraduate students in TuksDorp, Jacaranda, Protea Mbalenhle, Fairview Village and in Tuks Village Block F. It is common for Honours students to still live in the residences intended for undergraduate students. Consequently, the postgraduate buildings are more for Masters' and Doctoral students, who study full time (Adendorff, 2019).

The UP revised and implemented a programme called the Universal Access Programme in 2018. This programme aimed to make all the university buildings accessible to anyone, as well as those with a disability. Currently, the ladies' residences, which are situated next to Hatfield Campus, have disabled units. TuksDorp has a flat, which allows a caretaker to stay on the site. The biggest problem they are experiencing, is the lack of a disabled male residential room next to the Hatfield Campus, as all the men's residences that are located on the Hillcrest Campus (Adendorff, 2019).

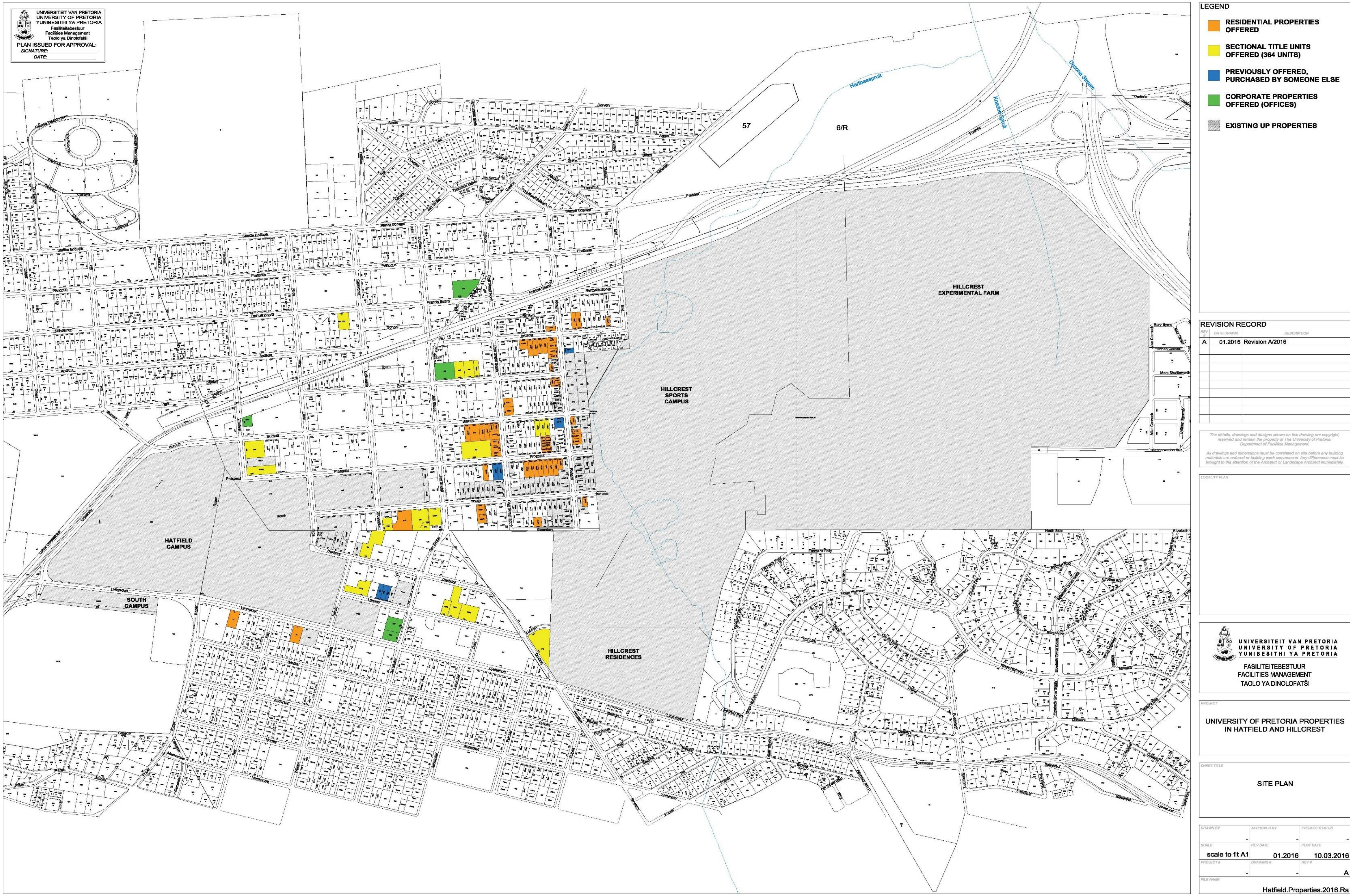
4.3. PROPERTIES OFFERED TO THE UNIVERSITY OF PRETORIA

Table 4.3: A table representing all of the properties offered to UP over the past 10 years.

Address	Erf Number	Comments
Residential Properties		
1294 Park Street	413/1	
1298 Park Street	413/2	
1293 Park Street	419/1	
1297 Park Street	419/2	
407 Richard Street	419/3	
126 & 128 A & B Lunnon Road	16/4, 16/3, 16/5	
1264 Boundary Lane	457/R	
39 Lynnwood Road	12	
77 Lynnwood Road	24/R	
1261 Prospect Street	439/R	
1287 Prospect Street	442/1	
1291 Prospect Street	442/R	
1293 Prospect Street	443/2	
1219 Burnett Street	341/R	
1233 Burnett Street	342	
1237 Burnett Street	343/R	
1239 Burnett Street	343/1	
1247 Burnett Street	344/R	
1249 Burnett Street	344/2	
1173 South Street	678	
1300 Arcadia Street	401/R	
1289 Arcadia Street	404/R	
1275 Arcadia Street	405/1	
1283 Arcadia Street	405/R	
1285 Arcadia Street	406/1	
1291 Arcadia Street	406/2	
1308 Arcadia Street	488/1	
1312 Arcadia Street	488/R	
1342 Arcadia Street	491/R	
1295 Arcadia Street	407/1	
357 Richard Street	407/2	
363 Richard Street	407/R	
269 Richard Street	413/3	
452 Richard Street	517/1	
470 Richard Street	517/R	
480 Richard Street	523/R	
490 Richard Street	523/2	
448 Glyn Street	420/1	
450 Glyn Street	420/R	
473 Glyn Street	344/1	

475 Glyn Street	350/1	
485 Glyn Street	350/R	
1250 Prospect Street	350/2	
1284 Prospect Street	784/1, 784/2, 784/3	
1286 Prospect Street	784/6, 784/4, 784/5	
1235 Prospect Street	355/R	
1263 Prospect Street	440/1	
1267 Prospect Street	440/R	
1279 Prospect Street	441/R	
1283 Prospect Street	441/1	
1303 South Street	541/2	
Sectional Title		
1293 Burnett Street	430/1	Offered as Res 1, now ST
464 Burnett Street	649	Units
1135 Francis Baard Street	785	Units
1235 Prospect Street	355/R	Entire Complex
1060 Prospect Street	689/R	Units
1228 Prospect Street	781	Units
1220 Park Street	323	Units
1226 Park Street	324	Units
1230 Park Street	325/1	Units
1229 South Street	366/4	Entire Complex
1195 South Street	613/R	Units
1189 South Street	573	Units
1177 South Street	619	Units
1231 South Street	366/R	Units
560 Grosvenor Street	276/1	Units
110 Duxbury Road	164	Units
116 Lunnon Road	15/12	Units
150 Lunnon Road	162/3	Units
152 Lunnon Road	162/1	Units
162 Lunnon Road	162/2	Units
243 Lunnon Road	149	Units
Commercial Space		
1226 Francis Baard Street	748/R	Lease (3 633m^2) 3-5 years
721 Jan Shoba Street	22/7	Lease (1 274m^2) 3-5 years
1204 Park Street	746/R	Lease (1 828m^2) 3-5 years
456 Festival Street	92/1	
731 Jan Shoba Street	22/6	Lease (334m^2)

Figure 4.2: A map indicating the properties offered to UP.



The UP is an anchor institution. Due to its prominence in the Hatfield and Hillcrest areas, residents or property agents often offer their properties to the university, when they plan on selling the property. The list (Table 4.3) and map (Figure 4.2) above indicate where the properties are situated, and also when they were offered to the university.

The university would rather purchase a building, than rent it from someone. Therefore, the commercial spaces available will not be considered as potential space for the university to use. There is an opportunity to purchase 2 full sectional title schemes, 1229 South Street and 1235 Prospect Street. These would create extra opportunities to house students – specifically postgraduate students; as the units are larger than those found in PBSH.

Multiple residential properties are available on Prospect Street, in which 54% of the buildings on the particular block are already owned by the university (refer to Table 4.4). Purchasing all those properties would result in an 85% ownership of the entire block. This would create a great opportunity for the development of future UP-owned student accommodation, if necessary. Currently, all the buildings owned by the University on South Street are used as office space. If there is any future demand for more office space; and the properties on the block are all owned by the University, this block could then be developed into formal office space.

Table 4.4: Properties offered to the university with the most potential for future development.

Street Address	**Erf Number**
1261 Prospect Street	439/R
1263 Prospect Street	440/1
1267 Prospect Street	440/R
1279 Prospect Street	441/R
1283 Prospect Street	441/1
1287 Prospect Street	442/1
1291 Prospect Street	442/R
1293 Prospect Street	443/2

4.4. ACCOMMODATION IN HATFIELD

Hatfield has become a node known for its student population. High-rise residential buildings have started to change the skyline of the area, in order to provide much needed accommodation for the masses of students attending the Hatfield and Hillcrest Campuses of the UP. Residential buildings in the area vary between single occupancy to full title houses, sectional title schemes and Purpose-Built Student Housing (PBSH) aimed at the rental market.

The supply in Hatfield provides three different residential options to students. The first option is to rent a unit in a PBSH building; the second option is to rent a unit in a building originally constructed as a flat; but it was not purpose built for students; and the final option is to purchase a unit in a sectional title scheme. The units in a sectional title scheme can be operated as investment properties by renting them out, or to sell them after the student has finished his or her studies.

The following graph shows the number of beds brought to the market by the PBSH buildings, as well as the vacancies in each of these buildings.

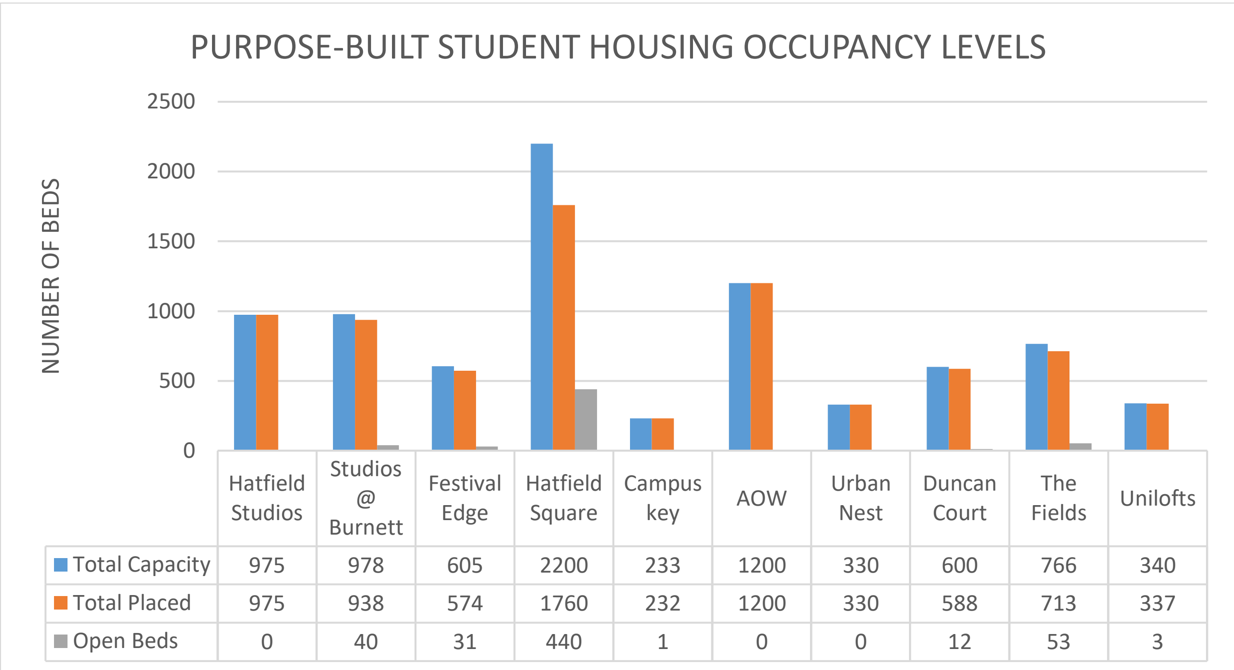


Figure 4.3: Purpose Built Student Housing occupancy levels in the Hatfield Student Village.

PBSH in Hatfield provides a total of 8 227 beds to the student-housing market. The vacancy rates of the different buildings vary between 0% and 20%; where the majority (7 of 10) of the buildings has a vacancy rate below 5%. Figure 4.3 shows the various vacancy rates of the PBSH buildings in Hatfield.

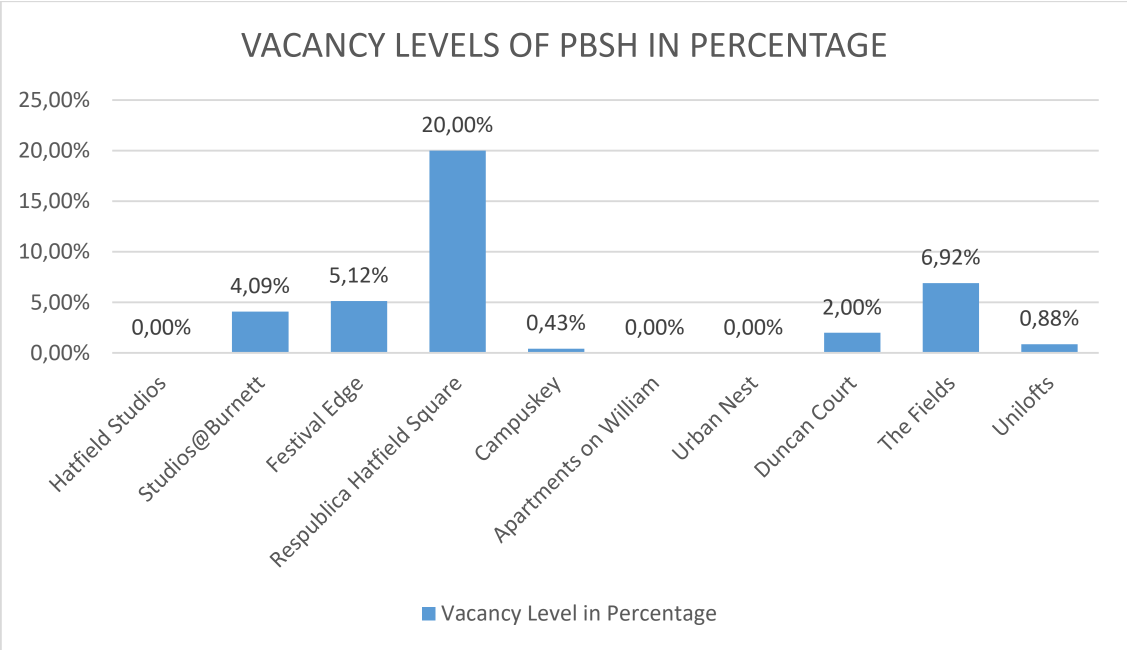


Figure 4.4: A graph representing the vacancy levels of Purpose Built Student Housing buildings in Hatfield.

Take note that some of the units in the Apartments on William (AOW) are currently being occupied by UP Residential students, due to the upgrading of UP's Residential buildings. This creates a false demand in the Hatfield Village. Once UP's residences have finished with the revamping, these students will move back into the residences, resulting in a major drop in occupancy levels in the above-mentioned building. Currently, Mopane (236 students) and Morula Legae (234 students) are occupying units in AOW. In 2020, Vergeet-my-nie, the Annex to Asterhof (308 students) will be having its scheduled revamp. In 2021, Erica will see its revamp (325 students). All these students will require other housing in Hatfield, which will continue to provide a false demand in the market; until all of the revamping projects are complete. The student accommodation buildings, which they will occupy, are yet to be determined. The University has signed a lease agreement for all of the units in Urban Nest (Adendorff, 2019).

The data that follow were obtained through the City of Tshwane website, Real Estate Agents active in Hatfield, as well as the building managers of the residential buildings. These data represent the majority of the residential buildings in the Hatfield Student Village; but it is not an all-inclusive list. The number of beds exclude any communes, as well as a very small amount of sectional title schemes (4-8 units per scheme).

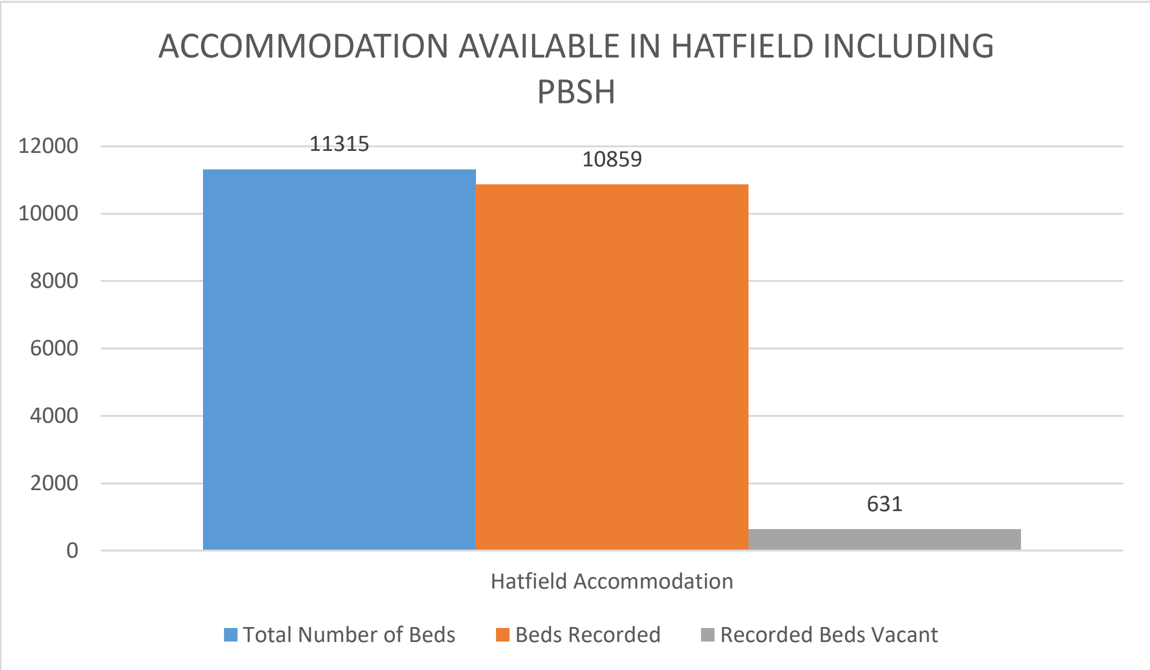


Figure 4.5: A graph representing the total number of accommodation available in Hatfield, which includes PBSH but excludes UP Residences.

The number of beds in Figure 4.4 includes the PBSH supply, but it excludes the UP Residences. The total number of beds represents all the buildings in Hatfield, where the number of units could be determined by using Tshwane's website. A unit is considered to contain one bed, unless otherwise stated by a representative party. Beds recorded and the recorded vacancies represent the exact number of beds, as determined through building managers and real estate agents.

Figure 4.5 represents the same data as above; but it excludes the supply of the PBSH buildings, along with the UP Residences. This is done, in order to establish exactly what the various provisions of accommodation are in Hatfield; and in order that the supply of each category can be determined.

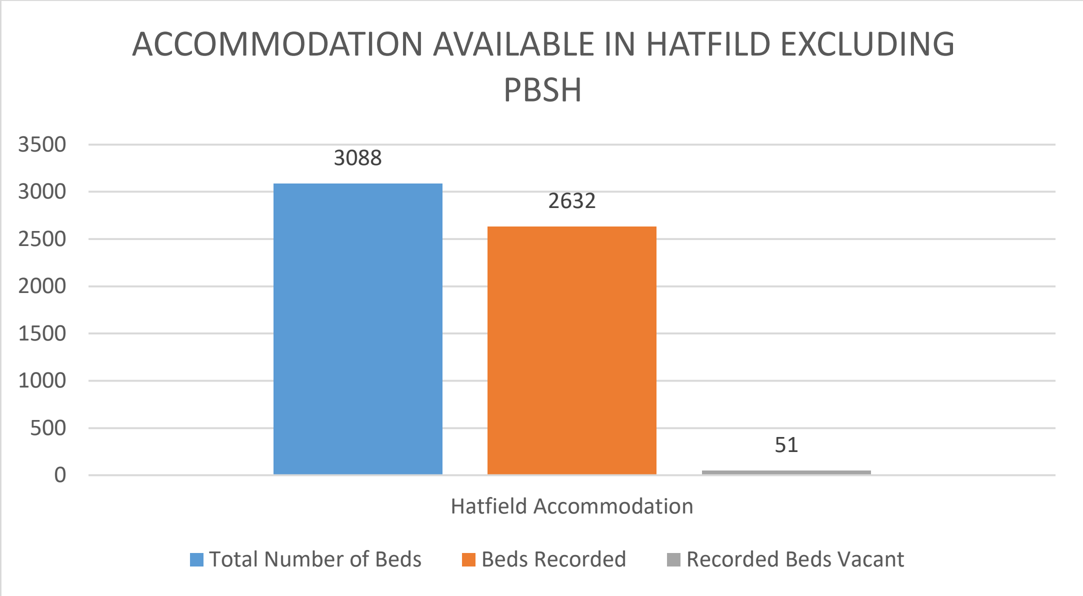


Figure 4.6: Accommodation available in Hatfield, which excludes PBSH as well as UP Residences.

While collecting the data, it was noted that there are very few caretakers on-site (numbers were collected from the security guards) and that the security guards were unaware of the number of students for whom they are responsible in the case of emergencies. This poses a huge security risk to everyone on the site.

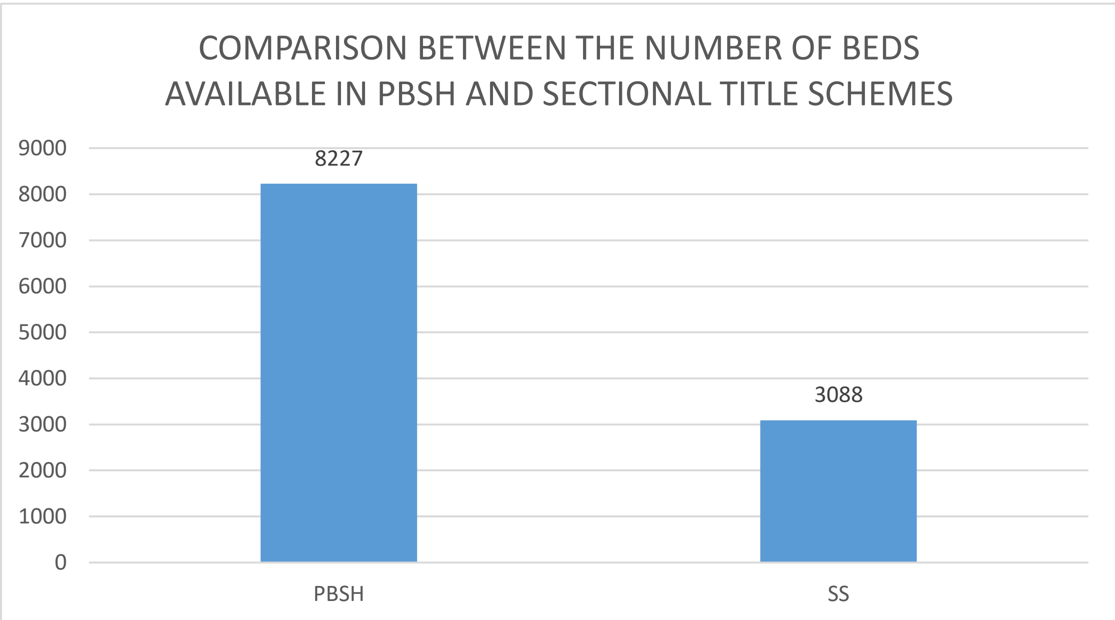


Figure 4.7: A comparison between the number of beds supplied in PBSH and in Sectional Title Schemes

Figure 4.6 provides a direct comparison between the supply of PBSH beds and Sectional Title units in the Hatfield Student Village. PBSH are high density residential buildings with smaller units than those found in the sectional title schemes.

Table 4.5 establishes which of the benefits provided by the Purpose-Built Student Housing are included in the monthly rental paid by the students. The information in the table below was taken from the websites of the various buildings; therefore, if it was not expressly stated on the website that it is included. Then, it would not be included in the table. All the facilities have Wi-Fi installed. The Laundromats are operated by using tokens. The bathrooms and kitchens can either be en-suite or communal facilities. All the facilities have on-site parking; but some of the buildings ask an extra-over fee for the secure parking.

Table 4.5: The benefits included in the monthly rental of PBSH in Hatfield.

PBSH	WIFI	COMMUNAL STUDY ROOM	WATER	ELECTRICITY	KITCHEN	BATHROOM	LAUNDRY	ON-SITE PARKING	OTHER
Hatfield Studios	No	Yes	Yes	No	Yes	Yes	Yes	No	
Studios @ Burnett	No	Yes	Yes	No	Yes	Yes	No	No	
Festival Edge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Games Room
Hatfield Square	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Swimming Pool / Gym
CampusKey	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Gym/ Games Room
Apartments on William	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Braai Facilities
Urban Nest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Duncan Court	No	Yes	Yes	No	Yes	Yes	No	No	
The Fields	Yes	Yes	No	No	Yes	Yes	No	No	Retail
Unilofts	No	Yes	Yes	No	Yes	Yes	No	Yes	

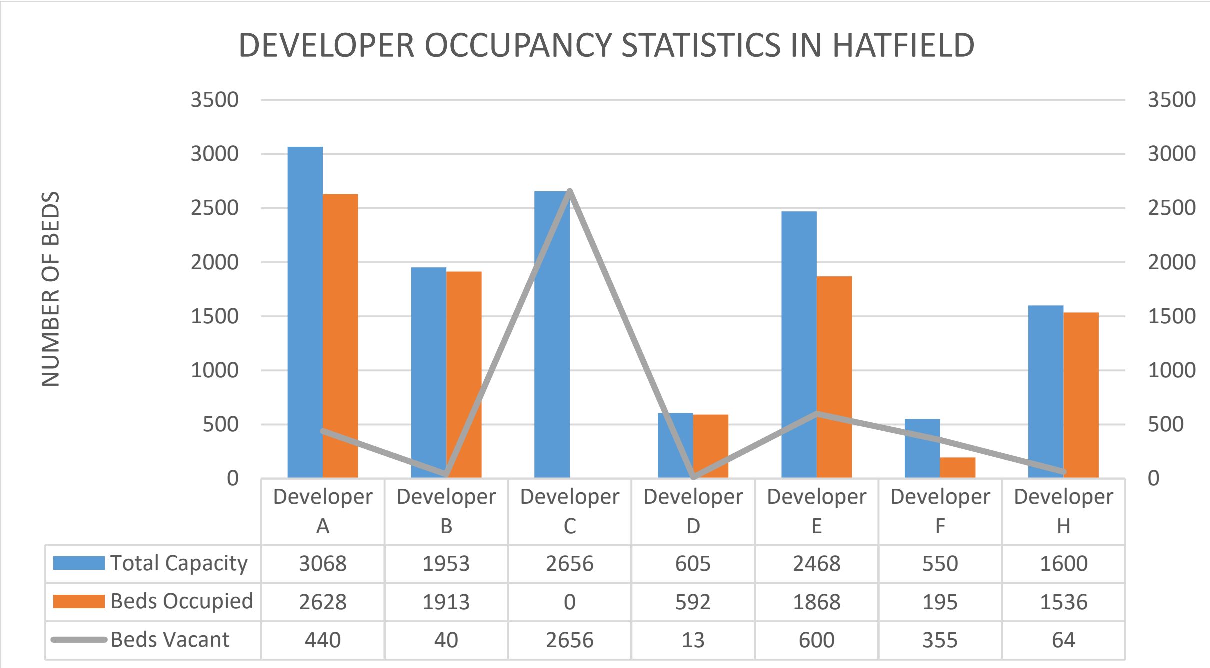
If the element has been labelled with a ‘yes’, that element is included in the monthly rental, when the element is labelled ‘no’, it is considered to be excluded from the monthly rental. However, the ‘no’ does not mean that the building does not have the listed benefit.

4.5. DEVELOPERS' PERSPECTIVE

4.5.1. Student Accommodation Supply and Characteristics

All of the developers who took part in the study have constructed new buildings in Hatfield within the past 5 years. It proved to be very difficult to determine who the developers were of the older buildings in Hatfield; since this information is not available at the subject building, or on the internet. The developers who were interviewed are developers of a variety of property usages, including PBSH and Sectional Title Schemes.

The graph below (Figure 4.8) shows the occupancy statistics of the buildings, which the developers developed. Developer A has the largest supply of beds (3068 beds); while Developer F supplies the least beds to the market (550 beds).



	Developer A	Developer B	Developer C	Developer D	Developer E	Developer F	Developer H
Total Capacity	3068	1953	2656	605	2468	550	1600
Beds Occupied	2628	1913	0	592	1868	195	1536
Beds Vacant	440	40	2656	13	600	355	64

Figure 4.8: This graph represents the number of beds supplied to the market by the developers who took part in the study, as well as the buildings' vacancy rates.

Developer C currently has no buildings on the market; since the construction is not yet complete. 1210 beds will be introduced to the market in January 2020; whereas the remainder of the beds (2968 beds) will be added over the course of the next three to five years. Developer E still has 600 beds in the pipeline, which will be delivered in 3 years' time; and Developer B has 700 units in the pipeline.

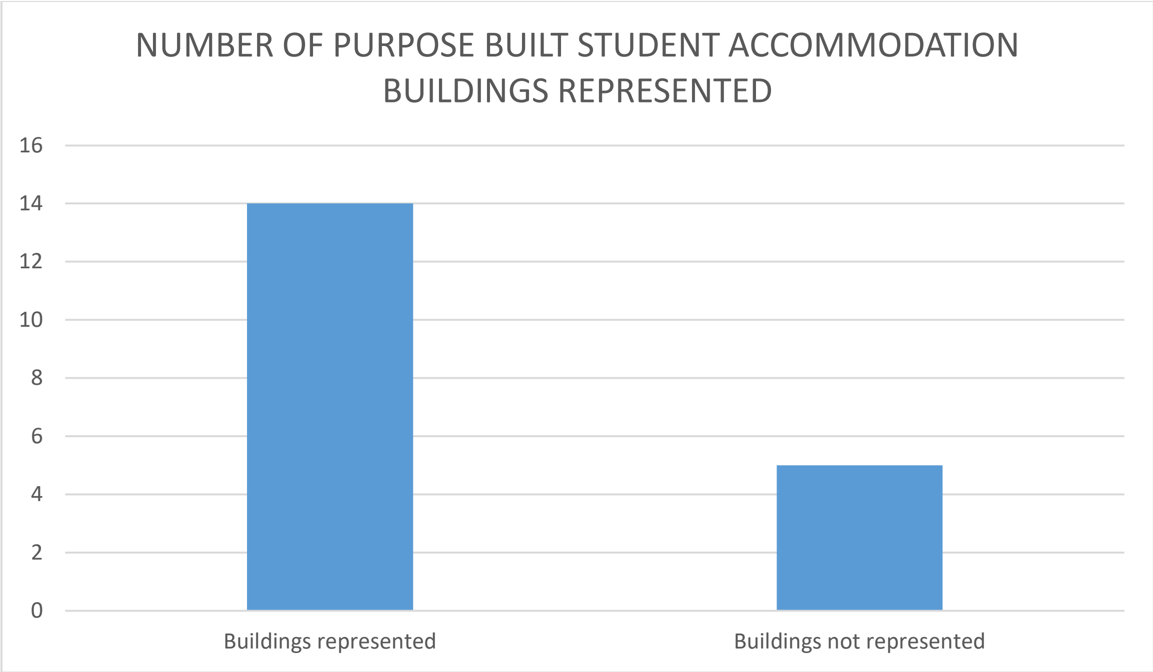


Figure 4.9: A graph representing the number of PBSH buildings represented by the various developers interviewed for the study.

The developers interviewed represent 74% of the PBSH buildings in Hatfield. This graph includes the buildings that are still in the planning and construction phase. The number of beds in the PBSH buildings represented by the developers interviewed amounts to 64% of the total beds available.

The Hatfield student accommodation market has a wide variety of rentals available for students, from which to choose. The basic price of student accommodation would be that which an NSFAS student can afford with the bursary. The NSFAS bursary provides R 49 900 to UP students for student accommodation in 2019 (Adendorff, 2019). This amount provides R 4 158 per month per student. This amount must include their monthly costs for accommodation, water, electricity, Wi-Fi and any other expenses, such as laundry services. It must be noted that the amount mentioned above is only the accommodation allowance; and NSFAS students still have other allowances available for their food, study courses, books, and transport (NSFAS, 2019).

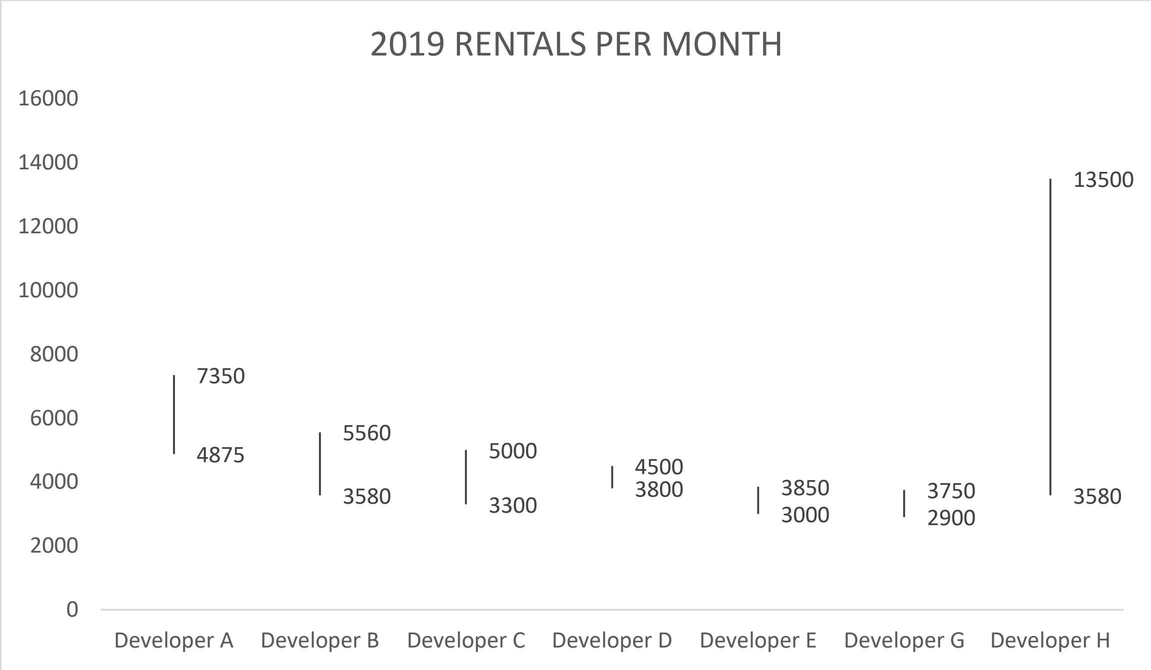


Figure 4.10: A graph stating the monthly rentals of the various developers' student accommodation units.

Figure 4.10 establishes the lowest and highest monthly rentals employed by the buildings of the developers who were interviewed. Developer F does not rent out any of his units; and they are only for sale. Developer G is located at TUT; but the monthly rentals are purely for NSFAS students; and this provides a baseline rental. Developer H provides rental units and sectional title units to the market. Developer H has the highest range in price offerings; while Developer E provides the cheapest beds to the Hatfield student-housing market. The different unit offerings provided by the developers can be seen in Figure 4.10.

The following figure was provided by Developer G, in order to explain the various levels of affordability of student housing in South Africa. This developer does not have a building in Hatfield; but he is continuously monitoring the Hatfield market, in order to determine when would be an appropriate time to enter with the company's specific student-accommodation model.

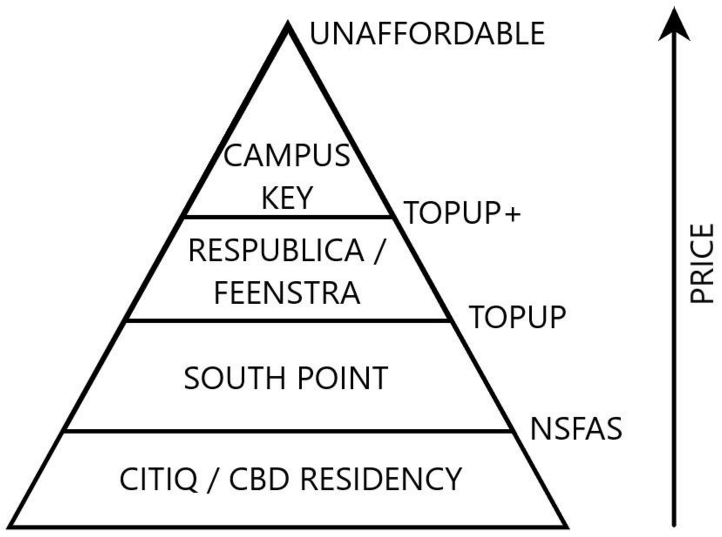


Figure 4.11: The cost comparison of student accommodation in South Africa.

The following graph (Figure 4.12) depicts the length of contracts being employed by the various developers. The UP residences employ a ten-month contract. The tendency to employ 10-month contracts is what has created the 8-9 month economy in Hatfield, causing a large portion of the office tenants to move out of the area; and the retail sector consequently to struggle.

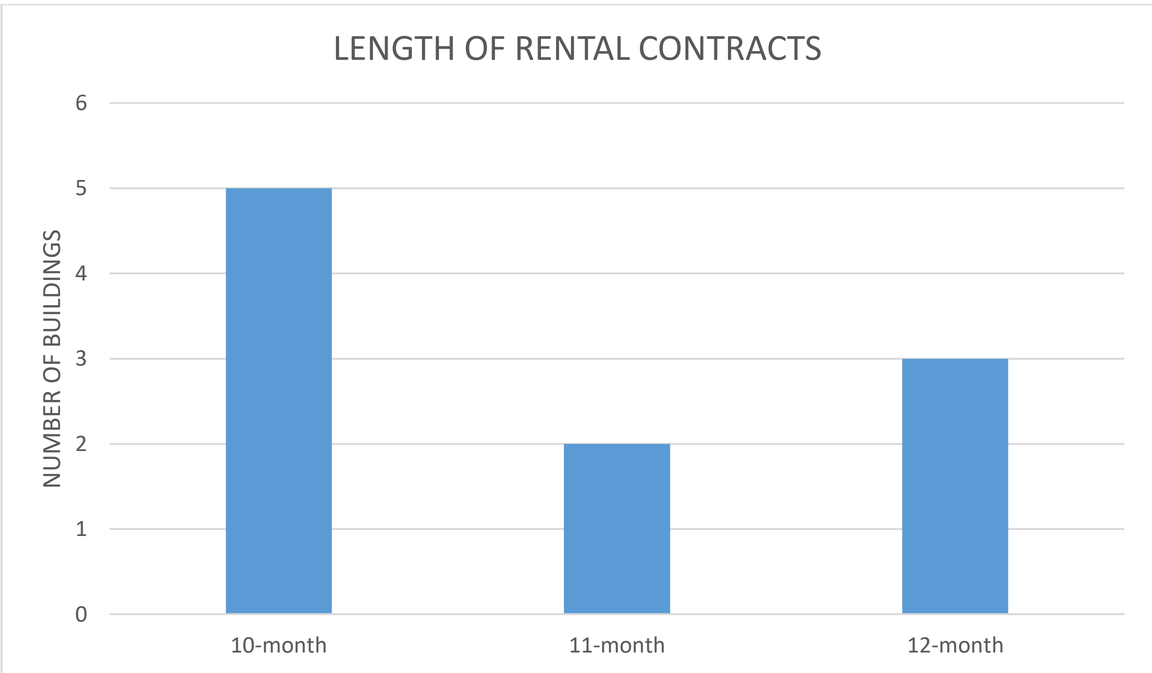


Figure 4.12: This graph illustrates the length of the contracts implemented by the developers.

Students who study at the Hatfield and Hillcrest campuses have a wide variety of housing, from which to choose. Students who live in the feeder neighbourhoods (Menlo Park, Brooklyn, Waterkloof, Menlyn, Sunnyside, Arcadia, Queenswood, Lukasrand, Garsfontein, Faerie Glen, Lynnwood, Equestria, Constantia Park, Villeria, Groenkloof, and other.) frequently stay in a flat or UP Res; but they return home during weekends and holidays. Students travelling from further areas (Johannesburg, Centurion, Midrand, Pretoria West, Montana, Silverton, Pretoria North, an other.) do the same; since they are still within a 100km radius from the university. This has caused the Student Village to run almost empty over weekends and during holidays; and consequently, this has placed considerable pressure on the non-residential uses.

When developing student accommodation, the Return on Investment is an extremely important part of the success of the building. When fitting one student into a unit, that student would have to cover the costs of the entire unit, which would make that unit much more expensive. When fitting four students into the same sized unit, the costs of that unit can be split between four accounts; and this makes it more affordable. It is also the less risky option. When one student moves out of a single occupation room, the developer has a vacant unit; whereas when one student moves out of the 4-bed unit, there are still three other students who can provide an income to the developer.

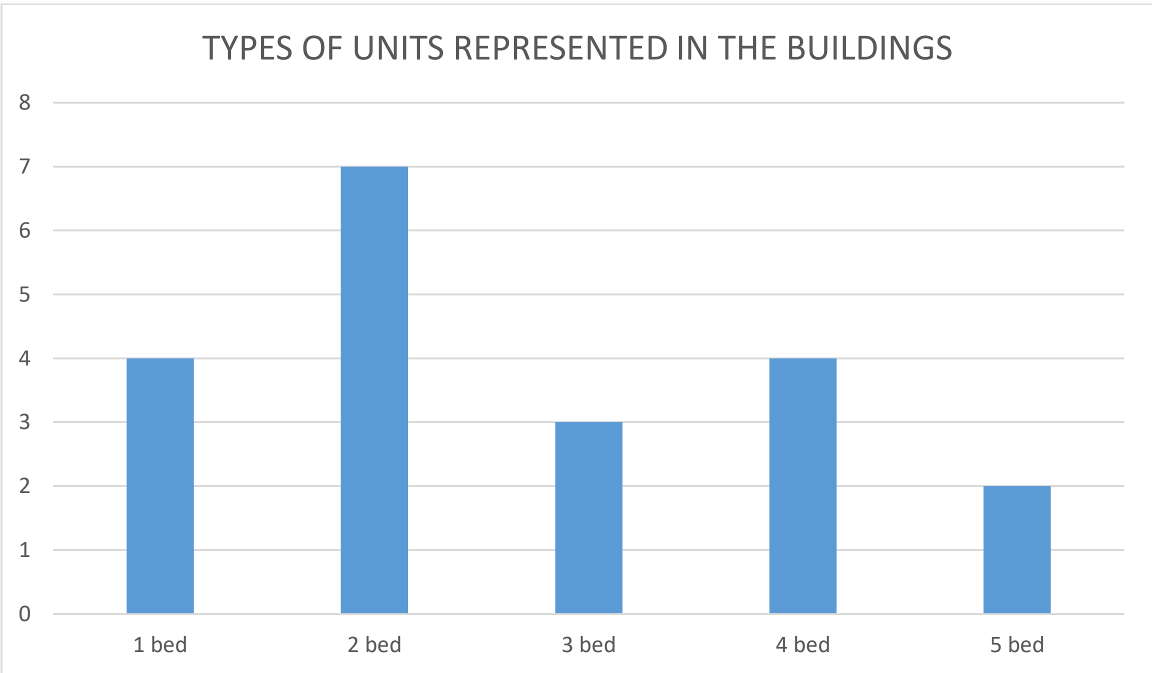


Figure 4.13: This graph represents the type of units that can be found in the buildings represented by the developers.

This graph represents the number of beds per unit in the various developments represented by the interviewed developers. It does not represent the number of beds available in the buildings. These are the unit options available to students in Hatfield. 2-bed units appear to be the most popular, followed by 1-bed and 4-bed units. Five-\ bed units are the least popular.

Figure 4.14 aims to establish whether the Developers believe that there will be more development over the next 5 years in Hatfield. The majority of the developers refer to new development as the existing developments in the pipeline; and that is why their answers were ‘yes’. Although they see more development in the pipeline, 5 of the 9 developers believe that the Hatfield student accommodation market is saturated. Due to the increased vacancy rates in the PBSH, some developers are worried about their occupancy rates with the amount of development still in the pipeline.

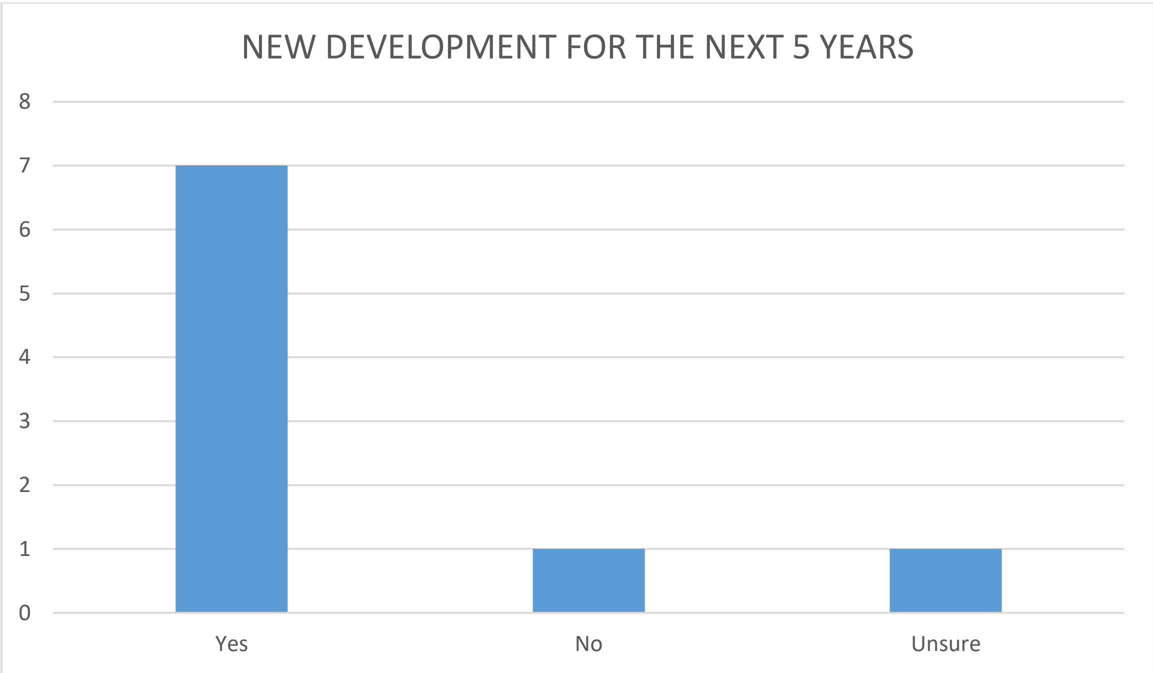


Figure 4.14: This graph establishes the development potential of student accommodation for the next five years according to the developers' expertise on the Hatfield area.

The biggest problem with construction is the long lead times of delivery. When considering the lead times, if a developer had to start building a new student accommodation block in Hatfield in 2019, the building would only be delivered in 3 years (2022). The process includes securing the land, going through rezoning and physical construction. This boom in Hatfield occurred, due to the forecasted student increases at the university about four years ago, which showed a massive increase in student numbers. These figures have been adjusted in the meantime; consequently, the buildings that are in planning will be able to proceed.

According to Developer B, the developments in the pipeline in Hatfield will have to start to move away from PBSH, and move into the apartment market. There is a healthy supply of PBSH and future development in this category might struggle to get zoning approval. Due to the construction environment struggling in the current economy, construction has become very expensive. It follows that the price range for accommodation units has increased, in order to cover the high construction costs. This, in turn, results in higher vacancy levels. Three to five years ago, construction costs were more affordable; so it was easier to provide high quality accommodation at more affordable prices.

The price of land in Hatfield is extremely expensive. Property owners in the area are aware that developers are looking for space to develop student accommodation Due to this knowledge, the owners add a premium on top of the actual market price for the property. When the developer's need for the property is high enough, the developer will purchase the property at the inflated price.

It is important to understand the shift that has taken place in Hatfield in the past 7 years. Student accommodation can be broken into 3 categories:

1. On-campus Residential,
2. Purpose Built Student Housing, PBSH for short, which is privately owned with on-site active management; and
3. The Conventional Residential Offerings, which have been in Hatfield for many years, but are not managed. These buildings are privately owned flats or townhouses, but due to the location of the building they may attract a student as a tenant, simply because of its location. These buildings are not exclusively aimed at students, or managed as student accommodation.

It is important to note that seven years ago PBSH did not exist. Students could choose between an on-campus residence and a conventional residence. If a student did not want to stay on campus, s/he would go and rent a flat and the student's parents, the bursar, or the person who pays the bills, would have to furnish that flat. The student would have to pay for data, parking, utilities and everything else. The category of PBSH came into being, and many of the entrances were in the last 7 years. It follows that in the last seven years, 8 227 beds were added to the market – specifically for students in Hatfield. This number does not include any of the sectional-title schemes added within the same time period.

An important element to note is that the University is making the market unstable by providing head leases to private accommodation buildings (PBSH), while refurbishing their own. As the supply is limited, the University is forced to pay expensive rates to house their own residential students, until their buildings are finally refurbished. This creates a false demand for expensive student accommodation.

The future development of Hatfield depends largely on the information provided by the University. The annual projected growth rate for contact students is 0.6% from 2018 to 2025, with the current number of students on Hatfield Campus at 34 669 students. The number of first-year students per year is approximately 13 000 students (Mouton, 2019).

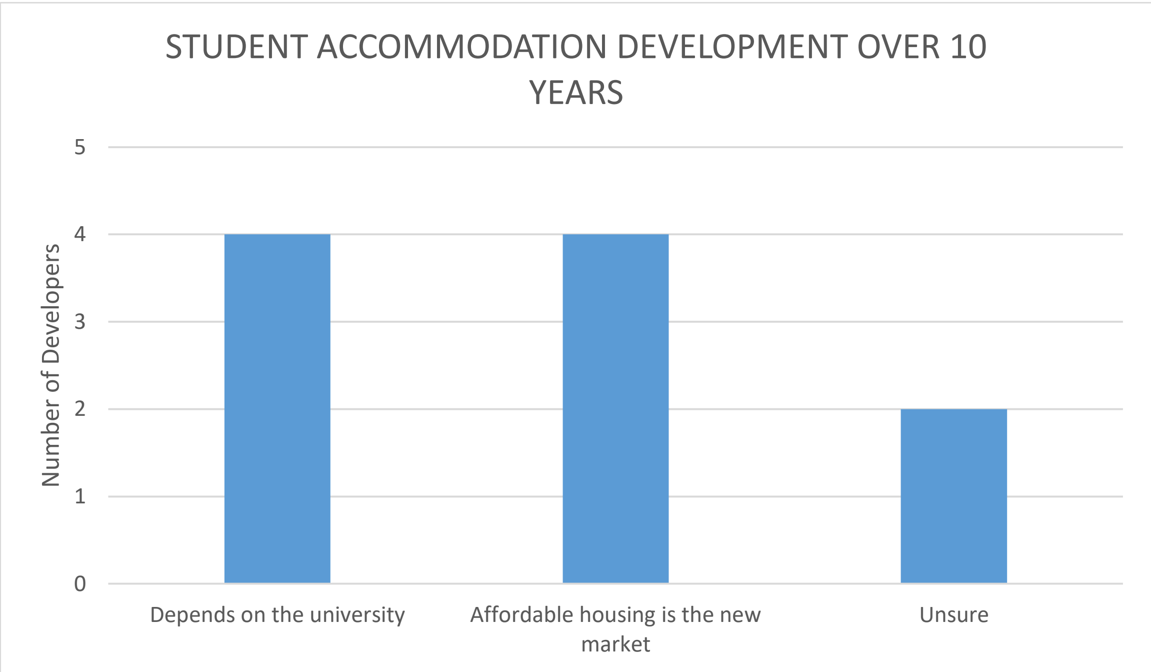


Figure 4.15: The developers' predictions for development over the next 10 years.

The prediction for development over the next 10 years has proved to be more difficult for the developers to determine. There is a lot of uncertainty on the future of the university; whilst others believed that the future accommodation must be aimed at a different demographic than that of the current market. Some developers have more than one opinion.

The development over 10 years largely depends on the information released by the University. The institution is currently growing at 0.6% per annum; and this growth rate will be implemented until 2025. After that, the growth rate will remain unsure; but future development will rely on the new figures published (Mouton, 2019). There will always be a demand for futher development of some sort in any area. The current demand will be to satisfy the change in demographics at the university (creating opportunity for NSFAS students). Developers will have to be able to adapt the product to meet the demand, not so much the quantity, but more the type of product at the right level of affordability for that market. There are 9 000 NSFAS students at the UP in 2019 (Adendorff, 2019). These students are spread across all of the campuses and the specific number of NSFAS students on the Hatfield Campus could not be determined.

The Hatfield Student Village has a very large existing supply of student accommodation, with many of these buildings being older than 10 years. Buildings require maintenance, as well as revamping, in order to remain competitive within the niche market of quality student accommodation in the area. The following table (Table 4.6) shows the results of the developers' willingness to either develop new student accommodation, or to revamp the existing student accommodation in the current economic conditions.

Table 4.6: The willingness of developers to develop new student accommodation or revamp existing student accommodation in the Hatfield Student Village in the current economic conditions.

Developer	**New Student Accommodation**	**Revamping Existing**
Developer A	Yes	Yes
Developer B	No	No
Developer C	Yes	No (rather change in use)
Developer D	No	Yes
Developer E	Yes	Yes
Developer F	Yes	No
Developer G	Yes	Yes
Developer H	Yes	Yes
Total Yes	**6**	**5**

Table 4.6 indicates that 6 of the 8 developers are interested in new student accommodation; while those who believe that new student accommodation will be constructed in the next five years were 7 of 8 developers. This question asked the developers to consider the two options specifically in the current economic market, an economy which is struggling, but it did not seem to have a large effect on their response. This indicates that there is still an appetite among the developers for further development of the student accommodation market in Hatfield.

Developers often enter into Joint Ventures (JV) with other developers, in order to create the perfect conditions for the planned development to take place. A JV is a "commercial alliance between two or more separate companies, which enables them to share the risks and the reward. A new business is created to which each party contributes resources, such as land, capital, intellectual property, skills, credentials or equipment (Construction World, 2016; Hargrave, 2019)."

Joint ventures are commonly used, in order to (Construction World, 2016):

- Enable smaller companies to deliver large projects by combining expertise and resources.
- Enable larger companies to acquire new resources or expertise from smaller companies.
- Access specialised information.
- Enable a smaller company to benefit from the financial stability and credibility of a larger company.
- Gain access to geographical locations.
- Share risks and costs.

Table 4.7 aims to determine whether the developers interviewed are willing to go into a JV with another developer, or with the UP.

Table 4.7: The developers' willingness to enter into a Joint Venture with other developers and the University of Pretoria.

	Other Developer	**UP**
Developer A	Depends on the opportunity	Depends on the opportunity
Developer B	Yes, with the right returns	Yes, with the right returns
Developer C	Yes	Yes
Developer D	Yes	No
Developer E	Yes	Yes
Developer F	Yes	Yes, preferably with UP
Developer G	Yes	Yes
Developer H	Yes	Yes, preferably with UP
Total Yes	**7**	**6**

The majority of the developers are interested in going into Joint Ventures with other developers, as well as with the UP. The developers who were interviewed believe that going into a JV with the university would result in aligned goals; and it would present a good opportunity for the Hatfield area. Several of the developers have highlighted the fact that there is a lot of red tape involved when working with the UP. This has prevented them from going into a JV with the university.

The Hatfield Student Village has more than 45 sectional title schemes that are being used as student accommodation due to their proximity to the university. Table 4.8 considers how many developers are willing to become the sole owner of an existing sectional title scheme (purchasing all the units, thereby removing the Body Corporate) and then managing it as rental housing.

Table 4.8: The willingness of a developer to become the sole owner of a sectional title scheme and managing it as a rental housing structure.

Developer	**Becoming the sole owner of a sectional title scheme and managing it as rental housing**	**Reason**
Developer A	Yes	No other parties will interfere
Developer B	Depends	Depending on your yield – Financial consideration
Developer C	Depends	Depends on the costs and how much the owners are willing to sell the unit for
Developer D	Depends	Depends on how much you are willing to pay – people willing to pay more for a unit they own
Developer E	Yes	Good yield
Developer F	No	Risk too high
Developer G	Yes	Good yield
Developer H	Depends	Very costly – depends on your figures

Four of the nine developers mentioned that it all depends on the figures related to this concept; since it might not create enough yield to make it feasible; while 3 of the 9 considered it to be a good idea; and only one developer said no to the concept. It would be a risky decision; but if a feasibility study were to be done, and the figures worked out; then it might be a good idea. This concept could potentially work if managed on a per bed basis.

The UP has limited accommodation space available for students; and the demand far exceeds the supply available. As a result, UP's Residential Affairs and Accommodation Department require that developers register with the department, to ensure that quality student accommodation can be provided to students, which are not placed in an on-campus residence.

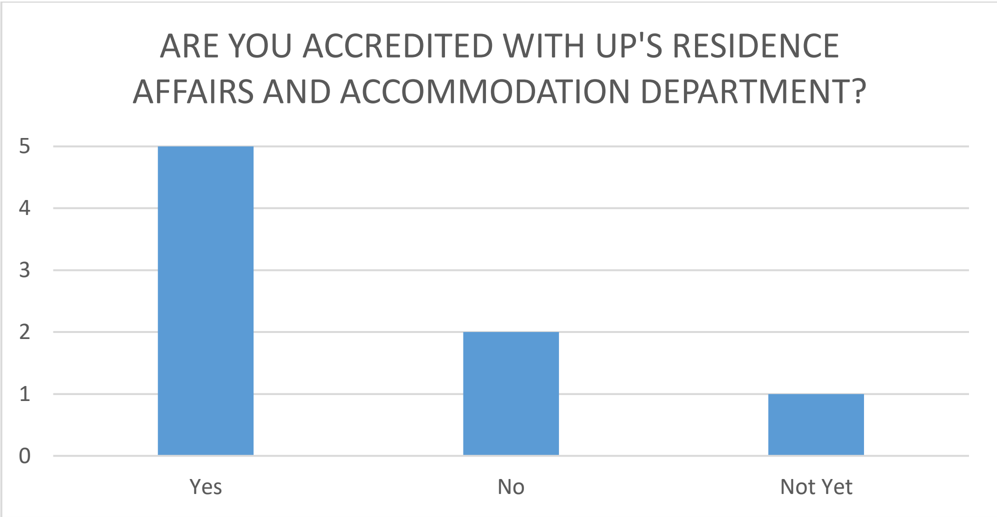


Figure 4.16: The amount of developers who are accredited with UP's Residence Affairs and Accommodation Department.

This graph records how many of the developers are registered and accredited with the University's Residential Affairs and Accommodation Department. The majority of the developers are registered and accredited. The developer who has not yet registered is still under construction.

In 2015, the Policy on Minimum Norms and Standards for Student Housing at Public Universities was published in the Government Gazette. Although the interpretations frequently differ, between the various developers, these regulations establish the basic baseline of how student accommodation must be delivered and managed, in order to ensure that the best quality of student accommodation is provided.

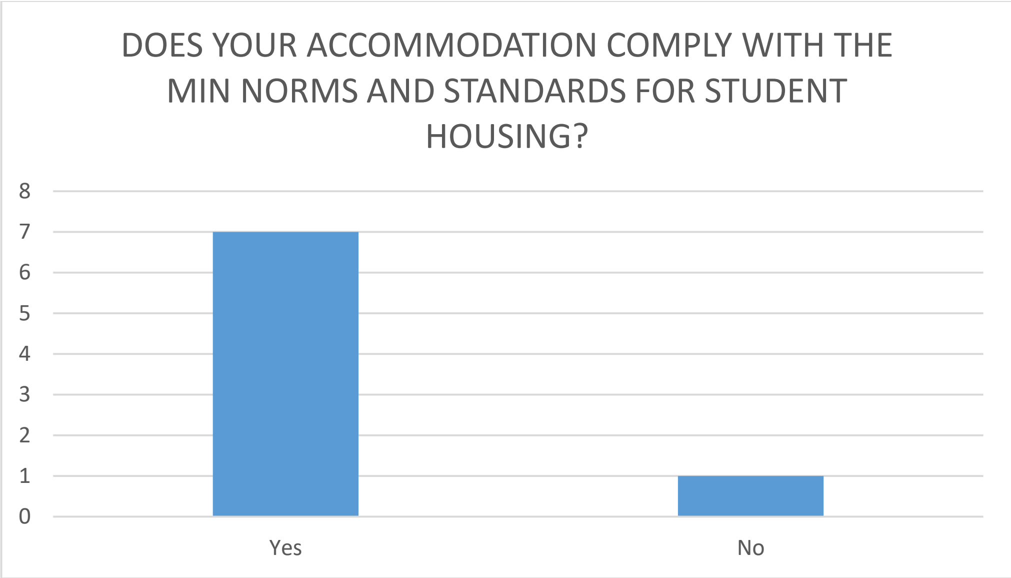


Figure 4.17: The developers who comply with the minimum norms and standards for student accommodation.

The only developer, who answered no, said that his development was constructed for high end-users, so the design did not consider the minimum norms and standards; since they already know that their units exceed these criteria. These units are available for purchase, but not for rental.

4.5.2. Conversions in Hatfield

The developers were asked whether they see any potential in converting the non-residential supply in Hatfield into residential uses. The various opinions of the developers will not be referenced, in order to protect the identity of the companies.

The conversion of non-residential buildings into residential buildings in Hatfield invoked different opinions from the developers; but a trend could be identified. The efficiency of non-residential buildings when converted must be effective. If the building is too deep, the units would be elongated; and there would not be much opportunity to bring in natural light from outside. You need windows on one side, and access through a door on the other side. If the unit is too deep, this layout would not be efficient. The other option would be to create much larger units; but then you would not be able to put enough students into the building to make the cost of conversion economical.

It is also important to consider the zoning on the property. Certain zonings place restrictions on the height, parking, number of units, and on the footprint of the building. If the zoning is incorrect, it will cost the developer additional money and time, to rezone the property correctly. The final element to consider is the parking on-site. According to building regulations, as well as zoning requirements, a certain number of parking spaces must be provided per number of units. The number of parking spaces should consider the number of units, but also the fact that not many students own any cars. The parking should be enough, but not too much.

The cost of the commercial space was an important point of discussion. Commercial space must be purchased at R/m^2 Gross Lettable Area, which could work out rather expensive.

Due to the already struggling micro-economy, the more offices you close down, the faster your economy will shut down, when the students are not there; so converting commercial space into residential space would not be advisable for the specific area being discussed. Although there is large potential for such conversions, with many office buildings standing vacant, it would not be a sustainable option for the area.

The one building mentioned by multiple developers, as a potential conversion is the ABSA Building situated at 1102 Burnett Street. This building is situated 500m from UP's Prospect Entrance at the Hatfield Campus. Although this building is not very large, the top floors have the potential to be converted into student accommodation; and these can be used for mixed usage development.

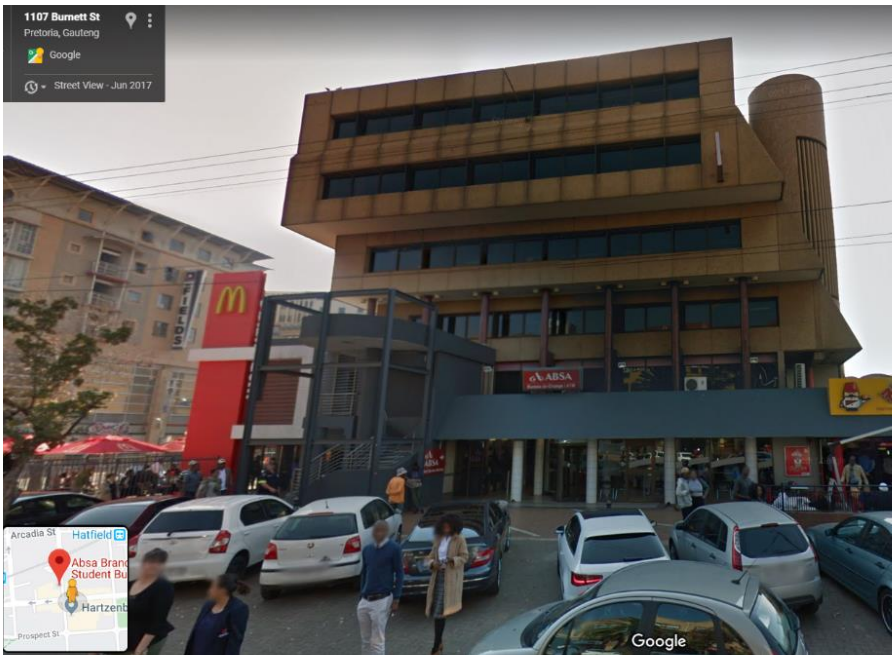


Figure 4.18: Absa Pretoria Branch Student Bureau Building situated at 1102 Burnett Street

4.5.3. Non-Residential Supply in Hatfield

The developers were asked to provide an opinion on the non-residential supply in Hatfield; and whether there is any potential in the sectors, such as retail, office space and entertainment. They had to respond to the question: Are there any other properties in Hatfield that could potentially be purchased by a developer for purposes other than residential?

All the developers unanimously expressed their concerns for the future of non-residential usages in Hatfield. In order for a city to be successful, there have to be office, retail, residential and student mix. At the moment, there is no appetite for non-students to spend their money in Hatfield. This is why the retail sector in Hatfield is so unsuccessful. It is not possible to run a city's economy on an 8-9 month income stream. Hatfield is distressed. It is not a sought-after place for students to live in; since there is nothing in the area that happens after hours. In order for Hatfield to become viable, there has to be improved student life.

The node has been dominated by residential usage; and it has been branded as a student village. It is going to prove difficult to do business in the node; unless the model is aimed at students. Although there are some opportunities for non-residential usages; it would not attract the number of people that it requires to keep the industries alive.

It is of extreme importance to consider the local market and the micro-economy, which is under huge pressure. Office blocks are standing vacant – most of the industries that once called Hatfield home, have moved to adjacent neighbourhoods, such as Menlyn Maine, The Club, Brooklyn and Waterfall. The Hatfield Village developed into a student town, which has resulted in a lack of interest in the area from large corporate companies. There are some possibilities at the smaller shopping centres. Developers could construct student accommodation above the retail area, in order to create mixed use spaces, such as at The Fields.

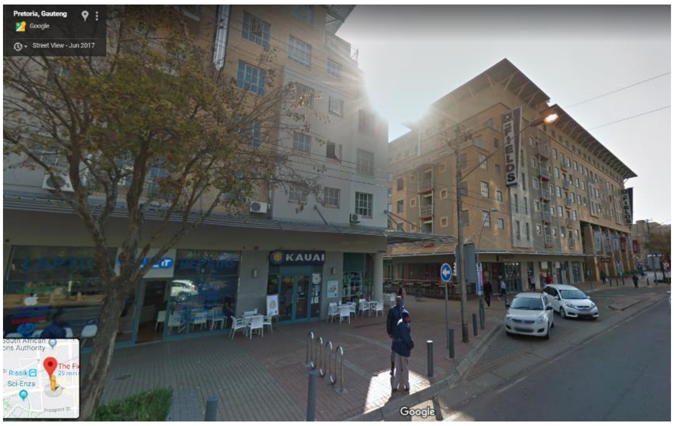


Figure 4.19: The Fields mixed use development

Another problem mentioned by the developers is the accessibility in Hatfield. In order for a commercial zone to be successful, it requires easy access from major roads, as well as easy thoroughfare. Hatfield is home to the most northern Gautrain station, which should make accessibility easy. Unfortunately, the one-way streets, the lack of parking space, the large amount of taxis, and the self-appointed car guards have made travelling through the area somewhat of a challenge.

The purchasing power in Hatfield is very limited. Students do not have money. The retail sector in Hatfield must be specifically aimed at students and their needs, in order to succeed. Hatfield needs other industries to enter, but this would prove to be very difficult. Other usages will continue to fade out, due to the rising number of students in the area.

4.5.4. Developers' Advice

The developers were asked to provide some form of advice to a new developer entering the Hatfield Student Market. This question was intended to determine the important concepts related to student accommodation. Each of the developers had different advice to give to someone who wants to enter into the student-accommodation market. The developers' advice will be stated separately.

Developer A:

It is not a property play; it is a hospitality play. If a developer thinks it is a simple property investment; it is not. Property is a component required, in order to give life to the hospitality offering. The developer is essentially managing a hotel with a long resident customer. All of the services that hotels would offer in terms of housekeeping, security, Wi-Fi, access control, front desk, should continue to be offered to the customer. That would be the most important mind-shift. Some very successful property developers, with many years of experience in property do not understand the first thing about managing the student environment. It is different from commercial, retail and industrial developments. The Developer has to do a lot of research and build the capacity, in order to be able to manage the assets, as well as the population living within.

Developer B:

His advice is: Do not go into student accommodation. There are better-yielding investment returns than students. People believe that student accommodation is a quick and easy way to make money; but it requires a lot of management. Invest the money into passive investments, in order to get a better return.

Developer C:

Location, location, location. Our company's research has determined that there are three things that determine whether student accommodation will be successful. The first thing is the distance to the university; the second element is the price of the offering; and the third element in South Africa, specifically, is security or safety. The building has to be within walking distance from the University; and when this is implemented, the security issue is close to being solved, because students would not have to walk far late at night, or to early classes. To solve the cost issue, ensure that the building is designed, as efficiently as possible.

Another piece of advice is to get a professional team that has constructed student accommodation before. Construction companies, who have not done student accommodation before, do not know all the tricks. They do not know how small a room should be and what the student population requires.

Developer D:

Be realistic about the forecasts. Work on a conservative basis; work on a 10-11 month income stream; and work on a staggered uptake model. First-year students are the ones that move into new buildings. Only very seldom would there be a second-year student that would move into a brand new building. Wait for those first-year students to arrive; and then aggressively market to them, especially with the lower Living Standards Measure (LSM) students, who arrive with their suitcases and have nowhere to go.

Be realistic about your uptake and your forecasting on the monthly period. Be realistic about the operational costs. If the developer will be providing a lot of services know that it costs money to do that. Get the correct banking partner. As a developer, you cannot rely on the information given to you by someone else – do your own research.

Developer E:

It would be wise to recommend to anyone who wants to develop student accommodation in Hatfield to go to the bottom of the range. Do 8 beds sharing a common facility, in order to bring the price down to fit in with the students' grants. This would allow the developer to come in below the R3 000 per bed market.

Developer F:

A developer would require a lot of money to make student accommodation work. Land is extremely expensive in Hatfield. The developer will be working with the Home Owners Associations (HOAs), or the management bodies, such as the CID, in order to get the formal land rights. Obtaining the rights for the development costs a lot of money, due to the attorneys and notaries required for the processes and the court cases. It would take a developer 3 years to get the rights on the property registered that results in interest on the property. Once development has been completed, the land price per unit becomes extremely expensive.

Developer G:

Affordability and quality above all else are important. We are staying in South Africa; so accessibility and affordability are key issues. When speaking about affordability, it does not mean 'slumpification'. It means to treat the poorer student the same as the affluent student. Think more inclusively; otherwise further displacement would be created. The future student is not the affluent student, where the father pays for the studies and the accommodation. It would be the Coloured student being funded by the government; and we have to ensure that they receive the treatment they deserve. There is a change in culture occurring across all the South African Universities.

Developer H:

Be prepared for very hard work. Look at the market positively. Do market research thoroughly; and if there is a real demand, build it. There is a big future in student accommodation. At the moment, the big bank funds are going mainly into retirement villages and student housing. They are largely financing these developments at the moment.

4.5.5. Final Comments

The developers were given the opportunity to provide any last comments, which they believed are important to consider in the Hatfield Student Village. The opinions of the developers will be kept anonymous. The following section describes the opinions of the developers, who were interviewed.

It is important to note that UP has been using external accommodation providers to house students; while they renovate their own residential buildings. This has created a fictitious supply of students. If they take those students back onto campus, it is going to leave a gap in the market. The university is creating a false demand. This is placing extra pressure on the student housing market in Hatfield.

Hatfield has the second best supply of student accommodation in the country; while UCT has the best supply. This research did not only consider student accommodation, but also Sectional-Title Schemes. When determining the supply, consider the student accommodation, as well as the other residential buildings in the area.

The DHET stated that there is about a 240 000 bed shortage at universities alone (excluding TVET Colleges). When determining supply and demand, it is important to divide the universities by their campuses. It is incorrect to say that the UP has 50 000 students, so 50 000 beds need to be developed in Hatfield. Consider that there are various suburban areas around Hatfield; so many students can study from home.

It is important to know that development stands very close to the Newton tree. Newton's law of gravity says the apple will fall to the ground. The rule of development is risk and reward go hand-in-hand. Student developments are very high risk; but it also means that the reward is high. Be very careful, therefore.

Student accommodation is a hot topic; but the operator is the aspect that makes the difference. A developer can develop as much as he/she would like; but the operations (tenant management) make the difference. The building manager must understand student politics, student life, what to do, and how to establish a student culture. There has to be a constitution for the building.

There is not enough retail in Hatfield and not enough entertainment for the students. This is a huge drawback. Developers are getting together to see how it can be changed; but it is not that easy. Around the Gautrain station, there is huge potential; since it is underdeveloped. Universities will never move; they will always be there. Developers must position themselves in the right way – close to the university. Public transport in South Africa is not particularly good; not everybody can afford a car; so the closer you are to the university, the better.

The shorter the distance to the university from the accommodation, the easier it is for the students to walk. Most students do not have cars. Students are willing to pay a premium; if they are closer to the university. The further the building is away from the campus, the cheaper the residential unit would have to be; or provision has to be made for vacancies in the building. The building has to be inside the core, close to the university.

Everything in Hatfield is re-development; and there are people, who have been staying there for 50+ years, but whose parents have also lived there. These people are emotionally attached to the environment; and they do not believe that developers understand that. Developers are, consequently, constantly struggling with these homeowners. At the same time, there is the City Improvement District (CID), who do not necessarily stay in the environment; but they take the area; and they make it their own environment. The CID has connections with the municipality and local institutions; and a developer needs these connections, in order to approve the developments.

A few years ago, the university had an approach of “we see all these things happening outside the fence; we think they are set up for failure.” Now, the relationship has become more constructive; and it is a matter of “we will not be able to solve our problems on our own; so let us get into the same boat, and work together”. Understanding everyone’s needs in Hatfield is important; so that developers can develop the appropriate things and adapt the morale, the product, or the pricing, in order to meet the requirements of the area. The university should continue engaging private-property owners on that basis.

The student sector is being highly politicised. Private investors might not be so positive, even on the 5-10 year period. Institutional investors will continue to invest, as they have lower yield requirements and social responsibilities. Financial drive would not stimulate this sector; it will be more of a social responsibility drive, which only the larger institutional investors can provide.

It is also important to note that, as soon as the listed funds come knocking on the door of student accommodation; this would be the signal for the private guys to exit. Listed funds can enter the market with cheap money; and the private guys cannot compete.

The Tshwane Municipality needs to transform Hatfield into a student town. They can do this by creating pedestrian walkways, closing off the roads, and making it into a student city. Because they have not done that, there is terrible crime in the area; so the access to the university is affected. There are lots of traffic issues. To get it properly laid out and properly done is the biggest problem that Hatfield currently faces.

The Hatfield Village concept is a good idea; but the university must take the responsibility for supporting its village. It is because of the university that Hatfield has attracted all these students; and the students have the spin-over effect, which has resulted in the 8-9 month economy. The university must decide to assist its local business people; and to be a role-player in the economy. If they adjust their procurement policies that they must purchase within their own feeder base, they would be able to make a huge difference in the area. At this point, they expect the private sector to support their students during their occupation period; but when the students go away, the university does not assist the private sector during that time. The long-term sustainability of the area depends on what the university does in the near future.

4.6. HATFIELD ROLE-PLAYERS' PERSPECTIVE

4.6.1. Hatfield CID

The Hatfield City Improvement District (CID) aims to develop a sustainable, responsible and inclusive village, which is a well-balanced, mixed-use suburb, with a well-integrated variety of appropriate businesses, residential clusters and educational, inspirational and recreational areas, supported by a sophisticated infrastructure and services.

The CEO of the Hatfield CID, Lukas Luckhoff, shared some of his views on the area, while being interviewed at the Hatfield CID Headquarters. He believes that future development in Hatfield is very limited; and he can think of 2 areas in the CID that still have some potential, namely Burnett Street and Park Street; while the periphery of Hatfield still has space available for development. He emphasised that Hatfield has a need for a strong residential component, which is not Student Accommodation. This residential component is important to fix the 8-9 month micro-economy, which exists in Hatfield. There is a need for at least 5 000 to 10 000 families to move into the area, in order to keep the micro-economy afloat. These families should move into different types of residential buildings from sectional title to long-term rental.

Due to the high density required to host these families in Hatfield, full title would not be the best option for the future of Hatfield.

Luckhoff also stated that there is a need for cheaper student accommodation in Hatfield, in order to cater for the NSFAS students, who will increase yearly. The NSFAS loan has changed into a full bursary; since the policy on free higher education has come into effect. As a result, the number of NSFAS students studying at higher institutions will increase exponentially.

There is a good opportunity to convert office space into residential space; if you can find affordable space that is available. It is extremely important to consider safety, cleanliness, neatness and accessibility, when considering the conversion of commercial space into a residential area. Unfortunately, the opportunity to use property for non-residential usage is very limited. Most of the commercial offerings that used to be in Hatfield have moved out of the area into newer business hubs.

The advice Luckhoff would like to give to developers in the area is to be careful of student accommodation. It would be better for the area if they could develop affordable residential villages for young families, which would allow for permanent residents, in order to fix the 8-9 month economy.

Transport in and around Hatfield is a major problem; since it does not create any potential for the area. Thoroughfare is difficult with all the one-way streets and the large amount of taxis that occupy the roads; whilst self-appointed car guards tend to jump into the road in front of your car. Effective daily management of the area must be done privately, by implementing smart technology and visual policing (Luckhoff, 2019).

The Hatfield CID, in conjunction with the UP and other role players in Hatfield, is working on the development of a precinct plan for Hatfield. It was originally a Regional Spatial Development Framework (RSDF); but the municipality decided to rather create a Precinct Plan. There are still discussions going on; but the university has established that any plans that could potentially endanger the safety and security of their students, will not be approved (Adendorff, 2019).

4.6.2. Real Estate Agents in Hatfield

Real estate agents often tend to develop their own opinions of the area, in which they work on a daily basis. They have exclusive knowledge of the market, the property values and the vacancies experienced in an area. Two prominent real estate agencies in Hatfield shared their experiences and opinions on the market currently experienced in the Hatfield Student Village. It is important to note that sectional title scheme units are often purchased by an investor, which is then leased out to a student for the academic year.

Figure 4.20 shows the number of units managed by the two real estate agents, as well as the vacancies that they experienced at the time of the study (2019). These agencies tend to market units in sectional title schemes; but they do have a few units in PBSH.

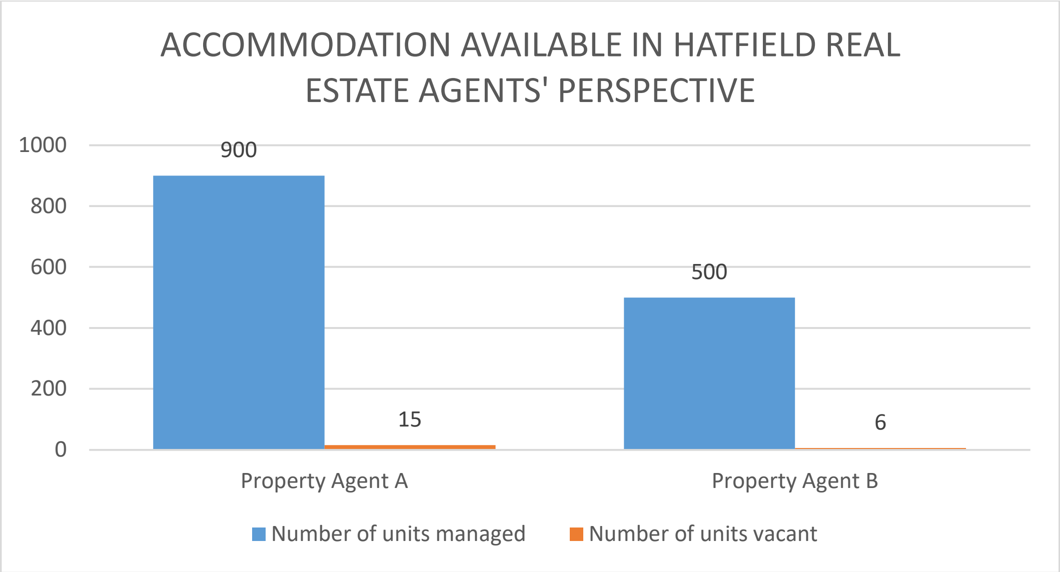


Figure 4.20: A graph illustrating the number of units managed by two prominent real estate agencies in Hatfield as well as the vacancies they are experiencing.

The two Real Estate Agent Companies represented in this study are very established in Hatfield; and they have quite the number of units that they manage in the area. These two companies' units represent 12.37% of the total Hatfield market; and they are therefore sufficient to take as a sample size for the entire area. It can be determined that, with the small amount of vacancies experienced by the agencies, that there is still demand for accommodation in Hatfield.

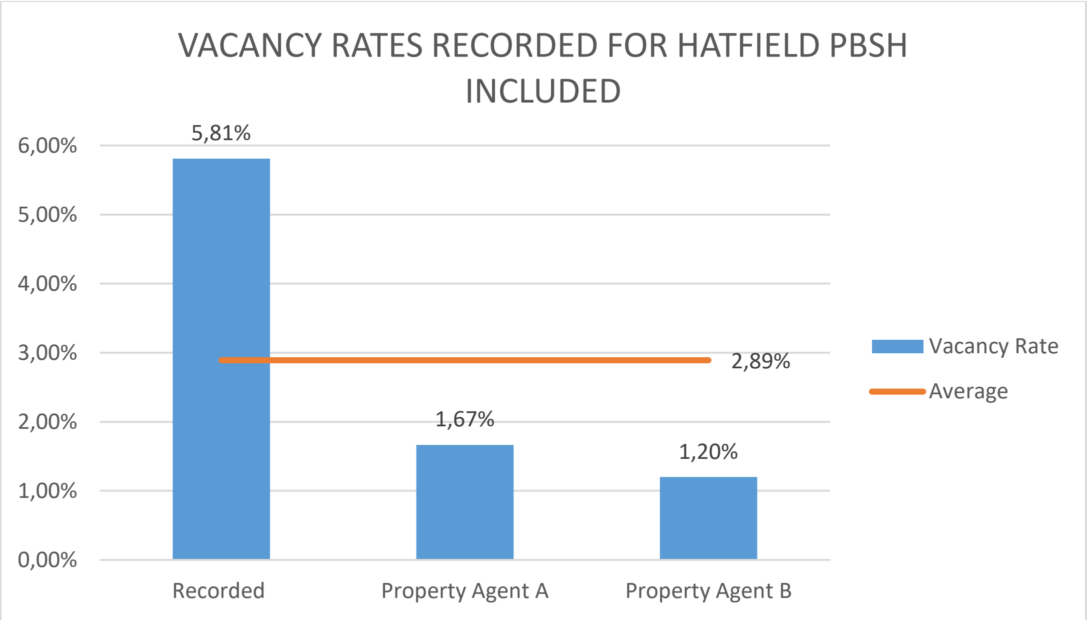


Figure 4.21: The vacancies recorded in the Hatfield Student Village including the PBSH buildings.

The recorded vacancy rates in Figure 4.22 include the vacancy rates for the PBSH buildings; while the Property Agents' vacancy rates do not vary. The PBSH buildings do mostly their own marketing; and they handle their own leasing contracts. The average vacancy rate is 2.89%. The vacancies in the PBSH are more than 4% higher than the vacancies in the Sectional Title Schemes, represented by the Real Estate Agents.

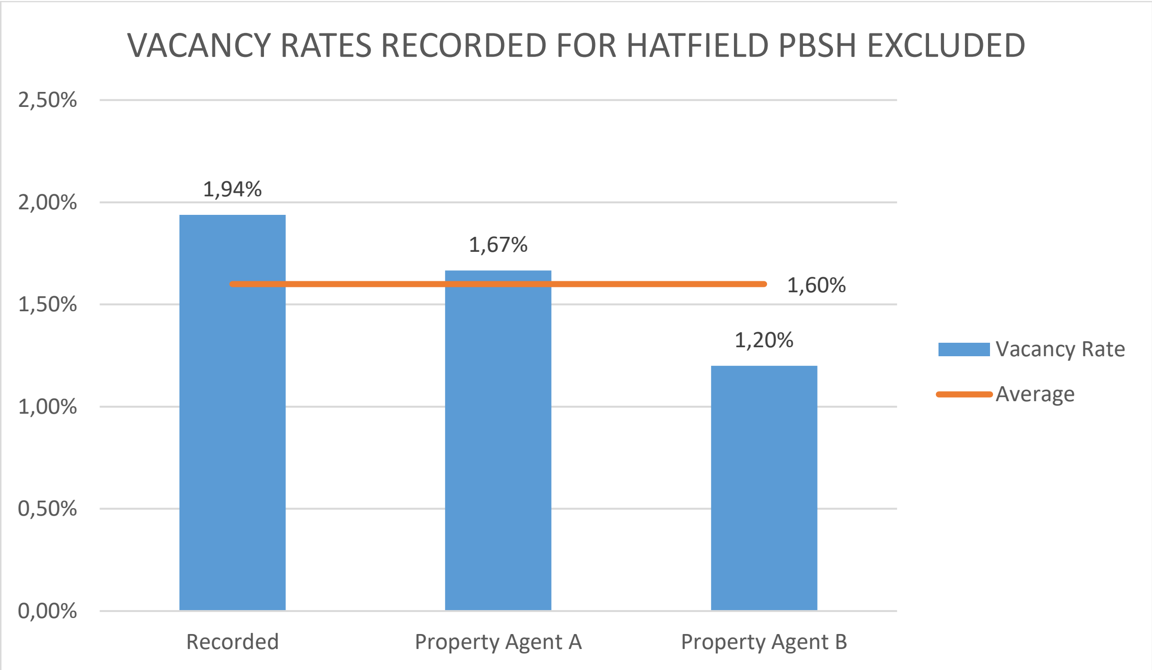


Figure 4.22: The vacancy rates in the Hatfield Student Village when PBSH vacancy rate is excluded from the recorded vacancy rate.

This graph (Figure 4.18) represents the vacancy rates when the vacancy rate of the PBSH is excluded. In this graph, the average vacancy rate can be taken as 1.60%. The average based on this graph gives a good indication of the occupancy levels in the Hatfield Student Village, when considering private-building owners.

The Real Estate Agents stated that there are very limited opportunities to develop Hatfield further than it has already been developed. If a developer does see further potential; it is important to be realistic about their expectations; and to do a proper feasibility study to ensure that there is sufficient demand to render the development viable. In the Hatfield area, it takes longer to get to a desired Return on Investment (ROI). It is very important to consider the location; and to ask a good and reasonable price. Both the agents stated that when they are experiencing trouble with the leasing of units in Hatfield, this is often due to rentals that are too expensive.

Both the agents have identified the need for the revamping of existing sectional title schemes in Hatfield; since the majority of these buildings are older than 10 years. One has gone further to say that the units need to be completely renewed. Hatfield is such a competitive market, that units need to stay updated; if they want to compete with the niche.

There is an opportunity to develop non-residential buildings into residential buildings; but it is important to bear in mind that the purchasing of commercial space is very expensive in Hatfield. On top of purchasing the expensive building or land, the conversion would also be very expensive, due to the difficulty of converting the deep spaces found in the commercial spaces in the area. There are too many residential buildings in Hatfield.

The commercial spaces in Hatfield are struggling, due to the 8-9 months economy created by the university's holidays and the vast amount of students living in the area. When developing commercial spaces, such as offices and retail, it is important to take note of the rights on the property. In Hatfield, any commercial space being developed would have to be in line with student use; otherwise it would not survive the pre-existing economy. Both real estate agents would advise against the development of such non-residential uses.

The area in Hatfield between Jan Shoba Street and the UP Hillcrest Campus is rather popular among students and developers; since this area is slightly quieter than that on the western side of Jan Shoba (Between Jan Shoba Street and Hatfield Campus), where the taxis have taken over the streets; and the majority of the students park during the day.

It is important to stay away from generating any debt, when developing in Hatfield. Purchase the property in cash, because very few developers get the rent that they desire. Do a complete and extensive feasibility, in order to determine whether it is wise to continue with the planned development.

Over the long term (10-year market) there is an over-supply in accommodation; but if the supply is of good quality, there will always be a demand for it. The rentals in the area have started to stagnate – there have been no rental increases over the past 3 years. The agents believe that the residential spaces in Hatfield are too expensive – due to the extremely competitive market.

4.7. FURTHER DISCUSSION

From the data above, it can be determined that the Hatfield Student Accommodation Market is satisfied; but there will always be a need for further development of accommodation. Figure 4.19 shows the number of beds, which are still in development, when divided into the number of beds in construction and those still in planning. The total number of beds, which will be delivered within the next 5 years amounts to 4178 beds. The information in the chart below was taken from the information given by the eight developers, who were interviewed for this study.

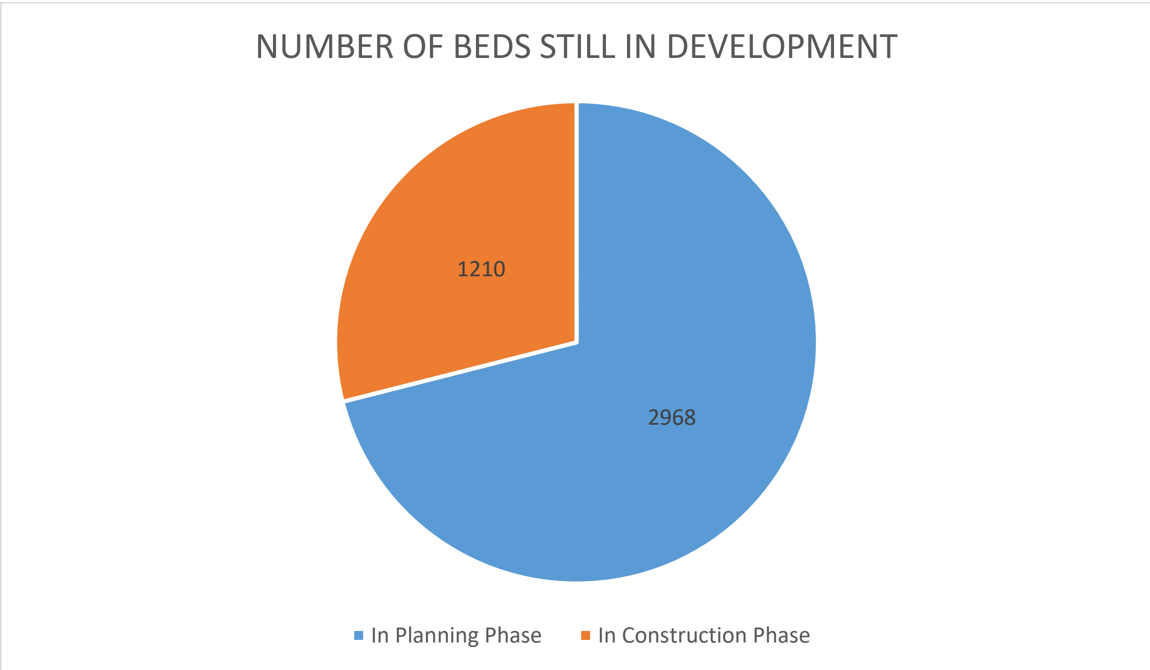


Figure 4.23: The number of beds that are still in development in the Hatfield Student Village.

The UP has predicted a 0.6% growth per annum from 2018 to 2025 in the number of students. This will result in a total growth of 3.53% from 2019 to 2025. The prediction for the growth of students after 2025 has not been determined; but in order to establish a long-term prediction, it was assumed that the growth will continue, as is currently predicted. The growth in the number of beds available to students in Hatfield, is slightly more difficult to predict, due to changes in the economy, changes in student demographics, and the changes in the construction technology used to construct student housing. Figure 4.20 gives a predicted growth in students on the UP Hatfield Campus, as well as the student accommodation beds available, while the current trend continues.

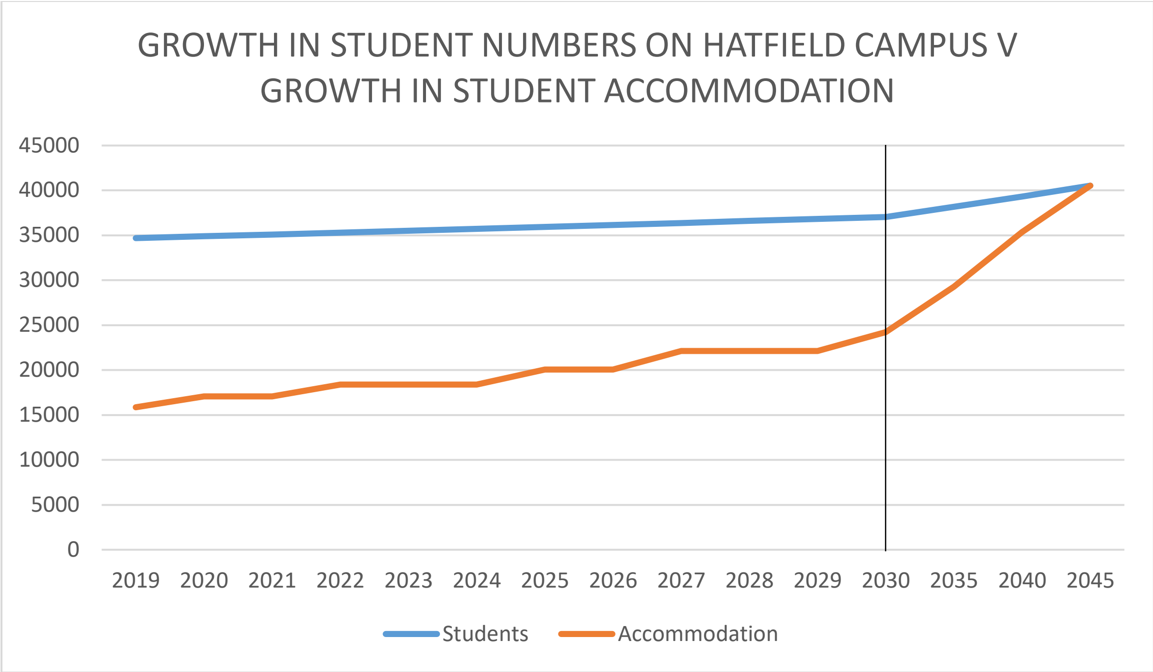


Figure 4.24: A comparison between the growth in student numbers on the Hatfield Campus and the growth in student accommodation.

From 2019 to 2025, the data presented were taken from the information given by the developers, who were interviewed. The long-term prediction over the next 10 years will depend on the local economy, the national economy, the growth in the number of students predicted by UP (this is what caused the previous boom in housing), as well as the risks involved with the student accommodation market (NSFAS students, developers' appetite, banks' willingness to fund, inflation.).

The current increase in student accommodation is 20.85% over a period of 5 years; and it was assumed that this rate will continue until 2030. If the above growth rates continue indefinitely, the number of beds available to students will surpass the number of students on Hatfield campus in 2044. This prediction does not include any new UP residences.

Although not completely accurate, due to the difficulty in predicting the growth in student housing, the data prove that there could be a danger of overdeveloping the area over the long term, in which the supply exceeds the demand. It is of great importance that the equilibrium of supply and demand be kept in check, in order to prevent further decay of the Hatfield micro-economy.

From the interviews, the following information was identified. This was never a direct question, but whilst answering other questions, the developers offered their opinions on what is required in the Hatfield Student Village. The opinion of the Hatfield CID CEO, Lukas Luckhoff, has also been added to the data below.

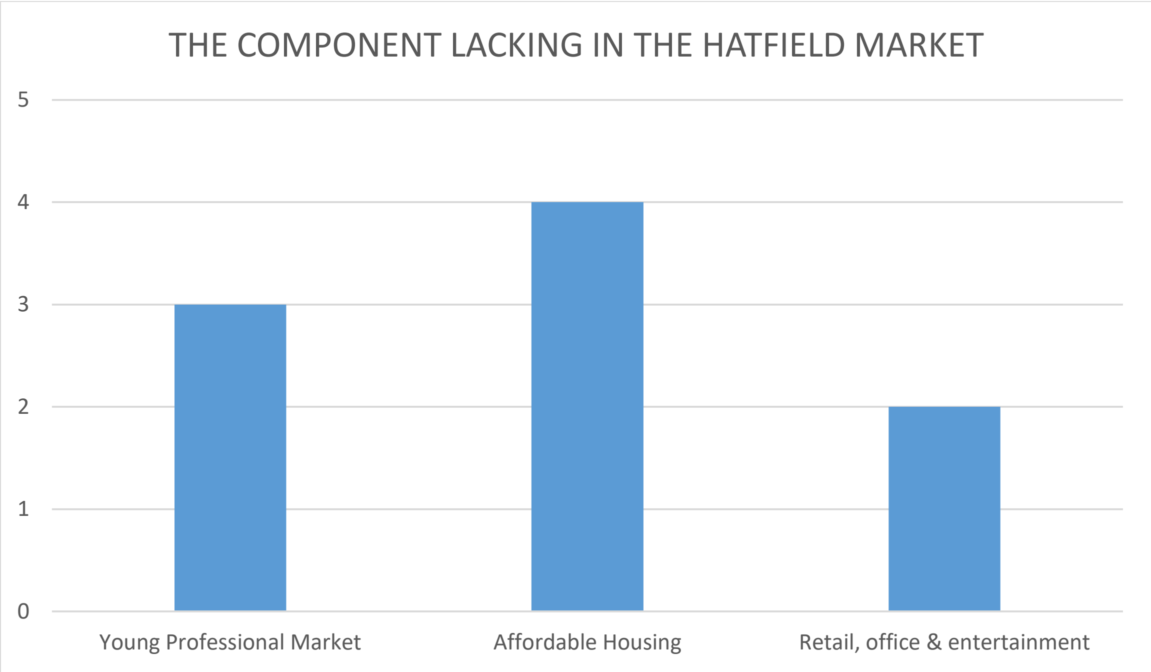


Figure 4.25: A graph depicting what the developers believe are lacking in the Hatfield Student Village.

Figure 4.25 indicates that the majority of the developers believe that affordable housing is the most important next step in the development of the Hatfield Student Village. This is followed by the developments for the young professional market. This market must be aimed to counteract the 8-9 month economy in Hatfield, by providing more permanent housing solutions to non-students. The developers also believe that more must be done to provide entertainment to the students in the area, in order to promote spending over the weekends and holidays.

4.8. CONCLUSION

The results, as will be discussed in Chapter 4, have determined that there is a need for affordable student accommodation in the Hatfield Student Village. The results have also determined that, due to the tendency to implement 10–month contracts by the developers and the university, this has created a shortened micro-economy in Hatfield, which has resulted in Hatfield becoming a residentially dominated node. The future development of student accommodation in Hatfield will rely on the information provided by the university. A more detailed conclusion and recommendation will be given in Chapter 5. The 10-year masterplan for the future of student accommodation in the Hatfield Student Village will also be discussed in the next chapter.

CHAPTER 5 - CONCLUSION AND RECOMMENDATIONS

The purpose of this study was to determine whether there is still any development potential for student accommodation in the Hatfield Student Village; and also to devise a 10-year masterplan for the future development of student housing in an area already dominated by housing for students. The reason a 10-year plan was chosen as the long-term plan is due to the volatility that is often experienced in the student accommodation market as well as the struggling economic environment South Africa is experiencing. With the UP, as the anchor institution in Hatfield, it has attracted many students looking for a place to stay close to the institution. This has ignited a demand for student accommodation in the area, which has grown tremendously over the past decade.

Developers and investors have taken advantage of the demand; and they have developed the area to supply about 11 315 beds to the market. This supply consists of Purpose-Built Student Housing, where the majority of new residences have been developed in the last seven years under Sectional Title Schemes.

5.1. CONCLUSIONS TO THE RESEARCH QUESTIONS

5.1.1. What is the current need for student accommodation at the University of Pretoria?

Hatfield and student accommodation go hand-in-hand. Due to the presence of the anchor institution, the area has received much interest from developers, for the development of student accommodation. When considering the data as discussed in the previous chapter, it can be determined that the appetite for further development of student housing is not waning; and that developers still see future potential for the market.

PBSH has the highest vacancy rates in the area (7.05%), especially those ones that have been constructed in the past 3 years. This indicates that the demand and supply for PBSH is reaching a tipping point, where the supply will exceed the demand. Developers are struggling to fill up the units of the recently constructed purpose-built buildings. The sectional title provision has a lower vacancy rate (1.94%), with most of the properties being almost fully occupied. The SS properties are usually purchased by property investors, who lease out the units to students studying at the UP. These buildings were not specifically constructed to cater for the student market; but due to the proximity to the university, the units are mostly occupied by students.

The two real estate agencies, who participated in the study also, have very low vacancy rates at 1.67% and 1.20%. These companies market sectional title units; and they rarely operate in the PBSH Market.

With 4 178 beds in line to enter the market within the next 5 to 10 years, the demand will probably be overshadowed by the supply of units. Opportunity must be given to the economy to recover – whilst giving time for the demand to catch up with the supply. Once the demand is large enough for new space and the existing spaces are fully occupied, new supply can be added to the market. Further development of student accommodation must concentrate on providing units for NSFAS students and other low-income students.

5.1.2. What are the current rental and management strategies of privately owned student accommodation when compared with that of the University?

The residences at UP are all managed by the Department of Residential Affairs and Accommodation; and there are on-site 'House Parents' at the residences, who take care of any immediate problems. PBSH residences must all be registered at the above-mentioned department, in order to ensure quality provision of student accommodation. The purpose-built buildings have on-site management to ensure good provision of services to the students; while the sectional title buildings are managed by a Body Corporate; but very rarely is there any management on-site at all times. Some of these buildings have a caretaker; but they are not necessarily available all day.

The UP implements a 10-month contract at their residences; and the majority of the PBSH also make use of 10-month contracts. This trend has resulted in the 8-9 month economy being experienced in Hatfield. During the 10-month contract, students still have holidays, during which they can return to their parental homes. That is why the economy is active for only 8 to 9 months of the year.

The majority of the PBSH, as well as the UP residences, have Wi-Fi included in their monthly rentals; and they also provide study areas to the students. The most important differences between PBSH and the UP residences is that food is included in the amount paid for UP residences. PBSH provide kitchens to the students to prepare food; but food is not included. The same goes for the Sectional Title Schemes.

5.1.3. What 10-year masterplan must be implemented, in order to promote a more effective student accommodation model in the Hatfield student Village?

The following concepts being highlighted can be used as a potential plan for the future of student accommodation in the Hatfield Student Village. These concepts are based on the opinions of the developers, Hatfield role players, and on the data collected from the student housing market in Hatfield. The masterplan will be divided into short-term (0-2 years), medium-term (2-5 years), as well as long-term (5-10+years) time-frames.

Short-term:

- There are 4 548 beds provided by UP residences (specifically for the Hatfield and Hillcrest Campus); and 11 315 beds are provided by student accommodation within the margins, as described in Chapter 3. It can be assumed that there are still other beds in the market, which fall outside the margins of the Hatfield Student Village. As most of the student beds are situated within the margins, it may be assumed that there are about 4 500 more beds in the areas next to the Hatfield Student Village (Sunnyside, Brooklyn, Muckleneuk, Lynnwood and Arcadia). It can therefore be assumed that the student housing supply consists of 20 000 beds in total. There are 34 669 students on the Hatfield Campus. That amounts to 14 669 students who do not have accommodation in the direct vicinity of the UP Hatfield Campus.
- The UP should take advantage of the properties offered to them in Prospect Street and develop them into low-cost student housing, specifically for the rising number of NSFAS students, by entering into a JV with a developer, who has a lower ROI; and who aims for quality and affordability. This residence could be managed by the University, or by a private party.

Medium-term:

- The beds that are currently in development in the area should continue to be developed; but the area has reached saturation, considering the supply of student accommodation. It would therefore be detrimental to the micro-economy and the area to allow developers to develop more student accommodation after the 4178 beds already in the pipeline have been completed.

Long-term:

- The developments in planning should consider implementing mixed usage in their buildings, in order to try and alleviate the economic difficulty placed on the micro-economy during the inactive months in Hatfield.
- The developers, along with the university, should implement ways, in order to promote a longer stay from students during the year. It is of extreme importance to correct the micro-economy, which has been created by the shortened stay of student residents in the area. The fewer students who stay in the area over holidays, the more the chance that the retail sector would be able to move out of the area completely.
- The future of student housing is in affordable accommodation for the low-income students studying on the NSFAS, and for those on other bursaries.
- There will always be development potential for student accommodation in Hatfield, due to the anchor institution; but for the next ten years, the demand has been satisfied, along with the new developments planned to occur during the next few years.

5.2. OTHER RECOMMENDATIONS FOR THE HATFIELD STUDENT VILLAGE

While this study aims to determine the future of student accommodation in the Hatfield Student Village, the developers and the role players in the area offered various opinions on what could potentially assist Hatfield in becoming a better district. This section will be divided into medium- and long-term. The following points should be considered for the future development of the area:

Medium-term:

- Permanent residents are required in the area, in order to fix the 8-9 month economy, which has been created by the large student population found in the Hatfield area. People see Hatfield as a student village; and this will prove to make this exercise very difficult. Working adults and families starting off do not want to stay in an area where students walk around the streets late at night, while making a lot of noise; where safety is an issue; where taxis have taken over the roads; and where the thoroughfare of the area is extremely difficult to negotiate. It will take further research and perfect design to make Hatfield inviting to permanent residents.

- A solution will have to be found for the parking problems experienced around the Hatfield Campus.
- The retail sector should aim all their provisions at students; while the academic year is in progress; but it should also be able to attract other sectors of the population during the inactive months; if they wish to remain profitable for the entire year.
- The majority of the office spaces in Hatfield are struggling to obtain and maintain tenants. Companies do not want to have their headquarters, or even business branches, in an area dominated by students. Poor accessibility is another element, which has companies shying away from the area. A potential solution to the lack of office space in the area is to provide co-working (floating) office spaces. These spaces provide work space to any person, from any business, or company. While paying a fee per month or per visit, the space provides serviced working areas with Wi-Fi, meeting rooms, boardrooms and 24-hour access. These spaces are perfect for students that have a part-time job, or who are permanently employed young adults, whose headquarters are located in Johannesburg; but they need not drive into the office every day.

Long-term:

- If it has been determined that permanent residents do not favour the area; the other option would be to make Hatfield an exclusively student town. This would be to essentially extend the Hatfield and Hillcrest Campuses to meet and become one Campus. It would then be of extreme importance to support the retail sector, in order to carry them through the economically inactive months during the academic year. Changing the status of the area would also require more entertainment provisions to students; and the amount of traffic travelling through the area should be reduced, in order to make the roads safer. Vehicular traffic should be kept to the extremities of the area; and cycling and walking should be promoted inside the area. Passage through the area by buses and taxis should be limited; and only certain routes should be allowed. This would reduce the danger on the roads; and the noise created by the hooting of taxis should also be reduced.
- Entertainment is an important draw-card in any economy. Affordable movie theatres, ten-pin bowling and an Escape Room (an activity where a group of people get locked in a room and then they should follow the clues in order to escape) could bring potential investment into the area.

5.3. FUTURE RESEARCH

During this study, a variety of future research topics surfaced, due to the complexity of the environment in Hatfield.

- Further research should look into the availability and the location of disabled units in Hatfield, in conjunction with the university's accessibility programme.
- The NSFAS bursaries are becoming an important part of tertiary education. It is important to look into the predicted growth of the number of students in the NSFAS programme; and the sustainability of this number in association with the accommodation provided for these students.
- The possibility of transforming Hatfield into an exclusive student town should be researched, in order to determine whether it is physically possible, economically viable, financially feasible and practically sustainable.
- This study focused on the accommodation for students in the Hatfield Student Village alone. Further research could be done on an in-depth investigation into the total accommodation supply intended for students considering all the UP campuses.

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ANNEXURES

Annexure A: Informed Consent Form

1. Project information

1.1 Title of research project:

An investigation into the development potential of student accommodation in the Hatfield Student Village.

1.2 Researcher details:

Name:	Anrike Coetzee
Contact Details:	078 451 9467
Department:	MSc Real Estate, Department of Construction Economics, University of Pretoria

1.3 Research study description:

The aim of the research is to conduct a due diligence study of all the university- and privately-owned student housing property in the Hatfield Campus Village. The study will be used to determine the most effective masterplan on future student accommodation implementation at the F.

The objectives of the study:

- Determine what the current capacity for student housing is (residences, flats, and houses.)
- Source rental and other accommodation models, which are implemented by private developers.
- Compare the developers' models with the current model implemented by the University of Pretoria in the residences.
- Devise a strategy over 10 years for the possible construction of or buying of student accommodation and the creation of joint ventures with developers, or private property owners for the optimal student-housing plan.

The participants of the study will be required to answer 10 questions verbally; while the researcher will write down the answers of the participants.

There are no health or safety risks associated with participating in this study.

2. Informed consent

2.1 I, ____ hereby voluntarily grant my permission for participation in the project as explained to me by Anrike Coetzee.

2.2 The nature, objective, possible safety and health implications have been explained to me and I understand them.

2.3 I understand my right to choose whether to participate in the project and that the information furnished will be handled confidentially. I am aware that the results of the investigation may be used for the purposes of publication.

2.4 Upon signature of this form, the participant will be provided with a copy.

Signed: ___________________________ Date: ________________

Witness: ___________________________ Date: ________________

Researcher: ___________________________ Date: ________________

Annexure B: Interview Questions for Developers

1. In the existing student accommodation buildings owned by you, what is the total number of beds available to students in each building?

2. How many beds are currently occupied?

3. What is the accommodation strategy implemented by your company, when it comes to student housing? (10-month contract / 12 month contract, benefits, configuration.)

4. What is the price range or target market for your student housing?

5. Do you see any further development of student accommodation in the Hatfield Student Village for the next 5 or 10 years?

6. Would you, as developer, be interested in the following scenarios in the current economic conditions:

    a. New student accommodation?
    b. Revamping existing student housing buildings?

7. In your opinion, what is the potential for turning existing non-residential buildings in Hatfield into student accommodation?

8. Would you advise a developer to purchase sectional titles schemes, where they are currently part of the Body Corporate, in order to become the sole owner and to manage the building as rental housing?

9. Are there any other properties in Hatfield that could potentially be purchased by a developer for purposes other than residential?

10. If you could give any advice to a new developer with regard to student accommodation, what would it be?

11. Would you be interested in going into a joint venture with the UP, or any other developer for future development in the Hatfield area?

12. Are you accredited with the University of Pretoria’s Residence Affairs and Accommodation Department?

13. Does your current student accommodation comply with the Policy on Minimum Norms and Standards for Student Housing at Public Universities, as published in the Government Gazette in 2015?

14. Any final comments?

Annexure C: Interview Questions for Role Players in Hatfield

1. Do you see any further development of student accommodation in the Hatfield Student Village for the next 5 or 10 years?

2. Which of the following scenarios would you foresee in the current economic conditions:

    a. New student accommodation?
    b. Revamping existing student housing buildings?

3. What is the potential for turning existing non-residential buildings in Hatfield into student accommodation?

4. Are there any other properties in Hatfield that could potentially be purchased by a developer for purposes other than residential?

5. If you could give any advice to a new developer with regard to student accommodation, what would it be?

6. Any final comments?

Annexure D: List of Student Accommodation and types

No.	Hatfield student accommodation	Type of accommodation
1	Hatfield Studios	PBSH
2	Studios@Burnett	PBSH
3	Festival Edge	PBSH
4	Respublica Hatfield Square	PBSH
5	Campuskey	PBSH
6	Apartments on William	PBSH
7	Urban Nest	PBSH
8	Duncan Court	PBSH
9	The Fields	PBSH
10	Unilofts	PBSH
11	Hillcrest Boulevard	SS
12	Hillcrest Boulevard 2	SS
13	Eruditi	SS
14	Hillview Village	SS
15	Lunnon Crest	SS
16	Hatfield Court	SS
17	Crown Court	SS
18	La Place	SS
19	Makwassie	SS
20	Oxford Court	SS
21	Prospect Village	SS
22	Harvard House	SS
23	Princeton Park	SS
24	Burnett Village	SS
25	Heidelberg Heights	SS
26	Du South	SS
27	Fairview Village	SS
28	Rumours	SS
29	Lunnon Court	SS
30	Prospect Court	SS
31	The Gables	SS
32	Akademia	SS
33	Burnett Villa	SS
34	Jakaranda	SS
35	Park Avenue	SS
36	Protea	SS
37	Four Oaks	SS
38	1361 Prospect St	SS
39	Unicrest	SS
40	Ivy league	SS

41	Cum Laude 1	SS
42	Cum Laude 2	SS
43	Cambridge Court	SS
44	Lofts on Park Street	SS
45	The Circuits	SS
46	Villa Magnolia	SS
47	Die Werf	SS
48	Normandie	SS
49	Jacaranda Park	SS
50	Prospect Place	SS
51	Mon Reve	SS
52	The Hill	SS