CHAPTER 1: FINDINGS

Shaped by powerful new forces, South Africa's largest urban centres have changed in the ten years since the birth of democracy in 1994

CHAPTER 1. FINDINGS

SUMMARY OF KEY FINDINGS

The South African Cities Network has developed a State of the Cities analytical framework which forms the basis of this report, clustering issues within the areas of productive, inclusive, sustainable and well-governed cities. In addition, demographic status and trends are of major concern to cities. Within each of these areas, the following key findings stand out.

DEMOGRAPHIC CHALLENGES

The size, form and character of its population is the ultimate concern of any city. Population size is the result of three things, birth, death and movement into and out of the city. Form refers to a range of population features, including age structure, life-expectancy, family size and typical household composition. Character refers to the relationship between population and place, chiefly whether residents are historically settled and inclined to regard themselves as belonging to the city, or are mostly new in-migrants, temporary inhabitants or highly-mobile potential out-migrants who see possible futures elsewhere.

The urban population challenge left by apartheid

South African cities have been left specific population challenges with the demographics of South Africa's cities massively distorted by apartheid policies. Apartheid not only left its mark on the size and shape of urban populations by distorting where people lived. It also misshaped the 'character' of urban inhabitants, warping attitudes to urban living by forcing millions of people into life strategies based on dual households and temporary migration from rural to urban areas and back again.

The state of the urban population

One of the most important strategic issues facing South African cities is 'city growth'. Although the winds of change are not easy to read a number of key trends are noted in the analysis.

- On average, South African cities have grown much faster than the national population since the 1970s, although the exact picture is obscured by the fact that the so-called TBVC states were never covered in South African censuses. The cities grew particularly fast after the end of apartheid with average population growth rates of approximately 4,4% between 1991 and 2001. The rate of growth was understandably highest immediately after apartheid restrictions on movement were removed. But city growth has slowed considerably in the 1996 to 2001 period, and now looks much as it did in the 1970s and 1980s, which in turn was a lot slower than in the decades before this.
- Not all of the nine SACN cities are growing equally fast. In fact, according to the 1996 and 2001 censuses, four of the nine cities are growing at a rate less than that of the South African population outside the country's 21 largest urban centres, a rate of only 1,4%. Some of the fastest growth is happening in South Africa's tier of secondary cities. This grouping is

also seeing cities with hyper-fast growth of over 8% per annum, and some cities that are depopulating at –3% per annum.

- Migration accounts for the current city growth trends. There is evidence that permanent migration to cities has been relatively small, and that which has occurred is balanced by return permanent migration from urban areas to rural villages. Meanwhile the apartheid pattern of temporary or circular migration, where younger members of a rural household move to a city to find work, maintaining consistent contact with their rural home, and sending back remittances whenever they can, is continuing. A key trend here is the migration of secondary school children in the 15-19 year age group. City to city migration is also increasing.
- The impact of HIV and AIDS on city populations cannot yet be seen, but cities will not escape the effects of the epidemic. In fact they may be worse affected if late stage AIDS drives migrants to seek family care and more dignified deaths back in rural areas. There is evidence that the

STATE OF THE SOUTH AFRICAN CITIES

ANALYTICAL FRAMEWORK

PRODUCTIVE CITY

Planning perspective:
Can the local economy provide a majority of residents with means to earn a reasonable living?

Post-apartheid challenge:
Negligible public and private sector investment in bases for industry efficiency other than cheap surplus labour. Hence an artificially small middle class and therefore weak domestic demand; and the productive capacity of large section of the population under-valued and un-harnessed.

This report looks at:
Employment and remuneration trends and especially the relative attractiveness of cities in terms of their ability to provide residents with a means to earn a living; factors illustrating and explaining the strength of the urban economy; and how cities are responding to urban economy weaknesses in a globalising economy.

INCLUSIVE CITY

Planning perspective:
Do residents have the opportunities and capacities to share equitably in the social benefits of city life.

Post-apartheid challenge:
Core feature of South African cities is inequality. Large numbers of residents marginalised into under-serviced ghettos on the edges of cities, where geographically, materially and psychologically distanced from the opportunities and advantages of city life.

This report looks at:
Progress in providing residents with access to key infrastructure based service; divides in wealth, ability to build assets and secure against risk; spatial exclusion; human development and quality of life. Also what cities are doing to address this.

URBAN POPULATION

Planning perspective:
Urban population size, shape and well-being over the long term, given the commitment that residents ultimately have to making their lives in the city

Post-apartheid challenge:
On one hand, distortions in where people lived across SA and therefore pent-up demand for urban lives denied by apartheid On the other, a highly mobile floating population, with entrenched patterns of rural to urban and return temporary migration.

This report looks at:
Complex city growth trends. Dynamics of migration, disease and household formation driving these.

SUSTAINABLE CITY

Planning perspective:
How is the city impacting on the store of natural resources that sustains the settlement and makes it livable?

Post-apartheid challenge:
Apartheid spatial planning left SA cities with built environments that were dysfunctional and, in turn, resource inefficient. Reversing apartheid has unfortunately meant reinforcing and exacerbating these inefficiencies, as more and more residents claim highly resource-intensive livelihoods from which they were previously excluded.

This report looks at:
The urban-environmental challenge that apartheid built-environment planning created; the trends in urban form resulting from post-apartheid settlement policies; measurable impacts on natural resources and the consequences thereof; and what cities are doing to construct sustainability agendas.

WELL-GOVERNED CITY

Planning perspective:
Is the political & institutional context stable, open and dynamic enough to give a sense of security that varied interests can be accommodated?

Post-apartheid challenge:
Bad relations between communities and municipalities, poor public participation, discord between and with communities, and high levels of crime and violence. Also financially and administratively weak institutions of government.

The report looks at:
How well South African cities are governed, including: evidence of social discord and disintegration; institutional stability and efficacy, ability to govern in a complex intergovernmental context without a clear national urban policy and well aligned development incentives.

epidemic may be impacting on fertility and on women between the ages of 25 and 34 in some cities.

- The movement between cities and rural parts of the country, as well as between cities, is having a marked impact on the shape of cities. But just as important is population re-dispersal within cities. Whereas the population of the nine SACN cities collectively grew 14,8% between 1996 and 2001, the growth in the number of households was 27,5%. Household growth reached almost 40% in two of the nine cities. This can only be explained by households splitting. Household decomposition reflects the removal of apartheid barriers to residential location within cities, and the success of an RDP housing programme that produced many new greenfield housing estates. It signals increasing intra-urban movement of people. Across the cities 8,9% of people surveyed in the 2001 census were living elsewhere in the same city five years before.

URBAN ECONOMY CHALLENGES AND THE PRODUCTIVE CITY

The size, shape and character of a city population is closely entwined with local economic prospects. There are a number of dimensions to the relationship. On the one hand, big cities tend to support wealth-creating activities because they facilitate generative interactions between an ever larger number of people. They deepen market demand and stimulate new productive activity. On the other hand city economies affect population size. Well-performing cities often see population increases above the natural growth rate, as migrants are attracted by what they perceive as relatively greater economic opportunities.

This is usually a good thing from the perspective of a country. It creates conditions for higher economic growth and, as the cost to benefit of having more children increases in urban areas, it drives down fertility rates. However, this positive relationship assumes that cities can offer residents a viable means to earn a living. If a city cannot, populations will 'float', disinvesting from the city psychologically, materially and physically, with the young, mobile, wealthy and highly skilled leaving first.

The urban economic challenge left by apartheid

In various ways apartheid left cities with a very weak economic base. In most countries growth has historically been driven by the expansion of the middle classes, and the gradual deepening of its pool of wealth. Out of this strata in turn comes the nation's future entrepreneurs and business risk takers. The apartheid urban economy was based instead on the notion that a rich racial minority would drive demand for goods and services, and that a large surplus labour force, whose costs of social reproduction barely needed to be covered, would be the sustainable basis for industry efficiency. This formula worked well for white South Africa in the 1950s and 1960s. But well before the end of apartheid it was obvious that the urban economy was in crisis. Complacent that cheap labour was the answer to economic efficiency, both government and industry underinvested in future economic growth drivers. Apartheid policies artificially limited the growth of the middle class. This invariably meant that domestic demand eventually reached its natural growth limits. In addition the potential productive capacity of a large section of the population went under-valued and un-harnessed.

Economic trends and the state of the productive city

It is often noted that primary and secondary industry in South Africa has declined over time, and the tertiary sector has become more and more important. This is true, but other more fine-grained trends are more important.

- Four economic sectors – government, social and community services; manufacturing; wholesale and retail trade; and transport and communications – have continued to add significant value to the South African economy over the last 30 years. But all have failed to contribute comparable increases in jobs in the nine cities. Manufacturing in particular has seen a substantial long-term decline in employment as production processes become increasingly capital intensive and high-tech. The picture is varied by city however. For example Ekurhuleni, once South Africa's manufacturing heartland, lost significant industry employment between 1970 and 2001. But this trend may now have been reversed. It created 30 235 new manufacturing jobs between 1996 and 2001, an increase of 26,1%. The general exception to this picture of jobless growth may seem to be the financial and business sector. But since the latest census data there is evidence that the financial services sector is also losing jobs.

- Following a long-term trend from primary and secondary industry into services, there has been a marked decline in employment amongst machine operators and trade workers. This is to be expected. Less expected is a decline in employment amongst professionals by 8,3% between 1996 and 2001. Although this may be driven by trends in some specific occupational sub-groups, such as teachers, it may also be that cities are losing some of those residents they consider to be their primary economic asset – workers in high value-adding knowledge industries. An exodus of professional skills from the country may be driving this trend. At the other end of the spectrum there was a total loss of 91 145 jobs in private households between 1996 and 2001.

- Of concern is the difference between employment opportunities in the city and those available in other parts of the country - in other cities or in non-urban areas. The census data suggests the surprising finding that while unemployment in the nine cities is on average 3,31% lower than the country as a whole, some of the cities have unemployment rates far higher than even most rural areas. The implication for residents in these particular cities is that it might make more sense to seek employment in rural areas.

- A similar picture emerges when levels of monthly income are compared. On average, SACN city workers earn R5 297,22 a month. This is R2 508,16 better than that earned across the country outside the nine cities. To a varying extent the pattern holds for all nine cities. But when the average monthly income earned is compared to the national average, including the nine cities, it emerges that three cities are unable to offer their employed people remuneration better than they might find in another SACN city.

- The lack of skills is becoming chronic. Only 26,9% of SACN city residents had a matric certificate in 2001, and only 11,9% had any form of post-school higher education. On the plus side, crimes typically affecting businesses directly, such as burglaries at non-residential properties and fraud, have declined from high levels in the mid- to late-1990s and are now relatively static.

Many of the SACN cities have responded to their urban economy challenges in similar ways. Believing that domestic economic demand will never drive economic recovery, South African cities are doing what the economic consensus of the moment says they should do – go global. Most of the cities believe that foreign consumer demand for goods and services will allow them to capture sufficient foreign-earned income to slowly drive up local income and demand.

There is no evidence that this growth path will not work. But yoking the city economy to global demand holds risk. There are recent signs of economic recovery in the United States of America, but the global export economy, ultimately over-reliant on the US consumer, remains structurally unbalanced and hence potentially fragile.

The recent shift towards an export-orientated economy has had little discernable impact on economic performance. Some indicators suggest that urban labour markets have suffered at the same time as economic returns from export industries have improved. Some economic sectors seen by some cities as key to export-led growth have proved highly capricious. Favoured sectors of only two years ago now seem to be shedding labour. The need for more diverse approaches, which include support for higher domestic demand and latent local productive capacity, should be considered.

SOCIAL CHALLENGES AND THE INCLUSIVE CITY

Cities do not only need to concern themselves with whether they can provide their residents with some means to earn a living. Populations may 'float' even when jobs are widely available. Either because of circumstance or choice, they may live in poor social environments that do not allow them to enjoy the benefits of urban life. Their incomes may not be sufficient for them to live better. Or they may calculate that it is better to avoid some of the higher costs of urban living in order to accumulate enough savings to invest in future lives elsewhere.

Cities need to look at social development as well as urban economic development. Regardless of whether they can provide populations with adequately remunerated work opportunities, they need to ensure that their residents have the opportunities and capacities – both material and psychological – to equitably enjoy the social benefits of city life. A city where no residents are denied the benefits of urban living is an 'inclusive city'.

The social challenge left by apartheid

Much of South Africa's population was historically excluded from the benefits of life in the country's largest cities. Black residents were marginalised into under-serviced ghettos on the edges of cities, where they were geographically, materially and psychologically distanced from the opportunities and advantages ordinarily associated with city life. By the end of apartheid the key feature of South African cities was social inequality.

Social trends and the state of the inclusive city

Considerable effort has been put into rectifying the imbalances of apartheid. In some respects, significant progress has indeed been made in ensuring more equitable access to the benefits of living in cities. In other respects, however, the SACN cities are more unequal today than they were ten years ago, and many social and human development challenges have consequently been compounded.

- On the plus side, the absolute numbers of households receiving an acceptable level of service have increased dramatically. This is particularly evident in some service areas, such as waste management. Between 1996 and 2001, the number of households receiving a municipal waste collection service at least weekly increased by 1 048 593. Even while the number of households forced to use their own dumping facilities increased slightly by 18 671, the proportion of households with inadequate waste services (defined as less than collection once a week) fell from 19,4% to 14,6%.

- While the absolute numbers of households served has increased noticeably, increasing size of populations and other dynamics have meant that the proportion of households receiving these services has often remained static or improved only marginally. For example, households using electricity for lighting purposes increased by 928 368 between 1996 and 2001. But the number without also increased, resulting in an only modest improvement of households without electricity from 22,3% to 19% of total. This picture is varied across cities, and it does not necessarily follow that cities with the fastest population and household growth performed the poorest in meeting backlogs.

- The number of households served has increased across the board. But the access to some levels of services has also declined in absolute terms. The numbers of households receiving running water on site (that is, either in yards or directly in dwelling) increased between 1996 and 2001. But this growth was almost all made up of new yard connections. In all but two of the nine cities, the number of water connections into dwellings decreased in the 1996-2001 period. Both the causes and the likely consequences of this trend need to be considered. One significant cause may be the absolute decline in the numbers of households living in backyard dwellings. The number of formal backyard dwellings declined by 16 073 between 1996 and 2001 (5,1%). The number of informal backyard dwellings declined by a huge 462 849 (65,7%).

- The average household income increased from some R48 291 per annum to R71 835 per annum between 1996 and 2001. This apparently healthy increase masks increasing disparities in the distribution of income in the nine SACN cities. Evidence says that the benefits of increased income across the population, and of urban asset formation are being outstripped by deepening wealth divisions and increased social exclusion. For example there was a 179,6% increase in the number of households claiming to have zero income between 1996 and 2001. There have been increases in the number of households earning between R4 800 and R9 600. But there have been substantial declines in the number earning in the middle-range income categories above this.

- Inequality is not only felt in distribution of income. Spatial analysis shows that increasing numbers of residents are taking up occupancy in informal settlements on the margins of cities, far from the work opportunities. In 2001, 36,8% of SACN city residents going to work or school made the journey on foot. By contrast only 25,4% made use of a bus or minibus taxi.

- Some human development indicators, such as those for health and education, give cause for concern. In some cities, antenatal surveys commissioned by the municipality show HIV and Aids rates of 37%. Levels of education remain generally low. In all but two cities the percentage of residents with no schooling came down between 1996 and 2001. But on

average 8% of residents were without any schooling, and a remarkable 61,3% are without a matriculation or school leaving certificate.

- A number of the SACN cities have done surveys of their residents' subjective sense of their quality of life. All surveys show that the perceived quality of life is declining amongst black residents, while increasing amongst white residents. This is in spite of the fact that considerable municipal capital has gone into infrastructure expansion in previously disadvantaged communities over the past decade. For example, in Buffalo City's August 2001 quality of life survey of 2 477 households, only 26% of African residents said they were satisfied with their lives, while 84% of white residents reported satisfaction.

A number of measures have been introduced by cities to address weaknesses in their inclusiveness. For example, a number of cities have developed poverty strategies. But these tend to be fairly isolated and haphazard, and to focus predominantly on infrastructure provision as the key solution to social problems.

BUILT AND NATURAL-ENVIRONMENT CHALLENGES AND THE STATE OF THE SUSTAINABLE CITY

City populations, the urban economic activities they are involved in, and the social goods and services they access, need to be organised in space. This 'organisation in space' gives rise to an 'urban form' or 'built environment'. Obviously, population growth, urban economic development and the social aspirations, or desperation of communities, all impact on city form. But in turn the size and shape of cities impacts on quality of life, economic growth and population stability. This is because the built environment impacts on the envelope of natural resources that sustains any settlement and makes it 'liveable'. Various impacts are important, including the impact of: water and air pollution on the habitability of the spaces that people use, and in turn public health; the size of cities and the intensity of movement on the time it takes for people to travel and for goods to be moved; the extent of usage on the integrity of key infrastructures such as road networks and sewer systems and the impact of the form of housing on energy usage

Because it impacts on the envelope of natural resources the built environment is either conducive or not to tolerable urban living. A city where the built environment overburdens the store of naturally available 'resources' – space, air, energy, water, time and heritage – will not be a 'sustainable city', since the costs of so-called 'diseconomies of scale' will begin to exceed the benefits of urban life.

The urban environment challenge left by apartheid

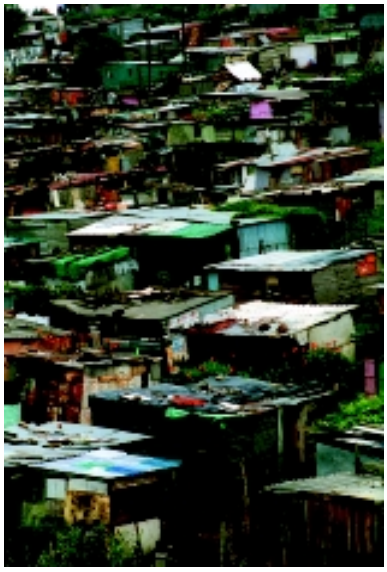
Apartheid policies meant that South African cities historically have an urban form that is not resource efficient. For example, the deliberate spatial separation of residential neighbourhoods into distinct racial segments spread cities out into a low-density sprawl. SA cities therefore have a high impact on available land relative to their population size. And travel within them is costly in terms of time, energy use and pollution effects.

The state of the sustainable city

In some cities in the developed and developing world, urban environmental challenges resulting from poorly designed city form have been exponentially

compounded by population growth. Some now offer barely liveable habitats. Although most South African cities are far from being large enough for this issue to be immediately pressing, the question of their long term sustainability is critical.

For various reasons, apartheid cities were designed in such a way that they had a disproportionately high negative impact on the urban environment. Impacts ranged from poorly serviced township areas resulting in high natural resource input costs, and poor waste and sewerage management, through to the excessive energy-use and time inefficiencies from travel in an urban road network sometimes built to impede movement:



- The attempts to correct the imbalances of the apartheid era have often exacerbated the high impact of the built environment on natural resources. In particular, perverse incentives have resulted in new housing developments on the margins of cities extending the ecological footprint of the city. For example, there was a net increase of 735 627 informal dwellings not in backyards between 1996 and 2001. There was a further increase of 743 843 formal self-standing houses in this period. Part of this new household formation was driven by the net movement of 478 922 households out of backyards and into formal self-standing houses or informal dwellings. This de-densification of cities creates capacity problems for networked infrastructure, and increases the marginal cost of new service connections, possibly beyond the point where this can be carried by operating cost transfers and cross-subsidisation within a service account.
- South Africa is a water stressed country. Projections for the National Spatial Development Perspective show that at least four SACN cities will place enormous pressure on available water in the next two decades, possibly leading to crises. Similarly South Africa has very little prime arable land and much of this just happens to be located proximate to the major urban growth centres of Gauteng. Sensitivity and impact analysis of what the ecological footprint of expanding cities could do to this land raises concerns.
- Many of our cities' sewerage networks are now running at near full capacity, and infrastructure laid down in previous decades is reaching the end of its working life. Both unanticipated population growth and new RDP housing developments, many with forms of flush toilets, are placing increased pressure on this capacity. Some South African cities have to spend huge resources each year managing a disproportionate quantity of illegally dumped waste. For example the City of Johannesburg has to deal with 266 139 tons of illegally dumped waste each year next to Tshwane's 115 080. Recycling initiatives, in spite of their potential for job creation, remain in their infancy in most cities.
- The transport routes of SACN cities are increasingly congested. This has pollution effects, but also impacts on the efficiency of the urban system that makes life in the cities bearable. The average travel time for a home to work trip in Johannesburg is now 50 minutes. This increases to 91,7 minutes for passengers needing to catch two buses to get to work, and to 120 minutes for passengers having to take a train, bus and taxi.
- The ecological impact of the built environment is an increasing concern for many SACN cities. A number have conducted state of the environment reports, and one or two have done full ecological footprint analyses. Such

an exercise for Cape Town shows that although the total municipal area for Cape Town is 2 487km^2, and its built up area is just 774km^2, its energy usage, building materials inputs, waste outputs, and food and fresh water requirements has an effective impact on some 128 264km^2, the size of the entire Western Cape province.

Various measures to prevent or mitigate environmental impacts are being introduced. However in general terms the SACN cities do not fully recognise the importance of systematically managing the built environment to contain its impact on a limited store of natural resources.

GOVERNANCE CHALLENGES AND THE STATE OF CITY GOVERNANCE

All cities are contested spaces. Even if the SACN cities perform extremely well in the coming decades it is virtually impossible that every resident will feel that their city is perfectly productive, inclusive or sustainable. This inevitably raises the prospect of groups and movements arising to voice, or fight for, their needs and interests. In most instances this is a healthy phenomenon. Where contestation is vocal, vigorous and formally organised, it strengthens the local democratic state by alerting authorities to social grievances that would otherwise simmer beneath the surface, manifesting as destructive street-level competitive politics, community disintegration, public violence, and crime. It also structures the social body by giving formal channels for people to properly identify and express any lack of satisfaction they may have.

This assumes that the population believes that the public sector is able to regulate social and political disorder by effectively anticipating and dealing with possible reasons for disharmony. When city government is manifestly ineffectual, however, the local population may disengage from the local state, and no longer look to public institutions to sort out concerns. This may trigger a downward spiral of increasing government ineffectiveness and disintegrating polities.

The effectiveness and efficiency of local government, on its own account and in association with other powerful urban actors, is therefore becoming more and more important. A city where the political and institutional context is stable and dynamic enough to give everyone the security that varied interests can be formally expressed, accommodated and managed is a ‘well-governed city’.

The governance challenge left by apartheid

Apartheid left South African cities with particular governance problems. A key challenge has been a weak polity, seen in conflictual relations between communities and municipalities, poor public participation, discord between and within communities, and high levels of crime and violence. Another problem was weak institutions of government. Despite appearances municipalities were poorly structured, under-capacitated and inefficient. Many were left with a weak basis for future financial sustainability.

The state of city governance

South African cities have done extremely well in containing the instability that marked the first few years of the transition from apartheid. In particular, foundations for stable local democracies have been laid. But despite the positive

progress, local states still carry many of the marks of apartheid, and have faced new challenges resulting from rapid settlement and institutional restructuring:

- There are generally high, but not necessarily stable, levels of satisfaction of residents with the municipality across key service sectors. These satisfaction levels differ considerably by race and settlement type. For example, only 22% of residents living in informal settlements in Johannesburg felt that the municipality was doing a good or very good job compared to 60% of residents living in wealthier, still predominantly white suburbs.
- Levels of public violence and crime increased considerably in the early to mid 1990s. These have stabilised in recent years, but remain unacceptably high. The levels of crime against persons are particularly worrying in that they erode community confidence and harmony. Incidents of indecent assault across a sample of SACN cities increased by 104,2% between 1994 and 2003. And incidents of child-abuse were up 33,6%, incidents of assault up 38,2% and assault with intent to do grievous bodily harm up 27,9%.
- Severe capacity constraints exist amongst some municipalities, especially with regard to long-term financial stability. The meltdown of the mid-1990s was regarded chiefly as a short-term financial management crisis. The root causes of a future potential fiscal crisis remain to be addressed. At present, with the exception of Msunduzi, between 78% and 91% of municipal debt in the cities stands at over 90 days outstanding, the cut-off after which debt has historically been understood as unrecoverable.

Municipalities are doing as much as they can to gear up the necessary capacity to ensure well-governed cities. There are many experimental government programmes and institutional innovations which are worth highlighting and applauding. As important as municipal capacity to govern the city within municipal competencies, is the ability to act as 'city-strategy leaders' able to align the efforts of a range of stakeholders from the public and private sectors.

THE RELIABILITY OF DEMOGRAPHIC AND ECONOMIC STATISTICS

All the demographic and economic statistics in this report contain a degree of sampling error. Statisticians distinguish between a point estimate and a confidence interval around that point. For instance, the point estimate of the population at the time of Census 2001 was 44.8 million. The 95% confidence interval was about 1% of the population either way. This means that there is only a 5% chance that the population fell outside the range of 44.4 million to 49.2 million. It is impracticable to calculate and report confidence intervals for every estimate in this document, but interpretation should be informed by a general sense of sampling error. Of course, there can be other sources of error in these statistics as well.

DEMOGRAPHIC STATISTICS

An ideal census should have no sampling error. But there was more than 10% undercount of the population in the 1996 census and more than 16% undercount in 2001. The degree of undercount in both cases was established by a recount of the population in 800 enumerator areas in 1996 and 600 enumerator areas in 2001. The recount was compared with the original count. From this recount, adjustment factors were derived and applied to the original count across the country. In general, the relative confidence interval – the size of the confidence interval relative to the point estimate – rises as the population size decreases. This means that demographic statistics for the smaller cities are more uncertain than for the larger cities.

South Africa lacks an official demographic cohort component projection model. No plausible model can reproduce both the 1996 and 2001 census point estimates exactly, given what is known about fertility, mortality and international migration. So there is an additional source of uncertainty about demographic statistics, the size of which cannot be estimated at present.

Economic statistics

These divide into two categories: labour market statistics and output or value added statistics.

Labour market statistics

Statistics South Africa produces several estimates of labour market statistics. There are some from the census, there are firm-based surveys (of which the most important is the Survey of Employment and Earnings, which covers registered firms outside agriculture with a turnover of more than R300 000 per annum) and there are household-based surveys (the October Household Survey from 1994 to 1999 and the Labour Force Survey from 2000 onwards).

The limitations of the census estimates is that it is impossible to ask within a census questionnaire the detailed questions necessary to establish the precise labour market status of each individual.

The coverage of the Survey of Employment and Earnings became progressively less satisfactory during the 1990s. The basis for sampling was changed in 2001, resulting in a substantial upward jump in its estimate of formal employment. Most of this reflects improved coverage rather than real change.

The October Household Survey and Labour Force Survey have asked detailed questions but they have been based on relatively small samples (usually about 30 000 households), so there is large sampling error at the individual city level (less if the nine cities are taken together). The Labour Force Survey's labour market questions differ from those of the October Household Survey, so there is a measure of discontinuity between 1999 and 2000.

OUTPUT AND VALUE ADDED STATISTICS

In the years immediately after 1994, Statistics South Africa gave priority to demographic and social statistics. The result was that industrial censuses became increasingly out of date and that economic statistics based on samples drawn from them became increasingly unreliable. A decision was taken in the late 1990s to replace industrial censuses with a continuously updated register of businesses, developed with co-operation from the South African Revenue Services. Estimates of gross output by industrial sector from January 2004 will be based on a sample of the new register. These estimates have not been published at the time of writing, but there may be substantial discontinuities in 2004, since the 2003 estimates were based on samples drawn from the 1988 industrial census with some adjustments in the early 1990s. It is likely that Global Insight, the company that has produced Gross Value Added statistics in this report, will need to adjust their estimates when new data are released by Statistics South Africa.

Comparison of 1996 census incomes with 2001 census incomes

There are two reasons why it may be very misleading to compare mean incomes and measures of inequality such as the Gini coefficient between the 1996 and 2001 censuses.

The first is that all households which had a missing income for any person receiving income had their household income set to missing. In this way, many households were excluded from household income tabulations, possibly seriously biasing the results.

The second is that in 2001, although missing incomes for workers were imputed, it appears from the Labour Force Survey that approximately a million informal sector workers were missed in the census. It may be that some receipts of old-age pensions were missed as well. The outcome is that, nationally, 23% of households were reported as receiving zero income. While some households may be living by consuming capital, it is implausible that 23% of all households are doing so. It is more likely that many of these households are in receipt of low incomes.

WARWICK JUNCTION, eTHEKWINI

Warwick Avenue is part of a junction of streets that form a thriving commercial precinct in the metropolitan landscape of Durban. With commuter traffic, formal and informal trade, it's part of the substance of the city's identity.

The extremities of Warwick Avenue are defined by the movement of people. At the southern end, where Warwick joins West Street, a regional minibus taxi terminus, housed under a vast canopy of corrugated iron, serves much of rural KwaZulu- Natal. It provides commuters entering Durban with access to West Street, where they can find further transport into the commercial part of the city, or to the Russell Street ranks that take them to the residential areas.

A large terminus for municipal and private buses that also serve residential areas delineates the upper end of the avenue. Collectively, these are the engines which drive the economy of Warwick Avenue junction, which has an annual turnover on par with the Pavilion shopping centre in the upmarket suburb of Westville.

It is estimated that a million people a day move through these ranks, providing a market base for an extremely diverse range of products. The heart is the fruit and vegetable market. Enclosed behind tall walls, with gate-posts topped by Oriental-type decorations that reflect its status as the old 'Indian' market, rows and rows of individually owned stalls sell fresh produce displayed in a rampage of colour and texture. Audibility is impaired by the low roar of incessant traffic outside and the loud murmur of crowds inside the walls, punctured by the occasional cock crowing. Here, however, is a level of interaction with vendors, other consumers, and the products that malls are bereft of.

Adjacent to the market gate that opens onto Warwick Avenue are a variety of food vendors, the most celebrated of which sell *inhloko*, or bovine heads. Until recently, the sight of cattle skulls cleaved apart on the crowded pavement was an everyday event, the delicacies prepared and cooked on site. For sanitary reasons and to prevent fat clogging the storm-water drains, this part of the process has been moved to a site nearby.

Also common is the cheapest, most rewarding meal in town – a mealie on the cob. A seasonal fast food that retails at R2 during the summer months, this most humble of snacks commands a respectable share of the market. Providing employment to around 400 people, the cooked mealie sector has a turnover of roughly R1 million per week. As part of an effort to regularise these unusual catering ventures, eThekwini municipality provides centralised services for hawkers to encourage registration and to help monitor conditions.

Opposite the City Market, the Prince Cyril Zulu Communicable Disease Clinic is situated within easy reach for commuters. The spare, modern design of the building, including an abundance of glass and straight edges demonstrates the function of architecture in raising the aesthetic level of a streetscape.

A dual aerial walkway joins Warwick Avenue and the market to the Russell Street ranks and the two sections of the walkway are very neatly defined: traditional and contemporary. The former is an uncompleted road off-ramp that has been redesigned to become the city's premier herbalist market, where flora and fauna used as *imithi,* or medicine, can be purchased. Several *izinyanga* (traditional healers) have consulting rooms at the lower end of the passage, creating a unique traditional medical centre that has become a popular tourist destination. On the sidewalk along the edge of West Street's old cemetery, in which the divisions of Islamic, Christian and Jewish burial places are visible from above, dressmakers provide *prêt-a-porter* couture for the masses, racks of simple wrap-around *iphinifa* (pinafore) frocks in blue or red *isishweshwe* floral prints. Road-side barbers do business in stands covered in yellow material painted with the styles available, often the distinctive handiwork of the Congolese artist Bruno.

Across the road, packed blocks in the vicinity of the fading pink and purple walls of Victoria Street market, more recognisable shops emerge. Tiny trading stores supply an assortment of goods that range from imported saris and kurtas, bolts of traditional *isishweshwe* cloth and loose beads to shoes, knives and hardware. On the pavements, cheek by jowl with *imithi* stands displaying dried horse lungs and baboon heads, hawkers offer cheap plastic table cloths and plates printed with images of Batman and the Power Puff Girls. It is impossible to overstate the diversity of sensory and shopping experience available in one of Durban's oldest trading neighbourhoods. Towering over it all are two beautiful structures that dominate the area architecturally and spiritually, the Grey Street Mosque and the Emmanuel Cathedral, bringing some gravitas to the swirl of commerce beneath them.