

**Exploration into Knowledge Production in Spatial Planning: The Cornubia Housing
Project, eThekweni Municipality, South Africa**

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Abstract

Planning discourse has been at the heart of South Africa's history, with planning ideologies influencing, and being influenced by, political actions and social debate. Under apartheid spatial planning was used as a tool to implement political ideals and reinforce the ideology of racial separation. In the post-apartheid era planning is still at the forefront of many urban processes. The three main challenges inherited from the apartheid spatial planning discourse are: separation; fragmentation; and sprawl. Planning has become more flexible in post-modern times and therefore can have greater emphasis on social, economic and environmental factors. These factors are critical, however, understanding how important each factor is to a particular development is a challenge.

This research examines the case study of the Cornubia Housing Project in the Northern Municipal Planning Region of the eThekweni Municipality. The project is a public/private partnership between the eThekweni Municipality and Tongaat Hulett, who both own portions of the land. The research seeks to establish the discourses used to produce the Local Area Plan for Verulam-Cornubia and the Cornubia Framework Plan. The Cornubia project is an interesting case study to research in post-apartheid South Africa as it encompasses the social, economic and environmental forces which influence the planning process. In the case of Cornubia knowledge needs to be translated into a spatial context, as the plans produced are representative of abstract spaces. Qualitative data was collected from interviews with professionals associated with the development of the two spatial plans.

The findings indicate that the views of the stakeholders involved in the development in the Northern Municipal Planning Region have changed over the last fifteen years and that the north has become a focus area for growth in the eThekweni Municipality due to the relocation of the airport. The discourses found in the two plans resonate with the international paradigm of New Urbanism. In addition to the principles of New Urbanism integration and nodes and corridors are also influential concepts. The collaboration between the stakeholders has allowed knowledge to flow and facilitated the production of development plans, which take into account local contextual issues.

Declaration

Submitted in partial fulfilment of the requirements for the degree of Master of Development Studies, in the Graduate Programme in the School of the Built Environment and Development Studies, University of KwaZulu-Natal, Durban, South Africa.

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. I confirm that a professional editor was not used. It is being submitted for the degree of Master of Development Studies in the School of the Built Environment and Development Studies, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

Student signature

Date

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Acronyms and Abbreviations

Airports Company South Africa	ACSA
African National Congress	ANC
Breaking New Ground	BNG
Central Business District	CBD
Congress for New Urbanism	CNU
Developmental Local Government	DLG
Durban Municipal Open Space System	D'MOSS
Department of Provincial and Local Government	DPLG
Dube Trade Port	DTP
Environmental Impact Assessment	EIA
Environmental Management Plan	EMP
EThekweni Transport Authority	ETA
Geographical Information System	GIS
Gross Domestic Product	GDP
Growth Employment And Redistribution	GEAR
Foreign Direct Investment	FDI
Inanda, Ntuzuma, KwaMashu	INK
Integrated Development Plan	IDP
Integrated Rapid Public Transport Network	IRPTN
King Shaka International Airport	KSIA
Local Area Plan	LAP
Local Economic Development	LED
National Development Plan	NDP
National Environmental Management Act	NEMA
National Planning Commission	NPC
New Growth Path	NGP
Northern Municipal Planning Region	NMPR
Northern Urban Development Corridor Project	NUDC

Reconstruction and Development Programme	RDP
Record of Decision	ROD
South African Sugar Association	SASA
Spatial Development Framework	SDF
South Municipal Planning Region	SMPR
Spatial Planning and Land Use Management Act	SPLUMA
Strategic Environmental Assessment	SEA
Tongaat Hulett Developments	THD
Traffic Impact Assessments	TIA
United Nations	UN
United Nations Development Programme	UNDP

Chapter One: Introduction

1.1 Overview of Research

Planning discourse has been at the heart of South Africa's history, with planning ideologies influencing, and being influenced by, political actions and social debate. Under apartheid spatial planning was used as a tool to implement political ideals and reinforce the ideology of racial separation. This apartheid planning discourse influenced city form, governance and furtherance of the apartheid state's programme. In post-apartheid South Africa, planning is still at the forefront of many urban processes. The reconstruction of spatial planning through the demarcation¹ process and the Municipal Structures Act 1998 has extended Municipal governance to include people who were previously outside of the planning system, and create "*wall-to-wall municipalities*" (Oranje & Van Huyssteen, 2007, p. 5). However, planning is complex and thus there have been many challenges to reconstruct post-apartheid South Africa which still persist today (Dewar, 2000; Xuza & Swilling, 2008; Freund, 2010; Harrison, et al., 2008; May & Meth, 2007; Turok, 2010; Wilson, 2011; Coggin & Pieterse, 2012; Marais, 2011; National Planning Commission, 2012; Nattrass, 2011; Patel, 2006; Todes, 2008; and Turok, 2013)

Planning has become more flexible and there is now a greater emphasis on the social, economic, environmental and political factors. These four factors are critical, however, understanding how important each factor is to a particular development is the challenge. Different development stakeholders² see one or more factors as being of greater importance than the others and this creates tensions in the development process. Many development stakeholders from different fields need to be involved to deliberate on projects and to find the appropriate balance between the factors.

This research argues that development is challenging and complex. The four factors mentioned above are key influential aspects of the development process. Knowledge of each factor must be sought and understood to create a solid conceptual framework to develop a particular area.

¹ Municipal Demarcation Act 1997

² For example, the public sector, private sector, and civil society

Each development stakeholder has their own understanding of why and how a particular area should be developed, and this may drive stakeholders in diverse directions. The dominant driver in most developments is the economic factor, and the challenge is the mediation between social, environmental and political factors in the development decision making processes. Ideally this contribution should facilitate a more efficient, sustainable and socially cohesive development to take place.

The Cornubia Housing Project³ is a mixed use/housing development proposed for the north of the eThekwin Municipality⁴. For a number of reasons the Cornubia project is an interesting case study to research in post-apartheid South Africa as it encompasses the social, economic, environmental, and political forces which influence the planning process. Firstly, the project is a public/private partnership between the eThekwin Municipality and Tongaat Hulett Developments⁵ (THD), each of whom own different portions of the site. Secondly, the proposed development is also planned in the Northern Municipal Planning Region (NMPR) which is the fastest growing region of the municipality. The NMPR incorporates: low to high income residential (including many informal settlements) and the Reconstruction and Development Programme (RDP) development Waterloo; the Gateway Theatre of Shopping (an extensive shopping precinct); Sibaya Casino; the King Shaka International Airport (KSIA) and the Dube Tradeport (DTP) (both opened in 2010). All of these separate developments come together to form a regional group of activities in this zone. Cornubia is central to this regional space and the development envisaged for this site will have a profound impact on the NMPR.

This research study will be exploring two plans: the first plan, produced by Iyer Design Studio for THD, is a framework plan for the Cornubia site. EThekwin Municipality, as owner of a portion of the site has also had input into the framework plan. THD and the eThekwin Municipality have collaborated to produce the Cornubia Framework Plan using a private consultant to facilitate bringing the ideas of both entities together. The Local Area Plan (LAP) for Cornubia and Verulam, which is the second plan, was commissioned by the Municipality. This LAP forms part of the Northern Urban Development Corridor project (NUDC), which in

³ From here on the Cornubia Housing Project will be referred to as Cornubia

⁴ Refer to Figure 3.2 in Chapter 3

⁵ Tongaat Hulett Development was formerly Moreland Developments

total incorporates three LAPs for the N2 corridor⁶ within the NMPR of the eThekweni Municipality. The NUDC was undertaken by the consulting firm SSI Engineers and Environmental Consultants⁷. The Cornubia Framework Plan and the LAP have been designed and produced from two different perspectives. THD is one division of Tongaat Hulett Sugar, a large sugar cane producer, and the land that they develop is usually high end commercial and residential. THD have an economic focus to make the land as profitable and efficient as possible. The eThekweni Municipality⁸ on the other hand has a mandate to approach planning from a more socially orientated position. A portion of land that they own in Cornubia is earmarked to provide much needed low income residential housing for the poorest members of the city.

To analyse Cornubia from a planning discourse perspective one must explore how the knowledge in the two plans was produced. Bruckmeier and Tovey (2008) explore the knowledge production process using sustainable discourses in rural development, first by asking what knowledge is available, how it is produced, exchanged and managed in projects and finally what different types of knowledge exist. They also explore the relationship between the different stakeholders' knowledges, how the actors interact with the knowledge and what learning processes take place. In the case of Cornubia knowledge needs to be translated into a spatial context, in what Lefebvre (1974) calls "*representative space*", as the plans produced are a representation of abstract spaces which will be developed into physical, lived environments.

The main focus of this research is the conceptualisation of these spaces. Along with Lefebvre, (Brenner, 2004 and 2009) examined the production of space from within the context of capitalist economics and the distinctive institutional arrangements and development trajectories that produce space. Brenner (2009, p. 62) explains "*the fabric of social space continues to be rewoven through the diverse processes of restructuring...[a]s Lefebvre recognized in the early 1970s, space is always being produced and transformed under capitalism; it is never fixed, static or pre-given.*" This perspective is also important to frame this research, as economic

⁶ A corridor along National Road 2

⁷ SSI is now known as Royal Haskoning DHV

⁸ The White Paper on Local Government, 1998, and the Municipal Systems Act 2000 legally mandates municipalities to prepare Integrated Development Plans (IDP). The IDP is the legal framework for municipal spatial plans and the strategic objectives of the city (Oranje & Van Huyssteen, 2007).

growth has become a contested aspect of South Africa's post-1994 government (Houghton, 2010). The influence of globalisation, impacts of global market forces, and the reintegration of South Africa into this market, has had an effect on development. In particular the influence of capitalism as an economic ideology on planning has been significant. This research explores the Cornubia project within the context of three discourse themes, firstly broad societal discourses, secondly knowledge, spatial knowledge, and participation; and lastly planning and South African planning discourse.

1.2 Research Rationale

This research was conceptualised to deepen the understanding of planning large scale developments on a metropolitan scale; and how the process of conceptualising these spaces occurs. The information-rich case study of Cornubia was used as it is a unique development in South Africa which has the potential to change the way large scale⁹ projects are undertaken. Furthermore, the Cornubia project is immeasurably complex and has been influenced by many different development stakeholders, and a great number of challenges. The Cornubia housing project is also distinctive as Tongaat Hulett is an immense land holder, both within and outside of the borders of eThekweni Municipality. This research focuses solely on the development of the Cornubia Framework Plan and the LAP, and the conceptualisations around how the Cornubia site should be developed, in the most sustainable and efficient way.

1.3 Aims and Key Research Questions

As explained above the aim of this study is to explore spatial and other knowledges produced in the creation of two spatial development plans with specific reference to the Cornubia Housing Project in the eThekweni Municipality. This research case study is used to understand the different spatial realities for development in the eThekweni Municipality Northern Municipal Planning Region (NMPR) through posing the following questions:

1. What are the spatial planning discourses and objectives in terms of spatial development planning in the eThekweni Municipality NMPR?
2. What are the main types of spatial knowledges and discourses reflected in the two spatial plans for Cornubia?

⁹ Projects with large hectares of land and great numbers of housing units with mixed-development.

3. How have the types and sources of knowledge and the exchange of knowledge helped produce spatial development plans for Cornubia and by what process?
4. What discourses and spatial knowledges have different stakeholders contributed to the two plans, and through what processes?
5. What local contextual issues have influenced the production of the two plans?
6. How have the power relations and the interactions between the multiple role players within the spatial plan development for Cornubia impacted on knowledge production?

1.4 Structure of Dissertation

This dissertation contains six chapters. Following this introductory chapter, Chapter 2 presents a theoretical framework for the analysis of the Cornubia Housing project. It is essential for this research to be framed in the broad global societal discourses as well as examining the main global ideologies related to development and planning which have relevance in the Cornubia context. The main framework explored is the discourses found in South African planning that have emerged in the post-apartheid era.

Chapter 3 explores the background of the case study, explaining briefly the eThekweni Municipality, the NMPPR and finally the Cornubia Housing project. This chapter will set the context for this research and presents background information on the Cornubia project.

Chapter 4 explains the methodology utilised in the research. The study was designed as a case study of Cornubia with a focus on the framework plan and the LAP for Cornubia and Verulam. This chapter explains the way the study was designed then describes the data collection method, types of data gathered and discusses how the data analysis was conducted.

Chapter 5 presents the findings and analysis under three headings; Broad Development in the Northern Municipal Planning Region; Spatial Plans; and Knowledge, Power and Participation. Within each section the knowledge production and planning discourses are discussed. Analysis directly follows the findings throughout. This chapter concludes by synthesising the findings and reflecting on the key research questions.

Chapter 6 evaluates the extent to which the study succeeded in answering the research questions and makes recommendations which would: enhance planning knowledge production; and promote a synthesis of different stakeholder inputs with reference to the social, economic, environmental and political factors which influence development projects. The recommendations will also include suggestions to address challenges of large scale developments and potential areas for further research.

Chapter Two: Society, Development and Planning

The Cornubia Housing Project, as a greenfield, mixed use development, has created an opportunity to re-evaluate how mixed-use housing projects are undertaken in South Africa. The project is envisioned to integrate the older middle to lower income suburbs with the newer high-income development in Umhlanga in the Northern Municipal Planning Region (NMPR) of the eThekweni Municipality. The Cornubia project has also been planned as a tool for social transformation and economic growth. This project needs to accommodate low-cost housing for the poor living within the city, whilst also accommodating commercial and industrial uses to create a growth node, job opportunities, and social facilities to serve the residential portion of the site (eThekweni Municipality, 2011). This project aims to correct previous apartheid spatial patterns which are found in all South African cities (Iyer, 2011).

To understand the conceptualisation of the Cornubia development it is important to discuss the project in relation to global ideologies and discourses. Discourse is defined as *“an ensemble of ideas, concepts and categorisations through which meaning is allocated to social and physical phenomena, and which is produced and reproduces in an identifiable set of practices”* (Hajer 2005 p. 447 cited in Baud, *et al.*, 2011, p. 6). Parker (1992 cited in Traynor, 2004) adds that *“[d]iscourses do not simply describe the social world that bring phenomena into sight...Once an object has been elaborated in a discourse it is difficult not to refer to it as if it were real”*.

This research study will be examining the discourses or concepts found in the Northern Urban Development Corridor (NUDC) Local Area Plan (LAP) for Verulam-Cornubia and the Cornubia Framework Plan, by studying the main themes of discourse emerging between the different development stakeholders who produced the plans (Traynor, 2004). Three themes have been identified to help understand the concepts found in the two plans. These themes are: broader societal discourses; knowledge, spatial knowledge, and participation; planning, and South African planning. In the section on South African planning four specific discourses identified by Harrison *et al* (2008) are used as a framework for analysis. These are namely: spatial discourse; social transformation; economy and the market; and sustainability. These discourses will be used as a framework to examine planning debates in South Africa. Two of the main debates in post-apartheid planning are Post-modernism and New-Urbanism and these have influenced the discourse themes found in planning literature.

2.1 Broader Societal Discourse

As indicated above there are three discourses which have become important in postmodern thinking. The first theme to be considered, societal discourse, includes the ideas around: pro-poor development; pro-growth development; and sustainable development. These discourses are particularly prevalent in the ideology of developing nations as these countries face many challenges including how to make better living environments for the poor; and the challenges incurred by environmental degradation (Faling, 2012; Houghton & McGranahan, 2006). South Africa also faces these challenges and it is necessary for the government and the private sector to be mindful of these discourses when undertaking development projects.

Pro-poor development

Pro-poor development is more dominant in developing countries where large proportions of their population are living as rural urban poor. It is argued that pro-poor development is the alternative to laissez-faire neoliberal development which assumes that the poorer members of society will benefit indirectly from market driven economic growth (Houghton, 2010). Thus pro-poor development provides direct interventions to benefit the poor and consists of bottom-up approaches tailored to provide better living conditions for the poor (Hannan, 2012; Houghton, 2010). Pro-poor development strategies have been incorporated into government policy in South Africa to provide a better standard of living for the large proportion of poor citizens located in South African cities.

Pro-growth development

The second societal discourse is neoliberalism which has been influenced by the globalisation of world economies. The concept of globalisation is characterised by the ideals of modernisation, liberalisation, privatisation and the opening up of world markets. Globalisation has become dominant in all parts of society and therefore influences development thinking within both government and the private sector. Many developing countries have shifted their macroeconomic policies to a more capitalist and market driven pro-growth agenda (Houghton, 2010). However, this shift has exacerbated the poverty, vulnerability and inequalities found in these countries (Finn, et al., 2014; UNDP, 2014).

Since 1975, in a number of countries, economic growth and development policies were influenced by neoliberalism. *“Neoliberalism is a broad structure of beliefs founded on right wing, yet not conservative, ideas about political democracy, individual freedom, and the creative potential of unfettered entrepreneurship”* (Peet, 2002, p. 62). Thus neoliberalism is characterised by market freedom and competition to achieve economic growth by allowing freedom in the private sector with little or no involvement from the government (Houghton, 2010).

Post World War Two economic growth is the main aim of governments as it is assumed to have a positive effect on society. Pro-growth policies are supported by most governments and development is led by the markets and the private sector (Bremner, 2000; Brenner, 2004). It is also assumed that economic growth will stimulate development which will benefit citizen livelihoods (Hannan, 2012; Houghton, 2010). However, while the neoliberal approach still dominates, in many developing countries, they have combined pro-poor and pro-growth development to create a more holistic approach to stimulating economic growth that includes and benefits the poor, and this addresses the shortcomings of neoliberalism.

Sustainable Development

The third societal discourse is sustainable development. There is a growing global awareness of the importance of the environment and how it benefits people. Industrialisation and high population growth have resulted in the need to deal with environmental issues and how humans are impacting the planet and its services (Rees & Wackernagel, 1996). Climate change is one of the major contemporary challenges facing the world today, due to the rise in greenhouse gases linked to modern energy production and consumption (Awuor, *et al.*, 2008; Ryghaug, 2011; Carmin, *et al.*, 2012). Developing countries, like South Africa, can be argued to be more susceptible to climate change as it affects the poor and vulnerable, who have a high dependency on resources and a low capacity to adapt to climatic changes (Haughton & McGranahan, 2006; and Awuor, *et al.*, 2008).

Sustainable development was defined in the seminal Brundtland Report of 1987 (Swart, *et al.*, 2004), as *“development that meet[s] the needs of the present without compromising the ability of the future generations to meet their own needs”* (WCED 1987 cited in Pope, *et al.*, 2004).

According to Mebratu (1998), this definition has been influential in creating a global discourse on sustainable development. However, since the initial definition was proposed in the Brundtland Report many other definitions have been created, leading to sustainable development becoming a complex and contested concept (Mog, 2004; Goodland, 1995; Gibson, 2006). According to Giddings *et al* (2002) people have different world views of sustainability, and this has created a range of meanings which has led to sustainable development becoming a 'loose' concept which does not give a clear orientation to make justifiable actions (Christen & Schmidt, 2012). There is however, a great degree of consensus that sustainable development is needed to create viable, liveable futures (Swart, et al., 2004; Goodland, 1995; Lozano, 2008; Gibson, 2006; Scipioni, *et al.*, 2009; Ugwu & Haupt, 2007). Swart *et al* (2004) argue that although the definitions for sustainable development may widely differ there is consensus around the importance of maintaining resilience in environmental and social systems.

2.2 Knowledge, Spatial Knowledge, and Participation

Knowledge

According to Rydin (2007) knowledge has been framed in terms of the modernist ideology from the mid-1900s. In the last few decades it has begun to breakdown and be constructed with more focus on social interactions. The modernist view was that knowledge production was constructed by technocrats, and that this 'expert' knowledge drove development. The new view is that knowledge is now created in knowledge networks whereby knowledge comes from multiple stakeholders who have different levels of expertise and perceptions of reality. In this sense there is a paradigmatic shift from a positivist approach to a more constructivist paradigm¹⁰. This more inclusive type of knowledge construction has been especially dominant in the environmental sphere as people have a close relationship to the physical environment through their lived experiences (Rydin, 2007).

Knowledge is exchanged in different ways, these exchanges can be in the form of: tacit knowledge; implicit knowledge; and embedded knowledge (van Ewijk & Baud, 2009). Tacit knowledge is personalised knowledge, exchanged face to face. Implicit knowledge is knowledge that is influenced by social and cultural norms, and embedded knowledge is implicit

¹⁰ Research paradigms are explained in Chapter 4.

knowledge learned through practice (van Ewijk & Baud, 2009). Knowledge exchange allows for new knowledge to be formed. This can happen through the exchange of knowledge in networks of professionals or through the exchange of knowledge from different norms and cultures. Knowledge production can also occur in a more controlled scientific manner for example, in laboratories through undertaking experiments (van Ewijk & Baud, 2009).

According to Baud *et al* (2011) one of the main approaches to knowledge production in relation to city development is within urban planning and management, whereby knowledge is created in a technical manner between development stakeholders. These stakeholders include government departments, private urban planners and development agencies. Thus city planning knowledge is usually created in a more technocratic manner (Baud, *et al.*, 2011). Spatial city planning is where knowledge is produced in accordance with the geographical space in which the city resides. This knowledge is called spatial knowledge (described below) and it is created by stakeholders who conceptualise the physical space of a city in agreement with the embedded knowledge of a particular country.

Spatial Knowledge

Lefebvre (1974) is an influential thinker of theoretical concepts about space. He advocates that there are three concepts of space: “*material space (spatial practices), representative space (conceived space) and representational space (the space of the everyday lived world)*” (Baud, *et al.*, 2011, p. 5). The main focus of this research is on conceived space as the two plans for Cornubia are conceptual and will only become representational space when the concepts of the plans are implemented into physical space.

Spatial knowledge is essential in urban areas as these are complex spaces providing citizens with an array of services and facilities to achieve a quality of life (Healey, 2011). Thus spatial knowledge production and exchange is essential in achieving equitable, economical- and environmentally- resistant development processes (Pfeffer, *et al.*, 2013). Spatial knowledge can either be represented by a traditional map showing geographical information specific to a location on the earth or a holistic map which shows a “*perceived spatial comprehension of facts*” (Pfeffer, *et al.*, 2013, p. 259). This type of map is usually undertaken in a geographical information system (GIS) which spatially represents datasets, for example identifying the

location of all the informal settlements in a specific city. Statistical data is then attached to the spatial location, for example, average income of households, the material used to construct the dwellings, average household size etc. This holistic GIS map allows interaction with the location and brings together a multitude of information which is usually not depicted in a spatial manner, for example economic information.

Furthermore spatial knowledge is important in the realm of planning and development as spatial planning is a tool which brings abstract ideas together into a cohesive spatial plan. These plans guide development and allow the abstract to become tangible outcomes. Space is complex as there are many issues that can influence how space is conceived. Also many stakeholders can conceive a specific space. Therefore *“within this complexity, how, why and for whom is an idea of the ‘place’ of the urban brought into existence?”* (Healey, 2006, p. 526). Therefore planning is one of the tools used to bring concepts and spatial imaginations into reality. Planners must assess these complex conceptions of space and orientate development to benefit the public good. Under democratic conditions there is a long standing assumption that citizens must also be involved in discussions about space. Thus greater public involvement in the planning process is needed (Campbell & Marshall, 2008)

Participation

In theory participation is the cornerstone of democracy except that, according to Arnstein (1969), many governments do not fully engage with the citizens they govern. In Arnstein's 1969 seminal paper on participation she defines it as *“simply that citizen participation is a categorical term for citizen power. It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic process, to be deliberately included in the future”* (Arnstein 1969, p. 216). In other words participation is a strategy whereby the have-nots join in government decision-making. However, for the powerless, participation without a redistribution of power is frustrating and meaningless.

Arnstein (1969) further expands her definition of citizen participation by creating an eight rung ladder depicting the different levels of participation, with the least engagement at the bottom. She clarifies that this is a very simplistic view, but that the ladder gives an idea of the types of participation methods. The bottom two rungs are *‘manipulation’* and *‘therapy’*, these are

defined as non-participation methods in which governments educate citizens rather than let them participate. Rungs three, four, and five are '*informing*', '*consultation*', and '*placation*', these are a form of '*tokenism*' whereby citizens can be heard but not necessarily listened to i.e. there is no follow-through from government, therefore no assurance of change. The sixth rung is '*partnership*' where there is a level of negotiation and engagement. The final two rungs are '*delegated power*' and '*citizen control*', these final two methods are where citizens become fully engaged in decision making or gain full managerial power (Arnstein, 1969, p. 217).

Participation, as mentioned, has become more important in development discourse and many governments actively engage with the citizens they govern. However, which rung of the ladder a specific government is on differs greatly around the world. In South Africa participation processes are now incorporated into the planning process through the Integrated Development Plan (IDP). However, Cash and Swatuk (2011) argue that the IDP process is flawed and has failed to create an equal society, the key reason for this is the breakdown in the public participation process.

2.3 Planning

“The planning tradition is a curious one, built up through a mixture of evangelism, formal institutional practice, scientific knowledge and increasingly, academic development. It represents a continual effort to interrelate conceptions of the qualities and social dynamics of place with notions of the social processes of ‘shaping places’ through the articulation and implementation of policies” (Healey, 2012, pp. 214-215).

After World War Two planning internationally adopted a modernist approach. One of the spatial planning methods used was master planning (Todes, *et al.*, 2010; Harvey, 2007; du Plessis, 2014). This took the form of developing plans for large areas of urban space. According to Todes *et al* (2010) the key focus was on land-use and its spatial distribution. The modernist approach was the separation of land uses, and had an emphasis on infrastructure, services and public investment (Todes, *et al.*, 2010; Dewar, 2000). Planning was also at the forefront of reconstructing war torn Europe, developing welfare states to deliver reasonable qualities of life to the citizens (Healey, 2012).

Planning has since shifted from this master planning focus and become more flexible in response to urban contexts, including approaches to involve residents in public decision making through participative processes (Steenkamp & Winkler, 2014). It is also important to note that, since 1900, there has been rapid urbanisation within countries, and that along with this urbanisation have come many challenges (Nel, 2011). In South Africa rapid urbanisation occurred in the 1970s with migration from the rural areas and the rise of informal settlements. South African cities were ill-prepared for the challenges of urbanisation which has led to an inefficient urban structure (Janse van Rensburg & Campbell, 2012). This urbanisation happened rapidly with the apartheid government failing to ‘control’ the movement of the black population. The rapid increase of informal settlements and inward-migration of people to the cities, meant that the government was no longer able to direct spatial planning in a structured manner. This rapid influx to the cities was due to the deterioration in the homelands, where there was mass overcrowding, and a failing economic system (Maylam, 1990; Maylam, 1995)

Planning has been described by Innes (1998, 52 cited in Portugali & Alfasi, 2008, p. 269) as *“what planners do most of the time is talk and interact...Dialogue and other forms of communication in themselves change people and situations”*. Therefore if planning discourse is a discussion it has the freedom to change and shape itself to a given context (Portugali & Alfasi, 2008). This description shows how planning can be flexible and adaptable to new ideas and concepts. Planning must also link with many other disciplines and ideologies and bring thoughts together to plan better living environments.

Moreover, in general, planning is seen as a government practice which has evolved to address the difficulties and complexities of activities which share locations. Planning practice as a form of governance implies it is a motivating force in knowing what the best action is in light of the available knowledge while also giving attention to any foreseeable challenges (Healey, 2011).

Planning Triangle

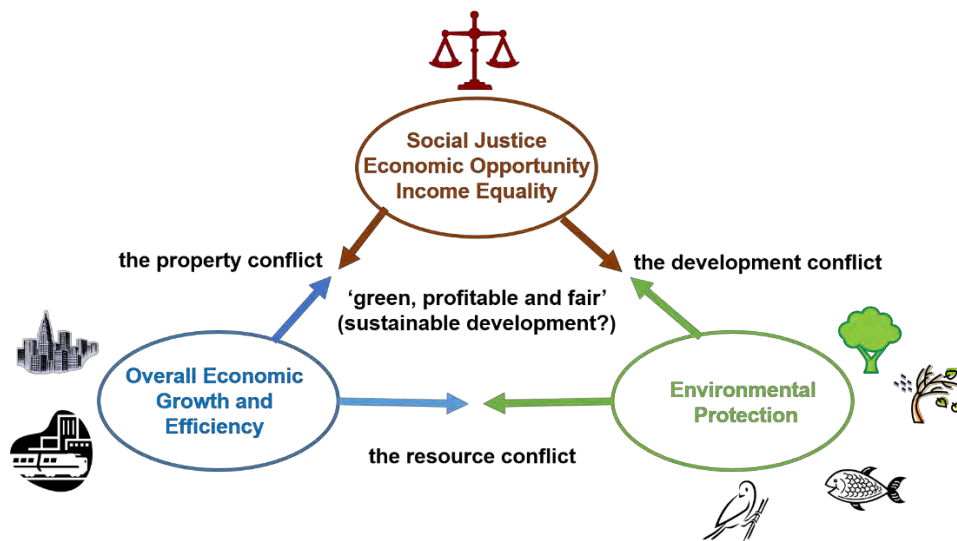


Figure 2.1: Planning Triangle (Campbell, 1999, p. 253)

In terms of planning the three societal discourses (see Section 2.1) can be depicted in Campbell's (1999) planning triangle (refer to Figure 2.1). He believes planners can focus more on one specific objective for example, social planners who are more interested in planning to correct social issues and imbalances, planners who focus on planning for economic growth and environmental planners who are the most interested in environmental preservation. According to Campbell (1999, p. 257) *"the crucial point is that all three groups have an interactive relationship with nature the difference lies in their conflicting concepts of nature"*.

According to Campbell (1999) planners are caught within the tensions of these three objectives and he believes that planners have no fixed home within a particular issue and move within the space defined by the three development objectives. Thus in short, *"the planner must reconcile not two, but at least three conflicting interests; to 'grow' the economy, distribute growth fairly and in the process not degrade the ecosystem"* (Campbell, 1999, p. 252). These three tensions are found in all development projects and the key is finding the best workable solution to mitigate the tensions and created sustainable development.

Megaprojects

Megaprojects are characterised by being: large scale; complex; state-led public-private partnerships; having multiple developers; politically sensitive; having a high investment

expenditure; and with a long-time frame (Bruzelius, *et al.*, 2002; Capka, 2004; van Marrewijk, *et al.*, 2008; Diaz Orueta & Fainstein, 2008; Hannan, 2012; Sutherland, *et al.*, 2014 ; Robbins, 2014). Megaprojects can be defined as economic projects such as industrial estates or infrastructure projects, for example the building of roads (Sutherland, *et al.*, 2014). Diaz Orueta and Fainstein (2008, p. 760) also define megaprojects as having “*complex contexts (mixed use residential, services, industries, shared facilities, new transport facilities etc.)*”. This definition of complex contexts best describes the Cornubia Housing Project which has conceptually included all of these uses. Internationally housing is not normally the main focus of a megaproject, however, in the South African context, because of political, economic and social pressures, there has been a drive to develop integrated human settlements as large scale housing developments (Sutherland, *et al.*, 2014).

Megaprojects are strategies to stimulate economic growth and promote more private investment (Hannan, 2012). These projects are part of a national state pro-growth agenda with power plays between the different development stakeholders (Sutherland, *et al.*, 2014 ; Robbins, 2014 ; Diaz Orueta & Fainstein, 2008). The powers of different stakeholders have an impact on how the space is conceptualised and how it will eventually be developed physically (Robbins, 2014). The thrust for the development of megaprojects in South Africa has been to drive economic growth, in focusing on the pro-growth agenda it has been challenging to stimulate social redistribution (Sutherland, *et al.*, 2014).

New Urbanism

New Urbanism is the counter argument to modernistic development principles, and according to Shibley (1998, p. 80) it is “*a reconceptualization of the American Dream*”. The new urbanism paradigm came to prominence in 1981 when a resort town was built in Florida. The development principles became prominent and a group of “New Urbanists”, including the couple who had designed the Florida town, founded the Congress for New Urbanism (CNU) to promote and spread information on this paradigm (Sander, 2002). However, the principles in New Urbanism can be traced back further to the 1970s to planners in the Midwest and San Francisco (Falconer Al-Hindi, 2001). New Urbanism, also known as “*neo traditional planning*”, is seen as an alternative to the continued patterns of low-density, car-orientated planning in the United States (Ellis, 2002, p. 261; de Villiers, 1997; Trudeau & Malloy, 2011).

The CNU produced a charter outlining the key principles of New Urbanism as being: compact development; public transport orientated; a range of household types; public space; non-gated; walkability; and mixed-use (Ellis, 2002; de Villiers, 1997; Trudeau & Malloy, 2011; Falconer Al-Hindi, 2001; Grant, 2007). These principles offer a normative depiction of places that are distinctly “urban” (Trudeau & Malloy, 2011, p. 425).

The critiques of New Urbanism focus on: the continuation of sprawl; the ideal of utopia; developments taking place on Greenfield sites; and the difficulties of implementation in practice (Falconer Al-Hindi, 2001; Trudeau & Malloy, 2011; Shibley, 1998; Grant, 2007). In Canada critics have indicated that the demand for new urbanist developments is low as people are preferring to live in gated estates (Grant, 2007). The New Urbanism paradigm is important as it has shaped the planning discourse in South Africa. The main principles are found in planning thinking and the challenge to create better places for all South Africans.

2.4 Planning Discourse in South Africa

Planning before 1994 was framed by apartheid government policy which created a lasting effect on the spatial characteristics of South African cities, towns and hinterland. These spatial characteristics have been very challenging and the discourses found in South African planning, well into democracy are influenced by the enduring apartheid spatial structure.

South African pre-1994 Planning Context

The Western Cape was the first area of South Africa to be colonised. The dominant colonialists of this time were the Dutch and the British, and towns were founded according to the traditions of these two nations. Churches were central to the Dutch town structure whereas market squares were central to British towns. As more people arrived and settled four colonies were created: the Cape; Transvaal; Natal, and the Free State. In 1910 these four joined together and formed the Union of South Africa (Harrison, *et al.*, 2008; Mabin & Smit, 1997).

At this time the colonialists began to exclude and segregate the indigenous black population, and did not include this indigenous population in the Union. The 1913 Land Act formally confined the black population into native reserves, which only encompassed 13 percent of the land mass of the country and limited their rights and ownership of land (Harrison, *et al.*, 2008;

Todes, *et al.*, 2009). This exclusion led to the creation of the African National Congress (ANC) as a political party in 1913 (Harrison, *et al.*, 2008).

The Natives (Urban Areas) Act of 1923, a key piece of legislation, was passed in this period. In the short-term the recommendations in the act were not implemented, however, it had a broader, long-term significance as key elements in the act were used and enforced by the apartheid government (Maylam, 1990; Mabin & Smit, 1997; Christopher, 1987; Maylam, 1995). Moreover, in the 1930s the modernist ideologies, for example those of Le Corbusier, became dominant in South Africa. (Harrison, *et al.*, 2008; Parnell & Mabin, 1995).

The apartheid era (1948 to 1994) was a period of government control and the introduction, implementation and enforcement of explicit racially discriminatory policies. At the national level planning was an integral tool in achieving segregation. The three main phases of apartheid began with “*Grand Apartheid*” (Maylam, 1990, p. 70; Christopher, 1987) where homelands were created for the black population in the rural periphery. This had an impact on the rural areas and by the 1970s, as mentioned, the homelands were overcrowded and failing economically. The second phase was the passing of both the Population Registration Act and the Group Areas Act in 1950 (Maylam, 1990; Maharaj, 1997; Christopher, 1987; Maylam, 1995). These acts enforced that firstly, everybody had to be registered by their race, and then forcefully moved to a designated racial area. Vast African townships¹¹ were built during this period and they were modelled on the modernist principles (Mabin & Smit, 1997). The third phase was petty apartheid with local level laws enforced to separate race groups from for example, using buses, public services and schools.

The modernist approach was embraced by the apartheid government and the modernist ideals were used to shape the apartheid city model (Parnell & Mabin, 1995; Dewar, 2000). Dewar (2000) explains that the modernist views were firstly anti-urban as sprawling residential suburbs with one building on one plot were favoured and this was deemed ‘*ideal living*’. The second modernist idea was the separation of land-use activities which allowed the apartheid city to take shape, desired activities such as commerce and retail were kept out of the black

¹¹ The townships were dormitory suburbs with much lower order services than in the urban white areas. These suburbs were based on the “New Town” modernist approach.

residential areas. The third idea was around the ideology of neighbourhood units. These neighbourhoods were inward looking (disconnected from the greater urban areas in the form of isolated islands, within a complex network of access-restricting roads). Finally, because of this network of restrictive roads, the modernist development approach was designed around the private car (Dewar, 2000; Watson, 2011; Parnell & Mabin, 1995).

By using these modernist principles the apartheid government could justify their spatial patterns as being international best practice. The apartheid government also used the British design principle of 'green belts' to further their spatial policy of separation. Green 'buffer zones' were created together with using industrial land and transportation corridors, such as railway tracks, to separate the different race groups (Harrison, *et al.*, 2008; Maylam, 1990).

The apartheid government started to weaken in the 1970s (helped by two main events, the strikes of 1973 and the Soweto uprising in 1976) (Maylam, 1990; Mabin & Smit, 1997). The apartheid era ended through negotiation and compromise when the old regime was elected out of power in the first all-inclusive democratic election in 1994 (Harrison, *et al.*, 2008). However, there was a period from 1990-1994 that was promoted by two positive actions which led to the dawn of democracy; the unbanning of the ANC, and the release of Nelson Mandela (Harrison, *et al.*, 2008).

The apartheid planning legacy has been characterised by separation, fragmentation, and sprawl (Bremner, 2000; Dewar, 2000; Harrison, *et al.*, 2003; Harrison, *et al.*, 2008; Coggin & Pieterse, 2012; Todes, 2003; Janse van Rensburg & Campbell, 2012; Freund, 2010; Haferburg, 2002; Todes, *et al.*, 2000). These three characteristics are very important to understanding the challenges faced by the democratic government post-1994 and why, well into democracy, challenges still remain.

Post-1994

The government intention at the beginning of democracy was the pro-poor Reconstruction and Development Programme (RDP, 1994), however, this initiative shifted to the pro-growth policy Growth Employment and Redistribution (GEAR, 1996). With the reintegration into the world arena, global discourse filtered into the government thinking, with the societal discourse of

neoliberalism being influential (Williams & Taylor, 2000). This is a significant shift as the focus of government was dominated by growing the economy and much of the social transformation discourse in the RDP was muted (Harrison, *et al.*, 2008). However, the ideology of the ‘Developmental State’¹² stayed in the government policy framework, with an emphasis on Developmental Local Government (DLG).

The immediate post-apartheid period was characterised by high income inequality, and this inequality and poverty has deepened in the post-apartheid era (Adato, *et al.*, 2006). The main concern is the dual economy with the first being the formal economy, and the second constituting structural manifestation of poverty, underdevelopment and marginalisation (May & Meth, 2007; Nattrass & Seekings, 2001). Moreover with the increase in poverty and inequality there is a presence of poverty traps, which hinder mobility and prevent individuals getting ahead. The poor have few assets and market failures have resulted in weak opportunities. Furthermore the growth in the economy has resulted in weak employment growth (May & Meth, 2007).

Housing the poor is an issue that has also persisted well into democracy and there is acceptance that this issue has become more problematic as there is growing concern about how to deal with the increasing number of people living in informal settlements (Cross, 2008; Pithouse, 2009; Huchzermeyer, 2003; Huchzermeyer, 2009). The RDP housing strategy was focused on mass delivery, as there was a huge backlog of state provided housing inherited from the apartheid era (Mackay, 1999; Cross, 2008; Bradlow, *et al.*, 2011). However, the official housing backlog has increased from 1.5 million to 2.5 million people since 1994 (Bradlow, *et al.*, 2011; Bank, 2007). The targeted housing subsidy is for households earning less than R3500 per month, and the predominant typology is the RDP style small house on a stand (Landman & Napier, 2009).

Following the Housing Act 107 of 1997 The Breaking New Ground (BNG) (South African Department of Housing, 2004) document was released in 2004 and gave new options for delivery, new delivery modes and housing subsidy mechanisms with an emphasis on the rental

¹² The ‘Developmental State’ ideology which originated from Asia, with the South Korea model being most influential for South Africa (Nattrass, 2011). The definition given by Marais (2011, p. 339) is that “*the developmental state refers to a model of economic growth and social redistribution in which the state acts, with varying degrees of autonomy, as a major variable promoting that growth, determining its pattern and ensuring social development*”.

market (Cross, 2008). The BNG also provides for *in situ* upgrading and social housing, which is medium density housing for rental (Landman & Napier, 2009; Aigbavboa & Thwala, 2011; Bank, 2007). The new housing document (BNG) marks a shift away from RDP housing units to the delivery of '*sustainable human settlements*', however, the process is complex (Tomlinson, 2011). More recently the New Growth Path (NGP, 2009) and the National Development Plan (NDP, 2011) have emerged. The NGP focus is on infrastructure projects and employment creation (Nattrass, 2011), whereas the NDP is a document that critiques the past development trajectory of the country and puts in place a '2030 vision' for the country to move towards with regards to development (National Planning Commission, 2012).

Much of the literature argues that although the government had good intentions, the BNG has failed to produce the envisioned sustainable human settlements. This is due to lack of implementation; institutional capacity problems; market forces creating high land values; extensive backlogs; corruption; and sub-standard building practices (Bank, 2007; Pithouse, 2009; Huchzermeyer, 2009; Cross, 2008; Del Mistro & Hensher, 2009; Tomlinson, 2011; Goebel, 2007; Pottie, 2004)

There have been many other policies which have influenced development and planning in South Africa, however, the main point to understand is the shift in ideological thinking to become more in line with the global discourse for market driven development and how this has affected the social transformation of the country. The four main planning discourses identified (spatial; social transformation; economy and the market; and sustainability) have been influenced by this shift in policy thinking and usually exist together, with overlapping ideas. However, to identify the main concepts within each discourse it is necessary to separate them out and examine the discourses in isolation.

2.4.1 Spatial Discourse

The three main spatial discourses are: New Urbanism; nodes and corridors; and gated estates (Harrison, *et al.*, 2008; Dewar, 2000; Landman, 2004; Todes, 2006; Janse van Rensburg & Campbell, 2012). Compaction has been one of the main drivers in spatial discourse, to rectify inequalities and other social challenges, such as access to basic services, creating economies of scale, and affordability. Another focus has been on restructuring and integrating cities by

creating better access to housing for the poor and to re-examine the pattern of building subsidised low cost housing on the periphery of towns and cities (Parnell & Pieterse, 2010).

The settlement pattern in South Africa is unsustainable, both environmentally and economically (Dewar, 2000; Janse van Rensburg & Campbell, 2012). Therefore compaction is necessary to improve urban performance. However, to achieve this substantial urban restructuring is required (Dewar, 2000). One method of densification is by creating an urban development line. The urban development line is an English concept from the 1940s, whereby towns established green-belts as physical mechanisms to inhibit sprawl (Janse van Rensburg & Campbell, 2012). The urban development line has been adopted by many cities in South Africa to contain city growth, by drawing an abstract line around the urban areas of cities, whereby development is not accepted on the outer edge of the line. In the South African context green belts have not been used as the land on the outer edge of the line is already agricultural or rural land. However, research undertaken in Plettenberg Bay suggests that, even with a development line, low density gated estates are still being built and the poor located on the periphery (Janse van Rensburg & Campbell, 2012).

Another spatial concept found in South African planning discourse is corridors and nodes. In the international literature, according to Whebell (1969, p. 1), a major proponent of corridor theory, *“the term corridor, applies to a linear system of urban places together with the linking surface transport media. Corridors are very persistent historically, and they form one of the major types of urban systems in the new world”*. Stupar and Sacic (2009) describe corridors and nodes as ‘streams’ and ‘webs’, whilst Primus and Zonneveld (2003, p. 167) express corridors as being *“bundles of infrastructure”* linking urban areas. In South Africa the notion of corridors has been used to spatially integrate formally disadvantaged areas into the city structure. As Haake (1972) argues, corridors form part of an integrated urban system. There has also been a trend for commercial decentralisation and the creation of multiple commercial nodes (Harrison, *et al.*, 2008; Coggin & Pieterse, 2012).

Another dominant development feature in South Africa has been the rise of gated residential estates. Gated estates are large housing developments, usually built for the high end of the market, which have high walls and limited access points, and are guarded by 24 hour security.

Landman (2004) argues that the proliferation of gated estates has led to the continuation of spatial fragmentation and social exclusion. The main reason behind the rise in gated communities has been due to high crime rates and the overall fear of crime (Landman, 2004; Harrison, *et al.*, 2008). In addition to the rise in gated estates there has been a trend in some suburbs to use boomed security entrances across public roads, which have created “enclosed neighbourhoods” (Landman, 2006, p. 133).

Furthermore these private housing developments have been market-driven, which has culminated in them being developed close to existing high-income areas. This continuation of high-end development has impacted negatively on the idea of spatial integration and has instead created spatial divides between the rich and poor. Moreover, gated estates are built on greenfield sites which reduces the amount of good quality, easily accessible land. Thus, the local government is challenged in being able to develop low-cost housing in accessible, desirable locations (Landman, 2004).

2.4.2 Social Transformation

“As is evident in almost every policy and piece of legislation relating to planning produced after April 1994, the new government has (more or less) consistently seen planning as an integral part of its (evolving) programme of social transformation” (Harrison, *et al.*, 2008, p. 135).

The first policy for social transformation was the RDP. The RDP objectives were: meeting the needs of the people; developing human resources; building the economy; democratising the state and society; and shifting to a more people-centred approach (Harrison, *et al.*, 2008; Peet, 2002). The RDP called for the national government to carry out integration planning to achieve normative objectives of sustainable growth, equity and empowering the poor (Harrison, *et al.*, 2008). However, with the shift in macroeconomic policy to more market driven neoliberal ideals the policy of DLG was initiated to strengthen both grassroots participation and development delivery. The local government sought to work together with local communities and find sustainable ways to improve quality of life, by maximising both social development and economic growth, which is conducive to creating job opportunities (Nel, 2004).

The Integrated Development Plan (IDP) is a tool, essentially a 5 year business plan¹³, to guide the implementation of the DLG initiative. The IDP is a strategic plan which provides a focus on the future management of cities and their complex urban environments (Coetzee, 2012). The formulation of the IDP has proved to be a complex process for a number of reasons which include: lack of instruments (guidelines and principles) to deal with the IDP ideals; the need to plan long-term horizons; and the lack of support outside local government (Harrison, *et al.*, 2008; Oranje & Van Huyssteen, 2007). The goal of the local government is to achieve participatory governance through the IDP. This goal has seen some progress, but there are still tendencies for a technocratic planning approach to participation (Harrison, *et al.*, 2008).

Integration has become a label for transformational planning in South Africa and has most prominently been captured in the IDP as a method for social transformation. The main focus to date in planning has been around spatial integration rather than social integration (Harrison, *et al.*, 2008). It is also argued that the focus has been on process and structure, rather than on what needs to be achieved. There was an assumption that better outcomes would be achieved through creating big municipal entities (municipal restructuring in 2000, guided by the Municipal Restructuring Act, 1998) and increasing the number of plans developed by the municipalities (Schmidt, 2008). However, the outcomes across the country have been mixed, and in the majority of cases the bureaucratic thinking has been reinforced instead of the ‘developmental’ thinking within the IDP process (Schmidt, 2008).

Along with the ideology behind the DLG, the housing policy was re-examined and the ‘Breaking New Ground’ (BNG) was introduced in 2004. Firstly this policy critiqued the continuation of reinforced spatial dysfunctionalities and social inequalities (Menguele, *et al.*, 2008; Pithouse, 2009). Including, as mentioned earlier, the continuation of the apartheid spatial patterns, with low-cost housing built on the cheaper land at the periphery of the urban areas (Robinson, 2008; Swilling, 2008; Turok, 2013). Secondly, the BNG acknowledged the failings of the supply-driven approach of the RDP which has resulted in the development of low-cost ‘matchbox’ houses. The vision of the BNG is therefore for the development of “*non-racial integrated socially sustainable human settlements*” (Menguele, *et al.*, 2008). The BNG vision is the key driver in the Cornubia development.

¹³ Reviewed annually

Furthermore, the BNG stipulates that twenty percent of all new developments should be earmarked for low-cost housing. However, this quota has not been taken very seriously and there have been negotiations between private developers and the government to locate the low cost housing away from the middle and higher income housing thereby reinforcing apartheid spatial characteristics (Harrison, *et al.*, 2008).

Thus, of the four main discourses found in South African planning social transformation has remained the most challenging and complex. Social integration and the inclusion of the poor into the workings of the city have not been as easy as envisioned at the dawn of democracy. Social transformation will be a long and challenging process that will dominate South African development thinking for many years to come and will no doubt be in political, academic and policy discussions for the foreseeable future.

2.4.3 Economy and the Market

Planning and the economy are tightly linked as the market has influenced planning both internationally and in South Africa. According to Peet (2002), between the mid-1980s and mid-1990s, there was a period of economic liberalisation for South Africa. However this liberalisation created many economic challenges for the new democratically elected government. These challenges were: integrating the economy into the global arena; attracting foreign investment; and becoming more competitive (Marais, 1998).

The shift from the RDP to GEAR was due to pressures from business and global forces. GEAR was introduced as a medium-term plan, which would bridge the existing constrained economic environment and achieve improved growth and employment (Chipkin, 2002). This strategy changed the conception of the role of the state and the government transformed to a tightly structured unit to lead development and economic growth. This is more in line with international views of the World Bank and UN-Habitats where the state facilitates private sector development and development in the cities is driven with a more laissez-faire approach with capital from private investment (Robinson, 2008; Brenner, 2004; Harrison, *et al.*, 2008). Cities have also been identified as being at the forefront of economic growth and the majority of government spending occurs within cities and urban areas (Robinson, 2008). Post-1994 South

African cities have become increasingly influenced by global forces with a tendency for the private sector to lead the development process (Robinson, 2008).

GEAR limited the ability to deliver services to the poor and this led to the promotion of the international practice of Local Economic Development (LED). The LED approach was to integrate development in an equitable and sustainable way (Mongale, 2003). Thus, LED became the key focus for planners as part of DLG. The South African White Paper on Local Government (DPLG, 1998) required municipalities to '*promote integrated economic development*' (Xuza & Swilling, 2008, p. 264). Partnerships between local government, communities and the private sector were highlighted as being an important part of LED (Xuza & Swilling, 2008). The importance of partnerships is also argued by Rogerson (2010) as collaborations between municipalities, private sector and civil society are important in successful LED approaches. There has been much debate as to whether LED has been successful so far in South Africa. Nel and John (2006) , Rogerson (2006) , and Xuza and Swilling (2008) have reviewed LED in the South African context in depth and argue that LED has achieved positive outcomes but that there are challenges still to be addressed.

The implementation of the LED approach has been criticised as failing due to lack of sustainable economic activities and weak capacity at local government level to carry out the policy objectives. It was also assumed that LED would solve all socio-economic problems at the local level (Harrison, *et al.*, 2008). However, the task of applying LED has been an opportunity for learning from experience through trial and error which has created the ability to hone the ideas of LED and create a South African version which is more adaptable for solving the challenges that face local municipalities (Xuza & Swilling, 2008). According to Nel *et al* (2003) local authorities need to engage in social and economic development to improve livelihoods. They flag that the two key points to be achieved are firstly to provide for the needs of the poor and secondly to develop the economic capacity of urban areas. Harrison *et al* (2008) explain that the pro-poor elements have not done so well in practice as the dominance of the market is leading development. Therefore as Xuza and Swilling (2008) indicate there is a need for a top-down (experts) and a bottom-up (grassroots) approach to achieve the desired economic development at the local level.

Urban regeneration of marginalised and declining areas has also been an economic focus of government to facilitate redressing apartheid inequalities, as the assumption has been that economic growth could be stimulated by the state. This push for regeneration has also been due to the growing trend of decentralisation, whereby business has moved out of the inner cities to new business parks on the periphery (Harrison, *et al.*, 2008). For example in the eThekweni Municipality, business has moved out to the north of the municipality around the Umhlanga new town centre. Low income and informal trade has moved into the inner cities to fill the vacuum, which has created a less desirable inner city environment. There has also been a lack of investment up-take in the township areas and government has not given economic development much attention in these areas (Turok, 2013).

Spatial planning, according to Harrison *et al* (2008), has a weak understanding of economic development; plans rarely incorporate analysis of economic spaces and the dynamic nature of space. *“Little attention is paid to how the city economy works spatially, and what kinds of spaces, infrastructure and forms of regulation are required to make it work”* (Harrison, *et al.*, 2008, p. 154). Also there has been a focus on abstract design rather than detailed planning, which has made economic analysis challenging. Therefore much of the large-scale investment capital is developed in areas away from poverty, to serve middle-income consumers in the form of car-orientated shopping and office complexes (Harrison, *et al.*, 2008).

To overcome the economic challenges, especially unemployment, the NGP of 2010 was launched as a government strategy to build an inclusive economy. The strategy aimed at co-ordinating eighteen strategically integrated projects to build both social and economic infrastructure. According to Nkwinti (2012) the NDP has taken precedence over the NGP, however together they are envisioned to transform the economy. The NGP aims to generate five million jobs by 2020, favouring creation of full-time skilled work. The NGP has been argued to be short of detail and to put many constraints on how the path is to be realised to be fully achievable, with conditions attached to a range of structural, organisational and ideological changes (Nattrass, 2011).

2.4.4 Sustainability

Sustainability, as mentioned earlier, is rarely adequately defined. In South Africa many of the challenges which result in unsustainable resource-use are key issues for municipalities to solve. These challenges include: traffic congestion; high energy prices; and securing landfill space (Swilling, 2008). In the 1950s and 1960s, when planning was linked to the modernist ideologies, environmental concerns were marginalised. Therefore governmental environmental management practice emerged outside of planning (Todes, *et al.*, 2009). Even today, within government, there is a separation between planning and environmental management. The key issue is that both are seen as being two different disciplines with different legal processes. This separation also hampers the process of land use change (Harrison, *et al.*, 2008).

The main influences on environmental management in South Africa have been the 1987 Brundland Report, and the 1992 Rio Summit which created the Agenda 21¹⁴ principles. The ideas from these international reports filtered into the South African National Environmental Management Act No. 107 of 1998 (NEMA), which sets out guiding environmental principles for all development in South Africa. Sustainability principles have been incorporated into all post-apartheid legislation since the introduction of NEMA (Harrison, *et al.*, 2008). NEMA is seen as a ‘*landmark*’ piece of legislation as it enables stronger strategic environmental management (Todes, *et al.*, 2009, p. 421). It is also mandatory for all levels of government (national, provincial and local) to take responsibility for the environment, however, environmental management is a local government mandate (Swilling, 2008).

Environmental Management is more reactive than planning as NEMA has a statutory requirement for an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) to guide decision making, implementation, and maintenance of large-scale or ecologically challenging development to provide environmental protection. (Todes, 2008). However, an EIA is regulated by the activity relating to the development, therefore the

¹⁴ Agenda 21 is a voluntary action plan which was produced by the United Nations and national governments at the UN Conference on environment and development which was held in Rio de Janeiro, Brazil from the 3-14 June 1992 (ICLEI, 06/11/2014). This plan has become a non-binding declaration of nations on achieving sustainable development. The document advocates local governments taking responsibility for sustainability. The principles laid out in the document were reaffirmed at the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002 (Sustainable Development Knowledge Platform, 06/11/2014).

majority of small scale applications do not require an EIA as they do not harm the environment (Todes, *et al.*, 2009).

Planning approval is obtained at the local level, while environmental approval is sought at the national level. Therefore each process is assessed by different spheres of government and governed by different legislation. The process works in parallel, including the public participation process. This dual system throws up many concerns, such as it results in development being slowed down. Moreover with the dual system it is not clear whether better decisions are being made or whether the development outcomes are sustainable (Harrison, *et al.*, 2008). The EIA process also takes up to nine months for approval thus this can delay the planning process and decisions (Todes, *et al.*, 2009). The approval given is a Record of Decision (ROD), planning decisions are dependent on the environmental approval and the local government cannot approve a planning application until the ROD has been given. Therefore it can be assumed that environmental approval at national level takes precedence over planning approval at the local level.

There is no mandatory EIA type process for large-scale town or city level development plans. The closest process, according to Swilling (2008), is the Strategic Environmental Assessment (SEA) which has been incorporated into the Spatial Development Framework¹⁵ (SDF) process which informs the IDP. However, this has not been fully embraced and leaves the environmental visions for municipalities weak and underdeveloped (Swilling, 2008). Todes *et al* (2009) argue that few SDF have been reviewed through the SEA process. Furthermore the IDP process has had little success with developing a clear sustainability mandate. Social and economic issues are more dominant than environmental issues as they hold greater appeal to stakeholders and politicians.

2.5 Summary

Planning discourse in South Africa has been heavily influenced by a number of different forces. Firstly, the challenge of pro-poor development and how to create better living environments to serve the poor. Secondly, the reintegration of the country into the global arena, which has

¹⁵ The SDF is discussed in more detail in Chapter 3

influenced the government to shift thinking from pro-poor ideas of development to pro-growth ideologies. Thirdly, the growing concerns of climate change and how that affects development. Lastly, dealing with the more unique challenges of rectifying the inequitable and unsustainable apartheid patterns of development; an inheritance from the apartheid government.

Planning as a discipline is highly influenced by many different discourses and it is the responsibility of a planner to consolidate these ideas and decide how to create the best development strategies for a specific context. South Africa has many challenges to overcome, adopting the right discourse within government is the key to successful developmental outcomes. The shift to more neoliberal ideologies has created more challenges, however, this discourse has been globally embraced and influences decision making across the world. The challenge for South Africa is to weave the three societal discourses of pro-poor development, pro-growth development, and sustainable development into government policy whereby the poor are elevated, the economic growth of the country is increased, and the environmental assets of the country are protected. The next chapter moves the focus to the eThekweni Municipality, KwaZulu-Natal. The three areas discussed are the Municipality, the NMPR of the Municipality, and Cornubia.

Chapter Three: eThekwini Municipality, the Northern Municipal Planning Region, and Cornubia

3.1 Introduction

Planning discourse is influenced in any municipality by a number of key issues. These being: international and national legal obligations; internal policies, politics, and plans; and local political, social, economic, and environmental settings (Lubke, 2004). The spatial patterns of the eThekwini Municipality, inherited from the apartheid era, are challenging as indicated by Sutherland *et al* (2013, p. 1) “[t]he spatial structure of the city, which is fragmented and reflects a pattern of sprawl, is a major obstacle to achieving sustainable, efficient, and equitable development”

In the post-apartheid era many new pieces of legislation and policies have been passed to replace apartheid legislation and to correct the spatial form of apartheid planning. The significant discourses in planning have been discussed in Chapter 2. One of the main changes post-1994 is that local municipalities are now the key agents in development and are the important decision makers.

Cornubia has been used in this research as a case study to investigate the knowledge production process within a large scale mixed-use development. This project had many different stakeholders, both in the public and private realm, and it allows the examination of the three contexts: the eThekwini Municipality; the Northern Municipal Planning Region (NMPR) of the municipality; and the Cornubia site. Firstly it is necessary to consider the municipal organisation, the split into four municipal planning regions, and the hierarchy of plans. Secondly to focus on the NMPR, which is one of the four municipality planning regions in the eThekwini Municipality, and to examine the developments, megaprojects and the Northern Urban Development Corridor project (NUDC). The NMPR is of great significance as it is the high growth area of the municipality and has many important developments, which are shaping the future of the city. Thirdly it explores Cornubia; its history; the location; the plans for the project; and finally the significance of the project for the eThekwini Municipality as well as nationally.

3.2 Durban pre-2000

Historically Durban was developed around a T-shaped main road network with the coastal road going north-south and the interior road going west away from the Indian Ocean. During apartheid the most accessible areas of the city were reserved for the white population. The black population were located on the periphery (Todes, 2003). The area where Cornubia is situated is close to the African group areas townships of KwaMashu and Inanda, which during apartheid fell within the homeland of KwaZulu (Hall & Robbins, 2002). However, with the demise of apartheid and rapid urbanisation, the city saw a steep rise in informal settlements within the urbanised part of the city (Todes, 2003). According to Lubke (2004) apartheid planning, like within all cities in South Africa, saw the vast majority of the poor and marginalised located on the edges of wealthy urban centres. This spatial pattern has left the historically black residential areas on the periphery. For an in-depth history of the development of Durban pre-1994 refer to Maharaj (2002), and for a perspective of economic planning and development during apartheid in the City refer to Freund (2002).

In the post-apartheid era new divides have now occurred between the rich and the poor. Todes (2003) identifies the development in the NMPR as being consistent with what is happening in other South African cities. In this zone the development was and is market driven, with a focus on catering for high-income residents of the city. The new development that has taken place has not integrated the older lower and middle income areas. Cornubia is envisioned as being the development that ‘stitches’ the areas together and provides linkages to all the existing residential and commercial developments (Real Consulting, 2011).

3.3 EThekweni Municipality

In December 2000 new municipal boundaries were created in line with the Municipal Demarcation Act (No. 27 of 1998). A number of regulating authorities were combined to create the eThekweni Municipality. The eThekweni Municipality is situated on the east coast of the province of KwaZulu-Natal, South Africa. The area of the municipality is 2297 square kilometres (Lubke, 2004; Stats SA, 2013), which is 1.4 percent of the total province. The population is 3,442,361 as of 2011, with 74 percent being Black African (Stats SA, 2013) the Municipality is also the third largest by population in the country (Stats SA, 2013). The Gross

Domestic Product (GDP) of the eThekweni Municipality, calculated in 2010, was 65.5 percent of the province and 10.7 percent of the country. The top industries in the Municipality are: finance; manufacturing; community services; and construction (eThekweni Municipality, 2012a). The eThekweni Municipality has an important role in the national economy as South Africa's major port city, and is therefore the country's main entry and exit point for imports and exports (Lubke, 2004).

eThekweni Municipality is divided into four functional areas referred to as the Central, South, West and North Municipal Planning regions (refer to Figure 3.1). Figure 3.1 shows these four spatial planning regions as well as the two dominant transport spines going north-south and west into the interior, which is the original T-shaped road network. Each spatial planning region has a municipal administration office located in its main economic node. Due to the new municipal boundaries these planning regions include urban, peri-urban, rural, and traditional authority land. Cornubia has been represented in the 2012 eThekweni Municipality Spatial Regions Map (Figure 3.1) and the Spatial Development Framework (Figure 3.3), which shows the significance of this site as it was a greenfield site at the time.

The municipality has a diverse topography with a coastal plain in the east along the Indian Ocean. Moving west the topography changes to rolling hills and valleys with a steep escarpment at the Western boundary (Lubke, 2004). Due to apartheid spatial planning the areas close to the national roads are well provided with infrastructure and social services. However the areas on the periphery and in the rural areas have poor infrastructure or no infrastructure (Lubke, 2004)¹⁶.

Sutherland *et al* (2013) have highlighted that eThekweni, like all municipalities in the country, has to balance a dominant neo-liberal, pro-growth agenda with a pro-poor agenda. The eThekweni Municipality also has an influential environmental department, the Environmental Planning and Climate Protection Department, and all developers must take into consideration the environmental value of the natural assets of the Municipality. Thus, all three 'corners' of the Planning Triangle (Figure 2.1) are represented because the eThekweni Municipality has this strong environmental focus. Furthermore, the eThekweni Municipality embodies the four planning discourses outlined in Chapter 2.

¹⁶ This is a legacy from the homelands created during the apartheid era (see Chapter 2)

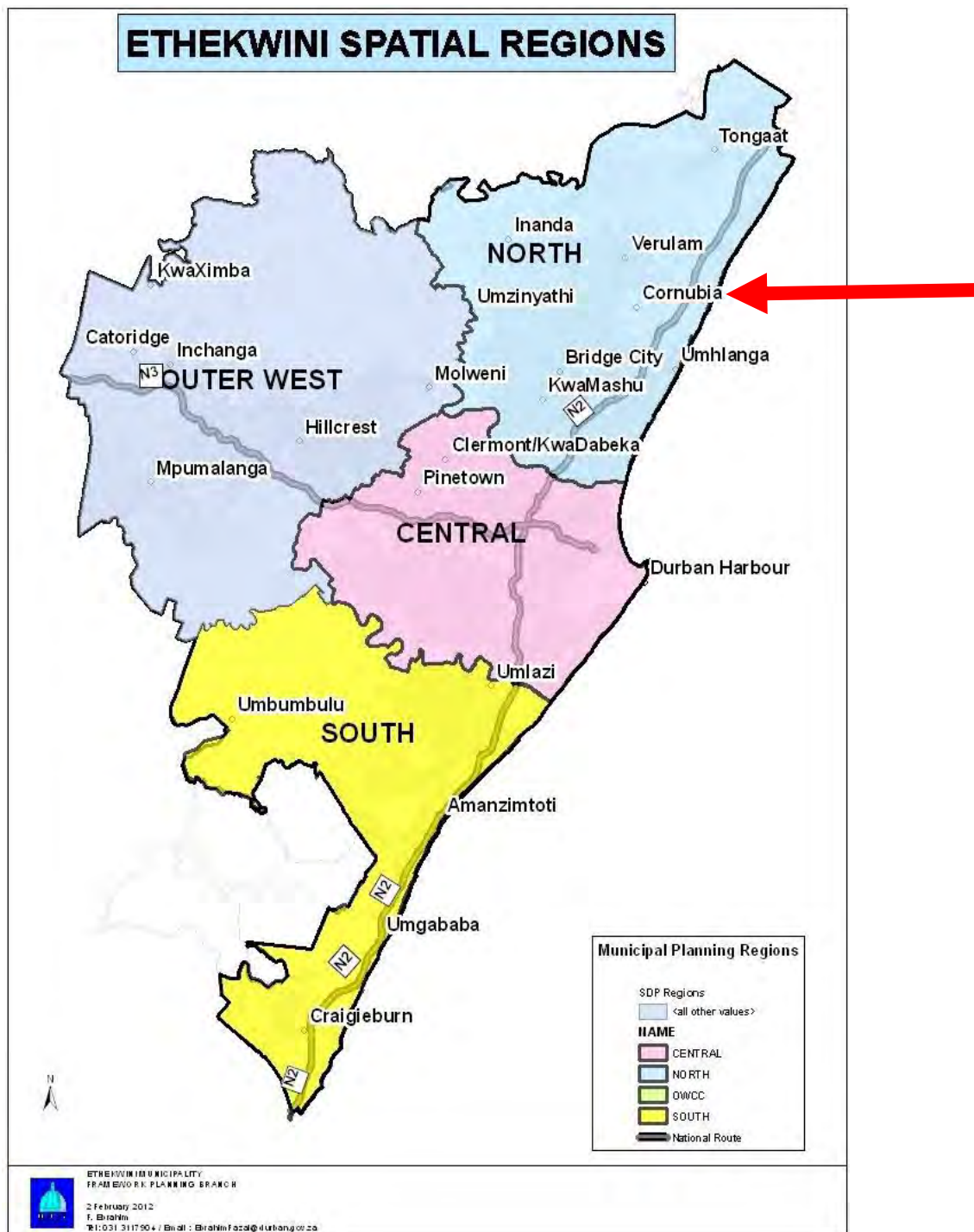


Figure 3.1: eThekweni Municipality spatial Regions (eThekweni Municipality, 2012b, p. 49)

As stated on the Municipality website (eThekweni Municipality, 2013a)¹⁷ the vision of the eThekweni Municipality is that *“by 2030 eThekweni Municipality will enjoy the reputation of being Africa’s most caring and liveable city, where all citizens live in harmony.”* The core values of the Municipality are: sustainability; economically successful city; caring city; smart city; and poverty reduction and a democratic and equal city (eThekweni Municipality, 2013a). These core values highlight the three dominating factors in development social, economic, and sustainability, and the city needs to find a balance between these three to be successful. However the Gini Coefficient¹⁸ of the Municipality is 0.639, which shows eThekweni Municipality as being highly unequal. This inequality poses a great challenge for the city to achieve its vision for 2030.

The urban development line (a tool to contain sprawl which is explained in Chapter 2), informs the planning and development in the Municipality. The line demarcates the outer edge of the waterborne sewage provision. This line also separates the urban development zone from the rural development zone (Sutherland, *et al.*, 2013). This line has been contested since the development of the King Shaka International Airport (KSIA) and Dube Tradeport (DTP), as both these developments were planned outside of the urban development line. The line has now been moved to incorporate both developments.

KSIA and DTP have been politically driven by both the national and provincial government. As Sutherland *et al* (2013, p. 4) explain *“decision making in the city, which is undertaken by politicians, is shaped by strong technical and spatial knowledge which is produced by officials. This has enabled the city to follow a relatively progressive path in service delivery, and to address its pro-poor goals”*. Development in the north has seen much political interest as it is the growth hub of the Municipality, with the largest population of the four municipal planning regions and a large concentration of developments.

¹⁷ Accessed on 21/10/14

¹⁸ The Gini Coefficient measures income equality and it ranges between 0 and 1. The value of one is perfect inequality and the value of 0 is perfect equality (Levine & Roberts, 2008; The Presidency, 2004)

3.3.1 Hierarchy of Plans

According to the Municipal Structures Act (No. 117 of 1998) the eThekweni Municipality is a ‘Category A’ municipality, and is one of six such municipalities in the country. The Integrated Development Plan (IDP) requires each municipality to create a Spatial Development Framework (SDF). The SDF is part of the hierarchy of plans (refer to Figure 3.2). This hierarchy shows a ‘nested’ development of plans with large scale broad concepts, with the SDF at the top of the hierarchy going down in scale to the more detailed precinct plans. Within the hierarchy, the NUDC Local Area Plan (LAP) sits above the Cornubia Framework Plan, which indicates the Cornubia Framework Plan as being more detailed. The eThekweni Municipality SDF (refer to Figure 3.3) provides a wealth of information and has been created by layering different knowledges to produce the plan. Some of the key features of the plan are: the urban development line, the 55 decibel noise contour (this will be explained further in Section 3.5); key nodes, such as Cornubia and the DTP. The plan also shows the environmentally sensitive land.

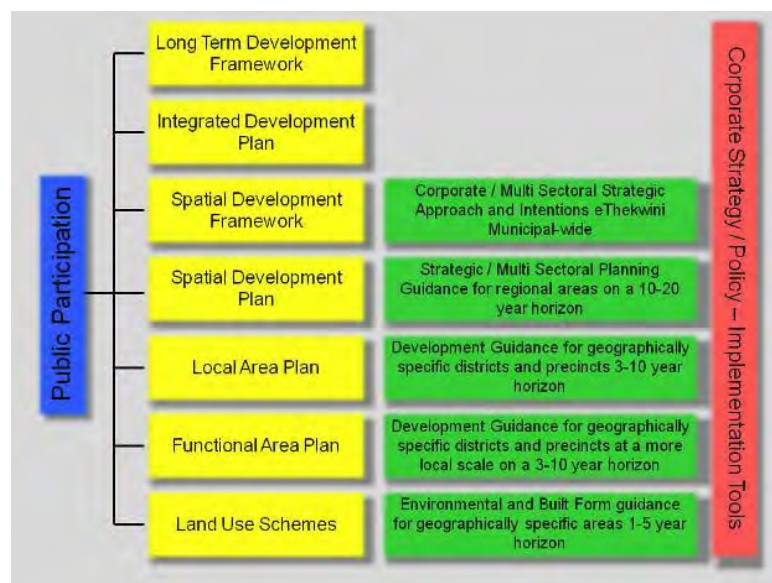


Figure 3. 2: Hierarchy of Plans (eThekweni Municipality, 2012a, p. 58)

3.4 Northern Municipal Planning Region

The NMPR is an important, dynamic part of the city. It is an area of 59764 hectares (26 percent of the total eThekweni Municipal area) and extends from the Umgeni River in the South to the town of Tongaat in the North, from the eastern coastline to UMzinyathi, Inanda in the west, and borders with the ILembe District Municipality in the West and North. Within the broader municipality the NMPR has the following roles, it: provides logistical support; has significant residential, commercial and services functions; specialises in coastal tourism and recreation; is a trade and industry investment centre; and has a significant agricultural support function (eThekweni Municipality, 2013).

The NMPR has become a growth area in the municipality for a number of reasons, firstly the KSIA and DTP have created the opportunity for business, industry, and other freight-orientated activities to locate themselves in the region. Secondly, Tongaat Hulett Development (THD) has a number of large land holdings which they own and intend to develop, and lastly the development of Umhlanga new town centre has led many commercial activities to relocate from the Central Business District (CBD) of Durban.

3.4.1 The urban development corridor

According to Iyer (2011a, p. 3) *“it is widely noted that the incipient corridor between Durban and Ballito is perhaps one of the most dynamic regions of the province.”* This has led to increased investment within the corridor and regeneration opportunities within existing towns (Iyer, 2011a). However the peripheral areas, where communities still need basic services, have not seen the benefits from the investment along the corridor. Increasing investment in the corridor is still seen as fundamental, according to Iyer (2011a) a successful urban corridor brings together mobility, accessibility and public transport. He further suggests that *“future planning should seize the opportunity that exists to establish the urban fundamentals that could lead to the planning and development of potentially a new and existing pattern of urban development predicted on a sustainable Urban Development Corridor”* (Iyer, 2011a, p. 8).

Cornubia is also significant as one of the planning principles is to design the area to accommodate a public transport system. The Integrated Rapid Public Transport Network (IRPTN) is a major project being undertaken by the municipality (refer to Figure 3.4). This

network is one of the strategic focuses of the SDF (eThekweni Municipality, 2012a), and C8 and C9 IRPTN bus routes, as shown in Figure 3.4, will link the region with the rest of the city. Route C9 is going to be the main transport spine through the Cornubia site. The IRPTN is a phased project with the first route proposed to be opened in 2016 (Commercial and Industrial Property News, 19/02/2013).



Figure 3.4: IRPTN Trunk Routes (eThekweni Municipality, 2012a, p. 133)

3.4.2 KSIA and Dube Trade Port

The KSIA and DTP has been declared an Aerotropolis, which will take approximately 40 years to complete (Aerotropolis KZN, 27/11/2014; TradePort, 27/11/2014; Daily News, 22/07/2011). According to the eThekweni Municipality IDP (2012a) this area is a main economic node not just for the north but for the whole city. According to Robbins (2014) the KSIA and DTP are nationally driven projects to increase the number of business and tourism visitors to KwaZulu-Natal. The Aerotropolis is also envisioned to stimulate high-value exports, and economic growth in the area. The airport was relocated in 2010 from its old location in the south of the

eThekweni Municipality (Robbins, 2014). Both the KSIA and DTP are located on a site covering 2040ha. According to Robbins (2014, p. 2) “[t]he Dube Tradeport Corporation, a KwaZulu-Natal Provincial Government public entity, is the primary developer of a number of projects within the Dube Tradeport envelope including the Dube Tradeport Cargo Terminal, Dube Trade Zone, Dube Agrizone and Dube City.” These, along with the KSIA, form the Aerotropolis (Robbins, 2014). The land adjacent to the Aerotropolis is owned by THD, thus they are an important role player in the development of the Aerotropolis, and THD have taken on board this concept and collaborated with DTP. For a background to the KSIA-DTP development refer to Robbins (2014).

3.4.3 Development and megaprojects in the Northern Municipal Planning Region

According to Sutherland *et al* (2013) national, provincial and local government use megaprojects to drive economic growth. The NMPR has a large concentration of developments and two megaprojects Cornubia and KSIA-DTP (Sutherland, *et al.*, 2014). Commercially the regional shopping centre called the Gateway Theatre of Shopping is located on the coastal (east) side on the N2 freeway. This development houses the main shopping mall with other smaller shopping complexes around the main Gateway building. Many of the car dealerships which were located in the CBD a decade ago have also moved north to the Gateway precinct. To the south of Gateway there is a development which incorporates large scale home improvement stores. The Gateway precinct is adjacent to the Umhlanga new town centre which has been designed for THD by Iyer Urban Design Studio. The design is grounded in the New Urbanism paradigm (explained in Chapter 2).

The Umhlanga town centre comprises modern office blocks and residential apartment buildings. Also on the east side of the N2 freeway there are many new low density housing estates designed and built by THD. These housing estates, aimed at high-income residents, link the suburb of Durban North with Umhlanga. Further north between the N2 and the sea is the Sibaya Casino. At the moment only the casino section has been built, however there is conjecture that THD have plans to build high income residential complexes around the casino. On the inland (west) side of the freeway opposite from the Gateway precinct, is the high income housing estate of Mount Edgecombe. This estate was also an initiative of THD and was built

on land that was previously used to grow sugar cane. The Mount Edgecombe estate is situated south of Cornubia. To the north of the Cornubia site is the KSIA and DTP.

It is noticeable through examining the developments in the NMPR that THD is a dominant role player. Their development portfolio suggests that they are a proactive company with a team of experts, both in-house and external consultants, who create conceptual designs for their vision for the development. They are driven by market forces and strategically release land when the market is right. Being the dominant land holder they have managed to implement their own design principles in the northern area, which has led to THD dominating the design style.

3.4.4 Northern Urban Development Corridor project

The Northern Urban Development Corridor project (NUDC) was conceptualised in an initiative called: *“The Basic Planning of Alternative Route Alignments of the R102 Including Linkages to Dube Trade port; and the Local Area Development Plans for the Northern eThekweni Urban Development Corridor”* (eThekweni Municipality, 2011a, p. 1). The Verulam-Cornubia LAP was one of three plans, the other two plans are: Phoenix-INK (Inanda, Ntuzuma, KwaMashu) and a plan for Tongaat-Dube Tradeport. The eThekweni Municipality has now changed its focus from the CBD and South Durban Basin to new key strategic zones/hubs. In the north this hub is the KSIA and DTP. These zones are major economic drivers in the municipality (eThekweni Municipality, 2011a). The NUDC followed a participatory process with meetings with the different communities and affected stakeholders (SSI, 2011). A key point is that Cornubia is identified as being a new town in the NUDC plan (refer to Figure 3.5).

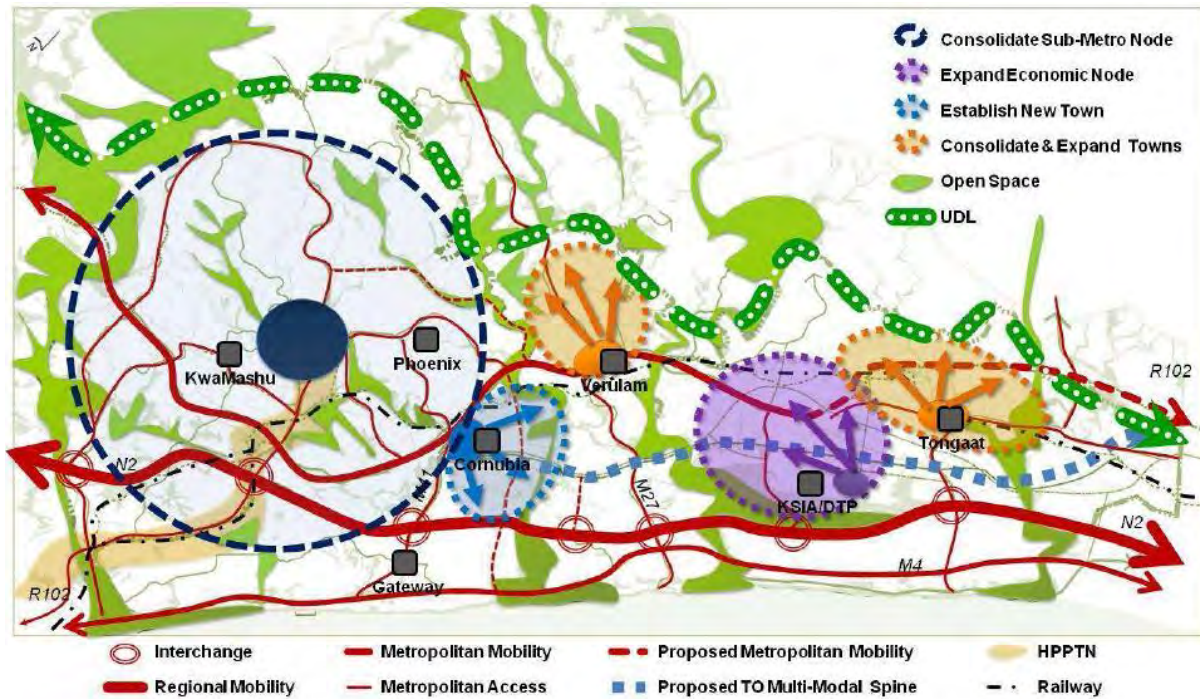


Figure 3.5: NUDC Concept Plan (eThekweni Municipality, 2011a, p. 8)

3.5 Cornubia

3.5.1 Location

Cornubia is situated approximately 15 kilometres along the N2 to the north of Durban's CBD (see Figure 3.1). According to the Cornubia website (Cornubia.co.za, 15/03/2013) Cornubia is strategically located with the intention to integrate the formally disadvantaged areas of Phoenix, Ottawa and Waterloo and the newly developed areas of Mount Edgecombe and the Umhlanga new town centre which surround the site. Cornubia is also seven kilometres south from the KSIA and DTP, as mentioned in Section 3.4.2, which suggests that the site is strategically situated within the Municipality.

The Cornubia site is a greenfields project, where no previous development has taken place. It has been used to date as land to grow sugar cane. The area was once a 'buffer strip' put in place by the apartheid government to separate group areas, in this case the Indian area of Phoenix and the Black areas of Inanda, Ntuzuma, KwaMashu from the White area of Umhlanga (McCarthy, 2010). McCarthy (2010) also adds that the site is located in an urban expansion area which is rapidly developing and Cornubia is uniquely situated to absorb high density urban development.

3.5.2 History

The first mention of building low-cost housing on the Cornubia site was in 2005 when the then mayor Obed Mlaba earmarked the site for development in a speech given at the site. He described the development as an opportunity to build low-cost housing, as envisioned in the Breaking New Ground Policy¹⁹ (BNG), to significantly reduce the housing backlogs. THD had been in discussion with the eThekweni Municipality about the site but nothing had been finalised before the Mayor's speech (Savides, 22/12/2008). Negotiations around the Cornubia site began in 2005/2006 and it took many years of debate between the eThekweni Municipality and THD before the two entities came together and produced the Framework Plan facilitated by the private consultant Iyer Urban Design Studio. It was also reported, that if the negotiations resulted in a disagreement, eThekweni Municipality would expropriate the whole site for the development of low-cost housing (Savides, 20/08/2008). However this expropriation did not occur and in January 2014 the first beneficiaries of the low-cost housing in Phase 1a moved in to their units (Sutherland, *et al.*, 2014). President Zuma officially launched the site in April 2014, (SA Govt News Agency, 02/04/2014).

3.5.3 Cornubia Housing Project

The Cornubia project is considered to be important for the growth of the city. According to the City Manager Cornubia is “*a great opportunity to undo what characterised the apartheid city*” (McCarthy, 2010, p. 5). Moreover THD want to achieve integration by ‘knitting’ together the ‘fragmented region’ (Business Report, 28/08/2006). According to the Cornubia website (Cornubia.co.za, 15/03/2013) the Cornubia project is the first integrated Human Settlement Development to be developed within the parameters of the national department of Human Settlement's ‘Breaking New Ground Initiative’ (BNG) (McCarthy, 2010). The Cornubia site is envisioned as a large scale housing project with both pro-poor and pro-growth housing elements. The site is owned by a number of entities: Tongaat Hulett own 620ha; eThekweni Municipality 580ha; South African Sugar Association (SASA) 69ha, and the Blackburn community is located on 28ha²⁰, totalling 1297ha (refer to Figure 3.6). However, due to the topographical features the total developable area is only 750ha (Cornubia.co.za, 15/03/2013).

¹⁹ The BNG housing policy has replaced the RDP low-cost housing policy The discourse within the BNG is integrated human settlements (Pithouse, 2009)

²⁰ The Blackburn community does not own this 28 ha of land

Firstly there is land steeper than 1:3, which is not conducive to development due to cost implications, and secondly there are a number of environmentally sensitive drainage channels across the site.



Figure 3.6: Ownership of Cornubia (Iyer, 2011, p. 9)

The Cornubia project is a good example of how local government can leverage growth in the area, which in this case has been achieved by partnering with the private sector. The partnership has allowed THD (private sector) to invest in infrastructure to service the market-led development. It is interesting that, according to the *Business Report* (28/08/2006) the estimated investment in building in the region was projected to be more than R20 billion. The majority of this spend would be completed by the private sector. It was anticipated that without this capital injection the Municipality would find it challenging to provide all the infrastructure and services necessary for development in this area. Allowing the private sector to develop would stimulate growth in the area, which in turn would provide opportunities for local residents. However, the LAP and the Framework plan were only finalised in 2011, indicating that the Cornubia project was going to be a long-term development (Iyer, 2011; eThekwinini Municipality, 2011).

3.5.4 Plans and Design

In 2010 the housing backlog in the eThekweni Municipality was estimated to be 250,000 homes, of which ten percent could be supplied in Cornubia. In terms of housing provision McCarthy (2010, p. 5) explains that *“in scale terms, on the housing front, the Cornubia project is without peer. There has been accumulating evidence of shortage of lower-income residential units in eThekweni.”* In 2010 the objective of the Municipality was to develop 20,000 subsidised housing units, in a compact, efficient and value enhancing manner (Cornubia.co.za, 15/03/2013; Sutherland, *et al.*, 2014). However, the capacity to provide this number of houses changed significantly due to the implementation of the noise contours (explained in Section 3.5.5 below). The main function of the Cornubia site has been described as the reintegration of the north of the city as well as providing bulk stock of well-located lower income housing and employment opportunities (McCarthy, 2010). However there is fear that having low-income housing next door to high-income areas will lower the values of the properties in the latter (Mfusi, 01/02/2010). The eThekweni Municipality has been reported as saying that they will use buffer zones to ensure that property values are not affected. If this is the case then this idea echoes apartheid style planning, except that in this situation buffer zones are being used to separate people of different classes (not race groups).

LAP and Framework Plan

The NUDC LAP and the Cornubia Framework Plan which form the focus this research are shown below (refer to Figures 3.7 and 3.8 respectively). According to Sutherland *et al* (2014) the two plans are significantly different in terms of the location of the new Cornubia town centre. The LAP places the node in the south-central part of the site where as the Framework Plan has the node to the south-east to link with the Gateway node. Another difference is the vision for the light industry and the business components of the concept. *“The LAP expressly advises against large-scale mono-functional office parks developments, and in particular along the N2, promoting instead mixed use development”* (Sutherland, *et al.*, 2014 , p. 8). However the Framework Plan has provided for large areas along the M41 and N2 for general business which would suggest mono-functional office parks. In other words the LAP provides for Cornubia to be defined as a separate new town, whereas the Framework Plan locates it as an extension to the Gateway precinct without its own identity.

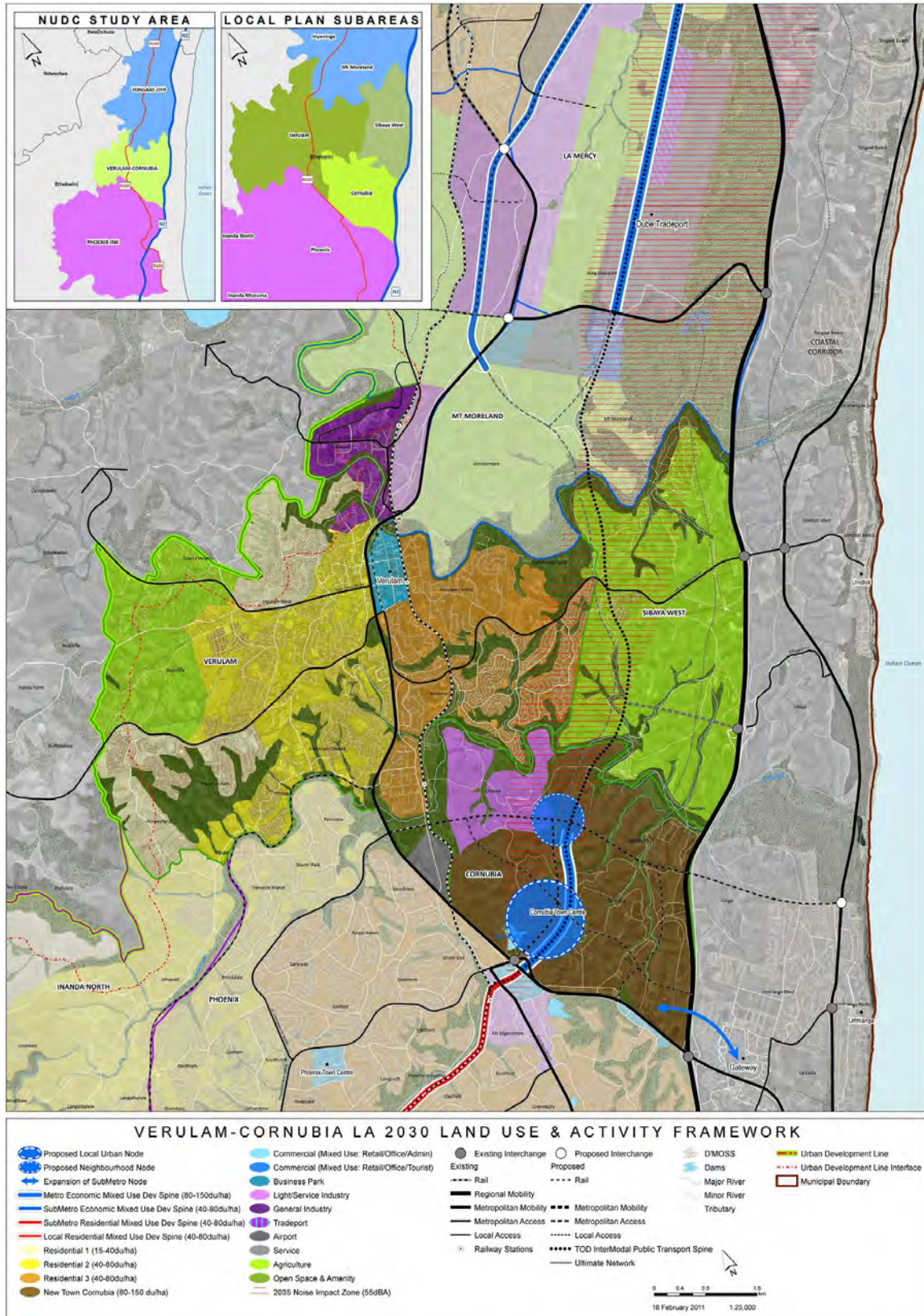


Figure 3.7: Verulam-Cornubia LAP (eThekweni Municipality, 2011a, p. 59)

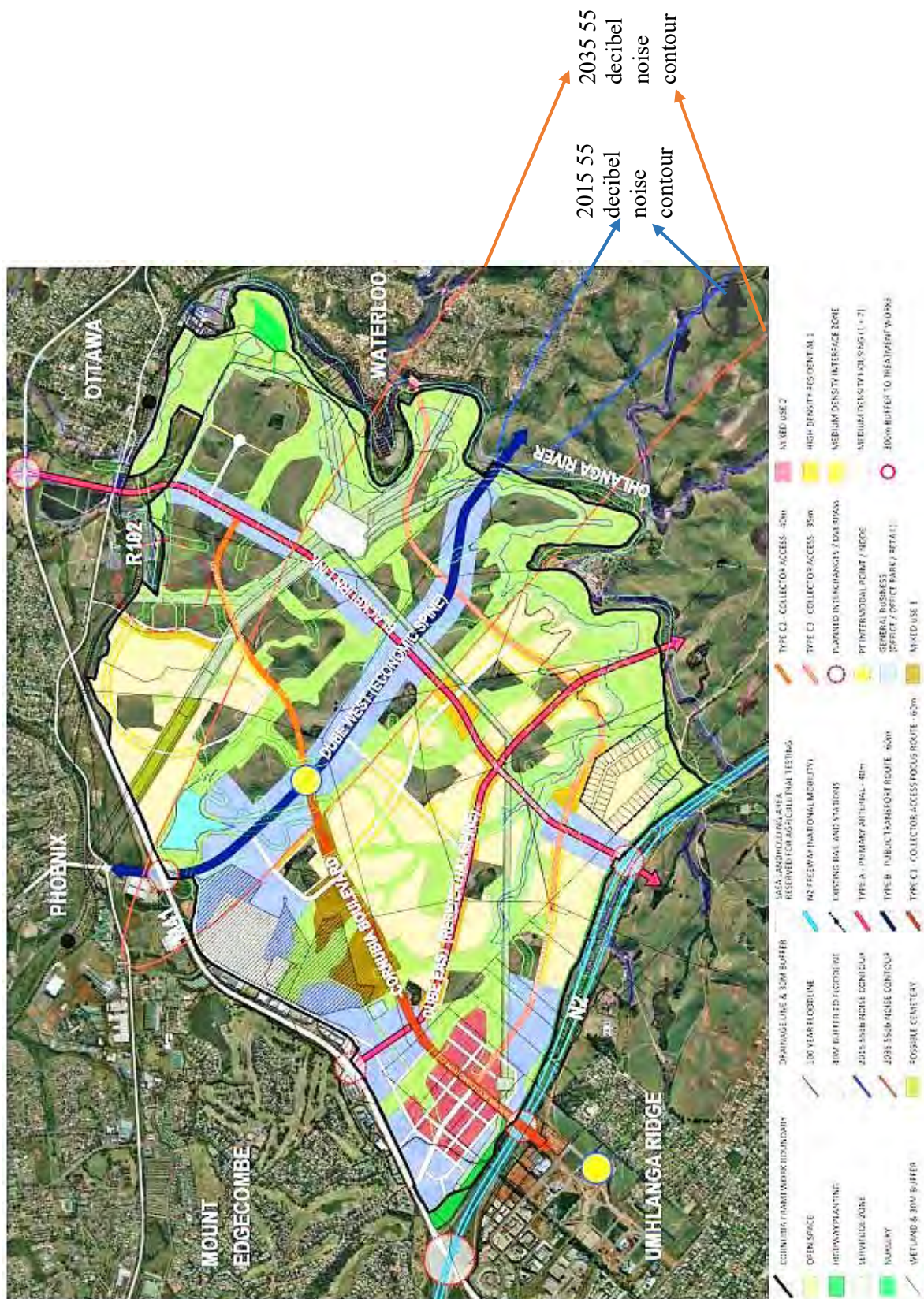


Figure 3.8: Cornubia Framework Plan (Iyer, 2011, p. 38)

3.5.5 Noise Contours

The noise contours measured from the KSIA have created a significant impact on the development of the Cornubia Framework Plan. The Municipality owns 281ha of the land in this designated area which was earmarked for low-cost housing. The 55 decibel noise contour is depicted in Figure 3.8. The blue line shows the projected 55 decibel line for 2015; this contour does not affect the site. However, the 55 decibel noise contour projected for 2035, shown in red, cuts across the site and covers a substantial portion of the land. The Framework Plan was changed (Iyer, 2011), along with the EIA (Carnie, 03/03/2011) due to land-use restrictions in the 55 decibel (and greater) noise zone.

The eThekweni Municipality Environmental Health Department has ruled against having residential development within this contour (Carnie, 03/03/2011). This ruling has drastically reduced the housing stock (Dennis, 14/07/2011), and the total number of units has been reduced to 24,320 (Sutherland, et al., 2014) from a reported 75,000 (Savides, 22/12/2008). From this 24,320 units 11,664 will be low-cost (Sutherland, *et al.*, 2014). The result of enforcing the noise contour is that general business activities are now taking the place of the proposed residential areas. Referring to Figure 3.8 it is noticeable that the development proposed along Dube West is now an economic spine. This spine would have been more conducive to mixed use development, including housing, if it had not been for the enforcement of the 55 decibel (2035) contour line and the impact of the ruling on the Framework Plan.

3.5.6 Political Significance

The Cornubia project has major political implications as it was earmarked from the very beginning to incorporate a large percentage of low-cost houses. Most of the development to date in South African cities has either been driven by the private sector, in the form of high-income development in accessible locations, or low-cost housing provision by government situated on cheaper land on the periphery of the urban core (Todes, 2003). In contrast, the Cornubia development is both a collaboration between the public and private sector and is envisioned to incorporate housing, commercial, and facilities aimed at high, medium, and low income citizens of the city. The development was declared a priority project by both the National Treasury and the Department of Human Settlement (Dennis, 14/07/2011). Cornubia

has been identified as one of the three Cabinet Lekgotla priority projects in the country (The Mercury, 30/05/2012).

Politically, the project started on contested ground as it was reported that *“a day after the announcement Moreland Development²¹, which owned the land that Mlaba has said was for the housing project, released a statement saying it was only involved in preliminary discussions with eThekweni Municipality regarding plans for the future development of Cornubia, and that the mayor has caused a misunderstanding about the housing which was not a ‘done deal’”* (Goldstone, 2007). This has caused tensions between the eThekweni Municipality and Tongaat Hulett, with both parties initially striving for their own goals and outcomes. Heated negotiations took place and finally an agreement was struck which allowed for the collaboration on the Framework Plan.

The Cornubia project has also fuelled negativity from low income residents. In 2007 citizens protested due to the lack of implementation of housing on the Cornubia site from the Municipality (Goldstone, 2007). This was owing to the mayor promising housing which had not materialised. There has also been contestation around the number of low-cost housing units as the figures have eroded over the years as mentioned previously. However, it has been suggested that the noise contours were enforced to limit the number of residential units to make way for more commercial and industrial activities (Sutherland, *et al.*, 2014).

3.6 Summary

This chapter has attempted to examine the three contexts of the research case study: eThekweni Municipality; the NMPR; and Cornubia. It has emerged that the eThekweni Municipality has been challenged due to the policies of apartheid leaving the municipality spatially fragmented. The poor and marginalised black population have been pushed to the urban periphery where they are disconnected from the rest of the city, have little to no infrastructure, and have to travel long distances for employment opportunities.

²¹ Now known as Tongaat Hulett Development

The NMPR is a concentration of developments which are primarily driven by THD, the main land owner in the area. The N2 road has also been envisioned as a development corridor, which makes this area a high growth area for the Municipality. In conjunction with the corridor the IRPTN, which will connect formerly disadvantaged areas in the north with the new high end development through to the city, will help to integrate areas that up until now have had poor accessibility to economic opportunities.

The main growth node in the north is the KSIA-DTP which has high potential for reshaping the eThekweni Municipality and the province, and bringing high levels of economic investment to the NMPR. The majority of the developments in the NMPR are commercial and high-end residential (primarily gated estates), with the planning principle of integration with existing development being undermined. The NUDC was a Municipal driven planning process used to examine the corridor and help the Municipality to conceptualise the area and become more proactive in the developmental decision-making process.

Cornubia is strategically positioned to support the integration of the NMPR. The partnership with THD will allow for a sustainable development vision and develop much needed infrastructure in the area. The site has been designed to incorporate mixed use development, which is more in line with international trends and moves away from modernist development thinking. However, the enforcement of the noise contours has significantly changed the vision for the site and created sterile land not suitable for housing. This has allowed for the conceptual design to incorporate mono-functional style business activities along the main spine of the site, which the eThekweni Municipality in the NUDC project advised against. Furthermore the Cornubia Housing Project is a politically and socially driven development as it will incorporate low-cost housing and help to reduce the housing backlogs in the Municipality. This political influence has showcased the development and created expectations for the marginalised citizens of the city. This chapter highlights the main challenges the Cornubia development must overcome and outlines the significant importance of mixed-use housing projects.

Chapter Four: Methodology

This research study was designed as a case study using thirteen in-depth interviews as the primary source of data. The interviews were conducted with professionals directly linked to the formulation of the Verulam-Cornubia Local Area Plan (LAP) and the Cornubia Framework Plan, as well as independent consultants and members of a community that will be affected by the development. This chapter gives the rationale behind the methodology and covers the methods used in conducting the study, how data was collected and analysed, and some reflections by the researcher on the methodology process.

4.1 Research Approach

It is useful to briefly consider the general scope of research approaches before discussing the approach adopted in this study. Research is a form of inquiry (Cohen, *et al.*, 2000). Three research paradigms have been identified: positivism, interpretive social science, and critical social science (Neuman, 2000; Guba & Lincoln, 1994; Cohen, *et al.*, 2000). The positivist approach uses facts which are ‘value free’, quantitative data with a method of strict rules and procedures in which hypotheses are tested against facts (Robson, 2002). The data are in numerical form that produce statistics.

Interpretive social science is related to the theory of meaning called hermeneutics and this approach is largely found in the Humanities. There are many varieties of interpretive social science, these being: hermeneutics; constructivism; ethnomethodology; cognitive; idealist; phenomenology; and qualitative sociology. This interpretive approach is an alternative to positivism in that it is sensitive to context, and uses various methods to understand how others see the world (Neuman, 2000). Critical social science is more commonly adopted by community action groups, political organisations and social movements. Other approaches to research inquiry include feminist and postmodernism (Neuman, 2000).

This research study was conducted using methods associated with the interpretive paradigm, with a constructivist focus. The research is being used to understand and ascribe meaning to a social phenomenon through the collection of data relating to discourse and knowledge. These rich ‘thick descriptions’ (Geertz, 1973 cited in Denscombe, 2007, p. 300), collected from

interviews are closely linked to social values and are directly influenced by the social perspectives of the respondents.

4.2 Qualitative vs Quantitative methods

Quantitative research uses descriptive statistics in the form of numbers (Denscombe, 2007). This statistical method tests hypotheses and concepts are in the form of distinct variables, statistics, tables or charts are analysed in relation to the hypotheses (Neuman, 2000). Qualitative research on the other hand captures and discovers meaning, with concepts in the form of themes, motifs and generalizations. Data are captured in the form of words and images either from documents, observations or transcriptions of interviews. Analysis is conducted by extracting themes or generalizations from the evidence and the data is organised into a coherent and consistent picture (Neuman, 2000).

Strauss and Corbin (cited in Hoepfl, 1997, p. 2) define qualitative research as *“any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification”*. Qualitative research aims to rather find understanding in exploration of a phenomenon about which little is yet known, as well as gaining more in-depth information about the patterns of meaning related to the chosen situation (Hoepfl, 1997). This research study used a qualitative approach with the aim of collecting a rich set of qualitative data to understand the reasons behind the two development plans. The research does not intend to create generalisable data that could be applied to other situations.

4.3 Case Study Methodology

The two main proponents of case study methodology are Robert Stake and Robert Yin (Baxter & Jack, 2008; Hyett, *et al.*, 2014; Zucker, 2009). Case studies can be undertaken using either quantitative or qualitative research methods or both (Yin, 1981), however, a qualitative method using the interpretive paradigm is the most common. According to Hyett et al (2014, p. 2) *“[c]ase study research is an investigation and analysis of a single or collective case, intended to capture the complexity of the object of study”*. A case is also defined by Miles and Huberman (1994 p.25 cited in Baxter & Jack, 2008) as *“a phenomenon of some sort occurring in a*

bounded context. The case is, in effect, your unit of analysis". Having a bounded case allows for the research study to be contained thus keeping a reasonable scope (Baxter & Jack, 2008).

Case studies have also been criticised for being too specific to a particular circumstance therefore limiting what they can offer to theory (Harland, 2014). However, case study research is becoming an increasingly popular approach in qualitative research (Hyett, *et al.*, 2014). According to the traditional view case studies are not seen to be of value on their own, must be linked to hypotheses, and cannot be generalised. Flyvbjerg (2006) argues that this conventional view is wrong or misleading and that a case study is a necessary and adequate method of approach.

The case study methodology used in this research is based upon the constructivist paradigm in which constructivists "*claim that truth is relative and that it is dependent on one's perspective*" (Baxter & Jack, 2008, p. 545). Thus constructivism is based on the social construction of reality and the advantage of this paradigm is the relationship between the researcher and the participants, allowing the respondents to tell their own story (Baxter & Jack, 2008). In terms of the research study the story of the conceptualisation of Cornubia was communicated during the interviews, through exploring the respondents understanding of the social world.

This case study of Cornubia could be classified as a descriptive type of study that describes a phenomenon in the real life context that it has occurred (Yin 2003 cited in Baxter & Jack, 2008). However, Stake (1995, cited in Hyett, *et al.*, 2014), would describe the Cornubia case study as being intrinsic as it is being used to understand the issues of a single case rather than what it represents.

4.4 Data Collection: Semi-structured Interviews

This study used in-depth semi-structured interviews as the method for data collection. Interviews were chosen as the desired method as they allow for discussion around the ideas and processes used to design the two plans. Interviews are an exchange of views and can involve a set of assumptions and understandings about a situation which are not normally associated with casual conversation (Denscombe, 2007; Cohen, *et al.*, 2000).

The interview schedule (see Annexure A) consisted mostly of open-ended questions. These types of questions give: a framework of reference to the respondent; allow flexibility to promote discussion; and an opportunity for the interviewer to probe the respondent's knowledge of the topic (Cohen, *et al.*, 2000, p. 275). The interview schedule consisted of the following sections: profile of the respondent; questions relating to spatial knowledge; planning discourse; megaprojects; knowledge; and the power relations between stakeholders. These sections of the interview link to the research questions and themes.

The researcher undertook all the interviews which lasted between forty five minutes to one and a half hours. The interviews were audio recorded with the permission of the respondents and fully transcribed by independent transcribers. The audio records and written transcripts together formed the data for analysis by the researcher.

It is important to understand the ethical issues relating to an interview as the data is usually about the human condition. Cohen *et al* (2000) identify three areas of ethical issues. Firstly one must obtain informed consent, secondly confidentiality must be maintained in the report of the analysed data and finally the consequences of the way in which the data is used must be considered.

For this research project ethical clearance was obtained from the University of KwaZulu-Natal prior to the research being conducted. Each respondent completed an Informed Consent Form (Annexure B). The Informed Consent Form included a section where respondents could indicate how the information could be used. Whilst many indicated that their name, position and organisation could be stated, the respondents have been identified with only an individual numerical code (see Section 4.6). The consequence of the interviews was to obtain data that will describe and can be interpreted to analyse the concepts found within the two Cornubia plans.

The interviews were conducted within two different time periods, firstly between November and December 2012, and secondly between May and August 2013. The reason the interviews were split into two periods was primarily due to the availability of the respondents and also new respondents being selected when other key people declined to be interviewed.

4.5 Sampling

The sample for the research was a non-random sample i.e. it was a non-probability study (Denscombe, 2007). The sample of respondents was purposively chosen. This type of sample is defined as a handpicked sample. The respondents were chosen because of their knowledge of the development in the Northern Municipality Planning Region (NMPR) of the eThekweni Municipality and, more specifically, of the Cornubia development. The sample included professionals with a range of expertise in planning, housing and economics from both the public and private sector. One interview was conducted with members of the Blackburn community which forms part of the Cornubia site. However, representatives from two stakeholder groups declined the invitation to participate. It would have been valuable to have had insights into their perspectives as this would have strengthened some of the discussions about the design of plans as well as the objectives of the development in the north, and may have revealed other tensions relating to the planning triangle (Figure 2.1).

4.6 Profile of Respondents

Thirteen interviews were conducted and a total of sixteen respondents participated representing both the public and private sectors and one community. Table 4.1 below summarises the details of the respondents. Only total numbers are reflected for race and gender to ensure that individual respondents cannot be identified.

Table 4.1: Profile of Respondents

	Job Description	Experience working in the development field (yrs.)	Public/Private Sector	Race ²²	Gender ²³	Date
R ²⁴ 1	Environmental Planner	17	Private			24-08-2011
R2	Planning Director	18	Private			13-11-2012
R3	Planning Consultant	22	Private			19-11-2012
R4	Planning Consultant	24	Private			15-11-2012
R5	Town Planner	9	Public			03-12-2012
R6	Town Planner	9	Public			03-12-2012
R7	Town Planner	22	Public			03-12-2012
R8	Housing Consultant	18	Public			22-07-2013
R9	Town Planner (Housing)	20	Public			22-07-2013
R10	Project Manager	22	Public			05-06-2013
R11	Consultant and Project Manager	12	Private			30-08-2013
R12	Town Planner	14	Private			22-11-2012
R13	Transport Planning Manager	22	Public			13-06-2013
R14	Consultant Economic Development	17	Private			21-05-2013
R15	Blackburn	N/A	Community leader			04-02-2013
R16	Blackburn	N/A	Community Leader			04-02-2013
	Total	236 years combined experience	Private= 7	B= 3	M= 8	
			Public= 7	I= 5	F= 8	
			Community= 2	W= 8		

²² Totals only given, B= Black; I= Indian; and W= White

²³ Totals only given

²⁴ Respondent

It is interesting to highlight the combined years of experience of the development professionals which contributed to the rich data gathered in the interviews. Whilst gender representation across the respondents was balanced (eight male and eight female), unfortunately the racial distribution was skewed as there were more White respondents than Indian or Black.

4.7 Conduct of Interviews

The respondents were sent invitations to be interviewed via email, and the date for the interview was arranged through electronic communication. The researcher had to be aware that the respondents were professionals with busy work schedules therefore one or two of the interviews had to be rescheduled.

The interviews went well with the respondents being fully engaged and willing to giving full and detailed responses. Each respondent gave incisive and carefully considerate responses and provided good examples. The researcher was a novice with the interview technique, but confidence grew with the experience of each interview. There were however, some challenges as some of the questions did not apply to all of the respondents.

4.8 Advantages and limitations of interviews

There are many advantages and disadvantages in using interviews to collect data. The advantages are: the in-depth type of information gathered; flexibility in collecting data as the interviewer is in control; the high response rate (unlike surveys and questionnaires); and that respondents usually enjoy talking about their opinions and ideas (Denscombe, 2007).

The main disadvantage of interviews is that they can be prone to subjectivity and interviewer bias (Cohen, *et al.*, 2000). The traditional view is for the interviewer to remain passive or neutral when conducting the interview, however this can be difficult and sometimes can alienate the respondent (Denscombe, 2007). One method for overcoming interviewer bias is to use many different interviewers to conduct the field work. However, for small scale research projects such as this, using multiple interviewers can be very difficult. It could be argued that the researcher being the sole interviewer provided consistency in the approach to the interviews.

Other disadvantages are that interviews: are time consuming; can be daunting for respondents as interviews are artificial situations; may be considered an invasion of privacy; may be challenging with regard to reliability, as consistency is hard to achieve. Respondents may also respond differently to different interviewer personalities (Denscombe, 2007).

4.9 Transcriptions

Transcriptions of interviews allow for the spoken word to be changed into written text to be analysed. However, transcriptions can lose some of the data from the interview as one cannot analyse the body language of the person once the interview has taken place, unless a video recording was undertaken (Cohen, *et al.*, 2000). Moreover, other problems with transcribing interviews include that: it is not always easy to hear respondents; respondents do not always speak complete comprehensive sentences; and that tonation, emphasis and accents used are difficult to transcribe (Denscombe, 2007). As mentioned earlier, the interviews were not transcribed by the researcher. Therefore the relationship between the researcher and transcribers had to be based on a mutual trust that confidentiality would be maintained.

4.10 Data Analysis

According to the literature *“there is no singularly appropriate way to conduct qualitative analysis, although there is general agreement that analysis is an ongoing, interactive process that begins in the early stages of data collection and continues throughout the study”* (Bradley, *et al.*, 2007, p. 1760). In this study the process of reading the transcriptions, listening to the audio recordings and beginning to draw out the emergent themes was aligned with this statement. The method for data analysis drew on characteristics of thematic analysis. Thematic analysis is identified as being a search for themes within the data. It is a form of pattern recognition where the emerging themes become the categories for analysis (Braun & Clarke, 2006, p. 80; Fereday & Muir-Cochrane, 2006; Rabiee, 2004).

The interview schedule was structured around the research questions (Section 1.3 in Chapter 1). The interview questions were clustered into broad categories: personal profile; the eThekweni Municipality northern zone; the two spatial plans for Cornubia; exchange of knowledge; stakeholder contribution; local contextual issues; and power relationships and

interactions. There was a level of analysis as each interview unfolded and the patterns in the responses began to become clear.

Once the full data set had been collected and transcribed the responses were colour coded according to the themes that emerged in each of the broad categories. For each of the themes the individual responses, together with the numerical code which identified the respondent were then extracted and consolidated. A mind map was constructed for the responses for each individual theme and the common ideas, views and opinions were clustered and analysed allowing the patterns in the data to emerge. This approach resonates with a general inductive approach (Thomas, 2006). The findings are reported in Chapter 5.

4.11 Reflections

A few of the participants indicated that they had enjoyed the interview as it had given them time to reflect on what had happened in the process of the development of the plans. Whilst interviewing representatives from the Blackburn community was important, they could only answer a small number of the questions, mainly those relating to the extent of participation.

As a methodology a qualitative case study was the best approach to adopt. However, there was a tension in using a purposive sampling technique as it was only possible to interview professional ‘experts’ and other stakeholders such as civil society were excluded from the sample. The main rationale for selecting these professionals was the fact that the knowledge used to create the plans was ‘expert’ knowledge.

The initial intention was to analyse the data using software such as *Nvivo*, however challenges such as access to the software were not overcome and the data was analysed manually. Whilst this might be considered as a limitation the manual approach enabled the researcher to become immersed in the data.

The findings of the research are expanded upon in Chapter Five, and the data themes have been split into three main headings: broad development in the north; spatial plans; and knowledge, participation and space. These themes have been broken down further into the main themes found in the data.

Chapter Five: Spatial Knowledge in eThekweni Municipality

This chapter discusses the findings of the study in the context of spatial knowledge and is based upon the information gathered from the interviews with the respondents, purposefully selected because of their knowledge of the development in the north sub-region of the eThekweni Municipality and the Cornubia site. The chapter is presented in three sections: the first explores the broad development in the north; the second section examines the spatial plans in more depth; and the final section explores the ideas around knowledge, participation and space.

5.1 Broad development in the Northern Municipal Planning Region

5.1.1 Changing Vision and Objectives

Development began in the north with the old north council and the Transitional Local Council²⁵. These public entities “*pushed*” development in the late 1990s and it was during this time that the Gateway Theatre of Shopping and the beginning of the Umhlanga new town centre were being developed (Respondent 1: 24-08-2011; Respondent 3: 19-11-2012; Respondent 4: 15-11-2012²⁶). Tongaat Hulett Development (THD) also “*spearheaded*” the growth in the north as they are a keen developer (Respondent 1: 24-08-2011). According to Respondent 13 (13-06-2013), THD has a vision of mixed use developments and the company have many big development projects that have already been developed in the north (Respondent 1: 24-08-2011). THD are often referred to in the literature when research is being conducted in the eThekweni Municipality as they are such a dominating land owner (Robbins, 2014 ; Sutherland, *et al.*, 2013; Sutherland, *et al.*, 2014 ; Sutherland, *et al.*, 2011; Todes, 2014; Freund, 2010).

The South Municipal Planning Region (SMPR) is also dominated by a large land owner, Illovo (also a sugar producing company). However, in contrast to THD this company have not been driven to develop their large land holdings and seem to be more content with producing sugar (Respondent 3: 19-11-2012). Therefore, the SMPR of the Municipality is not growing and, as one respondent commented, Illovo have missed many development opportunities (Respondent

²⁵ The Local Government Transition Act, 1993 “*created multi-racial, multi-party transitional interim urban and rural local councils*” (Oranje & Van Huyssteen, 2007, p. 3)

²⁶ In order to protect the identity of specific respondents the participants have been randomly assigned numbers.

5: 03-12-2012). This lack of development has created an imbalance within the city with the majority of the economic growth happening in the north.

From 2001 the eThekweni Municipality²⁷ was “*wary*” of growth in the north and was “*fighting*” the northern expansion, as the municipality wanted to focus on the Central Business District (CBD) (Respondent 14: 21-05-2013; Respondent 12: 22-11-2012; Respondent 3: 19-11-2012). The Municipality had no clear objective beyond the CBD (Respondent 4: 15-11-2012). This was due to the existence of a strong central planning office within the Municipality that had the greatest concentration of planning skills, knowledge and resources, compared to the other municipal planning regions (Respondent 3: 19-11-2012). There was consensus among the respondents that the central office was reactive towards developers and reacted negatively to new developments outside the core of the city (Respondent 1: 24-08-2011; Respondent 2: 13-11-2012; Respondent 3: 19-11-2012; Respondent 4: 15-11-2012; Respondent 9: 22-07-2013; Respondent 12: 22-11-2012; and Respondent 14: 21-05-2013).

However, in the late 2000s there was a shift in the vision of the Municipality and an acknowledgement of the need for the future growth in the northern sub-region (Respondent 2: 13-11-2012). This shift in focus has made the Municipality more proactive, constructive and prepared, which has been a “*radical*” shift (Respondent 2: 13-11-2012; Respondent 4: 15-11-2012). According to Respondent 5 (03-12-2012) the main reason for the shift in focus was because of the development of the King Shaka International Airport (KSIA), Dube Tradeport (DTP) and the Gateway shopping centre. With this new view Phoenix and KwaMashu are now seen as being more central than before the late 2000s, when they were viewed as being on the periphery (Respondent 5: 03-12-2012). The municipal planners have interacted with the development in the north and realigned their thinking to incorporate the demand for growth in the region. This shift also shows how flexible planning discourse can be, as explained by Portugali and Alfasi (2008).

Moreover, challenges remain as there are problems due to the lack of capacity to provide water and sanitation (Respondent 1: 24-08-2011). Bulk infrastructure i.e. water mains and sanitation facilities, still need to be developed, which comes at a high cost to the Municipality (Respondent

²⁷ 2001 was the year that eThekweni, became operational as a municipality.

12: 22-11-2012; Respondent 14: 21-05-2013). Significantly, the Infrastructure and Bulk Sanitation Department within the Municipality is still resistant to developing the north (Respondent 12: 22-11-2012). The Northern Urban Development Corridor Plan (NUDC), which was completed in 2011, represented the positive shift in approach by the eThekweni Municipality and it was designed to create a municipal vision for the north (Respondent 5: 03-12-2012).

Development Opportunities

To understand the desire for development in the north, it is important to highlight the opportunities that the respondents believe exist in the north. The first opportunity is for the Municipality to work with the private sector (Respondent 8: 22-07-2013). Working collaboratively with the private sector is in line with the desires of the Local Economic Development (LED) strategy (Nel & Binns, 2003; Nel & John, 2006; Nel, *et al.*, 2003; Rogerson, 2006; Rogerson, 2010; Xuza & Swilling, 2008) and the New Growth Path (NGP) (Nattrass, 2011). In relation to the north this type of partnership has been seen to be of great value as the private sector is reliant on the Municipality to provide sound policy frameworks and streamline the process for approvals to accelerate the delivery process. The Municipality also gains from working with the private sector as there can be cost sharing with regards to bulk infrastructure. The relationship, according to Respondent 8 (22-07-2013), is seen as being “*symbiotic*”.

The ability to grow the city to the north is a major strategic opportunity both in terms of physical development and for economic growth and the “*ability to absorb this growth*” i.e. there is land available for the rapid development that is happening in this area (Respondent 10: 05-06-2013; Respondent 8: 22-07-2013; Respondent 5: 03-12-2012; Respondent 3: 19-11-2012; Respondent 2: 13-11-2012; Respondent 4: 15-11-2012; Respondent 12: 22-11-2012). Job creation is a “*big political*” issue and the north provides an opportunity for land to be developed for industrial purposes which is constrained elsewhere in the Municipality, and the topography is conducive to industrial development (Respondent 6: 03-12-2012; Respondent 12: 22-11-2012). Another opportunity is the fact that much of the land is greenfield, which means that it is available and “*ripe*” for development (Respondent 2: 13-11-2012; Respondent 10: 05-06-2013; Respondent 6: 03-12-2012). This growth can give the opportunity to create regional integration in the north,

and provide large scale low-cost housing projects in the area (Respondent 9: 22-07-2013; Respondent 13: 13-06-2013; Respondent 4: 15-11-2012; Respondent 8: 22-07-2013).

According to Respondent 5: (03-12-2012), the objectives of the Municipality going forward include a strategic approach to unlocking development in a linear way; using the concept of integration; building the economy with a focus on growing the Municipality; compaction; protecting valuable environmental assets; protecting the coastal assets; optimising existing infrastructure; and accommodating people who need subsidised housing. These objectives are in accordance with the South African planning literature, with the ideas of socially transforming the Municipality, promoting economic growth and protecting the environment (Dewar, 2000; Hall & Robbins, 2002; Harrison, *et al.*, 2008; Janse van Rensburg & Campbell, 2012; Lubke, 2004; National Planning Commission, 2012; Sutherland, *et al.*, 2013; Todes, 2003; Todes, 2008; Todes, *et al.*, 2000).

5.1.2 Spatial developments in the north

This section highlights the main projects that have impacted spatially on development in the north. The development in the north began with the establishment of Umhlanga new town centre, office park developments and new medium to high income residential suburbs (Respondent 3: 19-11-2012). However it was the development of the Gateway Theatre of Shopping and The Ridge office and commercial area that really established the north as a high growth area (Respondents 5: 03-12-2012). All respondents are in agreement that the most significant impact in the north over the last five years are the KSIA and DTP (now known collectively as an Aerotropolis) and The Cornubia Housing project.

The Aerotropolis concept (Kasarda & Lindsay, 2011) has now become part of the rhetoric in the north, both in the private sector and local government (Respondent 3: 19-11-2012; Respondent 10: 05-06-2013). The concept was implemented into the DTP and THD vision for the airport (Respondent 12: 22-11-2012). However, some of the elements essential for an Aerotropolis for example, the downstream supply chain with a functioning manufacturing sector, which is the basis of an Aerotropolis, are viewed as being lacking in the region specifically and KwaZulu-Natal generally (Respondent 12: 22-11-2012).

The KSIA has been a big investment by Airports Company South Africa (ACSA), and has created many changes to the dynamics of the development in the region. The old airport, south of the CBD, had outgrown its site and there was no room to accommodate bigger airplanes. The new site for the airport was bought in the 1950s, but according to Respondent 5 (03-12-2012), Respondent 6 (03-12-2012) and Respondent 7 (03-12-2012), hosting the Soccer World Cup in 2010 “*kick started*” the relocation of the airport. With this relocation developers saw many opportunities in the north and wanted to ‘*piggy back*’ on the airport development by investing in industrial development (Respondent 8: 22-07-2013; Respondent 7: 03-12-2012).

Therefore the airport has brought many opportunities to the region (Respondent 1: 24-08-2011), speeded up development and changed the dynamics of the area (Respondent 1: 24-08-2011; Respondent 9: 22-07-2013; Respondent 4: 15-11-2012; Respondent 2: 13-11-2012; Respondent 3: 19-11-2012). Due to the noise contours (discussed in Section 5.2.5) the airport, has also increased the complexity of development in the north, impacting on the spatial distribution of land uses (Respondent 2: 13-11-2012). The KSIA will also benefit the regional economy with increased tourism, trade and business, as well as through creating jobs and economic opportunities (Respondent 2: 13-11-2012; Respondent 9: 22-07-2013). According to Respondent 3 (19-11-2012) the area has been strengthened by the development of the airport as there has been an emphasis on transport planning within the Municipality. The NUDC formed part of this transport planning in the north, and the process of developing the NUDC document was funded by provincial government (Respondent 1: 24-08-2011).

However, one respondent indicated that growth was happening before KSIA was developed and that the airport has built on to that growth “*and maybe entrenched, or solidified the growth trend*” (Respondent 4: 15-11-2012). According to Respondent 2 (13-11-2012) the development in the north was always going to occur, with or without the airport. Although Respondent 1 (24-08-2011) believes the Municipality may have focused on other areas, for example the Outer West, if the airport had not relocated to the north. Also, as it sits alongside major road infrastructure the airport has had to be brought into the infrastructure planning of eThekweni Municipality and it now needs to be integrated into the road network (Respondent 12: 22-11-2012; Respondent 2: 13-11-2012). The development of KSIA has also pushed the urban development line further north (Respondent 14: 21-05-2013). This line is now on the eThekweni

Municipality/ILembe District Municipality border and this will allow for further urban sprawl within the Municipality (Todes, 2014).

The DTP has also created opportunity in the northern region with the possibility of a thousand hectares of commercial and light industry (Respondent 3: 19-11-2012). Moreover, with these major developments the Cornubia project has become more viable (Respondent 11: 30-08-2013). The sales in the commercial business estate within the Cornubia site have been good, which has opened up more economic potential in the north (Respondent 10: 05-06-2013; Respondent 11: 30-08-2013). However Respondent 12 (22-11-2012) surmises that the growth is not necessarily new but reshuffling existing businesses from other areas, so in effect it is stealing economic potential from one area to give to another. This reshuffling could also be seen as decentralisation with businesses moving out of the CBD and to the north thus creating new nodes within the municipality (Respondent 2: 13-11-2012).

5.1.3 Stakeholder Conceptualisations

In 2001 there was little alignment or mutual understanding, between the different stakeholders, of the benefits and opportunities in the northern area (Respondent 2: 13-11-2012; Respondent 13: 13-06-2013). This misunderstanding was mainly due to the creation of eThekweni as a municipality which brought together a diverse number of areas that had operated independently up until the beginning of the millennium.

Since the late 2000s the views of the different stakeholders have become more aligned as everybody is *“after the same thing”*, sharing more of a common language of what they want to achieve with the broad development principles becoming more aligned (Respondent 12: 22-11-2012; Respondent 3: 19-11-2012; Respondent 10: 05-06-2013; Respondent 14: 21-05-2013). Respondent 10 (05-06-2013) explains that *“everyone’s trying to go in the same line but there might be details that are different in terms of Dube Tradeport’s intentions and Tongaat Hulett’s intentions.”* Also DTP and THD are aligning their development concepts, and the city is taking on board some of the concepts and collaborating with them, therefore creating a better vision and co-ordination for development within the Municipality (Respondent 4: 15-11-2012).

In contrast, Respondent 5 (03-12-2012) does not think the views of the different stakeholders are the same with regards to the development in the north. It has been a struggle to contain the view held by developers that there is limitless growth and that they can develop where ever they want (Respondent 5: 03-12-2012). For example, the Record of Decision²⁸ (ROD) for the DTP conserved land on the eastern side of the development and developers feel that this land should be developed because it is well located, and do not understand the importance of environmentally conserving the land (Respondent 5: 03-12-2012). This tension is linked to those between market forces and environmental conservation found in the planning triangle (see Figure 2.1 in Chapter 2) (Campbell, 1999). The planners in the municipality must evaluate the region and allow for environmental protection and plan for the social wellbeing of the citizens living in the region.

Respondent 9 (22-07-2013) explains that there are always differences between what the government and the private sector want, as they both operate from different sets of principles; the government is mandated to provide services and housing, whilst the private sector are operating for economic gain. Respondent 8 (22-07-2013) highlights that there are also differences of opinions on development between different departments in all spheres of government. These differences are mainly due to funding, different priorities and different delivery mandates (Respondent 9: 22-07-2013).

5.1.4 Roles of Government

There were two interrelated main issues raised during discussions with the respondents. Firstly the huge need for proactive provision of infrastructure and secondly, alignment of the different spheres of government in the development process (Respondent 2: 13-11-2012; Respondent 3: 19-11-2012; Respondent 4: 15-11-2012; Respondent 9: 22-07-2013; Respondent 12: 22-11-2012). The success of the development in the north will be determined by how the different spheres of government, (national, provincial, and local) interact with the expansion of this area. Each sphere has a significant role to play in the region, from National Government providing bulk infrastructure in the form of electricity, water and national road infrastructure, to the

²⁸ The ROD is the approval given by the national Environment Department for an Environmental Impact Assessment. The ROD comes with conditions which in DTP case included conserving the eastern side of the development.

provincial initiative of the DTP, and local government level providing services and swift regulatory processes (Respondent 2: 13-11-2011; Respondent 4: 15-11-2012). Furthermore good budgeting is needed, especially from the local municipality, to guide infrastructure development (Respondent 2: 13-11-2012, Respondent 12: 22-11-2012).

eThekweni Municipality has a huge role to play in “*making sure the strategic infrastructure at that level is adequate for growth and development of this corridor*” (Respondent 2: 13-11-2012). Moreover, infrastructure is key to the success of development in the north and according to Respondent 12 (22-11-2012), “*from a strategic perspective [the city needs to] acknowledge the development, there should be a lot more front footedness in terms of providing infrastructure up front and not being reactive to development applications.*” The city should not just respond to developers, instead it should be more proactive and anticipate infrastructure needs and budget accordingly (Respondent 1: 24-08-2011; Respondent 12: 22-11-2012). According to Respondent 2 (13-11-2012), Respondent 4 (15-11-2012) and Respondent 12 (22-11-2012), this is where the NUDC project has been an innovation by the city and has created much needed knowledge and forward planning for the city to use when assessing development in the north.

Other key roles that local government should play are: creating economic development and providing opportunities to create jobs (Respondent 10: 05-06-2013); facilitating the approvals of EIA and Rezoning applications, so they are done efficiently and timeously (Respondent 4: 15-11-2012); having densification as a guiding development principle (Respondent 1: 24-08-2011); monitoring development so that it is undertaken in a sustainable way (Respondent 10: 05-06-2013); encouraging private sector investment including Foreign Direct Investment (FDI) (Respondent 4: 15-11-2012; and Respondent 7: 03-12-2012); and finally the local municipality plays an important role in seeing the overall future of the growth of the Municipality (Respondent 7: 03-12-2012). All of these key roles are part of the overall discourse for planning in South Africa (Dewar, 2000; Hall & Robbins, 2002; Harrison, *et al.*, 2008; National Planning Commission, 2012; Nel, *et al.*, 2003; Rogerson, 2010; Xuza & Swilling, 2008)

5.1.5 Stakeholder Reflections

The different respondents reflected positively on the development in the north of eThekweni Municipality, by agreeing that it “*is seen as going to happen*”, so all stakeholders involved

need to make sure that it is planned in the most effective and productive way (Respondent 2: 13-11-2012). The restructuring of the city in a sustainable way, using mixed use and higher densities, would solve a lot of problems (Respondent 3: 19-11-2012). In addition the Integrated Rapid Public Transport Network (IRPTN), anchored at Bridge City,²⁹ is a huge strategic project which is fundamental to the development of the north (Respondent 2: 13-11-2012).

Moreover, there are enough areas for economic development being unlocked in the north to last 50 years (Respondent 5: 03-12-2012). So this needs a carefully phased approach to optimise infrastructure and minimize urban sprawl (Respondent 5: 03-12-2012; Respondent 6: 03-12-2012). The municipal planners must also examine the Municipality in a holistic manner, through examining the north in relation to the rest of the eThekweni Municipality.

The development in the north is positive in terms of growing the economy with lots of opportunities and possibilities (Respondent 10: 05-06-2013; Respondent 12: 22-11-2012). According to Respondent 11 (30-08-2013), the development is an unstoppable force and *“if it was managed in a socially responsible way then it could really address some very significant problems...of unemployment and access to entrepreneurial opportunities.”* In addition Respondent 12 (22-11-2012), thinks *“there was much better opportunity to do a little bit more finer grain [conceptualisation] to establish a much finer grain urban fabric out there without necessarily having to compromise some of the security features of why people have gone out there”*. Also it is not pedestrian friendly and the development is orientated around the private car (Respondent 12: 22-11-2012). This shows that the current development in the north is not in line with the compact city theory and New Urbanism as it is still centred on the private car (Dewar, 2000; Ellis, 2002; Falconer Al-Hindi, 2001; Harrison, *et al.*, 2008; de Villiers, 1997).

It is important to note that the reflections above emerged from the analysis of responses from professional ‘experts’, selected using a purposive sampling technique (see Section 4.1.1). The main rationale for selecting these professionals was the fact that the knowledge used to create the plans was ‘expert’ knowledge. However it is recognised that these ‘experts’ are part of a broader group of stakeholders, such as civil society, that were excluded from the sample on the basis that their involvement in developing the plans was at best minimal (see Section 5.3.2).

²⁹ The main shopping precinct and public transport hub in the northern sub-region, located in KwaMashu.

5.2 Spatial Plans

5.2.1 Influence and process

Cornubia Framework Plan

The process of developing the Cornubia Framework Plan started with “*intense*” workshop sessions that focused on design, with a set target date to deliver the finalised plan. The workshops were interactive and the participants knew that the discussions would culminate in a physical product at the end of the process (Respondent 3:19-11-2012). According to Respondent 2 (13-11-2012), THD and the Municipality put forward their different objectives and once a combined set of new objectives were produced the spatial aspects of the plan were then examined. The starting point was to develop a spatial concept, which happened quickly in about three days. Then there was a process of refinement with the plan being developed in about four to six months (Respondent 3: 19-11-2012). Thus, after many years of disagreement and not working together, the plan was produced in less than a year, and everybody felt like they had contributed (Respondent 2: 13-11-2012 and Respondent 3: 19-11-2012).

A first priority was to plan the linkages to integrate the communities on the coastal and the inland sides of the northern corridor, with the idea of linking the INK area (Inanda, Ntuzuma and KwaMashu) through Cornubia to Umhlanga (Respondent 3: 19-11-2012). The solution to linking the suburbs was the idea to create a lattice of parallel connecting roads though the NMPR, with linkages running east-west and north-south to “*stitch*” the Cornubia project into the wider region (Respondent 3: 19-11-2012).

New housing opportunities were also an imperative in the design, with an acceptable density to allow for a threshold critical mass required to support the major activities (Respondent 3: 19-11-2012). The design also needed to accommodate opportunities for employment and mixed use development, so that the project is a fully integrated part of the Municipality (Respondent 3: 19-11-2012). The IRPTN was an influencing factor in the design of the plan as there is a link through Cornubia (Respondent 3:19-11-2012). Good planning principles and practices were followed making sure that the eThekweni Municipality met their objectives (Respondent 2: 13-11-2012).

According to the respondents, the planning process of the Cornubia project shows a new co-operation that is also in line with how LED is envisioned in the country and with the idea that partnerships between public and private entities will stimulate economic growth (Nel & John, 2006; Xuza & Swilling, 2008; Rogerson, 2006). There is also the ideology of integration within the plan, which is prevalent in the social transformation discourse in South Africa with the focus of Cornubia on integrating communities (Harrison, *et al.*, 2008).

LAP Verulam-Cornubia

To create the LAP there was also extensive '*workshopping*' undertaken between the consultants preparing the plans and the different eThekweni Municipality departments that were involved. The Framework Planning Department facilitated the process of the plans and, significantly, it was the first time that the municipality had undertaken three LAPs at the same time (Respondent 5: 03-12-2012). The main reason for this was to examine the corridor holistically and, due to proposals for road realignments, developing the plans separately would not have worked (Respondent 5: 03-12-2012).

As mentioned, the project was funded by the Provincial Government and the Framework Planning department had to work closely with the eThekweni Municipality Transport Authority (ETA) to produce the plans. This was the first time that Framework Planning had worked closely with another department. This close working relationship was important as the Municipality wanted to be '*ahead of the game*' with regards to their conceptual understanding about the development of Cornubia (Respondent 5: 03-12-2012). Both plans, the Framework Plan and the LAP, went through a similar process with discussions and workshops allowing for ideas to flow. There were also a number of partnerships formed unofficially, which indicated the need for co-operation and linking expertise.

Both the design processes for the Framework Plan and for the LAP began by examining the physical ecological components of the site. The Framework Plan started the planning process by examining the "*reed network, the river and wetland*" system (Respondent 2: 13-11-2012). Respondent 12 (22-11-2012), shows how the LAP process started on the same lines "*essentially the way we do our planning is we do take our lead from environmental structure*" such as the

river and wetland systems. Environmental issues are an integral part of the planning process and this consideration shows the drive to develop holistic, well thought out plans.

The LAP process also brought together many different specialists such as bulk infrastructure consultants, environmentalists, and engineers. These consultants went through the process of negotiating and challenging each other in terms of the “*product*” (Respondent 12: 22-11-2012). There was an exchange of knowledge between the different specialists in what van Ewijk and Baud (2009, p. 220) refer to as “*knowledge networks*”, and there were opportunities for stakeholders to interact with the plans (see Section 5.2.4).

The LAP process also included DTP and THD in the formal planning process. Unlike other developers THD and DTP were given the space to contribute ideas, access documents, and comment on the process. The main reason for this is that THD and DTP have a strong vision for the area; and that they both collectively own seventy percent of the northern corridor.

5.2.2 Theory and concepts

The Framework Plan embraces the concept of New Urbanism as it incorporates the main design principles found in this paradigm as highlighted in the literature (Dewar, 2000; Ellis, 2002; Falconer Al-Hindi, 2001; Harrison, *et al.*, 2008; de Villiers, 1997). The main concepts highlighted in the framework plan are sustainable cities, public transport orientated, walkability, and mixed use developments (Respondent 2: 13-11-2012; and Respondent 3: 19-11-2012). The idea is to move away from the modernist approach to development and create what the BNG describes as Integrated Human Settlements (Harrison, *et al.*, 2008; Pithouse, 2009; Huchzermeyer, 2011; South African Department of Housing, 2004)

With ideologies such as integration, densification, alignment with economic markets, and sustainability the concept for the Framework Plan is also in accordance with the South African planning discourses (Harrison, *et al.*, 2008). According to Respondent 3 (19-11-2012) the literature on sustainability has shifted quite substantially over the last couple of years “*people are now talking about sustainable urbanism*”.

The traditional view of sustainability assumes that cities and the way they grow are the “*problem child*” (Respondent 3: 19-11-2012), and according to Respondent 3 (19-11-2012), “*normally it’s about not doing anything, maintaining the status quo, ensuring minimum impact on the environment. Now literature is showing, you [have] actually got to intervene, do things, enhance the natural environment...so if we don’t start to talk about sustainability in terms of how cities should grow and what the model of future cities are, then in fact....we’re actually going to lose the battle for sustainability*”. Respondent 3 (19-11-2012), further explains that sustainability is about trade-offs between the physical environment, the social environment and the economic environment which is exactly what Campbell (1999) is trying to convey in the Planning Triangle. Respondent 3 (19-11-2012) posed the questions “*what trade-offs could one live with*” and “*what mitigation could one live with and indicated that the Framework Plan is a chance to get it right from the beginning*”.

The Framework Plan also includes spatial concepts such as nodes and corridors. Different concepts such as noise contours and ecological preservation, have been introduced into the Framework Plan discourse through taking into account local contextual issues (see Section 5.2.5). The LAP also incorporated the concepts of nodes and corridors, the compact city approach, limiting sprawl, sustainable development and functional neighbourhoods (Respondent 12: 22-11-2012; Respondent 5: 03-12-2012). However, the LAP was completed before the noise contours were introduced by the eThekweni Municipality Health Department therefore the impact of the contours was not highlighted on the LAP.

5.2.3 The two plans: similarities and differences

The Municipality is the main actor linking the two plans as the Framework Plan was commissioned by THD and the LAP was prepared by consultants for the eThekweni Municipality. Because the Municipality owns a portion of Cornubia, it was actively involved in the design of the Framework Plan. The two plans have one key difference however, and this is the location of the main node (Respondent 3: 19-11-2012; Respondent 5: 03-12-2012; Respondent 12: 22-11-2012; Respondent 6: 03-12-2012). On the Framework Plan the node is an extension of Gateway, whereas on the LAP it is at a separate location further west. The Municipality were against the town centre being located across the N2 from the existing node of Gateway, they would have preferred it to be further west (Respondent 5: 03-12-2012;

Respondent 6: 03-12-2012; Respondent 7: 03-12-2012). Moreover, the Municipality believes the reason for THD wanting the node opposite Gateway is because of the potential visibility of business from the N2 and M41 roads.

Respondent 12 (22-11-2012) argues that Cornubia needs to have its own identity with an emphasis on a new town centre and not a continuation of Gateway. This view is also held by the Municipality and was explicit in the LAP. This is in accordance with other research undertaken on the Cornubia development (Sutherland, *et al.*, 2014). There has also been a proliferation of new development in the eThekweni Municipality which has no character, Goss (2005) describes this as modernistic development. This type of development characterises much of the new building style in South Africa at present (Respondent 12: 22-11-2012).

Moreover, the reason for the different positions of the node is because the Municipality and THD are “*coming from two very different perspectives*”. One is coming from the perspective of the public good and the other is influenced by market demand and profit margins (Respondent 12: 22-11-2012). This difference in objectives is part of the tensions found in the Planning Triangle (Campbell, 1999) and it is clear that these two entities had to discuss and compromise with regards to their objectives.

However, the N2 corridor is a limited access route and therefore multiple interchanges should not be developed along this corridor (Respondent 12: 22-11-2012). The Framework Plan seems to be more accurate in terms of where the node will eventually be located as the Municipality has had to compromise on the location due to the introduction of the noise contours (See Section 5.2.5) and allowing for maximum low-cost housing development on the site (Respondent 5: 03-12-2012).

5.2.4 External Input from Stakeholders

In terms of the mandate the Economic Development Branch at the Municipality has, the Cornubia development was not part of any of their programmes as it was a greenfield site. However, many stakeholders were required to work together as it was an integrated project. The Economic Development Branch was represented on the LAP Steering Committee to provide economic input (Respondent 10: 05-06-2013). There was plenty of opportunity to

comment on the plans each time a new draft was released, and the Economic Development Branch tried to comment and respond as much as possible (Respondent 10: 05-06-2013). The Economic Development Branch has also been involved in a socio-economic initiative driven by THD. This initiative allows for the partnerships desired in the LED process (Respondent 10: 05-06-2013) and as mentioned in the LED literature (Nel & Binns, 2003; Rogerson, 2006; Xuza & Swilling, 2008).

The EThekweni Transport Association (ETA) was also heavily involved in the planning process as one of the key role players in the creation of the LAP. According to Respondent 13 (13-06-2013) the municipality had full control of the NUDC plan and the ETA guided the consultants *“on how things should be developed”*. The ability for external departments to comment and be a part of the overall process is very positive. This shows new links between departments and better, more efficient ways of planning large scale developments. The plan was largely influenced by the transport network, designed around the IRPTN (Respondent 5: 03-12-2012).

The ETA also played an advisory role to THD on the transport aspects of the Framework Plan (Respondent 13: 13-06-2013). The ETA is the regulatory body approving the transport studies and Traffic Impact Assessments (TIA) which are included in development application approvals. The ETA undertook a transport study (a strategic assessment and long term transport plan) which examined the Cornubia area in the context of the north (Respondent 13; 13-06-2013). The study explored the implications of what happens to traffic when Cornubia *“comes on stream”*, over a 20 year horizon. The ETA examined the overall transport system from a network management perspective and *“how the development was going to impact on the greater municipal area”* (Respondent 13: 13-06-2013).

5.2.5 Local Contextual Issues

The development of the two plans has required a detailed understanding of many local contextual issues. The three key issues identified by the respondents are: the constraints of the housing subsidy; environmental issues; and the noise contours.

Housing Subsidy

The housing subsidy (mentioned in Chapter 2) is problematic according to Respondent 2 (13-11-2012); Respondent 5 (03-12-2012); Respondent 6 (03-12-2012); Respondent 13 (13-06-2013) and Respondent 14 (21-05-2013), as it does not allow for high density low-cost housing. Creating higher densities has been a critical driver in making the Cornubia project a sustainable development with a viable threshold of residents to allow for community facilities and public transport. This constraint contradicts the discourse of compaction as not having the ability to densify the site firstly restricts the amount of housing units that can be developed and secondly means that the demand for housing will lead to more housing built elsewhere leading to urban sprawl (Dewar, 2000; Janse van Rensburg & Campbell, 2012).

Another challenge, according to Respondent 12 (22-11-2012); Respondent 6 (03-12-2012) and Respondent 9 (22-07-2013), is the housing typology that the subsidy currently allows. The units that are being developed are four storey walk-ups which has allowed for more substantial densities than the more common land hungry one house one plot typology predominant in the majority of government low cost housing projects. Although this four storey walk up typology moves away from the modernistic view of single houses on individual stands (Dewar, 2000), it is not the most efficient use of housing development to densify development and create better efficiency of service infrastructure. The BNG promotes higher density housing development but does not specify the ideal development density in units per hectare (South African Department of Housing , 2004).

Environmental Issues

The eThekweni Municipality has many natural assets, and as a result the Municipality created the Durban Municipal Open Space System (D'MOSS) to protect large areas of natural habitat. Large tracks of land within the Cornubia site are part of the D'MOSS (Respondent 5: 03-12-2012; Respondent 10: 05-06-2013). Therefore the environmental impact the development will have has been deemed important in the design concept. The environmental protection is not only affected on the site, there are rivers running through the site to estuaries on the coast thus the impact of the development could affect the environmental wetland system further down the system (Respondent 12: 22-11-2012).

Moreover, Respondent 14 (21-05-2013) adds that the topography of the site is also constraining and this has determined where some of the land uses are to be located. For example industry can only go on flat land which is predominantly situated to the east of the site. The topography has also played a role in reducing the number of housing units as there are large areas of undevelopable land in many parts of the site with slopes greater than 1:3. However, more positively this has created areas which can now be left as ecological areas, providing natural drainage and enhancing the aesthetics of the area.

Noise Contours

All the respondents identified the noise contours³⁰ as a local contextual issue. They emphasised that these contours have had a significant impact on the development of Cornubia. Respondent 1 (24-08-2011) explains that *“the City felt that certain development should not take place within the 55 decibel zones from the airport [this is a] huge swathe of land in Cornubia”*. Respondent 3 (19-11-2012) also indicates that the impact of the decision happened much later in the Framework Plan process, therefore the plan changed and land uses were realigned. Many respondents, expressed the view that more tests should have been done to examine whether the noise really has an impact (Respondent 2: 13-11-2012; Respondent 3: 19-11-2012; Respondent 4: 15-11-2012; Respondent 12: 22-11-2012). Respondent 4 (15-11-2012), queries whether it is *“fair to deprive people of housing until you have assessed whether it really is [a] noisy environment”*. The modelling for the noise contours was a *“flat surface model”* this does not take into account the topography in the area and that in reality the noise from the airport could be heard in a completely different decibel range.

5.3 Knowledge, Participation, and Space

5.3.1 Knowledge Exchange

Framework Plan

The knowledge exchange for the Framework Plan has been between eThekweni Municipality, THD and the consultants (Respondent 2: 13-11-2012; Respondent 3: 19-11-2012; Respondent 4: 15-11-2012). According to Respondent 3 (19-11-2012), there has been a chance to learn, and the consultants approach their work in a way that they can learn from every project undertaken.

³⁰ The noise contours are explained in Chapter 3

The consultants also try to engage with each project so that “*each time...we create new knowledge*” (Respondent 3: 19-11-2012). It is also apparent that there is an exchange of knowledge between the different consultants in the NMPR as there are a small number, and they work on many different projects (Respondent 3: 19-11-2012; Respondent 4: 15-11-2012). This again reiterates the importance of a professional knowledge network with the exchange of embedded knowledge (van Ewijk & Baud, 2009).

Respondent 4 (15-11-2012) explains that the ideas get absorbed into different plans. Respondent 3 (19-11-2012) adds that there has been a huge learning curve with the projects in the north, especially the IRPTN which has opened their minds to a completely new understanding around integration, public transport and urban development. This IRPTN initiative is in line with the compaction discourse (Dewar, 2000; Harrison, *et al.*, 2008). The northern area seems to have allowed for new opportunities to learn about large-scale urban development and learning about creating sustainable communities interrelating with the bigger concept of the Aerotropolis (Respondent 3: 19-11-2012).

Local Area Plan

Designing the LAP was also a learning experience for the Municipality, as Respondent 5 (03-12-2012) explains “*as a city official, no matter how detailed, how in depth you get into the physical work, you still learn something...you will always learn.*” The consultants who undertook the LAP project are from an international company therefore international ideas have also filtered into the plans (Respondent 5: 03-12-2012). However, this international knowledge was mainly in the form of transportation knowledge (Respondent 12: 22-11-2012). Respondent 8 (22-07-2013) believes that departments should work together and share knowledge, by using empirical data to debate design elements. Through the Steering Committee meetings there was opportunity to comment and discuss the report (Respondent 10: 05-06-2013). However written comments from the team members and other departments were not usually shared so the knowledge exchange element was lost in that regard (Respondent 10: 05-06-2013). A knowledge network has also formed within the municipality with different departments communicating with each other. This is a positive approach to development, as it allows for more sustainable and well thought out concepts by incorporating a wide range of ideas, theories and concepts.

5.3.2 Public Participation

The Framework Plan was not a statutory plan therefore it did not have a formal participation process for consulting civil society, participation was conducted during the EIA process for the site (Respondent 2: 13-11-2012; Respondent 3: 19-11-2012; Respondent 9: 22-07-2013). The main issues to emerge from the EIA participation process were: people wanting employment; traffic congestion concerns; apprehension about the low-cost housing component; people wanting housing; and the effect the airport would have on living environments (Respondent 3: 19-11-2012; Respondent 12: 22-11-2012).

Moreover when one engages with the public there needs to be a defined layout to discuss as this is far more meaningful to the general public, with firm proposals and relative certainty with timeframes (Respondent 12: 22-11-2012). Furthermore poorer communities are usually more concerned with immediate issues rather than the overall vision of the Municipality.

However the NUDC project team held public meetings, which went into detail. It was subsequently realised that holding public meetings for all the plans was not necessarily the best solution as the immediate concerns of the public are not helpful when discussing the broad regional perspective (Respondent 5: 03-12-2012). Also having public meetings after the draft plan was completed has been problematic as it contradicts other studies for example the economic study which required public engagement prior to the completion of the LAP. Thus the public found out about the study unofficially and became “*outraged*” by the lack of engagement. This discontentment was compounded when business owners learned that THD had been consulted in advance and had specifically been “*given special insight into this process but no-one else [had]*” (Respondent 14: 21-05-2013).

There also seems to be a “*fear*” of public engagement within the Municipality as they do not want to be locked into disputes before they have developed their own ideas (Respondent 14: 21-05-2013). The development of the Municipality’s ideas in the north was one of the purposes associated with the LAP process. It was to allow the Municipality to conceptualise the area and allow them to be more proactive when it comes to development proposals. However, the public interpreted this “*fear*” of engagement in a manner that is excluding and not informative and with their views not being taken seriously (Respondent 14: 21-05-2013). This lack of

engagement can be linked back to the theory underlying Arnstein's (1969) Ladder of Participation, where the public participation process could be argued to be on the bottom four rungs of the ladder with the best form of engagement being '*consultation*' (Arnstein, 1969, p. 217). This position on the ladder suggests that progress can be made to create more meaningful citizen engagement opportunities.

5.3.3 Public/Private Partnerships

The public/private partnership in eThekweni is fairly unique, with THD owning so much land within the Municipality (Respondent 2: 13-11-2012; Respondent 3: 19-11-2012). The partnership has been deemed successful and neither party can "*do it*" on their own (Respondent 2: 13-11-2012). The partnership between the two entities for Cornubia is not formal in terms of legislation but is a co-operation agreement (Respondent 2: 13-11-2012). The fact that the site is jointly owned by the Municipality and THD is seen as a good model for future development "*where each does what they are good at doing and where their interests lie*" (Respondent 3: 19-11-2012). Furthermore "*everybody wants the city to prosper, to live in a city that provides for the citizens equally and creates opportunities*" (Respondent 3: 19-11-2012). EThekweni Municipality has to respect the fact that THD are a big land owner, and thus there needs to be a functional partnership (Respondent 10: 05-06-2013).

However, within the Municipality there are mixed feelings about working closely with THD. Some departments acknowledge their role in stimulating development and actively work together with them while others view them as being strong willed, and leading the development within the Municipality (Respondent 10: 05-06-2013, Respondent 1: 24-08-2011).

Examining the Planning Triangle model (Campbell, 1999) there is tension between the Municipality and THD view of sustainability. THD are much more aligned to the notion of economic sustainability, whereas eThekweni Municipality are focused on environmental sustainability (Respondent 4: 15-11-2012). There is also tension between ETA and THD with regards to cost sharing and at the moment it seems expected that the Municipality should pay for all road infrastructure (Respondent 13: 13-06-2013). Others view the relationship as "*healthy*" and "*robust*" where the municipality and THD "*agree to disagree*" on a "*healthy basis*" (Respondent 8: 22-07-2013; Respondent 9: 22-07-2013).

The power relations are also seen as being equal, however, the Municipality does have the “*inherent capacity to expropriate*” the portion of land owned by THD. This “*lends a bit of an arrow to its [the Municipality] bow*”. Nevertheless THD has the investment power and market credibility to influence the rest of the development therefore both entities are “*funny bed fellows....strong...both powerful*” (Respondent 12: 22-11-2012). In addition THD and DTP have formed a coalition in which they have aligned their vision for development in the north, with both ensuring that their interests are met (Respondent 12: 22-11-2012).

5.3.4 Representation of Space

According to Lefebvre (1974) “*representational space*” is the physical lived world. The concepts from the Cornubia Framework Plan will inhabit this physical world when the site is developed. This shift from the conceptual to the tangible will take many years to achieve and during this time knowledge can change and evolve. Cornubia will be built in many phases (over a ten to twenty year period) and during this time new ideas, more challenges and different demands will continue to shape the physical space (Respondent 2: 22-11-2012; Respondent 5: 03-12-2012; Respondent 10: 05-06-2013). The evolution of the Framework Plan is a “*certainty*” as the plan has already changed due to the development controls around the noise contours (Respondent 2: 13-11-2012). Respondent 3 (19-11-2012) believes that the detail will change and “*hopes*” that the plan becomes “*richer*” and creates new opportunities. The biggest challenge will be the need for higher densities (Respondent 3: 19-11-2012). Respondent 5 (03-12-2012) also “*hopes*” that there will be major changes to the housing subsidy so that these desired higher densities can be achieved, as at the moment, due to many factors, the affordable housing segment of the development has decreased in numbers (Respondent 13: 13-06-2013). There is the cynical view that the development of the Cornubia site will be a continuation of the development already situated along the northern corridor, with no innovation or “*anything particularly different*” (Respondent 12: 22-11-2012).

Moreover, the LAP has been completed and the development of the Cornubia site will now be guided by the Framework Plan. The LAP will be used as guidelines rather than an absolute plan, especially as THD will take its cue from what is happening in the economic market (Respondent 10: 05-06-2013). Respondent 10 (05-06-2013) presumes that the low-cost housing

component of the development will be more static and the Municipality will develop this when it has resources

5.4 Summary

Development in the northern area of the eThekweni Municipality has been rapid and dominated by one main stakeholder, Tongaat Hulett Developments. With the relocation of the airport the eThekweni Municipality have now acknowledged the future need for growth in the sub-region. Growing the north has been identified as a strategic opportunity. This opportunity allows for economic growth, the creation of much needed jobs, and also the availability of land for low cost housing. However, the biggest challenge with developing this area is the provision of infrastructure such as water, sanitation, and road networks.

The spatial plans were created following extensive discussions in meetings which has given the opportunity for ideas to flow and knowledge to be exchange. The main concepts found in both the Local Area Plan and the Framework Plan stem from the New Urbanism paradigm. Compaction, being public transport orientated, and a focus on sustainability being the main concepts in the plans. Along with these concepts local contextual issues have also influenced the design of the plans.

The following chapter presents an analysis of the findings of the study in relation to the research questions. The spatial discourse and objectives for the NMPR are discussed along with the spatial knowledge and discourses found in the two plans. A discussion of how these knowledges were exchanged and how the different stakeholders have contributed to the process of the plans is also included. Finally the local contextual issues are explored.

Chapter Six: Conclusions and Recommendations

Planning in post-apartheid South Africa has had many challenges to overcome, and many of these still persist well into democracy. The reconstruction of the spatial patterns, as well as social transformation, have been harder to overcome than the post-apartheid government had envisioned. The problems within South Africa are deeply structural with excessive poverty and inequality as well as a high levels of unemployment. Added to these inherited structural problems is the reintroduction of South Africa into the global arena, with pressures from globalisation and the market influencing decision making and policy. The shift to more neoliberal policy ideals and the influence of the market on development has exacerbated poverty, inequality and the apartheid spatial patterns in South Africa. This chapter will reflect on the initial research questions and gives recommendations and possibilities for further research.

6.1 Reflecting on the research questions

In the past fifteen years there has been a great deal of development in the north, which has mainly been facilitated by one private developer. This development has included a range of types including housing, commercial and retail. When the eThekweni Municipality was formalised in 2001 the Municipality did not feel that rapid growth in the north was ideal. This view was unlike those of the Transitional Local Council and the previous North Durban Council. However, the Municipality shifted its opinion with the development of the King Shaka International Airport (KSIA) and the Dube Tradeport (DTP), as these two developments accelerated the opportunities for growth. The Municipality recognised this potential and have been working collaboratively with the private sector to organise the development in the north in an ordered and sustainable manner. The establishment of such collaborative partnership is highlighted in the Local Economic Development (LED) strategy, promoted by national government. The main challenge in the area is the need for infrastructure such as sanitation and water, which are lacking in the NMPR.

The discourses used in the north resonate with the international paradigm of New Urbanism. These principles have been influential in the planning literature in South Africa and they have been incorporated into government policy and thinking. The principles are: sustainability;

mixed use development; compaction; and being public transport orientated. These principles have been interwoven with the discourses unique to the context of the country. These discourses support integration where formally disadvantaged areas are linked into the urban system using, in the case of eThekweni, the IRPTN and the ideology of corridors and nodes. In the context of the north the areas to be linked are INK, Phoenix and Verulam with Umhlanga, Mount Edgecombe, and the Gateway precinct through the IRPTN route from Bridge City in KwaMashu to Umhlanga via Cornubia.

Shifting the attention to the two plans, the LAP should inform the Framework Plan, however, the processes were simultaneous and the LAP informed the Framework Plan and vice versa. The LAP has been completed and is now a static plan therefore it will become dated (if it is not already). On the other hand, in comparison the Framework Plan is constantly evolving as a direct result of the spatial knowledge changing. This evolving plan is guiding Cornubia. The Cornubia development will be phased in over a long time frame therefore the concept for the area will change, which will inform the Framework Plan. For example, the LAP was not informed by the 55 decibel noise contour, whereas the Framework Plan was adapted to take this into consideration with consequential changes to the development pattern i.e. no residential development within the 55 decibel noise zone.

As mentioned, other spatial knowledges contained within both plans are the creation of a new node and the arterial route through the site. These spatial elements will remain in the plans as they are central to the development. However, the placement of the node has been highly contested with the node now being placed across the N2 from the Gateway Precinct. Other spatial elements are the low-cost housing which has shifted ever since the project began. This is problematic as the eThekweni Municipality has a mandate to provide this housing. This housing is the pro-poor element of the site. However the numbers of housing units have declined as low-cost housing cannot be built within the noise zone. The commercial and medium income housing, which is the pro-growth portion of the site, will be market driven and therefore will evolve with the fluctuations of the market.

Knowledge has been exchanged in a collaborative manner between both the Municipality and the private developer as well as between the different municipal departments. This knowledge

exchange happened through extensive workshops and discussions. Private consultants, who were involved with the exchange of knowledge are also facilitating the knowledge production process and the creation of cohesive plans. Moreover there was an exchange of implicit knowledge as professionals keep up to date with international knowledge. Companies like THD also explore benchmarking models to evaluate the best methods of building and cost analysis. The knowledge used in the two plans was expert knowledge and it was pooled from the joint experience of the individuals working together and contributing knowledge into the development of the plans. From data collected regarding the experience of the respondents', they collectively have 236 years of experience. This knowledge includes "corporate knowledge" that is found within THD and the political, technical and managerial knowledge found within the Municipality.

The LAP had a participation process which was designed as meetings for community members therefore community knowledge was sought for the LAP process. However, the main interests of the community were the immediate issues such as housing and job opportunities. These interests highlight the chronic needs found in many of the communities within South Africa. The needs of the communities are 'instant' solutions to create well-being and better livelihoods. This results in the public not necessarily wanting to engage with broad planning like the LAP. Both the Framework Plan and the LAP for Cornubia were also designed in the absence of a community being in existence at Cornubia, therefore the design has been created for a hypothetical community. This hypothetical community was therefore unable to participate in the design process as it was uncertain who would move to Cornubia.

The local contextual issues are firstly the housing subsidy, which is government funding for households that earn under R3500 a month. Both the Municipality and private consultants expressed their concerns over the housing subsidy as it does not allow for the creation of dense communities. This does not necessarily contradict the ideal for compaction as the subsidy allows for four storey walk ups as opposed to the older subsidy of one RDP house, one stand. However, it limits densification which is key in providing public transport and more sustainable communities. The 1997 Housing policy advocated mass delivery of RDP style houses as there was a huge backlog for housing at the beginning of the post-apartheid era. The problem with

the RDP style housing projects was the impact that it has had on the landscape. These developments are large sprawling entities on the periphery of towns and cities.

The new 'Breaking New Ground' housing policy changed the housing discourse to one of sustainable human settlements and this has allowed for a certain amount of densification with different typologies of housing. Housing densities can only be increased to the west of the N2. The reason for this being that the coastal plain was developed during the apartheid era as White suburban areas and the area can only be densified according to the local planning scheme which will not yield the densification level required to create optimal sustainable communities.

The second local contextual issue has been ecological preservation as Cornubia has a large amount of land dedicated to the wetland drainage system, as well as land under the D'MOSS system. The Municipality has a strong environment department and preservation is a key element of protecting the valuable ecological assets found within the Municipality. The topography of the site is also challenging as there a number of hectares which are steeper than 1:3. This land is too steep to develop and thus the remaining land needs to be optimally used in the most efficient possible way.

The third and final contextual issue has been the 55 decibel noise contour. The contour line is the noise, projected for the year 2035 (with the growth of KSIA). The eThekweni Municipality Health Department has stipulated that no residential development can be built within the contour line³¹. There has been much debate, both within the planning department and the private sector, as to whether this is appropriate in the South African context. It is in line with international best practice for new airports however, many old well established airports have housing situated close to their boundaries, including the old Durban International airport that was situated to the south of the CBD.

This begs the question is the projected noise (in 2035) more important than giving housing to those in dire need? The backlog for low-cost housing within the country is growing not decreasing and there are more people than ever who need adequate shelter and increased well-

³¹ Refer to Figure 3.8 in Chapter 3. The contour line loops across the site and has created a 55 decibel noise zone within the site.

being. One possible way of answering this question is to undertake research to model what the noise levels really are. It is highly probable that, as the topography will have an effect on the noise levels, the slopes will mute noise and change the way it is heard and at what volume. The noise contours were developed using a flat model i.e. level ground, which will not accurately predict the noise that will actually occur given the topography of the site.

There has also been some contestation around the change of uses within the noise zone as the housing has been replaced with commercial and retail activities. However, commercial and retail land outside of the noise zone has not been converted to residential to mitigate the loss of the housing within the noise zone.

In the data collected the respondents comment on how five to six years ago there were tensions and disharmonies between stakeholders. However through discussions and co-operations all parties have now attained a shared vision for a sustainable approach to the development of the north. All the development stakeholders want the best for the area, even from the different perspectives. Therefore arguably the power relations are not equal but they are stable. eThekweni Municipality and THD both have positive attributes to help deliver the desired sustainable development. However the eThekweni Municipality has an 'arrow in their bow' as they could expropriate the whole site to develop for low-cost housing, therefore they have the ability to wield political power. THD has the knowledge and understanding to develop economic opportunities and job creation. The power relationship may not be equal but it is not a disharmonious relationship as it is based on mutual respect. The eThekweni Municipality has been operational for the last thirteen years therefore there has been sufficient time for the municipality and THD to 'bed down'

Cornubia has ecological value in the form of wetlands and D'MOSS. The value of the remainder of the land has been reduced because of the impact of the type of agriculture (monoculture of sugar cane) on the land in the past. THD have realised the value of the agricultural land in terms of development in the north and have created high value developments for example, Mount Edgecombe which was built on land that was deemed undesirable as it was adjacent to the N2 and the Phoenix industrial estate. However, whilst THD have succeeded in creating high economic value in a sought after development, there has been an imbalance in the area as social

development has been side-lined. With the Cornubia development THD have had to engage with low-cost housing, even though it is being developed by the Municipality. This type of development has never been considered previously by THD as they usually focus on the high-end segment of the market.

6.2 Further Research

The NMPR embodies social, economic, environmental and political issues and there are a great number of opportunities for further research. These include, research into the impact of the 55 decibel noise contour on the development. This research could be the development of quantitative models to predict the noise levels by taking into account the topography, or qualitative through gathering rich data from the affected stakeholders. A second opportunity for research could be examining densification in more detail and determining how to densify the area to create sustainable efficient communities. When more phases of development in Cornubia have been completed research could be undertaken to clarify whether the objectives outlined by the Municipality and THD have actually been realised. Research could determine whether Cornubia has been integrated into the northern region, the extent to which the area is more socially cohesive, and whether the project has transformed post-apartheid spatial patterns. Fourthly, research could ascertain whether the physical development resulted in a continuation of the Gateway precinct, or has the discourse of sustainable human settlements resonated within the physical development of Cornubia. Lastly, have the partnerships between the different entities survived and has the process of developing the Cornubia Framework Plan been used to develop other areas of the eThekweni Municipality.

6.3 Conclusion

The focus of this research has been a unique case within the Municipality of eThekweni. Since having one large land owner within a municipal region is not a common occurrence, it is hard to generalise the findings because of this uniqueness. THD is unique within the municipal region as the company is driven to develop their land which is in stark contrast to Illovo, the big land owner in the south. The dynamics between the stakeholders are therefore arguably different to most other cities both in South Africa and globally. Many large urban municipalities are not surrounded by vast areas of agricultural land and rural hinterland. These attributes have

fostered the ability to create a vision for sustainable human settlements in the eThekweni Municipality.

The research has also show the dynamics between the stakeholders in terms of the Planning Triangle (Campbell, 1999). All three of the issues represented in the triangle: social, environmental, and economic; are important yet different stakeholders value these issues in varying ways. The key to creating sustainable developments is using all the knowledge available from a range of stakeholders and then shaping that knowledge into an efficient and cohesive plan to guide development that allows for interaction, and for the opinions of different stakeholders to be heard and valued equally.

Returning to the main planning discourses in South Africa: spatial; social transformation; economy and the market; and sustainability (Harrison *et al*, 2008). The research shows that these discourses resonate within the development knowledges of both the LAP and the Cornubia Framework Plan. The main objectives of the development are firstly to integrate Cornubia into NMPR and link existing areas together using public transport linkages. This integration echoes the need for social transformation within South Africa and the discourse of integration which is strongly advocated within government. This integration is also in line with the challenge to spatially transform apartheid patterns, by linking Cornubia to existing areas which allows for formerly marginalised citizens to have access to an increased amount of opportunities. Secondly the NMPR has been identified as a high growth area, this growth allows for the creation of economic opportunities and employment. Economic opportunities are very important in helping to uplift poor communities and the growth in the area has allowed for the economic development strategies to be implemented at the local level. Finally sustainability is a growing concern globally, and South Africa has incorporated this discourse into many policies and initiatives. The BNG document advocates for Sustainable Human Settlements and this ideal has been absorbed into the two plans for Cornubia. The NMPR has an extensive area of ecologically sensitive land and consideration of the ecological assets was the starting point when designing the plans. The research shows that the discourses found in South African planning are embedded in the development practices of both public and private stakeholders.

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Annexure A: Interview Schedule

Exploration into Knowledge Production in Spatial Planning: The Cornubia Housing Project, eThekweni Municipality, South Africa

My name is Helen Cooke and I am a student studying for my Master's degree at UKZN. The project aims to understand the two development plans, which have been developed for Cornubia and how spatial knowledge, planning discourse and ideology of megaprojects for growth, have influenced these plans. I would like to ask you some questions about your understanding of the development in the north zone of the eThekweni Municipality and Cornubia housing project. Your knowledge of the planning discourses in South Africa and more specifically eThekweni Municipality.

Thank you for agreeing to take part in the project. Before we start I would like to emphasize that:

- Your participation is entirely voluntary;
- You are free to refuse to answer any question;
- You are free to withdraw at any time.
- Your name will not be revealed unless you give permission

Section A: personal profile

1. Organisation (Public/Private/Community)
2. What position do you hold?
3. What is your specific responsibility?
4. What involvement have you had with Cornubia?
5. How long have you been working in the Development field/representing the community?

Section B: eThekweni Municipality northern zone (objective 1)

6. In your view what are the eThekweni Municipality objectives for the development in the north?
7. Do you think these objectives have stayed the same during the growth of the northern zone?

8. What spatial developments have changed the course of the development in the north?
9. How has the development of Airport/Dube trade port changed the dynamics of the north?
10. Do you think the concepts for the northern development are the same between the different role players?
11. What are your reflections on the development in the North of eThekweni Municipality?
12. What role do you think the state plays in development?

Section C: The two spatial plans for Cornubia (objective 2)

Questions to the Designers.

13. What influenced the development of the plan?
14. What were the processes followed in creating the plan?
15. What spatial concepts were used in the design?
16. Did you draw on spatial planning theory to ground the design?
17. In your opinion why do you think the two local area plans for the site of Cornubia are so different?

Questions to other Organisations

18. Are you aware there are two development plans for Cornubia?
19. In what way has your organization influenced the design of the plans?
20. Were you able to interact with the designers of the plans?

Section D: Exchange of knowledge (objective 3)

21. In your opinion was there an exchange of knowledge?
22. What were the processes followed in creating the plan?
23. Did you draw on knowledge from international sources?

Section E: Stakeholders contribution (objective 4)

24. Within the plan design was there a participation process?
25. Where other professional consultants were involved in the design process?

Section F: Local contextual issues (objective 5)

26. What local contextual issues influenced the plan design?

Section G: Power relationships and interactions (objective 6)

27 What was your interaction in the Cornubia plan design?

28 What are the interactions with the public/private partnership?

29 These plans are a representation of space, what in your view will happen on the site?

Annexure B: Informed Consent Form

Informed Consent Form

(To be read out by researcher before the beginning of the interview. One copy of the form to be left with the respondent; one copy to be signed by the respondent and kept by the researcher.)

My name is Helen Louise Cooke (student number 210540214). I am doing research on a project entitled 'Exploration into knowledge production in Spatial Planning: The Cornubia Housing Project, eThekweni Municipality, South Africa'. This project is supervised by Professor Dianne Scott at the School of Development Studies, University of KwaZulu-Natal. I am managing the project and should you have any questions my contact details are:

School of Development Studies, University of KwaZulu-Natal, Durban.

Cell: 002783 308 6765 Tel: 002731 767 2529. Email: helencooke@gmail.com or 210540214@ukzn.ac.za.

Thank you for agreeing to take part in the project. Before we start I would like to emphasize that:

- your participation is entirely voluntary;
- you are free to refuse to answer any question;
- you are free to withdraw at any time.

The interview will be kept strictly confidential and will be available only to members of the research team. Excerpts from the interview may be made part of the final research report. Do you give your consent for: *(please tick one of the options below)*

Your name, position and Organisation, or	
Your position and Organisation, or	
Your Organisation or type of Organisation <i>(please specify)</i> , or	
None of the above to be used in the report?	

Please sign this form to show that I have read the contents to you.

----- (Signed) ----- (date)

----- (print name)

Write your address below if you wish to receive a copy of the research report:

(Interviewer to keep signed copy and leave unsigned copy with respondent)