KEY PERFORMANCE INDICATORS:

Poverty Indicators and the Seven Strategic Priorities of the City of Cape Town

Report prepared for the Organisational Development and Transformation Unit

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1. Introduction

The City of Cape Town (CCT) is serious about meeting the needs of all its residents. In changing the direction of city management in this way the CCT has defined Seven Strategic Priorities (Box 1). It is now seeking ways to make sure that these priorities are met. Indicators are an important new tool that can be used by the CCT to set realistic targets, to monitor action and resource allocation and ensure accountability to residents. This report highlights how poverty indicators must be an integral part of the performance assessment of the municipality.

Developing appropriate indicators for use by municipal government is a new and demanding task. Drawing on international and national experience in the use of urban indicators, this report explores South African data that is available at the municipal scale that could be used for the development of poverty related indicators in the City of Cape Town.

Additional indicators linked to the priorities of the CCT will need to be developed to augment the poverty indicators suggested here.

2. Poverty indicators and the CCT's Seven Strategic Priorities.

As we enter the twenty-first century, managing the city is placing new and demanding responsibilities on local government. In recognition of the challenges faced by the CCT Seven Strategic Priorities (Box 1) have been identified. These priorities acknowledge the importance of long term economic and environmental sustainability and give prominence to the importance of equitable urban development. The priorities represent an integrated vision for the CCT. According to the Seven Strategic Priorities, the reduction of poverty and inequality is one of the major pillars on which the vision of the CCT depends. Although an explicit strategy (see 3 in Box 1) reducing poverty and improving the lives of all permeates many of the other priorities.

Box 1: Seven Strategic Priorities for the City of Cape Town

A framework for the integration of the city
An equity and redistribution strategy
A strategy to target zones of poverty and/or social integration
A housing strategy
An economic development and job-creation strategy
The identification of special high impact projects
The promotion of community safety

The seven strategic priorities of the CCT embrace notions of growth, equity and sustainability. In order to achieve these diverse goals we need a common language that can translate the different concerns and the specialist needs into comparable, measurable formats. Indicators can provide this common language.

In moving towards more specific ways of achieving the Seven Strategic Objectives a number of key initiatives are being put in place by the CCT. These include, but are not restricted to, the introduction of a comprehensive performance management system and the adoption of a poverty reduction framework (Box 2). The poverty reduction framework, like efforts to stimulate global competitiveness, spatial

integration (MSDF) or sound environmental management (Agenda 21) demands targeted action to ensure that the desired outcomes are achieved. Policy frameworks such as the MSDF and the poverty framework must guide the selection of indicators.

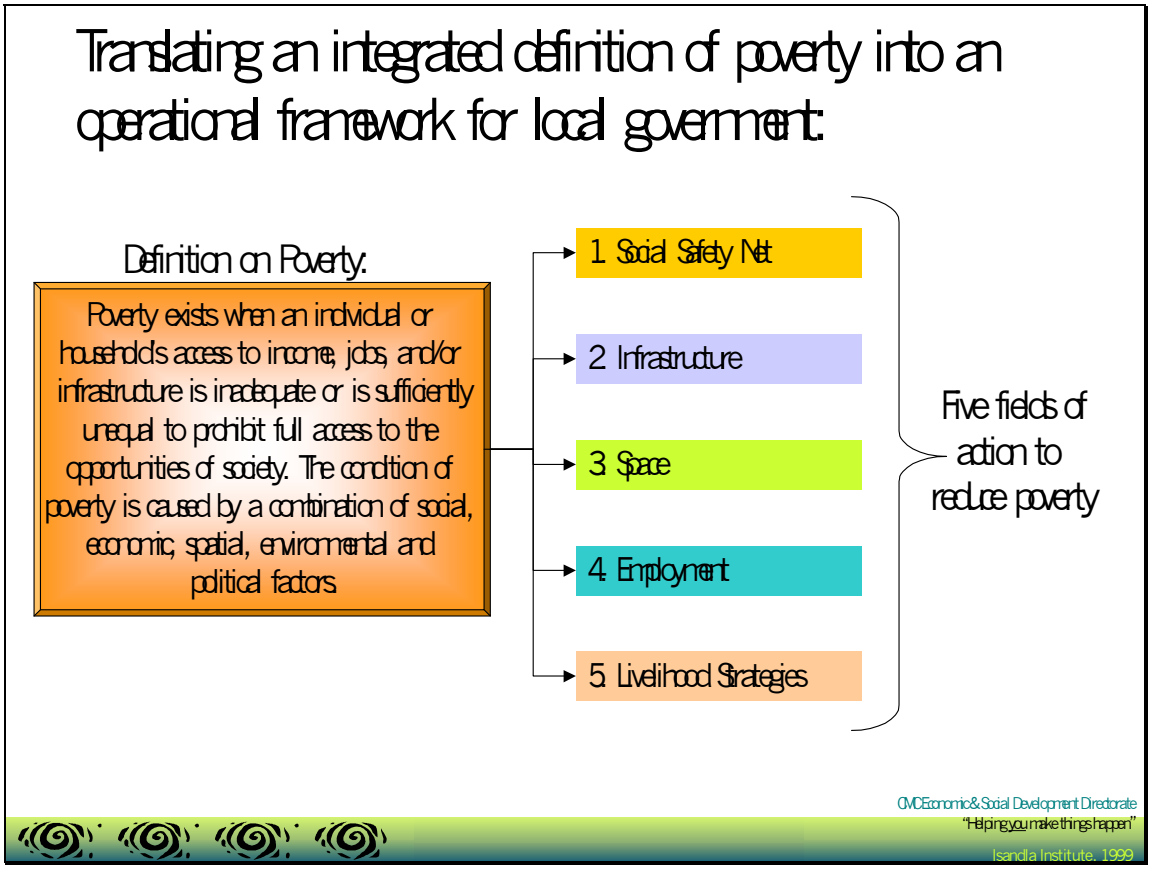
Indicators will make it possible to measure our current position, to set realistic targets and to monitor how well the CCT is meeting its poverty reduction goals. Indicators are also tools that will make it possible to relate poverty reduction efforts to other programmes in the CCT through budgets, the IDP and the performance management system.

Finding the right poverty indicators for the CCT is going to take time. Different indicators will be required for the different scales of activity – what is suitable for a corporate indicator will not be useful at the scale of the branch business plan. As an initial step this report begins reviewing the strategic objectives of the poverty framework. A brief overview of what is understood by indicators provides a backdrop to the discussion over what other cities and development organisations have used to monitor poverty. An evaluation of available data and an assessment of what indicators could be used across the CMC's poverty framework at the scale of the City and the branch business plan provide the remaining sections of the report. Before outlining the aims and objectives it is useful to briefly outline the poverty framework that informs our evaluation of potential indicators for the CCT.

2.1 The poverty reduction framework

As one of the major objectives of the seven strategic priorities of the CCT is to reduce poverty we must begin to develop deprivation indicators. Substantial work in defining the approach to poverty has already been completed.[2] In November 1998 EXCO endorsed the poverty reduction framework proposed by the Cape Metro Council which, on the basis of a disaggregated definition of poverty, identifies five essential elements of action to combat poverty (Box 3). The content of that framework is not spelt out in great detail here and is available as an Appendix to the report[3]. The central idea of the framework is to ensure that there is a comprehensive assessment of the causes of the problem, a common understanding of the multi-faceted nature of poverty and therefore commitment to simultaneous action on five key fronts so that poverty is effectively combated.

[2] CMC poverty framework
[3] CMC Poverty Reduction Framework.



3. Aims and objectives of this report

Our focus in this report is on linking indicators to the seven strategic priorities and the five fields of action of the poverty reduction framework adopted by the CCT.

The aim of this project is to see what quantitative data exists to develop locally relevant indicators that will measure action in each of the five fields of poverty reduction.

There are four objectives:
a) To identify what external indicators are used by other cities and other major parties involved in urban management. Attention is given to the conditions in the cities of both the developed and developing world and to other South African initiatives.
b) To establish what data is readily available for the City of Cape Town. At this initial stage our focus is on quantifiable information for the whole CCT area. At later stages it will be necessary to extend this base to local (branch) level information and qualitative data.
c) On the basis of the already available quantitative city scale information, to identify poverty-indicators that could be used across the five fields of poverty:
i) at a city-wide scale
ii) for the business plans of each division.
d) To identify gaps in the existing data bases available for producing poverty indicators and to suggest ways forward in developing a more comprehensive

indicators for the City of Cape Town. In this regard the assistance of CCT staff is requested to alert us to data we have not already identified.

4 Indicators

The focus on poverty reduction indicators should not be seen in isolation. KPIs or Key Performance Indicators are the order of the day both within government and the private sector. There are now national requirements that local government move towards an indicator-based system of performance assessment that is transparent and accountable.[4] The CCT itself is in the process of establishing an indicator based performance management system that will identify a series of internal indicators of how well staff in the CCT are doing their jobs. But the people of Cape Town will also judge the CCT. Although obviously better internal systems of management are related to improved service delivery, residents are more likely to judge the Council by external indicators such as how often their rubbish is collected. External indicators may measure things that are beyond the control of the CCT. For example, if the economy is performing badly then we would anticipate that the number of households who depend on informal work would increase, regardless of what the CCT does. But this does not mean that this change would be unimportant. It is crucial for the authorities to be alert to these dynamics, as the action of the CCT should be responsive to the forces that affect the City of Cape Town and its people.

The decision about which are the important external indicators for monitoring poverty will impact on the choice of internal indicators and may even determine elements of the overall corporate structure. Given the long-term impact that indicators will have on the operation of the CCT it is essential that there is a solid understanding of what indicators are and how they can be used.

4.1 Defining Indicators

In this report we have already talked about both internal indicators and external indicators. Before proceeding it is important that there is consensus on what an indicator is. Indicators are a measure of the level (or progress) of development that allows for comparison across time and space. Indicators are designed to present information in the best possible manner for decision-making processes. They enable policy formulation, the setting of goals and objectives, and the monitoring of the policies being implemented:

"Indicators are essentially pieces of information that reveal conditions, and over time, trends. Indicators can be used to make policy and planning decisions, to identify whether policy goals and targets are being met, and sometimes to predict change. Indicators can also be used to compare conditions of different locales or progress towards policy targets" (IDRC, 1998).

The United Nations provides another useful definition of indicators:
"Indicators are 'models' which simplify complex subjects to a few numbers which can be used to determine policy. Each indicator must be attached to a policy and each

[4] DLG – White Paper

policy must have indicators attached to monitor the impact of that policy. For example, housing is not an indicator, except in a broader sense. However, the percentage of households with access to formal housing is an indicator as it can be affected by housing subsidy policy and employment generation schemes." (UNCHS, 1995).[1]

These definitions begin to give a picture of why indicators can be so useful planning and managing complex long-term projects. There are, however, several different ways that indicators can be used. Having a common understanding of the different types and applications of indicators help prevent confusion.

4.2 Different types of indicators

It is important to realise that there are different types of indicator. Baseline indicators represent the starting point before any policies have been initiated. Baseline indicators are the first data that is collected for each variable. *In this report we have put the emphasis on identifying appropriate baseline data for poverty reduction.* Positive changes from the baseline will show the relative success of poverty reduction policies.

Once baseline indicators are established it is possible to compare us to others (benchmarking) and to assess the current position to determine the most critical areas of need. Implementing the poverty reduction strategies of the CCT will involve defining the most desirable outcomes (involving the production of outcome indicators). Outcomes indicators are also sometimes called impact indicators. Once it is clear what the end point should be it is possible to work out what output is required to get there, in other words setting targets known as outcome or output indicators. Deciding what the targets should be is the combination of a political process involving Councillors and a technical process based on what is feasible involving officials. If the poverty reduction is successful then the outputs will be achieved and the outcomes will be met. The success of policy is thus observed by looking at outcome indicators. Outcomes are concerned with whether policy goals are achieved and whether people are satisfied with the results of policies. It is possible to make outcomes indicators more and more sophisticated, giving particular attention to special interest groups (such as race or gender) or to special areas of concern (such as the economy or the political process).

In summary – there are three different types of indicators:

- **baseline indicators**
- **target or output indicators**
- **outcome or output indicators**

It is important that those who design and use indicators fully understand what they hope to achieve through the exercise. For maximum impact indicators should be strategy led and action linked. Indicators should not be allowed to become and end in themselves. In this report our concern is with establishing baseline poverty reduction indicators.

4.3 Poverty indicators

Poverty indicators are not new. The 'social indicators movement' developed in the US and the UK during the 1970s, in response to the paucity of social information that were available to the government (Payne et al., 1996).[2] The indicator movement, like much of positivist social science was heavily criticised. Poverty indicators, or indices of deprivation as they are sometimes called, are once again becoming increasingly important tools in defining the priorities of governments, especially at the local scale. Today the focus on indicators tries to accommodate earlier concerns by focussing on local knowledge, qualitative information and community relevance. The measurement of poverty has thus become a more dominant concern.

Indices of deprivation use a wide range of detailed information to give an indication of how deprived an area is. In developing countries the use of urban scale poverty indicators is a relatively recent phenomenon.

Traditionally poverty indicators depended only on income data. Now there is much more attention paid to acknowledging and measuring the different types of poverty (see the Box 1). Examples of the types of information that may be used to assess poverty include health, housing, education, social networks, political involvement, employment or crime. Indices often rely heavily on census data, but some go further and use other sources of information as well. In this report we have tried to source data other than just the census that is available for the City of Cape Town. Unfortunately, because of the great cost of producing indicators, we have to limit ourselves to data that is already available. We have also restricted ourselves to information that covers the whole of the CCT area.

4.4 Locally relevant indicators

Just because the information exists on national databases it does not mean it will be useful for measuring deprivation and assessing the needs of the poor within the CCT area. In South Africa line department information (e.g. labour market trends, welfare payments, housing provision, traffic accidents etc.) have tended to be produced to allow for international comparisons and not for local planning. Unfortunately much of the data collected at great cost is not therefore that useful for decision-making by local level planners.

Within the international planning and development fields there is a new emphasis on the importance of local governments and communities in achieving sustainable development. It is in this context that indicators are being developed to be locally specific to the area that they are being used in. Habitat 11 has lead the way in stressing how important it is to have community participation and the incorporation of local knowledge of conditions, when deciding upon which indicators to use. In recognition of this emphasis on the local we are not suggesting the uncritical adoption of indicators developed for other cities. We know for example that the issue of spatial integration is of central concern to the CCT. Both the Seven Strategic Priorities and the poverty framework refer specifically to the issue of space, yet other places have

not generated many spatially useful indicators[5]. There is clearly considerable further work required to develop our own indicators.

In South African the importance of local knowledge has become increasingly obvious with the emergence of Developmental Local Government (DLG). Our planning frameworks now include many more tasks that they used to and it is essential that there is a common language to mediate the different aspects of urban management. The production of IDPs and of business plans has made everyone much more aware of the need to be specific about what will be achieved in through particular plans and within specified budgets. Indicators are just a tool that will help set realistic goals, aid the drawing of more accurate plans or enable the measurement of local performance.

4.4 Criticisms of indicators

So far we have offered a rather glowing perspective on indicators and their potential to rationalise management of the CCT. There are, however, some important drawbacks to using indicators and these should be outlined before we embark on the expensive and demanding route of building an indicator framework for the CCT. Five of the most obvious problems with indicators are:

a) Indicators draw too much from a Western or Northern perspective. Indicators are grounded in the modernist belief in science or facts, which naively assumes that with perfect knowledge we can predict, control and determine outcomes. The well-established criticisms of positivist science are, in general terms, applicable to the use of indicators and caution is obviously required in dealing with the qualitative information at our disposal. Not only is the data imperfect, but the real world is a highly politically contested environment in which 'facts' about the city appear very differently depending on ones vantage point. The dangers of using indicators will be compounded if the KPIs of the CCT remain technical tools that are not widely understood and accepted by politicians and communities. Training for residents, councillors and CCT staff in how to use indicators is clearly a priority.
b) There are very specific criticisms of indicators because of their dependence on quantitative data that is generally collected in large surveys using questionnaires that may not be accurately collected or processed. As an alternative the IDRC suggests the use of grassroots indicators which are measures of socio-economic and environmental quality formulated by individuals and communities using indigenous knowledge (IDRC, 1998). The problem with community indicators is that they are culturally specific, qualitative and may not be easily recorded or compared across places. They are also very expensive to develop and update. However, they are holistic, participatory and directed towards action. These more political aspects to collecting information are key elements of implementing developmental local government in South Africa and must be included in further modification of the CCT's efforts to develop locally relevant indicators.
c) The use of indicators began in advanced industrial societies like the United Kingdom. This may be an inappropriate model for us here in South Africa. We have tried to address this concern by looking also to the large international

[5] There is a parallel CMC initiative to this one to develop indicators for the assessment of the MSDF.

development agencies such as the UNDP who are piloting the development of urban indicators for the developing world. We have also highlighted, both in the poverty framework itself, and in our final assessment, that importance of being informed by local (Cape Town) conditions. It is highly likely that staff of the CCT will have important suggestions on how to ensure that local concerns are included and we hope that suggestions and feedback on this document will be forthcoming.[6]

d) There are specific concerns about the use of composite indicators. Often composite indicators become so abstract that they cease to relate directly to peoples lived experience. Technically there are also problems when several different variables are linked together into one general measure. The problem lies in deciding what weight each variable should have. So composite indicators present both a statistical and an analytical problem. But they have the advantage of expressing a great deal of information in a simple form.

In this report we have delayed producing composite indicators until the key variables have been approved and the data has actually been produced. In order to give corporate expression to branch scale activities we propose composite indicators attached to the five fields of poverty (Table 13).

e) There are, rightly, concerns about the costs of collecting information. In fact we have a great deal of data available and though we may be measuring some of the wrong variables we have begun the KPI initiative in the CCT by asking what can be done with already available information.

f) One of the major problems in using indicators is that they tend to treat the household as the basic unit of analysis. The problem with this is that it ignores the generally unequal gender relations within a household. Despite the fact that unequal household relations lie at the heart of many aspects of poverty, indicators rarely expose gender dynamics. Further problems in representing the differential positions of women and men arise because data is usually not compiled by gender. In choosing the poverty indicators for the CCT we have tried to highlight some areas of important gender differentiation.

5. Poverty Indicators: experience from other countries

So, developing indicators is a contested, complicated and costly task. Nevertheless indicators seem to be the most sensible way of linking the increasingly demanding local government responsibilities and making sure that noble policies are translated into strategic action.

While we want locally relevant indicators that fit our needs, there is little point in reinventing the wheel. There is much that can be learned from other places. Before attempting to develop poverty indicators for Cape Town, it is useful to observe the ways in which urban poverty is monitored in other countries around the world.

[6] Please contact Nishendra Moodley in the OD and T unit for suggestions/comments.

5.1 Indicators in advanced capitalist countries

5.1.1. New Zealand

In 1994, a conference on socio-economic status held by the Health Services Research Centre called for the production of a new measure of deprivation in New Zealand. It was thought that existing measures of poverty were either outdated or not appropriate for New Zealand. Policy makers wanted to produce a new index of deprivation, incorporating indicators that would be specific to New Zealand and thus more appropriate to the country. The result was the production of the NZDep91 index of deprivation (Crampton et al., 1997).

The NZDep91 is a composite index that uses 10 pieces of information as indicators of poverty in New Zealand. These 10 variables were chosen from over 50 potential indicators. Principal component analysis was used to produce several indices (combinations of variables), from which a single index was eventually chosen as the best measure of deprivation. The main advantage of NZDep91 is that it is measured at the smallest possible level, the meshblock, with a median population size of 90 persons. This therefore provides the best possible picture of how deprived individuals are.

The 10 indicators of poverty used in the NZDep91 index represent seven dimensions of material and social deprivation (Crampton et al., 1997). They also correspond to the five fields of action to reduce poverty, as outlined by the CMA.

Table 1: New Zealand indicators of deprivation

	Dimension of deprivation	Indicator Used	Field of action to reduce poverty
1	Income	Equivalised household income below income threshold	Employment
2	Income	Means tested benefit and age 18-59	Social Safety Net
3	Transport	Adults with no access to car	Infrastructure?
4	Living Space	Equivalised household below an occupancy threshold	Space
5	Owned home	Not living in own home	Community
6	Employment	Unemployed and age 18-59	Employment
7	Qualifications	No qualifications and age 18-59	Community
8	Support	Single parent family	Community/Social Development?
9	Support	Separate or divorced and age 18-59	Community/Social Development?
10	Support	Separate or divorced and age 60 plus	Community/Social Development?

5.1.2. The United Kingdom (UK)

Several indices of deprivation have been developed in order to measure poverty in the UK. These include the Jarmen Index (1983), the Department of Environment (DoE) Indicators of Urban Deprivation (1983), the Townsend Index (1988), the Carstairs Index (1989), the LWT Breadline Britain Index (1991), and the DoE Index of Local Conditions (1995). The variety of indicators used by these indices to measure poverty is demonstrated in the table below. No single variable is present in the same form in all of the indices, although all do use some variation on unemployment.

The attention to 'being born in the New Commonwealth' highlights the growing importance of race and migration in British poverty profiles.

Table 2: Composite deprivation indicators used in the United Kingdom

Indicator	DoE (1983)	Townsend	Jarmen	Carstairs	LWT
Total unemployment rate	Yes	Yes	Yes	No	Yes
Male unemployment rate	No	No	No	Yes	No
Overcrowded households	Yes	Yes	Yes	No	No
Households lacking amenities	Yes	No	No	No	No
Not owner occupied	No	Yes	No	No	Yes
No car households	No	Yes	No	Yes	Yes
Low social class (4&5 or SEG 11)	No	No	Yes	Yes	Yes
Lone parent households	Yes	No	Yes	No	Yes
Lone pensioner households	Yes	No	Yes	No	No
Under 5s	No	No	Yes	No	No
Moved in previous year	No	No	Yes	No	No
Limiting long term illness	No	No	No	No	Yes
Born in New Commonwealth	Yes	No	Yes	No	No

The indicators that are used in the above indices are all pieces of information that are collected in the UK census. The DoE Index of Local Conditions, however, uses both census and non-census data. The information is also collected at different levels.

Table 3: Scale of information on poverty collected in the United Kingdom

Indicator	Level	Source
Total unemployment rate	All levels	Census
Overcrowded households	All levels	Census
Households lacking amenities	All levels	Census
No car households	All levels	Census
Children in unsuitable accommodation	All levels	Census
Children in low earning households	All levels	Census
17 year olds not in full time education	Ward/ District	Census
Standard mortality rate	District	Census
Long term unemployment	District	Non-census
Income support recipients	District	Non-census
House contents insurance	District	Non-census
Low GCSE attainment	District	Non-census
Derelict land	District	Non-census

In the UK the Audit Commission uses indicators to measure local authority performance. This represents a direct attempt to monitor public expenditure and promote the best use of public money. The indictors give information for the London boroughs, Metropolitan councils, Unitary councils and County councils. Auditors, appointed from District Audit and private accountancy firms, measure a vast number of variables covering a wide range of issues. The Audit Commission indicators show how internal and external indicators (see Section 4) can be used together to enhance local authority effectiveness. Their focus is rarely specifically on poverty reduction, but the attention to the tasks or responsibilities of local government is interesting for the CCT.

Table 4: The Audit Commissions' indicators

a) Dealing with the public

Indicator	What is measured?
Answering the telephone	Authority's performance for answering calls against targets
Answering letters	Authority's performance for answering letters against targets
Handling complaints	Number of complaints received by Ombudsman Does the authority have: a complaints policy? A follow-up procedure? A written policy on remedies? A system for reviewing the causes of complaints?
Access/Use of buildings	Number of authority buildings open to public Disabled access
Equal opportunities	Does the authority have a published policy on equal opportunities? Does the authority follow the Commission for Racial Equality and Equal Opportunities code of practice on employment?
Paying suppliers	% of invoices paid promptly

b) Providing housing accommodation

Indicator	What is measured?
Allocating and letting housing	% letting to new tenants (homeless and others) % of dwellings available for letting that are empty Average time taken to re-let dwellings available for letting Does authority follow Racial Equality code in letting?
Repairing council homes	% repairs completed within time limits % repairs for which appointment made and kept
Collecting rent	Rent collected as % of rent due % tenants owing over 13 weeks rent + over £250
Rent and costs	Average weekly cost per dwelling for management, repairs, rent rebates, capital charges, less government subsidy Capital expenditure on major repairs per dwelling

c) Housing the homeless

Indicator	What is measured?
Using temporary accommodation	Average number of households in bed and breakfast/ hostel/ other temporary accommodation Average length of stay
Assessing homeless people	Time taken to decide whether people are homeless

d) Refuse collection

Indicator	What is measured?
Service provided	Is household waste collected from all properties? Is garden waste/ bulky waste collected free of charge? Are recyclable materials collected separately? Are special arrangements made to help disabled people? Does authority make composting equipment available to households?
Reliability	Number of waste collections missed per 100,000 collections % missed collections made the next day
Waste recycling and reduction	% household waste recycled Waste collected per household that not recycled
Cost	Net cost of refuse collection per household

e) Waste disposal

Indicator	What is measured?
Waste recycling and reduction	% household waste recycled/ used to recover heat, power and other energy sources
Cost	net cost of waste disposal per tonne

f) Planning and land searches

Indicator	What is measured?
Dealing with planning applications	% of household applications decided within 8 weeks
Planning appeals	Number of decisions on planing appeals % of successful appeals
Establishing local and unitary plans	% of authority's population covered by local or unitary development plan Number of departures from statutory plan
Planning costs	Net expenditure per capita
Searches of the local land register	% standard searches done within 10 working days Standard search fee

g) Paying housing benefit and council tax benefit

Indicator	What is measured?
Time taken to deal with benefit applications	% new claims for council tax benefit/ housing benefit processed in 14 days % successful new claims for rent allowance paid within 14 days
Cost	Total number of benefit claimants Cost per claimant

h) Collecting local taxes

Indicator	What is measured?
Collecting taxes	% of council tax received of amount that should have received % of business rates received that should have been received
Cost	Net cost of collecting council tax per dwelling

i) Leisure and recreation

Indicator	What is measured?
Providing recreational facilities	Number of swims/visits to sports centres Net cost per swim/ visit Number of council playgrounds per 1000 children under 12 (% which conform to national standards) Number of sports pitches available to public
Spending on recreational facilities	Net expenditure on parks per hectare Net spending on sport and recreation per capita

j) Looking after the local environment

Indicator	What is measured?
Keeping highways clear of litter	% of highways of high/ acceptable cleanliness Average time taken to remove fly-trips Net spending on street cleaning per capita
Providing public conveniences	Number public conveniences open more than 12 hours per day Number with access for disabled/ baby changing facilities
Environmental health and consumer protection	% responses to environmental health complaints provided within target times % of food premises inspections that should have been carried out which were carried out % responses to consumer protection complaints provided within target times net spending on environmental health and consumer protection per capita

k) Providing an educational service

Indicator	What is measured?
Local authority maintained schools and nursery provision	% of children aged 3-4 in local authority maintained schools % 4 year olds in nursery places funded by council % secondary school pupils in local authority secondary schools % unfilled places in schools % pupils in excess of school capacity % primary school classes with under 21 pupils, 21-30, over 30 pupils Expenditure per pupil in nursery, primary, and secondary schools
Educational achievement	% pupils in local authority schools achieving level 2 or above in key stage test 1, level 4 or above in key stage test

	2,and level 5 or above in key stage test 3 % pupils in local authority schools achieving 5 or more A-C grades at GCSE
School meals	% primary pupils in local authority schools where meals are available to all full-time pupils % primary pupils buying a school meal Price per primary school meal
Children with special educational needs	% of children with statements of special educational needs Number of statements issued per year % statements prepared within 18 weeks % of all pupils placed in special schools
Student awards	Expenditure per capita on new discretionary awards % of new mandatory student awards which include a maintenance grant
Adult education	Number of enrolments on adult education courses per 1000 adult population Total hours for which students are enrolled per 1000 adult population % of hours that students attended % students satisfied with adult education courses Spending on adult education per head of adult pop
Education spending	Total net spending on education per capita

l) Providing social services

Indicator	What is measured?
Helping people to live at home	Number of over 65 year olds whom the council helps to live at home per 1000 population over 65 Number of under 65 year olds whom the council helps to live at home per 1000 population under 65 (with physical disabilities, learning disabilities, mental health problems) Number of nights of respite care funded by council per 1000 adults
Residential care	Number of over 65 year olds whom the council supports in residential care per 1000 population over 65 Number of under 65 year olds whom the council supports in residential care per 1000 population under 65 (with physical disabilities, learning disabilities, mental health problems) % adults in residential care offered single rooms % of residential care inspections that were carried out
Identifying needs and arranging services	% people receiving help from authority who have been given a statement of their needs by the council % new services this year for which a starting date was given to the client (and % where date was met)
Looking after children	Number of children looked after by council per 1000 children % of children in residential accommodation, in foster care, supported to live independently, other support % children moved 3 or more times in a year Number of children on child protection register (% on for over 2 years)

	% of inspections of children's residential homes/ day nurseries that were carried out
Cost	Net expenditure on social services per head of population for adults over 65, physical disabilities, learning disabilities, mental health, children's services, other, total.

m) Providing a public library service

Indicator	What is measured?
Use of libraries	Number of books/ other items issued by local authority libraries per capita Number of visits to public libraries per capita
Stock	Number of books/ recordings available per capita
Opening hours	Number of public libraries open 45+ hours per week, 10-44 hours per week, mobile libraries
Cost	Spending on books/ other materials per capita Net expenditure per capita on libraries

n) Providing police services

Indicator	What is measured?
Answering emergency calls	Number of emergency calls received % of emergency calls received that were answered within target time
Incidents requiring immediate response	Number of incidents requiring immediate response % responses that were within target time
Detecting crime	Number of crimes (total, violent, burglaries) per 1000 population % of crimes (total, violent, burglaries) detected by primary means/ other means Number of crimes detected by primary means per officer
Accidents involving alcohol	Number of road traffic accidents involving death/ personal injury % of such accidents where 1 or more tested positive for alcohol
Handling complaints	Number of complaints recorded, number substantiated, number formally resolved
Availability of police officers	Number of officers on duty per 1000 population % of uniformed officers time spent outside in public
Public satisfaction with policing	Levels of satisfaction recorded for % of people satisfied with police response to 999 call, service at police station, police response to violent crime, police response to burglary, police service at scene of accident, perceived level of foot patrols, perceived level of mobile patrols
Cost	Net expenditure per capita on police service

o) Providing fire services

Indicator	What is measured?
Responding to calls	Number of calls to fires, false alarms, other incidents % where attendance standards were met Number of rescues by fire brigade
Fire safety	Average time take to carry out fire safety inspections
Cost	Net expenditure per capita on fire service

p) Maintaining highways and streetlights

Indicator	What is measured?
Maintaining roads, pavements and streetlights	Regular inspection of streetlights? % streetlights not working % repairs to dangerous damage on roads/ pavements carried out within 24 hours Number of days major roadwork in place per mile of road Cost of highway maintenance per 100 miles travelled by vehicle
Pedestrian crossings	% pedestrian crossing with disabled facilities
Public rights of way	% footpaths signposted, easy to use
Public transport	Net spending per capita on public transport

q) Spending and income generally

Indicator	What is measured?
Total spending	Total spending per capita % of total spending financed from general grants from central government, from council tax

5.2 Indicators in developing countries

5.2.1. World Bank

The World Bank has been very influential in the use of poverty indicators in developing countries. However, the focus of the World Bank is on comparisons of levels between countries rather than within them. Most of the data that is collected does not go beyond the national level. These indicators do not provide detailed information at a local or city scale. Therefore they might not be very useful for determining which indicators to use in the City of Cape Town, but the focus on poverty/deprivation again shows the spectrum of variables that can be measured.

Table 5: World Bank Household Welfare Indicators at a national level (source: Household Priority Survey):[3]

Category	Indicators
Demographic Indicators	Sample size Total population Population below 15 years Population 60 years or above Age dependency ratio Number of males per 100 females (15 and over) Average household size
Education and literacy	Net primary enrolment rate (total, male, female) Net secondary enrolment rate (total, male, female) Literacy rate (total, male, female)
Head of household	Marital status of head Monogamous male head Polygamous male head Single male head De facto female head De jure female head Level of education (no level; primary not completed; completed primary; secondary not completed; completed secondary)
Labour market population	Number of employed people in sample Proportion of employed Branch of activity (agriculture/fishing; manufacturing/mining/construction; commerce; civil servant/army; other) Labour force participation (total, male, female)
Household expenditure	Mean per capita expenditure % of population below relative poverty line % spent on food in total expenditure
Household amenities	Type of fuel used for cooking (firewood, gas, charcoal, electricity, other) Access to sanitation Access to water (pipe/borne; well; other) Owner occupation rate
Malnutrition	Stunting

	Wasting Underweight

5.2.2. United Nations Centre for Human Settlements (UNCHS)

As part of Habitat II, the United Nations Centre for Human Settlements (UNCHS) has placed greater emphasis on measuring urban problems. As a result, the UNCHS initiated the Urban and Housing Indicators Programme to monitor the relative prosperity of cities, provinces and countries around the world. Indicators have been employed to measure the welfare of different cities around the world. The indicators of the UNCHS are also used to compare cities poverty profiles rather than to direct poverty reduction action, but there is much to be gained from this work.

Table 6: UNCHS indicators

a) Background data

Category	Indicators
Land use	Area of land in urban area used for: formal residential; informal residential; business; agriculture; services; transport; other; total; % conservation area
City population	Total population by sex in the metropolitan area and in the urban agglomeration Residential density
Annual population growth rate	Annual population growth rate (including net migration rates and natural growth rate)
Women-headed households	Number of households headed by women in the city and at the national level % of women-headed households of the total
Average household size	Total population divided by total households
Household formation rate	Annual rate of growth of numbers of households
Income distribution	Annual household income by quintile, income range and average income, at the city and national levels
City product per person	City product divided by population (US$ per capita)
Housing tenure type	Number of households: owned; purchasing; private rental; social housing; sub-tenancy; rent free; squatter no rent; squatter rent paid; other

b) Socio-economic development

Category	Indicators
Poor households	% women and men headed households below the locally defined poverty line
Informal employment	% of employed population in the informal sector
Hospital beds	Number of people per hospital bed
Infant mortality rate	% of children who die before reach age five
Life expectancy at birth	
Adult literacy rate	
School enrolment rate	
School classrooms	Number of primary/ secondary school children per

	classroom per school
Crime rates	Number of reported murders/ thefts/ rapes per 1000 population

c) Infrastructure

Category	Indicators
Household connection levels	% of households connected to water; sewerage; electricity and telephone
Access to potable water	% of households with access to potable water (within 200 metres of dwelling)
Consumption of water	Average consumption of water in litres per day per person
Median price of water	Median price paid per hundred litres of water (US$)

d) Transportation

Category	Indicators
Modal split	Proportion of work trips undertaken by: private car; train tram; bus/ minibus; motorcycle; bicycle; foot; other
Mean travel time	Average daily time in minutes for a work trip
Expenditure on road infrastructure	Per capita expenditure on roads (US$)
Automobile ownership	Number of automobiles per 1000 population

e) Environmental management

Category	Indicators
Waste water management	% of all waste water undergoing treatment
Solid waste generated	Solid waste generated per capita (tonnes per annum)
Disposal methods for solid waste	% of solid waste disposed: to sanitary landfill; incinerated; to open dump; recycled; other
Regular solid waste collection	% of households with regular solid waste collection service
Housing destroyed	% of housing stock destroyed per 1000, by natural or man-made disasters over the past 10 years

f) Local authorities

Category	Indicators
Local government per capita income	Total local government sources of funds (US$) annually, both capital and recurrent, divided by population (three year average)
Local government per capita expenditure	Capital expenditure (US$ per person) by all local governments in the metropolitan area
Debt service charge ratio	Total principal and interest repaid, including bond maturations, as a % of total expenditure by local governments
Local government employees	Total local government employees per 1000 population
Personnel expenditure ratio	% of recurrent expenditure spent on wage costs
Contracted recurrent expenditure ratio	% of recurrent expenditure spent on contracted activity
Government level providing	

services	
Control by higher levels of government	

g) Housing

Category	Indicators
Housing price to income ratio	Ratio of median free-market price of a dwelling unit and the median annual household income
House rent to income ratio	Ratio of median annual rent of a dwelling unit and the median annual household income of renters
Floor area per person	Median usable living space per person (sq. m)
Permanent structures	% of housing units which should maintain their structure for over 20 years with normal maintenance
Housing in compliance	% of the total housing stock in compliance with the current housing regulations
Land development multiplier	Average ratio between the median land price of a developed plot on the urban fringe and the median price of raw, undeveloped land with planning approval in an area currently being developed
Infrastructure expenditure	Ratio of total expenditure (operations, maintenance and capital) by all levels of government on infrastructure (roads, sewerage, drainage, water supply, electricity, garbage collection)
Mortgage to credit ratio	Ratio of total mortgage loans to all outstanding loans in both commercial and government financial institutions
Housing production	Total number of housing units (formal and informal) produced in previous year per 1000 population
Housing investment	Total investment in housing (formal and informal) as a % of gross domestic product

5.3 Indicators in South Africa

5.3.1. CSIR – Key Human Settlement Indicators: Applying Habitat II to South Africa

In response to Habitat II, the CSIR workshop initiated a pilot project to apply Habitat II and other indicators to South Africa. The Department of Housing therefore carried out the Housing Indicator Pilot Project in 1997. The result of the pilot project was the selection of a list of key indicators that are relevant to South Africa.

Indicators used in Housing Indicators Pilot Project
The indicators used in the pilot project address several topics:
Demography
Housing backlog
Access to engineering services
Access to social services
Economic issues
Environmental issues

Scale of data:
All of the indicators provide information for the whole of South Africa at the provincial level, unless otherwise stated. Sadly therefore we cannot extract this information for the municipal or even the metro scale. The major reason for the lack of locally available data is the dependence on the annual October Household Survey rather than the census. The definition of poverty is also very limited as it takes into account only income criteria. In general the South African indicator movement has been overly dependent on the distinction between urban and rural and on either income or access to infrastructure as the defining characteristic of poverty. The utility of this for the urban context of the CCT where the poor live under very varied social and physical circumstances is limited. The direct applicability of the national indicators to the tasks of the municipality is even more restricted. However, as Table 6 shows, the South African indicator movement is more sensitive to issues of race and gender than the international movement.

Table 6: Applying Habitat II to South Africa - Indicators identified by the Pilot Project

a) Demographic indicators

Indicator	What is measured	Scale	Source
Population Size	Total pop Urban pop Rural pop Number of urban households Mean household size (total and urban)	Provincial	October Household Survey 1996
Gender Distribution	% Male % Female % Female-headed households (total and urban)	Provincial	October Household Survey 1996
Age	% in bands 0-15, 16-25, 26-50, 51-	Provincial	October

Distribution	65, 65+		Household Survey 1996
Population Growth Rates	% increase in population year-on-year	National	World Bank Web Site
Infant mortality rates	Number of deaths of children below age 5 per thousand live births	National	World Bank Web Site
Net Migration	Number of people entering the country minus number of people leaving	National	World Bank Web Site

b) Housing Indicators

Indicator	What is measured	Scale	Source
Housing Type	Urban and Rural households separately: % formal % hostel % backyard shack % shack % traditional	Provincial	October Household Survey 1996
Tenure Type	No readily available data	Provincial	
Subsidy allocation	Number of subsidies allocated to date Number of subsidies issued to women Number of subsidies issued to men	Provincial	NOMVULA – Housing and Urbanisation Information System
Household income distribution	% urban and % rural households in each income band (Bands: R0-799 per month; R800-1069; R1070-1499; R1500-2499; R2500-3499; R3500+)	Provincial	October Household Survey 1996
Poverty	% urban households below poverty line % rural households below poverty line	Provincial	October Household Survey 1996
Density	Number of people per square km (at provincial scale only)	Provincial	CSIR
Income Expenditure	% income spent on services	Provincial	Not possible to disaggregate info on spending on housing
Income Expenditure	% income spent on transport (public/private combined, and aggregates for all incomes)	Provincial	CSS 1997

c) Engineering Services

Indicator	What is measured	Scale	Source
Water	% urban and % rural households connected to services	Provincial	October Household

			Survey 1996
Sewerage	% urban and % rural households connected to services	Provincial	October Household Survey 1996
Electricity	% urban and % rural households connected to services	Provincial	October Household Survey 1996
Telephone	% urban and % rural households connected to services	Provincial	October Household Survey 1996
Access to potable water	% urban and % rural households connected to services	Provincial	October Household Survey 1996

d) Social Services

i) Education:

The aim of Habitat II was to improve access to education, and more specifically to reduce teacher-pupil ratios at both primary and secondary levels. Therefore the indicator to be used is teacher-pupil ratios. These are defined as the number of teachers (including principals, librarians and certain head-office staff) divided by the number of pupils.

The Education Foundation (1994) carried out a comprehensive study on education indicators (which included enrolment rates, and teacher-pupil ratios) across South Africa, by ethnic group. These data are published at census district scale using GIS mapping.[4] This is the one set of national data that may be useful to the CCT.

Table 7: Education Foundation indicators

Indicator	What is measured	Scale	Source
Education	pupil-teacher ratios enrolment rates	Census district level	The Education Foundation 1994
Health	doctors per 1000 population hospital beds per 1000 population	Provincial and National	?
Welfare	number of welfare workers per 1000 population	Provincial	Dept of Welfare Statistical Review
Welfare Facilities	Number of treatment centres for drug dependents Number of beds Admissions	Provincial	Dept of Welfare Statistical Review
Welfare Facilities	Number of children's homes Number of beds Admissions	Provincial	Dept of Welfare Statistical Review
Welfare Facilities	Number of creches Number of beds Admissions	Provincial	Dept of Welfare Statistical Review
Welfare Facilities	Number of homes for people with disabilities Number of beds Admissions	Provincial	Dept of Welfare Statistical Review

Welfare Facilities	Number of homes for the elderly Number of beds Admissions	Provincial	Dept of Welfare Statistical Review
Safety and Security	Murders per 1000 population Rape per 1000 population Motor vehicle theft per 100000 population Housebreakings per 100000 population	Provincial	NEDCOR ISS Crime Index 1997; Crime Information Management Centre (CIMC); SAPS

ii) Economic Indicators

Indicator	What is measured	Scale	Source
Productivity	Gross Geographic Product (GGP) per capita	Provincial	
Energy Consumption	Electricity Consumption per sector	National	Dept of minerals and Energy
Employment	Number of economically active people (15-64) Participation rate (% of 15-64 age group that are economically active) % Informally Employed	Provincial	Institute for Futures Research
Unemployment	% Unemployed	Provincial	Institute for Futures Research

iii) Environmental Indicators

Indicator	What is measured	Scale	Source
Water Consumption	% of annual withdrawals by domestic, industry and agricultural sectors	National	World Bank

Key Indicators Selected

From the pilot study eleven key indicators were selected to form the next part of the development of the Housing and Urbanisation Information System:

Table 8: CSIR Housing and Urbanisation Information System indicators

Number	Indicator	What measured
1	Households below poverty line	total households by gender below poverty line as % of total households total households by gender below poverty line as % of total households by gender total White / Black / Coloured /Asian households by gender as % of total White/ Black/ Coloured/Asian households total White / Black / Coloured /Asian households by gender as % of total White/ Black/ Coloured/ Asian households by gender
2	Total households by subsidy income category	total households by income category for subsidy allocations (R0-1500; R1501-2500; R2501-3500)

		White/ Black / Coloured / Asian households by income category
3	Unemployment rates by gender	Average proportion of unemployed (male and female) during the year as a fraction of the formal workforce
4	Population by gender	Male / Female population within city proper, metro area and urban agglomeration
5	Household water connection levels	% households connected to water
	Household water access levels	How far the household has to fetch water
	Household electricity connection levels	% households connected to electricity
	Household sewage connection levels	% households connected to sewage
	Household telephone connection levels	% households connected to telephone
6	Infrastructure expenditure	ratio of total expenditure ($US and Rand) by all levels of government on infrastructure services in the current year, and the urban population
7	Child mortality	proportion of children who die before reaching their 5th birthday
8	Dwellings by type	% dwellings by type (formal on separate site, traditional, flats, townhouses, formal in backyard, informal in backyard, informal settlement, hostel, other)
9	Housing subsidy delivery	% units completed into housing project as % of number of subsidies approved
10	% subsidies accessed by gender	Number of housing subsidies allocated to women headed households as a ratio of total number of housing subsidies in area Number of housing subsidies allocated to women headed households as a ratio of total number of women headed households in area
11	Crime rates	Number of reported violent crimes per 1000 population

5.3.2 Provincial Measurement of poverty

The Social Services Division of the Western Cape has pioneered the use of poverty indicators within the Western Cape. Various Provincial assessment of poverty across the province include the percentage of children under 6 years, the percentage of the population getting state maintenance grants, income based assessments of poverty, and density of population.[7] The most innovative use of indicators in the province is the development of a composite marginalisation index (MARGCOM) by the Social Services Division of the Western Cape.[8] This index includes a number of variables:
Physical indicators (housing, basic services, water, transport);
Economic indicators (employment and unemployment);
Social indicators (education facilities, literacy, infant mortality, social services, sport and recreation, and social services);
Political indicators (RDP/development forums, NGO/CBO activity, local authority activity);
Demographic indicators (population size, age, sex, and growth rate).
Unfortunately the timing of this contract, falling as it did over the Easter school holidays, made it impossible to meet with the relevant Provincial officials to confirm the sources of information used in the MERGCOM index to ascertain if the data could be Disaggregated to the municipal scale.

5.3.3 The CMC's Levels of Living Index

In 1997, the Department of Information Services of the Cape Metropolitan Council (CMC) developed a 'levels of living' index. The rationale behind developing such an index was to use social indicators to serve as proxy measures of the quality of life in each area, in order to prioritise communities most in need of development. This work forms the ideal platform for further work in the area of poverty indicators for the CCT. The work is especially useful in that the data has allowed for the identification of zones of poverty within the CCT.

The data for the social indicators was derived from the 1991 Census. The level that the data is available is the smallest area for which census data can be aggregated, the Enumerator Sub District (ESD). An ESD usually represents about 200 households.

The 'levels of living' index was created by combining five different social indicators. The reasons for choosing the indicators are also given:[5]

Income indicator
The indicator used is the number of household heads earning less than R10000 per annum, as a % of all the household heads in each ESD. R10000 per annum is the household subsistence level for 1991, calculated by the Institute for Planning Research, University of Port Elizabeth.

[7] Source: Gavin Millar, Social Services, Western Cape Province.

[8] Department of Social Services: 1998: *Manual: Interim Indicators for the Determination of Marginalised Communities in the Western Cape Province*, Cape Town.

Education indicator
The indicator used is the number of adults (18 or older) with less than Standard 6 education, as a % of all adults in each ESD. This represents the minimum level of education required for post-school training, and represents a constraint on employment opportunities.

Unemployment indicator
This indicator is the number of adults (18 or older) who are unemployed but actively seeking work, as a % of all adults in each ESD. This therefore excludes all adults who are not actively seeking work, including homemakers, students and retired people. Unemployment has widespread consequences for self-esteem, capacity to meet one's needs for food and shelter, and other aspects of quality of life.

Welfare indicator
This indicator is the number of household heads who are single mothers with three or more children, as a % of all household heads in the ESD. This is a primary criterion for eligibility for a state welfare grant. This index represents a proxy for the quality of family life.

Overcrowding indicator
This index represents the number of households with over 1.5 residents per habitable room, as a % of all households in each ESD. 'Habitable rooms' includes bedrooms, sitting rooms and all other similar rooms, and excludes bathrooms, toilets, kitchens and passageways. Implications for overcrowding include increased risk of transmission of infectious disease, and reduced privacy within the home.

6 Applicability of other organisations' indicators to poverty in the CCT

What is clear from Section 5 is that there is considerable overlap between what the CCT is trying to achieve through the development of indicators and the efforts of other urban local authorities elsewhere in the world.

There are generally two ways that deprivation indicators are used. First activity-based indicators are produced. We have summarised these (using the sub categories of the poverty framework) in Table 9. The second way that deprivation indices are used is through composite indicators. Table 10 provides an overview of how the composite indicators cover the issues we are concerned about in the poverty framework.

Unsurprisingly not all of the indicators used elsewhere are of relevance to the CCT. Not only are the areas of core business for the CCT (Appendix 2) different to those of other countries, but the circumstances of the urban poor of Cape Town are different. In this section we highlight those variables used by others in measuring local government activity and poverty that could be used or adapted for incorporation into the CMC poverty framework.

Variables identified in Section 5 that have no direct relevance to South African urban conditions have been deleted to try and reduce the detail and to make clearer any poverty indicators we may wish to adapt for the CCT.

Indicators relating to non core functions of local government (such as education, health or welfare) have been left in as theses issues may provide useful proxy indicators for activities which do fall within the purview of the CCT's core business[9].

By way of reminder, there are five fields of action for poverty reduction which need simultaneous attention:

Social safety net – Indirect income, for example through subsidies and welfare.
Infrastructure – Physical (housing, water, electricity) and social (clinics and schools).
Space – Locational issues including access to jobs, and the environment.
Employment – Formal and informal including attention to wages.
Livelihood strategies – Social and cultural aspects of poverty.

In Appendix 3 there is an indication of which of the international variables identified in this report we should be able to produce for the CCT. The source of data is also indicated. It is possible that there is further data held by individual clusters that would assist in the calculation of these poverty and other indicators, we would ask that you notify Nishendra Moodley of any omissions or additions to these lists.

[9] See Report on Core Businesses

Table 9: International deprivation indicators applicable to the CMC's poverty framework

a) Social Safety Net

Means Tested Benefits - % of economically active population on Means Tested Benefits
Benefit Applications - % people claiming specific benefits.
Payment of local taxes - % tax received of the amount that should have been received. - net cost of collecting council tax per dwelling
Expenditure on road infrastructure per capita
Helping People to Live at Home or in Residential Care - Number of over 65 year olds whom the council helps to live at home/residential care per 1000 population over 65. - Number of under 65 year olds whom the council helps to live at home/residential care per 1000 population under 65 (physical disabilities, learning disabilities and mental health patients)
Child Care - Number of children looked after by council per 1000 children - % of children in residential accommodation, foster care, supported to live independently, other support - % of children moved 3 or more times in a year - Number of children on child protection register (% on for over 2 years)
Net expenditure on social services per head of sub-group population categories (i.e.over-65, disabilities etc.).
Spending on Recreational Facilities. - Net spending on sport and recreation per capita.
Police Services - Net expenditure per capita on police services
Number of welfare workers per 1000 population
Adult education - spending on adult education per head of adult population
Number of Housing subsidies allocated to men and women
Public Housing - average weekly cost per dwelling for management, repairs, rent rebates, capital charges, less government subsidy - Rent collected as % of rent due. - % of tenants owing over 13 weeks rent. - - capital expenditure on major repairs per dwelling
Fire services - net expenditure per capita on fire services
- Street Cleanliness - Net spending on street cleaning per capita
Refuse Collection - net cost of refuse collection per home - net cost of waste disposal per home
Median price paid per 100 litres of water

Net spending on environmental health and consumer protection per capita

b) Infrastructure

Welfare facilities - Number of treatment centres for drug dependants - number of children's homes - number of crèches - number of homes for the disabled - number of homes for the elderly
Housing - Not owner occupied - number of households: purchasing; private rental; social housing; sub-tenancy; rent-free; squatter no-rent; squatter rent paid
Total number of housing units formal and informal) produced in the previous year per 1000 population
Total investment in housing as a % of GDP
Public Housing - % letting to new tenants (homeless and others) - % of dwellings available for letting that are empty
Number of council buildings open to the public - % buildings with disabled access - number of public conveniences open more than 12 hours per day - number of public conveniences with disabled access/ baby changing facilities
Use of libraries - Number of books issued by local authority libraries per capita - Number of visits to public libraries per capita - Number of books per capita - Library hours
Police Services - % of emergency calls answered within target time - Number of officers on duty per 1000 of the population. - % of uniformed officers' time spent outside in public
Health infrastructure - Doctors per 1000 population - Hospital beds per 1000 population
Local government schools and nursery provision - % 3-4 year olds in local government schools - % 4 year olds in nursery places funded by council - % secondary school pupils in local government schools - % unfilled places in schools - % pupils in excess of school capacity - % primary school classes with under 21, 21-30, 31+ pupils
Number of primary/secondary school children per classroom per school
% households connected to water, sewerage, electricity and telephone
% households with access to potable water (within 200 metres of dwelling)
Average consumption of water in litres per day per person - % of annual withdrawals by domestic, industry and agricultural sectors
Refuse Collection - % households from which household waste is collected - % of household waste recycled

Proportion of work trips undertaken by private car, train, bus, minibus, motorcycle, bicycle, foot, other
Road maintenance - % streetlights not working - number of days major roadwork in place per mile of road - % repairs to dangerous damage on roads carried out within 24 hours - % pedestrian crossing with disabled facilities - % of footpaths signposted
Net spending per capita on public transport
Number of motor vehicles per 1000 population
% of housing units which should maintain their structure for over 20 years with normal maintenance
% of housing stock in compliance with the current housing regulations
Proportion of total expenditure by all levels of government spent on infrastructure
% household income spent on services
% household income spent on transport (public/private combined, and aggregates for all incomes)

c) Space and environment

Local and unitary plans - % of council's population covered by local or unitary development plan - net expenditure on planning per capita
Mean travel time for a work trip
Households with no access to a car
Overcrowded Households (proportion of households where number of residents per habitable room exceeds a prescribed level)
Amount of Derelict land
Provision of Recreational Facilities. - Number of council playgrounds per 1000 children under 12. - Number of sports pitches available to the public.
Spending on Recreational Facilities. - Net expenditure on parks per hectare.
- Street Cleanliness - % of roads of a high/acceptable cleanliness - Net spending on street cleaning per capita
Land Use - Proportion of land used for; formal residential, informal residential, business, agriculture, services, transport, other. - Proportion of land as a conservation area. - % of households: formal; hostel; backyard shack; shack; traditional
Median useable living space per person (sq. m)
Population Density (number of people per square km) - Residential density
% of all waste water undergoing treatment
Solid waste generated per capita (tonnes per annum)
% of solid waste disposed to: sanitary landfill; incinerator; open dump; recycled; other.
% of households with regular solid waste collection service
% of housing stock destroyed per 1000, by natural or person-made disasters over the past 10 years

d) Employment

Unemployment Rates - Total Unemployment Rate - Male Unemployment Rate
Long-term Unemployment Rate
Percentage of employed population in the informal sector
Participation Rate (proportion of population aged 15-64 who are economically active)

e) Community and social development

Police Services - Number of emergency calls received - % of emergency calls answered within target time - Number of crimes per 1000 population (murders, rapes, theft of motor vehicles, housebreaking) - Levels of satisfaction with various aspects of police service.
School Meals - % of primary school pupils buying a school meal.
Education achievement - % of economically active population with no qualifications - % pupils in local government schools achieving above certain grades (5 or more A-C grades at GCSE)
Mortgage to Credit Ratio - Ratio of total mortgage loans to all outstanding loans
Lone parent households
Lone pensioner households
Number of under five year olds
Moved in previous year
Marital status - separated/divorced age 18-59 - separated/divorced aged 60+

Significantly the composite indicators are drawn primarily from the developed world and so there is little emphasis on infrastructure. From the relevant variables summarised in Table 10 the focus is clearly on the social and cultural factors that underpin urban poverty.

Table 10: Composite indicators and the poverty framework

Indicator	**Field of action to reduce poverty**	**Which index used in?**
Equivalised household income below income threshold	Employment	NZDep91, UNCHS, Levels of Living
Total unemployment rate	Employment	NZDep91, DoE (1983), Townsend, Jarmen, LWT, DoE Local Conditions, Levels of Living
Low social class (4&5 or SEG 11)	Employment	Jarmen, LWT, Carstairs
No qualifications and age 18-59	Employment	NZDep91, DoE Local Conditions, Levels of Living

Male unemployment rate	Employment	Carstairs
Long term unemployment	Employment	DoE Local Conditions
Households lacking amenities	Infrastructure	DoE (1983), DoE Local Conditions, UNCHS
Not owner occupied	Infrastructure	NZDep91, Townsend, LWT,
No car households	Infrastructure?	NZDep91, Townsend, LWT, Cartairs, DoE Local Conditions
Means tested benefit and age 18-59	Social Safety Net	NZDep91, DoE Local Conditions
Lone parent households	Livelihood strategies?	NZDep91, DoE (1983), Jarmen, LWT, Levels of Living
Lone pensioner households	Livelihood strategies?	DoE (1983), Jarmen
Under 5s	Livelihood strategies?	Jarmen
Moved in previous year	Livelihood strategies?	Jarmen
Limiting long term illness	Livelihood strategies?	LWT
Born in New Commonwealth	Livelihood strategies?	DoE (1983), Jarmen
Separate or divorced and age 18-59	Livelihood strategies?	NZDep91
Separate or divorced and age 60 plus	Livelihood strategies?	NZDep91
Mortality rate		DoE Local Conditions, UNCHS, CSIR
Overcrowded households	Space	NZDep91, DoE (1983), Townsend, Jarmen, DoE Local Conditions, Levels of Living
Derelict land	Space	DoE Local Conditions

6.1 Shortcomings of the international deprivation indicators for the CCT

a) Very few of the proposed indicators mention the need to disagregate the information by race or area. Given Cape Town's unequal past and the legal obligation to integrate the segregated city there would need to be some attempt to reflect racial and spatial distributions.
b) Virtually no mention is made of the tendency for these indicators to be different for men and women. In South Africa there is a constitutional obligation towards promoting gender equity so this issues would need to be taken into account in adapting indicators for the CCT. The extent to which gender breakdowns are possible is dependent on the data.
c) There is an assumption that there is equal information for all parts of the city. In the CCT area that is not the case. There is a paucity of information on areas not previously under the control of the Cape Town Municipality. The rapid growth of African areas is poorly documented. Finally the categories of official information that are collected often do not identify crucial aspects of urban life for the poor. The information on employment and social and cultural structures of residents is especially poorly reflected in the choice of indicators.
d) The indicators, although they are generally activity linked, do not cover the full range of activities of the CCT.
e) The composite indicators do not address the CCT's five areas of poverty reduction.

7. Potential data sources for indicators

This section of the report documents the situation as it currently exists with respect to collection of data at the CCT level. It will therefore provide a 'shopping-list' of the data that is potentially available for the compilation of poverty indicators, and also illuminate areas where significant gaps exist in data collection for the CCT. As will become clear, data is actually collected at the CCT level by a variety of departments, and at different levels of government. The data is therefore highly fragmented, and not generally collected for the specific purpose of poverty monitoring. We will proceed therefore with a very simple structure, asking certain key questions about the nature of each potential data source. This will then allow an evaluation of which data are consistent and usable in the context of developing poverty indicators relevant for the CCT area. In the first instance the data is grouped according to its source (national, province, metro or City)

7.1 National data

Although many national departments, like housing or health may have information on local areas this is generally difficult to access for the municipal scale.

7.1.1 The Population Census

Potential Information/Data sources
The last Population Census was quite different from earlier ones insofar as the questionnaire was more detailed than in previous Population Censuses. Consequently, many of the following characteristics will not be available for periods before 1996.

A. Individual Characteristics
The last Population Census collected the following basic demographic information on all household members.

1. Gender
2. Age
3. Marital status
4. Race
5. Religion
6. Citizenship
7. Level of education (both school and post-school qualifications)
8. Employment status. The categories are employed (full-time or part-time), unemployed and looking for work, unemployed and not looking for work, homemaker, child, scholar/student, pensioner, disabled person). In addition, the Census can distinguish between individuals who are self-employed, who are self-employed and employ others, who are employees and who work in a family business.
9. Occupation. This description could be used in conjunction with 'employment status' to distinguish between formal and informal sector activities.

10. Place of work (down to the level of suburb/village/settlement). This variable could be linked with place of residence (Magisterial District) to establish some measure of commuting distance.
11. The main industry that the individual works in (i.e., economic sector).
12. Income
13. Whether the individual was attending school, college, technikon or university at the time of the Census (full time, part time or not at all). This could be useful for measuring non-attendance of school by individuals of school-going age.
14. The previous occupation of unemployed individuals.
15. Whether or not each individual was a migrant worker or not. In this case, a migrant worker was defined as someone who is absent from home for more than one month each year, either to work or to seek work. There is yet another variable which indicates whether or any household members were absent from the household because they were migrant workers. The latter provides the additional information of the migrant's age, their relationship to the head of household and their place of residence while away at work or away seeking work.
16. Year of arrival in the dwelling AND previous place of residence. This information could be useful for identifying reception areas or areas of high residential turnover and for understanding some of the dynamics of urbanisation or residential mobility.
17. Whether or not the individual has serious sight, hearing, physical or mental disability.
18. The number of children that female individuals have given birth to AND the number of such children who were still alive.

B. Household Characteristics

The last Population Census collected the following information concerning households:

1. Type of dwelling: This question covers different types of formal structures (house, apartment, townhouse, backyard room, tent, caravan) as well as distinguishing between the informal housing structures of 'traditional' huts, backyard shacks and shacks in informal settlements. Homeless households are also recorded.
2. The number of rooms (including the kitchen but excluding toilets and bathrooms) occupied by the household. In conjunction with the number of persons per household, this information could be used to calculate the occupancy rate for each household (see point 10 below).
3. For households who occupy only one room, whether or not this room is shared with another household (and, if 'yes', by how many households).
4. Whether or not the dwelling is owned by a member of the household.
5. The main type of fuel or energy used by the household for cooking, heating and lighting.
6. The household's main source of water.
7. The household's type of toilet facility.
8. The household's method of refusal disposal (removed by the local authority at least once a week, removed by the local authority less than once a week, or disposed in a communal refuse dump, a private refuse dump or not disposed of at all).
9. Where members of the household use a telephone (In their dwelling, at a neighbour, a public telephone, at work or not at all).

10. Number of members in the household.
11. Household income.

How often it is collected
The Population Census is conducted every five to ten years. There is usually a delay of a couple of years between the actual survey and the dissemination of the results.

Scale of the data:
Unlike surveys that are based on samples, the Population Census aims to provide data on every household in the country. From the point of its usefulness in providing KPIs, this means that the Population Census can provide household information down to the level of each Enumerator Area. Enumerator Areas are very small geographical areas that comprise between 150 and 300 households. The fine scale provided by these Enumerator Areas therefore makes it possible for the data to be represented in larger groups such as townships and municipal districts. The only snag is that Statistics South Africa may not release raw data at levels, which are smaller than the municipal district. This has been the practice in the published results of previous Population Censuses. However, the recent Population Census is not widely available in the form of raw data files and may allow analysis at smaller geographic units. Whatever the case, the Population Census is certainly the only source of household data to provide information at the level of magisterial districts.

Limitations of the Data
The main limitation of the data is that it does not come in a form that is readily useful for KPI measurement. A fairly substantial amount of expertise is required if the raw data is to be analysed in terms of new geographic boundaries, since this will require the analysis of the raw data. Apart from this, the only other limitations are the extraordinarily high cost of the data files and the irregularity of the census.

7.2 Provincial data

The province makes some of the most important investments in poverty reduction. Health, housing, welfare and security are all areas where substantial further liaison between the provincial and municipal offices should occur.

Education
[We have spoken with Mr. Pillay in the provincial education department, and then emailed him a series of questions on education data. We are still awaiting his response.]
Welfare
[We have had no success so far in contacting people in the provincial welfare department.]

7.3 Metro data

The major agencies involved in collection of information are the CMC and WESTRGO. The CMC has an interdepartmental indicator working group which co-ordinates available data for the metro and the MLCs.[10] The specialised nature of WESTRGO means that the data they collect is largely economic.

7.3.1 GGP and Employment figures[11]

Potential Data Sources
The CMA publishes GGP and formal sector employment figures for each of the LMAs. The underlying source of this data is the census figures, updated each year using a specific methodology and various other data sources.

Method of Collection
Presently the GGP figures are based on the 1991 census figures at magisterial district level. The CMC has developed a methodology both for updating these figures and converting them to correspond to the LMAs.

The updating is largely based on the RSC levies database, which maintains records of total turnover and wage bill of some 45000 firms who voluntary submit records. The methodology for updating GGP figures compares the real turnover figures in a census year to the real turnover in subsequent years, and is therefore able to revise the census information in line with current trends.[12] For certain sectors use is also made of other data, including wage bill data from the RSC database, historic growth rates in the CMA, and national growth rates.[13]

[10] The contact person is Carol Wright.
[11] The information for this section came from the CMC (1998) *Economic Trends and Spatial Patterns in the CMA* report, and from a meeting with Rae Wolpe (CMC - Economic and Social Directorate)
[12] The figures are converted to their real values using Reserve Bank national deflators.
[13] For a more thorough account of this methodology the reader is referred to CMC (1998) *Economic Trends and Spatial Patterns in the Cape Metropolitan Area: Statistical Database* pp. 74-82.

Conversion from magisterial districts to MLAs is undertaken using population conversion tables, which have been designed for this purpose. These are calculated using a detailed methodology, and are based on land use maps which should be updated periodically.

Formal sector employment figures are then calculated directly from these GGP figures, in combination with data for each sector on the share of wages and salaries to total value added and the average annual wage. This information comes from Statistics South Africa on a national level and is adjusted using provincial level statistics from PAWC (wage share of GGP per sector) and WEFA (average annual wage per sector).[14]

How often it is collected
The data is calculated on an annual basis.

Scale of Data
GGP and employment figures are calculated at the aggregate level of the CMA and then broken down for each of the six LMAs. The figures are also disaggregated by economic sector and again by manufacturing sub-sectors.

Limitations to Data
An immediate limitation to this data concerns the emphasis on formal sector economic activity and employment. The census figures are only able to tell us about formal sector activity, and as a consequence the informal sector is missing from this data. It is important to bear this in mind, because the informal sector is likely to be large, and its prosperity has particularly important implications for those who may be close to (or in) poverty. Other limitations revolve around the methodology behind the updating and conversion process, and can be identified specifically as follows;
The levies database can only capture a proportion of all the firms in the CMA, and the fact that it is contributed to on a voluntary basis may mean that this sample is not entirely representative.
The deflators used to convert nominal to real figures are national deflators, and as such they may not accurately reflect inflation in the CMA.
The use of different methods of updating for different sectors casts a slight doubt on the comparability of figures across sectors.
The fact that magisterial districts do not correspond directly to the MLAs creates further room for error in the conversion process.
The necessity to convert GGP figures to employment figures by use of wage share and average wage data is again another potential source of inaccuracy.
Statistics South Africa is cutting down on the frequency of some of the information which it has traditionally produced, and this may effect the methodology for calculating and updating of figures such as these.[15]

However, given that census figures (or indeed OHS figures) are published only infrequently, a method of updating for the intermediate years is necessary and is never

[14] See *ibid.* pp. 83-84
[15] For example, certain manufacturing data will be released on a five rather than three year time interval.

going to be perfect.[16] The RSC levies database does seem a reasonable basis from which to update the figures, and the CMC are confident that their methodology both for updating and for municipality conversion is generally a good one. It is fair to say therefore that these figures on GGP and formal sector employment for the CCT area are reasonable estimates given the inherent difficulty in calculating such figures. In general terms this data is more likely to be of use for strategic policies other than the poverty framework.

Planned Changes to Data Collection
The CMC plans to continue to update these figures on an annual basis, and also to revise the base from the 1991 census figures when the 1996 figures are fully available. There are also plans to link the levies database to the GIS, thus incorporating land use attributes and showing where all companies are situated and which ones are paying their levies. This should allow greater coverage for the levies database, and so improve the accuracy of the updating process. It should also then be possible to calculate turnover per spatial area, and this could potentially be extremely useful for the monitoring economic activity and opportunity in different areas of the city municipality.

7.3.2 Informal Sector Activities[17]

Potential Data Sources
The census provides a potential data source for calculating some broad measure of informal sector employment.

Method of Collection
The CMC has developed a methodology based on the census data for decomposing the total labour force into three categories: formally employed, informally employed, and unemployed.[18] The potential labour force is defined as the population between the ages of 15 and 64, and this is converted to a figure for the total labour force using participation rates.[19] The employment status classification from the census is then used to divide the employed from the unemployed, and the DBSA have developed a methodology with which to further divide those employed into a formal/informal classification.[20]

How Often it is Collected
Collection is infrequent, as it is based on census data.

Scale of Data

[16] Indeed, the census figures themselves are open to debate over their accuracy, and so methods of updating such as this can arguably provide an estimate which is equal or even superior to collecting inaccurate (and perhaps inconsistent) data from source each year.
[17] The information for this section came from the CMC (1998) *Economic Trends and Spatial Patterns in the CMA* report, and from a meeting with Rae Wolpe (CMC - Economic and Social Directorate)
[18] This is therefore also a source of unemployment figures at the city level.
[19] All of this information comes from the census.
[20] For a more detailed discussion of this methodology see CMC (1998) *Economic Trends and Spatial Patterns in the Cape Metropolitan Area: Statistical Database* pp.87-88.

The data can be calculated to the level of LMAs by using the CMC's methodology for converting from the level of magisterial districts.

Limitations to Data
There is little data available on the informal sector, and the very nature of this sector means that what data is available tends to be of an *ad hoc* nature. This can be seen by the fact that the DBSA does not make public knowledge of its methodology for making the formal/informal employment distinction.[21] There is clearly a pressing need for further techniques to be developed for measuring and analysing the impact that the informal sector has on employment opportunities and livelihoods.

Planned Changes to Data Collection
We are not aware of any planned changes, but the need to find better ways of monitoring the informal sector is widely acknowledged. In this regard the efforts of the World Bank and the Johannesburg Metro Council should be closely scrutinised as they are pioneering the way in collecting comprehensive economic data.[22]

7.3.3 Building Activities[23]

Potential Data Sources
Data is published by the CMA on the number of building plans approved, building work projects commenced, and buildings completed in each of the six LMAs. For each of these measures of building activities, the data is split into three categories; residential, additions and alterations to dwelling houses, and non-residential. For the non-residential category a further split is made to classify building usage between office, commercial, and industrial. In addition to the number of units in each of these non-residential usage categories, information on the total floor area is provided.

Method of Collection
The municipality is responsible for providing the CMC with this data for the City area. This data is captured directly from building plans submitted for approval, and site- inspectors' progress reports.

How Often it is Collected
This information is provided to the CMA by the City on a bi-annual basis, but only published by the CMA on an annual basis.

Scale of Data
The data can be broken down to the level at which the municipality collects it. The CCT collects data for Crossroads; iKapa; Pinelands as well as Zones A through E[24].

[21] All that we know about this is that it is 'based' on the 'unclassified' response to the occupation question in the 1991 census.
[22] Contact person is Prof C. Rogerson, Wits University.
[23] The information for this section comes from discussions with Suma van Giendt (CMC – Planning & Housing), Desree Sheppard (CMC – Planning and Housing), and Gloria Benjamen (CCT – Building Plans), and the CMC (1997) *Building Activities in the Cape Metropolitan Region* report.
[24] These zones follow area boundaries: Zone A is from Bakoven to Oranjezicht; Zone B from Zonnebloem to Thornton; Zone C from Mowbray to Kenilworth; Zone D from Athlone to Phillipi; and Zone E from Mitchells Plain to Phillipi.

Limitations to Data
It is by no means obvious that the six municipalities have either the capacity or inclination to continue to produce this data. Certain municipalities have already aggregated their figures[25], and the while City municipality is still planning to produce data by zone it is behind in releasing these figures and unlikely to be able to do so for certain zones (such as iKapa).

Planned Changes to Data Collection
The CMC is planning a series of workshops for the six municipalities to stress the importance of data collection, and it is hoped that this will result in the collection of more detailed and comprehensive information in future. This presents an opportunity therefore for input into the data collecting process.

7.3.4 Key Sector Indicators[26]

Potential Data Sources
The GGP and formal-sector employment figures discussed above are potential sources of data on the performance of sectors and clusters which are considered to have high growth and employment generation potential.[27] The trade data provided by the Customs and Excise database is also potentially useful to monitor the performance of key sectors.

Certain key sectors and sub-sectors may also be linked to other more specific data sources. For example, tourism is considered to be a key sector in the CMA, and consequently both the CMC and Wesgro collect data on tourism indicators.[28] Specifically they maintain lists of the number of tourists visiting various key attractions.

Method of Collection
The methods of collection for GGP, employment and trade data correspond to those discussed above. Data on tourism indicators is collected by the CMC from the key tourist attractions.

How Often it is Collected
GGP, employment and trade data are all available on an annual basis, and the tourism figures are produced monthly. However, seasonal variation in tourism would suggest that comparisons should only be made annually.[29]

Scale of Data

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[25] Blaauberg, for example, has this year lumped all its zones together.
[26] The information for this section comes from a discussion with Rae Wolpe (CMC – Economic and Social Directorate) and the CMC (1998) *Economic Trends and Spatial Patterns in the CMA* report.
[27] It may also be possible to identify sectors and clusters that are of particular significance to those close to (or in) poverty; for example sectors with the potential for generating large numbers of low and medium skilled jobs.
[28] Although we were made aware that there are disagreements between the data collected by the CMC and that collected by Wesgro.
[29] This can be done by calculating aggregate annual figures, or by making comparisons on a monthly basis with the same month in the previous year.

The GGP and employment figures are to the scale of the city municipality, while the trade figures can be calculated to this scale or to postal code areas within the municipality. The tourism data refers specifically to six key attractions, and the location of these can therefore be linked to individual municipalities.

Limitations to Data
The limitations to this data follow from those highlighted in the previous sections on GGP and employment figures, and on trade data. A further problem may arise in that the product categories with which the trade figures are classified are not likely to correspond perfectly to the sectors which GGP and employment figures are disaggregated into. However, a combination of these sources may still be used to obtain a broad idea of the performance of sectors and clusters that are considered to be particularly important.

With respect to the specific data on the tourism sector, the main limitation is a worry over the accuracy of the data given the contradictions evident from two different sources. The point can also be made that visits to specific attractions within the city municipality may not reflect accurately the true impact of tourism over the municipality as a whole. Nonetheless the figures serve as a broad indicator of the number of tourists visiting the region, and therefore can provide an insight into the performance of this sector at a city level.

Planned Changes to Data
There are a series of meetings planned to co-ordinate the activities of the CMC and Wesgro in producing tourism figures, which will hopefully provide a more accurate picture. Other key sectors may also be linked to more specific data sources, and this is worth investigating if and when key sectors are identified.

7.3.5 Trade Data[30]

Potential Data Sources
An unpublished database is maintained by the national division of Customs and Excise and contains trade data on country of destination and origin, product category, weight, and Rand value for all international transactions.

Method of Collection
The information is taken directly from the database with which the Customs and Excise record international trade transactions.

How Often it is Collected
Data collection of this nature is an ongoing process, and it would theoretically be possible to extract the data on a monthly or yearly basis. Given the seasonal fluctuations that characterise trade in certain sectors however, it would seem sensible to extract this data annually.

Scale of Data

[30] The information for this sector comes from a discussion with Rae Wolpe (CMC – Economic and Social Directorate).

The data is readily available at a level disaggregated to postal code area, so it is possible to determine trade flows by sector/product category at a citywide level, and also to specific areas within the city municipality.

Limitations to Data
The main limitation to this data is that the postal code classification refers to the area from which the firm exports the goods or receives the imported goods. This may not correspond to the area in which the goods are produced or consumed. For example, an exporting company will have is exports recorded from the area where it has its export depot, and this will not necessarily be the same area in which the goods are produced.
This is a significant limitation, and means that this data cannot confidently be used to link trade in various products to specific areas within the city, or even to the city municipality area as a whole.

Planned Changes to Data Collection
There are no specific changes to data collection that we are aware of, although we were told that the CMC is currently pushing Wesgro to extract more detailed and refined data on trade issues.

7.3.6 Investment[31]

Potential Data Sources
Wesgro maintains a list of recently completed, current and planned capital investment projects in the Western Cape that are worth over R10 million. This is a new project, and at present there are just over 600 projects listed. While this data is not directly relevant the link between poverty and economic growth means that this data may prove useful.

Method of Collection
Awaiting information

How Often it is Collected
Awaiting information

Scale of Data
The data is in the form of a list of investment projects, and it is possible therefore to extract all of the projects that fall specifically in the City of Cape Town municipality. It will thus also be possible to identify specific areas within the municipality where large-scale (over R10 million) investment projects are taking place.

Limitations to Data
The collection of data is at a very simple level, and is designed primarily to allow Wesgro to identify opportunities where they could play a supportive or marketing role. Thus it is not intended to collect detailed information for complex analysis, and is concerned with very broad information categories such as total value of current investment projects, types of projects being implemented; value and number of

[31] The information for this section comes from an email correspondence with Steve Downing (Wesgro).

planned projects etc. Given the goal of this data collection, the coverage is also unlikely to be comprehensive, and its focus on projects worth over R10 million leaves a gap in the monitoring of smaller scale investment activity. At present there is also very little known about FDI.

Planned Changes to Data Collection
This is a relatively new project, and at present we are not aware of any changes to the way in which investment data will be collected. We were made aware, however, that the CMC are pushing Wesgro to collect more detailed information on the impact of FDI in the CMA.

7.3.7 Skills Levels[32]

Potential Data Sources
The CMA produces figures on the distribution of skills levels for each LMA in census years. The source of this information is data from the census.

Method of Collection
Information on occupational distribution per magisterial district is collected for each census year. Occupational levels from the census are then converted to skills levels using a conversion table from the Department of Manpower[33]. Finally, the magisterial areas are converted into municipal areas through the same methodology used in calculating the GGP figures.

How Often it is Collected
Collection is infrequent and corresponds to years when the census is conducted.

Scale of Data
The skills data is at the level of the MLAs. It is broken down into the following categories: professional; highly skilled; skilled; semi-skilled; unskilled.

Limitations to Data
The data comes from the census and needs to be transformed to provide information on skills and to be useful at a municipal level. Both of these conversions introduce potential for error. There are additional problems with relying on the census for the data. Firstly, the census is only conducted periodically and therefore the skills data is only calculated for census years (since no updating is attempted). Secondly, it is unclear how reliable the actual census figures are[34].

Planned Changes to Data Collection
There are no planned changes to the collection of data on skills levels that we are aware of.

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[32] The information for this section comes from the CMC (1998) *Economic Trends and Spatial Patterns in the CMA* report.
[33] At the moment we are unclear as to from what source the department gets its table.
[34] The 1991 census, for example, is thought to have undercounted the number of blacks, and this has inflated the skills levels calculation; the 1996 census has still only been released as a 10% sample as there is concern as to its reliability.

7.3.8 Crime and Justice[35]

Potential Data Sources
Records of reported crimes are kept by the SAPS, and statistics can be extracted on various categories of crime.[36] The CMC has also requested that each LMA furnish it with details of crime 'hotspots' within their respective areas.

Method of Collection
The SAPS keeps records of crimes as they are reported at each local police station. The CMC has requested that each LMA consult with its local police stations and community centres in developing an idea of where the crime hotspots are.

How Often it is Collected
The SAPS collects the information locally on a daily basis, and the province releases summary reports every three months. The CMC project is a snapshot survey designed for a specific purpose and it hopes to release its results in mid-May.

Scale of Data
The nature of the SAPS data is that crimes are recorded at the individual local police stations where they are reported. Records are also kept, however, of where the crime occurred and the race, age, and gender of the victim. The data is therefore available at a scale corresponding to specific areas within the city municipality, and it would be possible to aggregate this data to broader areas, and to the city municipality as a whole. With respect to the crime 'hotspots' project, the CMC has little notion of what sort of data each municipality will collect for it.

Limitations to Data
The police data is only for reported crimes, and it is likely that unreported crimes are higher the more marginalised the community is. Hence an indicator based on reported crimes would understate the level of crime in impoverished areas; and as a marginalised area became more integrated into society it might show the paradoxical effect of an increase in reported crime. Another problem with the police data is the potential cost of retrieving the information.

The CMC survey is likely to deliver quite variable results across each municipality. What might be of some interest is if it is able to capture where there is a stark difference between community centres' perception of crime and the police's perception of crime, as this might give us some indication of unreported crime.

Planned Changes to Data
There are a number of indicators used by the safer cities programme (UN). THE CCT has recently opened a Safer cities unit and so the collection of indicators may develop. There are also a number of NGOs who monitor crime and their data bases may be useful.

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[35] The information for this sector came from discussions with Waynard Wessels (CMC – Crime and justice), Captain Keller (SAPS)(the people Mike spoke with about crime).
[36] For example: theft from car; theft of car; robbery with firearm; non-armed robbery; assault; pick pocketing; murder; attempted murder; drugs-related crime; rape; illegal possession of firearms.

7.3.9 Housing[37]

Potential Data Sources
The census provides the main data source on housing issues. In the 1996 census households are split into twelve categories according to the type of dwelling in which they live. Data is also collected on the number of rooms in the dwelling, and whether a member of the household owns the dwelling. In addition to this, the CMC are presently commissioning two studies that may be of interest. The first is a study of migration in the CMA, and the second a study of informal settlements.

Method of Collection
The housing data is collected in the standard census questionnaire. The informal settlement study will be based on detailed aerial photographs, taken every two years over the last eight years. The migration study is based on a detailed questionnaire administered to around 4000 randomly selected people in the CMA. Its focus is on both migration into and within the CMA, and data is collected on various attributes of the migrants including age, gender, education level, employment, and income. Movements within the CMA are also grouped into settlement categories; formally 'white' formal housing, formally 'coloured' formal housing; formerly 'black' formal housing, informal housing and hostels.

How Often it is Collected
The housing data is collected only in census years, and both of the CMC studies are essentially snapshot studies. The informal sector study will however model physical dynamics over the eight-year period in which the aerial photographs are studied. The migration study aims to provide a baseline for future studies of individuals moving in and out of the CMA.

Scale of Data
The 1996 census data is theoretically available to the scale of the household, and can be expressed in terms of Enumerator Areas of between 150 and 300 households. However, practically it may only be possible to disaggregate the data to the level of magisterial district (as was the case with the 1991 census). The migration and informal settlement studies will be to the scale of the CMA, although it may be possible to examine their results at a smaller scale.

Limitations to Data
The main problem with the census data on housing is that it is not presently available, and is only produced infrequently. It also suffers from the general problems associated with the accuracy of census studies. At present there is scant other information available on housing issues. The information from both the Migration Study and the Informal Settlement Study will potentially be more useful if they are replicated on a regular basis. However, with respect to the migration study it has been recommended that it is not advisable to examine the data on a municipal level, due the sampling method.

[37] Information for this section comes from the census questionnaire, and discussions with Basil Davidson (CMC - Housing) and Simon Bekker (US - CMC Migration Study).

Planned Changes to Data
It is hoped the information from the migration study will be produced on a biannual basis.
The CMC also wishes to set up a comprehensive housing database that will be mapped onto GIS and regularly updated.

7.3.10 Transport Infrastructure[38]

Potential Data Sources
The CMC (1998) 'Moving Ahead' report contains data on transport issues. This is based originally on the 1991 census, along with a CMC (1991-1992) survey of 15000 households. These sources combined can produce data on the average length of trip (km); modal split of transport between car, rail, bus, taxi, and other; percentages and absolute numbers of commuters using private cars, rail, and bus & taxi (by residential area); car commuters by income category; and commuter trip patterns.

Method of Collection
The standard census questionnaire from the 1991 census and a household survey questionnaire from the 1991-1992 CMC study.

How Often it is Collected
This was a snapshot study, although some of the data was census-based and so should therefore be available for all census years.

Scale of Data
The household survey was conducted on transport zones, which correspond to small areas within the CMA. It is therefore possible to group the zones roughly by municipality, and so examine data at a city and sub-city scale.

Limitations to Data
The main limitation to this data is that it is only infrequently available, and it is uncertain whether a similar report will be produced based on 1996 census figures.

Planned Changes to Data
There are no planned changes in the data collection that we are aware of.

7.3.11 Environment[39]

Potential Data Sources

[38] The information in this sector came from the CMC (1998) *Moving Ahead* report and discussions with Wilfred Crous (CMC – Transport Directorate).
[39] The information for this section came from discussions with Danie Klopper (CMC – Water and Waste Directorate), Steve Granger (CMC – Environment Department) and the UCT Environmental Evaluation Unit *Guideline for State of the Environment Reporting in the CMA* report.

The Scientific Services Department of the Water and Waste Directorate at the CMA monitors chemical quality and bacteria in rivers, landfill sites and sewers. They also monitor drinking water quality.[40]

Method of Collection
The data is collected through scientific monitoring at various sample points in the CMA.

How Often it is Collected
Monitoring varies for each indicator, ranging from an hourly to monthly frequency.

Scale of Data
There are various sample points where monitoring takes place, and these can therefore be linked to the level of the city municipality and to specific areas within the city.

Limitations to Data
The data collected by Scientific Services has a narrow focus on specifically green issues, which is only part of a more holistic view of environmental issues. There are also issues concerning the coverage of the entire city area, and the exact position of sampling points then becomes important.

Planned Changes to Data
The Environmental Management Department within the Planning, Environment and Housing Directorate at the CMC is currently developing a range of environmental indicators which embraces both green and brown issues. This project is still in its formative stages and the focus is on what indicators the CMA would ideally have,[41] rather than what is presently feasible.

7.4 CCT data

There is an enormous amount of data available from within the CCT. Many clusters are not aware that data they collect may be of use to others in the development of indicators. We would therefore appeal to managers to check this section carefully to ascertain if they have any additional data.

7.4.1 Rates[42]

Potential Data Sources
Each of the old municipalities has traditionally maintained a separate billing system for rates. These are now centralised on the PROMUS system for the CCT area[43].

[40] A whole host of environmental indicators linked to various departments within the CMA are outlined in a SoE report conducted by Cut's Environmental Evaluation Unit. However it is unclear from this how often and to what scale the data is available.
[41] These ideals are based largely around the Agenda 21 framework.
[42] The information for this section came from discussions with Mike Parker (CCT - Rates) and Angus Kirkman (CCT - Billing).
[43] The PROMUS system is also used in the South Peninsula and Oostenberg. The other three municipalities in the CMA, however, are on different systems.

Information thus exists across the CCT area on the rates that each stand should be paying and whether they are being paid.

Method of Collection
In theory the rates paid by a household should be based on the market value of the property. The rates for traditionally 'white' and 'coloured' areas are based on property valuations made in 1979, and have been increased monotonically for inflation. However, this year the rates increases are being based on a survey of property sales from the last 20 years which give a better indication of relative property values.[44] In the former Black Local Authority areas a system of rate collection did not exist until recently. The rates are presently in the form of an interim community service charge, based loosely on GIS evaluation of the physical and service infrastructure in each area.[45]

How Often it is Collected
The rate billing is on a monthly basis, although data on non-payments is more accurately available after three months.

Scale of Data
The data is at the level of the household (PROMUS is in fact a stand driven system) and covers the whole CCT area.

Limitations to Data
Although the rates data is available on a centralised database, the main problem with the rates data is that it is based on outdated and *ad hoc* valuations. The property value survey conducted last year indicated that while property values in some areas had increased dramatically since 1979, other areas had seen little increase.[46] Clearly, rates charged on the basis of 1979 evaluations are skewed heavily in favour of richer areas. The GIS based valuations in the former Black Local Authority areas also give little indication of real present-day property value, but at present this is perhaps the best that can be done in the absence of orthodox property markets in these areas.

Planned Changes to Data Collection
The setting and collection of rates is presently in a state of transition, and the property value survey on which this year's rates increases will be based is a temporary measure.
The CMC is currently in the process of implementing a comprehensive audit of property values over the entire CMA to form a basis for rates payments in the future. This audit will collect information on between 20 and 25 attributes of each property in the CMA, and there will be attempts to decompose the market value of the property amongst these attributes. This audit will be mapped on the GIS system and therefore can be integrated with other area information.

Thus in the medium term there will be a central rates database for the CMA[47] available at a household level and based on detailed property evaluations. This

[44] This is pending the DP's court challenge.
[45] There are in fact only two rates: one at around R30 and the other at R40 per month.
[46] For example, property prices in Camps Bay had increased thirytwofold since 1979, whereas in Mitchells Plain the increase was only twofold.
[47] There thus needs to be developed a unique 'common key' for each stand across the CMA.

comprehensive audit also provides a great opportunity for the collection of other baseline poverty data at a household level.

7.4.2 Water Tariffs and Service Levels[48]

Potential Data Source
Water billing for the entire City area has been on the PROMUS system for the past two years. Informal settlements are not billed directly as they do not have internal plumbing[49], and some formerly BLA are still in the process of having meters installed.

Method of Collection
Stands are billed for amount of water consumed. There is a three-tier system, which progressively penalizes the user as their water consumption increases. (This is soon to become a five-tier system). It is therefore possible to calculate the price paid for each additional kiloliter of water consumed per stand, as well has its total water consumption. Information is also available as to the time stands' have been in arrears, and the extent of their arrears.

How Often it is Collected
Stands are charged on a monthly basis but meters are only read quarterly. The quarterly reading gives an indication on how much to charge stands in the following two months. The next quarterly bill is then adjusted depending on whether the stand has been overcharged or undercharged for the months in which the meter was not read; and its reading is taken as an estimate of the next two months billing.

Scale of Data
The billing data is available at the level of the stand and is available across the City area.

Limitations to Data
The water consumption information is at the level of the stand and not at the level of the individual. This especially needs to be borne in mind with respect to the development of poverty indicators, as poorer stands will tend to have more people per stand. Thus stands which become poorer might actually show an increase in their water consumption because there are more people on the stand.

Water consumption is also highly, seasonal which makes month on month comparisons across a single year misleading[50]. Also, because the meters are only read quarterly, the monthly billed figures do not necessarily accurately reflect water consumption in that month. This suggests that one should compare the quarter's consumption with the same quarter's consumption in the previous year to obtain a meaningful indicator of change in water consumption.

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[48] The information for this section came from discussions and correspondence with Robert Mbwana (CCT Water) and Angus Kirkman (CCT Billing).
[49] Instead they pay the Interim Community charges and have access to a standpipe within 200m.
[50] Seasonality should not just be seen as nuisance to be removed, however. One could argue that households that show little water consumption variation are in fact poor households (they lack a lawn to water in the hot and dry Cape summer). Therefore the degree to which households are responsive to the seasonal nature of water consumption is in fact a rich indicator of poverty.

The Community Service charge gives an even rougher indication of water consumption in informal areas, and any measure of it would need to address the qualitative difference between walking 200m for one's water and having it via internal plumbing.

With respect to the arrears data, it should also been borne in mind that the individual liable for the arrears is the owner of the stand (who is not necessarily the consumer of the water). Furthermore, because historically no penalty for water non- payment existed[51], households have tended to neglect water payments. Although penalties are being introduced the reluctance to cut off water – which is a basic right under the constitution – suggests that inability to make water payments might be an undesirable indicator of poverty.

Planned Changes to Data Collection
The CCT is in the process of ensuring that every stand with internal plumbing has a meter (at the moment some houses in formerly BLA areas do not have meters). There are also long-term plans to read the meters on a monthly basis. A possible 'trickle' sanction, where households who are behind in payments are only provided with sufficient water to cover basic needs, is also been considered. However there is political and constitutional pressure against such a move.

7.4.3 Electricity Tariffs and Service Levels[52]

Potential Data Sources
The billing system for electricity consumption is in the process of being put onto the City's PROMUS system. This provides a database at the stand level of payments for electricity consumption for metered households. It will be possible to calculate electricity consumption per household. Records are also kept of sales of tokens at each vending outlet and this can provide some measure of average prepaid consumption.

Method of Collection
Metered houses have their meters read and are then billed accordingly. The sale of tokens by vendors is recorded on a central computer system.

How Often it is Collected
Meters are supposed to be read on a monthly basis[53], but circumstances sometimes make this difficult. Vending sales can also be calculated on a monthly basis.

Scale of Data
The data is on a household scale for metered households; and an average consumption for prepaid households per vending area can approximately be calculated from the

[51] This is different from the situation with non-payment of rates where court action is possible; and different from non-payment of electricity where households can be forced onto a prepaid system.
[52] The information for this section came from discussions with Colin Early (CCT - Electricity) and Angus Kirkman (CCT - Billing).
[53] A billing month does not correspond directly to calendar months.

number and level of sales of tokens at each vending outlet (which corresponds roughly to a geographical area).

Limitations to Data
There are a number of limitations with the data.
The seasonal nature of electricity consumption means that data can only be compared on an annual basis.
The PROMUS system is not fully operational at the moment, and confidentiality requirements mean that data at a single household level is not necessarily available.
The proxy for prepaid households is a rough measure of electricity consumption, as households do not necessarily buy the tokens in their residential area.
For historic reasons the area of electricity supply under the CCT does not correspond to the CCT municipality. This creates problems in that much of the aggregate information that the electricity department reports each year is at the 'wrong' aggregation level.
Unlike rates and water charges, electricity charges are consumer rather than owner based. Consequently, the consolidation rate of the three measures for each stand is not as comprehensive as if electricity were owner based, since the consumer need not correspond to the owner.
In theory every household in the City area has the option of taking an ED, but the lack of access points to certain informal houses (such as a serviceable road for maintenance of overhead cables) means certain informal houses have been unable to exercise this option. Presently, however, one is unable to distinguish between households which are too poor to link to an ED, and houses which are unable (because of their geographical location) to link to an ED.

Planned Changes to Data Collection
There are plans to link the billing database to the GIS system, so that maps will be available with data on electricity sold by area.

7.4.4 Additional Municipal Services[54]

Potential Data Sources
An audit of service levels conducted by the City of Cape Town provides data on municipal infrastructure.[55] The pattern of residential refuse collection can be obtained from each depot's schedule; and business refuse collection from the contract each business signs with the depot (requesting how many removals it requires), and the quarterly billing for this service which is on PROMUS.

Method of collection
The audit of service levels took the form of a questionnaire, which was completed by all branches of the City of Cape Town. Refuse is collected in the City municipality by each individual depot. Residential households are entitled to one free containerised bin per week (or five bags), and this service is provided to all rate-paying households. Trucks don't go into informal areas and these areas are serviced by a communal skip.

[54] The information for this section came from the City of Cape Town (1998) *Audit of Service Levels* report, and a conversation with Mrs. Botha (CCT - Refuse).
[55] Produced as a confidential report: City of Cape Town (1998) *Audit of Service Levels*

How Often it is Collected
The services audit was a first step, which will hopefully lay the groundwork for more refined and comprehensive future audits. Refuse collection frequency and dates depend on each individual depot, and the contracts it has undertaken with businesses.

Scale of Data
The services report provides a visual breakdown (in the form of maps) of various services (such as libraries) provided across the city area. The report also provides some branch specific[56] information, but at a fairly general level. The refuse data is available at a scale corresponding to the areas serviced by individual depots.

Limitations to Data
The service report data is largely unsuitable for indicator purposes, as it gives no measure of the quality of the services provided. Thus while, for example, the report provides a breakdown of municipal libraries in the city area, it gives no indication of hours that the libraries are open, or the number of books which have been taken out, over (say) a month period. The household refuse data is disaggregated and there is therefore a cost involved in retrieving the information from the individual depots.

Planned Changes to Data Collection
The services audit was conducted over a two-week period, and it is hoped that future audits will be more comprehensive. In particular, future audits will try to capture some of the qualitative aspects of the service levels. It would also be useful if this information was mapped onto the GIS system.

7.4.5.Health[57]

Potential Data Sources
The main source of data is the City of Cape Town (CCT) Health Department, which receives information on all births, deaths and notifiable diseases (infectious diseases) that occur within the CCT. Now that HIV/AIDS is a notifiable disease this information will also be available.

There are other sources of health information for the CCT. Hospital departments will collect different information on deaths, hospital admissions and Intensive Care Unit (ICU) admissions. There is indeed a wealth of information collected, but this information is less easily accessible. As an example of some of the information that is available, the respiratory department of Groote Schuur Hospital has got information on asthma deaths and ICU admissions. This provides very detailed information about the location of asthma patients/deaths within the city.

Other health information that is available includes data on tuberculosis cases for each health facility within the CCT. A useful study has also been performed which looked

[56] The seven branches are City Manager; Community Development; Corporate Finance; Municipal Services; Planning & Economic Development; Institutional Transformation.
[57] The information for this sector comes from interviews by M. Poyser with Community Development Staff

at the relationship between rates of tuberculosis and deprivation across a cross-section of the city (Eichhorn).

Method of Collection
The CCT Health Department receives this information from different sources:
Information on births comes from 'Early Notification of Birth' forms.
Information on deaths comes from the death certificates sent to the health department by doctors.
Finally, every instance of a person contracting an infectious disease has to be reported to the health department. Attempts are then made to reduce the spread of the disease.

The data that is received by the Health Department is kept on their database. To make the data more accessible, the Health Department publishes tables of data. The data which is most readily available, at area level, is as follows:

Table 11: Health data

Indicator	What is measured?
Population	Total population of each area
Number of live births	Total number of live births in each area
Live birth rate	Number of live births as a % of population of each area
Number of deaths	Number of deaths in each area
Death rate	Number of deaths as a % of population of each area
Number of infant deaths	Number of deaths of infants under 1 years of age in each area
Infant mortality rate	Number of deaths of infants below 1 years of age as a % of population of each area
Causes of infant mortality	Number of deaths of infants below 1 years of age in each area for each cause of death
Notifiable diseases	Number of cases of each notifiable (infectious) disease in each area: Acute flaccid paralysis Acute rheumatic fever Food poisoning Congenial syphillis Haemophlus influenza Type B Insecticidal poisoning Malaria Measles Meningococcal infection TB Typhoid fever Viral Hepatitis (A, B, C) Whooping cough Total
Deaths from notifiable disease	Number of deaths in each area for the following notifiable diseases: HIV/AIDS TB Meningococcal infection Viral hepatitis Congenial syphillis Whooping cough

How Often it is Collected

Data is continually being submitted to the Health Department. A report on the data, and summary tables of the data are compiled every year.

Scale of Data

For the purposes of health data, the City of Cape Town comprises four regions; Northern, Khanya, Eastern and Mitchell's Plain. Each of these regions consists of several areas (e.g. Claremont), and each of these areas are made up of suburbs (e.g. Claremont includes Rondebosch and Newlands). Most of the data is available at area level (as shown above), although data on deaths by each cause (58 categories) is readily available only at the level of the four regions within the CCT. However, as all

of the information is on the database of the Health Department, it is possible to request some data to be broken down to the smallest level possible (the suburb). Therefore, if it is decided that a certain piece of information would be useful as a health indicator, then that data could be requested for the suburb level.

Limitations to Data
The Health Department only collects data on the deaths, births and notifiable conditions that occur within the CCT. The Health Department does not collect any data on hospital or ICU admissions. These data would have to be obtained from the hospitals themselves.

The scale at which the Health Department makes most of its data most readily available is the area level. To obtain data at the suburban level will require going back to the raw data held within the Health Department database. It would be a laborious process to retrieve much health data from the databases. Often, different departments in hospitals request certain data from the Health Department. Useful data is therefore fragmented throughout the hospital departments within the CCT.

Planned Changes to Data Collection
No changes are planned for the collection of data for deaths and births. The only change in data collection that will occur is that AIDS/HIV will become a notifiable disease.

7.4.6 CCT Data already on GIS

The main source of data for the City of Cape Town that already exists on GIS is the information collected in the 1991 Census. The table below shows the information from the 1991 Census that is available on GIS.

Table 12: GIS data

Indicator	What is measured?
Age-Sex	Dependency ratio: the number of people in the 'dependent' age groups (0-14 and over 65) compared to the number of 'active' people (15-6) Index of ageing: number of 'aged' people (over 65) compared to the 'youth' (0-14)
Density	Population and housing density Persons per household Persons per habitable room Workers per household Household sharing accommodation
Education	% adults with less than Standard 6 education % total population with less than Standard 6 education % adults with Standard 6 education or lower Workers with less than Standard 6 education
Work status	Work status of total population by ethnic group Number of unemployed and looking for work Number of unemployed and economically inactive by population group Participation rates: number of people employed in each age-

	sex cohort
Income	Mean income of total population Income of working population Household income

The following information from the 1991 Census and 1985 Census are also available on GIS:
Total population
Number of males/females
Age 0-14, 15-64, 65+
Population by ethnic group
Education level
Occupation
Work status
Income per annum
Home language
Marital status
Citizenship

Information on population, dwellings, and density of population and dwellings is also available for 1995. These data are estimates made using information from the 1991 Census, from the Department of Home Affairs and from Bertie van Zyl.

When the 1996 Census becomes available, this will also provide a lot of data on GIS for Cape Town. Currently the CMC has a 10% sample of the 1996 Census for the whole of the CMA. However, the only information available at the moment for each variable is a single figure for the City of Cape Town. The information available includes:
Population by age and sex
Education levels of the labour force
Immigration into Cape Town for 1990-1996
% distribution of personal income
% distribution of the highest income earner per household
Occupation distribution in each industrial sector
Work status
Breakdown of the non-active population
Access to facilities/amenities (e.g. type of toilet, type of fuel for cooking)
Distribution of housing

This information will be available soon for the Enumeration Sub-District (ESD) level.

Other information that is available on GIS is the 'levels of living' index produced by the CMC. This includes GIS maps of the variables used in the index (income, education, unemployment, welfare, overcrowding) both separately and combined.

8. City wide indicators for poverty reduction in the CCT

On the basis of the results of the research reported above it would seem reasonable so suggest that locally generated indicators will best serve the poverty reduction

objectives of the CCT. Using the experience of the international and national communities it is clear that related but separate indicators must be developed for the branches and for the City as a whole.

8.1 Strategy related indicators for the City

Our recommendation is that five composite poverty indicators be developed one for each of the fields of action that link directly to the Seven Strategic Priorities. Table 13 identifies appropriate measurable variables to be factored into the composite indicators. Once these components are agreed to a statistician can weight the figures and produce the five poverty indicators for the CCT.

Table 13: Proposed composite poverty reduction indicators for the CCT

Sphere of poverty action	Proposed components of composite indicators
Welfare and subsidies	• proportion of the population registered as disabled • proportion of women who fail to receive maintenance payments due them from their ex-husbands • percentage of economically active dependant on means tested benefits • no of children on feeding schemes • percentage of CCT budget allocated to tariff relief
Infrastructure	• proportion of population with taps in the house • proportion of the population who use electricity as the major fuel source for cooking • percentage of houses with access to a toilet in the house • percentage of the population living in a formal house over 30m in size • TB rate • Expenditure on public recreational facilities per 10000 boys and girls
Space and environment	• a composite indicator of the MSDF • a composite indicator of Moving Ahead • a composite indicator of the Safer Cities programme • a composite indicator of Agenda 21 • the number of houses destroyed by fire, wind or flood in the last 5 years • ratio of the top and bottom property value quintiles • proportion of the population living in overcrowded rooms according to the Slums Act
Employment	• literacy levels among the economically active population • ratio of formal to informal work • proportion of the CCT area economy estimated to be dependant on illegal activity • Ratio between the top and bottom quintiles average incomes. • proportion of households earning below R800 per month • proportion of formal sector female workers earning below the poverty datum line • Participation rate of 18-30 year olds. • Male unemployment rate
Community Society	• gang membership • ratio of convictions to reportage for violent crimes • proportion of the population who are migrants • teenage pregnancy rates • HIV/AIDS rate • no of books taken out of community libraries • incidence of alcohol foetal syndrome • recorded incidents of racism

9. Activity related poverty indicators and the business plan highlights

At the moment each of the branches prepares business plans that suggest KPIs. Few of the branches have managed successfully to link their outcomes to the Seven Strategic Priorities. Fewer still have demonstrated an awareness of the data available to them for generating more sophisticated KPIs for the branch. In section 9 a review of the 1998/9 business plans of each branch is provided. The review simply notes the KPIs and data sources suggested and provides a list of additional indicators used elsewhere for that activity and a list of sources of locally available data. Invariably the Departments will know of further data and it is hoped that with some further training in the use of KPIs that they will develop locally relevant activity related poverty indicators for the branch.

9.1 Branch Activity Indicators

The core business of municipal local councils like the CCT is overtly oriented towards service delivery. Without exception the staff of the CCT interact directly or indirectly with the residents of Cape Town, many of who are poor. The poverty reduction framework has therefore got particular importance for the branches of the MLC as a way to ensure that the needs of all of the people of Cape Town are equitably met. Meeting the outcome indicators means that we will be gradually achieving the objectives set out in the Seven Strategic Priorities.

In this section we show how it is possible to use the poverty framework to develop **activity-related indicators** for each branch activity in the CCT. It is important to state that indicators shown here are not proscriptive. Consultants, without consultation with the relevant branch staff developed these poverty indicators. The only information on which the tables below are based is the business plan highlights[58]. The indicators selected may not therefore adequately reflect branch priorities or policy. In other words we are not suggesting that these are the poverty indicators that have to be used in the next business plans or in branch planning. So why go to all the trouble of producing these detailed indicators?

The purpose of producing poverty indicators for activities in the CCT is to give real examples of how to use activity-related poverty indicators at the scale of the branch. We want to show how putting branch activities into the wider context of the poverty framework helps specify how the CCT Strategic Priorities will be met and reinforces the need for clear and targeted action to meet those goals.

Some of the indicators we have suggested may be too idealistic at this point – don't forget that indicators must be achieved over a specified period of time (usually a year or a budget cycle) and must therefore be realistic and achievable. Nevertheless it is crucial to remember that if you aim nowhere, you will get nowhere. In the CCT we need to reduce poverty and so we need a defined idea of what this will involve on a budget by budget cycle.

By using indicators to show exactly what the position is now and what a branch hopes to achieve, the poverty reduction goals of the CCT become more tangible. We hope

[58] City of Cape Town, 1999: Business Plan Highlights: A Strategy for Implementation, Action Plans.

that branches will adjust future business plans using the poverty framework so that they can demonstrate how their activities link to the Seven Strategic Priorities. Moreover, we hope that branches will, prompted by these suggested indicators, be able to identify additional sources of data that could be used to modify and refine the indicators to make them more effective. Should branch managers require further assistance in developing indicators this can also be arranged.

In the first instance we have used those branches whose activities fall into the priority areas of the CCT budget and appear in the business plan highlights. Ideally the exercise should be extended to all branches. In looking at the business plan highlights we addressed the branches of councillor training, the new document planning management system, customer services, the billing and income systems, the muni-SDF, and transformation for service delivery only by way of comment (see 10.3). In section 10.2 we suggest actual poverty indicators for traffic services, housing, cleansing, tourism, business areas, customer services, the billing and income systems, HIV/AIDS/STD's and TB. For each of these branches particular attention is given to:

- Differentiating between baseline, output and outcome indicators
- Linking the activities of the individual branch (as identified in the business plan) to the five fields of poverty.
- Examples of issues that could have been, but were not this time, identified as priority objectives in the business plan have been included, but are not in bold.
- As each branch's indicators may be spread over several pages it may helpful to know that the following table format has been adopted in each case:

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Welfare and subsidies				
Space and environment				
Employment				
Infrastructure				
Community and social development				

9.1.1 Traffic services

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Welfare and subsidies	• **Decrease costs and increase revenue from offences** • **Equity of service delivery**	• **Rands profit raised from fines** • **Rands spent per areas of enforcement**	• **Outsourcing of expensive functions e.g. parking meters, tow wagons, summons serving, traffic college (reduce total departmental costs by x Rands)** • **Extension of card parking meters (increase revenue by x Rands)** • **Law enforcement partnerships (increase revenue through red robot violation convictions, vehicle testing)** • **Introduction of cost-effective reservist corps** • **Area based budgeting**	• **Increase Rands available to spend on enforcement and safety by X Rands** • **Increased equity in expenditure across the 3 planned zones for area budgeting.**

Traffic services cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Space and environment	• **Integrated and co-ordinated law enforcement service** • **Uphold orderly land development** • Improve mobility and traffic flow	• **No of days with major traffic delays caused by accidents** • **No of traffic Department responses in townships areas** • **Air pollution rates** • **Dumping, land invasion and parks offences** • Journey times across selected routes in poor areas	• **Improve responsiveness to problems: establish a rapid deployment unit able to respond to problems in all sections of the city** • **Cross training of staff to deal with, illegal dumping, land invasions and parks offences** • Enhance Departmental efficiency and resources – see list of activities under other headings in this column. See also PMS indicators.	• **Improve the quality of urban life** *** Reduce the number of days with accident induced traffic delays by x.** *** increase the number of traffic department assisted accidents in old township areas** • **Reduce pollution** *** increase the rate of vehicle checks by x** *** reduce air pollution levels by x** • **Uphold environmental quality across the city** *** increase rate of prosecutions for illegal dumping** • **Promote orderly cost effective land development for low-income housing and prevent corruption in the land sector** • Increase the mobility of the poor to increase their access to work and recreational opportunities. * Equity of investment in traffic services across poor and rich areas (this is a complex calculation involving costing across public and private modes of transport)

Traffic services cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Employment	• **Support traffic environment conducive to business activity** • **Increase visibility of policing**	• **No of traffic violations in areas of informal trade** • **No of traffic officers and wardens on the streets**	• **Appoint staff to monitor informal Trading enforcement** • **Recruitment of x traffic officers and traffic wardens** (Race and gender quotas?)	• **Improve the environment of informal trading areas** *** Increase convictions for offences by x** • **Decrease total number of offences committed in selected informal trading areas by x**
Infrastructure	• **Improve road safety**	• **No of road accidents** • **No of deaths caused by traffic accidents**	• **Introduce hand held violation recorders and increase** • **Introduce video unit and increase convictions for moving offences by x**	• **Improve safety of the CCT transport infrastructure** *** Save lives and money by reducing accidents**

Traffic services cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Community and social development	• Enhance climate of law and order through linking traffic control to other areas of CCT action (take traffic out of a vacuum) • Include local residents in reserve corps	• Monitor the link between traffic offences and crime statistics • No of joint projects with civic patrol, SAPS, Social Services, Magistrates' Offices and Public Prosecutions • Residential addresses of reserve corps	• Introduce scanning system for data capture • Improve social and physical infrastructure on which enforcement depends * Develop community service programme in areas of special need (road safety education, pedestrian assistance, traffic sign maintenance in zones of poverty etc.) * No of free labour hours from community service in zones of poverty • Advertise for reserve corps from across the city	• Improve the quality of traffic control in historically disadvantaged areas * Increase no of criminal convictions made through link with traffic offences • increase number of free labour hours dedicated to traffic related work • Increase involvement of residents from poor areas in civic duties such as the reserve corps * Include residents from al neighbourhoods in reserve corps

9.1.2 Housing

Field of poverty action	Priority objectives identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator (these are the activities that should be costed)	Desired outcome and * outcome indicators
Welfare and subsidies	• **Balance subsidies allocated to new and rental housing** • **Increase the amount of money available for housing from the Cities' own resources** • Allocate housing subsidies equitably to men and women	• **Proportion of the lowest income quintile of the CCT population living in rental housing and RDP housing** • **Money available per unit** • No of women who receive housing subsidies	• **Raise x Rands of additional capital to augment the housing subsidy** • **Draw additional money from rates (x Rand per unit)** • Education campaign for CCT front line housing staff and councillors to ensure that women are not inadvertently excluded from housing assistance	• **Promote post-apartheid racial equity though the removal of historically unequal subsidies * Equal housing subsidy by race** • **Improve the quality of new housing stock** *** increase size by x meters** *** increase quality of services (specify measure)** • Gender equity * Increase number of women home owners
Space and environment	• **Identification of affordable land for rapid release** • **Upgrading of informal settlements** • Racial integration of new neighbourhoods	• **Cost of land per unit** • **Number of units in informal settlements without access to basic services** • Segregation index	• **Rezoning of x acres of private land for low-income housing** • **Acquisition of x acres of provincial land for low-income housing** • Housing allocated in accordance with racial proportions on the lists	• **Prevent future social dislocation caused by overcrowding** *** 27meter houses** • Racially integrated city * Segregation index

Housing cont.

Field of poverty action	Priority objectives identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator (these are the activities that should be costed)	Desired outcome and * outcome indicators
Employment	• Use housing contracts to boost local job opportunities • Use housing contracts to create affirmative action opportunities (race and gender) • To build enterprise skills in the population of the CCT	• Proportion of contract value given to emerging contractors • Proportion of contract value linked to requirements for labour intensive construction Proportion of contract value linked to requirements for gender equity in construction teams	• Set race and gender quotas or policy guidelines for contracts allocated by the CCT • Rewrite contracts to include clauses insisting on race and gender equity in hiring practices	• Reduce inequality * decrease the gap between the (coloured and African) male and female unemployment ratios by x • Promote job creation * reduce the unemployment rate of the CCT by x * increase the number of construction related jobs by x • Build capacity in historically disadvantaged communities * expand the number of black building contractors by x percent

Housing cont.

Field of poverty action	Priority objectives identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator (these are the activities that should be costed)	Desired outcome and * outcome indicators
Infrastructure	• **Address housing shortage** • **Upgrade hostels** • **Improve the size and quality of new housing construction**	• **percentage of the population in the CCT area who live in formal houses** • **No of households in overcrowded housing units** • **No of households living in unrenovated hostels** • **Number of houses in the CCT that fail to conform to minimum standards** • **Average mid day summer temperature in RDP houses**	• **Build 20000 new houses (iSLP)** • **Build 5000 new houses (SPV)** • **Hostel upgrading of x units** • **Improve health of the poor** *** reduce damp related diseases e.g. TB by x** • **Increase the average lifespan of a house based on normal maintenance** *** Establish uniform minimum housing standards** • **Improve the size and quality of construction** *** Introduce environmentally appropriate construction materials** *** Raise additional capital to extend home finance to low income groups** *** Identify cheaper land to allow more for top structure**	• **Reduce negative impacts associated with poor living conditions :** *** reduce TB rate by x percent** *** reduce incidence of domestic violence by x percent** • **Increase access to credit through home ownership** *** increased numbers of the lowest income quintile with credit rating** *** increase in levels of home ownership in the CCT** • **Enhance family life** ***reduce the number of single family headed households in the CCT by x** • **Improve the environmental quality of life in the home** *** reduce domestic temperature variation by x and extremes** *** increase average RDP house size to 30meters**

Housing Cont.

Field of poverty action	Priority objectives identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator (these are the activities that should be costed)	Desired outcome and * outcome indicators
Community and social development	• **Communicate future plans to communities and NGOs** • **Deliver politically acceptable houses**	• **No of briefing sessions held with communities affected by housing delivery and upgrading.** • **No of complaints about housing delivered**	• **Expand communications strategies beyond community meetings e.g. to community radio and newspapers** • **Establish a liaison Committee with interested NGOs and councillors** • **Include post-occupation survey of satisfaction of new owners**	• **Increase residents' awareness of CCT housing activities** *** expand the number of people who are informed of Council action by x** • **Promote customer satisfaction** *** increase levels of approval in survey of new home owners by x percent** *** reduce number of complaints by x**

9.1.3 Cleansing

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Welfare and subsidies	• **Provide equitable services**	• **Differential levels of refuse service across the city** • **Differential levels of street sweeping**	• **Stretch existing resources to provide a weekly service for all** • **Masicoce and iSLP projects** • *Crisis management of residential areas*	• **Equity of refuse service levels** *** containerisation of refuse for all** *** improved service standards in growth areas** • **Greater efficiency so that branch can meet street sweeping demands** *** privatisation of non core activities e.g. garden refuse** *** see PMS indicators**
Space and environment	• **Improve environmental health**	• **No of rats** • **Incidence of infectious diseases (specify)**	• **Rationalise and improve quality of cleansing service**	• **Improve public health** *** reduce no of rats** *** reduce incidence of specified diseases**

Cleansing cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Employment	• **Employ casual labour to promote tourism** • Promote labour intensive approaches to street weeping	• **No of casual workers employed by age race and gender** • **No of tourist and tourist industry complaints about grime** • Unemployment rate	• **Seasonal cleaning of key tourist areas** • Use cleansing as a job creation sector	• **Tourism promotion and long term job creation** • **Reduced tourist and tourist industry complaints about grime** • **No of casual workers employed (specify age, race and gender)** • Reduce unemployment

Cleansing cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Infrastructure	• **Provide a more efficient refuse service infrastructure** • **Prevent flood damage to infrastructure though gully cleansing**	• **No of households without containerised bins** • **Mascione project** • **Rand damage caused by flooding**	• **Design and distribute a new more efficient bin** • **Fund operation winter**	• **Improve township refuse collection infrastructure** • **No of households with containerised refuse bins** • **Maintain urban infrastructure** *** reduce Rand damage caused by flooding by x percent**
Community and social development	• **Public awareness programmes to the press (**extend this beyond the formal print media to reach poor communities)	• **No of complaints** • Community awareness projects on the dangers of litter and public health hazards	• **Complaints desk and PRO to respond to bad press** • Establish reporting/ complaints mechanism for poor areas without general access to phones • Community education officer to run youth activities and radio programmes in Xhosa and Afrikaans	• **Greater accountability to all the residents of Cape Town** *** improved responses to complaints** • **Promotion of community awareness of issues of litter and refuse.** *** Introduction of education initiatives reaching x people who are unlikely to complain because of lack of access to phones etc.**

9.1.4: Tourism promotion and economic development[59]

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Welfare and subsidies	• **Ensure that all citizens benefit from CCT support of tourism**	• **Rand investment in tourist related developments in township areas compared to the old white area of the CCT**	• Increase investments in tourist related developments in township areas	• **Equity in Council support for benefits of tourism**
Space and environment	• Extension of tourist routes and activities into township areas • Improve poor quality residential neighbourhoods by creating public spaces	• No of tourist visitors to specified township sites • No of privately owned retail and recreational facilities associated with the designated tourist sites	• **The activities are not spelt out but relate generally to the development of tourism and the improved liaison with other tourist promotion agencies**	• **Promote township tourism –** *** Increase the no. of tourist visitors to specified township sites by x** • **Create township based economies** *** Increase the no. of privately owned retail and recreational facilities associated with the designated tourist sites by x**

[59] Activities are not specified in the tourism business plan highlights. The relationship between township tourism and the wider tourist development plan (which is also of importance to the poor who form the bulk of the tourist industries workforce) would presumably emerge from the in-house studies?

Tourism promotion and economic development cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Employment	• **Promote tourism related SMME's** • **Cape Town tourism is tasked with providing information, booking services, and marketing tourist facilities** • Create retail, service and craft jobs within township areas.	• **Unemployment rate** • **No of tourist related SMME's in the CCT** • **No's employed in tourist related SMME's by age, race and gender** • **Value of locally produced crafts produced** • No of locally based tour operators •	• **The activities are not spelt out but relate generally to the development of tourism and the improved liaison with other tourist promotion agencies**	• **Develop jobs based on creative areas such as art and music** *** Number of locally produced CDs selling more than 10 000 copies** • **Promoting tourism as a major growth sector of the CCT economy** *** decrease seasonal variations in tourist spending** *** increase the Rands spent by tourist** *** increase the number of workers employed in tourism related activities** *** increase tourism's growth rate relative to other sectors**
Infrastructure	• **Invest in tourist sites in townships**	• **CCT financial support for township tourist sites in Rands** • **No of places acceptable to tourists to buy refreshments**	• **Prepare in house research on tourism and development (**the nature of these activities are not specified) • Create public well sign posted public transport to tourist sites	

Tourism promotion and economic development cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Community and social development	• Promote local history, music, dance and art culture • Build neighbourhood pride and association • Build community networks through involving diverse interest groups in tourist developments • Create cultural tolerance by exposure to national, regional and international visitors	• No of local museums • No of music/dance/art events in designated zones (may be townships or zones of poverty) • No of people involved in community events e.g. cultural or religious festivals	• Support for local cultural events • Development of after school craft activities in community centres or libraries • Encourage local marketing of areas of interest • Run business development courses for tourist based SMMEs	• Build community pride and self esteem • Promote skills development • Affirm cultural diversity in Cape Town

9.1.5: Business Areas[60]

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Welfare and subsidies	• **Promote the development of business in low income areas**	• **No of formal enterprises in formal selected districts (Mitchell's Plain, Claremont, Athlone, Rylands/Gatesville)** • **No of informal businesses in informal areas (iKapa)**	• **Appoint new staff to co-ordinate crime and grime removal to promote formal business in targeted areas** • **Investment in infrastructure and staff co-ordination in informal trading area of iKapa**	• **Extend services to formal business into historically disadvantaged areas** *** increase crime, traffic, health inspection, litter collection services in BIA until they equal the service levels in the CBD** • **increase size of existing formal enterprises owned by coloureds/Africans/Indians** *** increase number of black businesses worth X by Y** *** increase number of formal enterprises in the selected zones** • **Increase facilities for informal traders iKapa**
Space and environment	• **Co-ordinate law enforcement to promote business**	• **Visual perception of grime** • **No of convictions for illegal trading, littering and fouling** • **No of complaints about illegal trading, litter and fouling**	• **Research survey (**of users, and suppliers of business?) **into causes, nature and desired responses to problems** • **Allocate x Rand to traffic and other identified branches e.g. cleansing**	• **Reduce unfair competition between formal and informal traders in selected mini business district zones of Mitchell's' Plain, Athlone, Claremont, and Rylands/Gaitsville** • **Enforce formal commercial zoning regulations associated with the CBD in historically black commercial nodes of the city**

[60] There is considerable debate in the literature about whether controls on the informal sector are beneficial to the poor. In a City such as Cape Town there are multiple interest groups and the need of constituencies other than the poorest of the poor have also to me met. The approach of the Business Improvement Scheme, while it aims to service historically disadvantaged communities is unlikely to benefit the poorest of the poor. The poverty framework can also be used to ask how the impact of important strategies such as the business improvement initiative can least negatively affect the poor.

Business Areas cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Employment	• **Management of informal trading** • Promote formal job creation by looking after the needs of owners and formal tenants	• **Average number of illegal traders in the areas**	• **Promote formal over informal jobs in designated areas**	
Infrastructure	• **Provision of hard surfaces for informal traders**	• **Square meters of hard surface available for informal traders**	• **Demarcation of areas prohibited for informal trading** • **Provide hard surface area in iKapa**	• **Ensure informal traders are not displaced without suitable alternative options** *** no of traders displaced by hawker prohibited zones relative to the number provided for in hard capped areas** • **Improve public health** *** reduce incidence of food contamination by x**
Community and social development	• **Promote co-ordinated action on behalf of emerging business enterprises** • **Ensure community safety** • **Prevent 'nuisances'** • Ensure that those displaced by Council enforcement have alternative outlets / locations for making a living	• **Crime rates** • **No of complains about parking attendants and illegal traders** • **No of incidents of conflict between formal and informal economic players** • No of displaced illegal traders and 'parking attendants'		

9.1.6 Cash and Billing system[61]

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Welfare and subsidies	• **Develop an indigent policy** • **Increase payment rates by improving the service** • **Increase payment rates** • **Rebates for the elderly** • Tariff structures that favour the poor[62]	• **Non-payment rates (rates, water, electricity)** • **Proportion of household heads above 65 years**	• **Develop targeting strategy and eligibility criteria for vulnerable and needy groups (there are a number of different ways of defining eligibility not just income** • **Introduce pay-up campaign** • **Increase cut offs for electricity and water** • **Increase evictions**	• **Meet constitutional obligation to provide basic services** *** No. of households dependant on indigent support** *** No. of households cut off by income quintile and housing type** *** No. of evictions** • **Prevent leakage of rates relief to those who can afford to pay** *** Increase cut offs, evictions and prosecutions population not-eligible for rates relief (indigent support)**

[61] There are many very important poverty related issues imbedded in this area of CCT activity. Without more detailed knowledge of what some of the proposed actions and the motivation that underpins them it is difficult to know if these are likely to enhance the opportunities of the poor or if these are actions motivated by other considerations (e.g. crime reduction, cost cutting) that may require though to minimise the negative impact on the poor. The complexity of issues makes it likely that the consultants will have misrepresented the Departments intentions in some areas of this table and that further discussion will be required in agreeing on poverty indicators for this area of action.

[62] The issue of the structure of tariffs for basic services is currently under debate at the national level and may have implications for the CCT. The restructuring of tariffs provides one of the most important avenues for cross subsidisation within a city.

Cash and Billing System cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Space and environment	• **Improve location of payment offices** • **Improve infrastructure needed to facilitate payment rates** • **Install pre-payment facilities**[63]	• **No and distribution of payment offices** • No of telephones by income quintile and area • **Proportion of the population on prepaid meters by income quintile**	• **Introduce mobile payment offices to service areas without easy access to phones and internet**	• **Reduce time and money spent getting to payment offices** *** Increase the number of payment offices per 100000 of the population** ***Increase the number of users of mobile payment offices**
Employment	• **Multi-skilling of staff**	• No of languages spoken by front-line staff	• Define appropriate employment criteria • **Staff training**	• **Improve communication between CTC staff and clients** *** PMS indicators disaggregated for gender, income quintiles and housing type**
Infrastructure	• **Establish a billing infrastructure for unbilled areas**	• **No of households without adequate affordable access to payment**	• **Improve telephones**	• **Make payment facilities more convenient** *** improve rate of payments made on time by x** *** reduce**

[63] In the field of energy the desirability and effectiveness of pre-paid meters for the poor has been questioned while in the area of water consumption the constitutionality of pre-payment is in doubt. Policy decisions on these issues within the CCT will affect the poverty-related indicators adopted.

		facilities		**complaints about payment facilities (see PMS)**

Cash and Billing System cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Community and social development	• **Make payment easier by making it more convenient** • Ensure minimum standards of basic services for all	• **Payment levels by area** • **Proportion of payments made by women** • Infant mortality rates • Daily consumption of water by those on indigence support	• Communication strategy to target groups • **Establish one stop shops** • **Extend third party payment facilities** • **Amend times for payment to allow greater access**	• **Increase access to basic services for the poorest of the poor** • **reduce incidence of diseases such as cholera or dysentery related to water quality and access** *** reduce infant mortality**

9.1.7 HIV/AIDS/STD's and TB.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Welfare and subsidies	• **Use of antenatal survey to identify HIV/AIDS**	• **Proportion of women treated in antenatal who test positive for HIV or TB**	• **Subsidised care for vulnerable groups**	• **Monitor infection trends and reduce incidence rates to promote a healthy population**
Space and environment	• Promote public recreational space (HIV/AIDS)			• Improve domestic living conditions (TB)
Employment	• **Improve comprehensive service in line with national policy – e.g. link with employers and provincial and national initiatives**	• **Industries in the CCT with a high proportion of vulnerable groups** • **Productive hours lost to HIV/AIDS and TB ill health**	• **Integrated HIV/AIDS and TB programmes in the workplace**	• **Maintain productivity levels in the workplace** *** Reduce productive hours lost to HIV/AIDS and TB ill health**
Infrastructure	• **Establish special HIV clinics** • Recreational facilities for youth	• **Number of HIV infections by area** • **No of people treated by HIV/AIDS and TB clinics**	• **Provide clinics to areas of need** • **Prevent crowding of health services**	• **Provision of high quality and up to date services for all**

HIV/AIDS/STD's and TB. Cont.

Field of poverty action	Priority action identified in the business plan highlights	Baseline indicators	Activity to be linked to output indicator	Outcome indicators
Community and social development	• **The business plan identifies several areas of commitment directly related to health care or education about HIV/AIDS– see health promotion, training, co-ordination, Council promotion of commitment**	• **Infection rates** • Increased awareness of HIV/AIDS	• **Improve and co-ordination of care** • **Promote programmes to reduce rates of infection**	• **Create a tolerant culture where people are free to seek information and treatment for HIV/AIDS and TB** • Contain the burden imposed by caring for the sick * reduce the number of households with members dependant on home care

9.3 Other priorities in the business plan and poverty indicators

Specific poverty framework indicators have not been provided for all of the areas of priority identified in the business highlights. Some activities do not lend themselves to output indicators and are better monitored under the PMS system alone, other areas (e.g. the muni-SDF) are themselves multi-dimensional activities and require specialist indicators to be developed for inclusion in the poverty framework (see Table 13).

9.3.1 Councillor training

Councillors will certainly require training in the development and use of indicators. A major objective of introducing key performance indicators is to encourage accountability and transparency in the activities of the Council. The development of qualitative dimensions for inclusion in the composite poverty indicators will certainly require both Councillor and community involvement. Also, indicators will need to be continually modified in line with community needs and as Councillors report to their constituencies on the performance of the City indicators will have to be updated so that they remain relevant.

9.3.2. Document planning management system

An efficient planning approval system is as much in the interests of the poor as it is of the rich. Efficient document management not only builds accountable cost-effective government, but will ensure that outstanding revenue is collected. Particularly in poor areas corruption and weak adherence to regulations can jeopardise the cost and quality of development a well-managed document system is most desirable. Indicators of the kind outlined for other activities, such as housing, are clearly not appropriate for this activity. The overall performance management system should, however, include checks to guarantee that all sectors of the community are dealt with in the same way and that delays in applications for lower cost improvements are not made to facilitate rapid progress of high budget high income applications. One useful indicator might be a check on the relative speed of applications of different costs and from different geographical areas of the city to ensure equity of treatment.

9.3.3. Billing and income systems,

Access to an appropriate, convenient and user-friendly system of paying bills is even more important for the poor than it is from the rich. The payment rates and tariff structures for basic services that are imbedded in the billing system lie at the heart of poverty reduction initiatives and should probably be opened up for further debate. At the moment only services that are currently charged for (water, electricity and rates) are addressed. The impact of more stringent policies of cost-recovery among the poorest of the poor may well impact negatively on other areas of good government including the legal requirements implied by the constitution with respect to basic needs and public health. Before finalising the poverty indicators for this branch it is essential that further consultations with affected branches such as environmental health is recommend.

9.3.3. The muni-SDF

Spatial integration of the CCT area is clearly of critical importance in the reduction of poverty. The poverty framework itself includes space/environment as one of the five key areas of action and suggests some activity-related indicators. The muni-MSF as a special project of the city operates across branch activities and will provide an overall framework for future development and investment. The muni-SDF team indicate in their business plan that they plan to integrate their work with other initiatives within the CTC including that of the poverty reduction framework and the zones of poverty identified by Community Development. The muni-SDF team has also indicated that they are willing to develop specialist spatial indicators. Unfortunately there is little international experience in this regard, but the CMC has recently commissioned consultants to develop impact indicators for the MSDF.

9.3.4.Transformation for service delivery

This branch holds ultimate responsibility for ensuring that the Seven Strategic Priorities are achieved. The development of Key Performance Indicators that address those Priorities is a major area of activity to ensure that those goals are met and transformation is achieved. In order to ensure that the poverty reduction priorities of the CCT begin to drive action the 'OD and T' branch will have to ensure that the poverty KPIs are integrated into a broader framework of allocating resources and determining CCT budget priorities. The outcomes based approach suggested here will also have to be integrated into the overall PMS, procurement policies and procedural mechanisms (especially the budget and the IDP) adopted by the CCT. Some indication of the issues embedded in this integration are highlighted in the next section 'where to from here with poverty indicators?'

10 Where to from here?

- Indicators should reflect strategic direction as expressed in the Seven Strategic Priorities and not be allowed to drive the activities of the CCT. It is essential that senior management of the CCT approve the link between the strategic poverty indicators (Table 13) and the Seven Strategic Priorities, as these will become public information against which action of the CCT is judged. This document should be submitted to EXCO for approval.

- Activity Indicators (section 10) should highlight the confluence and divergence of action from the Seven Strategic Priorities at the branch scale. It is important that the correct indicators are adopted and that affected parties agree to the value of the proposed indicators which they will use as targets and which will be used to judge their performance. Branches whose activities fall within the Business Plan Highlights and for whom poverty indicators have been proposed should be asked to review this document.

- In order to achieve the integrated developmental vision implied in the Seven Strategic Priorities the poverty reduction indicators should be integrated into a wider system of information associated with performance management and KPIs. Strategic and activity indicators need to be linked to the development of the proposed PMS for the CCT.

- Poverty reduction cannot be totally effective without growth and should not occur at the expense of sustainable resource management. Specific attention needs to be given to linking the poverty, growth and sustainability dimensions of the responsibilities of the CCT. These components probably need to be integrated into an overall strategic framework and vision so that principles around the relative importance of say growth over sustainability or poverty relative to global competitiveness can be clarified within the CCT.

- If indicators are to become a common language or tool for demonstrating commitment to the Seven Strategic priorities in the CCT then all players must be incorporated into the process. Comparable indicators should ideally be developed at the corporate level, the branch scale and in special projects such as the moving ahead project, the muni-SDF, Agenda 21 and the Safer Cities programme.

- Producing the indicators suggested in this report and that may come out of subsequent indicator projects is going to place a considerable burden on the data and information service facilities of the CCT. Developing and communicating indicators needs to be costed and supported.

•

List of Reference Sources

CMC (1997) Building *Activities in the Cape Metropolitan Region*
CMC (1998) Economic *Trends and Spatial Patterns in the Cape Metropolitan Area: Overview Synthesis Report*

CMC (1998) Economic *Trends and Spatial Patterns in the Cape Metropolitan Area: Statistical Database*

CMC (1998) Moving *Ahead: Cape Metropolitan Transport Plan*

CMC (1998) An *Integrated Development Framework for the Cape Metropolitan Area*

City of Cape Town (1998) Audit *of Service Levels*

UCT Environmental Evaluation Unit (1998) Guideline *for State of the Environment Reporting in the Cape Metropolitan Area*

List of Contacts

Bekker, Simon (US)	-	CMA Migration Study
Benjamen, Gloria (CCT)	-	Building Activities
Botha, Mrs. (CCT)	-	Refuse
Crous, Wilfred (CMC)	-	Transport and Traffic
Davidson, Basil (CMC)	-	Informal Housing and Migration
Downing, Steve (Wesgro)	-	Investment Activity
Early, Colin (CCT)	-	Electricity
Granger, Steve (CMC)	-	Environmental Indicators
Keller, Capt. (SAPS)	-	Crime
Kirkman, Angus (CCT)	-	Billing System
Klopper, Danie (CMC)	-	Environmental Indicators
Mbwana, Robert (CCT)	-	Water Tariffs
Miln, Doug (CMC)	-	Information Services
Parker, Mike (CCT)	-	Rates and Tariffs
Pillay, D (PAWC)	-	Education
Sheppard, Desree (CMC)	-	Building Activities
Van Giendt, Suma (CMC)	-	Building Activities
Wessels, Waynard (CMC)	-	Crime and Justice
Wolpe, Rae (CMC)	-	Economic Data

[1] CSIR Division of Building Technology. 1997. Key Human Settlement Indicators: South African Pilot Project. Pretoria.
[2] Payne, G., Payne, J. and Hyde, M. 1996. 'Refuse of all classes'? Social indicators and social deprivation. http://www.socresonline.org.uk/socresonline/1/1/3.html
[3] World Bank website: http://www.worldbank.org/data/country/adi/adi15-1.pdf
[4] Education Foundation. 1994. *The Education atlas of South Africa.* University of Natal, Durban.
[5] Development Information Centre Department of Information Services. November 1997. Levels of Living in the Cape Metropolitan area.