2014

SOCIO-ECONOMIC IMPACT ASSESSMENT FOR THE PROPOSED TINLEY MANOR SOUTH DEVELOPMENT

FINAL REPORT

Commissioned by:

Tongaat Hulett
DEVELOPMENTS

Prepared by:

UE
URBAN-ECON
Development Economists

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1   INTRODUCTION

1.1   BACKGROUND AND PURPOSE

Tongaat Hulett Developments commissioned this socio-economic impact assessment of the proposed Tinley Manor South Development to identify the major socio-economic impacts likely to occur as a result of the development on the surrounding communities, as well as further outlying regions. The study examines and provides an economic context for the range of social and economic impact areas identified. Detailed impacts on these key indicators have been modelled and these are described in detail in the sections that follow.

It is understood from the documentation provided that the proposed development involves the establishment of a mixed-use development comprising approximately:

- 46.2ha of high-density residential;
- 12ha of low to medium density residential;
- 44.6ha of low density residential;
- 17.8ha of medium impact mixed-use;
- 3.1ha of low impact mixed-use 1;
- 3.7ha of low impact mixed-use 2;
- 31.3ha of resort development;
- 0.6ha of service area and nursery; and
- 277.7ha of open space and roads.

Of the total site size of 437ha, 159.3ha is developable, which is 36.32% of the total site area.

The proposed development site will be accessed from by a planned intersection to the east of the N2 highway. The proposed development is south of the current Tinley Manor Village and north of Salt Rock. The development lies within the rapidly growing northern corridor linking eThekwini to Ballito. It is therefore necessary that the socio-economic impact considers the future urban environment that it will be located in.

1.2   PROJECT APPROACH

The approach that is followed during this report is to assess the socio-economic impact of the development as a whole, and for the specific individual components of the development. This approach will be adopted due to the extent of the mixed-use, residential and resort developments. The following aspects have been considered during the assessment:

CAUSES OF THE IMPACT	SOCIO-ECONOMIC IMPACT AREAS CONSIDERED

Low and Medium Impact Mixed-Use	⊙ The demand for and viability of the proposed sites
	 ⊙ Property value impacts
	 ⊙ Impact on existing retail/commercial activity
	 ⊙ Impact on existing business park development
	 ⊙ The indirect socio-economic such as:
	    o impacts of the traffic impact,
	    o environmental impact,
	    o visual, noise,
	    o density/congestion and
	    o other impacts that may be identified;
	 ⊙ Other impacts as may be identified

Residential sites comprising low, medium and high density	⊙ The demand for residential sites to the extent and nature of being proposed; the expected rate at which the supply of sites will be taken up and the phasing of the development. ⊙ Consideration of the design parameters of the development itself and the impact/suitability of it for the future residents of the township. This relates to aspects such as whether adequate socio-economic facilities are being provided on site or in the surround areas; ⊙ Related to the above points are the impact of the additional population in the township on the facilities, services and quality of life of the surrounding communities; ⊙ The indirect socio-economic impacts of the traffic impact, environmental impact, visual, noise, density/congestion and other impacts that may be identified; ⊙ The impact on land and property values. ⊙ Other impacts as may be identified
Resort Development	⊙ The demand for and viability for the inclusion of a resort development ⊙ The indirect socio-economic impacts of the traffic impact, environmental impact, visual, noise, density/congestion and other impacts that may be identified; ⊙ Property value impacts ⊙ Other impacts as may be identified

Accordingly, the socio-economic impact assessment is undertaken with the following in mind:

i)   At a macro level at which the impacts are assessed for the total development as a whole for the associated impact zones of KwaDukuza; and

ii)   The local land-use component at which the impact conditions of the individual components (mixed-use, residential and resort) of the project are investigated on existing similar land-use structures and firms.

1.3 PROJECT METHODOLOGY

The key activities that have been undertaken as part of the research are identified below:

Steps	Key Activities
Desktop data and information collection	⊙ Record and analyse the proposed development and its components and gaining an initial understanding of the likely impacts; ⊙ Defining the impact areas on which the proposed development will impact both in terms of the types of impacts and the geographical area where the impacts are likely to take place in terms of the KwaDukuza LED and other Planning documents ⊙ Provide an update of the socio-economic profile of the general area in which the proposed development is to be located including: employment profile, business profile and socio-economic trends
Interest Group Interviews	⊙ Interviews with key stakeholders in the surroundings areas within KwaDukuza. The purpose of the interviews will be to determine the nature and extent of the likely impacts and assess the demand factors that made the persons buying into the area; ⊙ Existing residential areas and commercial nodes will be approached during this investigation. The local business and community forums will be targeted as part of this investigation.
Analysis of Socio-Economic Information	⊙ Identify and assess the nature, extent, duration and severity of the anticipated socio-economic impacts of the development as a whole and the individual components. ⊙ Make use of impact tables to determine extent and locality of impact ⊙ Identify clear areas and opportunity for mitigation activities where applicable
Modeling of Economic Impacts	⊙ Collection of relevant information relating to the capital cost of the development ⊙ Modeling of the economic information in order to determine the impact on jobs, gross value added, new business sales and turnover ⊙ Collection of all relevant KwaDukuza tariff information in order determine the impact on the municipal property rates contribution ⊙ Determine where possible the impact on VAT, Tax (individual and corporate)

1.4 STRUCTURE OF THE REPORT

The report is structured as follows:

Section One: Introduction: This introduces the report as above.

Section Two: Spatial Analysis: This section addresses the spatial dynamics of the proposed development in terms of location, description of the development, surrounding nodes, a market delineation and urban and spatial economic planning priorities.

Section Three: Socio-Economic Profile: This section explores the present socio economic profile of the identified impact areas, which is used to compare future impact of the development.

Section Four: Market Assessment: This section details the general market trends and the growth in the local economic base, in order to gain an understanding of the market dynamics that are expected to impact on the proposed development.

Section Five: Socio-Economic Impact Assessment: This section assesses the socio-economic impacts from the development, providing a detailed account according to the impact factors identified, as well as mitigation measures.

Section Six: Summary and Recommendations: This last section summarises the overall impact of the development. Where possible negative externalities have been identified, detailed measures and associated mitigating actions necessary are recommended to support the positive impact of the proposed development on surrounding areas and the broader KwaDukuza region.

2   SPATIAL ANALYSIS

2.1   LOCATION OF THE SITE

The proposed site is located within the KwaDukuza Local Municipality within KwaZulu-Natal. The site is bordered by the uMhlali River to the side of the Tinley Manor Beach situated on the opposite side of the river. Sheffield Beach is situated southwest of the proposed site. On the western side a section of the proposed site is dissected by the N2 highway. The following map shows the location of the proposed site.

Map 1: Location of proposed site
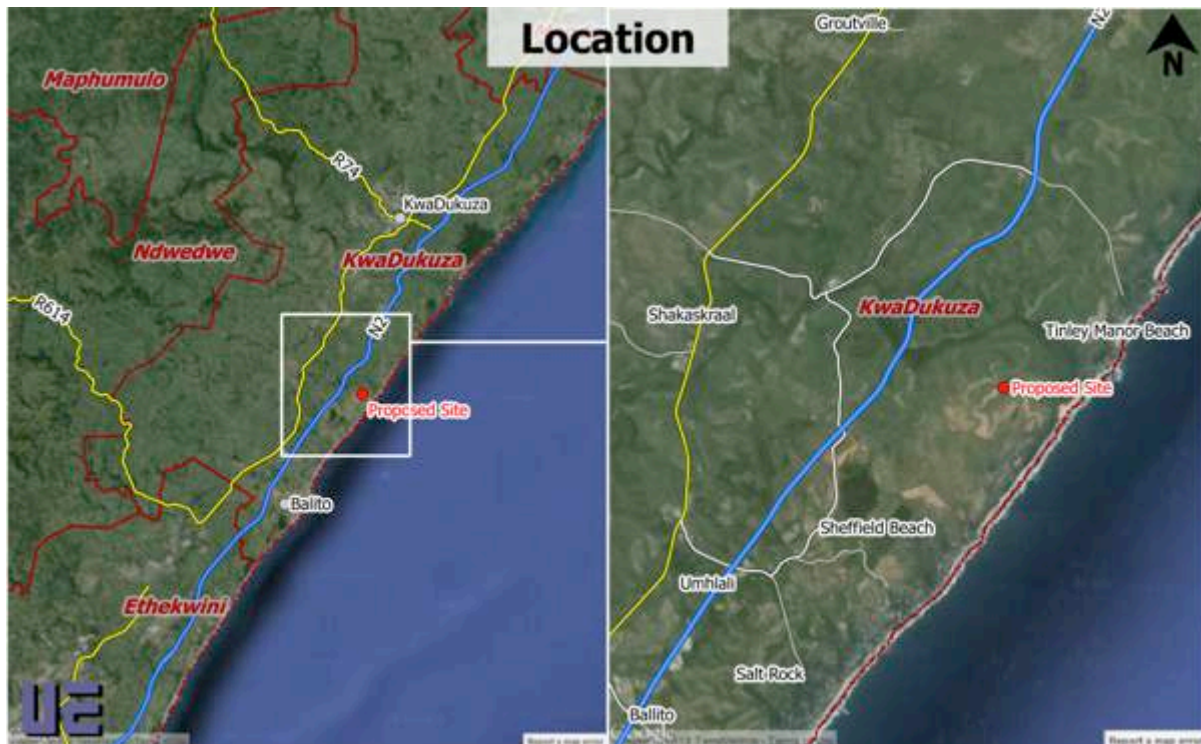
The proposed development is located close to several regional nodes: it is 10kms north east of Ballito, 20km north east of Tongaat and 10km south west of KwaDukuza. The King Shaka Airport is located 25kms south west of the site.

2.2   DESCRIPTION OF THE PROPOSED DEVELOPMENT

It is understood from the documentation provided that the proposed development involves the establishment of a mixed-use development comprising approximately:

- 46.2ha of high-density residential;
- 12ha of low to medium density residential;
- 44.6ha of low density residential;
- 17.8ha of medium impact mixed-use;
- 3.1ha of low impact mixed-use 1;
- 3.7ha of low impact mixed-use 2;
- 31.3ha of resort development;
- 0.6ha of service area and nursery; and
- 277.7ha of open space and roads.

- Of the total site size of 437ha, 159.3ha is developable, which is 36.32% of the total site area. The site plan is shown below:

The proposed development will be accessed from off a future intersection to the east of the N2 highway. The proposed development is south of the current Tinley Manor Village and north of Salt Rock.

Table 5.2: Land Use Zoning and Floor Area Ratio Schedule including roads

Land Use Zone	Area/ Ha	% of Total	% of Dev	FAR	Bulk (m2)	Units	Height (Storeys)
Open Space System	277.7	63.5%	0.0%				
Residential 1: High Density Residential @ 75units/ha	46.2	10.6%	29.6%	1.0	416,000	3120 units	2 to 6
Residential 2: Low-Medium Residential @ 35units/ha	12	2.7%	10.8%	0.5	54,000	189 units	max 3
Residential 3: Low Residential @ 10units/ha	44.6	10.2	28.5		201,000	21	
Low Impact Mixed Use 1: 60% residential @75 units/ha	3.1	0.7%	2%	1.0	29,000	203 units	max 3
Low Impact Mixed Use 2: Entertainment	3.7	.8%	2.4				
Medium Impact Mixed Use: 40% res @75 units/ha	17.8	4.1%	11.4%	1.0	152000	456 units	2 to 6
Resort: @55m2/room	31.3	7.2%	20%	0.25	78250	1,423 rooms	max 4
Service Area and Nursery	.60	.1%	.4%				
TOTAL DEVELOPABLE	159.30	36.32%	100%		928250	3898 units 1,423 resort rooms	
TOTAL SITE AREA	437.0					5412	

2.3   SURROUNDING NODES

2.3.1   COMMERCIAL ACTIVITIES

The following map gives an indication of the commercial activities located in the surrounding areas. The map shows the location of shopping centres as well as other commercial activities such as offices and other retail offerings. The top map indicates the activities north of the proposed site, while the bottom map indicates the activities south of the site.

Map 2: Commercial activities

North of the site, the majority of commercial activity can be found in the KwaDukuza CBD while there is some activity in Mandeni. South of the site, the commercial activities can be found in Umhlali, Ballito, Tongaat, Verulam, Phoenix and the Umhlanga node.

2.3.2   RESIDENTIAL ACTIVITIES

The following map gives an indication of the residential activities located in the surrounding areas. The top map indicates the activities north of the proposed site, while the bottom map indicates the activities south of the site.
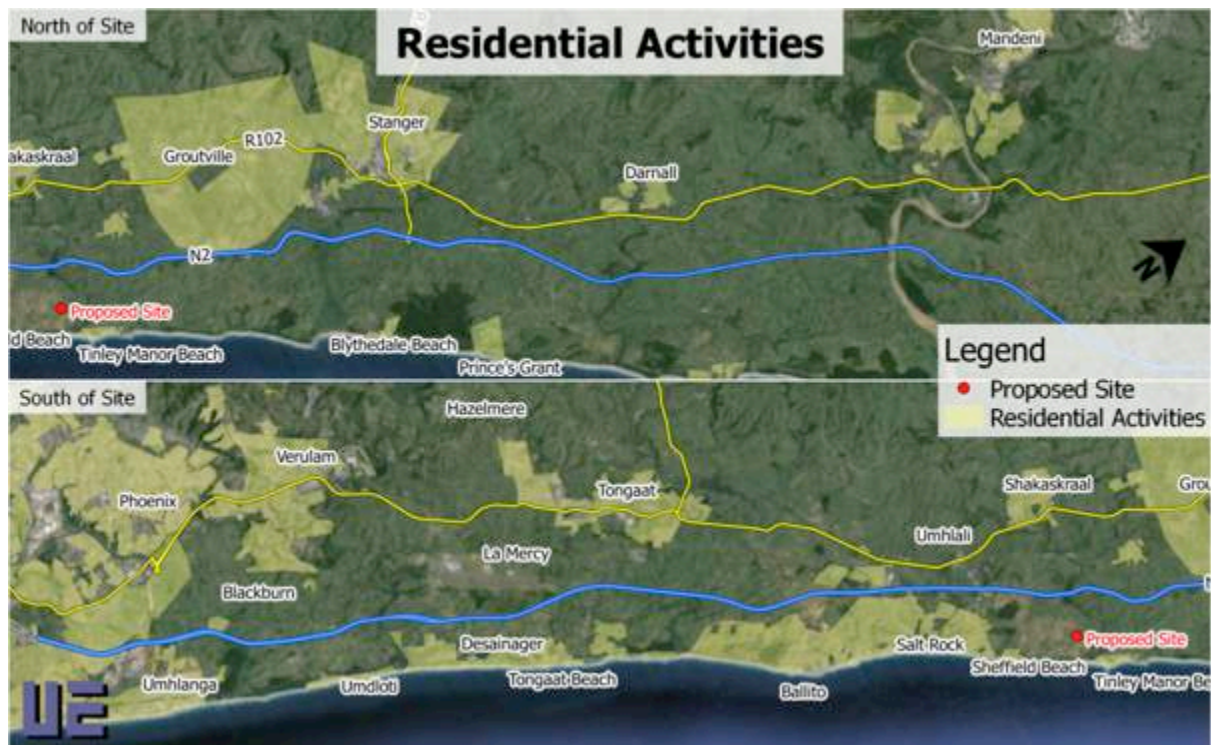
Map 3: Residential activities

North of the site, the majority of residential activity can be found in Groutville and KwaDukuza while there is also activity in Mandeni. South of the site, the residential activities can be found in Shakaskraal, Salt Rock, Ballito, Tongaat, Verulam, Phoenix and the Umhlanga node.

2.3.3 RESORTS

A number of resorts have been established along the coast, north and south of the proposed site. These include resorts such as Zimbali, Simbithi, Prince's Grant and Zinkwazi.

2.3.4 INDUSTRIAL FACILITIES

The following map gives an indication of the industrial activities located in the surrounding areas. The top map indicates the activities north of the proposed site, while the bottom map indicates the activities south of the site.

Map 4: Industrial activities

North of the site, the majority of industrial activity can be found in and around KwaDukuza and Mandeni while there is also some activity in Darnall. South of the site, the industrial activities can be found in Ballito, Tongaat, Verulam, Phoenix and Mount Edgecombe.

2.4   MARKET DELINEATION AND AREAS OF IMPACT

The map below gives an indication of the anticipated area of impact of the proposed development.

Map 5: Area of impact
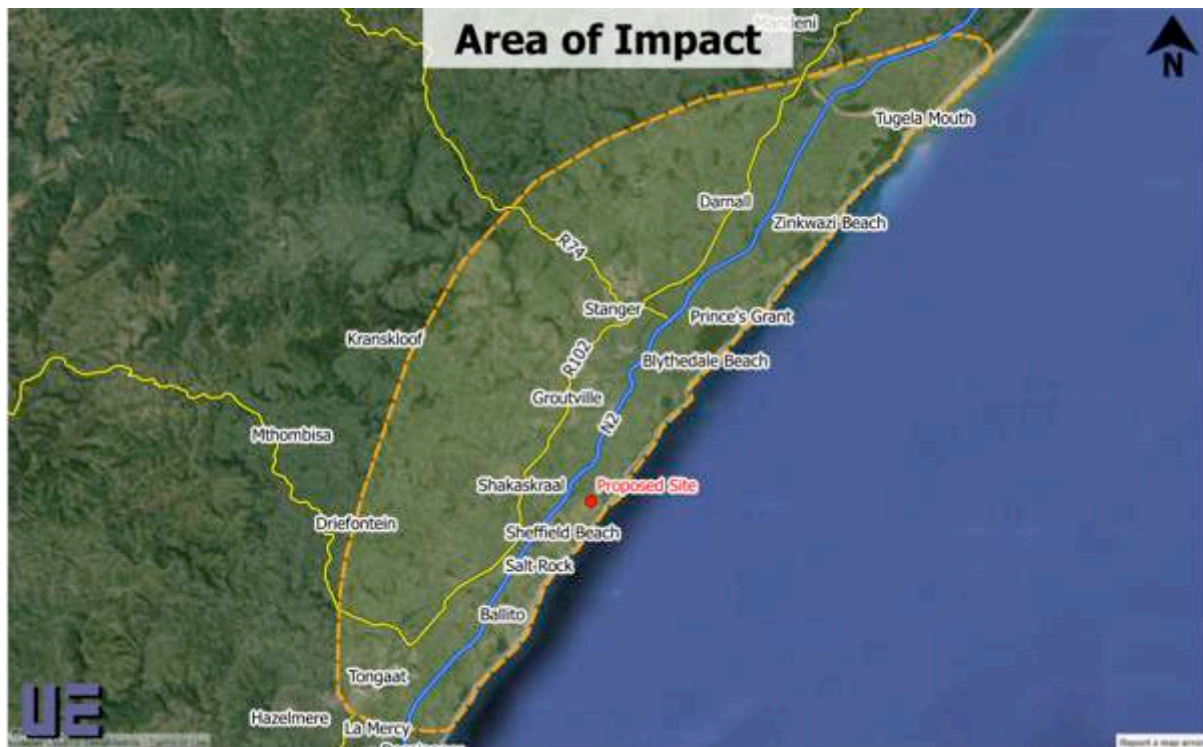
It is anticipated that the proposed development will have the biggest impact on Sheffield Beach, Shakaskraal and Groutville. However, the development is expected to have an impact on areas such as Ballito, Tongaat, KwaDukuza, Blythedale, Prince's Grant, Zinkwazi Beach as well as Tugela Mouth. There will be an economic as well as a social impact. The impacts will be discussed in further detail later in the report.

2.5 URBAN AND SPATIAL ECONOMIC PLANNING PRIORITIES FOR KWADUKUZA AND SURROUNDS

This section aims to show how the proposed development is in line with spatial development frameworks at different levels of government. The following map is an extract from the Provincial Spatial Development Strategy that forms part of the Provincial Growth and Development Strategy (PGDS) showing iLembe District Municipality.

It is evident to see that the proposed development falls within the area earmarked as an Economic Support Area.

The Provincial Spatial Development Strategy (2011) defines Areas of Economic Support as:

A number of regions resembled areas of good economic potential in more than just one of the key provincial economic sectors. Due to the fact that these areas represent a larger distribution across the entire province than the core areas of economic value adding, these zones are considered important areas of Economic Support. Typical interventions in these areas would include economic prioritisation of development, labour force interventions (e.g. skills development), key economic infrastructure investment and area promotion.

Map 6: KZN Spatial Development Framework: iLembe District Municipality
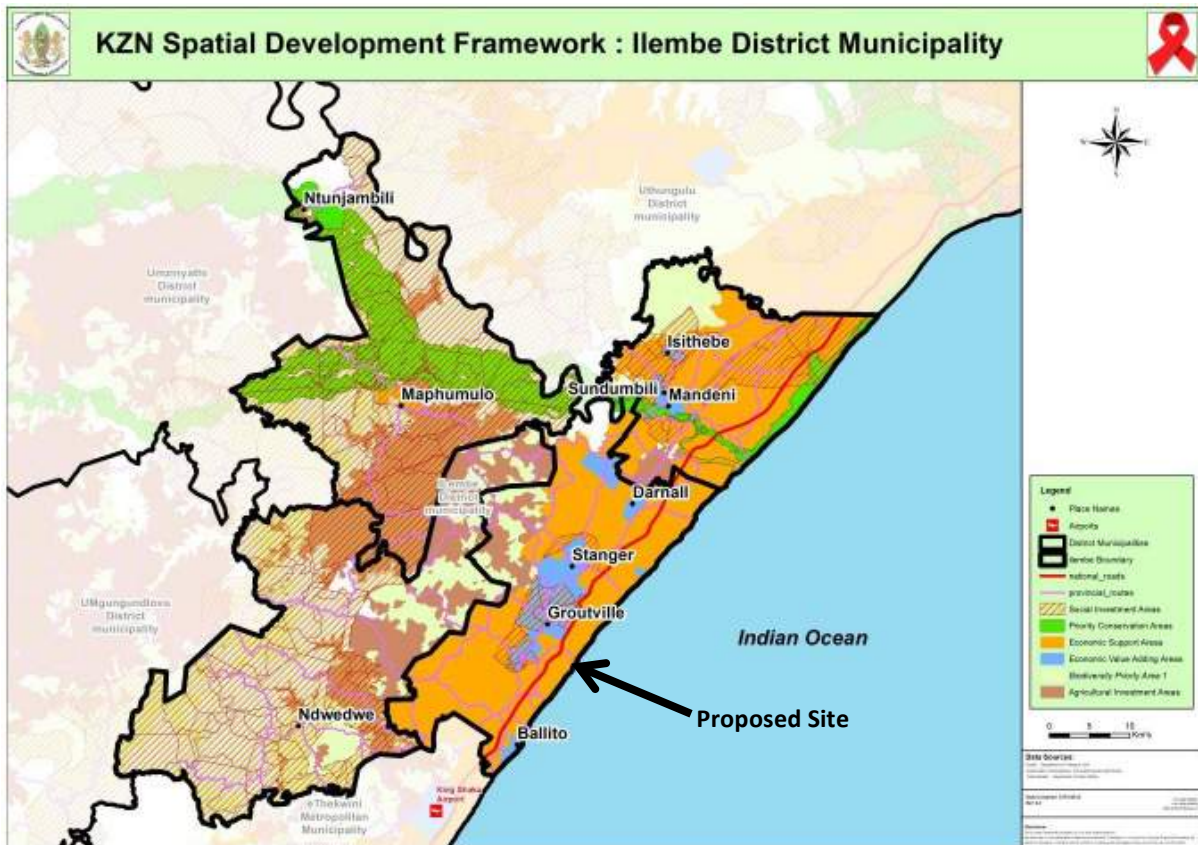
Source: (KZN PGDS)

At a district level, the iLembe District Spatial Economic Development Strategy (DSEDS) is taken into account. This strategy does two things: It consolidates and refines existing spatial and economic strategy to present a clear statement of the long-term future development path of the region and it provides an opportunity to establish new economic markets. The DSEDS and first 5 year IDP for the 2012/2017 term of office were developed together through a single integrated process.

The following map displays the Tourism Opportunity Corridor of the iLembe DSEDS.

Map 7: iLembe District Spatial Economic Development Strategy: Tourism opportunity Corridor
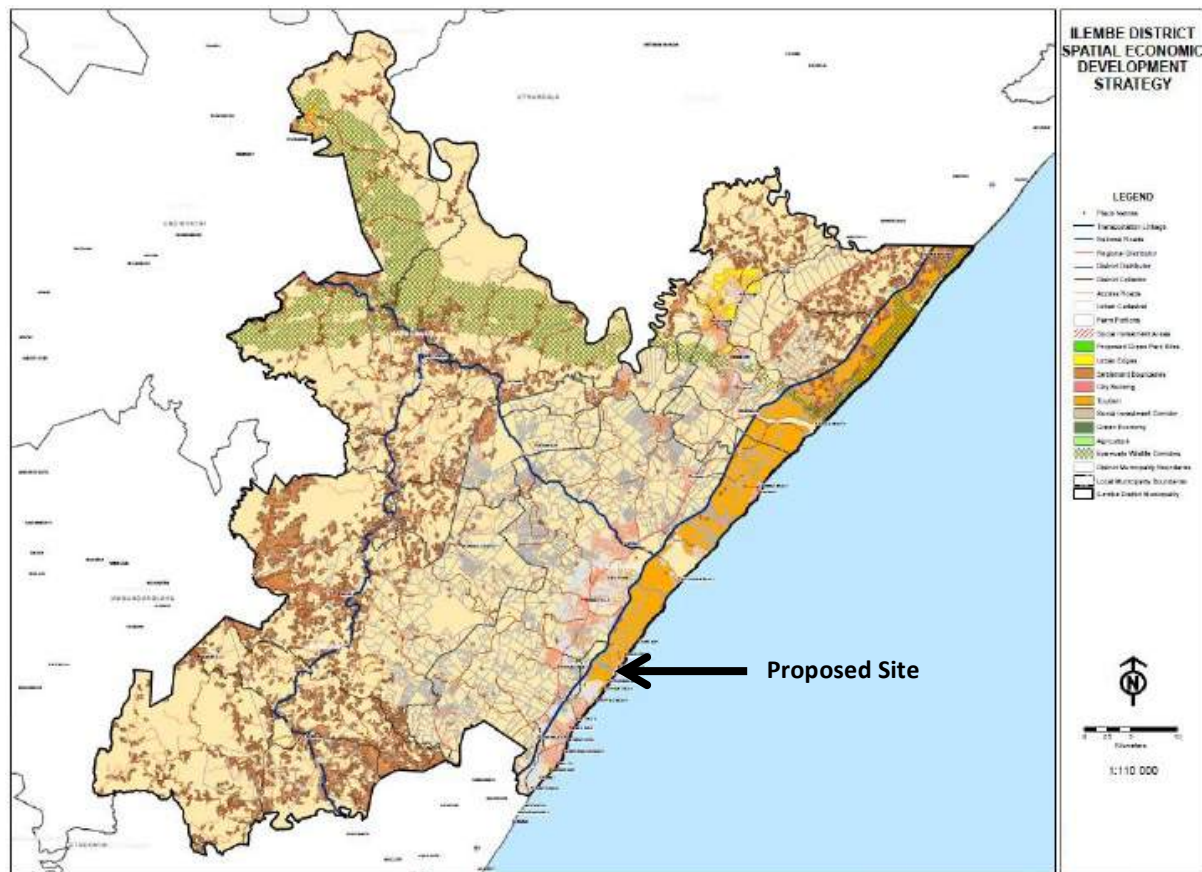
Source: (iLembe DSEDS, 2012)

The proposed site is located within the Tourism Opportunity Corridor. The iLembe District Spatial Economic Development Strategy (2012) explains the corridor as follows:

> *This corridor forms the eastern section along the coastline from Sheffield Beach to the most northern boundary of the iLembe District (also known and referred to as the Macambini Area). The intention of the corridor is to promote venture tourism (sport and recreational facilities) as well as nature conservation based tourism, with direct linkages to the inland culture and community based tourism. The corridor allows for excellent access to infrastructure support services and thus ideally suited for* ***Resort Development*** *and / or Gated Lifestyle Development.*

> *In the high road scenario the coast of iLembe has developed as an internationally recognized coastal resort destination. Already several resorts are successfully drawing tourists to the area. Resorts offer a wide variety of products and packages that appeal to several market segments. 3,4 and 5 star accommodation options are available, packages include heritage, golfing, eco, medical, agri, and wildlife packages. The experience of the North Coast is world class, safe and unique. The King Shaka Heritage Route has become a must see attraction in South Africa.*

The proposed development is thus in line with the Spatial Economic Development Strategy of the iLembe District.

At a local level, the KwaDukuza Spatial Development Framework (SDF) is considered. The following map shows the Consolidated SDF for the KwaDukuza Local Municipality.

Map 8: Consolidated SDF for KwaDukuza, 2012
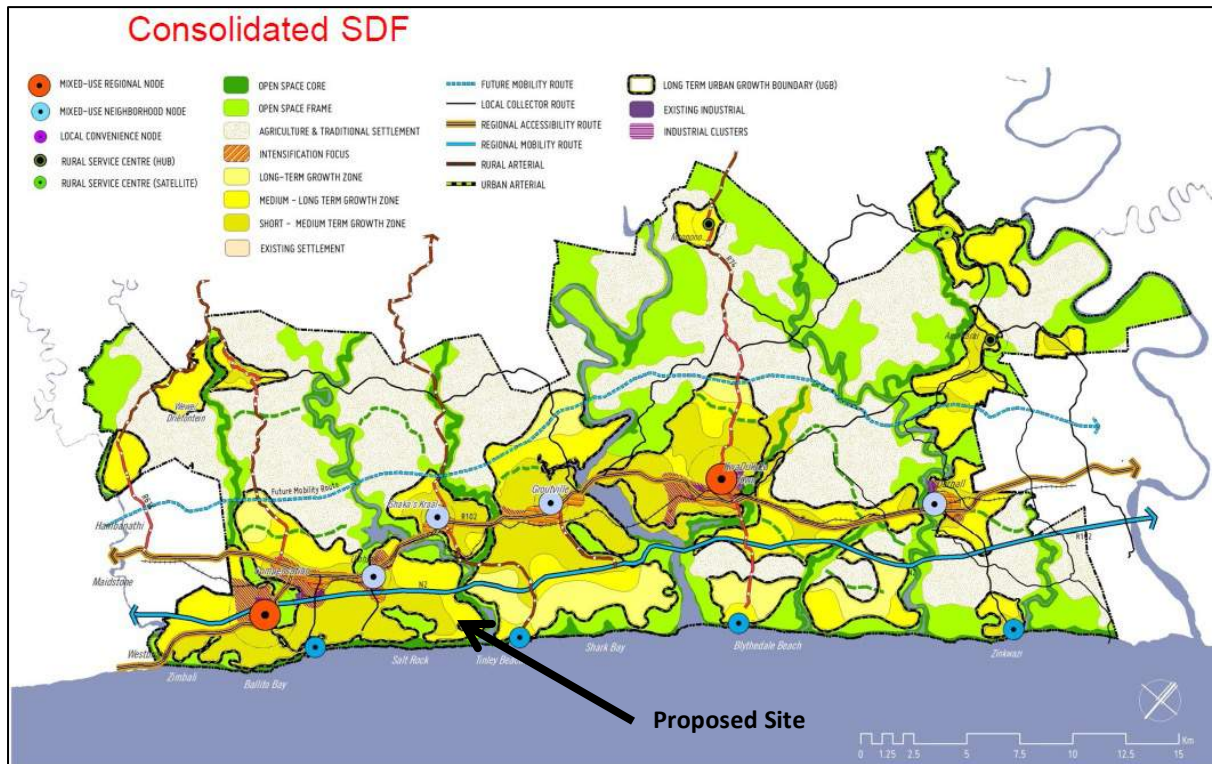
Source: (Iyer Urban Design Studio, KwaDukuza SDF Review, 2012)

The proposed site is located within a medium to long term growth zone according to the KwaDukuza SDF.

The SDF states that growth should be managed by promoting responsible densification, intensification and infill development. Furthermore, it states that densification within the identified areas should occur in a number of ways with mixed use development policy being one of them.

As is the case with the district and provincial levels, the proposed development is in line with the development plans of the local SDF.

3   SOCIO-ECONOMIC PROFILE

This section focusses on the socio-economic profile of the study area. This socio-economic profile analysis fulfils an important role in the indication of development potential within the relevant area. The socio-economic characteristics of the local market population inform the local resident profile which in turn demonstrates the needs and desires of the market population with regard to residential development.

3.1 DEMOGRAPHICS

This sub-section provides projections regarding the population, number of households, household size and household density within the market area. For the purpose of this study current and future population / household figures are derived from relevant growth estimates for each region based on published data sources. The following table summarises the demographic data for the market area.

Table 1: Demographics, 2013

Demographics	2011
Total population	231 187
Total households	70 283
Average household size	3.29
Household density (households per square km)	95.63

Source: (Statistics SA, 2011), (Urban-Econ calculations, 2013)

A total of 231,187 people and 70,283 households reside in the local market area. The average household size is 3.29 persons per household and the household density is 95.63 households per square kilometre.

The age profile, which indicates the percentage of the population which falls within the different age categories, is illustrated in the figure below.

Figure 1: Age profile, 2011
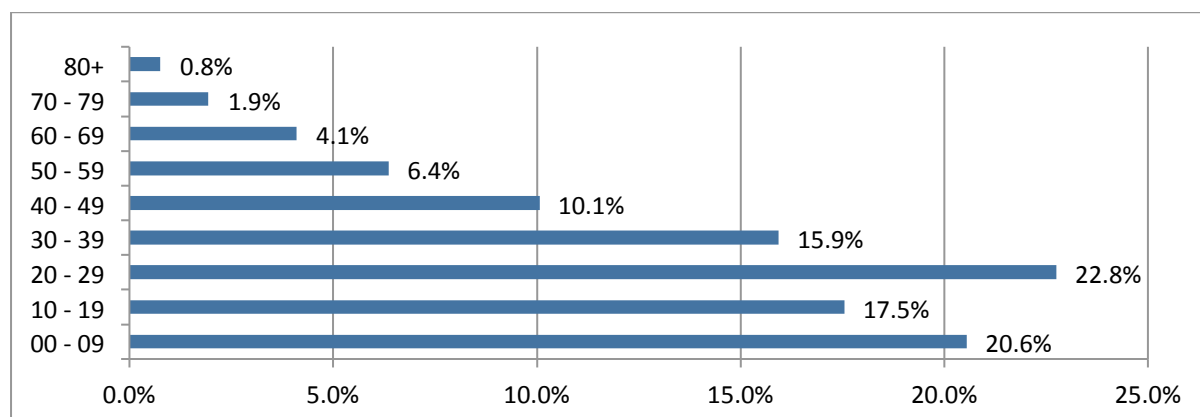
Source: (Statistics SA, 2013)

The majority of the population (66.7%) falls within the working-age population (15 – 64 years old). 29% of the population is younger than 15 years old while only 4.3% is older than 65 years old.

3.2 EDUCATION AND EMPLOYMENT

The education levels of the market area are indicated below.

Figure 2: Education profile, 2011
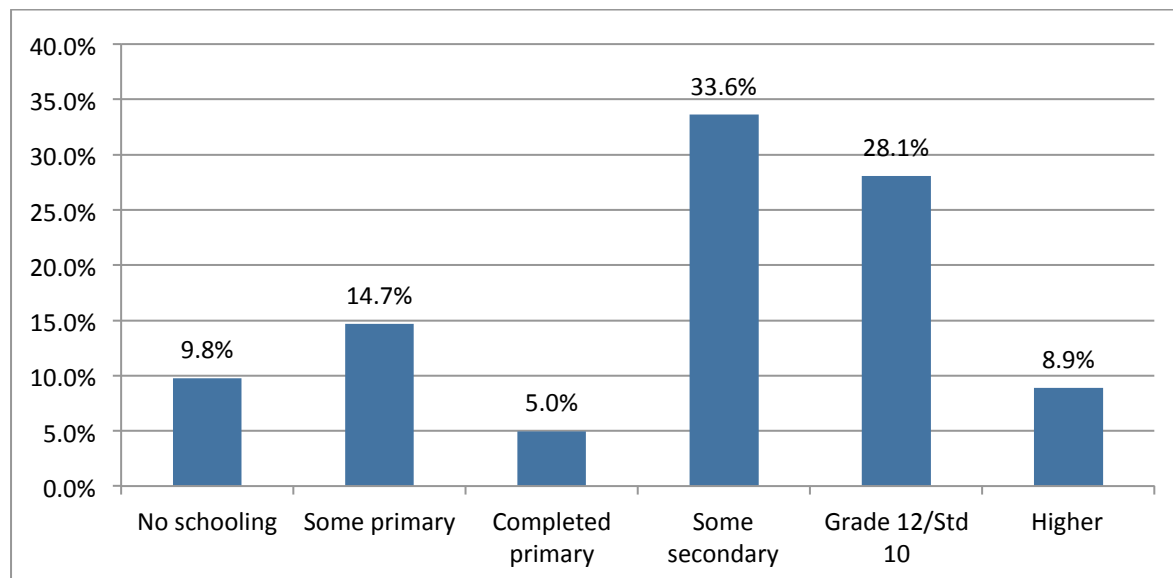
Source: (Statistics SA, 2013)

From the figure above it can be seen that 33.6% of the population completed Grade 12 or more, while 9.8% of the population does not have any schooling.

The employment profile is shown in the following table. It excludes the youth and the elderly and is based on the working-age population (portion of the population that are between the ages of 15 and 64).

Table 2: Employment profile, 2011

Concept		2011
Labour force	**Employed**	69.3%
	Unemployed	22.8%
	Discouraged work-seeker	7.9%
Labour force participation rate*		64.5%
Labour absorption rate#		44.7%

Source: (Statistics SA, 2013)

* Labour force participation rate: Labour force as a percentage of the working age population.

Labour absorption rate: Employed persons as a percentage of the working age population.

From the above table it is evident that the unemployment rate is at 22.8% for the KwaDukuza area, which is better than the 28.5% of the province. The percentage of discouraged work-seekers makes out a total of 7.9% of the labour force, which is also less than the 13.8% of the province as a whole. A small percentage of persons are not economically active (full-time students, homemakers, etc.) as is evident from the labour force participation rate that is 64.5%. Consequently, the labour absorption rate is fairly high (44.7%) meaning a relatively small portion of the population is dependent on those earning an income.

3.3 HOUSEHOLD INCOME ANALYSIS

The household income is analysed in order to determine the income per household per annum as well as the average monthly weighted household income. The household income is illustrated in the following figure.

Figure 3: Average annual household income, 2011
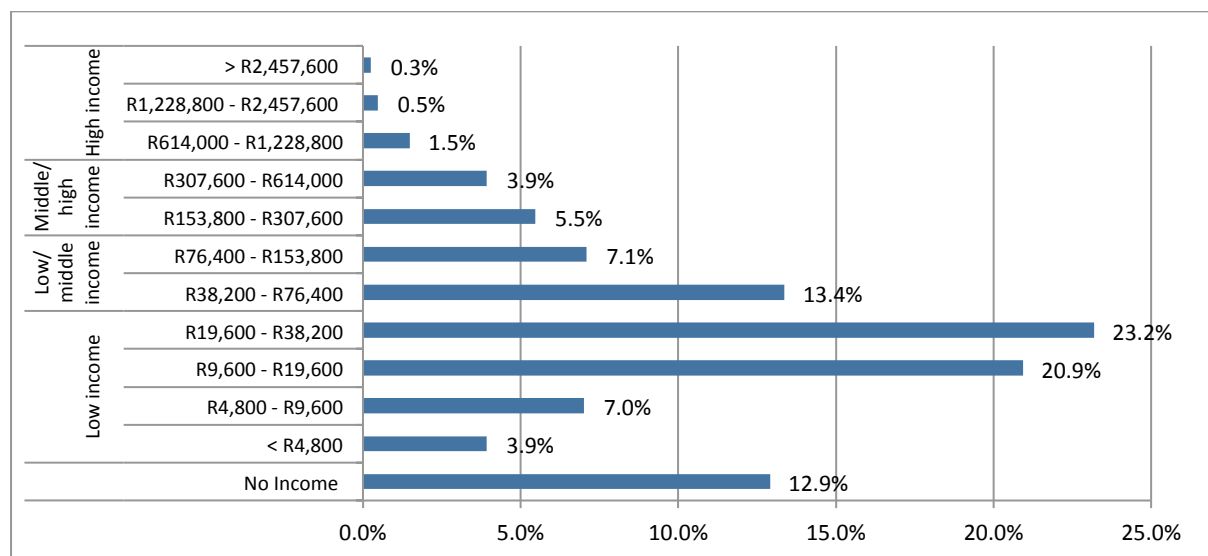
Source: (Statistics SA, 2013)

The majority of households (55.5%) fall within the low income group earning between R 1 and R 38,200 per annum. A total of 20.7% fall within the low/middle income group, 9.4% fall within the middle/high income group, 12.9% of households earn no income at all while 2.2% of households are high income earners earning more than R 614,000 per annum. The weighted average monthly household income for the market area is R 7,124 per month.

3.4 HOUSING PROFILE

The dwelling type indicates the quality of housing which a household occupies. The dwelling types of the market area are illustrated below.

Figure 4: Dwelling type, 2011
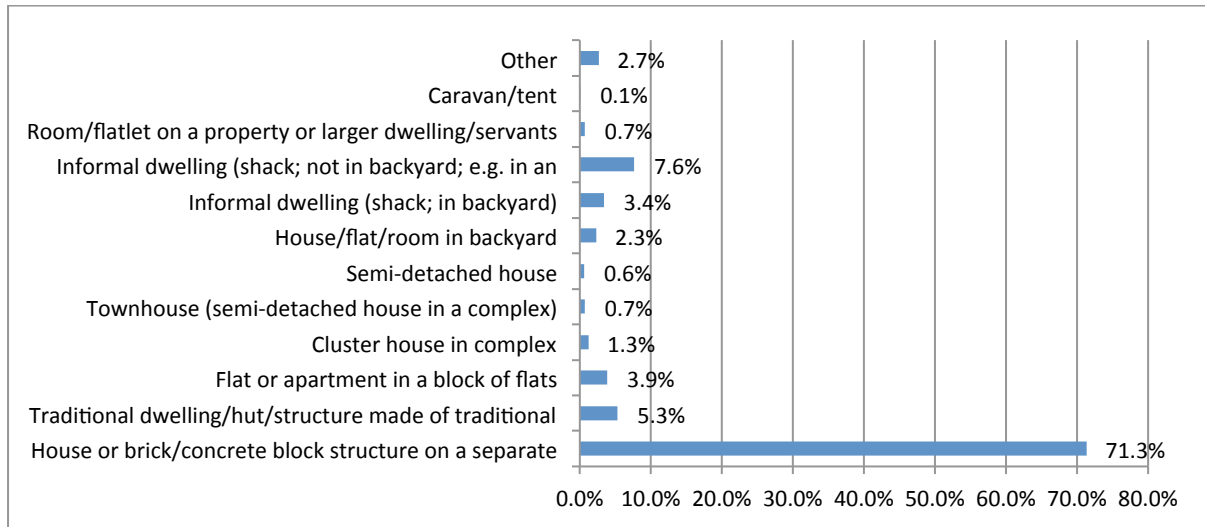
Source: (Statistics SA, 2013)

Households predominantly live in a house of brick structure within the market area (71.3% of all households) while 11% of households live in some sort of informal dwelling. This relates to approximately 7764 households.

The tenure status of the households is shown in the following figure.

Figure 5: Tenure status, 2011
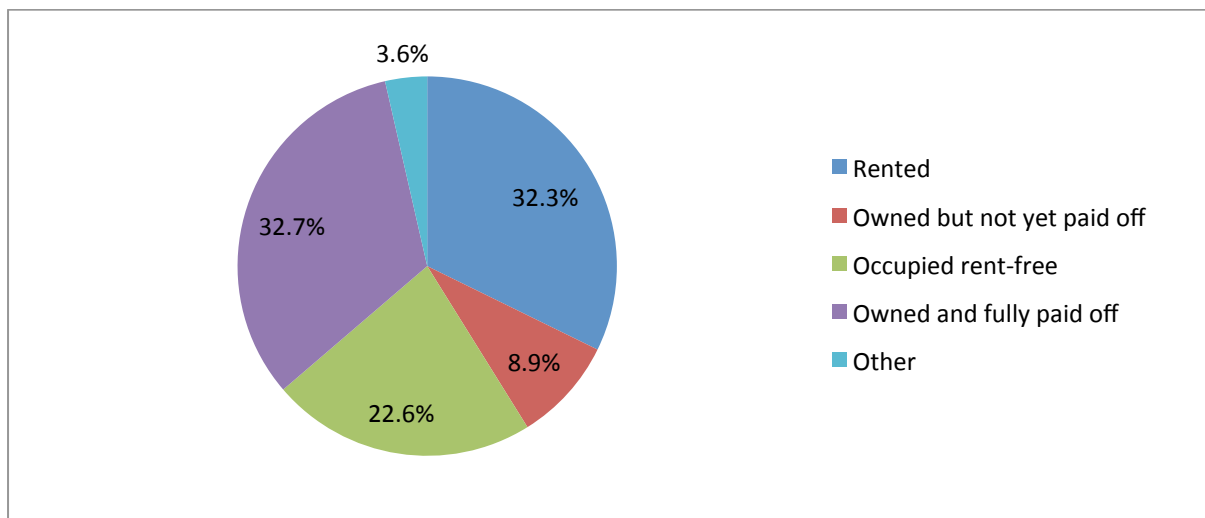
Source: (Statistics SA, 2013)

Almost a third of households (32.7%) have paid off their houses. A large percentage of house owners (32.3%) rent their dwelling, while 22.6% of home owners occupy their dwelling rent-free.

3.5 CONCLUSION

The following table gives a summary of the socio-economic profile for the market area.

Table 3: Summary of socio-economic profile for market area

Variable	Market Characteristics
Population (2011)	• 231,187 people
Households (2011)	• 70,283 households
Average household size	• 3.29 persons per household
Household density	• 95.63 households per square kilometre
Age profile	• 29% - Younger than 15 • 66.7% - Working-age population • 4.3% - Older than 65
Level of education	• 9.8% - No schooling • 14.7% - Some primary • 5% - Completed primary • 33.6% - Some secondary • 28.1% - Grade 12 • 8.9% - Higher
Employment profile (based on the working-age population)	• 69.3% - Employed • 22.8% - Unemployed • 7.9% - Discouraged work-seeker • 64.5% - Labour force participation rate • 44.7% - Labour absorption rate
Household income analysis	• 12.9% - No income • 55% - Low income • 20.5% - Low/middle income • 9.4% - Middle/high income • 2.2% - High income
Weighted average monthly household income	• R7,124 per month
Dwelling type	• 71.3% - House of brick structure • 11% - Informal dwelling • 17.6% - Other
Tenure status	• 32.3% - Rented • 8.9% - Owned but not yet paid off • 32.7% - Owned and fully paid off • 22.6% - Occupied rent-free • 3.6% - Other

4   MARKET ASSESSMENT

This section aims to provide an overview of the general market trends within the market area before focussing on the demand for each aspect of the proposed development.

4.1 GENERAL MARKET TRENDS

A general property market analysis is undertaken in this chapter to inform the trends in the overall market.

COMPLETED COMMERCIAL AND RESIDENTIAL BUILDINGS

Statistics South Africa publishes a statistical release annually indicating selected building statistics of the private sector as reported by local government institutions. The data set shows the total amount of new buildings that was completed within a calendar year, providing insight into the household growth and demand within a municipal area.

The table as well as the figure below indicates the total number of completed buildings for the KwaDukuza Municipal area.

Table 4: Completed buildings, KwaDukuza Municipality, 2004-2012

Type	2004	2005	2006	2007	2008	2009	2010	2011	2012
Dwelling houses	192	432	189	298	176	160	141	154	148
Flats and townhouses	69	249	541	284	530	544	230	326	309
Total Residential	**261**	**681**	**730**	**582**	**706**	**704**	**371**	**480**	**457**
Non-residential	2	2	6	10	16	18	45	10	11
Grand Total	**263**	**683**	**736**	**592**	**722**	**722**	**416**	**490**	**468**

Source: (Statistics South Africa, 2013)

Figure 6: Total completed buildings, KwaDukuza Municipality, 2004-2012
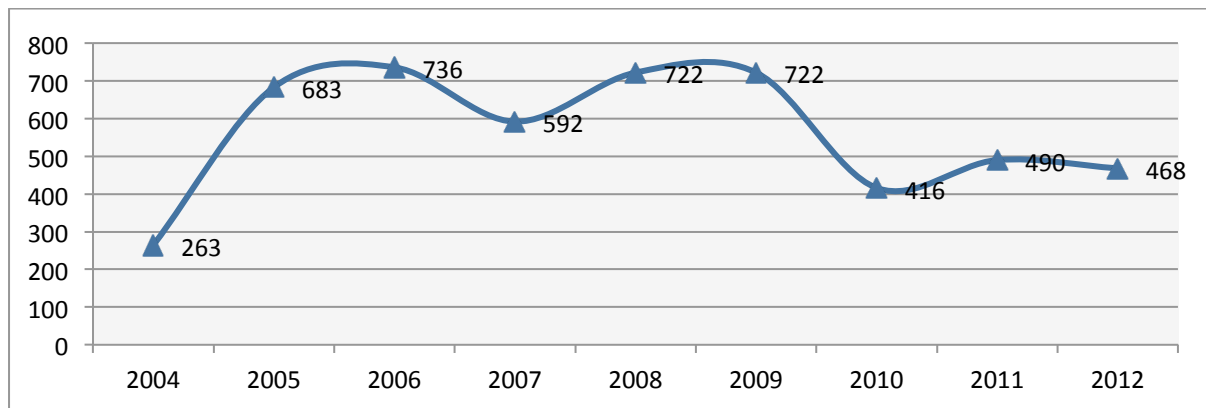
Source: (Statistics South Africa, 2013)

From the above graph it is evident to see that the number of completed buildings peaked between 2005 and 2009. Within KwaDukuza a total of 468 buildings were completed in 2012. This was below the average of 566 buildings per annum for this area.

INTEREST RATES

The prime interest rate was cut from 9% p.a. to 8.5% p.a. in July 2012 and has remained unchanged since then. In July 2008, the prime interest rate stood at 15.5%, but as a result of the global economic recession, the interest rate has come down to the current level. The interest rate is expected to stay at the current level in the short term.

INFLATION

The headline CPI (for all urban areas) annual inflation rate in August 2013 was 6.4%. This rate was 0.1 of a percentage point higher than the corresponding annual rate of 6.3% in July 2013. On average, prices increased by 0.3% between July 2013 and August 2013.

HOUSING MARKET

The ABSA House Price Index for December 2014 indicated that middle-segment house price growth came to a nominal 9.8% year-on-year (y/y) in July from a revised growth rate of 10.8% y/y in June. The first seven months of 2013 saw the value of middle-segment homes rising by an average 10.8% y/y. The slowdown in year-on-year price growth continued in the categories of small and medium-sized housing, while price growth in the segment for large homes appears to be near an upper turning point. Real price growth in middle-segment housing was registered at 5% y/y in June, i.e. after adjustment for the effect of headline consumer price inflation, which was at 5.5% y/y (ABSA, 2014).

Figure 7: Absa house price index, 2014
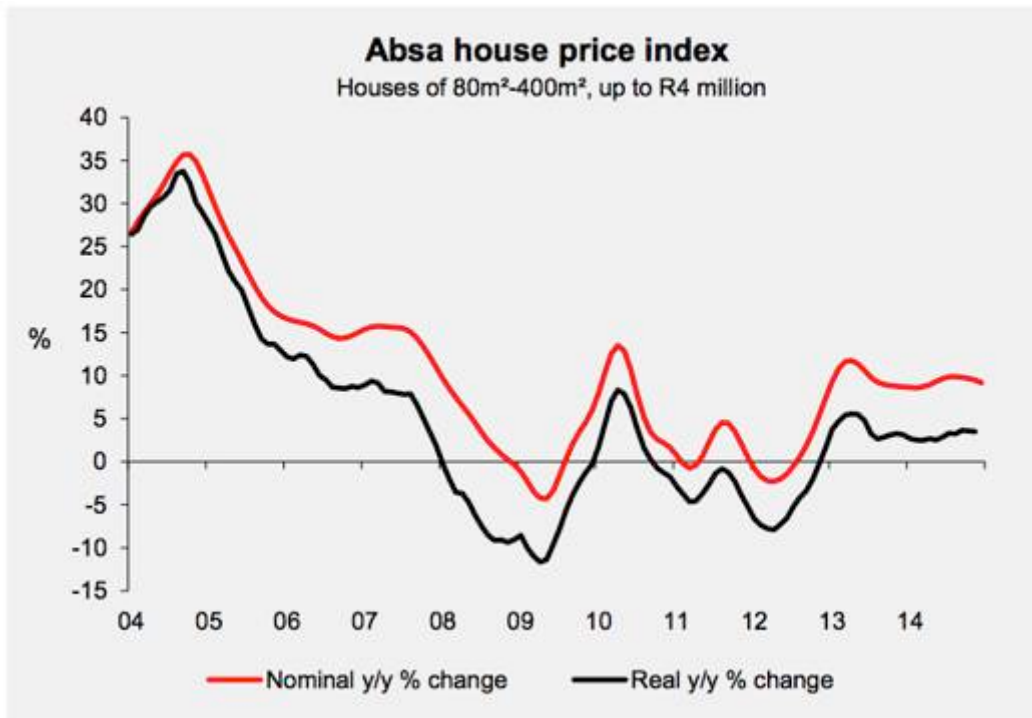
The FNB House Price Index showed a slight acceleration in its year-on-year growth rate, with the house price for December 2014 rising 6.87% year-on-year. This is slightly faster than the previous month's revised 6.85%,. This continues the mild accelloration trend of recent months, following gradual slowing in house price growth earlier in 2014.

Figure 8: FNB house price index, 2014

THE FNB/BER BUILDING CONFIDENCE INDEX

The FNB/BER building confidence index can vary between zero (indicating an extreme lack of confidence) and 100 (indicating extreme confidence). It reveals the percentage of respondents that are satisfied with prevailing business conditions in six sectors, namely architects, quantity surveyors, building contractors, building sub-contractors (plumbers, electricians, carpenters and shop fitters), manufacturers of building materials (cement, bricks and glass) and retailers of building material and hardware.

The FNB/BER building confidence index increased by 7 index points to register a value of 48 in 3Q2013, from 41 last quarter. This is the highest level of the index in 5 years. The current level indicates that there is an even split between those respondents satisfied with prevailing business conditions and those that are not (FNB, 2013).

Despite the rise in confidence in 3Q2013, other indicators, especially main contractor activity, suggest that the growth momentum in the building sector returned to the more subdued pace seen in 1Q2013 and was mainly based on smaller, informal projects (FNB, 2013).

Looking ahead, the building pipeline remains supportive of further growth. However, the recovery in building activity is likely to be modest given the headwinds confronting the sector in the form of lacklustre economic growth, slower growth in consumer spending and, more recently, labour unrest (FNB, 2013).

Figure 9: FNB Composite Building Confidence Index
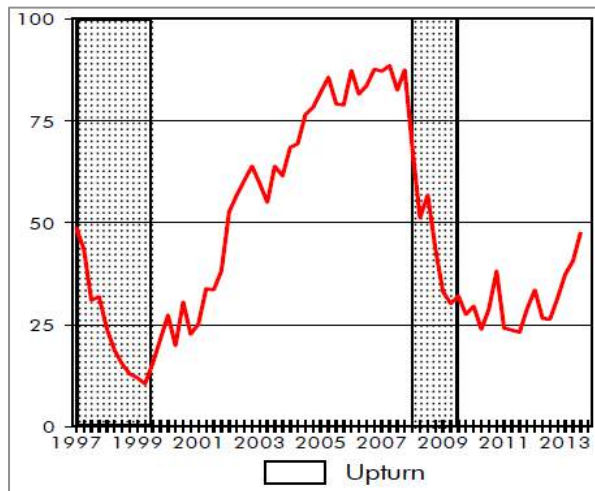
Figure 10: Main Contractors: Growth in building activity (Net balance)
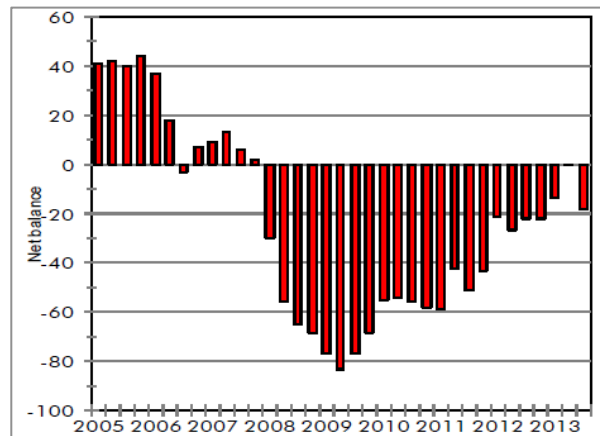
Source: (BER, Stellenbosch University. 2013), (FNB, 2013)

4.2 GROWTH IN LOCAL ECONOMIC BASE

The following figure gives an indication of the year-on-year growth in gross domestic product (GDP) as gross value added (GVA) at constant 2005 prices for KwaDukuza Municipality between 2001 and 2011.

Figure 11: Year-on-year growth in GDP for KwaDukuza
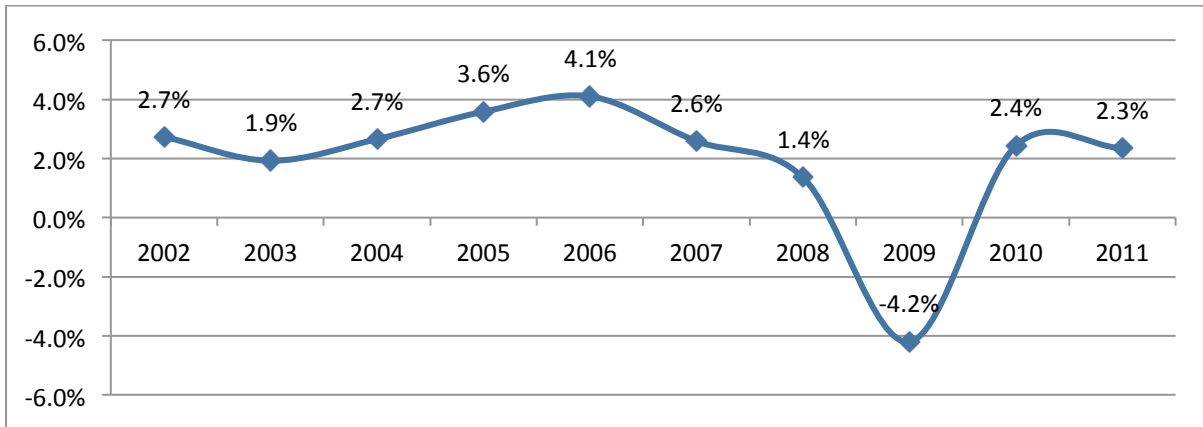
Source: (Quantec, 2013)

The year-on-year percentage change in GDP for KwaDukuza recovered to 2.3% in 2011 after it was at -4.2% in 2009. The GDP at basic prices of KwaDukuza grew at an annual average of 2.0% during the period of 2001 to 2011.

The following figure indicates the economic contribution of each sector of the economy in KwaDukuza in 2011.

Figure 12: Economic contribution, KwaDukuza, 2011
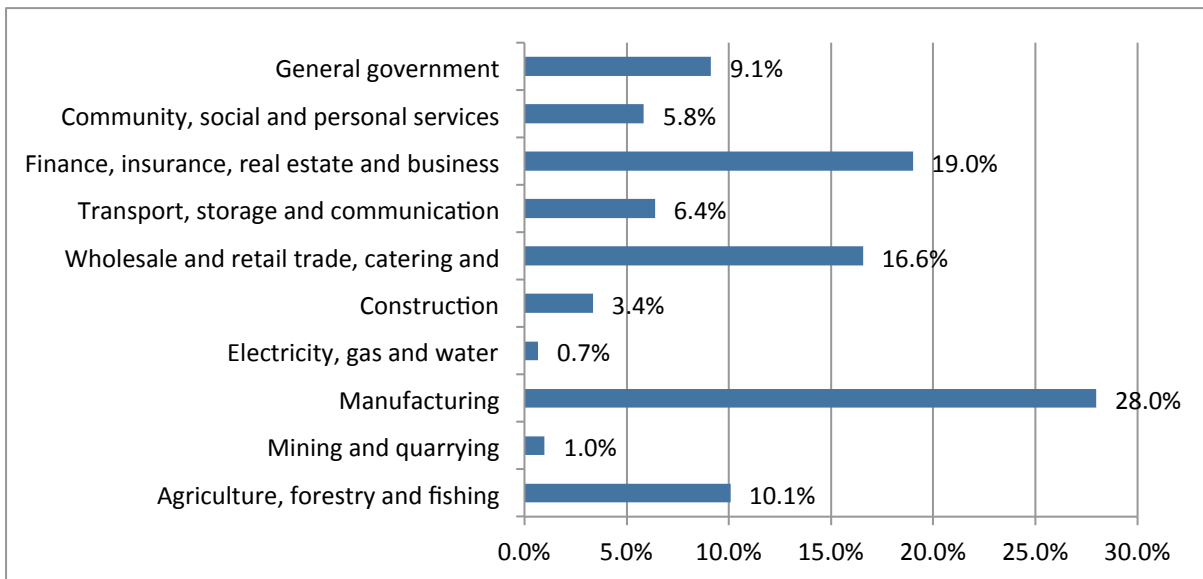
Source: (Quantec, 2013)

The largest contributor to the economy of KwaDukuza was the manufacturing sector which contributed 28.0% to the economy. The finance, insurance, real estate & business services sector contributed 19.0% while the wholesale & retail trade, catering & accommodation sector and the agriculture, forestry and fishing sector contributed 16.6% and 10.1% respectively to the total GDP.

5   SOCIO-ECONOMIC IMPACT ASSESSMENT

5.1 OVERVIEW OF THE ASSESSMENT

The socio-economic assessment is guided by an identification of surrounding impact areas that will be significantly impacted by the development. It is detailed according to impact factors, used to analyse each identified area according to sectorial impacts the proposed development has on the respective areas. The identification of the impact areas and the impact factors are detailed further below.

5.1.1: ANTICIPATED IMPACT AREAS

The surrounding areas to the development are likely to be the most significantly affected areas for the proposed development. As such, the surrounding nodes of Salt Rock, Sheffield Beach, Shakaskraal, and Ematadeni, Groutville have been identified as the primary impact nodes, as these will experience the greatest socio-economic impact from the development. Area lying further afield are KwaDukuza (Stanger), Ballito, Blythedale, and Princes Grant, and are also anticipated to be affected by the development. These have been identified as secondary impact areas.

The figure below graphically represents the impact areas of the proposed development, indicating the primary impact areas and secondary areas.

Figure 13- Primary and Secondary Impact Areas
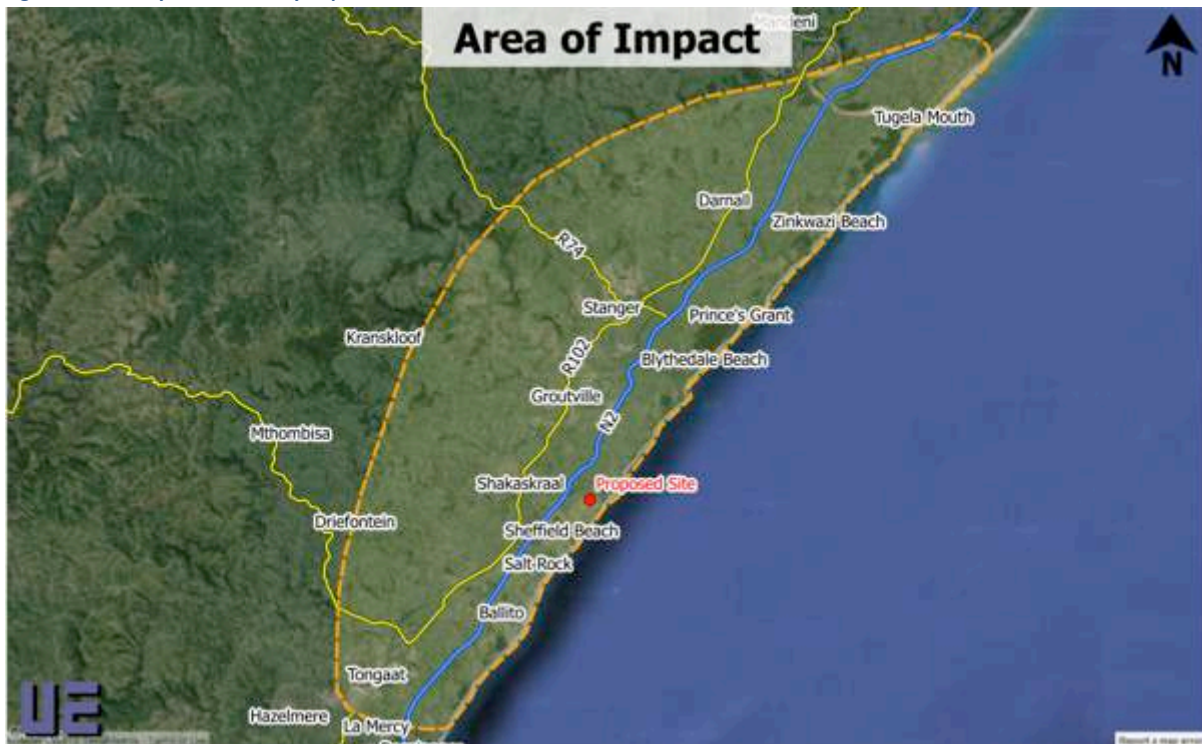
Source: Urban-Econ 2013

The assessment of the proposed development is conducted assuming all 141 ha are developed, however the development itself is expected be constructed in phases, over 10 years or longer, and on a demand basis. It is expected that the identified impact areas will overtime adapt to the growth in population and business activity, as the change is expected to be gradual.

5.1.2: IMPACT FACTORS

The socio- economic impact assessment is conducted on the following spheres of impact (factors) that the proposed development will have on the above identified areas:

- ✓ **Impact on Employment**
  This assessment investigates the contribution the development has to employment creation to the respective areas identified, and its subsequent reduction in unemployment levels.

- ✓ **Impact on Population Growth**
  This assessment investigates the total population growth, through influx of residents into Tongaat.

- ✓ **Impact on Existing Social Facilities**
  This assessment looks at the impact of the proposed development on existing social facilities in the addressed areas - noting a possible initial backlog in facility provision in the proposed development.

- ✓ **Impact on Existing Businesses (retail, office and resort activity)**
  This assessment isolates the main types of business activity which will be impacted by the proposed development, and quantifies this impact where possible.

- ✓ **Impact on Industrial Activity**
  This assessment discusses the impact on industrial activity, and addresses the impact of the proposed development on regional industrial activity.

- ✓ **Impact on Residential Demand**
  This assessment discusses the impact of the proposed development on the identified residential areas within the impact area.

- ✓ **Impact on Property Values**
  This is noted as being directly linked to the impact of the proposed development on residential demand.

- ✓ **Impact on Poverty Levels**
  This is addressed mainly by applying the impact of potential jobs created.

- ✓ **Impact on B-BBEE and SMME Development**
  This notes the impact on black-owned businesses and small enterprises in the key nodes.

- ✓ **Impact on Informal Sector Development**
  This section notes that key impacts will be felt mainly by the taxi industry and its corresponding vendors.

- ✓ **Impact on Skills Development**
  This section notes the impact of the proposed development on general development in the listed nodes.

5.2 ECONOMIC IMPACT

The economic impact assessment measures the anticipated economic impact of the capital expenditure (construction) of the proposed retail development. It includes economic output of new business sales creation, gross value added to the gross geographic product (GGP), additional total income created to households, as well number of jobs created.

ANTICIPATED TOTAL CAPITAL EXPENDITURE

The total capital expenditure is determined from the total construction costs per square meter, and the total recommended size of each of the aspects of the proposed development.

The anticipated total capital expenditure is as follows:

TOTAL INFRASTRUCTURE COSTS:	R 949, 910, 000
Internal Costs:	R 658, 240, 000
Bulk Infrastructure Costs:	R 291, 670, 000
TOTAL BUILDING COSTS:	R 11, 121, 000, 000
TOTAL CAPITAL EXPENDITURE:	**R 12, 070, 910, 000**

ECONOMIC IMPACT

The economic impact is determined by a multiplier analysis which measures the direct and indirect impacts on the regional economy derived from the capital expenditure of the proposed development.

Four different impacts are identified, and are described as follows:

New Business Sales Multiplier effect

This multiplier measures the total new business sales generated as a result of the capital expenditure which creates economic activity through the supply chain. Direct impact relates to new business sales directly in the construction supply-chain, and indirect business sales are business sales generated through indirect channels, such as from secondary expenditure in the economy derived from the income created by the capital expenditure.

Gross Value-Added Multiplier Effect

This measures the total value-added to the Gross Geographical Product (GGP) of the region's economy. Direct multiplier effects measure the value-added in the direct supply base, and indirect multipliers measure the induced value-addition indirectly to other subsequent sectors.

The Household Income Multiplier Effect

The household income multiplier effect tabulates the total household income increase as a result of the capital expenditure. Direct household income is the total household income generated as a result of expenditure on the supplying businesses, and indirect income reflects secondary income generated by secondary expenditure of households having benefited from the proposed retail development's capital expenditure.

The Employment Multiplier Effect

This multiplier measures the total employment created during the capital expenditure phase. Direct employment occurs within the supply-chain, and indirect employment incur in all processes indirectly of the supply-chain.

The economic impact of the proposed development can be broken into three distinct components, the impact of construction of the internal infrastructure and building cost, the impact of the bulk infrastructure costs, and the property rates. The results are identified below.

CAPITAL EXPENDITURE

Construction of the internal infrastructure (includes among others, internal roads, internal sewer, internal electricity reticulation) as well as the building cost can be viewed as a short-term impact on the construction industry within the Province. Internal infrastructure is estimated at R 658 240 000 while the total building cost is estimated at R 11 121 000 000. This totals R 11 779 240 000 that will be injected into the provincial economy during the construction of the proposed development. The results of the I/O Model for this component of the development is identified in the table below:

Table 5: Economic impact of capital expenditure (Internal Infrastructure Build Cost and Total Building Cost)

Economic impact multiplier	Direct	Indirect	Total
Additional new business sales	R 14 571 585 914	R 18 271 043 458	R 32 842 629 372
Additional Gross Value Added	R 4 822 004 922	R 6 846 558 082	R 11 668 563 004
Additional income created	R 2 553 995 718	R 3 205 945 199	R 5 759 940 917
Additional employment created	40 602	31 539	72 141

Source: (Urban-Econ modelling, 2013)

The following can be highlighted:

- A total of R14 billion of new business sales will be created directly and indirectly in the regional economy;
- This will translate to a total value addition of R 4,8 billion to Gross Geographic Product;
- The households benefitting from economic activity created by the capital expenditure will see their income increase by R 2,5 billion;
- The capital expenditure phase will create a total of 40,602 job opportunities throughout the total value-chain over the lifetime of the development's construction.

BULK INFRASTRUCTURE EXPENDITURE

Construction of the bulk infrastructure will also have a short-term impact, however, on the utilities sector (gas, water and electricity). Bulk infrastructure is estimated at R 291 670 000, which will be injected into the provincial economy during the construction of the bulk infrastructure. The results of the I/O Model for this component of the development is identified in the table below:

Table 6: Economic impact of Bulk Infrastructure Cost

Economic impact multiplier	Direct	Indirect	Total
Additional new business sales	R 323 080 133	R 234 526 691	R 557 606 824
Additional Gross Value Added	R 220 300 641	R 76 567 055	R 296 867 696
Additional income created	R 74 070 300	R 33 675 981	R 107 746 281
Additional employment created	200	365	565

Source: (Urban-Econ modelling, 2013)

The following can be highlighted:

- A total of R 323 million of new business sales will be created directly and indirectly in the regional economy;
- This will translate to a total value addition of R 220 million to Gross Geographic Product;
- The households benefitting from economic activity created by the capital expenditure will see their income increase by R 74 million;
- The capital expenditure phase will create a total of 200 job opportunities throughout the total value-chain over the lifetime of the development's construction.

MUNICIPAL RATES

The municipal rates contribution is excluded from the Input-Output model, as this is a direct injection into the revenue of the local municipality. However, it should not be excluded from the economic impact analysis completely, and will therefore be assessed here.

In calculating the contribution the proposed development will make to municipal rates, a number of assumptions were made. These assumptions are listed below:

- A rates increase of 5% per annum was assumed;
- The proposed development will be developed in phases. However, the precise nature of the phases has not been determined at this stage and consequently was not considered in the rates calculation;
- The developer incentive (see table below) included in the KwaDukuza Rates Policy 2013/14 was considered in the calculation.

Table 7: Developers incentives (residential and commercial)

Year	Rebate
Year 1	100% Rebate
Year 2	100% Rebate
Year 3	90% Rebate
Year 4	80% Rebate
Year 5	70% Rebate
Year 6	60% Rebate
Year 7	50% Rebate
From year 8 onwards	No incentive

Source: (KwaDukuza Rates Policy 2013/14)

In order to determine the value of each component of the proposed development, the Aecom African Property and Construction Handbook (2013) was utilised in order to determine an average building cost per component. Thereafter, the KwaDukuza Rates Tariffs were applied for each property type in order to determine the annual rates contribution. The following table shows the rates contribution of the proposed development. Assuming that the proposed development can be completed by 2017, the rates are presented in the table below:

Table 8: Rates contribution, 2020-2030

Concept	2020	2025	2030
Rates per annum	R 29 029 384	R 185 248 340	R 236 429 041
Accumulated Rates	R 42 852 901	R 598 272 158	R 1 673 066 878

The proposed developments' accumulated contribution to municipal rates are estimated to be around R75 million by 2020 and this is expected to increase to R2.9 billion by 2030. This is based in the assumption that rates will not be collected during the first two years due to rebates offered (as per above).

5.3   SOCIO-ECONOMIC IMPACT

A socio-economic impact is defined as:

> "The consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organise to meet their needs and generally cope as members of society. The term includes cultural impacts involving changes to the norms, values and beliefs that guide and rationalize their cognition of themselves and their society."

IMPACT RATING MODEL

In order to quantify the impacts, an impact rating model is undertaken which provides an assessment of each impact in terms of its direction (positive or negative), extent, intensity, duration, and probability of occurrence. The first step involves arriving at a consequence score by totalling the score for the extent, intensity and duration. The table below displays the rating system.

Table 9: Consequence score rating

Rating	Definition of rating	Score
A. Extent - The area over which the impact will be experienced		
None		0
Area	Confined to the study area (Proposed site)	1
Local	The local area (KwaDukuza Municipality)	2
Region	iLembe District Municipality	3
B. Intensity - the magnitude of the impact in relation to the sensitivity of the receiving environment		
None		0
Low	Natural and/or social functions and processes are negligibly altered	1
Medium	Natural and/or social functions and processes continue albeit in a modified way	2
High	Natural and/or social functions and processes are severely altered	3
C. Duration - the time frame for which the impact will be experienced		
None		0
Short-term	Up to 2 years	1
Medium-term	2 to 15 years	2
Long-term	More than 15 years	3

Each consequence score relates to a consequence rating, which is displayed in the following table.

Table 10: Consequence rating

Combined score (A+B+C)	0-2	3-4	5	6	7	8-9
Consequence rating	Not significant	Very low	Low	Medium	High	Very High

Once a consequence rating has been assigned to each impact, a probability rating needs to be applied to each impact. This represent the expected probability of each impact occurring. The table below displays the breakdown for each probability rating.

Table 11: Probability rating

Probability of the impact (likelihood of the impact occurring)	
Improbable	< 40% chance of occurring
Probable	40% - 70% chance of occurring
Highly Probable	> 70% - 90% chance of occurring
Definite	> 90% chance of occurring

Given that each impact now has been assigned a consequence rating and a probability rating, the significance of each impact can be calculated. The table below displays the significance rating system used to arrive at the significance of each impact.

Table 12: Significance rating

Significance Rating	Consequence Score	&	Probability of impact occurring
Insignificant	Very Low	&	Improbable
	Very Low	&	Probable
Very Low	Very Low	&	Highly Probable
	Very Low	&	Definite
	Low	&	Improbable
	Low	&	Probable
Low	Low	&	Highly Probable
	Low	&	Definite
	Medium	&	Improbable
	Medium	&	Probable
Medium	Medium	&	Highly Probable
	Medium	&	Definite
	High	&	Improbable
	High	&	Probable
High	High	&	Highly Probable
	High	&	Definite
	Very High	&	Improbable
	Very High	&	Probable
Very High	Very High	&	Highly Probable
	Very High	&	Definite

The table on the following page displays the results of the impact assessment model.

Table 13: Comprehensive impact rating

Socio-Economic Impacts		Direction	Extent		Intensity		Duration		Consequence Score	Consequence Rating	Probability	Significance
Town/ General Public	Employment	+	Region	3	High	3	Long	3	9	Very High	Highly Probable	Very High
	Income	+	Region	3	High	3	Long	3	9	Very High	Highly Probable	Very High
	Economic growth	+	Region	3	Medium	2	Long	3	8	Very High	Probable	High
	Housing	+	Area	1	High	3	Medium	2	6	Medium	Highly Probable	Medium
Municipality	Rates	+	Local	2	High	3	Long	2	7	High	Highly Probable	High
	Operations	-	Local	2	Medium	2	Medium	2	6	Medium	Probable	Low
	Demand for expanded electricity supply	-	Local	2	Medium	2	Long	3	7	High	Definite	High
	Demand for expanded on water supply	-	Local	2	Medium	2	Long	3	7	High	Definite	High
Tourism	Number of tourists	+	Local	2	Low	1	Medium	2	5	Low	Probable	Very Low
	Accommodation	+	Local	2	Medium	2	Long	3	7	High	Probable	Medium
Urban	Renewal	+	Local	2	Medium	2	Long	3	7	High	Highly Probable	High

Socio-Economic Impacts		Direction	Extent		Intensity		Duration		Consequence Score	Consequence Rating	Probability	Significance
Environment	Congestion and noise	-	Local	2	Medium	2	Medium	2	6	Medium	Highly Probable	**Medium**
	Aesthetics	+	Local	2	Medium	2	Medium	2	6	Medium	Highly Probable	**Medium**
Competing developments	Loss of income	-	Local	2	Medium	2	Medium	2	6	Medium	Highly Probable	**Medium**

5.4   IMPACT MITIGATION MEASURES

Mitigation measures are given for impacts identified as negative in the above table. If these mitigation measures are used, the significance rating should decrease and reduce the overall negative externalities of the development. The consequence ratings or probabilities in brackets are the new consequence ratings or probabilities once a mitigation effort has been put in place.

Table 14: Impact mitigation

Socio-Economic Impacts		Consequence Rating	Probability	Significance before mitigation	Significance after mitigation
Municipality	Operations	Low (Medium)	Improbable (Probable)	Low	**Very Low**
	Stress on electricity supply	High (Very high)	Definite	Very High	**Medium**
	Stress on water supply	High (Very high)	Definite	Very High	**Medium**
Urban Environment	Congestion and noise	Medium (High)	Probable (Highly probable)	High	**Low**
Competing developments	Loss of income	Medium	Probable (Highly probable)	Medium	**Low**

Municipality: Operations

The proposed development will put pressure on the municipality to provide services to the new residents and companies choosing to locate in Tinley Manor. Although the development is aimed to housing some existing residents, the municipality could still face migration and a population increase, which will add a bulk strain to their services. This probability can be reduced by the municipality anticipating the changes from the development and preparing for additional service provision and responsibility.

Municipality: Stress on electricity supply

Although this is a unit within municipal operations, it has been given its own impact rating due to the current strain on electricity supply within the municipality. The proposed development will put strain on the current electricity supply. "Green" solutions, such as solar heating, could be used to reduce the use of electricity within the development which would lower the impact.

Municipality: Stress on water supply

The supply of water is done at a district level. According to the iLembe IDP (2012/2017) the district together with Umgeni Water are jointly planning to implement the Lower Thukela Regional Bulk Water Scheme in order to serve the KwaDukuza area with potable water. Furthermore, the district is also exploring the idea of a desalination plant to augment the above water schemes. However, the investigations for this are still at a preliminary phase.

Urban environment: Congestion and noise

In terms of congestion and noise there will be a short-term impact during the construction as well as a medium-term impact as a result of more households and people from the new development. During construction, trucks and workers could add to the congestion which could result in accidents and delays. This can be mitigated against by hiring workers to direct traffic flow during congestion and to warn motorists of the upcoming construction zone. There is also the potential for noise pollution during construction. Workers could work during convenient times so that the noise blends in with other daily noises and notices could be put up in surrounding residential areas to warn residents of noise pollution.

Competing developments: Loss of income

It is inevitable that any growth and development that occurs in an area will have an impact on existing entities in that area. This is unavoidable due to the very nature of the free market system. Competition between businesses is a fundamental characteristic of our economic system and inevitably leads to short term impacts among businesses. However, this impact is not expected to be long-term as the area is expected to grow in the coming years.

6 CONCLUSION

This report has undertaken an assessment of the socio-economic impacts that are expected as a result of the establishment of the proposed Tinley Manor South Development within the KwaDukuza Local Municipality.

The assessment commenced with an analysis of the spatial dynamics of the region in which the development is expected to impact. The proposed development is located close to several regional nodes: 10km north east of Ballito, 20km north east of Tongaat and 10km south west of KwaDukuza. The King Shaka Airport is located 25kms south west of the site. North of the site, the majority of commercial activity can be found in the KwaDukuza CBD while there is some activity in Mandeni. South of the site, the commercial activities can be found in Umhlali, Ballito, Tongaat, Verulam, Phoenix and the Umhlanga node. North of the site, the majority of residential activity can be found in Groutville and KwaDukuza while there is also activity in Mandeni. South of the site, the residential activities can be found in Shakaskraal, Salt Rock, Ballito, Tongaat, Verulam, Phoenix and the Umhlanga node. A number of resorts have been established along the coast north and south of the proposed site. These include resorts such as Zimbali, Simbithi, Prince's Grant and Zinkwazi. North of the site, the majority of industrial activity can be found in and around KwaDukuza and Mandeni while there is also some activity in Darnall. South of the site, the industrial activities can be found in Ballito, Tongaat, Verulam, Phoenix and Mount Edgecombe.

Based on the location of the proposed development, it is anticipated that the development will have the biggest impact on Sheffield Beach, Shakaskraal and Groutville. However, the development is expected to have an impact on areas such as Ballito, Tongaat, KwaDukuza, Blythedale, Prince's Grant, Zinkwazi Beach as well as Tugela Mouth.

The key findings of the socio-economic profile are displayed in the table below:

Variable	Market Characteristics
Population (2011)	• 231,187 people
Households (2011)	• 70,283 households
Average household size	• 3.29 persons per household
Household density	• 95.63 households per square kilometre
Age profile	• 29% - Younger than 15 • 66.7% - Working-age population • 4.3% - Older than 65
Level of education	• 9.8% - No schooling • 14.7% - Some primary • 5% - Completed primary • 33.6% - Some secondary • 28.1% - Grade 12 • 8.9% - Higher
Employment profile (based on the working-age population)	• 69.3% - Employed • 22.8% - Unemployed • 7.9% - Discouraged work-seeker • 64.5% - Labour force participation rate • 44.7% - Labour absorption rate
Household income analysis	• 12.9% - No income

	• 55% - Low income • 20.5% - Low/middle income • 9.4% - Middle/high income • 2.2% - High income
Weighted average monthly household income	• R7,124 per month
Dwelling type	• 71.3% - House of brick structure • 11% - Informal dwelling • 17.6% - Other
Tenure status	• 32.3% - Rented • 8.9% - Owned but not yet paid off • 32.7% - Owned and fully paid off • 22.6% - Occupied rent-free • 3.6% - Other

It is anticipated that the development will assist in reducing unemployment in the region, as long as local labour, service provider, and contractors are used during the construction phase, while local labour must be sourced for maintenance, security, as well as within the resort an residential developments.

The assessment then provided a review of the market trends influencing property development in KwaDukuza. In terms of buildings completed, it is evident to see that the number of completed buildings peaked between 2005 and 2009. Within KwaDukuza a total of 468 buildings were completed in 2012. This was below the average of 566 buildings per annum for this area. The year-on-year percentage change in GDP for KwaDukuza recovered to 2.3% in 2011 after it was at -4.2% in 2009. The GDP at basic prices of KwaDukuza grew at an annual average of 2.0% during the period of 2001 to 2011. This indicates that the KwaDukuza municipality is currently receiving from the recent recession. Such a development will assist in stimulation the local economy further.

In terms of economic impact, the following estimates were provided for the development:

TOTAL INFRASTRUCTURE COSTS:	***R 949, 910, 000***
Internal Costs:	R 658, 240, 000
Bulk Infrastructure Costs:	R 291, 670, 000
TOTAL BUILDING COSTS:	***R 11, 121, 000, 000***
TOTAL CAPITAL EXPENDITURE:	**R 12, 070, 910, 000**

The impact of the capital expenditure (building costs and internal works but excluding bulk infrastructure costs) which amounted to 11 779 240 000 that will be injected into the provincial economy during the construction of the proposed development is shown below:

- A total of R14 billion of new business sales will be created directly and indirectly in the regional economy;
- This will translate to a total value addition of R 4,8 billion to Gross Geographic Product;
- The households benefitting from economic activity created by the capital expenditure will see their income increase by R 2,5 billion;
- The capital expenditure phase will create a total of 40,602 job opportunities throughout the total value-chain over the lifetime of the development's construction.

Bulk infrastructure is estimated at R 291 670 000, which will be injected into the provincial economy during the construction of the bulk infrastructure. The multiplier impact of such an injection is displayed below:

- A total of R 323 million of new business sales will be created directly and indirectly in the regional economy;
- This will translate to a total value addition of R 220 million to Gross Geographic Product;
- The households benefitting from economic activity created by the capital expenditure will see their income increase by R 74 million;
- The capital expenditure phase will create a total of 200 job opportunities throughout the total value-chain over the lifetime of the development's construction.

In addition to the above economic impacts, the contribution that is expected from new rates generated is displayed below:

Concept	2020	2025	2030
Rates per annum	R 29 029 384	R 185 248 340	R 236 429 041
Accumulated Rates	R 42 852 901	R 598 272 158	R 1 673 066 878

The final assessment undertaken is that of socio-economic impacts. The most significant of which is the positive impact expected from new employment and income in the region, as well as a contribution to economic growth in the region. There will also be a positive economic impact on the rates base of the local authority in the medium to long-run, as well as urban-renewal. The main anticipated negative impacts will be an initial stress on the electricity and water supply within the region, although mitigation solutions are suggested to reduce these. Additional housing will support the fairly high demand for medium density residential space within the market area. There will be a fairly small short-term impact on competing developments as demand is stimulated to meet supply.

In conclusion, the proposed development is expected to have an overall positive impact of the local KwaDukuza economy by generating short-term, and to a lesser extent, long term employment and income. The impact on water and electricity supply is a concern, however measures are currently in place to increase bulk service capacity in the region. There will be a medium, but short-term impact on existing developments planned for the area.