



The socio-economic contribution made by golf courses within residential estates in Gauteng, South Africa.

Duncan Theron Cremer

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ABSTRACT

Internationally and locally, the increase in the supply of golf estates are fuelled by the demand for golf course living. Not only driven by the ability to play golf, the rapid increase in property values, the tranquil, green environment and the added security offered by these gated communities is creating a lifestyle asset desired by many.

The debate surrounding these developments exists largely between the local communities, environmentalists and government on one hand and stating that these elitist consumptive developments are creating segregated communities and developers emphasising the socio-economic contribution of the estates.

The objective of this research was to specifically focus on the socio-economic contribution the golf courses that form part of golf estates in Gauteng make during its operational phase. The findings of this research were that, when compared to previously conducted studies that focussed predominantly on the Western Cape, these courses do make a significant socio-economic contribution.

DECLARATION

I, Duncan Theron Cremer declare that this research report is my own, unaided work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Signature

Duncan Theron Cremer

15 November 2008

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1 INTRODUCTION

1.1 Context of the study

1.1.1 The international business of golf estates

Internationally the concept of golf course developments has been steadily increasing and is still gaining momentum. As early as 2001, Luczycki (2001) notes that 46% of golf course developments in the USA included a residential component and that an overall 17% of all golf courses were part of a residential community. The desire to own property on a golf estate is however not fuelled primarily by the ability to play golf. Brass (2005) states that international studies have shown that only about 30% of people in these estates are likely to play golf. He further states that non-golfers who crave the fairway lifestyle are fuelling a wave of luxury residential golf construction around the world. In countries such as Dubai, South Korea, Turkey, Egypt and Poland golf courses are the centrepiece of elaborate new communities. Macintosh (2005) reports that in 2004 a development that stretched over 7,700 hectares with 180 holes and massive residential complex was completed just outside Hong Kong.

This fairway lifestyle is however only one of the factors driving construction of these courses around the world. It's expected that early buyers would be investors who believe golf course property is a good gamble. Brass (2005) notes that properties on golf related projects in Spain and Portugal has seen price increases of up to 25% over a period of five years. Davies, Watson, Cramer, Thilmany, Prosser & Elzi (2004) notes that a study conducted in Colorado in the USA determined that the premiums charged for golf estate properties added and estimated \$832 million through residential, and an estimated \$50 million to the economy of the state.

A study conducted by Laurie Walsh (1997) revealed that the 25,000 golf courses worldwide cover an area as large as Belgium and the business of

building them is among the fastest growing type of land development in the world. In the 1970's Southeast Asia had 45 golf courses. Today there are over 500 with 155 in Malaysia, 160 in Thailand, 90 in Indonesia and approximately 80 in the Philippines. Berg (2007) notes that Jeff Blunden from Ernst & Young reported in 2007 that in the state of Victoria in Australia, golf real estate accounted for 4% of all new housing in 2007 and that 50 proposed new courses will create 30,000 more home in the state.

1.1.2 Golf estates in the South African context

The South African economy experienced almost unprecedented growth in property developments and the value of the property market as a whole since the early 1990's. Over the past six years, the housing sector in South Africa has been booming, driven by a wide range of economic, social, cyclical and structural factors. Probably one of the most important cyclical economic factors impacting on the housing market during this period has been the sharp declining trend in interest rates since they peaked in 1998. Significantly lower inflation since late 2002 has also contributed to interest rates dropping to their lowest level in more than two decades.

Golf estate property has played a significant part in the South African property boom for two reasons. The first is illustrated by the fact that more than 70% of residents on golf estates do not play golf. This shows that it is not only golf that attracts buyers, but the secure and tranquil environment offered by these developments. Golf estates offer open spaces for those wanting to escape densely populated urban areas as well as safety offered by the high levels of security. Similar to the international driving force, the lifestyle offered by these estates are not the only reason for popularity. The second reason to buy in one of these estates is motivated by the significant growth in investment. Beeld (2002) reports that in 1992 a two bedroomed, fully furnished home on a Southern Cape golf estate sold for R400 000 and in 2002, that same property was worth R2,6 million. The Business Day (2003) also reported that the plots on some estates had increased by 400% between 1998 and 2003. This is a

major return for any investor and a major reason for the proliferation of golf estates around the country. Keenan (2007) reports that Colin Hegarty, MD of the Golf Research Group, stated recently that they researched paired pieces of land (broadly similar opportunities for developers) and that the addition of a golf course to a development caused the value of the estate to increase by up to 70% and the speed of sales to go up by 100%.

In order to meet this demand for golf estate properties, South Africa has seen a substantial increase in the number of estates being developed and planned. In the Western Cape alone there were over 21 approved courses with residential components which could accommodate more than 8,000 residential dwellings in 2005. As early as 2003 the Sunday Times (2003) reported that it is estimated that 20,000 Gauteng properties have been developed in golf estates alone since 1994. It is expected that this number will continue to grow as home buyers continue to seek security in a tranquil, green environment while at the same time enjoying substantial returns on their investment.

The unprecedented growth in the number of golf estates in South Africa has however not escaped some controversy. The large number of developments has caused an outcry amongst environmentalists, local communities as well as the South African government. The rapid increase of golf estate developments and a consumptive land use particularly targeted at areas of high scenic beauty and property values has raised a number of concerns in the public domain regarding the sustainability of such developments and their long term impact on the environment and local communities. In a report issued by the Western Cape Government (2005) it is noted that these developments may deplete water resources, consume agricultural land, spoil landscapes and heritage resources, displace and divide especially rural communities. Furthermore, the developments impact on access to resources such as the coast, contribute towards sprawl, perpetuate divisive patterns of spatial development through the segregation created by security measures

and counter social integration and integrated sustainable public service delivery.

Developers on the other hand are arguing that the development of golf estates is making a massive contribution, not only to the growing South African economy, but also local communities through job creation and social upliftment programs. In addition to this the developments will also lead to the rehabilitation of environmentally degraded areas and upgrading of infrastructure, which may benefit surrounding communities.

1.1.3 Golf as an international and South African sport

Golf is considered as one of the most significant global sporting industries, along with soccer and tennis. Golf as with tennis and soccer has mass appeal and generates massive television coverage. Golf worldwide is the largest sports-related travel market segment. The global value is estimated in excess of US\$10 billion per year and is growing by 10% annually with some 48 million people playing golf on a regular basis.

Today there are more than 450 golf clubs in South Africa with more than 127,534 members. The South African Golf Association reports that there are more than 50,000 golf members at the 74 clubs throughout Gauteng.

1.1.4 Setting Guidelines and understanding the impact

The controversy regarding golf estate developments has resulted in the Western Cape Provincial Government launching an investigation on the impact of golf estates and polo fields in the province in 2004 aimed at understanding the impact thereof. Through the results of this study, completed in 2005, the Western Cape Government managed to identify a range of issues and concerns related to golf and polo developments. These formed the basis of policy guidelines aimed at ensuring that positive impacts, most notably in

the form of economic growth and job creation, can be harnessed without compromising the natural resource base and local communities.

Despite this, some stakeholders are asking for even more research to be conducted. Keenan (2007) reports that Selisa Gaba, a lawyer and senior partner at Maforah Nkwe Attorneys, recently called for an intense study into the impact of golf estates before further restrictions and regulations were developed. In her address at a conference on golf in South Africa in 2007 she challenged government to make its position on evaluating golf estate applications unambiguous and that officials had far too much room for subjectivity.

To date no real progress has been made in conducting similar research and establishing comparable guidelines specifically for golf estate developments in Gauteng. This continues to raise concerns about the processes followed in establishing golf estates in the area as well as the sustainability following the construction phase. The Property Magazine (2004) stated that there was a definite need for developers, designers and government to be clear about the criteria that would encourage sustainability of future golf estate developments.

1.1.5 The South African Economy

South Africa is a middle-income, developing country with abundant resources, well-developed financial, legal, communications, energy, and transport sectors and a stock exchange that ranks among the 10 largest in the world. Its modern infrastructure supports an efficient distribution of goods to major urban centres. A legacy of apartheid has left the country with big disparity between the rich and poor of the country. The following statistics pertaining to the South African economy bear mentioning: (International Monetary Fund, 2005)

- household survey data unemployment rate of 26,5% of which 60% live in major cities and metropolitan areas

- life expectancy at birth of 46 years
- total human population of 46,6 million
- annual human population growth rate of 1%
- GDP per capita of \$3563 in September 2005 prices

South Africa's economy proved fairly strong over the last couple of years and has probably grown at its highest level in decades in 2005. At the beginning of 2006, ABSA economists (ABSA 2006) estimated that average real economic growth to be 4,9% in 2005, following growth of 4,5% in 2004. In 2007 ABSA (2007) reported that an annual growth of 4,5% would be maintained until 2009.

The South African unemployment rate is extreme with rates reported in 2006 being as high as 25,5% (Labour Force Survey, 2006). Although absolute poverty has declined, the percentage of people falling below the poverty line is 48,5% which translates to R22 million poor people (Africa News Service, 2004).

1.1.6 The Gauteng Province

Gauteng is the smallest province in the country occupying an area of 17 010 square kilometres, which is approximately 1,4% of the land area of South Africa. Despite this, it accommodates almost 19,7% of the total South African population, a total of almost 10 million people.

Figure 1: The Gauteng Province



Source: www.sa-venues.co.za

Although the smallest in size compared to the other provinces, Gauteng is the wealthiest and most populous (per square kilometre) province in South Africa. The province generates 10% of Gross Domestic Product for the African continent, contributes 34,2% of the country's GDP, 47,2% of all employee remuneration and 51,4% of all institutions' turnover. From 1995 to 2002 the Gauteng economy grew at an average of 3,3% compared to a national average of 2,7%. Growth in Gauteng is in line with that in other developing

countries such as India which recorded a 3,9% increase over the same period and Brazil who's GDP grew 3,7% (www.geda.co.za). Today the economic growth and output of the province outstrips the rest of the country and leads the whole continent.

Education levels are very high compared to other provinces with 23,6% of the province's population with Grade 12 (highest school level in South Africa) and 8,4% having completed some form of post schooling education. General adult literacy of persons over the age of 20 is by far the highest in the country with 96,3% of people stating that they have general read and writing skills.

These statistics prove that Gauteng is South Africa's economic powerhouse. Despite this, a significant divide exists between the rich and poor, reflected in the social structures and physical layout of the urban areas.

Figure 2: Map of Gauteng



Source: www.joburg.co.za

1.1.7 Crime in South Africa

Since the fall of apartheid in the late 1980s, the release of Nelson Mandela in 1990 and the first democratic elections in 1994, South Africa has undergone radical social transformation. The end of apartheid, democratization and majority rule were optimistically anticipated to end the violence of South Africa's 1980s armed struggle. Lemanski (2001) states that, since 1990, a new form of urban panic has engulfed South Africa, focusing on criminal activity rather than political insurgency, and spreading into previously protected white suburbs. South Africa hosts severe crime, yet crime statistics are considered unreliable as they are dependent on police recording and

victim/witness reporting it. This is aggravated by historic mistrust of a police force that previously functioned as a brutal government enforcer rather than a citizens' protector. The 2000–2001 moratorium on crime statistics (during which the government banned releasing crime statistics, arguing that errors reduced reliability) further hampered public confidence.

Despite South Africa's long history of crime, its increasing visibility in previously protected (white) areas and the increased media coverage of all areas has fuelled public anxieties. Gordon (1998) notes that in a 1994 public opinion survey, only 6% of respondents viewed crime as a major concern, yet, by 1997, this had risen to 58%. This increase is significantly above the relative rise in crime rates, representing the growth of post-apartheid fear of crime. According to the South African Police Service (SAPS), Gauteng had the highest per capita rate of crime with robbery with aggravating circumstances. Almost 80% of all carjacking incidences and nearly 80% of robberies at residential premises during 2006/7 occurred in Gauteng (www.saps.gov.za).

These limited statistics show that South Africa, and especially the Gauteng region, is crime ridden. The spatial impact of crime on the development of the South African cities and especially the phenomenon of the creation of gated communities will be further investigated in the literature review.

1.1.8 Conclusion

The context within which this research exists is that of an emerging economy with high levels of crime that is experiencing unprecedented growth in the property market. Despite this upsurge, the average person in South Africa is still living on the poverty line and the current political agenda is for their quality of life to improve without impacting negatively on the natural environment.

The property boom not only reflects a certain economic environment but it impacts on the South African socio-economic environment. In South Africa, a boom in this asset class may do more than boost certain key economic

sectors and levels of employment. If it is sustainable, it may also be helpful in acquiring a more equitable distribution of wealth. This could in turn have a positive impact in the long term economic growth and social integration of South Africa which could result in higher levels of social and political stability.

In order to ensure this it is imperative that government and developers understand the social, environmental and economic impact of, and take cognisance of the overall sustainability of new developments. This is particularly the case with controversial developments such as golf estates. As stated, a significant amount of research has been conducted in the Western Cape to understand the impact of golf estate developments. In comparison, very little research has been conducted to date and not much is known about the development of golf estates in Gauteng. This, despite the fact that it falls within one of the most prominent, densely populated and fastest developing areas on the African continent.

1.2 Purpose of the study

This research was motivated by comparative studies conducted by Cameron & Milner (2004), Jan Havenga in (2006) and ultimately the Rapid Review of Golf and Polo estates (2005), all carried out in the Western Cape. As mentioned, limited research has been conducted to date to better understand the impact of these developments in the Gauteng region. Similar to key sections of the aforementioned studies, the purpose of this study is to gain a better understanding of the socio-economic contribution of golf courses that form part of golf estate developments in the Gauteng province.

Given the broad nature of this research and restricted resources available, this is a broad investigation that would serve to highlight the core issues related to the socio-economic impact of golf courses on golf estates in Gauteng. From this the researcher will suggest areas for more in depth studies that can be conducted in future.

1.3 Statement of research problem and sub-problems

The objective of this research is to determine if the golf courses on residential estates in Gauteng make a significant socio-economic contribution following the completion of the construction phase.

The sub-problems are as follows:

- determine what contribution a golf course that forms part of a residential estate in Gauteng make to the local economy.
- determine what social contribution a golf course that forms part of a residential estate in Gauteng make to employment.

1.4 Delineating the problem

The delimitations and limitations of this study are as follows:

- the study is limited to the province of Gauteng.
- this study will include the direct economic impact of golf courses on golf estates and exclude the indirect contributions made.
- this study will only include the direct social impact of employment of golf courses on golf estates and exclude the indirect impact.
- this study will exclude golf courses with no residential component.
- this study will exclude the construction phase of the golf course and only focus on the operational phase of the golf course.

1.5 Significance of the study

The purpose of this study is to provide knowledge on the socio-economic contribution of golf courses on residential estates in Gauteng.

- the output of this research could indicate to stakeholders that golf estates do make a positive socio-economical contribution to the local economy,

- the output of this study can form a basis for more in-depth research to highlight the key issues and understand the total impact (including environmental and social impacts) of golf estates in Gauteng,
- the understanding of the socio-economic contribution of golf courses to residential estates can assist developers as well as municipalities in strategic decision making,
- the interpretation of the results of this study can be used by golf course management to optimise the direct socio-economic impact that a course makes during the operational phase,
- the results of this study can be used as a comparative to future studies,
- the results of this study can be used to assist in the formulation of a set of guidelines and development principles to which new developments in Gauteng must adhere to, similar to the Western Cape.

2 LITERATURE REVIEW

2.1 Introduction

Very little academic research has been done on any aspects of golf estate development in South Africa. The majority of information about golf estates in South Africa is available through government research, media reports, and studies conducted on specific developments in the Western Cape Province.

The literature review has been divided into four key sections, each addressing different aspects pertaining to the present study. Section one looks at sustainable development. The reason for this is the fact that most research on golf developments conducted to date was aimed at creating a better understanding of the long term sustainability of these developments. The intention of the second section is to establish an understanding of the development of South African cities within the context of the country's history. This is an important section as it forms the foundation of some social arguments against golf developments. This will be better illustrated by the supplementary literature on gated communities, also included in this section. The third section addresses the elements and understanding around socio-economic impact in specific relating to golf estate developments. The fourth and final section investigates the results of comparable studies. Through this the key areas and variables to be included in this study will be established. Particular focus will be on the Rapid Review on Golf and Polo Estates conducted in the Western Cape in 2005.

2.2 Sustainable Development

In order to meet the needs of humans, as well as sustained economic development, more pressure was placed on the natural environment towards the end of the 20th century than ever before. The depletion of natural resources and the destruction of the environment were starting to put an ever increasing amount of pressure on the environmental balance that supports life

on earth. Sudhir & Amartya (2000) states that the idea of sustainable development arose essentially from concerns relating to the over-exploitation of natural resources. The realisation of and reaction to this resulted in our current views of “sustainable development”.

The term “sustainable development” owes its widespread usage to the Brundtland Commission Report (WCED, 1987), *Our Common Future*, which defined it as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of “needs”, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs” (p.43). Towards the end of the 1980's Barbier (1986) simply defined sustainable development as being the maximum goal achievement across the three systems identified as basic to development – namely the biophysical support system, the economic system and the social system. Elkington (1997) defines sustainability as being “the principle of ensuring that our actions today do not limit the range of economic, social and environmental options open to future generations”(p.20). Elkington (1997) goes on to explain that a sustainable society needs to meet three conditions: its rates of use of renewable resources should not exceed their rates of regeneration; its rates of use of non-renewable resources should not exceed the speed at which sustainable renewable substitutes are developed; and its rates of pollution emission should not exceed the assimilative capacity of the environment. In the same year Gallopín, Hammond, Rasskin & Swart (1997) develops a very similar definition that states that “sustainability is therefore concerned with reconciling the long term development of human society with the finite limits of the planets” (p.20).

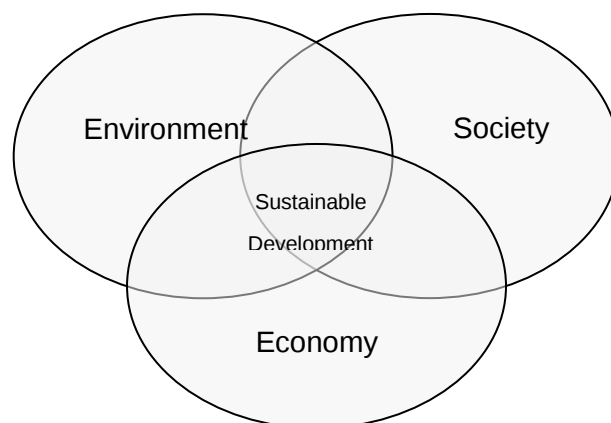
Sustainable development has gained increasing recognition world wide as a conceptual framework for development that recognises the inter-

dependencies between economic growth, social equality and environmental integrity. Although definitions vary, internationally accepted definitions emphasizes the need for a long term planning horizon, the adoption of a development path that improves the quality of current generations, while leaving future generations with at least the same capacity and options for development.

The World Summit on Sustainable Development (WSSD) hosted by South Africa in 2002 reaffirmed sustainable development as a central element of the international agenda and gave new impetus to global action to fight poverty and protect the environment.

As per the definition by Elkington (1997), most internationally accepted definitions recognise that sustainable development is a combination of economic, social and environmental aspects.

Figure 3: Aspects of Sustainable Development



In their report on the sustainability analysis of human settlements in South Africa, Du Plessies & Landman (2002) describes these aspects as follows:

- Economic: requires the development of an economic system that facilitates equitable access to resources and opportunities and the fair sharing of finite ecologically productive space that enables sustainable livelihoods and establishes viable businesses and industries based on sound ethical principles. The focus is on attempting to create prosperity for all, not just profits for a few, and to do this within the bounds of the ecologically possible and without infringing on basic human rights.
- Social: requires that we enable the development of fair and just societies that foster positive human development and provide people with opportunities for self-actualisation and an acceptable quality of life.
- Environment: requires that we find a balance between protecting the physical environment and its resources, and using these resources in a way that will allow the earth to continue supporting an acceptable quality of life for human beings.

Enormous progress has been made in South Africa over the last decade, in developing a new a progressive policy framework that provides a sound basis for sustainable development. Strategic direction to development efforts are given through key instruments that have been put in place at different levels. At national level the National Spatial Development Perspective that is used as an instrument of policy co-ordination, with emphasis on spatial implications of infrastructure and development policy and programmes. At provincial level the Provincial Growth and Development Strategies provides the overall framework, strategic direction and scope for development within the province.

2.3 The Social Structure of the South African Urban centres

In order to gain a better understanding of the current arguments for and against golf developments, especially the socio-economical perspective, it is important to be aware of current dynamics in South African cities as well as the history that gave rise to this.

This section addresses the South African city in the context of its history in order to understand how that “apartheid city” developed. The South African city that developed after the end of Apartheid in 1995 will then be scrutinized to understand how the dynamics have changed in a democratic environment. This will be followed by a section on the development of gated communities which has become a prominent feature in modern South Africa and an area of great resistance in the current debate.

2.3.1 The South African city as a result of history

Holsten (1998) states that “cities are plugged into the globe of history like capacitors: they condense and conduct the currents of social time. Cities are full of stories in time, ...their narratives are epic and everyday; they tell of migration and production, law and laughter, revolution and art. ... their registry is never wholly legible because of each foray into the palimpsest of city surfaces reveals only traces of these relations” (p.37). South African cities, like in many other developing countries, were influenced to a large extent by the colonial powers of the day. In the case of South Africa, Britain played an integral part in shaping the South African city. Devas & Rakodi (1993) states that colonial governments provided the necessary infrastructure to facilitate trade and maintain public order, but unfortunately they were more interested in what they could extract from their colonies than the conditions of the indigenous people. This is echoed by Devas (1993) and Watson (1993). During the British colonial period, and even before when the Dutch ruled over South Africa, many different forces influenced and shaped human settlements in South Africa increasingly along racial and class lines. This resulted in urban developments where a large proportion of the population was excluded from the economical, social and environmental benefits of an integrated, sustainable city. From the start, township establishment was regulated in a segregationist way. Planning legislation prohibited people of colour to reside in any town or village, or owning property, and people were forcibly relocated to newly established native locations.

The depression following the Anglo Boer war at the beginning of the century fuelled fear of black competition in the workplace. The Draft Green Paper on Development and Planning (1999) states that this was addressed by the government of the day through the implementation of new approaches to planning such as slum clearance initiatives, mass government housing; job reservation for poor whites, and the development of rigid and unsustainable 'betterment planning' methods in the rural areas.

Oranje (1997) and Smit (1989) explain that peripheral townships were established in many cities due to suggestions that the removal of blacks would greatly improve the living conditions of the whites. This resulted in the appointment of the Stallard Commission in 1921, and the subsequent passing of the Natives (Urban Areas) Act, No 21 of 1923 that provided for the establishment of separate native locations. These developments impacted on urban planning in the creation and strengthening of separate residential areas. Smit (1989) state that "ethnic engineering was considered a legitimate part of town planning from its earliest beginnings" (p.60). Town planning schemes became the central attraction of town planning, and became a tool for segregating residential areas in South Africa.

In the middle of the 20th century, urban growth in South Africa followed closely in the footsteps of most other cities around the world that experienced large growth during the industrial era at the beginning of the century. Urbanisation increased as black workers flocked to the cities for work and overtook the white population in absolute numbers in 1946. No houses were built during the war period, and the workers had to find refuge in overcrowded shacks, corridors, slum neighbourhoods, and backyards, living in appalling conditions. The housing problem became a major focal point with planners, architects and politicians. In the end the bulk of new housing went to whites, whereas housing conditions for black people showed little improvement.

The White Paper on Spatial Planning and Land Use Management (2001) explains that these patterns established the foundation for grand apartheid that formally emerged in the second half of the twentieth century, which was essentially a geographical attempt at partition, with dire spatial consequences." Oranje (1997) and Smit (1989) explains that urban segregation took on a very specific form in South Africa and apartheid provided a grand model for its implementation. With the election of the National Party in 1948, the promulgation of the Group Areas Act, 1950, and the election of Dr HF Verwoerd as Prime Minister in 1959, reconstruction took on a completely new dimension, that of designing and constructing the apartheid state. Davies, as referenced in Smit (1989), states that "this led to a city more structured and quartered than anything that had preceded it" (p.100). McCarthy (1991) observes that the Group Areas Act and the strict racial residential segregation it enforced created "an urban form that was more structured and quartered than anything that had preceded it in either colonial or early industrial capitalist times" (p.260). Landman (2002) explains that the results of this were wide ranging, leaving South Africa with segregated cities that entrenched inequality, that were difficult to manage well, and that functioned poorly. In addition it left distinctive spatial characteristics.

At the city scale, Dewar (1993) identifies three spatial characteristics that typified South African cities at the beginning of the nineties: low-density sprawl, fragmentation and separation. *Low-density sprawl* manifested in three processes that determined the pattern of growth. The first was speculative sprawl, which involved wealthier people seeking to privatise amenities and becoming the target group for developers, who target places of beauty to build their privatised "resorts" or "country estates". The second process, giving rise to low-density sprawl, was the development of low-cost housing schemes on the urban peripheries. A third process was illegal squatting by people who could not find a place in a designated housing area, or legal rights to reside in the cities and towns which lay within "white South Africa" and who sought a location closer to their places of work or other family members. The second

pattern is *fragmentation*. Cities reflected a cellular development pattern, since development occurred in relatively discrete pockets or cells, frequently bounded by freeways and/or buffers of open space. The primary reasons for this were the “neighbourhood unit” and “urban village” (garden city concept). An inevitable result of this cellular pattern is a simplified movement hierarchy. Isolated pockets of development are linked primarily by freeways and other limited access forms of movement. Through fragmentation, a sense of community and community interaction is lost to a large extent.

Figure 4: The Apartheid City

Source: Davies (1981)

The third pattern is *separation*. Du Plessies & Landman (2002) explain that this included separation of land uses, races and income groups. The dominant urban land-use pattern resembled a series of relatively homogeneous “blobs” of different uses, connected by rapid transport routes. Increasing numbers of poorer people settled on the urban edges, leaving them further and further from urban opportunities.

Williams (2000) states that the cumulative impact of these characteristics was cities of inequity, resulting in “islands of spatial affluence” in a “sea of geographical misery”. Du Plessies & Landman (2002) describe that the current effects of this planning approach include displaced urban settlements and a settlement pattern that is distorted, fragmented, unequal, incoherent and inefficient. It is a settlement pattern that generates enormous movement across vast areas, which is both time-consuming and costly, entrenching a system of unequal access to economic and social resources. The result of these levels of separation was spatial, social and economic exclusion of certain race groups to the benefit of others. The result was that the poorest city residents were the most distant from urban opportunities such as economic and social amenities. Daily experiences of long travelling times and distances became the norm. The resultant urban sprawl and the continuation of illogical peri-urban/rural settlement patterns increased the need for personal mobility to access jobs, commercial services and social infrastructure. However, the low-density aspects of this sprawl meant that mass transport systems were inefficient and uncompetitive despite subsidies. This encouraged the use of private vehicles and taxis, which brought further problems such as pollution, an increase in road accidents, traffic congestion, and subsequently bigger roads and further sprawl (CSIR 1999).

The Draft Green Paper on Development and Planning (1999) explains that the influences of apartheid, land market forces and urbanisation have created a pattern of human settlement primarily characterised by racial, socio-economic and land use segregation. Christopher (1990) affirms this by noting that the policy of apartheid in South Africa has left the country with increased levels of racial segregation in cities as a consequence of legislative programmes. Urban segregation levels have attained remarkably high levels, although the goal of total separation has eluded the White legislators.

Landman (2002) explains that it was these, largely historically constructed, uneven forms of development that became the subject of transformation in the

democratic South Africa of the 1990s. In the face of increasing internal and international opposition, and the growing economic and political need to accept the permanence of at least an 'insider' black group within towns and cities (as opposed to the majority of black people, kept outside urban areas by influx control laws), the government was confronted with the necessity for change.

2.3.2 The Post Apartheid City

At the end of the era of apartheid, South African settlements in both urban and rural areas was generally inefficient, fragmented, inconvenient and massively wasteful in terms of both publicly- and privately-controlled resources.

Christopher (2001) notes that an analysis of the results of the 1996 census revealed a general decline in urban racial segregation levels in South Africa since the end of legal *apartheid* in 1991. However, the trends are not uniform with Whites remaining both more segregated and less open to change than the other groups. Africans have become more integrated, but the majority are constrained in their choice of residential options by the general levels of poverty. Asian and coloured people have witnessed the greatest changes, with significant declines in segregation levels in the majority of cities as they begin to return to the areas from which they were forcibly removed in the previous 40 years. However, segregation levels remain exceptionally high and rapid integration may require government intervention.

In citing Smith (1992), Bremmer (1999) argues that while the socio-spatial characteristic forms of South African cities (residential segregation, buffer zones between races, peripheralisation of the black population and long distances between residence and workplace) have to some extent been blurred since 1994, this can be attributed more to market forces, the pressures of rapid urbanisation and upward black mobility, than to design or administrative intent. Christopher (2005) states that limited decrease in the

levels of segregation experienced between 1996 and 2001 can largely be based on the substantial rate of population growth and high levels of migration to urban areas. In a study on the urban segregation of South African towns, Kotze and Donaldson (1998) found that by the end of 1997, desegregation seemed to have been a one-way process whereby blacks, coloureds and Indians entered the previous whites-only neighbourhoods. The only evidence they could find of whites having moved in the opposite direction were in the central Cape Town neighbourhoods of Woodstock and Soutrivier.

While integrating policies, frameworks and plans have been drawn up, they have failed to result in mechanisms or procedures for superseding those practised under apartheid. Instead, speculation, urbanisation, crime and the growing informalisation of work have altered the city in ways that have superseded and yet reinforced apartheid's patterns. Christopher (2005) notes that the mere removal of restrictive legislation did not of itself result in residential reintegration, as the physical form of the cities and social and economic basis of society inevitably suffer from inertia.

According to Logan, Alba, McNulty & Fisher (1996), socio-economic status remains the strongest and most consistent discriminatory factor in the selection of residential suburbs in American cities. Prinsloo and Cloete (2002) notes that, based on evidence from previous studies and taking cognisance of existing trends in the South African residential market, it seems that there is a great degree of similarity South African cities and the general trends in many US cities.

An interesting finding by Christopher (2005) was that whites continued to maintain remarkably high levels of residential exclusivity when measured by standard indices of segregation, referring to city-wide unevenness of distribution. However, he notes that this conclusion needs to be tempered by the recognition that it is within the former white group areas that most of the developments leading to reintegration are taking place, reversing the forced

removals of the other groups during the apartheid era and the creation of zones of racial exclusion by the previous government.

2.3.3 Gated Communities in South Africa and the impact on society

A social component that has since the earliest days played an integral role in defining urban form, influencing urban planning, residential design and the spatial distribution of citizens is the element of fear. Lemanski (2004) explains that historically, the pre-modern city constructed walls and gates to exclude undesirables and thereby minimize fear, while the modern city was created in response to fear of those already inside the walls. Baron Haussman's nineteenth century Parisian reconstruction famously "boulevardized" the city, displacing and fragmenting the feared revolutionary threat posed by the underclass. Frantz, Glaze & Webster (2002) notes that today, one of the most striking features of recent urbanisation is the rise in popularity of privately governed residential, industrial, and commercial spaces.

In the course of a broad liberalisation and globalisation of South African society, the transformation of the apartheid city to the post apartheid city has contributed to an increase in crime as well as a feeling of insecurity among the people. In a complete survey of two housing areas in northern Johannesburg, Jurgens & Gnad (2000) found that, for personal protection, since the end of the 1980s living areas have been created in the suburbs whose uniqueness and exclusiveness are defined by the amount of safety measures and that their population structure combines social and racial segregation.

Manzi & Smith-Bowers (2005) explores, through two case studies, how communities struggling with neighbourhood problems including crime are using gating as a way of improving their environment rather than abandoning poorer areas of the city to find a safer home in more residentially segregated affluent neighbourhoods. Based on the common assumption that they are a major factor in the intensification of social segregation, gated communities are

normally presented in highly negative terms. Based on their study, Manzi & Smith-Bowers (2005) argue that that gating can help to foster social cohesion in an area or neighbourhood by involving a wide spectrum of communities and income groups to create management vehicles which can reduce crime, protect parked vehicles, increase safety and enhance the local environment by preventing unsolicited entry.

Since the early 1990's gated communities have become a prominent feature in the South African urban landscape. Landman (2002) echoes that the key motivation for the institution of gated communities in South Africa can largely be contributed to the high levels of crime experienced. Lemanski (2004) states that, in the absence of apartheid urban controls, alongside escalating crime, fear of crime and a lack of confidence in the "new" government, citizens responded independently by fortifying their properties, taking extreme measures in some cases. Garland (1996) as cited in Landman & Schonetch (2002), states that the perceived rises in crime and the inability to protect citizens has led to the erosion of one of the foundational myths of modern societies: namely that the sovereign state is capable of providing security, law and order and crime control. Landman (2002) explains that urban fortresses are a direct consequence of the recognition that the state cannot protect the lives and property of all citizens. Gated communities act as a private alternative to crime prevention and control. Other factors that contribute to the establishment of gated communities are financial security, resource security, socio-cultural safety and lifestyle security. The last mentioned factor is a dominant factor in the development of golf estates in that it gives residents access to a specific way of life in a private and protected environment.

Despite the increase in gated communities, there is no consistent definition of what is meant by 'gated communities'. A number of terms such as "suburban enclave" (Hook and Vrdoljak 2001), "security villages" (Bremmer 1999; Landman 2000) and "gated communities" (Hook and Vrdoljak 2001) are used to describe this phenomenon. Landman & Schontech (2002) defines the

concept of gated communities as a generic term that includes enclosed neighbourhoods that have controlled access through gates or booms across existing roads, and security villages and complexes, including lifestyle communities which provide their enclosed residents with a range on non-residential entities such as schools, offices, shops and golf courses. Caldeira (2001) describes the characteristics of fortified enclaves in Brazil as being private property for collective use, physically isolated (either by walls, empty spaces, or other design devises) which is controlled by armed guards and security systems.

The implementation of gated communities in South Africa is having a significant impact on urban sprawl, fragmentation and separation. Bremmer (1999) points out that gated communities are producing an increasingly disparate, separate city. The chances that people will develop a sense of shared space, of shared destiny, grow slimmer by the day. Not only do access controlled areas impact on the daily activity patterns of people, in influences urban form and it's functioning. The gaps between the townships, the inner city and the suburb are widening.

Landman & Schontech (2002) explains that by contributing to spatial segregation, gated communities also result in social and economic segregation. The exclusion of some residents from enclosed areas can lead to social exclusion, creating a barrier to interaction among people of different races, cultures and classes, thereby inhibiting the construction of social networks that form the basis social and economical activities.

Although enclave supporters claim that gated communities lead to decreased crime and increased community, research by Blakely & Snyder (1997) and Landman (2000) in both America (Blakely and Snyder) and South Africa (Landman 2000 and 2004) disputes such suggestions. In fact, empirical research indicates that erecting walls and monitoring entrants actually facilitates social exclusion, enhances urban segregation and disrupts urban

planning and management (e.g. emergency and municipal service routes). Thus far, Johannesburg has been the prime site of South Africa's residential enclosures, but as crime and fear have risen in other cities, these are embracing a similar fortress fate.

In the conclusion to her study Lamanski (2004) makes an interesting comparison of the modern South African city to those that dominated the landscape during the years of apartheid. She states that the three key similarities between the apartheid and post-apartheid city are identified: first, the use of fear to justify exclusion; second, the use of spatial mechanisms to displace social problems; and third, the dominance of social and symbolic exclusionism.

Apartheid encouraged all races to consider themselves separate nations, with distinct physical boundaries and symbolic identities. Such social and symbolic exclusions remain strong cities being more polarized and segregated today than in the 1980s. With the sudden proximity of difference, citizens have emulated the fear-management strategy they previously witnessed the state operating, that of socio-spatial exclusion and segregation. Apartheid's strongest legacy is thus not physical structure but symbolic exclusionism and the dominance of symbolic exclusionary mentalities threatens to undermine South Africa's future.

Most if not all golf estates are gated communities. Critics of these developments argue that these, as other gated communities, contribute to spatial fragmentation which serves to reinforce existing social and economical inequalities. The Property Magazine (September 2004) quotes Wally Menne, an environmental consultant to golf estate developments as saying that golf estates are a manifestation of inequitable distribution of wealth, and the consequence of years of disparity. In his opinion, golf estates are a modern materialization of the segregated facet that burdened South African economic and socio-economic development in the past.

In an attempt to better understand the impact of golf and polo estate developments in the Western Cape, a study was conducted in 2005. One of their conclusions mentioned in the Rapid Review on Golf and Polo estates in the Western Cape (2005) and a point for consideration in this debate is the following: "The question that thus has to be considered is whether the economic benefits of golf estate developments, as a form of gated communities, outweigh the broader socio-spatial concerns that may in the medium to long term impact on socio-political stability and nation building. In short, will they have a positive nett effect on creating a prosperous and just society?" (p74).

2.4 The different views regarding the impact of golf estates developments in South Africa

In general there seem to be opposing views held by government and the developers about the socio-economic value of golf estates, their impact on the environment and their effect on local communities.

The South African government is sceptical as to the real benefits these developments bring to the economy and their contribution to the upliftment of local communities. Government opposition to the establishment of new golf estates was affirmed in a budget speech made by Tasmeen Essop, the minister of environmental affairs and development, in 2004. The Property Magazine (2004) reported that she stated that government questioned the consequences and that she was determined to weigh up the benefits of golf estates to tourism and job creation against their environmental impact, especially where water is concerned. In 2005 there were even talks of land affairs minister Thoko Didiza considering a resolution calling for a moratorium on the development of new game farms and golf estates. In 2005 Govender (2005) reported that a resolution supporting the shelving of "elitist"

developments was endorsed by at least 1000 delegates at the National Land Summit, including officials from the Agriculture and Land Affairs Department.

Smith (2004) and Jordan (2004) notes that estate developers, on the other hand, claim that golf estates do not only improve the environment but also create substantial economic value for the local communities. Developers argue that big developments such as golf resorts and estates create jobs and fulfil an important social development function by putting money into local social upliftment projects. They also state that it is a widely accepted economic principle that for every one direct job created in a mega-project, at least three more are created in downstream supply and support activities.

From this it is clear that one major aspect of government resistance to golf developments is based on the socio-economic impact thereof. In opposition to this, developers argue that they make a significant socio-economic impact to local communities as well as the economy. The aim of this section is to gain a better understanding of these opposing arguments in the context of the social and economic environment.

2.4.1 The socio-economic impact of golf estates

In light of the debate regarding the impact of golf estates in South Africa over the last couple of years, one of the crucial aspects that have come to the fore is the concern of these estates effect on the social environment. This is strongly echoed by the following statement made by the South African President, Thabo Mbeki, in a speech delivered on the 12th of August 2005: "To succeed in this task, we have, among others, an urgent challenge of bringing to a stop the pro-rich housing development strategies that ensure that the best located land that is close to all the best facilities is always available to the rich; a situation where the best land is allocated especially to create gated communities and golf estates, while the poor can only access dusty semi-developed land far away from modern infrastructure" (Thabo Mbeki Speech,

12 August 2005). The Business Day (2005) reports that Neil Gopal, incoming CEO of commercial property association Sapoa, which includes most major developers in SA among its members, agreed with Mbeki's concerns. Gopal states the he thinks that there has been a flight of the pro-rich to golfing estates and that he does not believe these golfing estates are sustainable".

Smith (2004) reports that community organisations in many of the affected areas have requested that the social sustainability of these developments be taken into account, particularly where exclusive up-market residential golf estates are established in poverty stricken semi-rural areas. Golf course estates are frequently elitist enclaves, isolated from surrounding communities thriving on people's fear and insecurities in the face of increasing levels of crime and violence. Estates are populated by people who have accumulated sufficient wealth to do something about this, but rather than use their considerable resources to assist in addressing the problem, they attempt to block themselves off from the rest of society. At its most benign, this takes the form of fencing and closing off residential areas to the public, limiting access to public open space. At its most extreme it means guards, razor wire and electric fences. For society, this cannot be healthy, creating divides between the elite and the surrounding communities, and fostering resentment and tension between the "haves" and the "have nots". By limiting access to natural resources such as arable land, fuel, water, food and medicinal plants, golf estates further impoverish poor communities, both economically and psychologically. (WESSA: 2005)

Jordan (2004) states that an area of particular concern is the influx of migrant labour into the areas. This comes with social impacts such as the amount of jobs gained and lost by local people in the process, workers accommodation on the estates, growing informal settlements and the lack of services and facilities, such as healthcare, that can be supplied to these areas. Despite the permanent jobs that are created, the question of job creation is still under scrutiny. Gosling (2004) notes that many golf estates use the job creation

argument as the main justification for the social benefits that these estates bring to the local community and the economy at large. Estates create temporary jobs during the development phase, permanent jobs after development is completed and additional jobs in the economy because of the existence of the estate. Swart (2003) reports that a survey undertaken in the Western Cape identified that one off-site job is created for every eight golf tourists per 10-day visit. Gosling (2004) notes that local communities say that too few permanent jobs are being created to justify the developments.

The DEADP (2005) states that studies conducted in South Africa indicate that a golf estate with an approximate capital investment of forty million rand and 600 residential units will create 860 skilled and 2175 semi-skilled and unskilled jobs. In addition to that it is estimated that an 18 hole golf course creates approximately 72 permanent jobs, and a golf estate anything between 300 and 600 jobs (Blij 2002). From a labour point of view it seems to be the case that golf developments in general make a very positive contribution to the South African community at large. Keenan (2007) reports that Diarmund Herlihy, MD of ADPM, stated that in Ireland the business of golf is seen as a massive job creator and some of the best, most suitable land was used for new courses, exactly the opposite of the current situation in South Africa. Keenan (2007) also reports that Peter Matcovich added to this by stating that golf employs more people than any other sport.

When looking at the direct economic impact, the DEADP (2005) states that the three main channels through which money flows from golf courses and golf estates into the local economy are construction, employment and procurement. Other channels include tourism, tournaments and the households on the estates. When money is continuously injected into a local economy it has the effect of creating more money by virtue of how many cents of each Rand is spent on goods and services that are available locally. Another very significant contributor to the economic impact is the impact golf estates have on the value of properties.

Employment and procurement during the operation of a facility are forms of continuous injection of capital into an economy, which if spent locally creates an income for someone else. This is referred to as the multiplier effect (a given amount of money that grows as it circulates, the end result being a sum that is larger than the original amount). Tourism and tournaments are not regular sources of money flows because of fluctuations in numbers and the frequency with which they occur. Households may also not provide a continuous flow if residents are mobile and spend only a part of the year on the estate (DEADP, 2005).

In summary it is clear that there is a definite difference in the view of stakeholders regarding the impact of golf estate developments from a socio-economical impact perspective. The main arguments against these developments are the divisiveness of a walled and gated community; the negative impact of migrant labour; the closing of public spaces and the strain on municipal infrastructures. The argument from a developer perspective is that thousands of jobs, both permanent and temporary are created and that these developers actually contribute a substantial amount to social investment by upgrading communal facilities.

2.5 Comparative Studies

In this section comparative studies are investigated in order to get gain insight into the variables of socio-economic impact that were investigated, especially in the Western Cape. Specific focus is given to the findings of the Rapid Review on Golf and Polo Estates compiled by the Department of Environmental Affairs and Development Planning in 2005.

2.5.1 International Studies – the economic impact of golf in South Carolina

Davies, Watson, Cramer, Thilmany, Prosser & Elzi (2004) states that studies on the US golf industry in 2004 showed that the number of golf courses continue to grow as an industry, with 14,725 courses nationwide, compared to 13,258 courses in 1999. These facilities generated \$20.5 billion in direct revenues and \$62 billion in all associated economic activity.

2.5.1.1 The economic contribution to Colorado's golf industry

Davis et al (2004) reported in 2004 that in 2002, the golf industry in Colorado contributed over \$560 million in direct revenues to the Colorado economy and over R1,68 million when considering the indirect economic activity.

Factors included in their study included capital expenditure, operating expenditure, employment, golf course revenues as well as the impact on the real estate market. Findings of their study for public, private and resort courses were the following:

Table 1: Colorado golf course revenues

	Total Revenue in Million Dollars			
	Public	Private	Resort	Total
Green Fees	\$ 137.49	\$ 9.51	\$ 42.51	\$ 189.51
Golf Car Rentals	\$ 35.28	\$ 7.00	\$ 5.54	\$ 47.82
Other Rentals	\$ 3.44	\$ 2.88	\$ 3.45	\$ 9.76
Driving Range	\$ 15.29	\$ 1.66	\$ -	\$ 16.95
Pro Shop Merchandise	\$ 25.82	\$ 11.66	\$ 15.39	\$ 52.88
Food and Beverage	\$ 39.54	\$ 48.64	\$ 1.98	\$ 90.16
Dues/Initiations	\$ 9.26	\$ 111.95	\$ 13.60	\$ 134.81
Other	\$ 5.94	\$ 10.52	\$ 1.70	\$ 18.16
Total/Revenue	\$ 272.06	\$ 203.82	\$ 84.18	\$ 560.06

Source: David et al (2004)

Table 2: Capital Expenditures

2003 Projects	Public	Private	Total
Course renovation	\$ 1.19	\$ 1.06	\$ 2.25
Irrigation system/water source	\$10.68	\$ 5.47	\$ 16.15
Clubhouse and Building expansion	\$ 6.27	\$ 7.24	\$ 13.52
New vehicle and equipment	\$ 5.00	\$ 1.82	\$ 6.82
Other Projects	\$ 1.15	\$ 0.93	\$ 2.08
Total	\$24.29	\$16.52	\$ 40.82
Average Clubhouse Square Footage	3814	13366	
Average Maintenance Square Footage	2846	4074	

Source: David et al (2004)

Table 3: Operating expenditure

Total Expenditure in Million Dollars				
	Public	Private	Resort	Total
Full time wages	\$ 52.03	\$ 51.97	\$ 6.29	\$110
Part time wages	\$ 19.44	\$ 22.39	\$ 1.87	\$ 44
Seasonal wages	\$ 10.75	\$ 10.61	\$ 1.79	\$ 23
Facilities maintenance	\$ 16.44	\$ 11.26	\$ 2.30	\$ 30
Capital Expenditures	\$ 14.40	\$ 21.56	\$ 1.57	\$ 37
Operational equipment	\$ 24.71	\$ 8.78	\$ 2.72	\$ 36
Equipment leases paid	\$ 5.06	\$ 2.19	\$ 0.63	\$ 8
Marketing expenditures	\$ 1.96	\$ 0.52	\$ 0.47	\$ 3
Payroll taxes	\$ 3.01	\$ 9.10	\$ 0.53	\$ 13
Income taxes	\$ 0.09	\$ 0.61	\$ 0.01	\$ 0.7
Property taxes	\$ 1.06	\$ 6.33	\$ 0	\$ 7
Workers comp taxes	\$ 0.97	\$ 2.13	\$ 0.10	\$ 3
Other taxes	\$ 0.25	\$ 0.34	\$ 0.20	\$ 1
Group insurance	\$ 3.07	\$ 5.40	\$ 0.04	\$ 9
Liability insurance	\$ 1.05	\$ 2.67	\$ 0.12	\$ 4
Water expense	\$ 5.05	\$ 1.83	\$ 0.94	\$ 8
Electricity expense	\$ 3.73	\$ 4.41	\$ 0.39	\$ 9
Natural gas/propane	\$ 0.77	\$ 0.79	\$ 0.09	\$ 2
Sewer expense	\$ 0.52	\$ 0.14	\$ 0.06	\$ 0.7
Solid waste disposal	\$ 0.38	\$ 0.46	\$ 0.04	\$ 0.9
Pro Shop Merchandise	\$ 23.34	\$ 8.29	\$ 2.57	\$ 34
Food and Beverage	\$ 21.96	\$ 7.80	\$ 2.42	\$ 32
Other expenditures	\$17.37	\$25.81	\$ 3.74	\$ 47
Total Expenditure	\$ 227	\$ 205	\$ 29	\$ 462

Source: David et al (2004)

2.5.1.2 Golf industry in South Carolina

Flowers (2006) reports that in 2006 there were 375 golf courses around the state of South Carolina in settings that varied from ocean views and marshes on the coast to mountain vistas. With the highest number of holes per capita in the United States, Golf Digest ranked South Carolina among the nation's top five golf states. Golf generated more income than any other single entertainment or recreation activity in the state.

The findings of the study were as follows:

Economic Impact:

In 2004, golf courses and the off-course expenditures of visiting golfers had a total economic impact (direct, indirect and induced) in South Carolina of:

- \$2.261 billion in output or sales,
- 30,938 jobs,
- 713 million in personal income, and
- \$180 million in federal, state and local taxes.
- green fees and club membership dues generated \$11.9 million in admissions tax revenue alone, accounting for over 41% of state admissions tax collections. In 2004, the average revenue from membership dues, green fees and cart fees per paid round was \$48.41.

Golf Course Statistics:

The state had 375 golf courses, giving South Carolina the highest number of holes per capita in the United States. Overall, the average number of rounds played was 32,512 per 18-hole course in 2004.

Visiting Golfers:

- There were 923,000 trips to South Carolina that included a round of golf in 2004. These trips generated \$0.9 billion in visitor expenditures, \$0.2 billion spent on the golf course and \$0.7 billion off-course

expenditures at hotels, restaurants, and other retail and entertainment venues.

Despite the fact that both these studies excluded the construction and residential components of golf developments, these findings clearly indicate that the golf industry has made a large contribution to the local economies in the States of South Carolina and Colorado.

2.5.2 The Cameron Milner Study (2004)

In 2004 Cameron and Milner (2004) conducted a study on the sustainability of Golf Estates in the Western Cape of South Africa. The aim of the study was to investigate media reports in order to get a general view of what is happening across the Western Cape within a triple bottom line framework to include environmental, social and economic aspects of development.

In their assessment of the economic impact, Cameron and Milner (2004) investigated the impact on each of the stakeholders affected.

2.5.2.1 Community Employment

Focus was placed on the creation of employment for the local community and the sensitivity of developers towards the influx of migrant workers. Results showed that:

- ten out of eleven developers were sensitive to whether employees are local or migrant but that it is difficult to differentiate the locals from non-locals during the hiring process.
- Development Phase: Besides the 1000 permanent jobs created by the estate, 1000 temporary jobs were also created during the holiday season. It was also calculated that the multiplier effect of the development process created 9000 jobs in the economy and generated three times the total development cost in the economy.

- Operational Phase: Some of the golf estates claim that they will create between 700 and 1000 permanent jobs. Of nine estates interviewed it was found that an average of 451 jobs will be created on the estate. This high figure could be attributed to the fact that some developments include health spas, golf resorts etc.

2.5.2.2 Economic viability for the Buyer/Resident

The factors considered important in their study were the financial viability of the golf course and the risk inherent in purchasing a property on the estate.

- Golf course yield was investigated in order to determine if it could sustain itself. If not, homeowners have to cover the shortfall making it more expensive to live on the estate that could deter potential buyers. It was found that in many cases the number of rounds played per annum is far less than the course capacity which should be a concern for certain courses if they are in financial difficulty. One course fulfilled less than a third of its capacity in the 2003 season.
- Property purchase risk was also investigated. Factors included were the original purchase price, restrictions on resale and to a lesser degree the affordability of rates and taxes. In determining the original purchase price, six respondents felt that market price is the most important factor in determining the original sales prices of the units (other variables used were prices on other estates, prices of surrounding property, cost to build and the creation of demand). A high level of respondents indicated that there were restrictions on re-sale of units which increased risk as free market movement was restricted. Lastly it was found that rates and taxes on most estates were higher than surrounding residential land. One council even charged service fees on unused land containing fynbos, even though it was not utilised.

2.5.2.3 Commitment of the Developer

The commitment displayed by the developer can indicate confidence in the estate as an investment. Gauging this commitment therefore may be useful to buyers or residents in their purchase decision. In their study, Cameron and Milner (2004) found that in most of the developments the developer dedication was very high and created a lot of confidence in the longevity and sustainability of the project.

The findings of the social and economic areas of the study is summarised in the following table:

Table 4: Cameron and Milner summary

Negative aspects	Positive aspects
Social	
<i>Community</i> – The impact of investment efforts are not quantified. Developments put pressure on existing infrastructure in towns. An influx of migrant labour increases unemployment in the area and strains services such as healthcare and crime prevention.	<i>Community</i> – Developers have a good sense of social responsibility. All developments make some contribution to community upliftment. People development opportunities do exist on the estates. Jobs are created through the building and existence of the estates.
	<i>Residents</i> - Estates have building regulations and noise management programs. Facilities are many and varied providing quality lifestyle.
Social verdict Developers satisfy this aspect of the triple bottom line principle although an effort needs to be made to quantify the social investments made. The pressure on regional infrastructures and services need to be managed although this is mostly the responsibility of the municipalities and regional authorities.	
Economic	
<i>Community</i> – Migrant labour issue puts strain on community. Questions remain over optimal use of land.	<i>Community</i> – Jobs are created and this can enhance the local economy through increased consumption spending.
<i>Buyer</i> – Golf course sustainability risk due to low golf yields and some courses not owned by developer. Restrictions on reselling properties pose a risk. High rates and taxes can make living on estate unaffordable for some.	<i>Buyer</i> – Buoyant market is sustaining high capital growth of property on the estates.
<i>Developer</i> – bureaucracy of approval process is a cost. Speculation, if left unchecked, could be a risk to long-term sustainability.	<i>Developer</i> – Developments are still profitable which is evident by the number of proposed new estates.
Economic verdict At this point in time developers satisfy this aspect of the triple bottom line principle. Although there are major issues all three stakeholders are currently benefiting in some way from golf estate developments. Developers and authorities do need to devise a strategy to fix the migrant labour problem. Authorities need to work on determining optimum use of land. Developers need to continue to ensure that there is value in the properties for buyers.	

Source: Cameron & Milner (2004)

Despite the overall positive contribution towards social and economic bottom lines, their overall findings and verdict was that developers in the Western Cape did not develop according to the triple bottom line principle as they fell short with respect to the environmental aspect.

2.5.3 Socio-Economic study of Fancourt Golf Estate in George, South Africa (2006)

In a more recent study of the socio-economic impact of the Fancourt Golf development in George in the Western Cape, Professor Jan Havenga reported on the following variables; construction, procurement, operations and social responsibility.

Table 5: The Case of Fancourt

THE CASE OF FANCOURT	% Fancourt impact per annum
Employment creation:	
Fancourt construction & related industries employment impact over the past 10 years (direct and indirect)	8%
Fancourt employment impact on construction related industries in the Western Cape over the past 10 years	1.4%
Multiplied increase in GGP <i>for construction</i>	
George (including Fancourt)	27%
Western Cape (including George)	2%
South Africa (including Western Cape)	0.7%

Source: Havenga (2006)

As indicated in Table 5 it is clear that, per annum over the past 10 years, Fancourt created 8% of the construction jobs in George, and contributed 27% to the construction GGP of George. Other findings were that 49% of Fancourt employees have financially dependent family members, Fancourt basic salaries are higher than other George employers and that staff turnover is perceived to be lower than the industry benchmark. The cumulative impact of jobs created as a result of the Fancourt development was the following:

Table 6: Cumulative impact of Fancourt on the employment market

	Fancourt Direct	Indirect/Induced	Total Employment
Construction	352	962	1314
Operations	945	415	1360
Events	25	444	469
Communities	n/a	45	45
Local Government	n/a	48	48
Tourism	n/a	146	146
Infrastructure	n/a	8	8
Totals	1322	2068	3390

Source: Havenga (2006)

Havenga also found that 80% of employees were from George and that a further 16% from the Eden district, close to the development. Of these, 85% were permanently employed and only 15% were migrant workers not residing locally with families.

With regard to procurement, it was found that almost 60% of all supplies were procured from businesses in George and the Western Cape.

Havenga also analysed the spending at Fancourt by guests and found the following effect on the region:

Table 7: The economic impact of Fancourt

	% Fancourt impact per annum
Direct Spending at Fancourt	5.2% of George GRP
Multiple increase in GGP:	
George (including Fancourt)	6.2% of George GRP
Western Cape (including George)	0.14% of WC GRP
South Africa (including Western Cape)	0.03% of SA GDP

Source: Havenga (2006)

From these findings it is clear that the development of Fancourt Golf Estate made a significant contribution to the socio-economic environment in George as well as the Western Cape.

2.5.4 The Rapid Review on Golf and Polo Estates in the Western Cape (2005)

In order to gain a better understanding of the areas of economic impact of golf estates, the following section consist of the components identified as areas of economical contribution as included in the Final Report on the Rapid Review of Golf Course and Polo Field Developments compiled by the Department of Environmental Affairs and Planning of the Western Cape (2005).

Variables included in this section include the following:

Table 8: Variables included in the Western Cape Study

Impact Area	Variables Included	Construction Phase	Operation Phase	Area of Study
The Golf Industry	Expenditure on rounds of golf played	No	Yes	Economic
	Expenditure on auxiliary items by golfers	No	Yes	Economic
	Expenditure on membership fees	No	Yes	Economic
Golf Course	Direct Expenditure	No	Yes	Economic
Residential Unit	Direct Expenditure	No	Yes	Economic
Leisure Developments		No	Yes	Economic
Golf Tourism		No	Yes	Economic
Golf Events		No	Yes	Economic
Employment Opportunities	Number of employees per course	No	Yes	Socio-economic
	Levels of employment	No	Yes	Socio-economic
	Employment by race, gender and occupational category	No	Yes	Socio-economic
	Average income of levels of employment	No	Yes	Socio-economic
Procurement	Total and amount procured from local companies	No	Yes	Economic
Spatial Implications				Social
Water use and demand				Environmental
Use of treated and effluent and effluent generation				Environmental
Social systems and local communities				Social

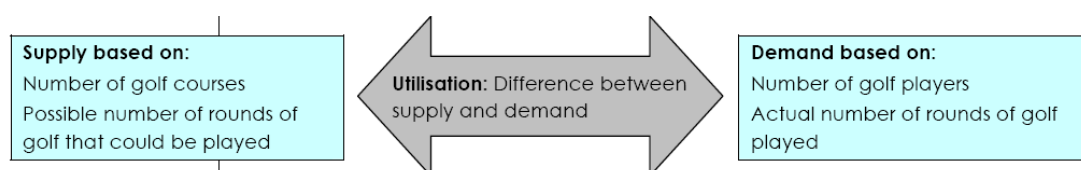
Source: Adapted from the Rapid review of Golf and Polo Estates in the Western Cape (2005)

Specific emphasis will be placed on the economic and socio-economic variables included in the study.

2.5.4.1 Supply and Demand

In order to project the utilisation of golf courses and understand the need for more courses, the supply and demand for golf, the number of rounds of golf that is played per annum has been quantified. The following methodology was used:

Figure 5: Utilisation of golf courses in the Western Cape



Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

The supply was calculated as follows:

Table 9: The supply of golf in the Western Cape

Hours of operation (7h30 to 16h00)	A	8.5
Laps (minutes) between tee off times per fourball	B	10
Number of fourballs per day	$A \times 60 \text{ minutes} / B = C$	51
Number of people per fourball	D	4
Rounds of golf per day	$C \times D = E$	204
Rounds of golf per annum	$E \times 315 \text{ days}^* = F$	64 260

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

Accordingly, a golf course could accommodate around 64 000 rounds of golf per annum. Based on the number of golf developments in the province, it was projected that there was capacity to host 5 312 000 rounds of golf per annum (18 and 9 hole courses).

The demand was derived from previous studies and based on the following assumptions:

Table 10: Assumptions regarding demand and utilisation

High Utilisation for 18 hole golf course	50 000	rounds per annum
Medium Utilisation for 18 hole golf course	35 000	rounds per annum
Low Utilisation for 18 hole golf course	20 000	rounds per annum
High Utilisation for 9 hole golf course	35 000	rounds per annum
Medium Utilisation for 9 hole golf course	25 000	rounds per annum
Low Utilisation for 9 hole golf course	17 500	rounds per annum

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

Based on these findings, the projected utilisation of courses in the Western Cape were as follows:

Table 11: Projected golf course utilisation

Existing Golf Courses		Number	Utilisation	Rounds per course	Rounds per annum	Capacity per course	Capacity per annum	Utilisation Rate
TGC	9 hole	35	Low	17 500	612 500	64 000	2 240 000	27%
TGC	18 hole	14	Medium	35 000	490 000	64 000	896 000	55%
PGC	9 hole	3	Medium	25 000	75 000	64 000	192 000	39%
PGC	18 hole	5	Medium	35 000	175 000	64 000	320 000	55%
TGC + HE	9 hole	2	Medium	25 000	50 000	64 000	128 000	39%
TGC + HE	18 hole	4	Medium	35 000	140 000	64 000	256 000	55%
PGC + HE	9 hole	6	Medium	25 000	150 000	64 000	384 000	39%
PGC + HE	18 hole	14	High	50 000	700 000	64 000	896 000	78%
Total		83	247 500	2 392 500	512 000	5 312 000		45%

Notes

TGC	Traditional Golf Course	TGC + HE	Traditional Golf Course plus Residential Components
PGC	Private Golf Course	PGC + HE	Private Golf Course plus Residential Components

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

While the limited analysis of supply, demand and utilisation indicated that private golf courses with residential components received high usage and that traditional golf courses were generally under-utilised, these were tentative conclusions. These findings presented an interesting debate in that it could be argued that since golf courses with residential estates were the most popular (because of the standard of the courses) more such facilities are needed. The counter argument was that efforts should rather be concentrated on improving and utilising existing golf courses than building new golf estates, particularly as there appeared to be capacity for hosting more golf rounds at many of the courses.

In conclusion it was found that it appeared that there were sufficient golf course facilities to cater for the demand and that demand was likely to be higher for certain types of courses than for others, depending on the number of holes, the standard of the facility and its location.

2.5.4.2 The economic impact of golf developments

In order to determine the economic impact of the golf developments, the researchers involved the Rapid Review of Golf Estates in the Western Cape identified the following questions that needed to be answered:

- What is the impact of golf estates in the economy relating to both income and employment?
- Where do golf developments spend their money? On what and how much?
- What kinds of jobs are being contributed to the local economy?
- What kinds of commercial activity are being created?
- What is the impact of the golf industry on the economy?
- What is the impact of golf tourism on the economy?
- What links are there between golf and the tourism industry?

- Does the Western Cape need to develop more golf courses and golf estates?

In order to address these questions the following areas of study was undertaken as part of their study:

- an economic impact assessment of the golf industry as a whole;
- an economic impact assessment of a golf course;
- an economic impact assessment of a residential unit on a golf estate;

Due to the scope of this study, a more expansive report will be given on the economic impact of the golf industry and a golf course, specifically the operational phase. Even though the indirect socio-economic impact does not form part of the scope of this study, the findings in the Western Cape are reported in order to create a better understanding of the impact.

Each element of the above-mentioned impact assessments was based on the use of income and employment multipliers to project the indirect and induced impact of the direct expenditure. Direct expenditure refers to the first round of expenditure, indirect expenditure to the second and subsequent rounds of expenditure, while induced expenditure reflects consumers' expenditure of earnings derived from the various rounds of expenditure constituting a particular economic activity. For example, the expenditure by a golfer on a golf course (direct) results in expenditure by the golf course development on maintenance (indirect) and expenditure by the golf course's employees in local shops (induced). The multiplier expresses the relationship between initial spend and changes in total local income and employment. The following section shows the findings of the study.

2.5.4.3 Golf Industry Economic Impact Analysis

It was found in their study that most golf course operators agreed that the golf course in new estates was regarded as a cost centre, which did not apply to

many of the more established courses. As a result, new developments were based on a combination of the golf course and some other form of income generating development (residential or tourism), which makes the projects financially viable.

In order to assess the financial viability, golf estates in the Western Cape apply various financial models:

- One approach is to obtain income from a combination of sources, namely membership fees, contribution from levies attached to residential properties and green fees from non-members. The golf courses that apply this model, pitch their fees for non-members at a level that is considered affordable. This serves to increase the volume of rounds played which often results in a profitable golf course. Hence, viability is achieved through ensuring a high volume of rounds played and deriving of income from more than one source.
- Some apply an approach where it is accepted that the golf course will not be run at a profit (i.e. increasing the volume of players is not a focus) and profits for the development are generated from other sources such as hotels, restaurants and spa facilities.
- Some use a system of selling debentures which serves to support the maintenance and running costs of the golf course.

Factors identified in their study that needed to be quantified in order to understand the economic impact were the following:

- Expenditure by golfers on playing a round of golf i.e. green fees;
- Expenditure on the construction of golf developments, including golf courses, golf estates, hotels & wellness centres etc;
- Expenditure by golfers on auxiliary items during a round of golf such as food & beverage, caddies, etc;
- Expenditure by golfers on membership fees;
- Expenditure by golfers on golf equipment;

- Expenditure on golf events; and
- Expenditure by golf tourists.

The reality was that there was virtually no information available to quantify all these factors. Broad assumptions were made based on various components of research conducted, but a detailed study was required to provide an accurate economic impact assessment of the golf industry. The items listed below were quantified by Grant Thornton to determine the impact of the golf industry. As a consequence of the limited information available, this quantification has had to draw on a number of assumptions:

- Expenditure on rounds of golf played/green fees were R110;
- Expenditure on auxiliary items by golfers R90;
- Expenditure on membership fees were R3000 and there were 50 000 members in the province.

Table 12 shows the direct expenditure based on the fact that 2 500 000 rounds are played per annum:

Table 12: Expenditure at golf courses in the Western Cape

Expenditure Item	Expenditure per Annum
Rounds of Golf/Green Fees	R275 million
Auxiliary Spend	R225 million
Membership Fees	R150 million
Total Direct Expenditure	R650 million

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

The results of the economic impact assessment were as follows:

Table 13: The economic impact of all golf courses in the Western Cape

Total Direct Expenditure	R650 million
Total Direct, Indirect and Induced Expenditure	R961 million
Total Contribution to Employment (Direct)	6 906
Total Contribution to Employment (Indirect and Induced)	1 726
Total Contribution to High-Level Occupations	1 557
Total Contribution to Mid-Level Occupations	2 670
Total Contribution to Semi-Skilled & Unskilled Occupations	4 406
Total Salaries Paid	R250 million
Estimate VAT on Direct Spend	R80 million
Estimated VAT on Indirect and Induced Spend	R8 million
Estimated PAYE/SITE on Payroll	R45 million
Estimated RSC Levies on Payroll	R877 000
Estimated RSC Levies on Turnover	R915 000
Estimated Corporate Tax	R29 million

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

Based on the assumptions made by Grant Thornton for the Western Cape study as well as the assumptions made about the utilisation of golf courses in Tables 10 and 11, the following calculation can be made to determine the direct economic contribution of a golf course:

Table 14: The economic impact of one course in the Western Cape

Average Green Fees (A)	R110.00
Auxiliary Spend per round of Golf (B)	R90.00
Total spend per round of golf (C = A+B)	R200.00
Average number of rounds per year per course (D)	35,000
Total direct contribution of rounds played per year (E = C x D)	R7,000,000.00
Average membership fee (F)	R3,000.00
Number of members per club (G)	1,000
Total direct contribution of golf membership per year (H = F x G)	R3,000,000.00
Total direct contribution of a golf course per year (I = E + H)	R10,000,000.00

Source: Adapted from the Rapid review of Golf and Polo Estates in the Western Cape (2005)

This calculation is very similar to the estimation made in the Rapid Review on Golf and Polo Estates in the Western Cape (2005) that a typical 18-hole golf course will generate R8,8 million in expenditure from green fees, auxiliary spend and membership fees.

Table 15: The economic impact of a single golf course in the Western Cape

Total Direct Expenditure	R8,8 million
Total Direct, Indirect and Induced Expenditure	R13 million
Total Contribution to Employment (Direct)	77
Total Contribution to Employment (Indirect and Induced)	19
Total Contribution to High-Level Occupations	17
Total Contribution to Mid-Level Occupations	30
Total Contribution to Semi-Skilled & Unskilled Occupations	49
Total Salaries Paid	R3,4 million
Estimate VAT on Direct Spend	R1 million
Estimated VAT on Indirect and Induced Spend	R104 000
Estimated PAYE/SITE on Payroll	R609 000
Estimated RSC Levies on Payroll	R12 000
Estimated RSC Levies on Turnover	R12 000
Estimated Corporate Tax	R391 000

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

The current study therefore makes the following proposition:

A golf course that forms part of a golf estate makes a direct economic contribution of R10,000,000 per annum (Proposition 1).

2.5.4.4 Procurement

The golf industry's impact on the local economy was further investigated by examining their expenditure on the procurement of goods and services. In the study of the Western Cape Golf developments (Western Cape Report, 2005), it was found that the golf courses/estates spent between 50 percent and 75 percent of their procurement budgets on local goods and services. Although the size of the course/estate determines the size of the procurement budget, local procurement represents a healthy injection of capital into the local

economy. Table 16 indicates the total procurement budgets of some estates and the proportion of that spent on local economies.

Table 16: Procurement spend by golf estates in the Western Cape

	TOTAL PROCUREMENT EXPENDITURE	AMOUNT PROCURED FROM LOCAL COMPANIES	% OF PROCUREMENT SPENT LOCALLY
ARABELLA	100 million	50 million	50%
GOOSE VALLEY	3.3 million per annum	2.4 million per annum	72%
FANCOURT	41,4 million per annum	31,9 million per annum	77%
GEORGE	5 million	n/a	n/a

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

It was assumed that households or businesses who receive R1 from Arabella spent 66 cents within the community. Of the 66 cents another six cents is spent on local goods and services, followed by another three cents and finally one cent. The expenditure of R1 by Arabella in the local community therefore generated a total income of R1.76 for other firms and residents. The multiplier therefore is R1.76. If the procurement expenditure of Arabella is used as an example, the R50 million direct spending therefore generated an additional R38 million of indirect spending in the local community.

From this the current study makes the following propositions regarding the procurement of goods and services of a golf estate:

More than 60% of money spent of the procurement of goods and services will be on local companies (Proposition 2).

2.5.4.5 Employment Opportunities

Despite the permanent jobs that are created, the question of job creation is still under scrutiny. Many golf estates use the job creation argument as the main justification for the socio-economic benefits that these estates bring to the local community and the economy at large (Gosling, 2004). Estates create temporary jobs during the development phase, permanent jobs after

development is completed and additional jobs in the economy because of the existence of the estate. Another survey undertaken in the Western Cape identified that one off-site job is created for every eight golf tourists per 10-day visit (Swart, 2003). However, local communities say that too few permanent jobs are being created to justify the developments (Gosling, 2004).

Blij (2002) found in a golf industry study of 31 clubs that an average 18-hole course provides jobs for 72 people which is made up of the following:

- Management: 2
- Administration: 5
- Hospitality: 10
- Outdoors: 15
- Caddies: 40

Using Blij's average number of employees per golf course, the City of Cape Town study (2004) estimated that the city's 19 golf courses created 1 368 job opportunities across the city (an average of 72 jobs per course). A comparative analysis of 5 courses in the Western Cape, undertaken by Omniplan (2004), showed similar results which indicated that an average of 30 people is employed by an 18-hole course, excluding caddies. Their study also showed that, with a capital investment of R393 million rand and a total of 600 residential erven, 3035 jobs would be provided as follows:

- 860 skilled jobs
- 2175 semi-skilled and unskilled jobs.

In their economic impact assessment of golf estates in the Western Cape, Grant Thornton (2005) estimated the following in terms of job creation:

A typical 18-hole golf course would contribute 318 employment opportunities during the two year construction period and 106 employment opportunities per annum during the operational stage. 54 of the employment opportunities

during the operational stage would be for semi-skilled or unskilled occupations.

In their study of the Western Cape, researchers reported that employment during the operational stage according to race, gender and occupational category were as follows:

Table 17: Employment opportunities created during the operational phase of a golf estate

	Management		Service		Technical		Admin		Labourer	
	M	F	M	F	M	F	M	F	M	F
African	8%	0%	18%	16%	32%	4%	9%	4%	44%	7%
Coloured	9%	17%	18%	27%	38%	5%	14%	20%	36%	10%
Indian	1%	0%	3%	2%	2%	1%	3%	2%	0%	0%
White	53%	22%	9%	7%	14%	4%	10%	39%	2%	0%
	71%	29%	48%	52%	86%	14%	36%	64%	83%	17%

Source: Rapid review of Golf and Polo Estates in the Western Cape (2005)

In their conclusion it was noted that despite the fact that a significant number of jobs were created during the construction phase, large scale developments could result in an influx of migrant job seekers. It was also stated that although it is acknowledged that golf estates can provide significant employment, the general experience is that these jobs are at the lowest level and therefore only help at the 'survival level'.

From this the current study makes the following propositions regarding the employment opportunities that will be created during the operational phases of the golf course:

The operational phase of a golf course will contribute between 72 and 100 employment opportunities after construction (Proposition 3).

Based on these findings and the delimitations of this study, it is accepted that job creation during the construction phase of the golf course en residential units will make a significant socio-economic contribution. Also, based on the

delimitations, the employment opportunities created during the construction of the course and residential units as well as the operational phase of the residential units will not be investigated.

2.6 List of propositions

The following propositions will enable the present study to address the sub problems as stated in Section 1.3:

Sub Problem 1 – Determine what direct economic contribution a golf course that forms part of a gated community in Gauteng makes to the local economy.

Proposition 1: A golf course that forms part of a golf estate makes a direct economic contribution of R10,000,000 per annum.

Proposition 2: More than 60% of money spent of the procurement of goods and services will be on local companies.

Sub Problem 2 – Determine what direct social contribution a golf course that forms part of a gated community in Gauteng makes to employment.

Proposition 3: The operational phase of a golf course will directly contribute between 70 and 100 employment opportunities after construction.

3 RESEARCH METHODOLOGY

The following chapter will outline the research methodology that was used to address propositions, sub-problems of the research and the research problem. The following aspects of research methodology will be discussed: research population and sample size, sampling methodology, data collection and questionnaire design. Validity and reliability will be addressed as well as the tools used to analyse the data.

3.1 Research Design

A comparative study was carried out between the socio-economic impact of golf courses on golf estates in the Western Cape (Cameron & Milner (2004), Havenga (2005), The Rapid Review of Golf and Polo Estates in the Western Cape (2005)) with those in Gauteng. This included comparisons of “main factors”.

3.2 Introduction to the research methodology

A quantitative approach was used to determine the similarities and differences between the geographic areas of studies. Structured interviews using a standardised questionnaire was used to collect the data required for purposes of this research. This included information on supply and demand for golf; the economic impact of the golf industry; employment patterns; as well as procurement spend during the operational phase of the golf course.

3.3 Constructing the questionnaire

The detailed questionnaire developed for each golf course included in the study is divided in two main sections (see Appendix 2, Section B).

Section 1 – Direct economic contribution

The first section was designed in such a way that the economic impact could be determined. The first four questions in section one was aimed at establishing the utilisation of the course. This was due to the fact that the utilisation of the course will be required to perform some of the economic analysis. Questions five to eleven included questions regarding the elements identified that contribute to the direct economic contribution of the course.

Section 2 – Employment & Procurement

This section of the questionnaire consisted of a table indicating all employment figures, levels of employment as well as the gender and racial composition of employees. This section also included two questions regarding procurement spending of the golf course.

3.3.1 Respondent bias

Considering that the research is exploratory in nature and centred on the socio-economic contribution, this can result in potential bias. The respondents may have felt that open discussion of the details of their business may compromise public opinion of the socio-economic contribution and sustainability of golf courses that form part of a residential estate. In order to negate the risk of respondent bias, the researcher acknowledged that some of the data collected was of a sensitive nature and treated as such.

3.3.2 Validity and Reliability

The questionnaire was designed to satisfy the criteria for reliability and validity that is required to give the research credibility. Yin (1994) explains that four tests have been commonly used to establish the quality of any empirical data. The four measures can be classified under two headers, Validity and reliability where validity refers to the quality of the instrument being used to measure, and reliability to how accurately it is measured.

Perry (2001) described the four elements as follows:

- Construct Validity – the formation of suitable operational measures for the concepts being investigated;
- External Validity – is concerned with the generalisability of the research findings beyond the case;
- Internal Validity – refers to the consistency of the cause and effect relationship discovered; and
- Reliability – refers to how consistently a technique measures concepts so that other researchers will get the same result.

3.3.2.1 Validity

The validity of the research instrument was sought through the use of a pilot study in which the respondents understanding of the questions was checked.

3.3.2.2 Reliability

The researcher personally conducted all the interviews in order to ensure reliability. Therefore any questions or queries were also addressed in exactly the same manner for all respondents. This provides for a high level of equivalence.

The reliability was further enhanced in that a detailed questionnaire was developed to act as guide during the interview. This means that other researchers repeating the study would have a detailed guide to assist them during the interview. In order to further ensure this, the accuracy and precision of the questionnaire was addressed by ensuring the questions were clear, concise and simple to understand and that the questionnaire was well structured. The clarity and wording of the questionnaire also ensured that the answers would be repeatable and therefore stable.

3.3.3 The research population and sample and selection

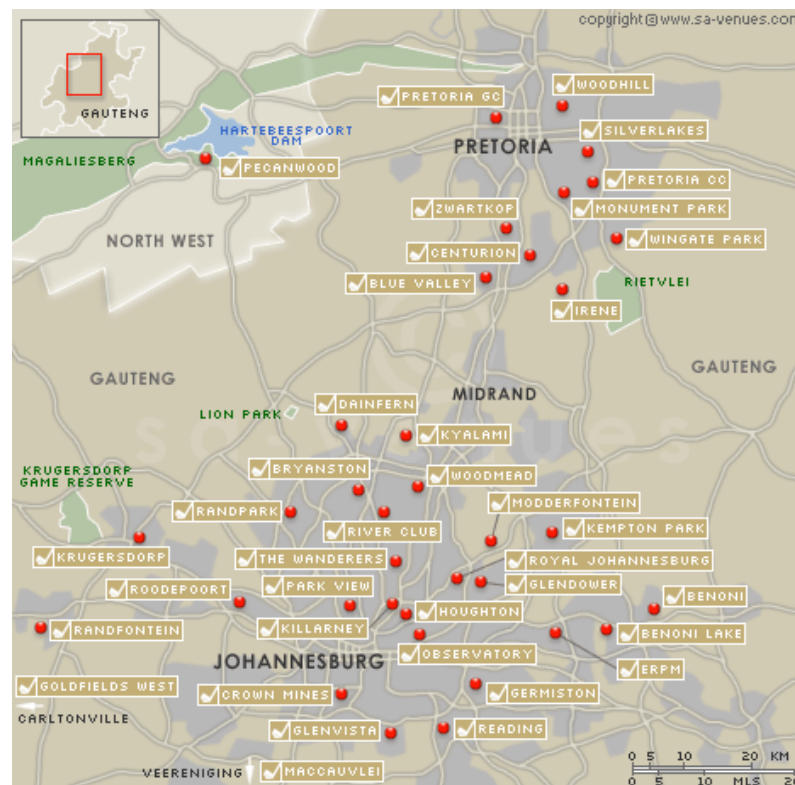
The sample selected for the purposes of this study comprises the entire population of 11 golf estates with operational golf courses in Gauteng.

Table 18 shows a list of all courses to be included in the study:

Table 18: Golf courses included in study

Golf estate name		9 hole estate	18 hole estate	Suburb
1	Blair Athol		Yes	Lanseria
2	Blue Valley Golf Estate		Yes	Midrand
3	Centurion Golf Estate		Yes	Centurion
4	Dainfern Country Club		Yes	Bryanston
5	Eagle Canyon Club		Yes	Honeydew
6	Ebotse		Yes	Ekhuruleni
7	Emfuleni Club		Yes	Vanderbijlpark
8	Pebble Rock		Yes	Pretoria
9	Silver Lakes Golf Estate		Yes	Pretoria
10	Woodhill Residential Estate and Country Club		Yes	Woodhill
11	Zwartkop Golf Estate		Yes	Pretoria

Figure 6: Location of golf courses in Gauteng



Source: www.sa-venues.co.za

3.3.4 Data collection

In consultation with the management of each golf estate the appropriate respondents were selected. In some cases the data was collected from more than one individual within the organisation.

The prospective interviewees was contacted telephonically. During this initial conversation the purpose of the study and a brief overview of the methodology were discussed. If the person was willing, an appointment was set-up to explain the study in further detail and to conduct the interview.

It was envisaged that the majority of interviews be conducted in person unless geographic location and or time restrictions inhibit this. In these instances, telephonic interviews was conducted. (See Appendix 2 for the questionnaire that was used as a guide in the interview).

3.3.5 Data analysis

The data was recorded in the research instrument developed for this purpose (see Appendix 2). The statistical analysis that was used in this study included the calculation of means, std deviations, ratios and percentages. These estimates was used to compare the socio-economic impact of the Gauteng golf estates with those cited in the Western Cape Study (Cameron & Milner (2004), Havenga (2005), The Rapid Review of Golf and Polo Estates in the Western Cape (2005)).

It must be noted that the supply of golf was calculated based on the same model used in the study conducted in the Western Cape. The hours of operation used in this study is however slightly different in that the hours of operation were calculated between the first and last tee-off time as opposed to the total hours of operation. This gives a more accurate measure of the total supply of golf on golf estates in Gauteng. This study also included the income

generated from caddies and golf carts as this can form a significant portion of the potential direct expenditure at a golf course.

3.3.6 Summary

In this chapter the research methodology used for this research is outlined. The research population, sample size, sampling methodology, data collection and questionnaire design, the validity and reliability as well as the tools used to analyse the data have been discussed.

4 PRESENTATION OF THE RESULTS

The following chapter consists of the presentation of the findings of the present study. The first section presents the findings of the supply and utilisation of golf at residential golf estates in the Gauteng province. The section that follows on this indicates how green fees, membership fees, golfers spend on caddies & golf carts as well as auxiliary spend per round of golf contribute to the total direct expenditure at a golf course. The researcher then presents the findings with regard to the annual procurement spend of the golf courses studied and indicate which portion of this is spent in the local economy. The second last section presents the findings of employment numbers and the demographics thereof which is followed in the last section by the involvement of courses in social upliftment programs.

4.1 The supply and utilisation of golf

As illustrated in Table 19, a golf course that forms part of a golf estate offers an average of 40.37 hours of golf per week. Given the average of 7.77 minutes between tee-off times, an average supply of 57,786 rounds of golf is generated per annum per course. In order to determine the utilisation of these courses, respondents at the courses studied were asked to provide the actual numbers of rounds played per annum. As indicated in Table 19, the utilisation of courses ranged from as low as 28% per annum at Blaire Athol, which is deemed to be a very exclusive course, up to as high as 85% at Woodhill Residential Golf estate. The demand for golf at the eleven courses surveyed was 37,852 per annum which resulted in an average utilisation of 66%.

Table 19: Supply and utilisation of golf courses

COURSE NAME	TOTAL-Hrs/wk	Minutes Between tee-offs	Potential 4-balls per day	Potential rounds per annum	Actual Rounds/annum	Golf Course Utilisation
Blair Athol	36.00	10.00	30.86	38,880	10,800	28%
Blue Valley Golf Estate	37.40	8.00	40.07	50,490	35,000	69%
Centurion Golf Estate	40.83	5.50	63.64	80,182	43,000	54%
Dainfern Country Club	39.00	8.00	41.79	52,650	43,000	82%
Eagle Canyon Club	44.50	10.00	38.14	48,060	40,000	83%
Ebotse	37.60	8.00	40.29	50,760	38,571	76%
Emfuleni Club	38.00	6.00	54.29	68,400	35,000	51%
Pebble Rock	40.75	7.00	49.90	62,871	28,000	45%
Silver Lakes Golf Estate	40.50	7.00	49.59	62,486	45,000	72%
Woodhill Residential Estate	41.70	8.00	44.68	56,295	48,000	85%
Zwartkop Golf Estate	47.83	8.00	51.25	64,575	50,000	77%
AVERAGE	40.37	7.77	45.86	57,786	37,852	66%
TOTAL	444.12	85.50	504.48	635,649	416,371	

Figure 7: Potential and Actual rounds per course

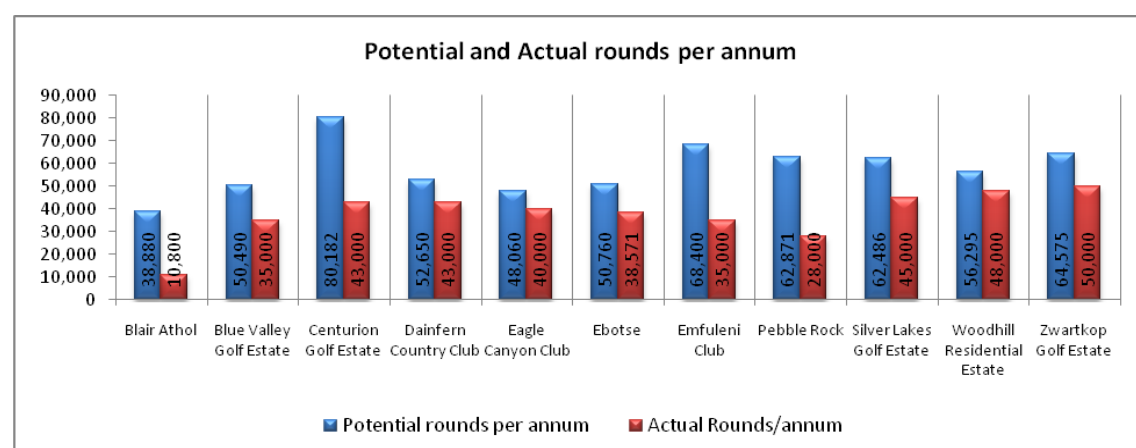


Figure 8: percentage utilisation per course



4.2 Total Direct Expenditure

Based on the model used in the Rapid review on golf in the Western Cape, the total direct expenditure of golf courses consist of the expenditure on green fees, auxiliary spend and membership fees. In addition to this and as indicated in the methodology, this study included the income generated from caddies and golf carts as this can form a significant portion of the potential direct expenditure at a golf course.

4.2.1 Membership

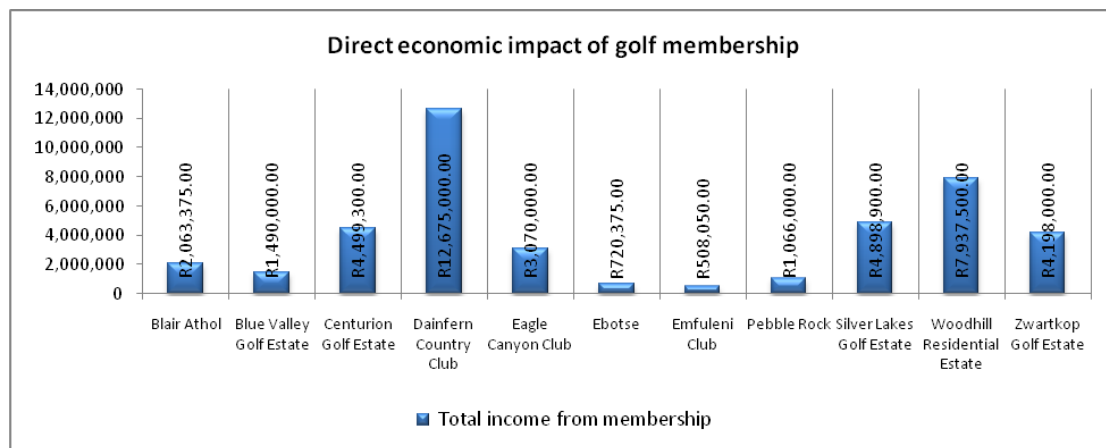
Using the data collected during the interviews, the number of members per category and the cost per type of membership was used to determine the direct contribution made by membership fees.

As per Table 20, it was found that the average direct contribution of membership fees at the courses studied was R3,920,590.91 per course. As indicated, the total contribution of membership fees at the 11 courses studied alone accounted for more than R43 million of the total direct economic expenditure.

Table 20: Direct impact of membership fees

COURSE NAME	Senior Male Membership income/year	Senior Female Membership income/year	Junior Male Membership income/year	Junior Female Membership income/year	Total income from membership
Blair Athol	R 1,935,150	R 101,850	R 21,375	R 5,000	R 2,063,375
Blue Valley Golf Estate	R 1,280,000	R 160,000	R 25,000	R 25,000	R 1,490,000
Centurion Golf Estate	R 3,140,000	R 1,177,500	R 144,000	R 37,800	R 4,499,300
Dainfern Country Club	R 9,750,000	R 2,750,000	R 125,000	R 50,000	R 12,675,000
Eagle Canyon Club	R 2,475,000	R 550,000	R 37,500	R 7,500	R 3,070,000
Ebotse	R 596,062	R 105,187	R 16,256	R 2,868	R 720,375
Emfuleni Club	R 441,150	R 51,900	R 12,000	R 3,000	R 508,050
Pebble Rock	R 855,000	R 171,000	R 32,000	R 8,000	R 1,066,000
Silver Lakes Golf Estate	R 4,048,550	R 714,450	R 115,515	R 20,385	R 4,898,900
Woodhill Residential Estate	R 6,750,000	R 1,012,500	R 140,000	R 35,000	R 7,937,500
Zwartkop Golf Estate	R 3,302,400	R 825,600	R 63,000	R 7,000	R 4,198,000
ALL COURSES - AVERAGE	R 3,143,028.41	R 692,726	R 66,513	R 18,323	R 3,920,590
ALL COURSES - TOTAL	R 34,573,312.50	R 7,619,987	R 731,646	R 201,553	R 43,126,500

Figure 9: Direct economic impact of membership fees

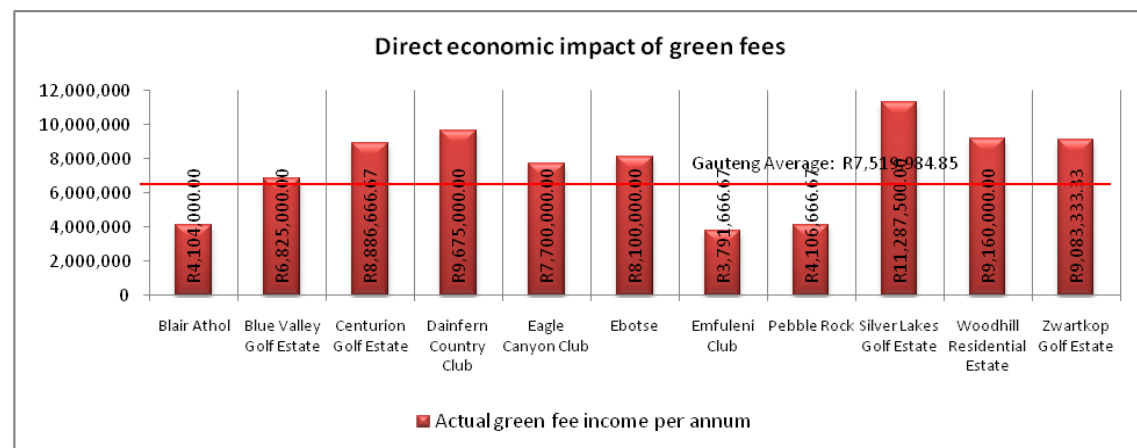


4.2.2 Green fees

Green fees are determined by and can generally be divided into three categories dependant on the membership status of the player at a specific course. These categories are members, members affiliated to other clubs as well as non-members. In order to determine the total direct economic impact of green fees, an average cost per round had to be determined based on these categories. For the purpose of this study, the average of members, affiliated members and non-members was used to determine the average cost per round. This was then multiplied by the actual number of rounds played at the specific course which results in the actual direct economic impact of green fees per course. Table 21 indicates that the average direct economic impact of green fees varied from just more than R4 million at Blaire Athol to more than R9 million at Zwartkop Golf Estate. An average of R7,519,985 generated from green fees per course resulted in a total direct economic contribution of R82,719,833.

Table 21: Direct economic contribution of green fees

COURSE NAME	Members		Affiliated Members		Non-Members		Avg Cost per Round	Actual green fee income per annum
	Mon-Fri	Sat & Sun	Mon-Fri	Sat & Sun	Mon-Fri	Sat & Sun		
Blair Athol	R0	R0	R570	R570	R570	R570	R380	R4,104,000
Blue Valley Golf Estate	R80	R90	R150	R200	R300	R350	R195	R6,825,000
Centurion Golf Estate	R0	R0	R200	R220	R400	R420	R206.67	R8,886,666.67
Dainfern Country Club	R0	R0	R250	R300	R350	R450	R225	R9,675,000
Eagle Canyon Club	R110	R110	R165	R220	R275	R275	R192.50	R7,700,000
Ebotse	R100	R100	R190	R220	R300	R350	R210	R8,100,000
Emfuleni Club	R55	R95	R100	R120	R120	R160	R108.33	R3,791,666.67
Pebble Rock	R50	R50	R130	R160	R220	R270	R146.67	R4,106,666.67
Silver Lakes Golf Estate	R105	R105	R290	R360	R285	R360	R250.83	R11,287,500
Woodhill Residential Estate	R65	R80	R170	R200	R285	R345	R190.83	R9,160,000
Zwartkop Golf Estate	R90	R90	R170	R200	R240	R300	R181.67	R9,083,333.33
AVERAGE	R59.55	R65.45	R216.82	R251.82	R304.09	R350	R207.95	R7,519,984.85
TOTAL								R82,719,833.33

Figure 10: Direct economic impact of green fees

4.2.3 Caddies and golf carts

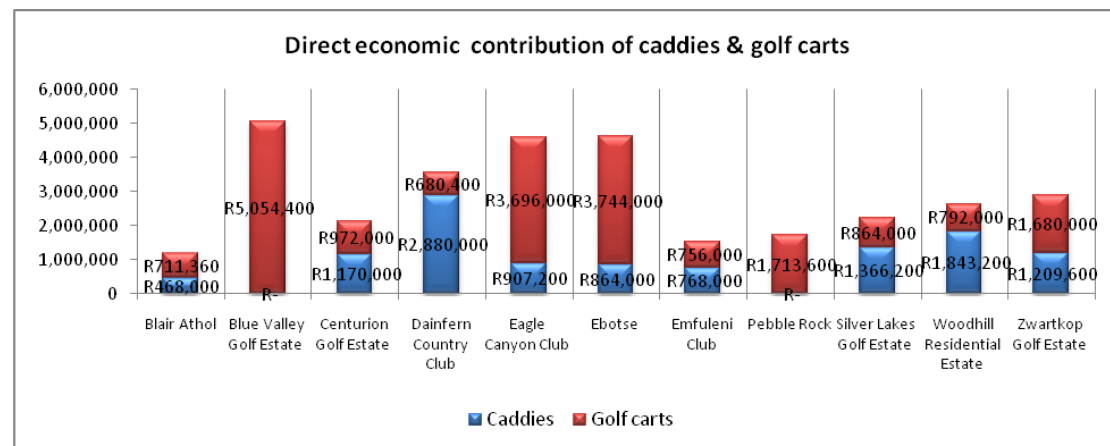
It is interesting to note that, as indicated in Table 22, not all courses make use of caddies. Despite this, it was found that courses employed an average of almost 20 caddies and were charging an average cost of R123 per caddie per round of golf. Given the number of rounds per caddie per month as collected during the survey, it shows that the fees paid for caddies make a total direct economic contribution of R11,476,200 per annum.

It was found that golf carts were rented out at a slightly higher rate of R175 per round and that the average number of 18.18 rounds per month was more or less the same as the number of rounds completed by a caddy per month. The result of this was that golf carts at the eleven courses surveyed made a direct economic contribution of R20,663,760 per annum.

Table 22: Direct economic contribution of caddies & golf carts

COURSE NAME	CADDIES			GOLF CARTS		
	Avg Cost	Avg rounds per month	Direct impact per year	Avg Cost	Avg rounds per month	Direct impact per year
Blair Athol	R 150	13	R 468,000	R 228	13	R 711,360
Blue Valley Golf Estate	R -	0	R -	R 180	13	R 5,054,400
Centurion Golf Estate	R 130	25	R 1,170,000	R 180	18	R 972,000
Dainfern Country Club	R 120	25	R 2,880,000	R 150	21	R 680,400
Eagle Canyon Club	R 135	16	R 907,200	R 200	22	R 3,696,000
Ebotse	R 120	20	R 864,000	R 200	26	R 3,744,000
Emfuleni Club	R 100	16	R 768,000	R 120	21	R 756,000
Pebble Rock	R -	0	R -	R 140	17	R 1,713,600
Silver Lakes Golf Estate	R 110	23	R 1,366,200	R 200	18	R 864,000
Woodhill Residential Estate	R 120	16	R 1,843,200	R 150	11	R 792,000
Zwartkop Golf Estate	R 120	21	R 1,209,600	R 175	20	R 1,680,000
AVERAGE	R 123	19.44	R 1,275,133	R 175	18.18	R 1,878,524
TOTAL			R 11,476,200			R 20,663,760

Figure 11: Direct contribution of caddies and golf carts



4.2.4 Auxiliary spend

Respondents were asked to estimate how much money golfers spend on average during a round of golf on auxiliary items such as food, beverages, golf balls etc. Respondents indicated that golfers spent an average of R180 during a round of golf on these items. Given the actual numbers of actual rounds played per annum, and as shown in Table 23, auxiliary spend at golf courses that form part of golf estates in Gauteng make an average direct economic contribution of R7,301.494 per course and a combined total of R80,316,429 per annum.

Table 23: Direct economic contribution of auxiliary spend

COURSE NAME	Average Spend per Round	Actual Rounds/annum	Total direct economic impact
Blair Athol	R25	10,800	R270,000
Blue Valley Golf Estate	R300	35,000	R10,500,000
Centurion Golf Estate	R75	43,000	R3,225,000
Dainfern Country Club	R150	43,000	R6,450,000
Eagle Canyon Club	R300	40,000	R12,000,000
Ebotse	R300	38,571	R11,571,429
Emfuleni Club	R150	35,000	R5,250,000
Pebble Rock	R75	28,000	R2,100,000
Silver Lakes Golf Estate	R150	45,000	R6,750,000
Woodhill Residential Estate	R150	48,000	R7,200,000
Zwartkop Golf Estate	R300	50,000	R15,000,000
AVERAGE	R180	37,852	R7,301,494
TOTAL		416,371	R80,316,429

4.2.5 Total direct economic spend at golf courses on golf estates in Gauteng

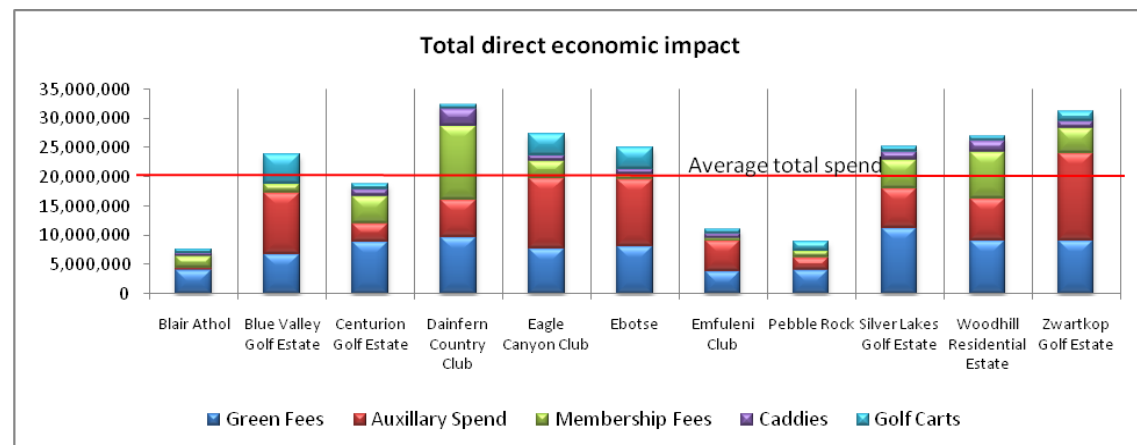
The findings presented in the sections above needs to be combined In order to determine the total direct economic spend at the golf courses studied. Table 24 presents the findings of each of the components studied as well as its combined impact. It was found that, on average, a golf course makes a direct economic contribution of R21,663,884 per annum. It also indicates that there is quite a substantial difference between the lowest contributor, Blair Athol (R7,616,735) and the highest being Dainfern Country club

(R32,360,400). It was found that the 11 courses studied make a combined direct economic contribution of R238,302,722 per annum.

Table 24: Total direct economic contribution of golf courses on golf estates in Gauteng

COURSE NAME	Green Fees	Auxiliary Spend	Membership Fees	Caddies	Golf Carts	Total direct economic contribution
Blair Athol	R4,104,000	R270,000	R2,063,375	R468,000	R711,360	R7,616,735
Blue Valley Golf Estate	R6,825,000	R10,500,000	R1,490,000	R0	R5,054,400	R23,869,400
Centurion Golf Estate	R8,886,667	R3,225,000	R4,499,300	R1,170,000	R972,000	R18,752,967
Dainfern Country Club	R9,675,000	R6,450,000	R12,675,000	R2,880,000	R680,400	R32,360,400
Eagle Canyon Club	R7,700,000	R12,000,000	R3,070,000	R907,200	R3,696,000	R27,373,200
Ebotse	R8,100,000	R11,571,429	R720,375	R864,000	R3,744,000	R24,999,804
Emfuleni Club	R3,791,667	R5,250,000	R508,050	R768,000	R756,000	R11,073,717
Pebble Rock	R4,106,667	R2,100,000	R1,066,000		R1,713,600	R8,986,267
Silver Lakes Golf Estate	R11,287,500	R6,750,000	R4,898,900	R1,366,200	R864,000	R25,166,600
Woodhill Residential Estate	R9,160,000	R7,200,000	R7,937,500	R1,843,200	R792,000	R26,932,700
Zwartkop Golf Estate	R9,083,333	R15,000,000	R4,198,000	R1,209,600	R1,680,000	R31,170,933
AVERAGE	R7,519,985	R7,301,494	R3,920,591	R1,275,133	R1,878,524	R21,663,884
TOTAL	R82,719,833	R80,316,429	R43,126,500	R11,476,200	R20,663,760	R238,302,722

Figure 12: Total direct economic impact per course



4.3 Procurement

During the data collection phase it was found that a number of the courses were unwilling to disclose financial information with regard to procurement spend. In the section relating to procurement spend at the golf courses, only seven of the eleven courses were willing to disclose such information.

The data collected are displayed in Table 25 and shows that the average procurement spend of the seven golf courses that were willing to disclose the relevant information were R5,771,428.57 million per annum. On average, each of these courses spend 62% of their procurement spend on local companies, therefore making an average direct contribution of R3,562,857.14 per course and a total of R24,940,000 to local economies.

Table 25: Procurement spend

COURSE NAME	Procurement spend	% on local companies	Total local spend
Blair Athol	R 3,900,000.00	70%	R 2,730,000.00
Blue Valley Golf Estate	Not willing		
Centurion Golf Estate	R 4,000,000.00	30%	R 1,200,000.00
Dainfern Country Club	R 4,500,000.00	10%	R 450,000.00
Eagle Canyon Club	Not willing		
Ebotse	R 3,700,000.00	50%	R 1,850,000.00
Emfuleni Club	Not willing		
Pebble Rock	R 4,800,000.00	70%	R 3,360,000.00
Silver Lakes Golf Estate	R 8,500,000.00	90%	R 7,650,000.00
Woodhill Residential Estate	Not willing		
Zwartkop Golf Estate	R 11,000,000.00	70%	R 7,700,000.00
AVERAGE	R 5,771,428.57		R 3,562,857.14
TOTAL	R 40,400,000.00	62%	R 24,940,000.00

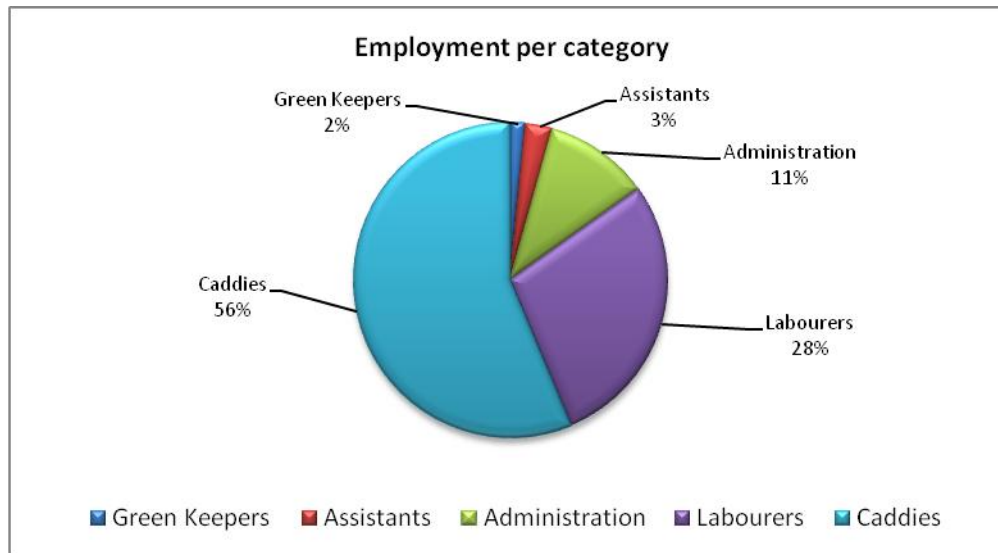
4.4 Employment

For this section the researcher had interviewed a number of respondents at each of the golf clubs in order to determine what permanent employment each of the clubs create.

It was found that each of the courses employed one green keeper which was in all of the cases a white male employee. On average, all green keepers had

two assistant green keepers which consisted of 35% African and 75% white males. The total number of administrators was 78 between all the courses, giving each course an average of seven. Within this group it was found that 17% were African male, 9% were African female, 69% were white males and 5% were white females.

Figure 13: Employment per category



Despite the fact that two of the courses studied outsourced the maintenance of the course to outside contractors and therefore had no labourers, this made up the second largest portion of people permanently employed at the course. On average each of the eleven courses employed 19 labourers. This portion of labour consisted of 98% African males and only 2% white male employees. The last category included in the employment section was the caddies which made up the biggest number despite the fact that two of the courses employed no caddies. It was found that 405 caddies were employed at the eleven courses, giving each an average of 37. Caddies were in all cases African male employees. Table 26 gives an indication of the findings per category indicating both the count of male and female employees as well as the percentage each makes up of the category.

Table 26: Employment creation per category

	MANAGEMENT		ADMINISTRATION & ASSISTANTS		LABOURERS		CADDIES	
	Male	Female	Male	Female	Male	Female	Male	Female
African	0	0	20	7	201	0	405	0
Coloured	0	0	0	0	0	0	0	0
Indian	0	0	0	0	0	0	0	0
White	11	0	67	4	4	0	0	0
Sub-Total	11	0	87	11	205	0	405	0
TOTAL	11		98		205		405	

	MANAGEMENT		ADMINISTRATION & ASSISTANTS		LABOURERS		CADDIES	
	Male	Female	Male	Female	Male	Female	Male	Female
African	0%	0%	20%	7%	98%	0%	100%	0%
Coloured	0%	0%	0%	0%	0%	0%	0%	0%
Indian	0%	0%	0%	0%	0%	0%	0%	0%
White	100%	0%	68%	4%	2%	0%	0%	0%
Sub-Total	100%	0%	89%	11%	100%	0%	100%	0%
TOTAL	100%		100%		100%		100%	

4.5 Social Upliftment

The section on social upliftment was included in order to determine which portion of golf courses made a conscious effort to make a social contribution. Respondents were asked only to indicate if courses were involved in some form of social upliftment programme and if so, to give a brief description of these programmes.

Table 27: Social upliftment

COURSE NAME	Social Upliftment involvement	Description of program
Blair Athol	Yes	Involvement of local schools and establishment of a golf foundation
Blue Valley Golf Estate	Yes	Working with golf development programme
Centurion Golf Estate	No	No programme in place
Dainfern Country Club	Yes	Sponsorships and donations to local charities
Eagle Canyon Club	Yes	Junior development programme and schools tournaments
Ebotse	No	No programme in place
Emfuleni Club	No	No programme in place
Pebble Rock	Yes	Juniors are able to join club and receive training at no cost
Silver Lakes Golf Estate	Yes	Golf teaching academy
Woodhill Residential Estate	Yes	PGA Club, involvement in schools league
Zwartkop Golf Estate	Yes	Junior Club, Local charities, Lions club
TOTAL	8	

As indicated in Table 27, eight of the courses were involved in social upliftment programmes that ranged from free golf membership and coaching for juniors to sponsorship and donations to local charities.

5 INTERPRETATION OF THE RESULTS

In order to address the research problem and sub problems, the following propositions under each sub problem have been outlined in Chapter 2:

Sub Problem 1 – The direct contribution that a golf course that forms part of a gated community in Gauteng make to the local economy

Proposition 1: A golf course that forms part of a golf estate makes a direct economic contribution of R10,000,000 per annum.

Proposition 2: More than 60% of money spent of the procurement of goods and services will be on local companies.

Sub Problem 2 – The direct social contribution of a golf course that forms part of a gated community in Gauteng make to employment.

Proposition 3: The operational phase of a golf course will directly contribute between 70 and 100 employment opportunities after construction.

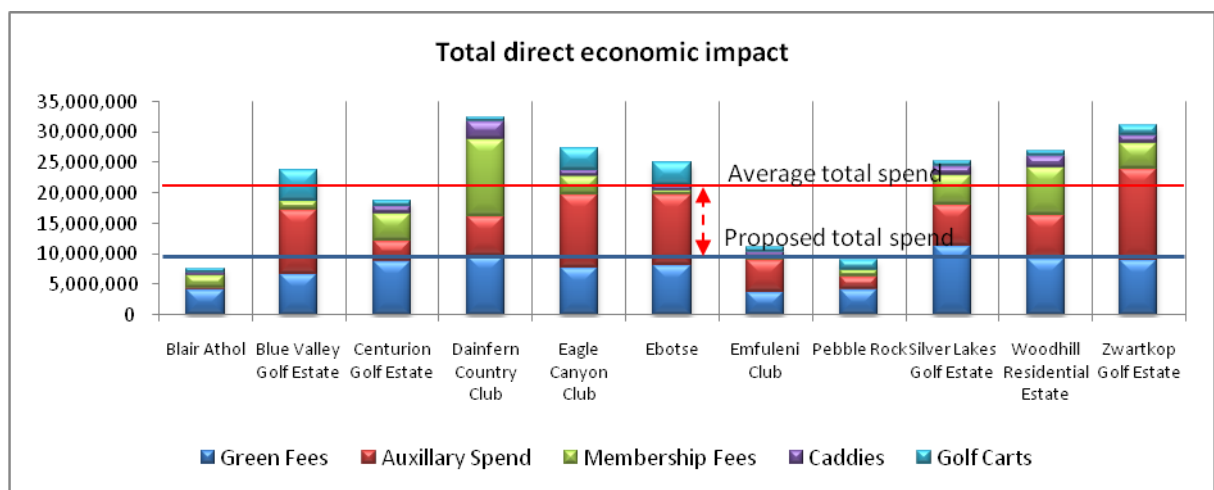
These propositions will now be discussed as they link back to the research problem: The objective of this research is to determine if the golf courses on residential estates in Gauteng make a sustainable socio-economic contribution following the completion of the construction phase. From this conclusions will be drawn regarding the sub problems.

5.1 The direct economic contribution of a golf course during operational phase

Proposition 1 suggested that a golf course that form part of a golf estate in Gauteng will make a direct economic contribution of more than R10,000,000 per annum. The Rapid Review on Golf Estates carried out in the Western Cape included green fees, auxiliary spend and membership fees as elements that all contributed to this.

As indicated in Chapter 5, the researcher included the contribution of caddies & golf carts in this study. The findings of this study was that the golf courses on golf estates in Gauteng made more than double the proposed economic contribution of R10,000,000. On average, each of the courses made annual direct contributions of more than R21,000,000 to the economy, 116.64% more than the findings of the Rapid Review on Golf Estates carried out in the Western Cape in 2005.

Figure 14: Proposed and total spend



As indicated in Figure 14, all but two of the courses (Blair Athol and Pebble Rock) make contributions of more than R10,000,000 per annum.

In order to make a direct comparison to the findings of the studies conducted in the Western Cape, Table 28 was created showing a breakdown of contribution of each of the elements per round.

Table 28: Total direct economic spend: breakdown per round

	Western Cape (2005)	Gauteng golf estate (2008)	% Difference
Average Green Fees (A)	R110.00	R198.67	80.61%
Auxiliary Spend per round of Golf (B)	R90.00	R192.90	114.33%
Average cost of caddies (B1)	not included	R27.56	n/a
Average cost of golf carts (B2)	not included	R49.63	n/a
Total spend per round of golf (C = A+B+B1+B2)	R200.00	R468.76	134.38%
Average number of rounds per year per course (D)	35,000	37,852	8.15%
Total direct contribution of rounds played per year (E = C x D)	R7,000,000.00	R17,743,317.25	153.48%
Average membership fee (F)	R3,000.00	R5,913.41	97.11%
Number of members per club (G)	1,000	663	-33.70%
Total direct contribution of golf membership per year (H = F x G)	R3,000,000.00	R3,920,590.91	30.69%
Total direct contribution of a golf course per year (I = E + H)	R10,000,000.00	R21,663,908.16	116.64%

The Rapid review on golf estates worked on the assumption that 35,000 rounds are played per annum. The present research found that even though the number of rounds played per annum in Gauteng were higher (37,852), this was only 8.15% higher than the assumptions used in the Western Cape. It was also found that there was a significant difference between the average total spend per round which made a considerable difference to the total direct economic impact of a round of golf. A golfer in Gauteng spent an average of 134.38% more on a round of golf in 2008 than what was spent in the Western Cape in 2005. Combined with the difference in the number of rounds played per annum, the direct contribution of rounds played per year in Gauteng made a contribution of R17,743,317.25 per annum. This is 153.48% more than a course in the Western Cape made in 2005. It was established that clubs in Gauteng had 33.70% less members than the membership count assumed in the Western Cape. A factor that could influence this is that fact that membership fees in Gauteng are on average 97.11% higher than in the Western Cape. The total contribution of membership fees in Gauteng, without taking inflation into account, was found to be 30.69% higher than in the Western Cape study conducted in 2005.

In order to make this comparison to the findings in the Western Cape more realistic, the researcher took inflation at 6% per annum into account. The impact on the findings of the Western Cape compared to Gauteng is depicted in Table 29. Also, the impact of caddies and golf carts were excluded as these were not originally included in the findings in the Western Cape.

Table 29: Real total direct economic spend: breakdown per round

	Western Cape (2005)	Western Cape (inflated at 6% per annum for three years)	Gauteng golf estate (Excl Caddies & golf Carts)	% Difference
Average Green Fees (A)	R110.00	R131.01	R198.67	51.64%
Auxiliary Spend per round of Golf (B)	R90.00	R107.19	R192.90	79.95%
Average cost of caddies	not included	not included	not included	not included
Average cost of golf carts	not included	not included	not included	not included
Total spend per round of golf (C = A+B)	R200.00	R238.20	R391.56	64.38%
Average number of rounds per year per course (D)	35,000	35,000	37,852	8.15%
Total direct contribution of rounds played per year (E = C x D)	R7,000,000.00	R8,337,112.00	R14,821,498.70	77.78%
Average membership fee (F)	R3,000.00	R3,573.05	R5,913.41	65.50%
Number of members per club (G)	1,000	1,000	663	-33.70%
Total direct contribution of golf membership per year (H = F x G)	R3,000,000.00	R3,573,048.00	R3,920,590.91	9.73%
Total direct contribution of a golf course per year (I = E + H)	R10,000,000.00	R11,910,160.00	R18,742,089.61	57.36%

As indicated in Table 29, the total impact of a golf course in the Western Cape now increases to R11,910,160 (taking inflation into account) and that of a course in Gauteng reduces to R18,742,089.61 (when excluding caddies & golf carts). Despite these adjustments, it is clear that a golf course in Gauteng still makes a direct economic contribution that is 57.36% more than a course in the Western Cape. This analysis also shows that this difference can largely be contributed to the 64.38% higher spend per round of golf in Gauteng. The fact that courses in Gauteng play on average 8.15% more golf per annum than the Western Cape inflates the total direct contribution of rounds played per year to 77.78% when compared to the Western Cape in real terms.

The fact that courses in Gauteng that form part of a residential estate have a direct economic impact of more than double that of one in the Western Cape does not necessarily imply that courses in Gauteng make their maximum contribution. In order to appreciate how golf courses can influence their direct economic contribution, an understanding needs to be established of the extent that the factors analysed influence the direct economic contribution of a golf course.

5.1.1 The contribution of total spend per round of golf

As shown in Table 29, the average spend per round of golf is made up of the green fees, spend on auxiliary items, caddie fees and golf cart rentals. These are all variables that can be adjusted or influenced in order to change the total spend per round of golf. Not only can the correct adjustment of these elements increase the total spend per round of golf, it can also impact on the utilisation of the course by making it more attractive to prospective players. This could then in turn have a significant impact on the total direct economic contribution of the course.

The Table 30 shows the total contribution of each of these elements for the three courses that made the biggest direct economic contribution through rounds of golf as well as the total of the three that made the smallest contribution. This could assist in understanding how the relationship between these elements contributes to increasing a courses' direct economic contribution.

Table 30: Contribution of top and bottom three courses

COURSE NAME	Number of Rounds	Green fees	Auxiliary Spend	Caddies	Golf Carts	Economic impact
Direct economic contribution per cost element						
Top three (% of total)	128,571	R24,883,333	R38,571,429	R2,980,800	R9,120,000	R75,555,562
Bottom three (% of total)	73,800	R12,002,333	R7,620,000	R1,236,000	R3,180,960	R24,039,293
Expenditure per round						
Top three (cost per round)	128,571	R193.54	R300.00	R23.18	R70.93	R587.65
Bottom three (cost per round)	73,800	R162.63	R103.25	R16.75	R43.10	R325.74

As indicated in Table 30 it is clear that the biggest contributing courses play on average a lot more golf than those that are not. The utilisation of courses will however be further investigated in the next section.

It is also evident that the top three courses manage to generate a much higher expenditure per round.

Figure 15: Average fee per round

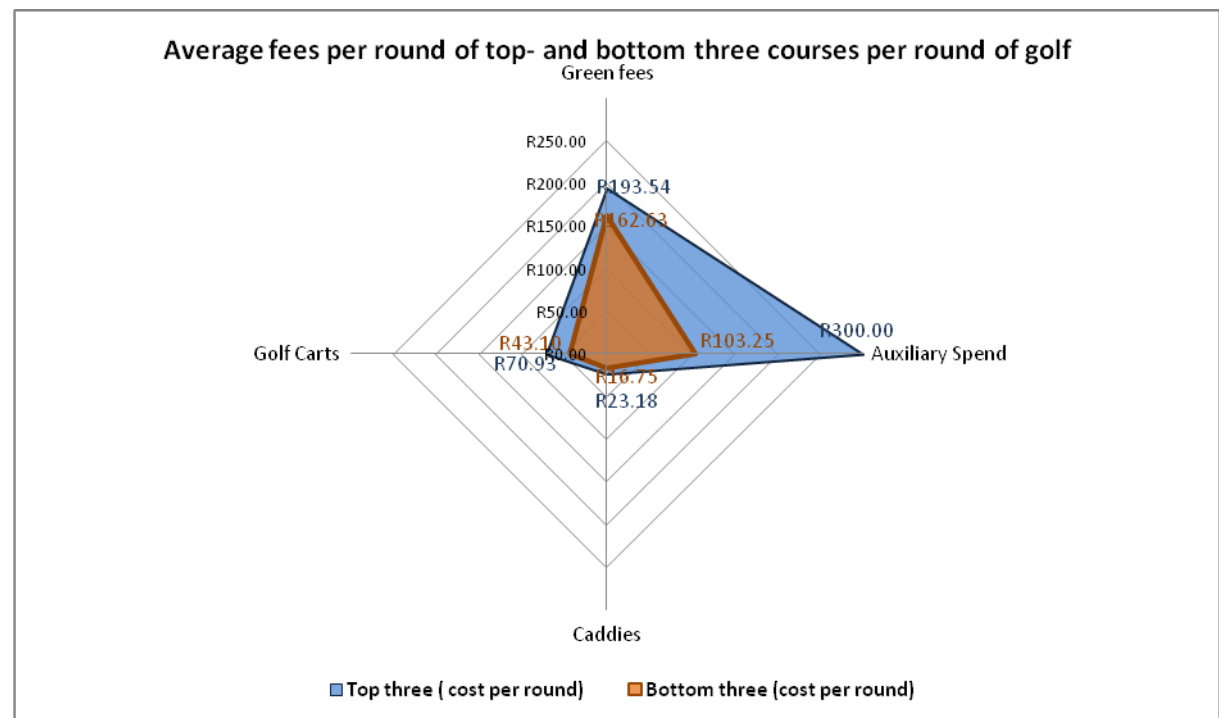
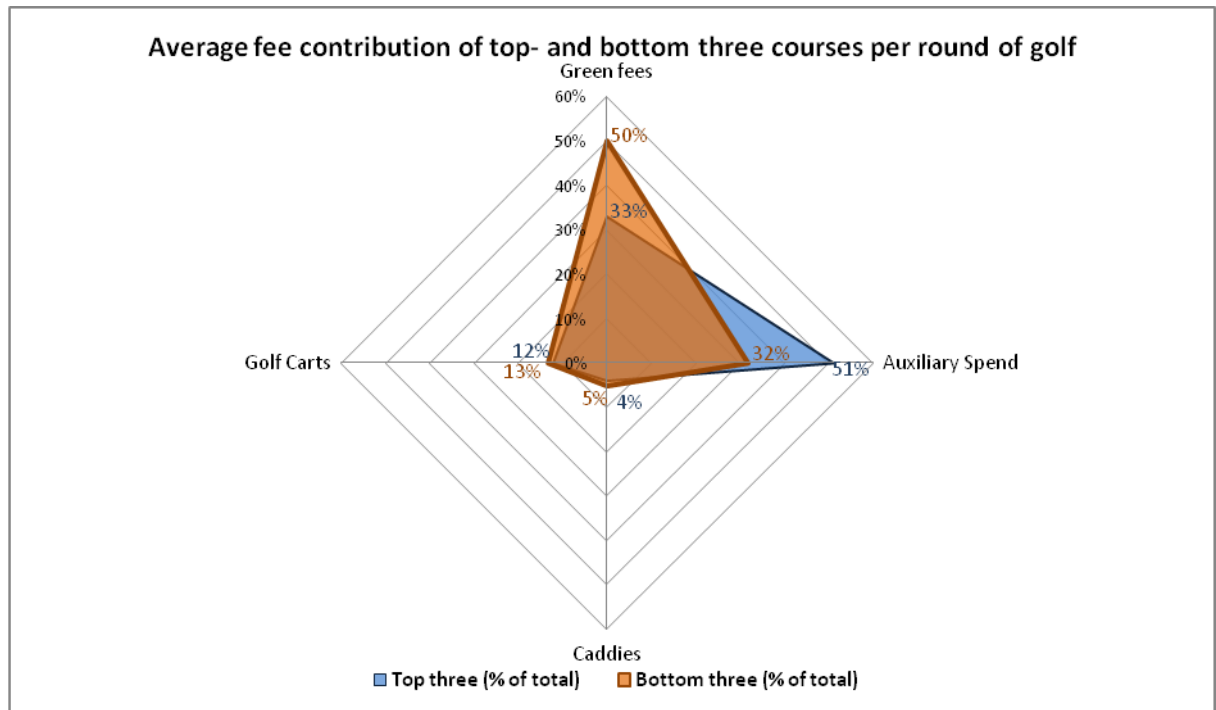


Figure 15 indicates that these courses manage to accomplish this by increasing the auxiliary spend per round of golf to almost three times that of

the bottom three courses. The result of this (combined with the higher number of rounds played) contributes 51% to the top three courses' contribution per round in comparison to only 32% of the bottom three as indicated by Figure 16. This figure also indicates that the bottom three courses are a lot more reliant on the smaller cost items (green fees, golf carts and caddy fees).

Figure 16: Average fee contribution



5.1.2 Golf course utilisation

The average golf course utilisation is one of the major factors that influence the direct economic contribution of a golf course. Figure 17 indicates the average utilisation in Gauteng as well as the utilisation of each course in relation thereof.

Figure 17: Golf course utilisation

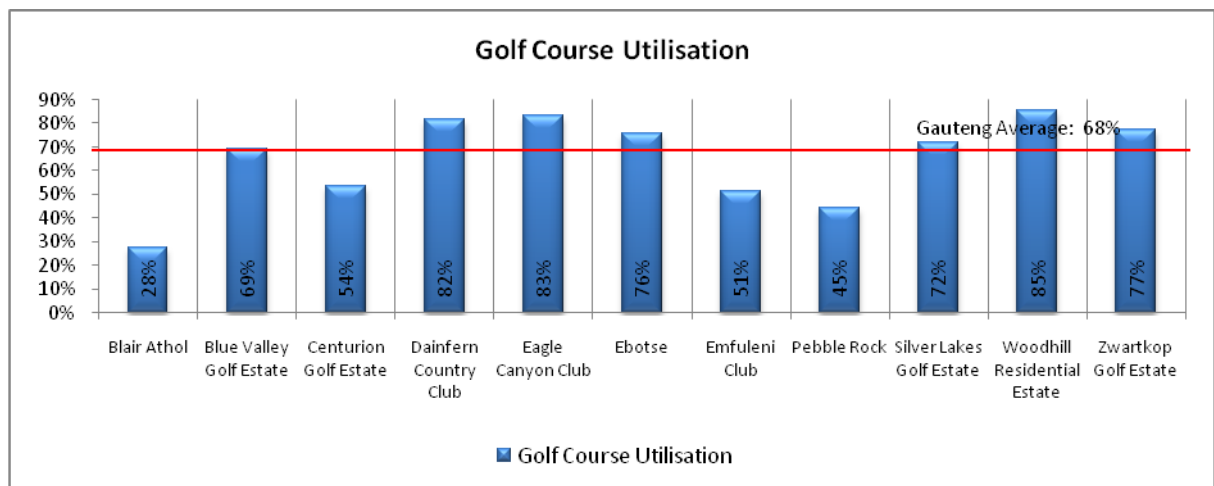


Table 31 shows all the courses that have an average utilisation of less than the average of 68% per annum. It is interesting to note that these courses are also the four that make the smallest direct economic contribution, totalling only R38,292,960 (16% of the total contribution of all courses).

Table 31: Potential contribution

COURSE NAME	Current rounds per annum	Total direct contribution of rounds played	Rounds per annum at Gauteng avg utilization (68%)	Contribution at 68% utilisation	Difference
Blair Athol (11)	10,800	R5,553,360	26,438	R13,594,625	R8,041,265
Centurion Golf Estate (8)	43,000	R14,253,667	54,524	R18,073,529	R3,819,862
Emfuleni Club (9)	35,000	R10,565,667	46,512	R14,040,865	R3,475,199
Pebble Rock (10)	28,000	R7,920,267	42,753	R12,093,277	R4,173,011
Total	116,800	R38,292,960	170,227	R57,802,297	R19,509,337

Should these courses increase their utilisation to that Gauteng average of 68% per course it would enable them to play 170,227 rounds per annum which is an increase of 46%. This would in turn result in an increased economic contribution of R19,509,337 per annum, 51% more than the current contribution.

5.1.3 The direct contribution of golf membership

Despite the fact that the average golf membership in Gauteng was significantly higher than those in the Western Cape, the total contribution of membership fees in Gauteng (in real terms) was only 9.73% higher than in the Western Cape. The reason for this was the fact that it was assumed that courses in the Western Cape had on average 50.8% members more than courses on golf estates in the Gauteng region.

Table 32 shows that the five courses which received the largest contribution from membership fees had an average membership count of more than 600 members. The only two courses that managed to achieve a high number of members while keeping the average membership fees high were Dainfern Country Club and Woodhill Residential Estate. The combined contribution that these two courses received from membership fees (R20,612,500) was almost as much as the combined contribution of all the other nine courses (R22,514,000).

Table 32: Membership contribution

COURSE NAME	Number of members	Avg membership fee	Total income from membership
Dainfern Country Club (1)	1070	R 11,845.79	R 12,675,000.00
Woodhill Residential Estate (4)	1400	R 5,669.64	R 7,937,500.00
Silver Lakes Golf Estate (5)	1017	R 4,817.01	R 4,898,900.00
Centurion Golf Estate (8)	651	R 6,911.37	R 4,499,300.00
Zwartkop Golf Estate (2)	1000	R 4,198.00	R 4,198,000.00
Eagle Canyon Club (3)	580	R 5,293.10	R 3,070,000.00
Blair Athol (11)	151	R 13,685.13	R 2,063,375.00
Blue Valley Golf Estate (7)	400	R 3,725.00	R 1,490,000.00
Pebble Rock (10)	500	R 2,132.00	R 1,066,000.00
Ebotse (6)	150	R 4,802.50	R 720,375.00
Emfuleni Club (9)	376	R 1,351.20	R 508,050.00
ALL COURSES – AVERAGE	663	R 5,857.34	R 3,920,590.91

There seems to be no direct correlation between the number of members and the average cost per membership as some of the course with more expensive membership fees still managed to draw a high number of members. This is

also displayed by the fact that the two courses with the lowest membership fees (Emfuleni Club and Pebble Rock) which both failed to recruit more than the average of 663 members.

5.1.4 The combined direct economic contribution per course per year

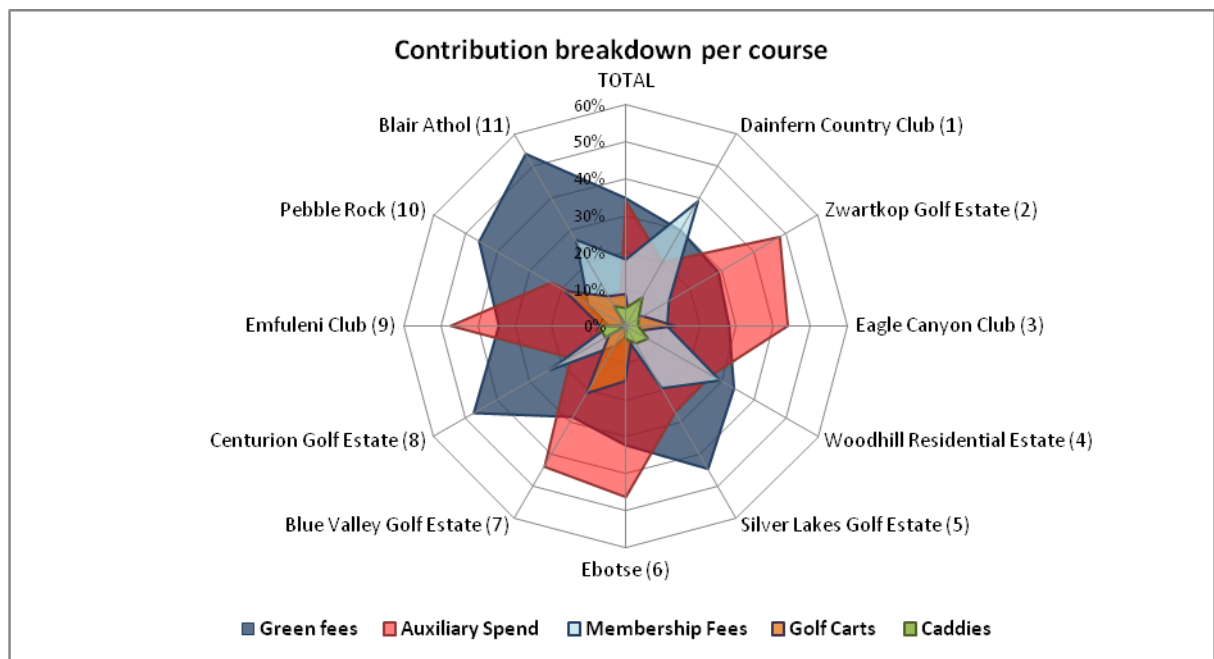
In Table 33, all courses included in this study is ordered from the Dainfern Country Club which made the highest direct economic contribution, to Blaire Atholl which made the smallest. All values larger than the research average for that category were coloured in green, and the values less than the average in red. This table highlights the fact that the number of rounds played, the contribution of green fees and that of auxiliary items purchased makes the biggest impact on whether a course makes a large direct economic contribution. Also, as indicated in the section above, membership fees and more specifically the number of members could also prove to have a significant impact on a courses' direct economic contribution.

Table 33: Above and below average total contribution

COURSE NAME	TOTAL ECONOMIC IMPACT	Number of Rounds	Green fees	Auxiliary Spend	Caddies	Golf Carts	Membership Fees
Dainfern Country Club (1)	R32,360,400	43,000	R9,675,000	R6,450,000	R2,880,000	R680,400	R12,675,000
Zwartkop Golf Estate (2)	R31,170,933	50,000	R9,083,333	R15,000,000	R1,209,600	R1,680,000	R4,198,000
Eagle Canyon Club (3)	R27,373,200	40,000	R7,700,000	R12,000,000	R907,200	R3,696,000	R3,070,000
Woodhill Residential Estate (4)	R26,932,700	48,000	R9,160,000	R7,200,000	R1,843,200	R792,000	R7,937,500
Silver Lakes Golf Estate (5)	R25,166,600	45,000	R11,287,500	R6,750,000	R1,366,200	R864,000	R4,898,900
Ebotse (6)	R24,999,804	38,571	R8,100,000	R11,571,429	R864,000	R3,744,000	R720,375
Blue Valley Golf Estate (7)	R23,869,400	35,000	R6,825,000	R10,500,000	R0	R5,054,400	R1,490,000
Centurion Golf Estate (8)	R18,752,967	43,000	R8,886,667	R3,225,000	R1,170,000	R972,000	R4,499,300
Emfuleni Club (9)	R11,073,717	35,000	R3,791,667	R5,250,000	R768,000	R756,000	R508,050
Pebble Rock (10)	R8,986,267	28,000	R4,106,667	R2,100,000	R0	R1,713,600	R1,066,000
Blair Athol (11)	R7,616,735	10,800	R4,104,000	R270,000	R468,000	R711,360	R2,063,375
TOTAL	R238,302,722	416,371	R82,719,833	R80,316,429	R11,476,200	R20,663,760	R43,126,500
Avg per course	R21,663,883	37,851	R7,519,984	R7,301,493	R1,043,290	R1,878,523	R3,920,590

Finally, Figure 18 shows the percentage that each of these elements made to the total direct economic contribution of each course. From this it is evident that courses that made a higher direct economic contribution, all managed to realise a significant percentage contribution from green fees, auxiliary spend and membership fees. Courses where there were either only one or two of these elements made up the biggest portion was generally found to make smaller direct economic impacts.

Figure 18: Contribution breakdown per course



5.1.5 The annual direct economic contribution of golf courses on residential estates

Proposition 1 suggested that a golf course that forms part of a golf estate makes a direct economic contribution of R10,000,000 per annum. Based on the results of the present study it can be concluded that, on average, the courses included in this study of golf courses that form part of golf estates in Gauteng make an average direct economic contribution of R21,663,908.16. The present research therefore supports proposition 1. It was however also indicated that, despite the fact that proposition 1 is supported, golf courses can make adjustments to the elements that contribute to this, and make an even more significant direct economic contribution.

5.2 Procurement spending at golf courses on golf estates

Proposition 2 suggested that golf courses that form part of golf estates in Gauteng spend more than 60% on the procurement of goods and services on local companies.

Studies conducted in the Western Cape indicated that golf courses in this part of South Africa make a large contribution to local companies and the local economies through procurement spending. The study of Fancourt conducted by Jan Havenga in 2006 showed that 60% of the course's procurement budget was spend on businesses in George and the Western Cape. The Rapid Review on Golf Courses in the Western Cape conducted in 2005 indicated that courses and estates spend between 50% and 75% of their procurement budgets on local goods and services.

As indicated in Chapter 5, not all the golf courses studied were willing to disclose financial information as this was deemed to be confidential information. Table 34 shows that total procurement spend varied from R3,700,000 spent by Ebotse to as much as R11,000,000 spent by Zwartkop Golf Estate. The average of 62% of spend on local companies in Gauteng was however lower than Goose Valley (72%) and Fancourt (77%) but higher than Arabella (50%) as indicated in the Rapid Review on Golf courses conducted in the Western Cape in 2005. The study by Jan Havenga in 2006 of Fancourt indicated that the local spend reduced to 65% when compared to the findings of the Rapid Review on Golf Courses in the Western Cape. This was however still slightly higher than the findings at golf courses that formed part of residential estates in Gauteng.

Table 34: Analysis of procurement spend

COURSE NAME	Procurement spend	% on local companies	Total local spend
Blair Athol	R 3,900,000.00	70%	R 2,730,000.00
Blue Valley Golf Estate	Not willing to disclose		
Centurion Golf Estate	R 4,000,000.00	30%	R 1,200,000.00
Dainfern Country Club	R 4,500,000.00	10%	R 450,000.00
Eagle Canyon Club	Not willing to disclose		
Ebotse	R 3,700,000.00	50%	R 1,850,000.00
Emfuleni Club	Not willing to disclose		
Pebble Rock	R 4,800,000.00	70%	R 3,360,000.00
Silver Lakes Golf Estate	R 8,500,000.00	90%	R 7,650,000.00
Woodhill Residential Estate	Not willing to disclose		
Zwartkop Golf Estate	R 11,000,000.00	70%	R 7,700,000.00
AVERAGE	R 5,771,428.57	62%	R 3,562,857.14
TOTAL	R 40,400,000.00		R 24,940,000.00

In the Rapid Review of Golf Courses in the Western Cape it was assumed that households or businesses who received R1 from Arabella (one of the course included in their study) will spend 66 cents thereof within the local community. Of the 66 cents another six cents is spent on local goods and services, followed by another three cents and finally one cent. The expenditure of R1 in the local community therefore generated a total income of R1.76 for other firms and residents. The multiplier therefore is R1.76. If the procurement expenditure of Arabella is used as an example, the R50 million direct spending therefore generated an additional R38 million of indirect spending in the local community. If this same multiplier is applied to the current study of courses in Gauteng, the results are as follows:

Table 35: Indirect impact of procurement spend

COURSE NAME	Procurement spend	% on local companies	Total local spend	Additional Indirect spending	Total local impact (Multiplier of 1.76)
Blair Athol	R 3,900,000	70%	R 2,730,000	R 2,074,800	R 4,804,800
Blue Valley Golf Estate	n/a	n/a	n/a	n/a	n/a
Centurion Golf Estate	R 4,000,000	30%	R 1,200,000	R 912,000	R 2,112,000
Dainfern Country Club	R 4,500,000	10%	R 450,000	R 342,000	R 792,000
Eagle Canyon Club	n/a	n/a	n/a	n/a	n/a
Ebotse	R 3,700,000	50%	R 1,850,000	R 1,406,000	R 3,256,000
Emfuleni Club	n/a	n/a	n/a	n/a	n/a
Pebble Rock	R 4,800,000	70%	R 3,360,000	R 2,553,600	R 5,913,600
Silver Lakes Golf Estate	R 8,500,000	90%	R 7,650,000	R 5,814,000	R 13,464,000
Woodhill Residential Estate	n/a	n/a	n/a	n/a	n/a
Zwartkop Golf Estate	R 11,000,000	70%	R 7,700,000	R 5,852,000	R 13,552,000
AVERAGE	R 5,771,429		R 3,562,857	R 2,707,771	R 6,270,629
TOTAL	R 40,400,000	62%	R 24,940,000	R 18,954,400	R 43,894,400

From this it is clear that the combined total impact of direct and indirect economic spend on the local community can be valued at R43,894,400 per annum. From this it is evident that golf courses that form part of residential estates in Gauteng make a significant contribution to the local economy.

5.2.1 The annual direct economic contribution of procurement spend at golf courses on residential estates

Proposition 2 suggested that a golf course that forms part of a golf estate spend more than 60% of procurement spend of goods and services on local companies. Based on the results of the present study it can be concluded that, on average, the courses included in this study of golf courses that form part of golf estates in Gauteng spend 62% of their procurement spend with local companies. The present research therefore supports proposition 2. It was also indicated that, using the multiplier derived from studies in the Western Cape, that this procurement spend indirectly contributed an additional R18,954,400 to the local economy. From this it is evident that golf

courses in Gauteng that form part of residential estates makes a significant contribution to the local economies through procurement spend at local companies.

5.3 Employment creation at golf courses during the operational phase

In order to determine the direct social contribution of a golf course that forms part of a gated community in Gauteng make to employment, proposition 3 suggested that the operational phase of a golf course that forms part of a residential estate in Gauteng will create between 70 and 100 employment opportunities during its operational phase.

The literature review indicated that studies conducted in the Western Cape established the following:

Table 36: Findings in the Western Cape

Study	Findings
Blij (2002)	a golf industry study of 31 clubs that an average 18-hole course provides jobs for 72 people.
Omniplan (2004)	The analysis of 5 courses in the Western Cape showed similar results which indicated that an average of 30 people is employed by an 18-hole course, excluding caddies.
Grant Thornton (2005)	In the economic impact assessment of golf estates in the Western Cape it was estimated that a typical 18-hole golf course would contribute 106 employment opportunities per annum during the operational stage. 54 of the employment opportunities during the operational stage would be for semi-skilled or unskilled occupations.
Rapid review of Golf and Polo Estates in the Western Cape (2005)	A golf course will make a direct contribution to employment of 77 jobs during its operational phase.

The study conducted by Blij (2002) notes that employment opportunities created is made up of a management component, administrators and assistance, labourers and caddies. In a similar study Omniplan (2004) uses the same employment categories but excludes caddies.

Table 37 is a categorical comparison of the current study and Blij's (2002) indicating the variance between the different employment categories. From this it is evident that courses in Gauteng employ an average of 6 people (8%) less during the operational phase per golf course than courses included in Blij's study. It also indicates that higher skilled positions (management, admin and assistants) make up a larger portion of total employees in the Western Cape (24%) than in Gauteng (16%). The biggest difference in employment is the number of administrative and assistant staff employed with courses in Gauteng employing 6 people (40%) less in this category than courses included in the study conducted by Blij (2002).

Table 37: Employment structure analysis 1

	Blij (2002)		Gauteng		Variance
	Average of 31 clubs		Average of 11 clubs		
Management	2	3%	1	2%	-50%
Admin & Assistant	15	21%	9	14%	-40%
Labourers	15	21%	19	29%	27%
Caddies	40	56%	37	56%	-8%
Total	72	100%	66	100%	-8%

When comparing the findings of the current study to that of Omniplan (2004), it was found that, when excluding caddies, courses in Gauteng create 13% more employment opportunities during the operational phase of a golf course. It is also evident that courses in Gauteng are more heavily weighted towards middle level employment with almost double the amount of administrators and assistants. Courses included in the Omniplan (2004) study employed 10% more labourers.

Table 38: Employment structure analysis 2

	Omniplan (2004)					Gauteng (Excl caddies)		Variance
	Erinvale	Sparrebosch	Atlantic Beach	Average		Average of 11 clubs		
Management	1	1	1	1	4%	1	3%	0%
Admin & Assistant	5	3	3	4	14%	9	31%	145%
Labourers	25	22	16	21	82%	19	66%	-10%
Total	31	26	20	26	100%	29	100%	13%

It was found in the Rapid Review on Golf Estates in the Western Cape (2005) that the general pattern is that the high-income management level occupational categories were staffed predominantly by whites and that labourer category were staffed generally by blacks (Africans and Coloureds) as indicated in Table 39. These findings are echoed in the results of the present study where it was found that 100% of management and 68% of administrators and assistants were white males. The unskilled categories comprised 98% African male labourers and 100% of all caddies were African males. These employment patterns reflect a very strong male bias in all cases.

Table 39: Rapid Review employment demographics

	Management		Service		Technical		Admin		Labourer	
	M	F	M	F	M	F	M	F	M	F
African	8%	0%	18%	16%	32%	4%	9%	4%	44%	7%
Coloured	9%	17%	18%	27%	38%	5%	14%	20%	36%	10%
Indian	1%	0%	3%	2%	2%	1%	3%	2%	0%	0%
White	53%	22%	9%	7%	14%	4%	10%	39%	2%	0%
	71%	29%	48%	52%	86%	14%	36%	64%	83%	17%

The Rapid Review on golf Estates in the Western Cape (2005) also showed that women predominate in the service and administration categories. In contrast to this, findings of the current study at courses in Gauteng indicate that administrative and assistant positions are filled by predominantly white (68%) and black males (20%). Only 11% of this employment level was filled by females.

Table 40: Gauteng golf courses employment demographics

	MANAGEMENT		ADMINISTRATION & ASSISTANTS		LABOURERS		CADDIES	
	Male	Female	Male	Female	Male	Female	Male	Female
African	0%	0%	20%	7%	98%	0%	100%	0%
Coloured	0%	0%	0%	0%	0%	0%	0%	0%
Indian	0%	0%	0%	0%	0%	0%	0%	0%
White	100%	0%	68%	4%	2%	0%	0%	0%
Sub-Total	100%	0%	89%	11%	100%	0%	100%	0%
TOTAL	100%		100%		100%		100%	

Similar to the findings in the Western Cape, the current study indicates that employment patterns reflect a relatively strong male bias with a high absorption capacity for semi-unskilled labourers. This is considered a benefit, since there is a high level of unemployment in the unskilled and semi-skilled labour force in the Province.

The distribution of total employment by race is given in Table 41 which shows that the employment patterns at courses in the Western Cape roughly reflects the demographics of the Western Cape.

Table 41: Employment by race

	Western Cape		Gauteng	
	Employment by race group	Demographic profile	Employment by race group	Demographic profile
African	23%	27%	88.1%	73.8%
Coloured	56%	54%	0.0%	3.80%
Indian	1%	1%	0.0%	2.50%
White	20%	18%	11.9%	19.90%

In comparison to this, courses in Gauteng employ a larger percentage of black people, no coloureds or Indians and a smaller percentage of white people when compared to the demographic profile of the province.

5.3.1 The annual contribution of golf courses on residential estates to employment

Proposition 3 suggested that the operational phase of a golf course that forms part of a residential estate in Gauteng will create between 70 and 100 employment opportunities during its operational phase. Based on the findings of the current study it can be concluded that courses included in the study employed an average of 66 people per annum during the operational phase. The present study therefore does not support proposition 3 as it was found that golf courses that form part of residential estates in Gauteng employ less

people than the proposed number derived from studies conducted in the Western Cape.

Although it is acknowledged that golf estates can make a positive contribution to employment in Gauteng, the general experience is that these jobs are at the lowest level. Data collected indicate that most employment is in the unskilled and semi-skilled categories. This should however not be undervalued as there is a high need for jobs in this category in Gauteng.

6 CONCLUSIONS AND RECOMMENDATIONS

This chapter summarises the findings of the research and puts forward recommendations to the relevant stakeholders of residential golf developments and more specifically regarding the golf courses at these estates. Possible areas of improvement of the management and operational structure of these golf courses aimed at the improvement and increase of the direct socio-economic contribution these courses make in Gauteng are proposed. The final sections makes recommendations of future research that could be conducted in order to increase the knowledge base that surrounds these type of developments.

6.1 Summary of the findings of the literature review

Like in the rest of the world, the increase in the supply of golf estates in South Africa are fuelled by the demand for golf course living, not only driven by the ability to play golf. The rapid increase in property values in recent years, the tranquil, green environment and the added security offered by these gated communities is creating a lifestyle asset desired by many. The debate surrounding these developments exists largely between the local communities, environmentalists and government stating that these consumptive land use developments in favour of the elite put a lot of strain on natural resources while at the same time adding to urban sprawl and creating segregated communities. Developers on the other hand argue that golf estate developments make large contributions to the social and economic environments with minimum impact on the environment.

As stipulated in the statement of the research problems, the aim of this study is to determine if golf courses on residential estates in Gauteng make a significant socio-economic contribution following the completion of the construction phase. As reported by the DEADP (2005), the three main

channels through which money flows from golf courses and golf estates into the local economy are construction, employment and procurement. Comparative studies investigated indicated that golf courses, both locally and internationally, make a significant contribution to the socio-economic environment. The Cameron and Milner (2004) study of golf courses on golf estates in the Western Cape focussed on the triple bottom line sustainability of these estates. Despite the overall positive contribution towards social and economic bottom lines, their overall findings and verdict was that developers in the Western Cape did not develop according to the triple bottom line principle as they fell short with respect to the environmental aspect. In a more recent study, Professor Jan Havenga (2006) focussed on the construction, procurement, operations and social responsibility in order to determine the socio-economic impact of the Fancourt development in George in the Western Cape. His findings indicated that the course made a significant contribution to the socio-economic environment in George as well as the Western Cape.

The final and most significant comparative study was the Rapid Review on Golf and Polo Estates in the Western Cape conducted in 2005. This study investigated all variables ranging from the golf industry to the spatial implications of golf course developments. The study indicated that despite the fact that courses on residential estates enjoyed high levels of demand, the supply in the Western Cape was high enough to meet the demand. Their findings also showed that courses made a direct economic contribution of R650 million per annum. The average direct economic contribution made by of one course amounted to between R8,8 million and R10 million per annum. It was also found that between 50 percent and 75 percent of their procurement budgets were spent on local goods and services. Dependant on the size of their procurement budget, this represented a healthy injection into the local economies. Many golf estates use the job creation argument as the main justification for the socio-economic benefits that these estates bring to the local community and the economy at large. Based on the findings of Blij (2004) and Grant Thornton (2005) the Rapid Review on Golf and Polo Estates

acknowledged that golf courses that form part of golf estates in the Western Cape provided significant employment and created between 72 and 100 employment opportunities. The general experience was however that these jobs were at the lowest level and therefore only helped at the 'survival level'.

6.2 Key findings of this research

The key findings of the present research are presented through a comparison to the research problems and proposition posed in order find answers to these problems.

6.2.1 Golf course utilisation

One of the factors that were found to be critical to the successful contribution of golf courses on golf estates to the local economy was the utilisation rate, or number of rounds played, of these course. Through an analysis of the courses included in the present study it was found that the utilisation rate of golf courses in Gauteng was 66%. This suggests that despite the fact that courses on residential estates enjoyed high levels of demand, the supply of golf at golf estates in Gauteng is high enough to meet the current demand.

6.2.2 Research Problems

As stated in the research problem in chapter one, this researcher has undertaken to determine if the golf courses on residential estates in Gauteng make a significant socio-economic contribution following the completion of the construction phase. The sub problems stated in chapter two was aimed at enabling the researcher to address this research problem.

The first sub problem was aimed at determining the direct economic contribution a golf course that forms part of a gated community in Gauteng makes to the local economy. In order to answer this sub problem, the researcher made two propositions.

Proposition 1: A golf course that forms part of a golf estate makes a direct economic contribution of R10,000,000 per annum.

The present research suggests that a golf course that forms part of a residential estate in Gauteng makes an average direct economic contribution of R21,663,884 per annum, more than double the proposed contribution. The research also indicated that the largest portion of this direct contribution is made up of green fees and auxiliary spend by golfers during a round of golf. The present research therefore supports proposition 1 but also indicated that, despite the fact that proposition 1 is supported, golf courses can make adjustments to the elements that contribute to this, and make an even more significant direct economic contribution.

Proposition 2: More than 60% of money spent on the procurement of goods and services will be on local companies.

The present research suggests that, on average, 62% of all procurement spend by operational golf courses at golf estates in Gauteng is directed towards local companies. This amounts to an annual injection of almost R25,000,000 per annum to the local economy. The present research therefore supports proposition 2. It was also indicated that, using the multiplier derived from studies in the Western Cape, that this procurement spend indirectly contributed an additional R18,954,400 to the local economy. From this it is evident that golf courses in Gauteng that form part of residential estates make a significant contribution to the local economies through procurement spend at local companies.

The second sub problem was aimed at determining what direct social contribution a golf course that forms part of a gated community in Gauteng makes to employment.

Proposition 3: The operational phase of a golf course will directly contribute between 70 and 100 employment opportunities after construction.

The present research suggests that golf courses that form part of residential estates in Gauteng employ an average of 66 employees during the operational phase. In order to gain a better understanding of the difference between employment structure in Gauteng and the Western Cape, a comparative analysis was performed between the findings of the present research and previous studies conducted in the Western Cape. When compared to the study conducted by Blij (2002), it was found courses in Gauteng only employed 8% less people than those included in Blij's study. Despite this relatively small difference, the present research revealed that courses in Gauteng employed 41% less people in two top employment levels (management and administrative). When compared to the findings of the study conducted by Omniplan (2004) which excluded caddies, the present research indicated that courses in Gauteng created 13% more employment opportunities during its operational phase. The focus of the findings of the Rapid Review on Golf Estates in the Western Cape was predominantly on the demographic composition of employment structures. Similar to their findings, the present study suggests that high income levels are predominantly occupied by white male employees. The Rapid Review also showed that service and administrative levels are predominated by female employees. In contrast to their findings, the present research found that only 11% of this category was filled by female employees in Gauteng. Similar to the findings in the Western Cape, the current study indicate that employment patterns reflect a relatively strong male bias with a high absorption capacity for semi-unskilled labourers.

The present study therefore does not support proposition 3 as it was found that golf courses that form part of residential estates in Gauteng employ less people than the proposed number derived from studies conducted in the Western Cape.

6.3 Recommendations

To date very little is known about the impact of the development of golf estates in Gauteng despite the fact that it falls within one of the most prominent, densely populated and fastest developing areas on the African continent. The present research was born from this and was focussed on the direct socio-economic impact of a golf course that forms part of residential developments in Gauteng. Based on the results of this study and comparisons made to the findings of similar studies conducted in the Western Cape, the following section proposes some recommendations that could increase the positive impacts these courses make.

As indicated through this study, golf courses that form part of golf estates currently only enjoy a utilisation rate of 66%. This should serve as an indication to developers of future estates that the inclusion of a golf course might prove to burden the development as the course could be underutilised should strategies to increase the use of the golf course not be in place.

Despite the fact that it was established that membership fees at courses in Gauteng made a 30.69% higher direct economic contribution in comparison to findings in the Western Cape, courses in Gauteng had on average only 66.3% as many members. Given the fact that courses in Gauteng manage to generate a much higher contribution given the fact that it had significantly less members, it seems only logical that courses must employ strategies that would enable them to increase the number members per course. It must be noted that there seems to be no direct correlation between the number of members and the average cost per membership as some of the course with more expensive membership fees still managed to draw a high number of members. This implies that courses need to find ways other than lowering membership fees in order to stimulate an increase in membership numbers.

The present study also found that, despite the fact that courses that made a higher direct economic spend played on average more rounds of golf per

annum, these high contribution courses managed to generate a much higher expenditure per round. It was further established that the biggest contributor of the factors that impacted on the average spend per round was the auxiliary spend per round. High impact courses managed to increase the auxiliary spend per round to more than three times that of courses that were found to have the lowest direct economic impact. It is therefore imperative that courses that made lower direct economic contribution should not only aim to increase the number of rounds played per annum, but also increase the average spend per round and focus specifically on auxiliary spend in order to increase their direct economic impact.

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When compared to the findings of similar studies conducted in the Western Cape, the present study found that courses in Gauteng included in the study employed less people on average. It was also found that these courses employed predominantly white males in management positions and that the unskilled categories were dominated by black employees. It is therefore recommended that courses should put structures in place that would facilitate the improvement of skills and qualifications of black employees that would allow them to fill more management positions in years to come.

6.4 Areas of further research

The following diagram shows the magnitude of these developments which could serve as an indication of the extent of further studies that should be conducted in order to fully understand the impact as well as the sustainability of these developments.

Figure 19: Elements golf estates for future studies

GOLF ESTATE DEVELOPMENTS							
CONSTRUCTION PHASE				OPERATIONAL PHASE			
Golf Course	Residential component	Leisure	Other	Golf Course	Residential component	Leisure	Other

The present study focussed only on the direct socio-economic impact of the operational phase of courses that form part of residential estates in Gauteng. The study focussed on the direct economic spend at these courses, their procurement spend in the local economy as well as job creation.

Despite the fact that the researcher managed to establish in all cases whether propositions could be supported or not, the broad based nature of this study implies that each of these components could be studied in a lot more detail. Specific attention should be given to procurement spend as this encompasses a lot more than just a simple annual spend figure and the percentage thereof spent in the local economy. A better understanding of the employment structures could also be created through research specifically focussed on this element of the development.

In order to create a full understanding of the impact of these developments, further research must be conducted on all other phases of golf estate developments. These phases should include the construction of the course, as well as the construction and operational phases of the residential component and where applicable the leisure component included in some developments. Future studies should however not only incorporate elements directly impacted by the actual developments, but should also encompass factors such as the impact of the developments on the golf industry and golf tourism in the region.

The socio-economic impact of golf courses at golf estates is however not the only factor that determines the success and sustainability of these developments. As stated in the literature review, The Property Magazine (2005) reported that government is determined to weigh up the benefits of golf estates to tourism and job creation against their environmental impact. Possible future research should therefore focus more specifically on the environmental impact of golf estates. Combined with the social and economic studies conducted, the result of such a study could shed light on the triple bottom line sustainability of these developments as per the study conducted by Cameron and Milner conducted in 2004 in the Western Cape.

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APPENDICIES

Appendix 1: Consistency Matrix

Sub- Problems	Literature	Propositions	Data sources	Data analysis
Sub Problem 1 What contribution does a golf course that forms part of a gated community in Gauteng make to the local economy?	Cameron & Milner (2004); Davies, Watson, Cramer, Thilmany, Prosser & Elzi (2004); Flowers (2006); Govender (2005); Havenga (2005); Jordan (2004); Smith (2004); The Property Magazine (2004); Western Cape Rapid Review of Golf and Polo Estates in the Western Cape (2005).	<i>Proposition 1:</i> A golf course that forms part of a golf estate makes a direct economic contribution of R10,000,000 per annum. <i>Proposition 2:</i> More than 50% of money spent of the procurement of goods and services will be from local companies.	Q1, Q2, Q3, Q4, Q5, Q6, Q7 ,Q8, Q9 ,Q10, Q11	Descriptive statistics
Sub Problem 2 What social contribution does a golf course that forms part of a gated community in Gauteng make to employment?	Blij (2003) Cameron & Milner (2004); Davies, Watson, Cramer, Thilmany, Prosser & Elzi (2004); Department of Environmental Affairs and Planning (2005); Gosling (2004) Havenga (2005); Jordan (2004); Keenan (2007); Swart (2003); WESSA (2005); Western Cape Rapid Review on Golf and Polo Estates (2005).	<i>Proposition 3:</i> The operational phase of a golf course will contribute between 70 and 100 employment opportunities after construction.	Q12	Descriptive statistics

Appendix 2: Structured interview and guiding questionnaire

The following interview guide is aimed at providing data for further analysis to inform the research problem as stated.



Research Topic:

**INVESTIGATE THE SUSTAINABLE SOCIO-ECONOMIICAL
CONTRIBUTION MADE BY A GOLF COURSE WITHIN A RESIDENTIAL
ESTATE IN GAUTENG:**

Interview Guideline

Respondents Name: _____

Company: _____

Position Held: _____

SECTION A: Prepping the Respondent

1. State topic and explain methodology

SECTION B: Detailed questionnaire

Section 1

1. How many holes does the course have?

9 holes

18 holes

36 holes

54 holes

2. A - What are the hours of operation of the course?

B – How many rounds are played on average per day

-A-
Open (First
Tee-off)

-A-
Close
(Last Tee-off)

-B-
Avg number
of rounds/day

Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

3. How many minutes are allowed between tee-off times per fourball?

4. How many members does the club have and how much are the membership fees?

	Total number of members	Membership fees per year
a. Senior Male		
b. Senior Female		
c. Junior Male		
d. Junior Female		

5. How much are the green fees?

	Weekdays	Weekends
a. Members		
b. Affiliated Member		
c. Non-members		

6. What are the average costs of caddies per round and what is their average monthly utilisation?

	Average Cost	Utilisation (in rounds) per month
a. Caddies		

7. What are the average costs of golf carts per round and what is their average monthly utilisation?

	Average Cost	Utilisation (in rounds) per month
a. Golf Carts		

8. How much do golfers spend on average on items such as food, drinks and basic equipment during a game of golf

R0 – R50		R51 – R100	
R101 – R200		More than R200	

9. How much is spent annually on the procurement of goods and services

10. What percentage of this is spent on local companies

Less than 20%		20% - 40%		40% - 60%	
60% - 80%		80% - 100%			

Section 2

11. How many people are permanently employed by at the golf course?

	African		Coloured		Indian		White	
	Male	Female	Male	Female	Male	Female	Male	Female
Green Keepers								
Assistants								
Administrative people								
Labourers								
Caddies								

12. Is the golf club involved in some form of social upliftment program?

YES	NO
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13. If "yes", give a brief explanation of the program: