CAPE TOWN 2025: URBAN FORM AND INFRASTRUCTURE

NISA MAMMON
05 JULY 2005

Prepared for ISANDLA Institute

TABLE OF CONTENTS

1. INTRODUCTION

From the Status of Cape Town - Overview Paper (Smith 2005) it is apparent that urbanisation due to migration in Cape Town happens at a rate of approximately 38 525 persons per annum. This equates to approximately 1.6 times the current population size (approximately 23 857) of Upper Table Valley [1] covering a land surface area of approximately 114ha [2]. On the other hand, the N2 Gateway programme intends to enable approximately 20 000 to 22 000 households to be housed / re-housed over the following three years. The City is currently planning to accommodate approximately 18 000 people (3600 households) of this total on approximately 29ha of land in Joe Slovo, Langa in Cape Town i.e. on 25% of the land surface area of Upper Table Valley to accommodate the equivalent of approximately 75% of the Upper Table Valley population. Moreover, standards for the provision of emergency site and service schemes (with no top structure) insist on one ablution to every five households (often four to five people per household), implying that approximately 20 people share one external ablution service point on a daily basis compared with the Upper Table Valley scenario where 2.3 persons have access to at least one bathroom or ablution room per household inside the residential unit.

The overview paper further confirmed that there are huge disparities in income levels between the wealthy minority and impoverished majority visually apparent in our city, yet we are still locating them away from the major urban opportunities in the city. Among other transportation issues, discussed later on, travel journeys to work continue to be expensive for Black (traditionally classified as Indian, Coloured and African) people living on the outskirts of Cape Town who spend an average of 30 to 40% of their gross monthly income on travel costs and an average of 1 hour 5 minutes travelling per trip to and from work (de Saint-Laurent, B. 1998 as cited in Xhali, 2003).

Statistics are useful when used to gauge and address the magnitude and dysfunctionality of the city's issues, concerns, opportunities and potentials for the majority of its people. However, when statistics become the means of addressing the problem, these fail dismally. City makers, operators, developers and built environment professionals have become obsessed with numbers as the underlying tools for addressing the public facilities and spaces, transportation, housing and other problems and challenges we are facing. There are, among others, two reasons for this. The first is that there is a prevailing practice of evaluating everything we are and do in terms of material gain and economics, as individuals, as households, as communities and as a citizenry. Second, from a planning point of view, we have been so brain-washed by scientific data and modernist style

'menu' urban planning that quality and value in the making of cities is always a secondary notion, if it features at all. Thirdly, the obsession with quantity rather than quality of delivery arises from the enormous pressures on South Africa's democratic government to redress decades of discrimination, exclusion and systemic disregard for the rights and needs of the majority of the country's people.

We have to find the meaning, purpose and roles of cities from a qualitative perspective, again.
Within this process, we must find ourselves and our roles in society, again. Perhaps it is time to slow down, stop, look and listen a little and perhaps it may come to light. We are not here for ourselves as individuals, alone we are here mostly to serve and shape society and the container of that society, the city!

1.1 What this paper is about

This paper expounds the need to return to a normative position in post apartheid Cape Town that engenders a developmental agenda from the highest political levels to the immediacy of critical delivery, including accessing the needs of local people. It argues for a long term view on making urban form and infrastructure to a level of such robustness and flexibility that it can change as it must, yet remain timeless in its fundamental make-up. The paper examines the urban form and infrastructure of Cape Town twenty years hence, i.e. to 2025, based on two scenarios: the Business As Usual (BAU) scenario and the Sustainable Development (SD) scenario. BAU is defined as the 'continuation of current social and economic trends' and SD as 'a win-win combination of gradual shifts in environmental, social and economic spheres' (Ravetz 2000: 40). Perhaps more radically, this paper promotes a SD approach that does not only achieve radical shifts in environmental, social and economic spheres but also radical shifts in mindsets and consciousness. It challenges especially those who are in a position to influence societal change for the better, those who hold political and economic power and those who manage public expenditure assets and accounts to marry ideology, policy and implementation so as to effect the necessary changes that will ensure the good life, the good city for all. It also has a place for the ordinary citizen who enjoys and celebrates life to help our leaders and our children to regenerate a collective moral conscience so that we can begin to build our future as citizens together.

The following key questions are investigated in the context of achieving an appropriate urban form and infrastructure that would begin to contribute to inequality/ poverty reduction, integrated and sustainable urban development in Cape Town.

a) What are the likely prospects in terms of urban form and infrastructure for Cape Town by 2025?
b) What are these prospects likely to mean for poverty/ inequality reduction, integrated and sustainable urban form?
c) What alternatives are available to Cape Town for a constructive future by 2025 that will fundamentally and positively impact poverty/ inequality reduction, integrated and sustainable urban form?
d) What are the key pathways or interventions around which city-wide coalitions can cohere to bring about a positive and sustainable urban form and infrastructure for Cape Town?

The brief is rather ambitious in that it considers a number of sectors that influence urban form and infrastructure including *services, housing and shelter, roads and transport, health, educational infrastructure, public space and facilities, as well as natural resources.* While the paper attempts to screen these at a glance in relation to urban form and infrastructure, it considers *public facilities, places and open spaces*, *roads and transport* as well as *housing* in more detail.

Urban Form is defined as the shape or pattern of settlement in the landscape in two-dimensional terms. In three dimensions, it refers to the 'outcome of structure, function and process' (Dewar and Todeschini 2004: xvi). This paper focuses on the two-dimensional aspects of form. *Urban Infrastructure* refers to the utilities required to operate the usable built form effectively, including water, electrical power-lines and energy systems, storm water, sewerage, telecommunications, roads and rail. The emphasis of the paper is on the provision of public transportation and non-motorised transport infrastructure.

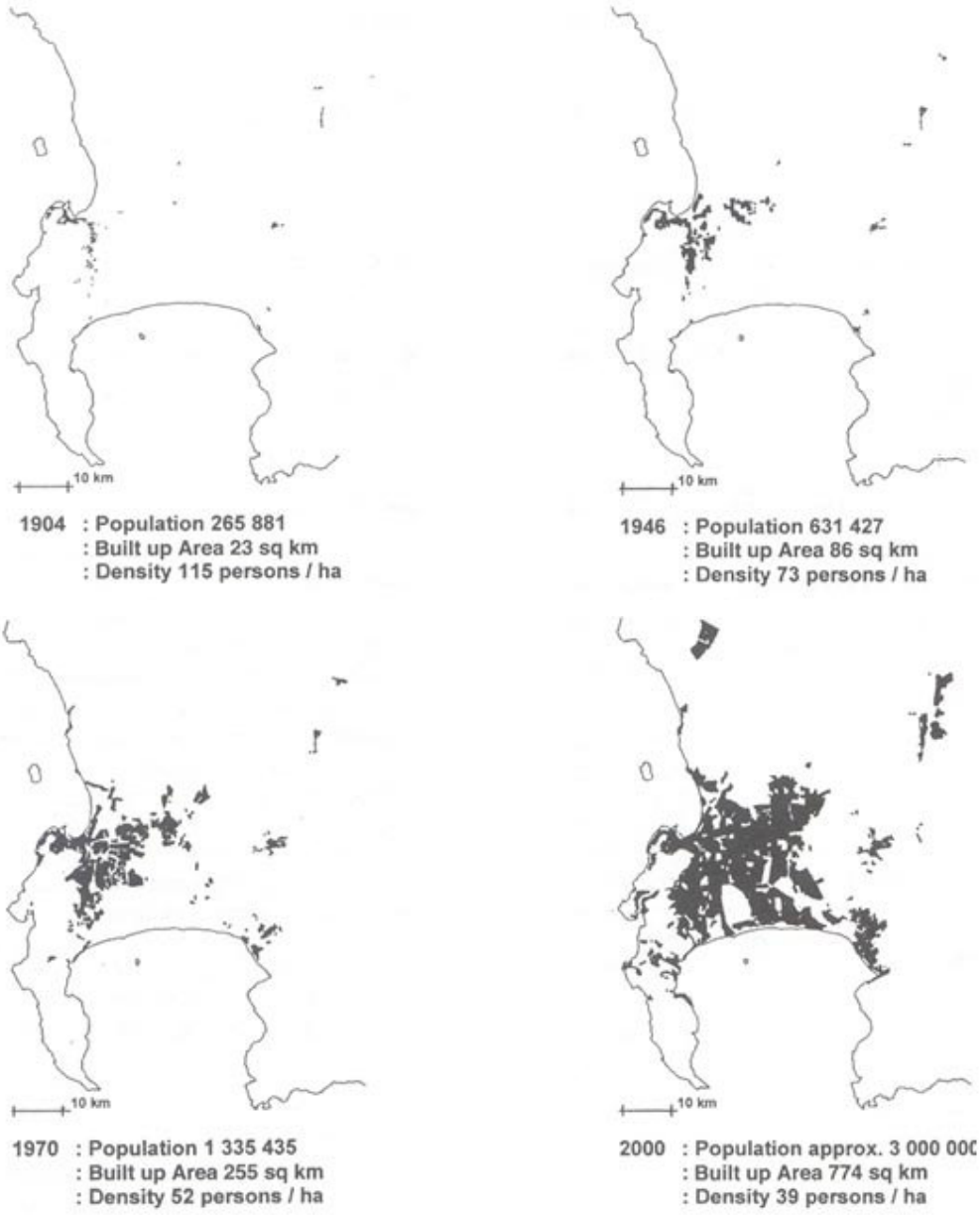
The paper does not adequately address the concerns associated with capability deprivation coupled to sustainable livelihoods. This aspect should be addressed by social scientists working in the built environment that are more qualified to provide expert proposals in this regard. A number of statements that follow are not directly referenced to external sources because the author draws directly on her daily experience as an urban planning practitioner in Cape Town.

2. URBAN CAPE TOWN – LEGAL AND POLICY CONTEXT

Appendix A outlines some of the urban and environmental legislation and policies that started driving city-making and urban imperatives in creating the new South African democratic city. There is no doubt that these laws and policies promote human settlements that would achieve an urban form and infrastructure that is humane, integrated, sustainable and representative of a democratic society. However, in reality and in practice, these good intentions have largely fallen by the way side for several reasons.

It is still quite apparent that:

- From the over paper, it is clear that inequality, poverty and social exclusion have increased in the city. Coming from a background of spatial and racial segregation, fragmentation and polarisation, Cape Town still experiences a significant degree of 'spatial division of the city into zones of relative advantage and disadvantage which are now perhaps defined increasingly in terms of the categories of socio-economic status or class rather than those of 'population group' or ethnicity which predominated in the apartheid era' (Wilkinson 2004: 221).
- The current form of urban development is grossly unsustainable. As the built up area grows in extent, people densities are becoming lower, leaving a continuously sprawling pattern of urban development that is completely unsustainable against the backlogs and future growth in housing and services that need to be provided for (Refer to Figure 1).



- Public facilities, places and open spaces are underutilised, neglected, vandalised and perceived as unsafe in the case of open space for recreation and sports. Besides, local people have not attached their identity to these places since the advent of democracy.
- Analysis of transportation patterns and investment are still focused on prioritising the private vehicle or road based public transport as opposed to promoting the efficient, affordable and safe use of public transport and non-motorised transport. This is evident from the limited information available on public and non-motorised transport usage, qualitative accident data etc. (MSDF Review 2003: 53-54).

- The city has become more polarised since the advent of democracy through forcing mass developments onto cheap land on the periphery, and reinforcing lack of access to major urban opportunities and agglomerations in the city, instead of bringing people closer to these opportunities. This calls into question the government's boldness to utilise its land in strategic locations for the creation of more sustainable human settlements. Turok (2001) cited in Wilkinson (2004: 221) states the following trends as the key reasons for 'persistent polarisation' in the local space economy. The first is the decentralisation of retail and office activities away from the Cape Town CBD to suburban centres generally associated with higher income residential areas. The second is the tendency to shift away from established centres towards a more dispersed pattern of development. The third is the trend of development towards the city's major northern growth corridor and the fourth, a tendency for economic activity centres to specialise in serving different market segments. All these reinforce the continued polarisation between the city's more developed northern and western areas and the major zone of socio-economic disadvantage in the metropolitan south east sector of the city.

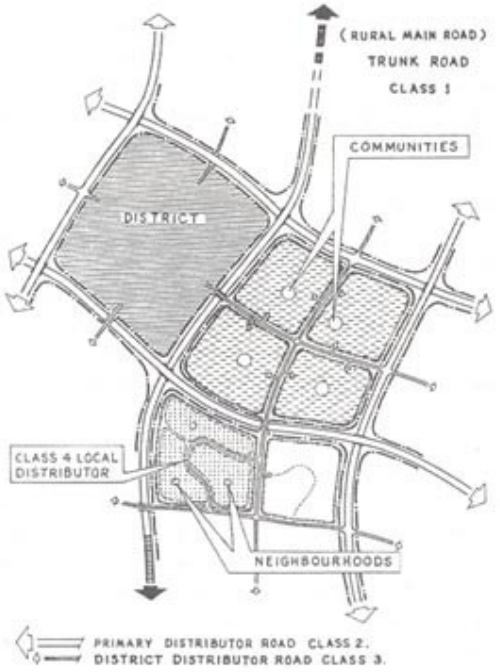
3. CAPE TOWN TODAY – THE BAU SCENARIO

The current pattern of development is regarded as the BAU scenario in terms of the definition offered above. The modernist approach to planning adopted after the second world-war reinforced the strategy of apartheid to:

- separate and divide the city and its land uses into racially-divided group areas;
- create discreet pockets of land uses and mono-functional housing estates, especially in the south east sector of the city; and
- use planning standards based on quantity, not quality that sought to create suburban instead of urban environments.

As a result, public facilities provision has up until now largely only been dealt with through formulae that deal with the issue of access at a superficial level. The formulae fail to acknowledge the reality on the ground where access is often inhibited by movement barriers. They also do not account for differences in car ownership levels which would affect the accessibility potential of facilities. Present formulae also fail to acknowledge the difference in need related to the socio-economic status of communities in Cape Town. Freeways and rail

way lines and their respective buffer zones were used to reinforce the apartheid city and up until today, these have a profound impact on integrating the city and its people. This situation is also largely impacting on the ability of the metropolitan south east (MSE) sector to be spatially accessible to the mainstream of the city's activities, including large employment nodes. (Refer to Figure 2)



Furthermore, the pressure that sprawling developments bring to bear on utility services (in particular water and waste water) is of great concern. Water supply across the Cape Metropolitan Area is restricted and limited. Waste water treatment works located in the metro south east sector and to the north of the city (Potsdam) currently have limited capacity and/or are being upgraded to accept further (sprawling) growth and development (MSDF Review 2003).

3.1 Public Facilities, Places and Open Spaces

Cities provide a critical basis and opportunity for enhancing living conditions and alleviating poverty for increasingly large numbers of people. Agglomerations of social services provide the opportunity to alleviate poverty by providing access to public goods and services including education, health and welfare services. The increasing spatial fragmentation of cities into wealthy and poor enclaves, however, undermines the equitable distribution of public goods and services. This trend ultimately reinforces poverty and creates serious

problems of social and economic exclusion, with escalating social tensions and violence, which is often exacerbated by the balkanisation of immigrant neighbourhoods (South African Cities Network, August 2003).

There are a number of concerns and issues associated with the existing provision and management of public places and spaces in Cape Town. These are discussed at two scales: the larger city scale and the local human settlement scale. At the city scale there are two key concerns that require discussion. The first is the Cape Metropolitan Open Space System (CMOSS) and the Biodiversity Network (BN). The City of Cape Town adopted its Biodiversity Strategy in October 2003. It created a Biodiversity Network for implementation and sustainable management in partnership with other public and private landowners on the basis of CMOSS. The CMOSS and the proposed BN are premised on sound ecological and conservation intentions and are to form the backbone of urban development planning, a step in the right direction.

The CMOSS and BN used as their starting point the identification of vacant land, nature reserves, wetlands and river systems which were assessed for their intrinsic ecological significance or value instead of restoring eco-systems to their natural state through identifying what area of the urban surface needs to be reclaimed and restored, and working backwards from this. At a certain level therefore, they are reactive and fragmented in their constitution on plan and potentially compete with urban development imperatives. Often the only opportunities for reversing apartheid style planning with large investments in urban development of a mixed use and job creation nature occur on land set side for CMOSS – BN forcing trade-offs between healing the city's dysfunctionality for the majority of the urban poor and conserving valuable land for future generations. Furthermore, it is questionable whether the CMOSS – BN approach would ensure and reinforce the systemic role nature has to play in a rapidly urbanising context. This role has to do with the natural courses or continuities nature follows at a larger city scale which ideally only nature should shape over time. A good example is that of surface / sub-surface water that, directed by rivers and natural water courses, flows from the city's high points to its low points and at the same time supports the city's biodiversity.

Associated to the CMOSS-BN conservation is the issue of who becomes the custodian of this land? Some of this land is in private ownership and only considered by public authorities once an application for a change in land use or development rights are applied for. On

consideration and approval of such applications, public authorities have the power and obligation to ensure that CMOSS-BN is protected and make the rules on how the management of such land is effected. However, given their lack of human and financial resources, they do not necessarily see their role as custodians of these assets. In other words, they make the rules, exercise the power to direct control over the land management but have no responsibility or resources to manage, monitor, maintain and secure the land as potentially key public assets for future generations.

The second concern at the city scale is the ownership and threat of development of significant public open spaces and natural systems; in favour of other demands and interests. These are best illustrated by example. The Driftsands Nature Reserve, one of the few potential urban parks in Cape Town with high ecological and environmental asset value, is presently under threat of being developed for mass low-income housing despite attempts by the authorities to illicit a professional opinion on what portions of this Reserve can be developed without compromising its integrity.

The other example of natural systems under threat or undermined by private interests is that of the Noordhoek Valley area. As at 2002, 81% of this valley was privately owned and included land that should form part of nature to allow the natural systems to perform their ecological functions and should ideally have remained in public ownership or custodianship. Although attempts by the South African National Parks to incorporate some of this land into the Cape Peninsula Protected Natural Environment have been successful, these processes are time consuming, costly and unnecessary. Private land owners were allowed to acquire natural public assets during apartheid rule for which compensation at current market value becomes obligatory, if expropriated. This means that the public purse bears the cost of reclaiming natural assets into the public domain which should never have vested in private ownership. Furthermore, this pattern of ownership allowed development to happen indiscriminately undermining the natural systems and compromising the long term sustainability of the valley. (Refer to Figures 3 and 4)

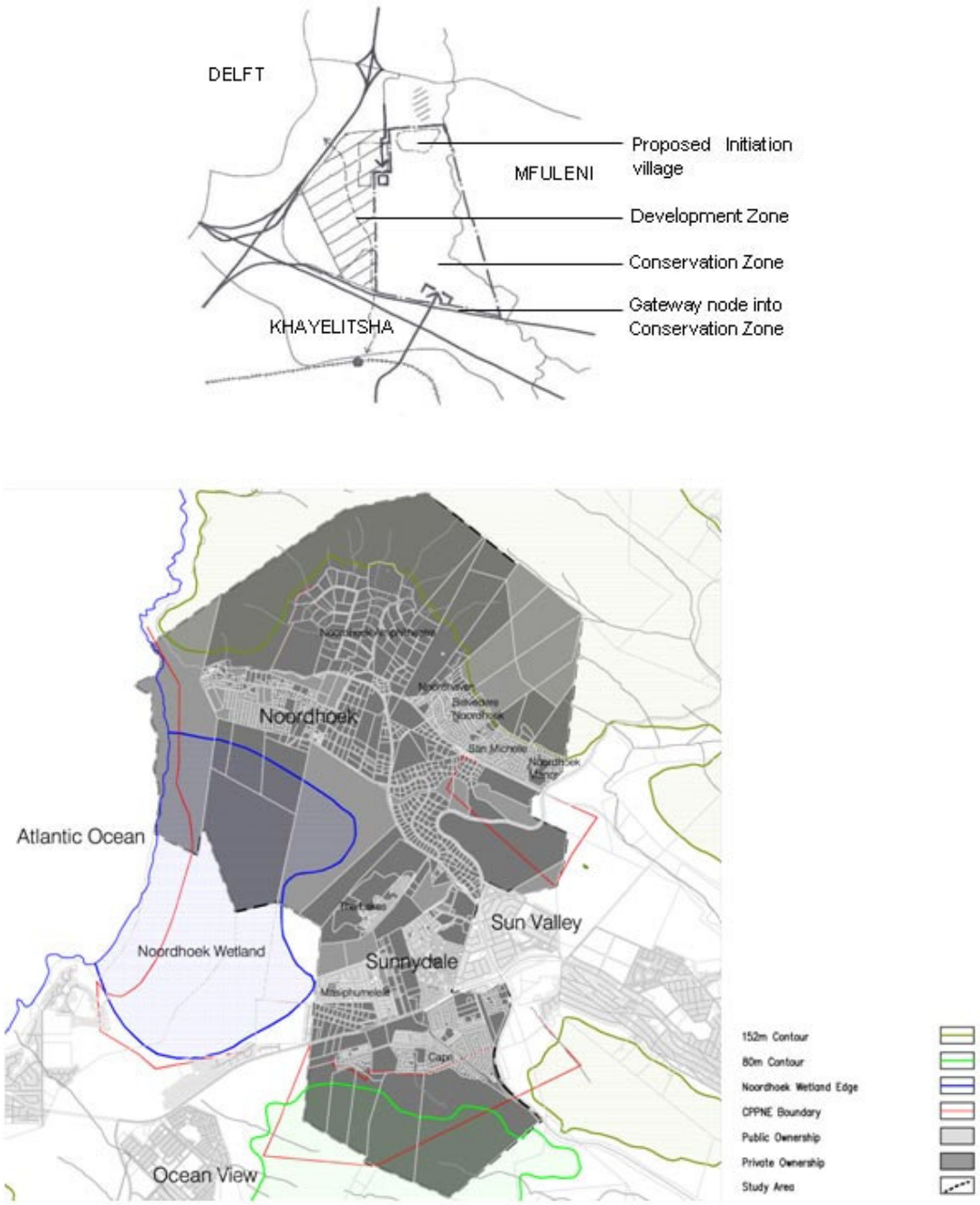


Figure 4: Existing Land Ownership and Conservation
(NM & Associates Planners and Designers, 2001)

At the human settlement scale, the following issues and concerns are raised with respect to public facilities, places and open spaces:

- *The struggle for public space as structuring urban form and reinforcing other urban activities.* The City of Cape Town's Dignified Urban Spaces Programme (DUSP) was a

healthy attempt to begin to address this issue. The programme created an opportunity for public space provision to have better meaning and value to urban form and structure in areas where urban dysfunctionality was greatest. The programme's intervention ranged from the upgrade of large transport interchanges to creating public walkways, open squares / forecourts and spaces where other activities such as trade and work from home could clip on. However, because it was a retrospective or retrofit attempt at healing local urban dysfunctionality, some interventions were unsuccessful and require additional efforts to make them work. There were three key reasons for this. The first is that the spaces happened without an affiliated management framework that would kick in after completion of their construction and ensure that they are properly functional, maintained and managed. The second is that the spaces became victims of fragmented planning and management within the City of Cape Town, where one department creates spaces without another taking their function into the spaces as a complimentary and reinforcing layer of successful 'public space making'. The third is the lack of local participation and therefore local ownership and identity associated to some of the DUSP's projects. (Refer to Figures 5 and 6)

Figure 5: Bath House, Nyanga (Piet Louw Architects)
(*Die Burger*, 23 April 2005)

Figure 6a: Philippi Public Space: City of Cape Town
(Du Toit and Perrin, 2003)

Figure 6b: Additional Public Space Philippi: City of Cape Town
(City of Cape Town, 2005)

- *The lack of management and maintenance of existing public places, facilities and open spaces.* Public facilities and spaces are often the only venues for social events, yet users such as community organisations and youth groups have to pay to use them. Furthermore, they are not freely available to user groups during school holiday periods when learners need to engage in extra-mural activities. They are generally poorly maintained, and often vandalised as a result of a negative perceptions in communities that they have very little use and social value.
- *The lack of resources to provide, maintain and manage public spaces and the implications for urban form.* The City is often quoted as not having sufficient human and financial resources to provide, manage and maintain public facilities, places and open spaces. 'Open space is regarded as unaffordable to provide and maintain, and cannot compete for popular and political support in the face of demands for basic services' (Southworth 2003: 120). This has serious implications for the design of green field human settlements for two reasons. One, high density and tight living demands among the urban poor require a degree of shared public spaces for amenity, relaxation and breathing spaces as extensions to the private dwelling unit. Two, when a public space is positively surveilled, defined by other urban elements such as housing and of a human scale, it can assist in dealing with criminal and anti-social activity at the level of community. There is often a reluctance to support the notion of public space as positive urban space which is integral to urban form and settlement because of the perception that city officials would

become victims of crime when entering areas to service and maintain pocket parks, internal courtyards and play spaces that give definition to urban form. Hence, design is driven not by urbanity but by the fears and biases of the local authority officials.

3.2 Roads and transport

The traditional transport planning approach in the modernist paradigm paid very little attention to human and social needs relative to urban movement patterns. It was focused on a *'describe, predict and demand'* approach which relied on the technical expertise of road engineers to provide for the needs of the car. This approach also promoted 'the best distribution of resources, according to neo-classical market economics' (Vasconcellos 2001: 34). The role of the planner and designer was to retro-fit the needs of the city's people into the transportation structure. (Refer to Figure 7 and Appendix A)

For working class communities in developing countries, moving between home and required destinations is presently difficult if not impossible in some cities (Vasconcellos 2001). South African cities are presently suited to those with vehicles who access even local destinations by car. Most 'planned' parts of our cities are uncomfortable to use as pedestrians, cyclists and physically challenged persons. Cyclists have largely been relegated to share increasingly unfriendly road spaces with high volumes of fast moving traffic. Those in wheelchairs and / or physically challenged in other ways are even worse off and limited to using special institutional services to access key facilities and amenities by road. According to Behrens (cited in the MSDF Review, 2003: 62) 'walking accounts for 36% of all trip purpose main mode use, and therefore despite considerable car dependence, remains an important mode of transportation.' However, since Cape Town's data focuses on motorised forms of travel, 36% of all trip making is excluded. Non-motorised transport (NMT) [3] is only beginning to enter the public transport planning agenda in Cape Town.

Furthermore, the South African apartheid city ensured that people were located on the outskirts of the city away from urban opportunities in the city centres, implying that they need to travel long distances to reach work places. For them travel journeys to work continue to be expensive.

Car usage in Cape Town has increased by 50% between 1990 and 1999 (Oral Communication: Arcus-Gibb, 2004). This leads to congestion and conflict and begs the question as to whether the further provision of road space which invites more cars onto the road network is the most appropriate strategy for facilitating movement in the interest of the greater public. It is of critical importance to address the inequity of the present situation. The majority of our urbanised population will never be able to afford a car and will continue to rely on more affordable means to access urban opportunities. In Cape Town, car ownership will continue to rise at 3% per annum (Cape Metropolitan Council, 1999).

One of the principal objectives of government policies and legislation discussed in Appendix A is modal integration - to create integrated metropolitan transport systems which will promote the concept of seamless travel between different public transport modes and services. This will be achieved by creating a metropolitan public transport system consisting of a primary network and supplemented by secondary support services. The primary network would consist of corridor services, metropolitan services and express direct and limited stop services. The secondary network would consist of feeder services, shuttle services, distribution services and demand response services.

The metropolitan rail system is seen as the core element or backbone of the primary system, and is still the most affordable public transport service. However, old rolling stock, poor service management and unsafe rail stations and journeys prevent this system from being used optimally. The bus service is seen as being introduced in the primary corridor and express services where the rail system does not provide direct links between major origin and destination areas. At this stage, the different public transport modes still operate in isolation of one another and are managed in a fragmented manner.

While taxi violence has been a cause for concern (*Cape Times* June 24, 2005) and road accidents as a result of poor taxi driving skills and the use of old, badly serviced vehicles have increased, taxis provide an important public transport service in Cape Town. Taxis fill an important gap in the public transport market as is the trend in most of the developing world. Writing on behalf of the informal sector economy in developing countries, De Soto (2000: 25) argues that ‘unauthorised buses, jitneys and taxis account for most of the public transportation in many developing countries’.

Attempts by government to regulate the taxi industry in the regulation and restructuring of public transport in Cape Town have been met with protests, taxi violence and even death threats to government administrators and officials. However, there are successful lessons that can be learnt from other developing countries that have embarked on similar processes. One such case is the introduction of a Bus Rapid Transit (BRT) System which was successfully implemented in one sector of the city of Bogota, Colombia. While it took time to negotiate the introduction of the BRT with traditional (and sometimes illegal) operators of the old bus and taxi public transport system, the system was eventually accepted. There are two interesting factors associated to this case. Firstly, the taxi and old bus systems were retained as feeder services to the new BRT and at the same time, bus and taxi drivers were paid a minimum wage irrespective of the number of trips they made in a day. This changed the behaviour patterns of bus / taxi drivers for the better since their wage income was no longer dependent on the number of trips made on a daily basis. Secondly, the operators of the old system were included as a key stakeholder in the operation of the BRT through very skilled 'seduction' teams that convinced them to participate in the scheme in a meaningful manner through creating incentives that are more sustainable in the long term (Sandoval Castro, 2005).

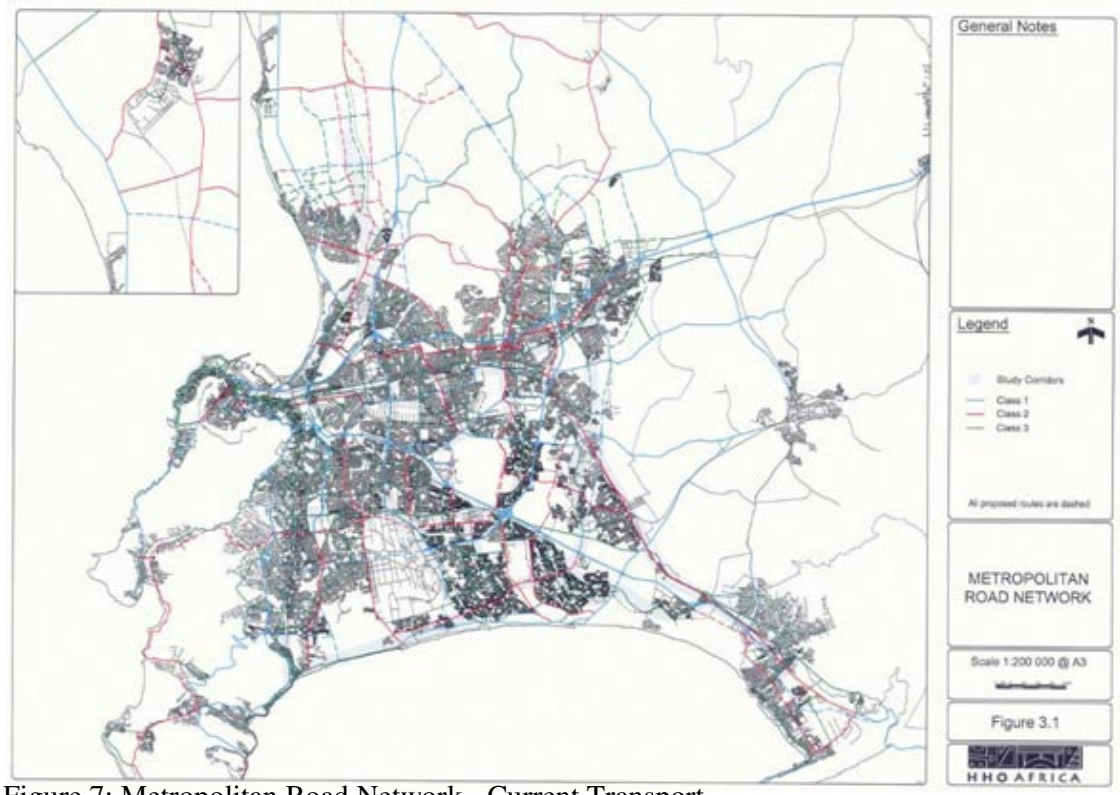


Figure 7: Metropolitan Road Network - Current Transport
(HHO Africa, 2005)

3.3. Housing (Shelter)

The Status of Cape Town - Overview Paper (Smith 2005) confirms that there are presently approximately 800 000 households in Cape Town. Of these, about 265 000 are said to be in need of adequate housing. The rate of subsidised housing has been inadequate to respond to this need as well as to the new households that are forming as a result of in-migration, population growth and household splitting, the majority of whom are poor. As a result, the number of informal shacks has grown significantly, increasing from 28 300 in 1993, to 59 854 in 1996, to more than 100 000 in 2004. In addition to overwhelming backlogs, inadequate housing provision and resource inefficiencies and as a result of the modernist approach to planning, housing has up until now largely only been dealt with through formulae or numbers that deal with the issue of integrated human settlements at a very superficial level, resulting in an urban form that goes against the fundamental principles of creating sustainable human settlements. The new policy approach recognises this and seeks to address it but with limited success in practice.

Turner (1972: 259) argued in the 1970s, 'Conventionally defined housing problems, stated in terms of quantitative deficits, arrived at by applying physical standards, concentrate attention on end products and simultaneously divert attention from deficiencies in the housing process itself.' Little seems to have changed in the housing sphere in the past 10 years in South Africa, and Cape Town in particular, where there is still a mismatch between poor peoples' needs and the housing delivery process. This disparity was currently revealed in the protests and unrest experienced in Cape Town by back-yard shack dwellers and people living in poverty (*Cape Times* May 26, 2005). Against the housing context of Cape Town it is worth re-creating approaches to human settlement making that begins to form a strong value-based perspective without losing sight of the number of people that need to be accommodated in the city.

The following fundamental contextual issues have to be seriously reconsidered in the planning, development and delivery of housing and integrated human settlements. The first and most fundamental is the issue of where people are housed or located. The N2 Gateway Housing Programme proposes most of its housing delivery on relatively inexpensive land located on the periphery of the city such as in Delft, packing and stacking more and more of the same income groups and housing types in areas with few resources that create confidence

in these areas and provide access to employment, capital, finance, communication networks, and so on (see Figure 8 and 9).

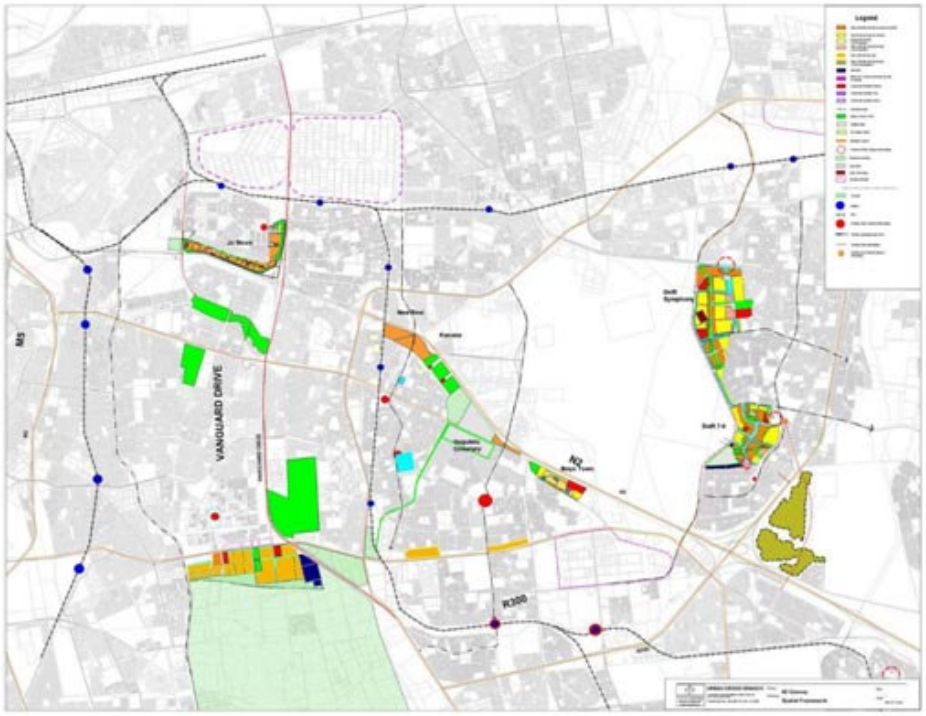


Figure 8: Vacant Land for Low-income Housing
(City of Cape Town, Urban Design Branch, 2005)

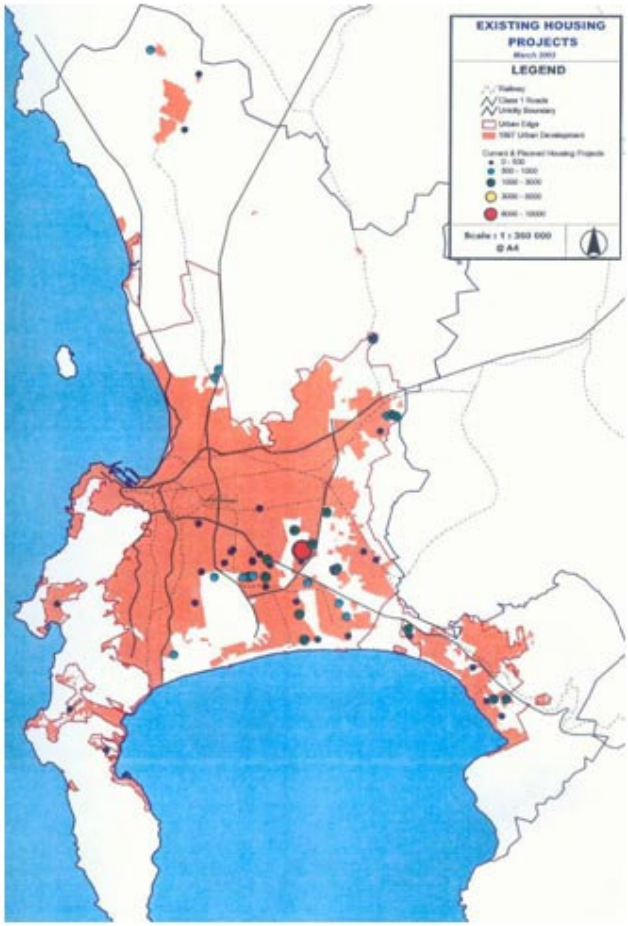


Figure 9: Current Housing Projects
(City of Cape Town, April/May 2003)

The second is the lack of financial, human and creative resources to provide housing stock that is more appropriate and sustainable catering to a range of needs, densities and varied forms of tenure. Housing needs have to respond to people who enter cities for the first time who when poor or down and out do not and cannot expect to be accommodated in a subsidised dwelling unit. They have to rent or share space with family or friends, at first. There are young people who come to the city to attend school or tertiary education programmes, and simply need a room to rent until they return home. There are urban families (often grand parents and young teenagers) who take care of young children whose parents are deceased as a result of HIV / AIDS and other poverty - related diseases. Then there is the standard five to six family household who needs family size accommodation. The one size fits all is clearly not appropriate given the range of needs and circumstances surrounding shelter. In fact, the uniform approach exacerbates the delivery of numbers of dwellings rather than dealing with the typology that allows for extended family conditions.

Densities have to increase substantially given the scarcity of land and the economy that needs to be achieved in the provision of state-subsidised housing, especially in areas located close to opportunities such as the inner city. At the same time, there is a place for different forms of tenure patterns to emerge. Not all people are ready to own property - some may need to rent with a view to ownership. Others who form part of stokvels or community savings schemes may need to form part of cooperative tenure schemes. Clearly, the state housing subsidy regime and housing finance institutions cannot expect these varied conditions to fit neatly into their set of rules which were created to serve particular interests. These institutions have to create more flexible measures and be more open to the needs of the new housing ‘market’.

Figure 10: Aerial View of Khayelitsha, Cape Town, South Africa
(Dewar and Todeschini, 2004: 15)

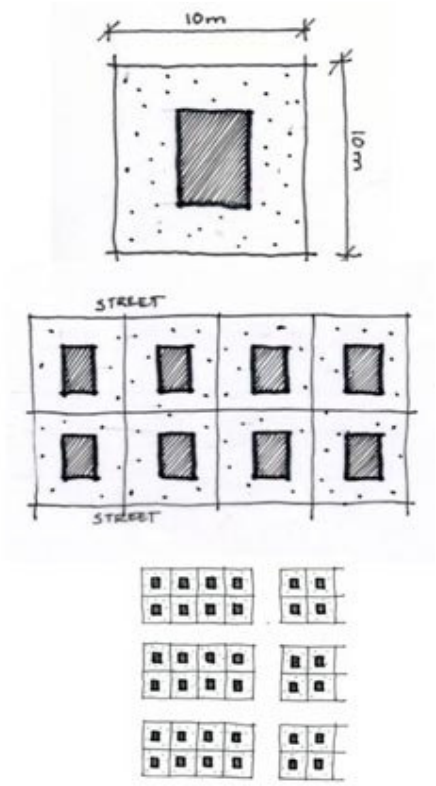


Figure 11: One House One Plot
(NM & Associates Planners and Designers, 2004)

The BAU scenario can be situated in the modernist planning paradigm and the ideology of apartheid, the one reinforcing the other as a construct of separateness. These are two key factors that shaped the urban form and movement structure of the city.

The third issue is the government's insistence on allowing turnkey developers [4] to be responsible for the creation of integrated human settlements for low income beneficiaries (N2 Gateway Housing Programme, 2005). A value-based approach to settlement making is by its nature diametrically opposed to profit-seeking motives which are essentially driven by numbers and economics. Perhaps a more people-driven approach or Peoples' Housing Process combined with skills in the private sector is a more appropriate approach to integrated and participative settlement making.

Modernism is still very much the underlying driving force behind current day planning practices in the BAU scenario. In this paradigm there is an obsession with numbers as a fundamental underpinning of making 'successful' settlements, whether they are integrated, humane and sustainable or not. At an unconscious level, numbers and quantities are powerful

because our minds are obsessed with economic success, competition and material accumulation, the fundamentals of capitalism. The fundamental question is whether economic success and competition make sustainable human settlements and allow the poorer sectors of society to enter the realm of capitalism?

4. THE NATURE OF THE GOOD CITY - THE SD SCENARIO

The good city is based on a vision and ideas that consider the whole as the sum of its parts. This translates into positive action where slowly but surely the context and its people transform into humanely – performing environments. These add value to society at all levels, the region, the city, the neighbourhood and the household.

> *'Vision carries the connotation of value, meaning and purpose – and of something beyond our reach that is nevertheless worth striving for and aspiring to. A rationale, on the other hand, is limited and attainable, and the tighter and more compact the rationale is, the more attainable it is. And we do have a tight and compact rationale for our lives and for what we do. It is an economic rationale, and economic in a very narrow sense. It is solely interested in a certain type of efficiency and profit – efficiency and profit to the exclusion of, and isolation from, everything else, particularly the future'* (Le, 1999 quoted in Friedmann, 2000: 461).

Friedmann (2000: 471) correctly points out that 'we are a time-binding species whose inescapable task in a fundamentally urbanised world is to forge pathways towards a future that is worth struggling for'.

4.1 Urban Form and Infrastructure post modernism and apartheid rule

What is worth struggling for is a sustainable urban form and infrastructure for a good society – the sustainable city. The sustainable city is premised on the following fundamental principles (adapted from Rogers, 1997: 169).

- ***A socially just city*** where justice, food, shelter, education, health and hope are distributed fairly and equally and where peoples' most basic needs are heard, understood, articulated in government, responded to and met so as to raise the

capabilities of society to maximum levels, focusing directly on the poorer sectors as a priority.

- ***A creative city*** where open-mindedness is promoted and the potential of human resources is mobilised to its fullest to intervene in the landscape with respect, dignity and simplicity.
- ***A city-ecology approach to planning*** where ecological processes and systems are protected and conserved and used as a means of structuring urban form and infrastructure.
- ***An integrated compact city*** where access and proximity to the essential goods and services, including emergency services, information and people, is had with ease and safety especially for movement on foot.
- ***A diverse democratic city*** where a broad range of people with overlapping interests, cultures and activities come together and part on a regular basis in the spaces and places that promote public interest, public debate and public life.
- ***The ultimate city*** where fear of crime and violence and turf protection is eliminated in the public realm and space is appropriated across public boundaries, and society thrives as a totality of parts. The ultimate city is timeless, robust and flexible; cares for the future and caters for the needs of future generations regardless of what they seek to become.

4.1.1 Creating the socially just city

The socially just city must respond to the poor and the poorest of the poor in particular, to address the cycles of poverty at three levels. The first is to **reduce / eradicate *income poverty.*** Urban planning and design can begin to establish the spatial structure, form and function that can support economic opportunities and activities for example in high threshold areas such as urban corridors and transport interchanges. Poverty is much more than a measure of income or consumption (Sen 1999). It also has to do with assessing the capabilities of the poor in a historical context of oppression and in a spatially dysfunctional city structure and form.

The second level therefore, is to **overcome *asset poverty*** among the poor. From an individual household perspective asset poverty refers to either:

- having no access to investment to build an asset base; or

- having very limited access to investment in residential or other property or built structure/s in areas where opportunities for adding economic / financial value to such investment are lacking because these areas are perceived to be crime-ridden or lack decent infrastructure for example, public facilities, services, and commercial facilities adding no or little recognisable value to peoples' investment.

Since urban Cape Town is so economically and locationally polarised, there is limited potential for asset value to grow and create other economic benefits, particularly in the metro south-east sector as it stands today. The economic value of residential property is biased to centres of agglomerations such as the CBD's of Cape Town, Claremont and Bellville, leaving residential land in the south-east sector with limited asset value for two reasons. Firstly, the south-east lacks a well-performing urban agglomerated anchor and secondly, it contains an oversupply of subsidised housing largely occupied by poor people and is increasing as a result of the N2 Gateway intervention.

The third level is to **reduce *social exclusion*** as a result of poverty. Social exclusion happens when communities and individuals are no longer able to participate in community life and activities: 'Social exclusion may lead to losses of self-reliance, self-confidence, psychological and physical health' (Palmans and Marysse 2003: 13). Social exclusion in urban areas at the local and city scales in South African cities is a condition that prevails within poorer urban areas because of the lack of facilities and access to resources to reinforce the social and communal fabric of communities. It also prevails among urban areas between richer and poorer areas. Ordinarily, poor people not only lack the know-how to enter wealthier social networks but also the confidence and self-esteem to access people of wealthier means. Contact between rich and poor is generally circumstantial and is not naturally promoted in our post-apartheid city. This is apparent at all levels and particularly at a spatial level where fragmentation and segregation of the city and its people were most successful during the planning phase of the apartheid city.

4.1.2 Creating the integrated compact city – the role of public facilities, places and open spaces, housing (shelter) and public transport

As a result of the urbanisation of poverty, all sectors are pressured to respond to the need for additional infrastructure: transport, community goods and services, finance, recreation,

education, health, housing, etc. This section focuses only on *public facilities, places and open spaces, housing (shelter) and public transport.*

4.1.2.1 Public facilities, places and open spaces

Public facilities, public spaces and institutions provide venues to address critical issues such as health, education and social development collectively. These are also venues for people to congregate and interact outside of the confines of their private domains. These are important spaces for recreation and relaxation especially given the nature of the majority of the lower income areas where space is at a premium. Furthermore, public facilities, spaces and institutions are also key components of the broader urban environment as they provide the backdrop for daily life activities especially for the urban poor. Public facilities, public spaces and institutions' location as structuring elements to urban form is therefore critical when attempting to address urban restructuring objectives which aim to:

- improve social and economic integration;
- address the inequitable distribution of opportunities through the city; and
- provide basic levels of access and convenience for a full range of people especially those who move on foot, to urban parks, open space recreation and sports facilities.

The role of public spaces in positive urban environments across all scales from the very local to the larger neighbourhood, is a social one. Public spaces 'represent the primary, and arguably the most important, form of social infrastructure' (Dewar and Todeschini 2004: 69). There is generally a correlation between location and scale of public space: the larger spaces usually associate with the most accessible urban conditions.

Le Grange, Dewar and Louw (2005: 20) argue that in positive urban systems open space is but one element of public structure: 'The elements of public structure (green space, movement of all modes, urban space, social institutions and facilities, utility services, emergency services) are brought into association with each other to create an 'accessibility surface' or 'accessibility network', defining places of greater or lesser accessibility or exposure' once shaped into urban form.

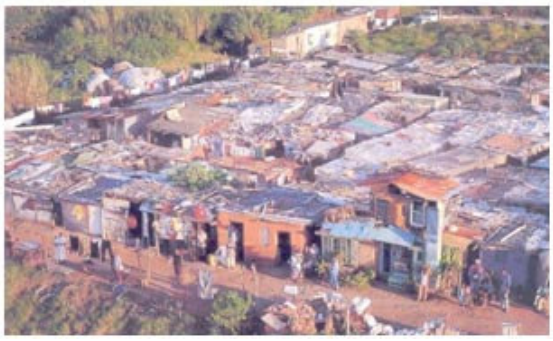


Figure 12: Open Space as Urban Space, Informal Settlement
(le Grange, Dewar and Louw in association, 2005)

Figure 13: Open Space as Urban Space, De Waal Park, Company Gardens and Grand Parade
(le Grange, Dewar and Louw in association, 2005)

4.1.2.2 Public transport

The transport laws and policies described in Appendix A mandate us to challenge the technocratic approach to transport planning which has a particular bias towards the motor car. Vasconcellos (2001:36) argues that the most appropriate way of approaching 'human movement in space would be to search for *an anthropology of movement'*. Here the emphasis would be on citizens' 'mobility related to daily activities and to housing / location moving strategies based on family or individual life-cycles'.

In addition, one has to ask the question: when is it appropriate to follow a socio-anthropological approach to transport planning and how scientific would such an approach be? Put differently, is there a place for a combination of science and anthropology / sociology in approaching transportation planning? This paper argues that there is and that it is most appropriate to invent a sustainable transport planning approach by combining the concerns and prioritisation of public and non-motorised transport with those of the automobile. This approach is possible as long as: 'one is clear about the typology of transport structure that would achieve a sustainable urban form; and we understand "how access is distributed in space; how different social classes and groups use the city; and what the related conditions of equity, safety, comfort, efficiency, environment and cost are' (Vasconcellos 2001: 38).

The typologies of transport put forward by Vasconcellos (2001: 252) include the following: ***Non-motorised transport (NMT) dominated cities:*** cities where walking, bicycling and other forms of movement not propelled by fuel-combustion mechanisms, are the dominant modes of movement. Consumption of road space is low and pollution levels are close to absent.

***Lightly motorised cities*:** cities where motorcycles and three – wheelers are the dominant mode. Consumption of road space is moderate, and pollution levels have a high impact.
***Public transport – motorised cities*:** cities where motorised means such as trucks, buses and mini-buses already play a major role in the city. Consumption of road space per person is moderate to low, and energy consumption middle to low.
***Automobile motorised cities*:** mobility, access and comfort for car owners / users are high and low for others. This entails high consumption of road space per person and high pollution impact levels.

The most appropriate and sustainable typology for Cape Town to counter-balance car dependency, is a combination of a) and c) which together would result in: i) increased accessibility and mobility for a range of users; ii) decreased pollution and environmental impacts; and, iii) middle to low energy consumption.

4.1.2.3 Housing (shelter)
While acknowledging the need for all sectors to respond as best they can in a context of limited resources, it is recognised that having shelter, a place to live – a roof over one's head is both a right and an opportunity. Shelter or a home must however not only provide protection and comfort but also value to begin to access the other elements of sustainable livelihood. It is about restoring dignity and human capabilities to reach the heights people are capable of but often do not realise as a result of day-to-day survivalist and impoverished living patterns.

Location is a key element in this respect from the point of view of achieving agglomeration economies, which refers to 'the productivity advantages stemming from the spatial concentration of production. …Space figures centrally in urban economic and social theory because proximity facilitates the gathering and exchange of information, lessens the cost of transport, and makes possible the exercise of some beneficial social controls' (National Academies of Sciences 2004: 20). Both poverty and opportunity are assuming an urban character since cities are the places where diverse social and economic benefits present themselves. Proximity to concentrations or agglomerations of production (land, capital, financial resources, technology, transport, people, communications systems and energy) can generate substantial economic opportunity, innovation and income growth, especially for the poor. Against this background, it seems more prudent and appropriate to locate the poor

closer to existing agglomerations of urban opportunities, in a more appropriate and sustainable urban form.

The following elements are highlighted as the key underpinnings of creating integrated, sustainable human settlements at the neighbourhood scale, using the Urban Design Framework (UDF) of the Joe Slovo site as a case in point which brings together the elements of location, public facilities, places and spaces, public transport and housing.

Landscape and green network*:* The provision of landscaping should compliment the residential block and movement framework with a view to connecting public spaces. The elements that form a landscape network include open spaces, movement corridors, parks, urban agriculture, community squares and residential streets.

Public place, building form and scale: Higher order public spaces allow for more commercial, mixed-use developments for small-scale enterprises and home-based income generating options. Smaller residential courts provide a sense of safety with stairs accessing these spaces, people hanging washing, children playing and adequate lighting, therefore providing a level of surveillance, combined with a positive interface condition to the public spaces.

Hierarchy and movement framework: the movement framework concerns the structural aspects of movement routes. The primary emphasis within low-income areas is on a safe and sustainable non-motorised transportation and an adequate public transport system, which seeks to provide a maximum choice for how people move between destination points. Different scales of street widths assist the overall design of the movement structure, for example, 6m to 8m road reserves serve a predominantly pedestrian or low order movement route in a residential area, whereas 10m and 12m road reserves allow for increased public transport and private vehicular mobility as well as generous side walks for NMT. The 20m road reserve serves a main activity function through residential areas mainly associated with commercial enterprises or clusters of facilities.

Urban Blocks: The development of the block varies in dimension due to surrounding local conditions. Differing street configurations, plot subdivisions and building types change the block module. The block dimensions are generally based on a comfortable walking distance

between streets, for example a large block is based on a 90m x 90m module, although this dimension varies due to site constraints and opportunities. The average gross density of an urban block is approximately 129 dwelling units per hectare [5], which creates sufficient thresholds for a viable human settlement.

Development parcels and plots: The desired housing typologies, mixed use possibilities, massing of houses and form of tenure / ownership generally inform particular parcels of development. There is also a key structuring role for community / economic nodes to initiate development parcels onto which the residential fabric would clip.

A mix of land uses: Communities benefit from a range of educational, health, recreational, civic and commercial uses, which are carefully and conveniently, located close to residential areas by way of safe movement routes. In addition, residential units allow for a mix of living and working possibilities especially along the main activity routes.

Climate, energy and resource efficiency: Appropriate building orientation in low-income housing is important in order to maximise the efficient functioning of individual housing units, urban courts, spaces and urban blocks. The issue of water control is also fundamental to

ng.

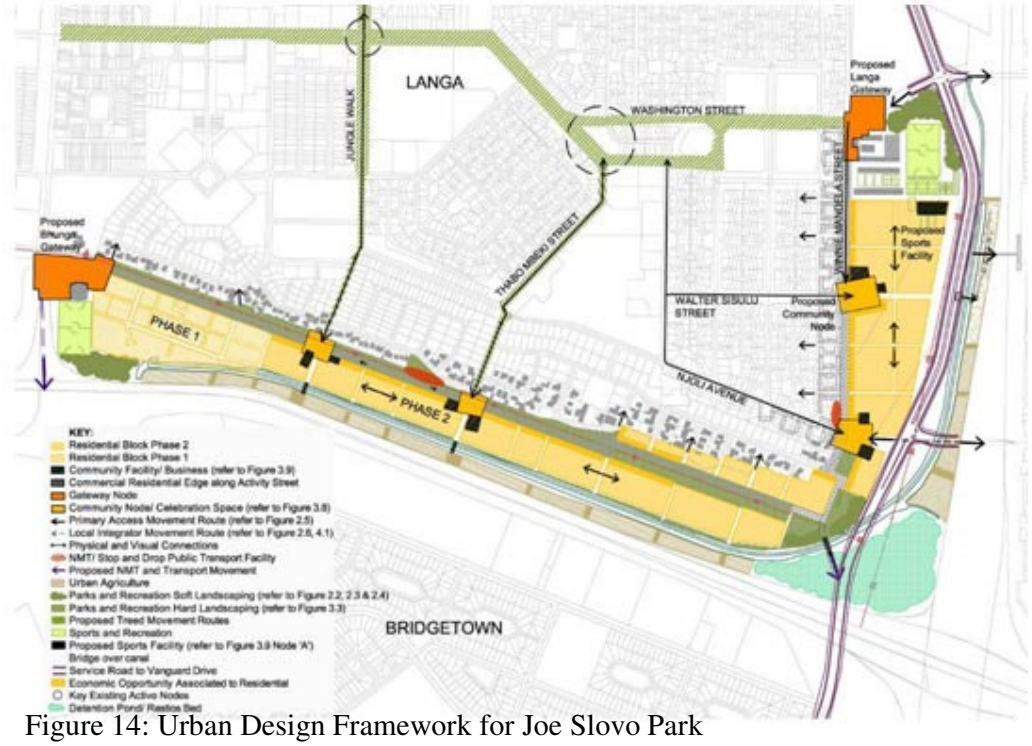


Figure 14: Urban Design Framework for Joe Slovo Park
(NM & Associates Planners and Designers, 2005)

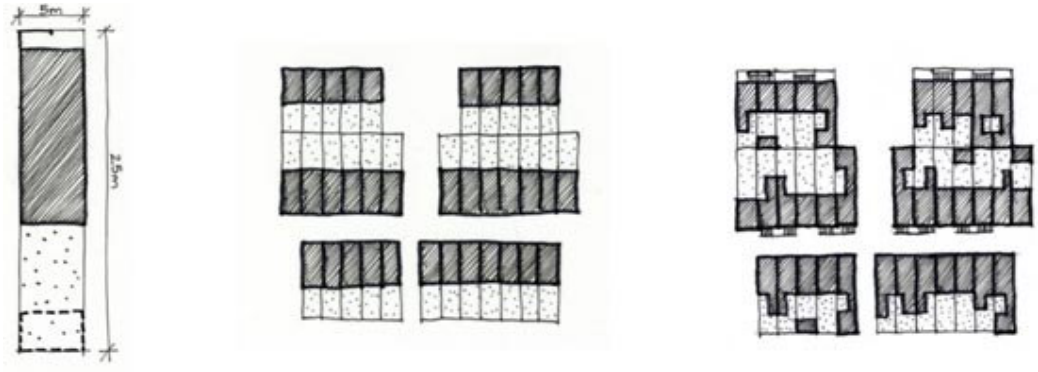


Figure 15: Row Housing
(NM & Associates Planners and Designers, 2005)

4.1.3 Creating the good city - the dynamic, temporal and restructured urban surface

'Unlike the tree-like, hierarchical structures of traditional cities, the contemporary metropolis functions more like a spreading rhizome, dispersed and diffuse, but at the same time infinitely enabling' (Corner (Ed), 1999: 234). The key characteristic that typifies the contemporary metropolis is the web-like sprawl or regional metropolis or city-region (Corner, (Ed) 1999; Ravetz, 2000) where the influx of people, vehicles, goods, and information constitute 'the daily urban system' (Corner (Ed), 1999: 234). This implies that urbanism is dynamic and temporal, which means that there is a shift from particular forms of urban space in the city to processes of urbanisation that network and link across vast regional surfaces and in the case of the central business districts of Cape Town, across global surfaces as well.

The effects of urbanisation are complex but three aspects with respect to planning and design are worth highlighting. The first are peripheral sites that in the traditional metropolis constituted agricultural land or the open countryside, and are now being developed for state-assisted low-income housing or middle income suburban gated communities. The second is the remarkable increase in mobility and access to information and the media. The third, and consequence of the previous two, is a paradigmatic shift from viewing cities in 'formal terms to looking at them in dynamic ways' (Corner (Ed), 1999: 234). Hence the structured urban typologies of square, park, public places and spaces and so on, have become much less significant than the infrastructures, network flows, peripheral spaces and informality that constitute the dynamic and temporal contemporary metropolis (Corner (Ed), 1999).

5. IN PURSUIT OF THE GOOD CITY - KEY STRATEGIES

There are four key and mutually reinforcing strategies that can begin to achieve the *restructured urban surface* in pursuit of the good city. These include:

- (re)-location;
- reclamation;
- restructured public transport, including non-motorised transport; and
- re-emphasising public facilities, places and open spaces.

If structure is about organising human activity in space in response to the natural landscape, then re-structure is about re-organising human activity in space to attain a certain urban form and condition that is reasonably equitable, integrated and sustainable.

5.1 (Re) Location

Those who have been on the City's housing waiting list (poor or not) for many, many years (10 to 20 years) and are still living in a shack / back yard shack or sharing with two or three other families, should be welcomed back into the inner city of Cape Town. The following sites are state-owned and strategically located. Sites in inner city areas (not indicated below) for infill housing can also play a key role.

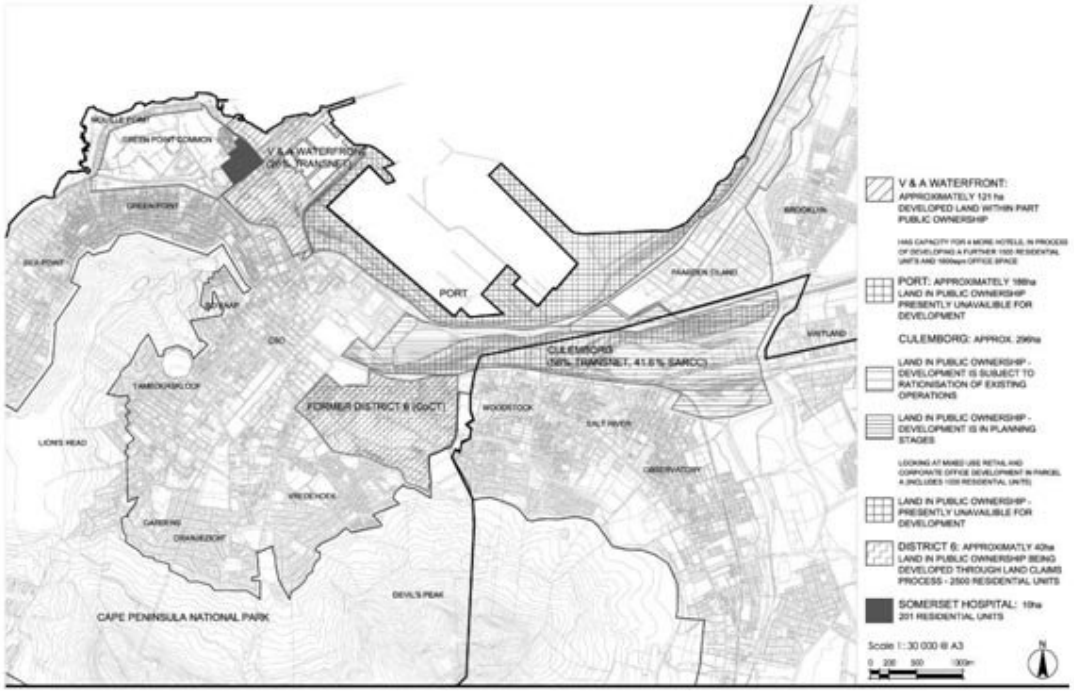


Figure 16: Potential for Growth in the Inner City of Cape Town on Public / Parastatal Land (NM & Associates Planners and Designers, 2003)

Figure 17b: Residential Quarter in Gujarat, India
(Pramar, 1989: 16)

Figure 17a: Housing density in Jodhpur, India
(Steele, 1998: 118)

Figure 17c: Open Space and Public Facilities as Social Spaces
(NM & Associates Planners and Designers, 2003)

At the metropolitan scale inner city areas - especially areas like District Six, Wingfield and Culemborg - can be regarded as the inner perimeter of the Cape Town core and should reinforce the CBD's role because of its proximity to an abundance of natural and urban resources. The area's capacity to absorb more people and resources must therefore be recognised in the re-development of inner city areas, and reflect in the form and densities that are re-created. Existing utility services capacity, in particular, waste water treatment, is more available to these areas and even if this was not the case, investment in these services in better located areas than the south-east is more beneficial in the long term. Water savings could be achieved through forms of urban development that promote higher densities and reduce private open space such as swimming pools and private gardens.

The boldness of this action would begin to weave the core of the CBD with its inner perimeter and slowly the one will influence the other in a dynamic and temporal manner. The majority of people will move closer to the heart of the city core, merging the 'formal' themes of tourism, entertainment, commerce and finance at the global level with the perceived informality and arbitrariness of the newcomers - the steady and fast pace of the former intermingling with the ad hoc / sometimes lethargic tempo of the latter. Slowly but surely, in time we will 'transcend habitual binaries such as: formal / informal, organised / unorganised, legible / illegible, codified / uncodified, and so forth' (Pieterse, 2004/2005: 53).

However, it is important to exercise great care not to cause fright and flight of those who presently occupy / invest in the inner city enclave. The idea is not to recreate the American scenario where the inner city was abandoned when poorer Black Americans started moving in, to locate closer to urban opportunities. The case of Baltimore in the USA, an old coal mining town, experienced significant exodus from its inner city in the 1980s when wealthier residents felt threatened, abandoning housing stock in the inner city for the distant suburbs which greatly affected the economy of the city. The solution might lie in distributing development for lower – middle income throughout the city targeting areas where confidence is greatest in the central business districts (for example, Claremont and Bellville); and to introduce smaller pockets of infill development in traditionally white group areas where urban opportunities are most accessible (for example, Blaauwberg).

5.2 Reclamation

There are three levels of reclamation that could assist the restructuring process. These include: the r*edistributio*n *of state land assets*, *restitution* in terms of the Restitution of Land Rights Act (Act No. 22 of 1994) and *reclamation* of underutilised land.

5.2.1 Redistribution of state land assets

This could occur in two ways. Firstly, peripheral spaces can be set aside for agricultural / ecological / small – farming opportunities associated to the city's edge much like the Philippi Horticultural Area. This would enable the edge of the city to move away from being an imaginary line that is consistently permeated and shifting further outward to a productive edge that clearly absorbs some of the key urban economic functions (i.e. productive and protective functions), while at the same time allowing a transition function with the potential

for those who come from rural areas to adapt to urban life. These would constitute the less dynamic and easy-tempo spaces of the city, that play a role in fixing the city's edge.

At the same time they these assets have the potential to re-instate an agricultural economy to support the city's demand for fresh produce while assisting to prevent urban sprawl. This part of the landscape can begin to create its own economy slowly but surely. It could take on a redistributive role as far as the fresh produce retail chain is concerned, where markets can be established at the point of production, as well as selling produce in the open market place, especially to small scale or informal fresh produce traders. Secondly, the urban redistributive action should occur on strategic state land assets as defined above. (Refer to Figures 16 and 18)

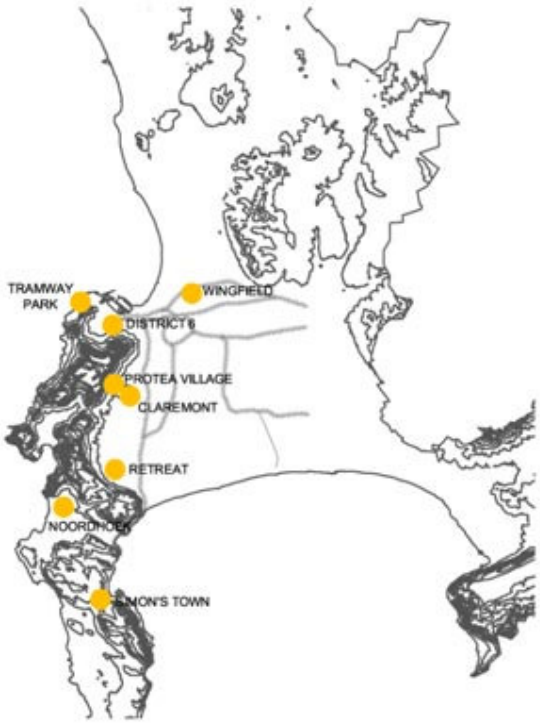


Figure 18: Some restitution claims in Cape Town larger than 60 claims per site (NM & Associates Planners and Designers, 2005)

5.2.2 Restitution

All obstacles to restitution should be removed as a matter of urgency and priority. Restitution allows an immediate condition of integration if only it was vigorously pursued by the state and became more affordable. One fails to understand why people who have made claims to land that they were dispossessed of as a result of grossly unjust laws, should be prevented from returning because of, among other complexities:

- The lack of financial and human resources on the part of the state to assist resettlement, making resettlement unaffordable to many land claimants;

- Potential complex tenure arrangements and terms and conditions of access to state subsidies and bank loans; and
- The lack of bulk infrastructure and service provision that would result in higher costs; if provided for smaller claimant communities. Consequently resettlement programmes compete for scarce resources along with other citizens' needs for services.

Restitution actions require a number of government and non-government organisations (for example, claimant communities and their representatives) to work very closely together. Coalitions can begin to address the following as a matter of priority with respect to resettlement. On the one hand, government's need to recognise that people who are resettling need catch-up time in terms of financial, emotional and integration resources as a result of forced removals and displacement. On the other hand, the expectation of returning communities to return to as large a piece of land / residential unit as possible, having little regard for:

- Long-term affordability concerns such as the upkeep and maintenance of private gardens, the payment of property rates once the rates holiday period expires, and the payment of commercial services such as water, sewer and electricity; and
- Fellow citizens who also need accommodation and access to land in good locations but are not necessarily legitimate claimants in the restitution process.

5.2.3 Reclamation of underutilised land

There are three sets of urban land or spaces that can contribute to the restructured urban surface, and influence compact urban form and usable space in a positive manner.

The first set includes road reserves. As far as the proposed road network is concerned, most road reserves and freeways that separate rather than integrate, and that are not required for public transport or NMT should be de-proclaimed and where appropriately located, used for urban infill purposes or urban agriculture.

Figure 19a: Underutilised land associated to road reserve
(City of Cape Town, 1999, drawings by P. Andrew cited in Dewar and Todeschini 2004: 89)

Figure 19b: The Reclamation of Underutilised Land
(City of Cape Town, 1999, drawings by P. Andrew cited in Dewar and Todeschini 2004: 89)

The second set is also related to the car. It refers to important public spaces and places being returned to the people. One such example is the Grand Parade – once a space of gathering, trading, celebration, meeting, contestation and protest, now mainly a car park. Another is Riebeeck Square. We need to reclaim these spaces in anticipation of the gathering that must happen when we begin to celebrate life as a city, a people and an integrated society, once the inner city is inhabited by the people who currently understand their place to be outside of the urban public realm.

The third set is the street to be reclaimed. Invite the children back into the street – let it breathe like an urban space again, playing many roles: a pedestrianised space, a link, a social space, a trade space and so on.

5.3 Restructured Public Transport and NMT

Prioritising public transport and NMT requires major shifts in the mindset of those responsible for transportation and urban planning. The underlying principle of this mind shift is to prioritise and facilitate human movement on foot as the most basic form of transport.

The priority in public expenditure should shift away from constructing more freeways (unless critical for freight and long-distance inter-regional purposes) and providing more private parking to investment in public transport and NMT infrastructure. The first areas to be prioritised in terms of improving public and NMT should be the poorer peripheral areas

between places of opportunity and residential areas. This reinforces the Klipfontein Corridor initiative in restructuring public transport that can later be applied to other urban corridors in Cape Town.

The notion of an urban corridor provides the most appropriate means of achieving equitable urban access and urban restructuring in a city like Cape Town. An urban corridor represents a broad band of mixed use activity around one or more continuous transportation routes, carrying high volumes of public transportation that operate on a stop-start rhythm. The activities along the line of the corridor tend to form energy points that cluster and grow together over time like 'beads along a string' (le Grange, Dewar and Louw, 2004: 11).

The idea therefore is to start with a hierarchy of urban access, not a classification of roads as is the case in a motorised transport approach. Access is influenced by proximity to movement generators such as employment centres, stations, schools – places that carry significant volumes of movement and activity, including major public activities (le Grange, Dewar and Louw, 2004).

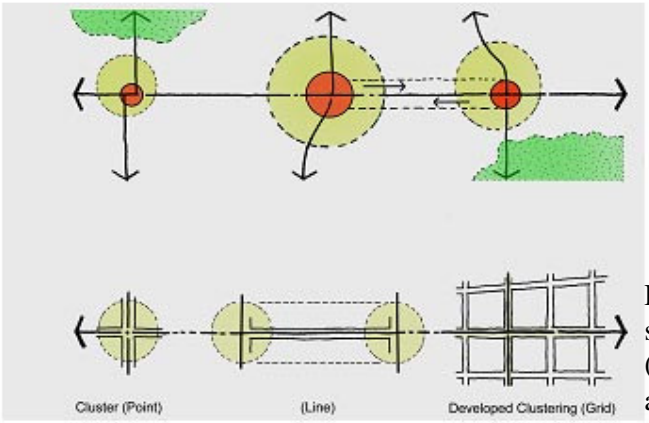


Figure 20a: Concept of beads on a string
(le Grange, Dewar and Louw in association, October 2004)

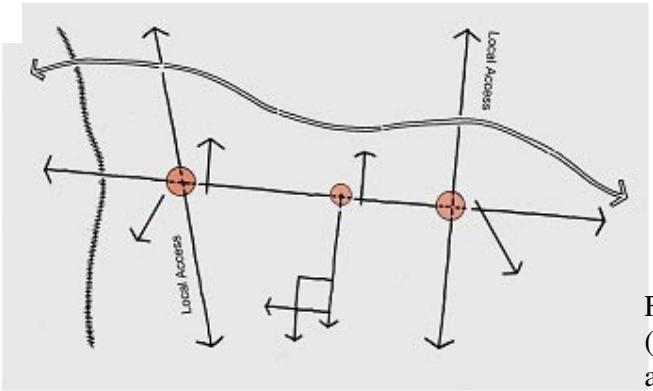


Figure 20b: Hierarchy of Access
(le Grange, Dewar and Louw in association, October 2004)

5.3.1 NMT – An urban necessity

A significant implication of the existing (BAU) context is that the vast majority of people are excluded from access to urban opportunities and activities, even those that are essential for a basic human existence. The emphasis of NMT promotion must therefore be on integrated human scale movement and convenient access (commuting and recreational) at a very basic and essential day to day level. Restoring movement to a human scale is extremely desirable and in a context of such resource scarcity and fiscal constraint, very necessary. NMT can greatly improve our physical well-being – the health of our minds and body, mobility of the younger generation and opportunities for economic activities and tourism.

The underlying philosophy of NMT is that spending time outside in a qualitative environment and/or space can potentially add value to uplifting the human spirit and quality and comfort of public life. In particular, people with limited resources and opportunities can engage their milieu beyond a survivalist and internalised mode of existence. Moreover, the wealthy sectors of society can also be encouraged to engage the city as a place using the most basic levels and forms of transport i.e. walking, cycling and commuting. At the same time, NMT can promote integration at the larger metropolitan, sub-metropolitan and local scales linked through a system and hierarchy of urban networks.

An urban NMT network to promote access and low cost mobility for Cape Town should be understood at three scales. The first level of network should provide opportunities for those wishing to move across the city quickly to access work and facilities / amenities and institutions of metropolitan significance such as the Cape Technikon, Groote Schuur Hospital, and so on. It will comprise of the major bus, taxi and rail links and a number of higher order routes which can facilitate fast movement. This level of access does not focus on the needs of pedestrians as it is not expected that anyone will consider accessing the CBD from Khayelitsha by foot on a daily basis or that many cyclists and / or carts will consider travelling this distance regularly.

The following diagram (Figure 21) illustrates how each mode offers a different level of access and set of opportunities and begins to suggest how the different levels of access described above can be improved on through strategic NMT planning. It suggests that there are two levels of network planning required – the first addressing levels of access at the local

level (Figures 22a and 22b) and the second addressing levels of access at the sub-metropolitan scale (Figure 23).

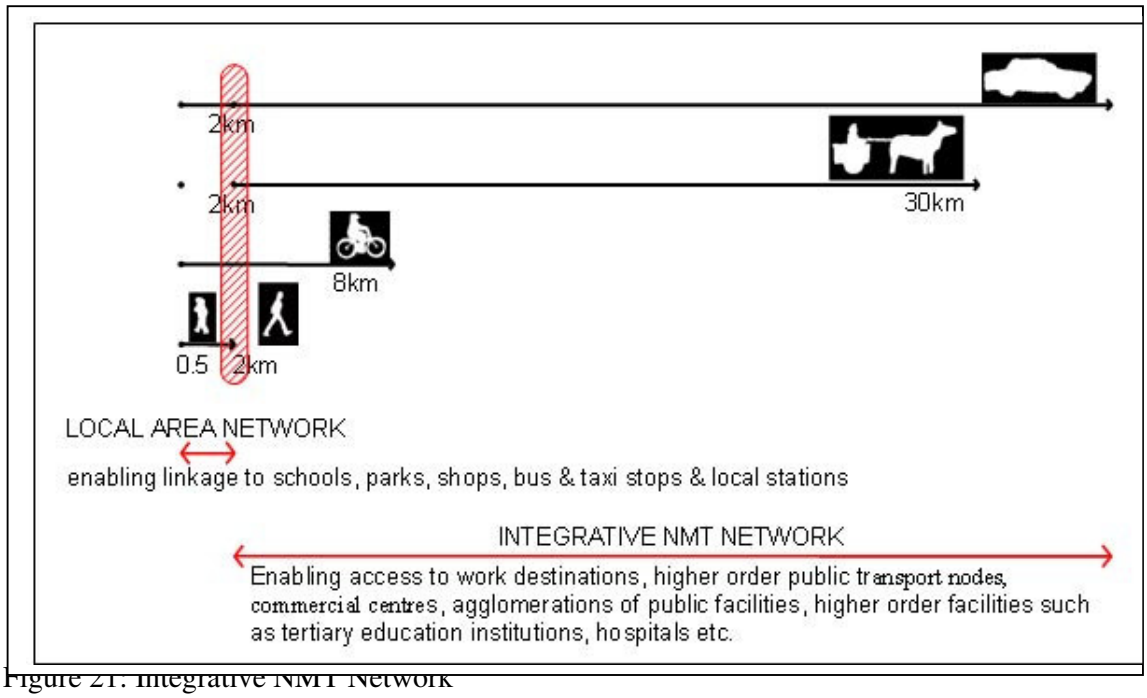


Figure 21: Integrative NMT Network
(NM & Associates Planners and Designers, 2004)

Figure 22a: Bangiso - Tandazo Link before intervention
(NM & Associates Planners and Designers, 2003)

Bangiso – Tandazo link is a highly pedestrianised route within Victoria Mxenge, Khayelitsha. It serves at least 4 schools, informal housing along its length as well as informal economic activity. The upgrade of this link created support for everyday activities to be more comfortable, usable and social in nature.

Figure 22b: Bangiso – Tandazo Link after intervention
(NM & Associates Planners and Designers, 2003)

The second level of network is related to access to public facilities, amenities, institutions and work venues at a sub-metropolitan scale and should enable people to move between their residential neighbourhoods and surrounding areas easily by a combination of foot, bicycle and public transport. (Refer to Figure 23)

The third level of network should be focussed on facilitating local linkage for a full range of NMT and relates mostly to local and school movement and shopping activities. It is important for this level of network to comprise of routes that do not attract fast moving

modes of transport but that enable safe, convenient access to local destinations for NMT predominantly. (Refer to Figures 22a and 22b above)

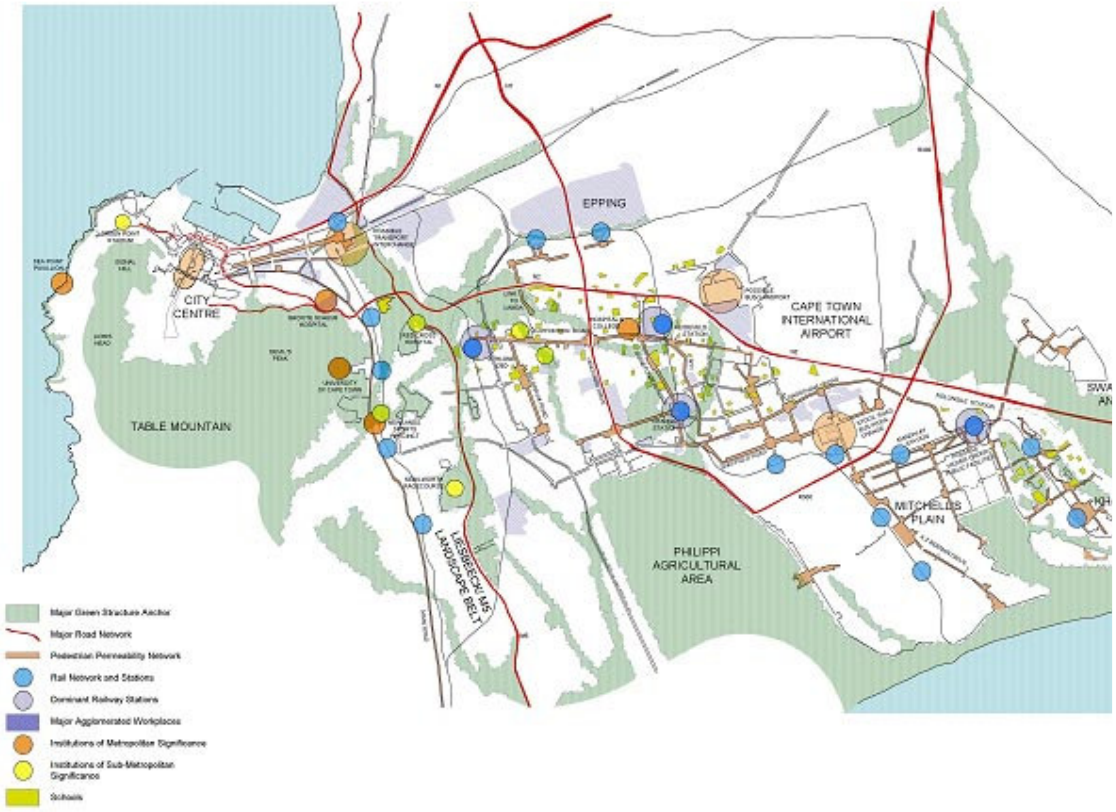


Figure 23: Klipfontein Corridor Concept
(le Grange, Dewar and Louw in association, October 2004)

5.4 Re-emphasising public facilities, places and open spaces

This strategy should focus on some of the key roles of open space. According to le Grange, Dewar and Louw (June 2005: 23), among others, these roles include:

- the provision of natural resources that are necessary for now and in the future;
- the provision of productive resources so as to produce food for the urban population;
- the creation of livelihood opportunities in respect of promoting urban agriculture to provide on-site nutrition to households as well as act as a source of income; and
- to provide open space that can be used for trade and / or small scale manufacture requiring limited up front capital and overheads.

It is also important to highlight two aspects related to public facilities and places. Firstly, social infrastructure is integral to public transport and NMT access as well as the urban natural and built form. Secondly, social infrastructure could become the places of the new multi-cultural urban order where the potential conflicts of difference may well begin to be played out. Sandercock (2003: 87) maintains that ‘in multi-cultural societies, composed of

many different cultures each of which has different values and practices, and not all of which are entirely comprehensible or acceptable to each other, conflicts are inevitable'. It begins to question how we use and appropriate social infrastructure in a new integrated democratic society and what does this mean for urban form?

Re-emphasising public facilities, places and open spaces is discussed in more detail in section 4.1.2.1 and considered as an integral part of the strategies discussed in sections 5.1, 5.2 and 5.3.

6. CONCLUSION

This paper argues for the need to return to a normative, value-based approach to making sustainable cities, based on a sound vision and principles of the good city. It focuses on some of the shifts that need to take place in the realms of public facilities, places and open spaces; public transport and non-motorised transport and housing (shelter) as a means of achieving the good city. It makes the point that the likely prospects for Cape Town appear unpromising if we continue on the basis of a BAU approach to city making. Apart from achieving an undesirable urban form, one of the extreme negative consequences of the BAU approach may well be that the city will experience more local uprisings instead of encouraging local energies to shape and build the city into a sustainable future.

On the other hand, poverty / inequality/ poverty reduction can be achieved more quickly when a SD approach to city making is vigorously pursued. The city would become more integrated and create a more positive quality of life and environment for all its citizens, should we as policy makers, city builders, city managers, planners, designers, administrators, developers and professionals in the built environment adopt a collective consciousness that is all encompassing, more caring and moves away from environmental, spatial, economic, cultural and social polarisation. This approach to making cities would hopefully inspire ordinary citizens and local communities to participate actively in the democratic city building process.

The paper puts forward four key strategies including: i) (re) location; ii), reclamation;, iii) restructured public transport and NMT; and, iv) re-emphasising public facilities, places and open spaces based on current mandates emanating from public policy and legislation that

city-wide coalitions can begin to focus on to achieve an inclusive, integrated, equitable and sustainable urban form.

References:

Arcus-Gibb (2004). Oral Communication with Y. Frizlar, Principal Transport Engineer.

Cape Metropolitan Council (1999). Moving Ahead – Cape Metropolitan Transport Plan: Part 2: Public Transport Strategic Component. September 1999.

Cape Times (May 26, 2005). Protests no threat 'yet', says Mbeki. Housing delivery to be speeded up after 'pilot' N2 project is completed, says councillor.

Cape Times (June 24, 2005). Financial affairs of two taxi associations under the spotlight.

City of Cape Town. (2003). "MSDF Review - Phase 1: Spatial Analysis, Trends and Implications", Draft Report April / May 2003. Prepared for the Spatial Planning and Environment: Development Services Branch.

De Soto H. (2001). The Mystery of Capital – Why Capitalism Triumphs in the West and Fails Everywhere Else. London: Transworld Publishers.

Dewar D. and F Todeschini F. (2004). Rethinking Urban Transport after Modernism - Lessons from South Africa. United Kingdom: Ashgate Publishing Ltd.

Friedmann J. (2000). "The Good City: In Defence of Utopian Thinking", International Journal of Urban and Regional Research 24(2): 460-472, June 2000.

le Grange L. Dewar D and P Louw (2004). A Spatial and Design Concept for the Klipfontein Corridor. Prepared for the Department of Transport and Public Works, PGWC.

le Grange L. Dewar D and P Louw (2005). A conceptual approach to the provision of public open space in the southern portion of the Cape Metropolitan Area. Prepared for the City of Cape Town.

Lucien le Grange Architects and Urban Planners and NM & Associates Planners and Designers in Association (2005). *Joe Slovo Park Urban Design Framework*, April 2005.

National Academies of Sciences 2004. Cities Transformed. Southern African Migration Project, Krista House (http://www.nap.edu/books/0309088623/html/)

Palmans E. and Marysse S. (2003). "Local Agenda 21 and Poverty IDPM-UA discussion paper". Institute of Development Policy and Management, University of Antwerp.

Pieterse E. (2005). "Alternative Futures of the South African City", *Digest of South African Architecture* 2004 / 2005: Feature Article, 52-53.

Pramar V.S. (1989). Haveli - Wooden Houses and Mansions of Gujarat. United States of America: Mapin Publishing Pvt. Ltd.

Ravetz J. (2000). "Trends and Prospects" (Chapter 3) in *City - Region 2020: Integrated Planning for a Sustainable Environment,* London: Earthscan Publications Ltd, pp. 36-48.

Rogers R. (1997), Chapter 5, *Cities for a small planet* in Gumuchdjian P (ed). *Cities for a Small Planet.* England: Butler and Tanner Ltd, Frome.

Sandercock L. (2003). *Cosmopolis II – Mongrel Cities of the 21st Century.* London: Continuum.

Sandoval Castro, Edgar Enrique (2005). '*Transformation through Bus Rapid Transit'* Lecture delivered by Colombian Scholar and former General Manager of the Transmilenio Company in Bogota on 14 April 2005 at the University of Cape Town.

Sen A. (1999). *Development as Freedom.* Oxford: Oxford University Press.

South African Cities Network 2003. "A South African Urban Renewal Overview".

Southworth B. (2003). "Urban design in action: the City of Cape Town's Dignified Places Programme – implementation of new public spaces towards integration and urban regeneration in South Africa", *URBAN DESIGN International* (2003) 8, 119 – 133.

Steele J. (1998). Rethinking Modernism for the Developing World – The Complete Architecture Balkrishna Doshi. London: Thames and Hudson Ltd.

Turner J. F.C. and Fichter R. (eds) 1972. *Freedom to Build: Dweller Control of the Housing Process.* New York & London: Macmillian Company.

Vasconcellos E.A. (2001). *Urban Transport, Environment and Equity – The Case for Developing Countries.* United Kingdom: Earthscan Publications Ltd.

Wall A. (1999). "Programming the Urban Surface", in Corner J. (ed) *Recovering Landscape – Essays in Contemporary Landscape Architecture.* New York: Princeton Architectural Press.

Wilkinson P. (2004). "Renegotiating Local Governance in a Post-Apartheid City: The Case of Cape Town" *Urban Forum* 15(3): 213-230, July – September 2004.

Xhali R. (2003). *The Feasibility of Using Natural Gas as a Fuel in the Public Transport Sector in South Africa*. Towards a Master of Philosophy, EDRC University of Cape Town.

End Notes

[1] Upper Table Valley comprises Vredehoek, Gardens, Tamboerskloof and Oranjezicht

[2] City of Cape Town. '*Density by Suburb' 2003* – available from the City of Cape Town (CMC Administration) Data Base, 44 Wale Street Cape Town.

[3] Non-motorised transport (NMT) is defined as any form of movement that does not rely on battery and/or fuel combustion driven mechanisms to be propelled. Examples include: walking, cycling, per-ambulating, using donkey, horse or human-drawn carts / trolleys, rickshaws, and so on.

[4] Turn key developers are responsible for the entire development process as opposed to the construction contract only. This leaves very little room for the contracting Employer to exercise control over the development process.

[5] The local area of Langa currently has a population density of 564 people per hectare which translates to 141 dwelling units per hectare at 4 people per dwelling unit. To be consistent, densities of any new developments such as Joe Slovo Park upgrade should conform to this trend.

Appendix A: Urban Cape Town – Legal and Policy Context

1. INTRODUCTION

Since the advent of democracy, from the Constitution of the Republic of South Africa Act (Act No. 108 of 1996) and Bill of Rights through to the Development Facilitation Act or DFA (Act No. 67 of 1995) to the Municipal Systems Act (Act No. 32 of 2000) and Housing Act (Act No. 107 of 1997) an urban-based model of development premised on the promotion of human, environmental, social and economic development principles and rights has been encouraged to guide South African cities' growth and change. The intention of the DFA for example, was to change the approach to the land planning system in two profound ways. Firstly, the Act advocated an urban as opposed to a suburban / sprawling development model; and secondly, it placed a set of values at the centre of the land planning system by defining outcomes against which all land–based decisions should be measured (Dewar and Todeschini 2004). These values included the following:

- Promote the integration of social, economic, institutional and physical aspects of land development;
- Promote integrated land development in rural and urban areas in support of each other;
- Promote the availability of residential and employment opportunities in close proximity to or integrated to each other;
- Optimise the use of existing resources, including resources related to agriculture, land, minerals, bulk infrastructure, roads, transportation and social facilities;
- Promote a diverse combination of land uses, also at the level of individual erven or sub-divisions of land;
- Discourage the phenomenon of 'urban sprawl' and contribute to the development of more compact towns and cities;
- Contribute to the correction of historically distorted spatial patterns in the Republic and to the optimum use of existing infrastructure; and,
- Encourage environmentally sustainable land development practices and processes.

In response to the intent of the DFA, the following key urban (visionary) laws / policies were constructed as a means of achieving the principles of integration, equity, social justice and sustainability in Cape Town.

1.1 Urban laws and policies

In the 1990's we witnessed the emergence of the Western Cape Planning and Development Act (Act No. 7 of 1999) which was not effected in law at the time, the Metropolitan Spatial Development Framework (MSDF) and the Muni-Spatial Development Framework or Muni-SDF. Since 2000, we saw the emergence of the Cape Metropolitan Open Space System, the Integrated Development Plan for Cape Town and more recently, the Breaking New Ground Policy (2004) on making more integrated human settlements all of which embrace the principles of the DFA and promote a particular urban form and infrastructure that begins to challenge the dysfunctional and inefficient apartheid city for the majority of its people. As a result of 'Breaking New Ground', the N2 Gateway Housing Programme was initiated to demonstrate through pilot projects, how the three spheres of government can work together towards the development of a new approach to development practice based on higher densities, the principle of integration and the need to empower poor and marginalized communities.

The N2 Gateway Housing Programme is limited to the informal settlements adjacent to the N2 between Bhunga Avenue in the west and Boys Town in Crossroads, currently housing approximately 15 500 informal households in total (Refer to Figure 8). It also targets approximately 6 000 households occupying backyard shacks in areas adjacent to those mentioned above and includes District Six in support of the approximately 1200 households to be resettled in terms of the Restitution of Land Rights Act (Act No.22 of 1994). This Act was established to restore or compensate people for their land rights lost as a result of racially discriminatory laws or practices, after 1913.

The most recent draft policy framework which is in the process of being formulated include the Provincial Spatial Development Framework (PSDF) which is one of the eight strategic initiatives that seek to support the objectives of "iKapa Elihlumayo" [2] or the Growing Cape. In addition to the PSDF, the Provincial Housing Plan, the City's Integrated Development Plan (2004) and impending Spatial Development Framework came about to

reinforce and strengthen the policies of the 1990's, with a strong focus on value-based implementation and delivery.

The White Paper on National Transport Policy approved by Parliament on 18 September 1996 put forward key principles that supported the fundamentals of the DFA and was later encapsulated in the National Land Transport Transition Act (Act No. 22 of 2000). This Act contributed to the notion of integration through principles that started to acknowledge that land development and transportation cannot be considered in isolation of each other. This Act also promoted public as opposed to private transportation, promoting at least an 80 / 20 public – private modal split.

On 15 and 16 May 2003, the then Cape Provincial Minister of Transport and Public Works hosted a Public Transport Summit, the outcomes of which included the endorsement of 'The Provincial Vision for Public Transport And Five Year Strategic Delivery Programme' finalised in July 2002. One of the key plans of this Vision was Delivery Plan No. 21 on Non Motorised Transport. This delivery plan dealt with the important aspect of the walk and cycle mode and the need for these to be recognised as part of the public transport system. A key decision at the time was to embark on an ambitious programme to introduce a Bus Rapid Transit (BRT) System within the Klipfontein Corridor, between Cape Town CBD and Khayelitsha. The rationale for selecting this area is that the corridor traversed the poorest of the poor areas and the majority of people living in the metropolitan south east sector of the city.

Cape Town's local transformational transport planning was compiled in Moving Ahead which was published in September 1999 as both an analysis of the existing transport situation and a vision containing strategic policies and strategies for establishing a comprehensive public transport system.
The broader metropolitan objectives for the public transport plan included:

- the provision of affordable services to the urban poor, for work and other essential journey purposes;
- the creation of viable and attractive transport alternatives to car users;
- services which will benefit visitors and holiday makers;
- transport for the young, old and mobility disadvantaged;
- the strengthening of regional, inter-city transport connections;
- the achievement of environmental goals; and

- the development and restructuring of the metropolitan area.

One of the principle objectives of government policy is modal integration - to create integrated metropolitan transport systems which will promote the concept of seamless travel between different public transport modes and services. This will be achieved by creating a metropolitan public transport system consisting of a primary network and supplemented by secondary support services.

From a road infrastructure point of view, the Cape metropolitan road network provides the existing road network and future road proposals to ensure that mobility is maintained in the long-term across the metropolitan area. The network was based on traffic modelling estimating demand up to 2015 and proposes various higher order categories of roads namely Classes 1, 2 and 3 [3]. (Refer to Section 3.2, Figure 7)

1.2 Green laws and policies

From an environmental management and protection perspective, we witnessed the promulgation in the 1990's of certain pieces of legislation such as the National Environmental Management Act (Act No. 107 of 1998) or NEMA that attempted to ensure the rights of both humans and the environment within a context of sustainable development and sustainable resource use. Equity defined in the Act as "equitable access to environmental resources, benefits and services to meet basic needs and ensure human well being" was a key underlying principle of this legislation.

Since 2000 the concern from environmentalists and conservationists was mainly with the protection, conservation, rehabilitation and management of biodiversity focusing on the linkages and interconnectedness of all ecosystems. This was entrenched in the establishment of the National Environmental Management: Biodiversity Act (Act No. 10 of 2004) and reinforced by the Protected Areas Act (Act No. 57 of 2003). At the city scale, the City of Cape Town adopted its Biodiversity Strategy in October 2003. It created a Biodiversity Network for implementation and sustainable management in partnership with other public and private landowners.

Reference:

Breaking New Ground Policy Statement (2004), 02 September 2004.

Cape Metropolitan Council (1996). Metropolitan Spatial Development Framework. The Guide for Spatial Development in the Cape Metropolitan Functional Regional Area.

Cape Metropolitan Council (1999). Moving Ahead – Cape Metropolitan Transport Plan: Part 2: Public Transport Strategic Component, September 1999.

City of Cape Town (1999). Municipal Spatial Development Framework – Draft, August 1999.

City of Cape Town (2001). Integrated Development Plan (IDP) Needs Analysis, November 2001.

City of Cape Town (2003). Biodiversity Strategy, October 2003.

Dewar and Todeschini (2004). Rethinking Urban Transport after Modernism - Lessons from South Africa. United Kingdom: Ashgate Publishing Ltd.

Provincial Government of the Western Cape (2003). The Provincial Vision for Public Transport and Five Year Strategic Delivery Programme.

Provincial Government of the Western Cape (2004). Business Plan for the N2 Gateway Pilot Project.

Provincial Government of the Western Cape (2005). Provincial Spatial Development Framework Proposals, Draft No.2 – Road show, prepared by: CNdV, Cape Town.

Government of S.A. (1996). White Paper on National Transport Policy (approved by Cabinet on 18 September 1996).

List of Acts:

Government S.A. (1994). Bill of Rights and Constitution – Summary of the Constitution. http://www.paralegaladvice.org.za/docs/chap01/05.html

Government S.A. (1996). Constitution of the Republic of South Africa Act (Act No. 108 of 1996)

Government S.A. (1995). Development Facilitation Act (Act No. 67 of 1995)

Government S.A. (1997). Housing Act (Act No. 107 of 1997).

Government S.A. (2000). Municipal Systems Act (Act No. 32 of 2000)

Government S.A. (1998). National Environmental Management Act (Act No. 107 of 1998)

Government S.A. (2004). National Environmental Management: Biodiversity Act (Act No. 10 of 2004)

Government S.A. (2000). National Land Transport Transition Act (Act No. 22 of 2000)

Government S.A. (2003). Protected Areas Act (Act No. 57 of 2003)

Government S.A. (1994). Restitution of Land Rights Act (Act No.22 of 1994)

Government S.A. (1999). Western Cape Planning and Development Act (Act No. 7 of 1999)

End Notes:

[1] Breaking New Ground, 2 September 2004 is a comprehensive and approved Housing Delivery Plan, which acknowledges the need to see housing as an instrument to spatial restructuring by creating sustainable human settlement developments.

[2] Ikapa Elihlumayo is a provincial framework aimed at creating “a home for all” by striving for increasing economic growth, increasing employment and economic participation, reducing geographical and socio-economic inequality; and providing a sustainable social safety net.

[3] Class 1 refers to Freeways and Expressways. Class 2 are Primary Arterials, which form the primary network for urban areas and are characterised by high volumes, restricted access and fairly high speeds. Class 3 are District Distributors, which distribute traffic between the principal residential, industrial and business districts of a town and form the link between the primary network and the roads within the residential areas. They are characterised by high volumes, restricted access and moderately high speeds. The major road-based public transport movements are routed on district distributors.