

# Western Cape Government Provincial Treasury

# Regional Development Profile Central Karoo District

2013

Working paper

To obtain additional information of this document, please contact:

Western Cape Provincial Treasury Local Government Budget Office Private Bag X9165 7 Wale Street Cape Town

tel: +27 21 483 3386 fax: +27 21 483 4680

This publication is available online at <a href="www.westerncape.gov.za">www.westerncape.gov.za</a>

# **Contents**

Intro	oduction		3
1.	Demog	graphics	4
	1.1	Population Size	4
	1.2	Age and Gender Distribution	6
	1.2.1	Age and Gender Distribution of the Central Karoo District	7
	1.2.2	Age Distribution	7
	1.2.3	Gender Distribution	8
	1.2.4	Dependency ratio	8
	1.3	Population Groups	8
2.	Social I	Development and Well-being	10
	2.1	Education and Human Development	10
	2.1.1	Literacy	10
	2.1.2	Educational attainment	11
	2.1.3	Early Childhood Development	12
	2.1.4	Learner enrolment, learner teacher ratio and dropout rates	13
	2.1.5	Access to Further Education and Training Facilities and Media Centres/Libraries	14
	2.1.6	No fee schools	14
	2.1.7	Education outcomes (Matric pass rate)	15
	2.2	Healthcare Services	16
	2.2.1	Healthcare Facilities	16
	2.2.2	HIV AND AIDS Treatment and Care	18
	2.2.3	Child Health	19
	2.2.4	Maternal Health	21
	2.2.5	Community Based Services	23
	2.3	Safety and Security	24
	2.4	Poverty and Inequality	25
	2.4.1	Human Development Index	26
	2.4.2	People Living in Poverty	27
	2.4.3	Indigent Households	29
	2.4.4	Gini coefficient	29
	2.4.5	Poverty Indexes	31

	2.5	Access to Housing	37
	2.5.1	Access to Housing: Western Cape District/City Level Comparison	37
	2.6	Access to Municipal Services	39
	2.6.1	Water	39
	2.6.2	Energy	42
	2.6.3	Sanitation	44
	2.6.4	Refuse Removal	47
3.	Econon	nically active population	49
	3.1	Labour Force	49
	3.1.1	Characteristics of the Unemployed	51
4.	Econon	nic Structure and Performance	52
	4.1	The Central Karoo District Economy	55
	4.2	Current profile – growth & employment trends in a provincial context	56
	4.3	Macro implications and district economic outlook	59
	4.4	Economy: Conclusion Remarks	61
5.	Finance	e and Resource Mobilisation	61
	5.1	National Transfers	61
	5.2	Provincial Transfers	64
6.	Environ	mental Challenges and Status Quo	65
	6.1	Environmental Management	65
	6.1.1	Regional Water Volume and Losses	66
	6.1.2	Water Quality	67
	6.2	Waste Water Treatment	68
	6.3	The current legislation around Water Services Development Plans (WSDPS)	69
	6.4	Integrated Waste Management Plans	70
	6.5	Spatial Development Plan	70
	6.5.1	Background to Built Environment Support Program (BESP)	71
	6.5.2	Spatial Development Plan: Central Karoo Region	73
	6.6	Air Quality Management	73
	6.6.1	Air Quality Plans: Central Karoo District	74
Cau	ıtionary N	lote	75

## Tables

Table 1	Western Cape Population Numbers and Projections	4
Table 2	Total population by ward - Census 2011	6
Table 3	Central Karoo Population by Population Group, 2001 and 2011	9
Table 4	Literacy Rates, 2011 intra-provincial comparison	10
Table 5	Literacy rates across the Central Karoo District municipalities	11
Table 6	Central Karoo Early Childhood Development Facilities	12
Table 7	Central Karoo District Learner enrolment, Learner-teacher ratio and Dropout rate, 2012	13
Table 8	Public Further Education and Training Facilities and Schools with Libraries/ Media Centres in the Central Karoo District, 2012	14
Table 9	Number of no fee schools per municipality in the Central Karoo, 2012	15
Table 10	Education Outcomes – 2011/12 Matric Pass Rates within the Central Karoo District	15
Table 11	Number of Western Cape Healthcare Facilities, 2012	17
Table 12	Central Karoo District Healthcare Facilities, 2012	17
Table 13	HIV and AIDS Prevalence and Care: Western Cape	18
Table 14	HIV and AIDS prevalence and care: Central Karoo District	19
Table 15	Child Health in the Western Cape: Full Immunisation and Malnutrition, 2011/12	20
Table 16	Child Health in the Central Karoo: Full Immunisation and Malnutrition, 2012/13	21
Table 17	Maternal Health in the Western Cape: Mortality, Delivery to women under 18 years and Termination of pregnancy, 2012/13	21
Table 18	Maternal Mortality: Central Karoo District, 2011/12 and 2012/13	22
Table 19	Maternal Health in the Western Cape: Births to women under 18 years	22
Table 20	Maternal Health in the Central Karoo: Births to women under 18 years	22
Table 21	Maternal Health in the Western Cape: Termination of Pregnancy	23
Table 22	Maternal Health in the Central Karoo: Termination of Pregnancy	23
Table 23	Community Based Services: Non-profit Organisation (NPO) Care	24
Table 24	Crime in the Central Karoo: April to March 2003/04 – 2012/13	25
Table 25	Household income Central Karoo District	26

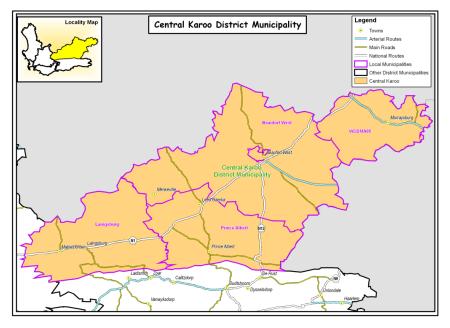
Table 26	HDI 2001, 2007 and 2010 per City/District			
Table 27	HDI, 2001, 2007 and 2010 per municipality			
Table 28	8 Poverty Rate – Percentage of People Living in Poverty, 2001, 2007 and 2010 per City/District			
Table 29	Poverty Rate – Percentage of People Living in Poverty, 2001, 2007 and 2010 per municipality	29		
Table 30	Indigent Households within the Central Karoo Municipalities	29		
Table 31	Gini coefficient 2001, 2007, 2010 per City/District	30		
Table 32	Gini coefficient 2001, 2007, 2010 per municipality	30		
Table 33	Access to Housing in the Central Karoo, 2001 and 2011	38		
Table 34	Accessing housing in the Central Karoo, 2001 and 2011 - Percentage share comparison per municipality	39		
Table 35	Access to Water in the Central Karoo, 2001 and 2011	40		
Table 36	Access to piped water per ward	42		
Table 37	Access to energy per ward	44		
Table 38	Access to Sanitation in the Central Karoo, 2001 and 2011	45		
Table 39	e 39 Access to Sanitation per municipality in the Central Karoo District			
Table 40	Access to sanitation per ward	46		
Table 41	Access to Refuse Removal Services in the Central Karoo, 2001 and 2011	48		
Table 42	Access to refuse removal in the Central Karoo District	48		
Table 43	Access to refuse removal per ward	49		
Table 44	Labour Force Details Central Karoo, 2001 & 2011	50		
Table 45	The Composition of the Western Cape Labour Force across Districts, 2011	50		
Table 46	The Composition of the Cape Labour Force across municipalities, 2011	51		
Table 47	Characteristics of the Unemployed, 2011	51		
Table 48	Western Cape economy sectoral growth and employment: 2000 – 2011	53		
Table 49	Western Cape: Real GDPR Growth Forecast: 2013 - 2017	54		
Table 50	Central Karoo District: Sectoral contribution to recovery growth, 2010 - 2011 & employment creation	56		
Table 51	Central Karoo District economy in provincial perspective: Sectoral composition: 2011			
Table 52	Central Karoo District economy in provincial perspective: real GDPR growth 2000 – 2011	58		

Table 53	Central Karoo District GDPR and employment trends, 2000 – 2011	58		
Table 54	Equitable Share within Central Karoo Region	63		
Table 55	Provincial Transfers	64		
Table 56	Provincial Payments and Estimates in comparison with transfers			
Table 57	Summary of Western Cape Regional System Input Volumes and Non-Revenue Water and Water Losses, 2013	66		
Table 58	Summary of System Input Volume and Non-Revenue Water (NRW) - Central Karoo District Region 2013 - June 2013	67		
Table 59	Blue Drop and Green Drop Performance	68		
Table 60	Spatial Development Plan	72		
Figures				
Figure 1	Central Karoo District Percentage of Western Cape Population – 2001 and 2011	5		
Figure 2	Population distribution across municipalities within Central Karoo District 2001, 2011, 2012 and 2013	6		
Figure 3	Central Karoo Population Pyramid, 2011	7		
Figure 4	Central Karoo population groups, 2001 and 2011	9		
Figure 5	Educational attainment of the Central Karoo population in 2001 and 2011	11		
Figure 6	Poverty Overview – Central Karoo, 1996 – 2010	28		
Figure 7	Access to formal dwellings across the Western Cape, 2011	38		
Figure 8	Access to Water per District 2011	40		
Figure 9	Access to piped water in the Central Karoo District	41		
Figure 10	Census 2001 and 2011 by Energy source for lighting	43		
Figure 11	Energy Sources used for cooking and lighting in the Central Karoo, 2011	43		
Figure 12	Access to sanitation in the Western Cape – District Comparison (2011)	45		
Figure 13	Access to refuse removal by local authority/private company in the Western Cape	47		
Figure 14	Global PMI vs Kagiso PMI vs Western Cape manufacturing production (BER survey)	59		
Figure 15	Central Karoo District economy: forecast real GDPR growth by broad sector: 2012 - 2017	60		
Figure 16	Equitable share distribution in the Western Cape	62		
Figure 17	Municipal Infrastructure Grant within the Central Karoo Region	63		

# Maps

Map 1	Human Development Index	27
Мар 2	Gini coefficient in Western Cape 2010	30
Мар 3	Household Services Poverty Index: Western Cape Local Municipalities	31
Мар 4	Household Services Poverty Index: Inter-district and Metro Comparison	32
Мар 5	Household Services Poverty Index: Central Karoo District Local Municipalities	32
Мар 6	Housing Poverty Index: Western Cape Local Municipalities	33
Мар 7	Housing Poverty Index: Inter-District and Metro Comparison	34
Мар 8	Housing Poverty Index: Central Karoo District Local Municipalities	34
Мар 9	Education Poverty Index: Inter-district and Metro Comparison	35
Map 10	Education Poverty Index: Central Karoo local municipalities	35
Map 11	Economic Poverty Index: Western Cape Local Municipalities	36
Map 12	Socio-economic Poverty Index: Inter-district and Metro Comparison	36
Мар 13	Socio-economic Poverty Index: Central Karoo District Local Municipalities	37
Map 14	WSDP Review Status	69
Map 15	Spatial Development Plan	71

# **Central Karoo District**



#### List of towns

Beaufort West Laingsburg Prince Albert

### Central Karoo at a glance

Population		2001	2011
Central Karoo District		60 482	71 011
Western Cape		4 524 331	5 822 734
Central Karoo District as percentage of Western Cape		1.33%	1.21%
Percentage share		2001	2011
African		12.0%	12.7%
Coloured		76.8%	76.15%
Indian/Asian		0.11%	0.42%
White		11%	10.13%
Other			
Socio-economic indicators			
Education			2011
Literacy rate			73.4%
Health			
Number of Primary Health Care Facilities 2012: 0 Comr Centres, 1 Community Day Centre, 8 Clinics, 3 Satellite clin clinics; 4 district hospitals.			
	Jun-11	Jun-12	Jun-13
Immunisation rate	80.3%	77%	899
Anti-retroviral patient load (HIV/AIDS)	674	715	94
Crime (numbers)	2010/11	2011/12	2012/13
Murder	37	29	27
Total sexual crimes	134	164	158
Drug related crimes	898	1 076	1 05
Poverty levels	2001	2007	2013
Poverty rate (percentage of people living in poverty)	38.7%	34.0%	32.5%
Number of indigent households			6 103
Unemployment rate			201
			22.7%
Access to housing and municipal services (Percentage share of households with access)		2001	201
Formal dwellings		77.9%	91.19
Informal dwellings		14.7%	35.79
Electricity for lighting		72.7%	82.69
Flush toilets (sewerage system/with septic tank		71.7%	80.09
Access to Piped water		83.7%	88.97
Refuse removal (by local authority at least once a week)		81.0%	86.0%
Economy			
•			201
GDP-R (R million)			201

#### Introduction

Regional profiles provide Western Cape municipalities with data and information which may assist in planning, budgeting and the prioritisation of municipal services. It is acknowledged that municipalities across the Western Cape have different capacities and therefore will use the information own needs.

The areas covered in this profile include information on: demographics, education, health, crime, poverty, housing, municipal services, labour force, economy, finance and resource mobilisation and environmental management. The 2013 Profile also features information on early childhood development, social grants and poverty indexes, bulk infrastructure as well as appendices on ward level data. The indicators reflect the socio-economic reality of municipalities. As such valuable insight can be gained as to the developmental challenges faced by communities residing within a specific geographical area.

This profile uses data<sup>1</sup>, primarily sourced from Statistics South Africa, administrative data from sector departments, the Municipal Review and Outlook (MERO) and Quantec. The data sourced from sector departments are the most recent that is available. The latest survey data available at municipal level from Statistics South Africa 2011 Census; comparisons are also made with the 2001 Census.

The format of the profile allows for easy readability with data being displayed in table or figures, followed by the relevant trend analysis.

The information contained in this profile highlights information for the Central Karoo District in relation to the Western Cape.

-

A caveat to the data used to inform the analysis contained in this profile has been attached in the form of a cautionary note at the back of the profile.

#### 1. Demographics

The demographics of a population refer to selected population characteristics such as age, gender, race and income level. Demographic characteristics in a municipal service delivery environment, determines the extent and quantum of services to be delivered. Population characteristics inform key policy decisions, e.g. household income for example determines a household's inclusion or exclusion from certain benefits, e.g. if a family's income is less than R3 500 per month, it qualifies for state provided housing opportunities. Furthermore income levels also qualify households to classify as indigent and therefore access to free basic services (water, electricity) benefits as stipulated by the Indigent Policy of municipalities.

A thorough understanding of population changes is necessary to ensure adequate planning based on available information.

This section outlines the gender, age and racial (population group) distribution of the population of the Central Karoo District. It provides a gauge of anticipated population growth trends since 2001, the gender and age distribution of the population and the racial distribution of the population.

#### 1.1 Population Size

Population size provides an indication of the volume of demand for government services in a particular geographical space. This demand expresses the needs of communities for infrastructural and social services, including water, sanitation, electricity, housing and hospitals. It also serves as a planning measure to assist budget planners in matching available resources to the relative demand for services.

Table 1 below displays the population across the different regions in the Western Cape Province. The 2011 Census estimated the population size of the Western Cape at 5.8 million people, of which 71011 people (1.22 per cent) resides within the Central Karoo District. The most populous regions in 2011 are the City of Cape Town with 3.7 million people (64 per cent), followed by Cape Winelands with 787 490 people (14 per cent).

Table 1 Western Cape Population Numbers and Projections

Population numbers and Projections	Stats SA 2001 Census	Stats SA 2011 Census	Quantec 2012 Projections	Quantec 2013 Projections
City of Cape Town	2 893 247	3 740 026	3 750 785	3 823 068
West Coast	282 673	391 766	401 710	409 930
Cape Winelands	629 490	787 490	814 061	828 902
Overberg	203 520	258 176	267 142	272 195
Eden	454 919	574 265	595 857	607 161
Central Karoo	60 482	71 011	74 462	75 671
Western Cape	4 524 331	5 822 734	5 904 017	6 016 927

Source: Statistics South Africa 2001, Census 2011 and 2013 Quantec projections

Compared to other districts (2011 comparison), Central Karoo District have the second smallest population after Overberg with 71 011 people.

The Quantec projections estimates the Western Cape Population to be at 6.0 million people; whilst the Central Karoo District Population is projected to be at 75 671 people in 2013. This reflects an annual growth rate of 3.2 per cent between 2011 and 2013.

Figure 1 shows a comparison between 2001 and 2011 Census, population distribution across the different regions in the Western Cape Province.

70.0% % Western Cape population 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% City of Cape Cape West Coast Overberg Eden Central Karoo Winelands Town 6.2% 4.5% 1.3% ■ 2001 63.9% 13.9% 10.1% 2 011 64.2% 6.7% 4.4% 9.9% 1.2% 13.5% 2 013 63.5% 6.8% 4.5% 1.3% 13.8% 10.1%

Figure 1 Central Karoo District Percentage of Western Cape Population – 2001 and 2011

Source: Statistics South Africa Census 2001, Census 2011 and Quantec projections

Naturally, the City of Cape Town accounts for almost two thirds of the Western Cape population in both 2001 and 2011 with 63.9 per cent in 2001 and 64.2 per cent in 2011. The Central Karoo's share of the Western Cape population has contracted from 1.3 per cent to 1.2 per cent between 2001 and 2011. The 2013 Quantec population projections indicate that the Central Karoo population will marginally increase to 1.3 per cent of the Western Cape population in 2013.

60 000 50 000 40 000 30 000 20 000 10 000 0 Prince Albert Beaufort West Laingsburg 2001 6 679 10 518 37 110 2011 8 289 13 136 49 586 2012 8 631 13 593 52 238 2013 8 783 13 808 53 080

Figure 2 Population distribution across municipalities within Central Karoo District 2001, 2011, 2012 and 2013

Source: Stats SA, Census 2001, Census 2011 and Quantec 2012, 2013 projections

Beaufort West remains the most populous municipal area in the Central Karoo region with 49 586 people in 2011 and projected to grow to 53 080 at 7 per cent in 2013. Prince Albert follows Beaufort West with 13 136 people in 2011 growing to 13 808 in 2013. Laingsburg has the smallest population in the Central Karoo region at 8 289 people in 2011 and is estimated to grow to 8 783 in 2013.

Table 2 Total population by ward - Census 2011

Laingsburg		Prin	Prince Albert		ıfort West
Wards	Persons	Wards	Persons	Wards	Persons
Ward 1	2 830	Ward 1	3 521	Ward 1	7 454
Ward 2	927	Ward 2	2 636	Ward 2	6 519
Ward 3	360	Ward 3	2 647	Ward 3	7 280
Ward 4	4 172	Ward 4	4 332	Ward 4	5 348
				Ward 5	7 103
				Ward 6	4 921
				Ward 7	10 962
TOTAL	8 289		13 136		49 587

Source: Statistics South Africa Census 2011

Table 2 indicates that the biggest concentration of people is found in Ward 4 in Laingsburg and Prince Albert respectively and in Ward 7 in Beaufort West.

#### 1.2 Age and Gender Distribution

The age distribution of a population provides a crucial guide for differentiated policy options as it can assist in targeting resources more appropriately toward the relevant age groups. The 2011 Census results indicate that 50.9 per cent of the Western Cape population is female and 49.1 per cent male. Life expectancy nationally is estimated to have increased to 54.9 years for males and 59.1 years for females. This trend will

contribute to an increase amongst the older age cohorts (Statistics South Africa, 2011 estimates).

#### 1.2.1 Age and Gender Distribution of the Central Karoo District

The population pyramid for the different districts in the Western Cape tend to have wide base that gradually narrows in the upper age cohorts. The wide base at the bottom pyramid indicates high fertility rates. The pyramid narrows toward the top which indicates a higher death rate amongst the older generations than among the younger people. This trend is consistent for the Central Karoo District population pyramids (2001 & 2011) presented below.

**Central Karoo District** 2011 80 - 84 70 - 74 60 - 64 50 - 54 40 - 44 30 - 34 20 - 24 10 - 14 0 - 4 -6000 -4000 -2000 0 2000 4000 6000 ■Male ■ Female

Figure 3 Central Karoo Population Pyramid, 2011

Source: Stats SA Census 2011

In terms of the population pyramid in Figure 3 above, in 2011 there was 1 477 more females in the Central Karoo District than males. According to the pyramid the majority of the population falls within the economically active group from 15 – 64.

#### 1.2.2 Age Distribution

The population can be classified into three main groups namely the children (0 - 14 years); the economically active population (15 - 64 years) and persons aged 65 years and older.

In 2001, the Central Karoo's population composition was as follows: children at 32.7 per cent, the economically active population at 61.4 per cent and the elderly at 6 per cent. In 2011, the Central Karoo's population composition was as follows: children at 30.5 per cent, the economically active population at 63.3 per cent and the elderly at 6.2 per cent.

When comparing the shape of the 2001 and 2011 population pyramids, population increases are particularly noticeable at very young ages, from 0 to 9 years, as well as in the working age population between 15 and 49 years. This will have particular implications for the provision of facilities and services related to children and child care; whereas the growth in the labour force will also have a direct impact on a greater need for employment opportunities.

#### 1.2.3 Gender Distribution

Figure 3 also illustrate changes in the District's population with respect to the gender distribution. The gender ratio changed slightly in 2011 compared with 2001; for every 100 females there were 99 males in 2001, this ratio decreasing to 96 in 2011. Central Karoo's population had more females than males in both 2001 and 2011. This changes in the age cohorts 15 to 24 and 30 to 34 where there appears to be an increase in the male population. Within the elderly groups, the gap between men as compared to women widens to a ratio of 40 per cent men as opposed to 60 per cent women on average. This decline in the number of men could be attributed to economic migratory factors or mortality amongst men.

#### 1.2.4 Dependency ratio

The dependency ratio relates to the number of children (0 - 14 years old) and older persons (65 years or over) to the working-age population (15 - 64 years old). The child dependency ratio for the Central Karoo based on the 2011 Census is 48.20 per cent and the aged dependency ratio during the same period is 9.7 per cent, resulting in a total dependency ratio of 57.9 per cent. This highlights the extent of support that the Central Karoo needs to take into consideration when planning service delivery. For the province as a whole, the total dependency ratio is slightly lower at 44.9 per cent.

#### 1.3 Population Groups

The historical and emerging South African context has particular relevance for how municipal services are packaged in order to prevent perpetuation of previous policy considerations. Migration patterns, in turn have implications for current and future demand for municipal services. In addition, population disaggregation provides insights into the service levels of the various racial groups to the employment opportunities and government services. These dynamics hold implications for government planning, including the delivery of education, health, housing and basic services.

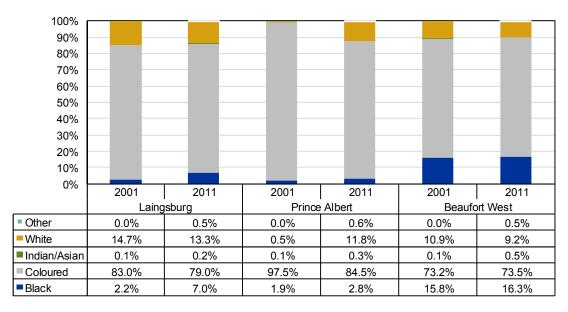
Table 3 Central Karoo Population by Population Group, 2001 and 2011

Population Group	2001	Percentage of Population 2001	2011	Percentage of Population 2011	Average Annual Growth rate 2001 - 2011 %
African	7 280	12.0	9 045	12.7%	3.7%
Coloured	46 474	76.8	54 076	76.2%	2.6%
Indian or Asian	72	0.1	300	0.4%	26.9%
White	6 658	11.0	7 197	10.1%	1.3%
Other			393	0.6%	
Total	60 484	100.0	71 011	100.0%	

Source: Stats SA Census 2001 and 2011

The proportions of the population groups in the Central Karoo remain fairly consistent between 2001 and 2011. Coloureds represent the majority of the population at 76.2 per cent, followed by Africans which represent 12.7 per cent, White citizens constitute 10.1 per cent and Indians constitute 0.4 per cent of the Central Karoo population. A total number of 393 people (0.6 per cent) were counted in the 2011 Census as other (an assumption are made that it could not be established which population groups these people belonged to).

Figure 4 Central Karoo population groups, 2001 and 2011



Source: Statistics South Africa Census 2001 and Community Survey 2011

The Coloured population group are the dominant population group across the three municipalities within Central Karoo but there were notable shifts in the different municipal population compositions between the two latest Censuses. The Coloured population group share dropped significantly in Prince Albert from 97.5 to 84.5 per cent between 2001 and 2011. Laingsburg experienced a rise in the African Black population share from 2.2 to 7 per cent between 2001 and 2011. The composition of the population groups remained fairly constant in Beaufort West between 2001 and 2011.

#### 2. Social Development and Well-being

#### 2.1 Education and Human Development

Education and training improves access to employment opportunities and helps to sustain and accelerate overall development. It expands the range of options from which a person may choose to create opportunities for a fulfilling life. The level of education of the population in a region influences amongst others its welfare through indirect positive effects on health and life expectancy.

Selected indicators affecting the education and skill levels in communities discussed here are the learner enrolment and learner teacher ratio, literacy rate and access to training facilities, education outcomes and learner dropout rates in the municipal area. An indication of the number of no fee schools in a municipal area is also included; this gives a sense of the extent to which the Department of Education has identified and prioritised support to households who are unable to make a contribution towards education costs.

#### 2.1.1 Literacy

Literacy is used as a concept to indicate a minimum education level attained; a simple definition of literacy is the ability to read and write, which has been translated into the successful completion of a minimum of 7 years of formal education. Since most learners start school at the age of 7 years, the literacy rate is calculated as the proportion of those 14 years and older who have successfully completed a minimum of 7 years of formal education. Literacy skills are important for several reasons. On an individual level, literacy has been linked to physical health, the ability to access learning opportunities, social and democratic participation, and obtaining higher income employment. In fact, it has been demonstrated that children's literacy levels can predict high school completion and post-secondary participation. At the societal level, employment and reduction in crime rates have positive implications for the local economy, in reduced reliance on welfare and reduced expenditure in the criminal justice system. Nationally, the demand for, and the cost of, providing public goods and services including health and education, would be much reduced if literacy levels in in the Central Karoo District were higher overall.

Table 4 Literacy Rates, 2011 intra-provincial comparison

Municipal area	Literacy rate 2011
City of Cape Town	90.5%
West Coast	79.1%
Cape Winelands	81.7%
Overberg	81.1%
Eden	82.6%
Central Karoo	73.4%
Western Cape	87.2%

Source: Western Cape Department of Social Development, 2013

Table 4 above depicts the intra-provincial comparison for the Metro and the respective districts in the Western Cape which is based on Census 2011. The City of Cape Town has the highest literacy rate in the province at 90.5 per cent; followed by the Eden District with a literacy rate of 82.6 per cent whilst Central Karoo District has the lowest literacy rate of 73.4 per cent.

Table 5 Literacy rates across the Central Karoo District municipalities

Central Karoo	Literacy rate 2011
Western Cape	87.17%
WC053: Beaufort West	74.90%
DC5: Central Karoo	73.35%
WC051: Laingsburg	69.97%
WC052: Prince Albert	69.89%

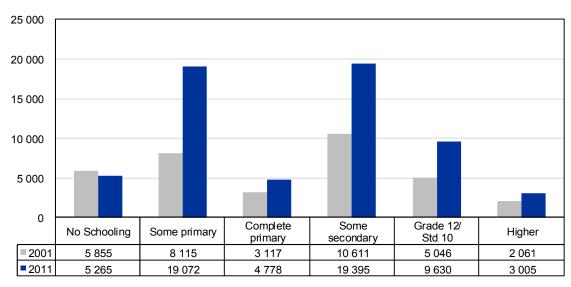
Source: 2011 Statistics South Africa and Western Cape Department of Social Development, 2013

As shown in Table 5, Beaufort West Municipality has the highest literate population in Central Karoo in 2011 at 74.9 per cent, followed by Laingsburg Municipality at 69.97 and Prince Albert Municipality at 69.89 per cent.

#### 2.1.2 Educational attainment

An advantage of having access to the educational attainment levels of the communities of a municipal area is that it allows the WCED and the municipality to proactively plan services by taking into account the needs as well as the developmental potential of the region. Municipalities may further use the information of the education profiles to attract businesses while providing specific motivation for the retention of specific types of businesses and industries already in the municipal area. It further equips the municipality with the relevant information in making presentations to businesses, industries and satellite offices where decision on the possible location is a consideration.

Figure 5 Educational attainment of the Central Karoo population in 2001 and 2011



Source: Stats SA, Census 2001 and Census 2011

The number of individuals that have not received any schooling decreased from with 590 from 5 855 in 2001 to 5 265 in 2011. The number of individuals that completed some primary schooling has increased with 10 957 from 2001 to 2011. This trend are mirrored in the case of the number of individuals that completed some secondary schooling reflecting an increase of 8 784. The number of individuals that completed Grade 12 has increased significantly between 2001 and 2011 by 8 784 from 10 611 to 19 395. The number of individuals with higher qualifications than Grade 12 also increased from 2 061 to 3 005 between Census 2001 and 2011. The overall observation is that the educational levels of the communities in Central Karoo have increased considerably between 2001 and 2011.

#### 2.1.3 Early Childhood Development

The Western Cape Government has prioritised investment in Early Childhood Development (ECD) as:

- A vehicle for early intervention and child protection;
- The basis for improving school outcomes and laying the foundation for lifelong learning;
- A means to reduce childhood poverty; and
- An opportunity to develop the skills and competencies required for economic opportunities in later life.

The vision is that:

In a world fit for children, the outcomes for every child should be:

"...A nurturing, caring and safe environment to survive, be physically healthy, mentally alert, emotionally secure, socially competent and be able to learn." (United Nations, A World Fit for Children 2002)

The mission is:

To facilitate, measure and monitor the provision of a range of ECD services and programmes that include a developmentally appropriate curriculum, knowledgeable and trained staff and educators, and support the health, nutrition, physical and social wellbeing of children.

To reach the goal:

To ensure that children have opportunities to access a range of quality, developmentally appropriate ECD programmes that promote their care, protection and development.

Table 6 Central Karoo Early Childhood Development Facilities

Region	Area	Number of ECD facilities funded	Number of children accessing ECD services in funded facilities
Central Karoo	Beaufort West	17	1 666

Source: Department of Social Development, 2013

Early childhood development is increasingly being put on the agenda for children's rights. Ensuring the healthy cognitive, social and emotional development of young children merits the highest priority of every responsible government, organisation, community, family and individual for the sake of raising healthy children worldwide. Reaching children in a holistic manner and incorporating health, nutrition, water and sanitation, education and interventions that support their full development is crucial.

According to Table 6 above, there are 17 funded Early Childhood Development Centres servicing 1 666 children in Beaufort West. Early childhood development programmes target children between the ages of 0 and 4 years and in terms of the region's demographics there were 7 678 children between 0 and 4 recorded in the Census 2011 for Central Karoo District.

#### 2.1.4 Learner enrolment, learner teacher ratio and dropout rates

Population dynamics, which include knowledge of the current population profile and projected learner growth, provide a basis for sound education planning. Knowing the learner enrolment numbers of a municipality enables the Western Cape Education Department (WCED) to determine the level of demands placed on schools for the current year as well as anticipated demands for future years. Having a sense of the exit points allows the WCED to plan more effectively with respect to Further Education and Training (FET).

This information should further be used by local government and business partners in the region to assess the current and potential skills base in a region. Learners in a farming area for example may be encouraged through various support initiatives such as learnerships, apprenticeships and bursaries to consider agriculture related studies, often offered at FET colleges, the Department of Agriculture (through various diploma courses) and tertiary studies at universities. These are often done in an effort to retain skills in the region or to develop the potential of the people in this area. One area where challenges exist is to ensure that sufficient technical curricula exists, particularly those of engineers, agricultural extension officers and various categories of artisan training are available within municipal areas.

The learner teacher ratio is very important, because it is closely related to the amount of money spent per child. It also has an impact on the education outcomes.

Table 7 Central Karoo District Learner enrolment, Learner-teacher ratio and Dropout rate, 2012

	enro	urner Iment 2 + LSEN)	Aver Lear teache	ner	Average Drop out rate	Drop % in FET phase	facili Num schoo librarie	cation ities - ber of Is with s/media tres
Central Karoo District	2012	2013	2012	2013	2012	2013	2012	2013
Beaufort West	10 710	10 688	30.8%	33.0%	41.0%	43.1%	17	19
Prince Albert	2 126	2 154	29.8%	32.4%	39.2%	49.4%	5	5
Laingsburg	1 178	1 221	26.0%	34.5%	65.9%	59.3%	4	4

Source: Western Cape Department of Education, 2013

Table 7 indicates that learner enrolment decreased in Beaufort West from 10 710 in 2012 to 10 688 in 2013. Learner enrolment has increased in both Prince Albert with 28 and Laingsburg with 43. The learner teacher ratio has increased overall in the Central Karoo region from 2012 to 2013. The Central Karoo region reflects high FET drop-out rates in 2013 of 43.1 per cent in Beaufort West, 49.4 per cent in Prince Albert and 59.3 per cent in Laingsburg. In terms of the drop in FET phase data, the enrolment for Grade 10 of 2011 is compared with the Grade 12 enrolment of 2013.

#### 2.1.5 Access to Further Education and Training Facilities and Media Centres/ Libraries

Access to higher and further education and training institutions is essential to equip individuals to access employment opportunities. According to the Department of Education, the Central Karoo District jurisdiction is being served by the South Cape College.

Table 8 Public Further Education and Training Facilities and Schools with Libraries/
Media Centres in the Central Karoo District, 2012

Education facilities - Number of
schools with libraries/media centres

Central Karoo District	2012	2013
Beaufort West	17	19
Prince Albert	5	5
Laingsburg	4	4

Source: Western Cape Education Department, 2013

School libraries and media centres make a difference to student achievements and it has a positive impact on students and on learning. We live in the 'information age', and therefore, information literacy has become the universal currency, the single common denominator required for success at any stage of life. This is especially true for children who, now more than ever, must be equipped to access, use, and evaluate information competently in both print and electronic formats. According to Table 8 the number of school libraries and media centres has remained unchanged in Prince Albert and Laingsburg but changed from 17 to 19 from 2012 to 2013 in Beaufort West.

#### 2.1.6 No fee schools

No fee schools<sup>2</sup> make provision for learners who live in low income communities where the majority of learners are unable to make a financial contribution towards the cost of education. No fee school status ensures extra State support to schools where contributions in the form of school fees are not possible.

The three poverty indicators utilised for this purpose are income, unemployment rates and the level of education of the community, which are weighted to assign a poverty score for the community and the school.

<sup>&</sup>lt;sup>2</sup>2011 SNAP Survey, Public Ordinary Schools

Table 9 Number of no fee schools per municipality in the Central Karoo, 2012

Municipality	2012	2013
Beaufort West	16	16
Laingsburg	3	3
Prince Albert	4	4

Source: Western Cape Education Department, 2013

The no-fee schools policy introduced in 2007 by government were designed to make education affordable for poor children. The No-fee policy ranks schools according to the level of poverty in a specific area. The number of no fee schools has remained unchanged in Beaufort West (16), Laingsburg (3) and Prince Albert (4) from 2012 to 2013.

#### 2.1.7 Education outcomes (Matric pass rate)

Education remains one of the key avenues through which the State is involved in the economy. In preparing individuals for future engagement in the labour market, policy choices and decisions in the sphere of education play a critical role in determining the extent to which future economic and poverty reduction plans can be realised.

The impact of the education and training system on the lives of the general population is an important barometer of the contribution to development, and human resource development in particular, that the South African education and training system has achieved. The matric results are among the most important indicators of the performance of the schooling system.

Table 10 Education Outcomes – 2011/12 Matric Pass Rates within the Central Karoo District

Municipality	2011	2012
Beaufort West	86.9	88.0
Laingsburg	97.9	90.9
Prince Albert	89.5	89.1

Source: Western Cape Education Department, 2013

During 2011 Matric examination, the schools in the Matric pass rates within a specific area provides an indication of the number of people that are able to enter the job market or proceed with higher education. Laingsburg Municipal Area achieved the highest pass rate at 90.9 per cent followed by Prince Albert with 89.1 per cent and Beaufort West with 88.0 per cent. The matric results improved from 86.9 per cent to 88 per cent in Beaufort West from 2011 to 2012 but regressed from 97.9 per cent to 90.9 per cent in Laingsburg and 89.5 per cent to 89.1 per cent in Prince Albert. The overall pass rate for the Western Cape was 82.9 per cent in 2011 and 82.8 per cent in 2012.

#### 2.2 Healthcare Services

Good health is vital to achieving and maintaining a high quality of life. A diverse range of factors play a role in ensuring the good health of communities and those diseases, especially preventable and contagious/communicable ones, are kept at bay. Some of the factors include lifestyle features that also depend on the provision of high quality municipal services, such as clean water and sanitation. It is the function of healthcare services not only to restore bad health, but also to prevent communities from contracting preventable diseases.

In September 2000, 191 United Nations member states signed the United Nations Millennium Declaration that commits world leaders to combat poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. The eight Millennium Development Goals (MDGs) are derived from this declaration, and although they are all interdependent, three are specifically focused on achieving improved health outcomes; these are to reduce child mortality, to improve maternal health and to combat HIV and AIDS, malaria and other diseases.

The Western Cape Provincial Strategic Objective 4: Increasing Wellness has also identified a number of these factors identified in the MDGs as key indicators of wellness; these include maternal mortality, child mortality and HIV and TB incidence.

This section on healthcare services focuses on selected health outcomes and evaluates the ability of the healthcare system to deal with these pertinent issues. Some of the key health indicators, identified also through the MDGs as well as the Province's Strategic Objective 4: Increasing Wellness will also be discussed below.

Although healthcare is provided by both public and private institutions, information provided by the Department of Health, as detailed in this section, pertains only to public sector healthcare institutions. Any privately provided facilities or services are not reflected in the information below.

#### 2.2.1 Healthcare Facilities

Access to healthcare facilities is directly dependent on the number and spread of healthcare facilities and healthcare staff within a geographic space. South Africa's healthcare system is geared in such a way that people have to move from primary, to secondary and tertiary levels of healthcare. The first point of contact would be at the primary healthcare level. Primary healthcare facilities include Community Health Centres (CHCs), Community Day Centres (CDCs) and Clinics, including satellite and mobile clinics.

Table 11 Number of Western Cape Healthcare Facilities, 2012

List of facilities 2013	Community Health Centres	Community Day Centres	Clinics	Satelite Clinics			Healthcare Facilities* - Fixed, satelite and mobile clinics,				egion: ospital			
						2013	2012	2011	2013	2012	2011	2013	2012	2011
City of Cape Town	9	37	82	17	4	149	149	159	9	9	9	2	5	5
West Coast District	0	1	26	20	20	67	67	69	7	7	7	0	0	0
Cape Winelands District	0	6	42	6	28	82	82	84	4	4	4	2	2	2
Overberg District	0	1	22	7	14	44	44	47	4	4	4	0	0	0
Eden District	0	5	33	12	21	71	71	76	6	6	6	1	1	1
Central Karo o District	0	1	8	3	10	22	22	20	4	4	4	0	0	0
Western Cape	9	51	213	65	97	435	435	455	34	34	34	5	8	8

<sup>\*</sup> Information for 2010 and 2011 from 2010/11 and 2011/12 Annual Performance Plans Source: Western Cape Department of Health Annual Performance Plan 2012/13

The Central Karoo District has 1 Community Day Centre, 8 clinics with 3 satellite and 10 mobile clinics. In addition hereto it also has 4 district hospitals. The Central Karoo District has the lowest number of Healthcare facilities of all the districts in the Western Cape, but exceeds the requirements of the World Health Organisation guidelines of 10 000 people per facility.

Table 12 Central Karoo District Healthcare Facilities, 2012

List of facilities 2013	Community Health Centres	Community Day Centres	Clinics	Satelite Clinics		Total Primary Healthcare Facilities* - Fixed, satelite and mobile clinics, CHCs, CDCs			Distric Sspita			egion spita		
						2013	2012	2011	2013	2012	2011	2013	2012	2011
Laingsburg	0	0	1	1	1	3	3	3	1	1	1	0	0	0
Prince Albert	0	0	2	1	2	5	5	5	1	1	1	0	0	0
Beaufort West	0	1	5	1	7	14	14	10	2	2	1	0	0	0
Central Karoo DM A**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	n/a	n/a	1	n/a	n/a	0
Central Karoo District	0	1	8	3	10	22	22	20	4	4	4	0	0	0

<sup>\*</sup> Information for 2010 and 2011 from 2010/11 and 2011/12 Annual Performance Plans

Source: Western Cape Department of Health 2012/13

Within the Central Karoo District there appears to be an even spread of facilities given the demographics of individual municipalities. Beaufort West has the majority of fixed/permanent structures accounting for 5 clinics, 1 satellite clinic and 7 mobile clinics respectively. Laingsburg has the least fixed/permanent structures accounting for 1 clinic, 1 satellite clinic, 1 mobile clinic and 1 district hospital respectively.

<sup>\*\*</sup> In 2012/13, West Coast DMA included in Matzikama Local Municipality, Cape Winelands DMA included in Witzenberg Municipality, Central Karoo DMA included in Beaufort West Local Municipality.

#### 2.2.2 HIV AND AIDS Treatment and Care

According to the 2009 National HIV Survey the estimated HIV prevalence for the Western Cape was 16.9 per cent (CI 95%: 13.8 – 20.5%). The weighted Provincial Survey estimate from the larger sub-district survey was 16.8 per cent (95% CI: 16-17.7%). The highest HIV prevalence estimates remain amongst the age groups of 25 - 29 and 30 - 34 years. (Department of Health, Annual Performance Plan 2011/12: 18)

The information presented here shows how different health districts in the Western Cape have responded to the healthcare need with respect to HIV and AIDS treatment and care. Although treatment and care is essential in managing the disease, in the case of HIV and AIDS the need and importance of preventative care must be emphasised, especially since to date, there is still no known cure. In preventative care, the department is planning to distribute 122 million male and 1 million female condoms and deliver on-going campaigns to encourage the practice of safe sex. (Department of Health, Annual Performance Plan 2011/12: 8)

Concurrent HIV infection is the biggest risk factor for TB.

Table 13 HIV and AIDS Prevalence and Care: Western Cape

City/Districts	Number of Anti- Retroviral Treatment (ART) Sites 2011		Anti- Retroviral Treatment	ART Patient Load 2011*	ART Patient Load 2012*	ART Patient Load 2013*
City of Cape Town	61	64	66	75 652	85 791	99 223
West Coast District	17	28	36	3 205	3547	4 561
Cape Winelands District	23	31	40	9 750	11 830	14 170
Overberg District	6	17	17	3 259	4253	4 907
Eden District	23	34	49	7 847	9 397	10 402
Central Karoo District	3	3	7	674	715	949
Western Cape	133	177	215	100 387	115 533	134 212

<sup>\*</sup> Patient load at June 2011 and 2012 at end June; at end March 2013 Source: Western Cape Department of Health, 2011, 2012 and 2013

At the end of the June 2013, the Province highlighted that it has more than 215 antiretroviral treatment (ART) sites across the Western Cape, up from 177 anti-retroviral sites reported during June 2012. The treatment of HIV and AIDS are receiving more and more attention from government in order to ensure healthier communities. The Western Cape also provides anti-retroviral treatment to over 134 212 persons as at the end of June 2013. The City of Cape Town has registered the highest number of antiretroviral sites of 66 with a total number of 99 223 persons currently on the antiretroviral treatment. The Cape Winelands and Eden District Municipalities has the second highest number of anti-retroviral sites (more than 40) with a 2013 patient load of 11 830 in Cape Winelands and 9 397 in Eden. The ART patient load has increased over all districts with 16.16 per cent from 2012 to 2013.

Table 14 HIV and AIDS prevalence and care: Central Karoo District

	Anti- Retroviral Treatment	Number of Anti- Retroviral Treatment (ART) Sites June 2012	Anti- Retroviral Treatment	ART Patient Load 2011*	ART Patient Load 2012*	ART Patient Load 2013*
Laingsburg Local Municipality	1	1	1	52	62	78
Prince Albert Local Municipality	1	1	2	80	61	131
Beaufort West Local Municipality	1	1	4	542	592	740
Central Karoo District	3	3	7	674	715	949

<sup>\*</sup> Patient load at June 2011 and 2012 at end June; at end March 2013 Source: Western Cape Department of Health, 2011, 2012 and 2013

Table 14 demonstrates the number of patients that are on the anti-retroviral treatment across the Central Karoo District Municipality.

Central Karoo District has a total 949 patients on anti-retroviral treatment, with 7 dedicated Anti-Retroviral treatment sites across the District. Beaufort West has the highest patient load with 740 patients in the District with 4 treatment facilities and Prince Albert has the second highest patient load with 131 patients with 2 treatment facilities as at the end of June 2013. Laingsburg has the lowest patient of load of 78 and with one facility.

#### 2.2.3 Child Health

Children, infants and especially new-born babies are particularly vulnerable to malnutrition and the contraction of infectious diseases, many of which are preventable or can be treated. The prevention of mother-to-child HIV transmission has already been discussed above.

Two other indicators of child health will be discussed here, namely, immunisation and malnutrition. Immunisation protects both adults and children against preventable infectious diseases; the administration of a vaccine stimulates the body's own immune system to protect the person against subsequent infection or disease. Malnutrition (either under- or over nutrition) refers to the condition whereby an individual does not receive adequate amounts or receives excessive amounts of nutrients; however, the indicator looked at here is for underweight children.

#### Immunisation<sup>3</sup>

Immunisation protects both adults and children against preventable infectious diseases; the administration of a vaccine stimulates the body's own immune system to protect the person against subsequent infection or disease. Low immunisation rates speak to the need for parents to understand the critical importance of immunisation, as well as the need to encourage parents to have their young children immunised.

The National Department of Health has set an immunisation target of 90 per cent against which the results from the Western Cape can be benchmarked. The Western Cape Health Department has set its immunisation target for the 2011/12 as well as the 2012/13 financial years at 95 per cent, higher than that of the national target (Department of Health APP 2012/13: 129).

Table 15 Child Health in the Western Cape: Full Immunisation and Malnutrition, 2011/12

City/Districts	Population < 1 year fully immunised 2011/12	Population < 1 year fully immunised 2012/13	Number of severely underweight children < 5 years per 1 000 population 2011/12	Number of severely underweight children < 5 years per 1 000 population 2012/13
Western Cape Province	87.8%	89.0%	3.0	2.8
Cape Tow n	87.5%	89.5%	3.2	2.8
West Coast DM	97.1%	96.3%	1.8	1.6
Cape Winelands DM	90.0%	91.8%	3.2	2.9
Overberg DM	74.4%	75.8%	2.8	2.5
Eden DM	88.6%	102.8%	2.9	4.2
Central Karoo DM	80.3%	77.0%	2.0	3.7

Source: Western Cape Department of Health, 2012 and 2013

In the 2012/13 financial year, full immunisation levels for the Western Cape were 89.0 per cent, slightly higher compared with the 87.8 per cent in the 2011/12 year. The full immunisation level for the Eden District Municipality was the highest (102.8 per cent) in the Western Cape; followed by the West Coast District with 96.3 per cent. The Overberg District Municipality has registered the lowest number of immunisation level of 75.8 per cent across the districts; with the Central Karoo District Municipality having the second lowest immunisation rate at 77.0 per cent.

In relation to the number of severely underweight children less than 5 years the Eden District Municipality has the highest prevalence of malnutrition rate of (4.2) followed by the Central Karoo District with the second highest prevalence rate of 3.7. The West Coast District has the lowest malnutrition prevalence rate of 1.6; followed by the Overberg District with a malnutrition prevalence rate of 2.5.

\_

<sup>&</sup>lt;sup>3</sup> The immunisation rate is calculated as the number of children immunised as a percentage of the total number of children less than one year of age. If children who are one year or older are immunised, the immunisation rate for that year could be greater than 100 per cent because more than 100 per cent of children aged less than one year would have been immunised in that particular year.

Table 16 Child Health in the Central Karoo: Full Immunisation and Malnutrition, 2012/13

City/Districts	Population < 1 year fully immunised 2011/12	Population < 1 year fully immunised 2012/13	Number of severely underweight children < 5 years per 1 000 population 2011/12	Number of severely underweight children < 5 years per 1 000 population 2012/13
Central Karoo District	80.3%	77.0%	2.0	3.7
Laingsburg	94.7%	75.0%	3.1	3.1
Prince Albert	53.0%	94.1%	2.8	9.5
Beaufort West	89.0%	77.0%	1.0	2.5
Central Karoo DMA	56.0%	-	6.1	

#### **Malnutrition**

The number of severely underweight children younger than five years has increased from 2.0 per 1 000 population in 2011/12 to 3.7 per 1 000 population in 2012/13 with the largest number in Prince Albert at 9.5 per 1 000 population.

#### 2.2.4 Maternal Health

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. Even though it may not strictly fit the definition, information on births to teenage mothers and termination of pregnancies are also included here.

#### Maternal deaths

In 2012/13 maternal mortality increased from 28.7 per 100 000 population to 68.6 per 100 000 population.

Table 17 Maternal Health in the Western Cape: Mortality, Delivery to women under 18 years and Termination of pregnancy, 2012/13

Maternal mortality	Total number of live births in facilities 2010/11	Total number of maternal deaths in facilities 2010/11	Maternal Mortality per 100 000 live births 2010/11	Total number of live births in facilities 2011/12	Total number of maternal deaths in facilities 2011/12	Maternal Mortality per 100 000 live births 2011/12	Total number of live births in facilities 2012/13	Total number of maternal deaths in facilities 2012/13	Maternal Mortality per 100 000 live births 2012/13
Western Cape Province	92 462	40	43.3	89 394	26	28.7	93 321	64	68.6
Cape Town	59 786	33	55.2	61898	19	30.7	62 143	49	78.9
West Coast DM	5 124	0	0.0	4 854	0	0.0	4 972	6	120.7
Cape Winelands DM	13 856	4	28.9	10 500	2	17.0	12 683	5	39.4
Overberg DM	3 150	0	0.0	2 838	0	0.0	3 0 5 1	0	0.0
Eden DM	9 507	2	21.0	8 220	5	60.8	9 4 0 5	4	42.5
Central Karoo DM	1039	1	96.2	1084	0	0.0	1067	0	0.0

Source: Western Cape Department of Health, 2011 and 2012 and 2013

The Central Karoo's District maternal mortality per 100 000 live births decreased from 96.2 per 100 000 live births in 2010/11 to 0 in 2011/12 and remained unchanged in 2012/13.

Table 18 Maternal Mortality: Central Karoo District, 2011/12 and 2012/13

Maternal mortality	Total number of live births in facilities 2010/11	Total number of maternal deaths in facilities 2010/11	Maternal Mortality per 100 000 live births 2010/11	Total number of live births in facilities 2011/12	Total number of maternal deaths in facilities 2011/12	Maternal Mortality per 100 000 live births 2011/12	Total number of live births in facilities 2012/13	Total number of maternal deaths in facilities 2012/13	Maternal Mortality per 100 000 live births 2012/13
Central Karoo DM	1 039	1	96.2	1 084	0	0.0	1 067	0	0.0
Beaufort West	727	1	137.6	740	0	0.0	827	0	0.0
Central Karoo DMA	104	0	0.0	102	0	0.0	-	-	-
Laingsburg	80	0	0.0	83	0	0.0	100	0	0.0
Prince Albert	128	0	0.0	159	0	0.0	140	0	0.0

Source: Western Cape Department of Health, 2011, 2012 and 2013

#### Births to teenage mothers

Teenage pregnancy is almost always unplanned; as a result when young parents are placed in a position to care for their children, they often have to postpone or sacrifice their own lives' dreams. For these young people life can become particularly tough, especially if they do not have family or social support. Women with unplanned pregnancies, whether teenage or other, may also opt to terminate their pregnancy.

Table 19 Maternal Health in the Western Cape: Births to women under 18 years

Delivery to women under 18 years	Delivery to women under 18 years 2010/11	Total deliveries 2010/11	Delivery to women under 18 years per 1 000 deliveries 2010/11	Delivery to women under 18 years 2011/12	Total deliveries 2011/12	Delivery to women under 18 years per 1 000 deliveries 2011/12	Delivery to women under 18 years 2012/13	Total deliveries in facilities 2012/13	Delivery to women under 18 years per 1 000 deliveries 2012/13
Western Cape Province	6 484	93 192	69.6	6 320	93 199	40.2	5 906	92 125	64.1
Cape Town	3 911	63 082	62.0	3 756	64 116	58.6	3 448	63 178	54.6
West Coast DM	416	4 921	84.5	472	4 926	95.8	451	4 932	91.4
Cape Winelands DM	1 136	12 156	93.5	1 085	11 905	91.1	993	11 146	89.1
Overberg DM	279	2 948	94.6	241	2 906	82.9	231	2 879	80.2
Eden DM	650	9 042	71.9	657	8 244	79.7	683	8 883	76.9
Central Karoo DM	92	1 043	88.2	109	1 102	98.9	100	1 107	90.3

The delivery to women under 18 years for the Western Cape decreased from 6 320 to 5 906 cases in 2012/13 which means a reduction of 6.5 per cent year-on-year. The total deliveries in facilities in Central Karoo to women under 18 years increased with 9 from 2011/12 to 2012/13.

Table 20 Maternal Health in the Central Karoo: Births to women under 18 years

Delivery to women under 18 years	Delivery to women under 18 years 2010/11	Total deliveries 2010/11	Delivery to women under 18 years per 1 000 deliveries 2010/11	Delivery to women under 18 years 2011/12	Total deliveries 2011/12	Delivery to women under 18 years per 1 000 deliveries 2011/12	Delivery to women under 18 years 2012/13	Total deliveries in facilities 2012/13	Delivery to women under 18 years per 1 000 deliveries 2012/13
Central Karoo DM	92	1 043	88.2	109	1 102	98.9	100	1 107	90.3
Beaufort West	59	722	81.7	64	750	85.3	70	859	81.5
Central Karoo DMA	12	107	112.1	10	107	93.5	-	-	-
Laingsburg	9	87	103.4	8	86	93.0	10	104	96.2
Prince Albert	12	127	94.5	27	159	169.8	20	144	138.9

The births to women under 18 years per 1 000 deliveries have decreased from 85.3 in 2011/12 to 81.5 in 2012/13 in Beaufort West and decreased from 169.8 in 2011/12 to 138.9 in 2012/13 in Prince Albert. Laingsburg recorded an increase in delivery to women under 18 years per 1 000 deliveries from 93.0 in 2011/12 to 96.2 in 2012/13.

#### Termination of pregnancy

These teenage delivery rates can also be seen in conjunction with the termination of pregnancy rates as unplanned or unwanted pregnancies may result in terminations.

Table 21 Maternal Health in the Western Cape: Termination of Pregnancy

Termination of pregnancy (TOP)	Total TOPs performed 2010/11	Female population 15 - 44 years 2010/11		Total TOPs performed 2011/12	Female population 15 - 44 years 2011/12		Total TOPs performed 2012/13	Female population 15 - 44 years 2012/13	TOP per 1 000 female population 15 - 44 years 2012/13
Western Cape Province	14 359	1 380 716	10.4	14 474	1 405 654	10.3	15 248	1 470 176	10.4
Cape Town	10 233	923 847	11.1	10 753	945 028	11.4	11930	987 390	12.1
West Coast DM	847	74 942	11.3	675	74 262	9.1	341	78 613	4.3
Cape Winelands DM	1 378	186 405	7.4	1 533	189 863	10.5	1 490	196 780	7.6
Overberg DM	282	53 927	5.2	288	55 017	5.2	330	57 199	5.8
Eden DM	1 262	128 498	9.8	1 225	128 259	9.6	1 156	136 711	8.5
Central Karoo DM	357	13 096	27.3	0	13 225	0.0	1	13 484	0.1

Source: Western Cape Department of Health, 2011, 2012 and 2013

A total of 15 248 termination of pregnancies (TOP) has been performed in the Western Cape with the highest in the City of Cape Town (11 930) and the lowest (1) in the Central Karoo District. The total termination of pregnancies increased with 774 year-on-year in the Western Cape, which is a concerning trend.

Table 22 Maternal Health in the Central Karoo: Termination of Pregnancy

Termination of pregnancy (TOP)	Total TOPs performed 2010/11	Female population 15 - 44 years 2010/11	TOP per 1 000 female population 15 - 44 years 2010/11	Total TOPs performed 2011/12	Female population 15 - 44 years 2011/12		Total TOPs performed 2012/13	Female population 15 - 44 years 2012/13	TOP per 1 000 female population 15 - 44 years 2012/13
Central Karoo DM	357	13 096	27.3	0	13 225	0.0	1	13 484	0.1
Beaufort West	31	8 722	3.6	0	8 835	0.0	0	9 062	0.0
Central Karoo DMA	61	1 132	53.9	0	1 140	0.0		1 156	-
Laingsburg	170	1 378	123.4	0	1 387	0.0	1	1 407	0.7
Prince Albert	95	1 865	50.9	0	1 863	0.0	0	1 858	0.0

The only termination of pregnancy that was performed in the Central Karoo for 2012/13 was in Laingsburg. Beaufort West and Prince Albert are not reflecting any termination of pregnancies for the 2012/13 year.

#### 2.2.5 Community Based Services

Community Based Services (CBS) in the Western Cape are provided by Non-profit Organisations (NPOs), subsidised by the Provincial Government. Patients who require on-going care upon discharge from hospital are referred to a primary healthcare facility in the area in which they live. The Home Community-Based Services (HCBS) Coordinator at the primary healthcare facility refers the patient to the NPO partner

responsible for services HCBS in the area. The caregiver will render the service according to the instruction on the care plan and the Sister will visit the individual to make sure the plan is being carried through.

Home Community Based Services does not replace the family as the primary caregiver; it is meant to be a complementary and supportive service to the family to prevent 'burn-out' for family caregivers who care for sick relatives.

Table 23 Community Based Services: Non-profit Organisation (NPO) Care

Community Based Services	Monthly average number of Non-profit Organisation appointed home carers 2011/12	Monthly average number of Non-profit organisation appointed home carers 2012/13
Western Cape Province	2 853	3 064
Cape Tow n	1 639	1 856
West Coast DM	311	278
Cape Winelands DM	264	303
Overberg DM	233	240
Eden DM	329	312
Central Karoo DM	77	74

At June 2012/13, there were 3 064 carers appointed by Non-profit Organisations across the Western Cape reflecting an increase of 7.4 per cent year-on-year. The monthly average number of Non-profit Organisations that appointed home carers for the Central Karoo District decreased from 77 to 74 from 2011/12 to 2012/13.

#### 2.3 Safety and Security

The safety of persons and property is vitally important to the physical and emotional well-being of people and business. Without the respect of person and property, it would be impossible for people to live peacefully, without fear of attack and for businesses to flourish.

Crime has a significant impact on the economy. It can hamper growth and discourage investment and capital accumulation. If it is not tackled with seriousness, it has the potential to derail both social and economic prosperity.

National, Provincial and local government departments allocate considerable resources to programmes and activities that are aimed at maintaining safety and security within the geographical areas for which they are responsible.

In order to maximise the impact of the resources allocated to increasing safety, it remains critical that those limited resources are deployed in the areas where they are most needed.

The discussion in this section that follows is limited to the reported contact and property related crime such as murder and sexual crimes, as well as crime heavily dependent on police action for detecting drug related crimes and driving under the influence of alcohol/drugs; these are detailed in the table below.

Table 24 Crime in the Central Karoo: April to March 2003/04 - 2012/13

Central Karoo District	April 2003 to March 2004	April 2004 to March 2005	A pril 2005 to M arch 2006	April 2006 to March 2007	A pril 2007 to March 2008	April 2008 to March 2009	A pril 2009 to M arch 2010	April 2010 to March 2011	A pril 2011 to M arch 2012	A pril 2012 to M arch 2013
Contact crime (	crimes aç	gainst the	person	)						
Murder	49	46	34	29	36	22	37	29	38	27
Total sexual crimes	989	142	96	75	66	86	134	164	174	155
Property relate	d crime									
Burglary at residential premises	634	538	391	412	472	500	566	142	657	782
Crime heavily d	lependen	t on polic	e action	for detec	ction					
Drug related Driving under	322	609	568	650	743	823	898	1 076	1 093	1 052
the influence of alcohol/ drugs	107	130	243	287	263	258	234	256	207	179

Table 24 shows the number of crimes within the selected crime categories that was reported to police stations located throughout the Central Karoo District area over the period 2003/04 and 2012/13. The total number of murders reported during April 2012 to March 2013 was 27 which is a significant decline of 11 cases inform 2011/12. Total sexual crimes decreased by 10.9 per cent to 155 in 2012/13 from 174 incidents in the previous reporting period. Burglaries at residential premises increased by 19.0 per cent from 657 during 2011/12 to 782 cases during 2012/13. Drug related crimes decreased from 1 093 cases in 2011 to 1 052 cases reported in 2012/13, and driving under the influence of alcohol/drug crimes declined significantly from 207 which were reported during 2011/12 to 179 which was reported during 2012/13.

#### 2.4 Poverty and Inequality<sup>4</sup>

The section on poverty and inequality speaks to the level of human development as well as the levels of poverty and inequality within different areas within the Western Cape. The level of development and income level of the population also serves as an indication to the level of need within communities, which also indicates the need for assistance required. Inequality levels highlight how the experience of different members of the same broader community may be grossly dissimilar. The province contains 131 towns outside the Cape Town metropolitan area. Some of these settlements have solid developmental bases and experience dynamic growth, whilst others are stagnant or declining. Settlements with declining populations, economic activities, services and infrastructure leads to decreasing and social and economic service levels in the surrounding hinterland, which consequently impacts negatively on rural quality of life.

25

<sup>&</sup>lt;sup>4</sup> This section draws on Global Insight data.

#### **Household Income**

Household income is one of the most important determinants of welfare in a region. The ability to meet basic needs, such as for adequate food, clothing, shelter and basic amenities is largely determined by the level of income earned by the households.

Table 25 Household income Central Karoo District

Series	No income	R1 - R4 800	R4 801 - R9 600	R9 601 - R19 200	R19 201 - R38 400	R38 401 - R76 800	R76 801 - R153 600	R153 601 - R307 200	R307 201 - R614 400	R614 401 - R1 228 800	R1 228 801 - R2 457 600	R2 457 601 and more	Unspecified
Western Cape	216940.6	41994.5	63338.58	193007.6	287950.1	256649	209294	177194.8	121756.5	46594.54	12221.55	6828.385	89.76606
Central Karoo (DC5)	1593	595	1048	4046	4679	3146	1840	1290	615	125	53	36	0
Laingsburg (WC051)	128	47	69	502	612	525	265	160	69	18	12	1	0
Prince Albert (WC052)	225	118	220	702	956	613	337	233	130	21	12	10	0
Beaufort West (WC053)	1240	430	759	2841	3112	2008	1238	897	415	87	29	25	0

Source: Quantec Research 2013

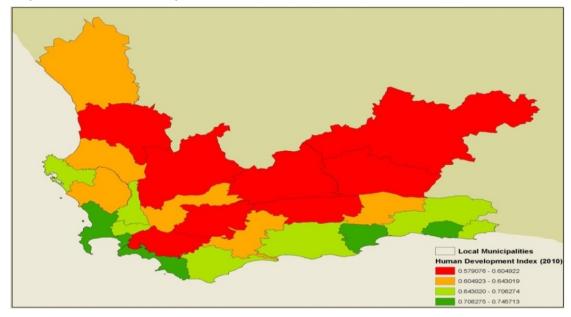
In terms of Table 25 above the most people with no or little household income lives in Beaufort West followed by Prince Albert and then Laingsburg. In terms of demographics the share of people without household income in Beaufort West comprises of 2.3 per cent of the population, 1.6 per cent of Prince Albert's population, 1.5 per cent of Laingsburg's population.

#### 2.4.1 Human Development Index

The Human Development Index (HDI) is a composite, relative index that attempts to quantify the extent of human development of a community. It is based on measures of life expectancy, literacy and income. It is thus seen as a measure of people's ability to live a long and healthy life, to communicate, to participate in the life of the community and to have sufficient resources to obtain a decent living. The HDI can assume a maximum level of 1, indicating a high level of human development, and a minimum value of 0.

Table 26 HDI 2001, 2007 and 2010 per City/District

Municipality	2001	2007	2010
City of Cape Town Metropolitan Municipality	0.71	0.73	0.74
West Coast District Municipality	0.63	0.64	0.65
Cape Winelands District Municipality	0.63	0.65	0.65
Overberg District Municipality	0.63	0.65	0.66
Eden District Municipality	0.64	0.68	0.69
Central Karoo District Municipality	0.57	0.59	0.60



Map 1 Human Development Index

The levels of human development differ across the broad geographic areas in the Western Cape. Central Karoo District (0.60) has the lowest HDI of all the districts, followed by the West Coast & Cape Winelands (0.65) and Overberg (0.66). The City of Cape Town (0.74) has the highest HDI followed by the Eden District Municipality (0.69).

The HDI indicates that the level of development within the Central Karoo District has improved over the past decade; the HDI increasing from 0.57 in 2001 to 0.60 in 2010.

Table 27 HDI, 2001, 2007 and 2010 per municipality

Municipality	HDI 2001	HDI 2007	HDI 2010
WC051: Laingsburg Local Municipality	0.56	0.59	0.59
WC052: Prince Albert Local Municipality	0.55	0.57	0.58
WC053: Beaufort West Local Municipality (including Central Karoo DMA)	0.58	0.60	0.60
WC - DC5 Central Karoo District Municipality	0.57	0.59	0.60

Source: Global Insight Regional Explorer, 2011

Prince Albert Municipality (0.58) has the lowest HDI in the district followed by Laingsburg Municipality (0.59). This poses a huge challenge for the district to create more employment opportunities to improve the standard of living in the area. Life expectancy is considered to be low due to high mortality stemming from the mixture of diseases of affluence and of poverty.

#### 2.4.2 People Living in Poverty

The poverty rate represents the percentage of people living in households with an income less than the poverty income. The poverty income is defined as the minimum monthly income needed to sustain a household and varies according to household size, the larger the household the larger the income required to keep its members out of poverty.

The poverty income used is based on the Bureau of Market Research's Minimum Living Level (BMR report no. 235 and later editions, Minimum and Supplemented Living Levels in the main and other selected urban areas of the RSA, August 1996). For example, the monthly income needed to keep a 1 person household out of poverty in 2010 is estimated to be R1 315, while for a two person household it is R1 626; a four person household requires an estimated income of R2 544 to stay out of poverty while a household with eight or more person requires an estimated R4 729.

**Poverty Overview** WC - DC5 Central Karoo District Municipality, Total 23 500 40.0% 39.0% 23 000 38.0% Nr of people in poverty 22 500 37.0% 22 000 36.0% 21 500 35.0% 21 000 34.0% 20 500 33.0% 20 000 32.0% 19 500 31.0% 19 000 30.0% 18 500 29.0% 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 Nr of people in poverty = % in Poverty

Figure 6 Poverty Overview - Central Karoo, 1996 - 2010

Source: Global Insight Regional Explorer, 2011

Global Insight estimates on the number of people living in poverty in the Central Karoo shows a sharp increase from 21 100 to 23 000 between 1996 and 1999, with a decline in 2000, but since then showing constant decline. In 2010, the estimated number of people living in poverty in the District was approximately 20 200 people, down from the 2001 high of approximately 23 250.

Table 28 Poverty Rate – Percentage of People Living in Poverty, 2001, 2007 and 2010 per City/District

Municipality	2001	2007	2010
City of Cape Town Metropolitan Municipality	23.9%	20.2%	19.7%
West Coast District Municipality	32.0%	30.5%	30.4%
Cape Winelands District Municipality	30.9%	26.4%	25.7%
Overberg District Municipality	31.0%	30.3%	29.6%
Eden District Municipality	31.6%	23.4%	21.7%
Central Karoo District Municipality	38.7%	34.0%	32.5%

The Central Karoo District (32.5 per cent) has the highest proportion of people living in poverty in the Western Cape followed by the West Coast (30.4 per cent) and Overberg (29.6 per cent). The poverty rate in the Central Karoo District is a cause for concern in general.

Table 29 Poverty Rate – Percentage of People Living in Poverty, 2001, 2007 and 2010 per municipality

Municipality	2001	2007	2010
WC051: Laingsburg Local Municipality	37.6%	35.7%	36.1%
WC052: Prince Albert Local Municipality	44.1%	42.7%	43.3%
WC053: Beaufort West Local Municipality (including Central Karoo DMA)	37.5%	31.5%	29.1%
WC - DC5 Central Karoo District Municipality	38.7%	34.0%	32.5%

Source: Global Insight Regional Explorer, 2011

The District's poverty rate drop from 38.7 per cent in 2001 to 32.5 per cent by 2010. Prince Albert at 43.3 per cent has the highest proportion of poor people and it is rising compared to the rest of the district.

## 2.4.3 Indigent Households

In response to the poverty levels of its communities, municipalities offer households support through their indigent policy. The indigent policy provides for free or discounted rates on municipal services such as water, electricity, sanitation, refuse removal as well as property rates.

Table 30 Indigent Households within the Central Karoo Municipalities

Municipality	Households Indigent Households			ouseholds	Percentage Indigent Households		
	2012	2013	2012	2013	2012	2013	
Prince Albert	2 195	2 200	782	782	35.6%	35.6%	
Beaufort West	10 535	12 294	4 938	4 676	46.9%	38.0%	
Laingsburg	1 221	1 246	647	647	53.0%	52.0%	
Total	13 951	15 740	6 367	6 105			

Source: Department of Local Government, June 2013

According to the Department of Local Government information the total number of households in the Central Karoo from 13 951 to 15 740 from 2012 to 2013. The proportion of indigent households has however declined in Beaufort West over the same period with a significant reduction of 6.8 percentage points over the reporting period.

## 2.4.4 Gini coefficient

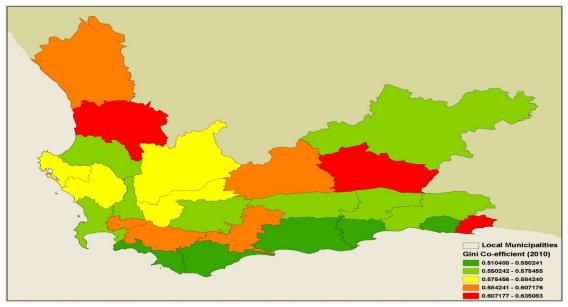
The Gini coefficient is a summary statistic of income inequality, which varies from 0, in the case of perfect equality where all households earn equal income, to 1 in the case of perfect inequality where one household earns all the income and other households earn nothing. In practice the coefficient is likely to vary from approximately 0.25 to 0.70.

Table 31 Gini coefficient 2001, 2007, 2010 per City/District

2001	2007	2010
0.60	0.59	0.57
0.59	0.61	0.60
0.60	0.60	0.59
0.58	0.59	0.58
0.59	0.59	0.56
0.59	0.60	0.58
	0.60 0.59 0.60 0.58 0.59	0.60       0.59         0.59       0.61         0.60       0.60         0.58       0.59         0.59       0.59

Source: Global Insight Regional Explorer, 2011

Map 2 Gini coefficient in Western Cape 2010



Source: Global Insight Regional Explorer, 2011. Map Created by E-Innovations, WC Department of the Premier

A comparison of the Gini coefficient across the Western Cape shows that inequality across all the districts and the Central Karoo has been relatively high, but has over the past decade shown some decline. According to Gini coefficient calculations, there has been a marginal change in the level of income inequality experience in the Central Karoo District; as the Gini coefficient increased from 0.59 in 2001 to 0.60 in 2007 but declined to 0.58 in 2010.

Table 32 Gini coefficient 2001, 2007, 2010 per municipality

Municipality	HDI 2001	HDI 2007	HDI 2010
WC051: Laingsburg Local Municipality	0.59	0.61	0.59
WC052: Prince Albert Local Municipality	0.61	0.62	0.61
WC053: Beaufort West Local Municipality (including Central Karoo DMA)	0.59	0.59	0.57
WC - DC5 Central Karoo District Municipality	0.59	0.60	0.58

Source: Global Insight Regional Explorer, 2011

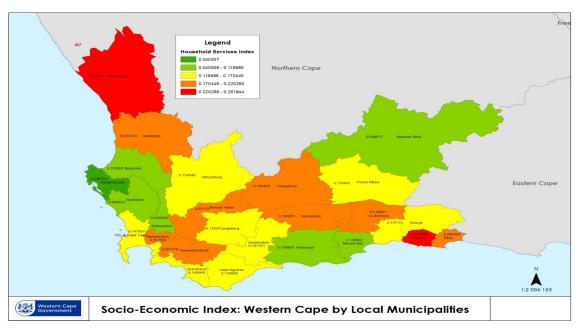
Prince Albert Municipality (0.61) had the highest Gini coefficient in 2010 in the Central Karoo District followed by Laingsburg Municipality (0.59) and Beaufort West (0.57). The Central Karoo District has more poverty to contend with than most of the other districts as a result of the high unemployment rate of the area.

#### 2.4.5 Poverty Indexes

The Socio-economic Poverty Index is derived from Census 2011 variables with its main purpose to identify areas of greatest need. The higher the values index the "poorer" the area is in relation to the index.

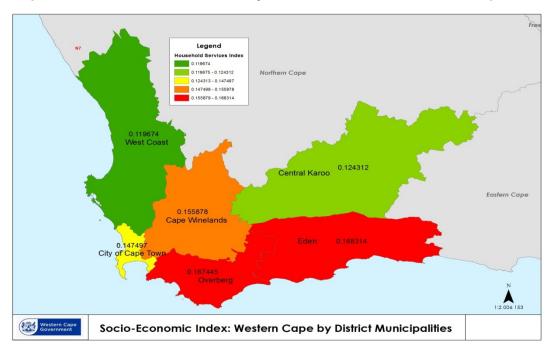
The Socio-economic Poverty Index has four domains namely Education (20 per cent). Housing (20 per cent), Household Services (30 per cent) and Economic (30 per cent). Each Poverty Index domain as highlighted has a specific weight that is attached to it as per the census 2011.

The objective of the Socio-economic Poverty Index is to identify areas (wards) of greatest need for developmental purpose or further to identify the most vulnerable wards. It is imperative to note the Socio-economic Poverty Index variables described is only limited to the identified variables as per the Census 2011.



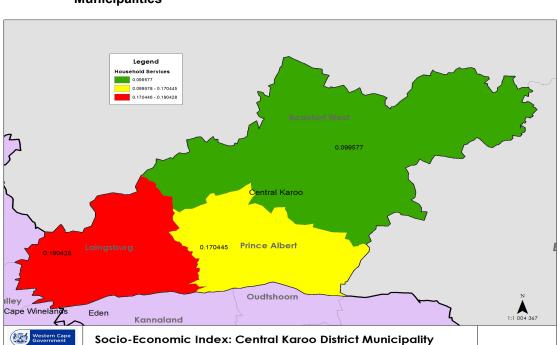
Map 3 Household Services Poverty Index: Western Cape Local Municipalities

The map depicts the Socio-economic Index for Household Services for all 30 municipalities across the Western Cape. The Socio-economic Index for Household Services includes the following sub-variables such as Energy for lightning, main water supply, refuse disposal and toilet facilities. This variable measures households with an income below R38 401 per annum. This map clearly indicates that Matzikama and Knysna Municipality has the most vulnerability in relating to household service. The municipalities in Central Karoo have medium high to medium low vulnerability.



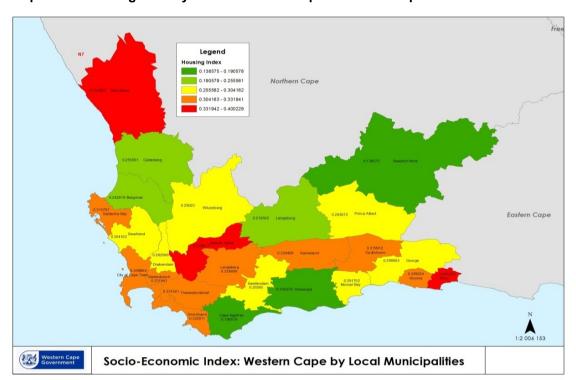
Map 4 Household Services Poverty Index: Inter-district and Metro Comparison

The map depicts the Socio-economic Index for Household Services for the respective district municipalities and the City of Cape Town within the Western Cape. The Socio-economic Index for Household Services includes the following sub-variables such as Energy for lighting, main water supply, refuse disposal and toilet facilities. This variable measures households with an income below R38 401 per annum. This map indicates that across the districts that the Central Karoo region are less vulnerable that Eden and Cape Winelands in terms of household services.



Map 5 Household Services Poverty Index: Central Karoo District Local Municipalities

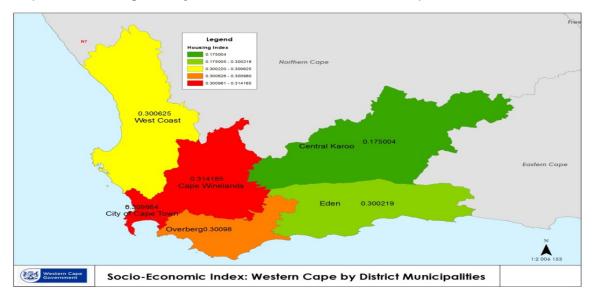
The map depicts the Socio-economic Index for Household Services for the municipalities situated within the Central Karoo District. The Socio-economic Index for Household Services includes the following sub-variables such as Energy for lightning, main water supply, refuse disposal and toilet facilities. This variable measures households with an income below R38 401 per annum. This map clearly indicates that within the Central Karoo District that Laingsburg Municipality has the most vulnerability in relating to household service; followed by Prince Albert and Beaufort West Municipalities respectively.



Map 6 Housing Poverty Index: Western Cape Local Municipalities

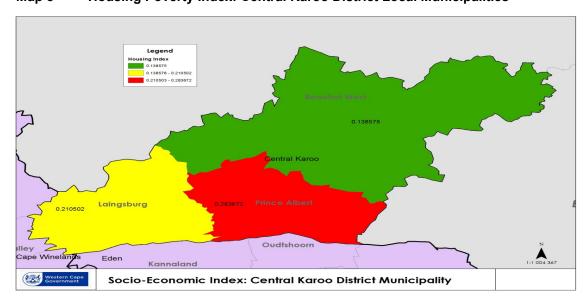
The map depicts the Socio-economic Index for Housing for all 30 municipalities across the Western Cape. The Socio-economic Index for Housing includes the following subvariables such as dwelling type and room density. This variable measures households with an income below R38 401 per annum.

This map clearly indicates that Beaufort West, Laingsburg and Prince Albert are less vulnerable than Bitou, Matzikama and Breede Valley municipalities in relation to housing.



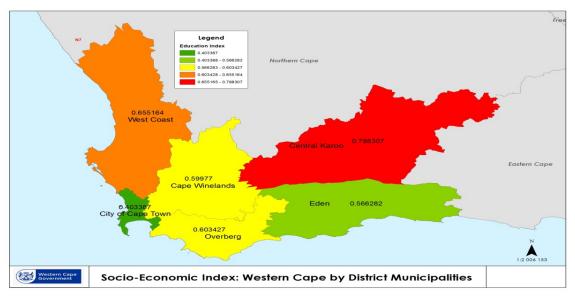
Map 7 Housing Poverty Index: Inter-District and Metro Comparison

The map depicts the Socio-economic Index for Housing for the respective district municipalities and the City of Cape Town within the Western Cape. The Socio-economic Index for Housing includes the following sub-variables such as dwelling type and room density and measures households with an income below R38 401 per annum. Central Karoo compares better with Cape Winelands and Overberg in terms of dwelling type and room density.



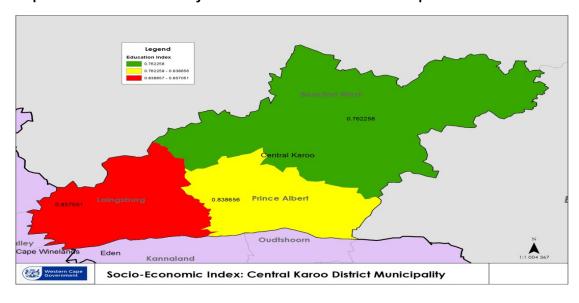
Map 8 Housing Poverty Index: Central Karoo District Local Municipalities

The map depicts the Socio-economic Index for Housing for the municipalities situated within the Central Karoo District. The Socio-economic Index for Household Services includes the following sub-variables such dwelling type and room density. This variable measures households with an income below R38 401 per annum. Within Central Karoo region, Prince Albert Municipality measures high vulnerability in the household poverty index in comparison with Beaufort West and Laingsburg municipalities.



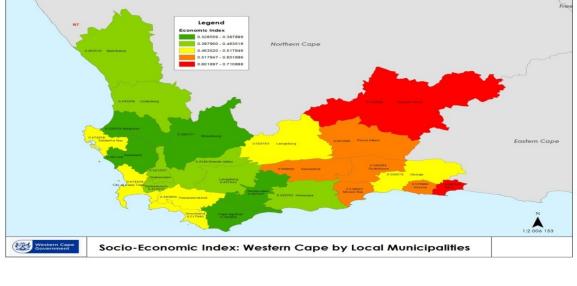
Map 9 Education Poverty Index: Inter-district and Metro Comparison

The map depicts the Socio-economic Index for Education for the municipalities situated within the Central Karoo District. The Socio-economic Index for education includes the sub-variables such as illiteracy, no schooling, adults < Grade 12 and adults with no tertiary education. Central Karoo is at risk in terms of literacy and schooling in comparison to other districts in the e Western Cape.



Map 10 Education Poverty Index: Central Karoo local municipalities

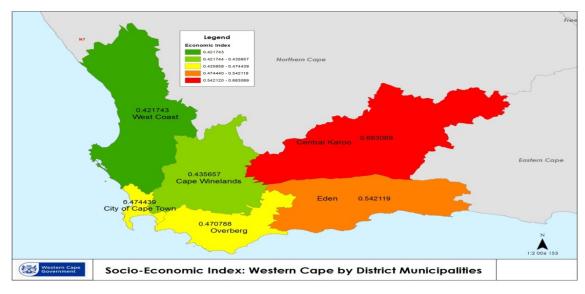
According to the above map Laingsburg Municipality followed by Prince Albert are at risk in terms of literacy and schooling as well as adults with no tertiary education. Beaufort West has the least vulnerability for this index.



Map 11 Economic Poverty Index: Western Cape Local Municipalities

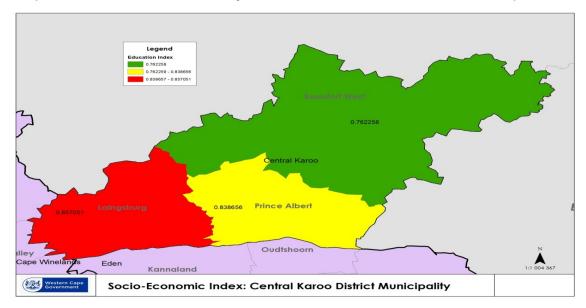
The map depicts the Socio-economic Poverty Index for all 30 municipalities across the Western Cape. The Socio-economic Index measures the following sub-variables employment, income and economic dependency ratio.

This map clearly indicates that the municipalities that are most vulnerable to the economic poverty index are clearly Beaufort West and Bitou. The other municipalities that furthermore display high levels of vulnerability in relation to this variable are Prince Albert, Kannaland, Oudtshoorn, Mossel Bay and Knysna.



Map 12 Socio-economic Poverty Index: Inter-district and Metro Comparison

The map depicts the Socio-economic Index for Economic for the respective district municipalities and the City of Cape Town within the Western Cape. The Socio-economic Index for Economic includes the following sub-variables employment, income, and economic dependency ratio. This map indicates that across the districts that the Central Karoo District followed by Eden District has the most vulnerability in relation to the Economic Poverty Index.



Map 13 Socio-economic Poverty Index: Central Karoo District Local Municipalities

The map depicts the Socio-economic Index for the municipalities situated within the Central Karoo District. The Socio-economic Index for municipalities in the Central Karoo includes the sub-variables such as employment, income and economic dependency ratio. This map clearly indicates that within the Central Karoo District Laingsburg Municipality has the most vulnerability and Beaufort West the least vulnerability in relation to the economic index.

## 2.5 Access to Housing

The Constitution of the Republic South Africa (the Constitution) states that every citizen has the right to access to adequate housing and that the state must take reasonable legislation and other measures within its available resources to achieve the progressive realisation of his right. Still, there are many South Africans who lack this basic right.

The three spheres of government (national, provincial and local) share the responsibility for delivery of adequate housing. Housing is an important determinant of the living conditions of any population. It has an effect on health and thereof on worker productivity, but is in turn affected by economic conditions and in particular by income and housing costs.

Information from the 2001 Census and 2011 Census are used to provide estimates of the extent of the backlog in housing within the Central Karoo District.

## 2.5.1 Access to Housing: Western Cape District/City Level Comparison

Figure 7 shows the percentage of households that are categorized as formal/informal, traditional dwellings and compares household dwelling types across the Western Cape districts in 2001 and 2011.

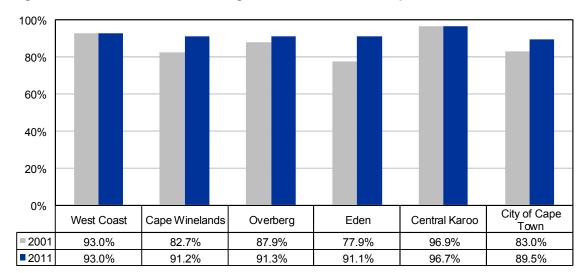


Figure 7 Access to formal dwellings across the Western Cape, 2011

Source: Stats SA 2011

Eden District, Cape Winelands and Overberg District has the lowest proportion of formal dwellings (91 per cent) compared to Central Karoo and the West Coast District with Central Karoo District has the highest proportion of formal dwellings (97 per cent); followed by the West Coast District with 93 per cent of its communities that has access to formal dwellings. The district across the Western Cape with the biggest proportion of informal dwellings (8.2 per cent) is the Cape Winelands Districts compared to the other districts of the Western Cape.

Table 33 Access to Housing in the Central Karoo, 2001 and 2011

Dwelling Type	2001	Percentage share 2001	2011	Percentage share 2011
Formal	14 335	94%	18 048	97%
Informal	311	2%	540	3%
Traditional dwelling	337	2%	85	0%
Other	190	1%		0%
Total	15 173	100%	18 673	100%

Source: Stats SA Census 2001 and 2011

In the period between 2001 and 2011, the total number of dwellings in the Central Karoo increased by 3 500, while the number of households residing in formal dwellings increased by 3 713. Over the same period the informal housing has increased with 229 units.

Table 34 Accessing housing in the Central Karoo, 2001 and 2011 - Percentage share comparison per municipality

	Laings	Laingsburg		Albert	Beaufort West	
	2001	2011	2001	2011	2001	2011
Formal	96.0%	96.6%	92.0%	93.9%	96.0%	97.9%
Informal	1.0%	2.5%	3.0%	5.6%	2.0%	1.8%
Traditional	2.0%	0.8%	3.0%	0.6%	2.0%	0.3%

Source: Stats SA Census 2001 & 2011

In 2011, Beaufort West (97.9 per cent) has the highest proportion of households with access to formal housing followed by Laingsburg (96.6 per cent) and Prince Albert (93.9 per cent) respectively. Prince Albert has the highest proportion of informal dwellings at 5.6 per cent within the Central Karoo District.

## 2.6 Access to Municipal Services

Access to services such as potable water, basic sanitation, safe energy sources and refuse removal services ensures that households enjoy a decent standard of living.

This section looks at household access to services as drawn from the 2001 Census and 2011 Census. The information provides a breakdown of the types of access for each service area; changes in the relative proportions indicate either improvements or worsening in the in overall access levels.

#### 2.6.1 Water

Access to improved water sources is a key element in improved quality of life. The Water supplied should be safe and should be made available to communities to prevent the use of unsafe supplies that can lead to diseases. Unsafe water supplies will in turn have an impact on public health.

Figure 8 indicates the access to water over the districts and the Metropolitan area in the Western Cape as extrapolated from Stats SA Census 2001 and Census 2011. A comparison is made between three access levels such as households with no access to piped water, households with access to piped water inside yard or dwelling and households with access to piped water outside the yard or dwelling.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2001 2011 2001 2011 2001 2011 2001 2011 2001 2011 2001 2011 City of Cape Cape Central West Coast Fden Overbera Winelands Karoo Town 2.0% 0.9% 2.0% 0.8% 1.2% 0.8% 4.3% 2.2% 1.1% 0.7% No access to piped 0.6% 1.2% ■ Piped water outside yard 8.1% 17.3% 11.2% 10.1% 13.0% 10.5% 12.0% 8.9% 5.7% 2.3% 14.3% 12.0% ■ Piped water inside dwelling/yard | 89.9% | 81.9% | 86.8% | 89.1% | 85.8% | 88.7% | 83.7% 88.9% 93.2% 97.1% 84.4% 87.3%

Figure 8 Access to Water per District 2011

Source: Stats SA: Census 2001 & 2011

Most of the households within the Western Cape regions' access to piped water inside the dwelling or yard have increased from 2001 until 2011 with the exception of households in the West Coast that has decreased in its percentage from 89.9 per cent to 81.9 per cent. The Central Karoo has the highest percentage of households with access to piped water inside dwellings/ yard and has increased from 93.2 per cent in 2001 to 97.1 per cent in 2011. The West Coast District shows the largest increase in the percentage of households with access to water outside the dwelling. The other districts and the Metro have all decreased its percentage of households with access to water outside the yard. All the districts as well as the Metro have decreased its percentage of households with no access to piped water over the ten year period from 2001 to 2011.

Table 35 illustrates basic access to water per water source in the Central Karoo from 2001 to 2011.

Table 35 Access to Water in the Central Karoo, 2001 and 2011

Water source	2001	% share of households 2001	2011	% share of households 2011	Average annual growth 2001 - 2011
Piped water inside the dwelling	8 667	57.1%	14 731	77.2%	5.4%
Piped water inside the yard	5 427	35.8%	3 787	19.9%	-3.5%
Piped water from outside the yard	897	5.9%	446	2.3%	-6.7%
No access to piped water	180	1.2%	112	0.6%	-4.6%
Total	15 171	100.0%	19 076	100.0%	2.3%

Source: Statistics South Africa Census 2001 and 2011

In 2001, close to 99 per cent of households in the Central Karoo already had access to piped water in 2001, either inside the dwelling, inside the yard or outside of the yard. In 2001, just 1.2 per cent of Central Karoo households did not have access to piped water and has been reduced to 0.6 per cent in 2011. A positive development between 2001 and 2011 has been the substantial increase in the number of households with piped water inside the dwelling.

Figure 9 indicates the percentage of households per municipal area in the Central Karoo District with access to piped water inside dwelling or yard, piped water outside yard and no access to piped water from 2001 to 2011.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2001 2011 2001 2011 2001 2011 Beaufort Laingsburg Prince Albert West Piped water inside dwelling/yard 97.2% 97.2% 91.0% 95.7% 96.0% 97.4% ■ Piped Water outside yard 1.0% 2.2% 7.0% 3.6% 5.0% 2.0% No access to piped 1.8% 0.6% 1.0% 0.7% 1.0% 0.6%

Figure 9 Access to piped water in the Central Karoo District

Source: Statistics South Africa Census 2001 & 2011

All the municipalities in the Central Karoo obtained more than 90 per cent access to piped water inside the dwelling or yard in both Census 2001 and 2011. Prince Albert had the highest access to piped water outside the yard in 2001 at 7 per cent but reduced this to 3.6 per cent in 2011, with a concomitant rise in piped water inside the dwelling or yard. Laingsburg had the highest percentage of households without access to piped water in 2001 and reduced this to 0.6 per cent in 2011.

Table 36 Access to piped water per ward

Municipality	Piped (tap) water inside dwelling/ institution	Piped (tap) water inside yard	Piped (tap) water on community stand: distance less than 200 m from dwelling/ institution	Piped (tap) water on community stand: distance between 200 m and 500 m from dwelling/ institution	Piped (tap) water on community stand: distance between 500 m and 1000 m (1 km) from dwelling/ institution	Piped (tap) water on community stand: distance greater than 1000 m (1km) from dwelling/ institution	No access to piped (tap) water	Total
DC5: Central Karoo	14 731	3 787	212	90	73	71	112	19 076
WC051: Laingsburg	1 597	744	40	12	-	-	15	2 408
10501001: Ward 1	620	131	13	9	-	-	9	781
10501002: Ward 2	242	50	3	-	-	-	-	295
10501003: Ward 3	126	1	-	-	-	-	-	127
10501004: Ward 4	609	562	23	3	-	-	7	1 205
WC052: Prince Albert	2 495	930	93	25	5	6	24	3 578
10502001: Ward 1	610	283	29	17	-	1	8	947
10502002: Ward 2	704	176	2	-	-	-	2	885
10502003: Ward 3	364	206	-	1	-	-	-	571
10502004: Ward 4	817	265	62	7	5	4	14	1 176
WC053: Beaufort West	10 638	2 112	80	53	68	66	73	13 089
10503001: Ward 1	1 069	878	7	5	-	-	12	1 970
10503002: Ward 2	1 476	179	21	29	63	63	21	1 852
10503003: Ward 3	1 368	166	-	1	-	2	7	1 545
10503004: Ward 4	1 633	62	2	7	2	-	6	1 711
10503005: Ward 5	1 431	432	9	5	1	-	7	1 885
10503006: Ward 6	1 000	160	-	1	-	-	5	1 166
10503007: Ward 7	2 662	234	41	5	2	-	16	2 960

Source: Stats South Africa

Table 36 above indicates access to piped water per municipal ward in the Central Karoo District. Ward 1 in Laingsburg has a backlog of 27 households without access to piped water or with access to piped water further than 200m way from the dwelling. In Prince Albert Municipality the biggest backlog of households without access to piped water is found in Ward 1 (18 with access to piped water further than 200m from the dwelling and 8 households with no access to piped water) and Ward 4 (16 with access to piped water further than 200m from the dwelling and 14 households with no access to piped water). The biggest backlogs in terms of no access to piped water in are found in Beaufort West with 73 households followed by Prince Albert 24 and Laingsburg 15.

#### 2.6.2 **Energy**

Energy is essential for human life; commonly identified uses include energy for cooking, heating and lighting. Given the harmful environmental impacts of certain identifiable energy sources, as well as growing energy demand and needs, the use of clean and sustainable energy is becoming increasingly important. Different energy sources also have other usage risks; e.g. health and safety risks especially in the use of paraffin and open flame usage.

The information in Figure 10 depicts to the sources of energy used for lighting for households in the Central Karoo.

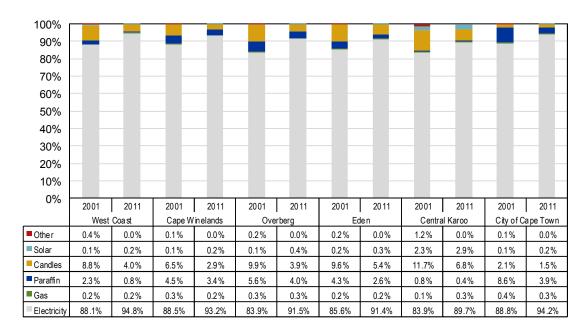


Figure 10 Census 2001 and 2011 by Energy source for lighting

Source: Stats SA Census 2001 & 2011

In 2001, the major energy source for most of the households (above 80 per cent) in the Western Cape is electricity. The highest percentage of households with access to electricity in 2001 was in the City of Cape Town at 88.8 per cent and the lowest was in the Central Karoo at 83.9 per cent.

By 2011, all the households in the districts as well as in the Metro had 93.4 per cent access to electricity. Central Karoo recorded a rise in access to electricity from 83.9 per cent to 89.7 per cent between 2001 and 2011.

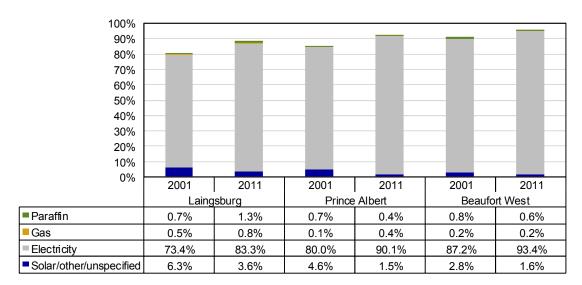


Figure 11 Energy Sources used for cooking and lighting in the Central Karoo, 2011

Source: Statistics South Africa Census 2011

All the municipalities in the Central Karoo region have increased in access to energy, specifically electricity, from 2001 to 2011. Electricity is the major source of electricity within the Central Karoo, with Beaufort West having the highest portion of households with access to electricity with 93.4 per cent, followed by Prince Albert at 90.1 per cent and Laingsburg with 83.3 per cent in 2011. Laingsburg have the highest percentage of households that use solar energy, although access to solar energy declined from 6.3 per cent to 3.6 per cent between 2001 and 2011.

Table 37 Access to energy per ward

				Candles			
Municipality	Electricity	Gas	Paraffin	(not a valid	Solar	None	Total
				option)			
DC5: Central Karoo	17 048	48	69	1 300	548	63	19 076
WC051: Laingsburg	1 911	9	11	281	193	4	2 408
10501001: Ward 1	661	6	-	78	35	1	781
10501002: Ward 2	246	-	7	18	21	2	295
10501003: Ward 3	126	-	-	-	1	-	127
10501004: Ward 4	878	3	5	184	135	1	1 205
WC052: Prince Albert	3 092	-	11	317	150	9	3 578
10502001: Ward 1	827	-	4	93	21	2	947
10502002: Ward 2	857	-	-	16	11	1	885
10502003: Ward 3	539	-	2	14	12	5	571
10502004: Ward 4	869	-	5	194	106	1	1 176
WC053: Beaufort West	12 045	39	47	703	205	50	13 089
10503001: Ward 1	1 785	5	7	144	25	4	1 970
10503002: Ward 2	1 619	-	8	172	50	3	1 852
10503003: Ward 3	1 492	2	-	19	6	26	1 545
10503004: Ward 4	1 678	6	6	17	4	1	1 711
10503005: Ward 5	1 772	12	11	82	1	6	1 885
10503006: Ward 6	1 112	10	2	38	1	2	1 166
10503007: Ward 7	2 587	3	13	231	119	7	2 960
Total	17 048	48	69	1 300	548	63	19 076

Source: Stats SA, Census 2011

The highest number of households with no access to the energy sources highlighted in Table 37 is located in Beaufort West (50), with the majority of households in Ward 3 (26). Prince Albert has 9 households with no access to an energy source with the biggest backlog in Ward 3(5). Laingsburg has 4 households with no access to energy sources largely located in Ward 2.

#### 2.6.3 Sanitation

Sanitation is a means of promoting health through the provision of safe disposal and treatment of human waste. Access to a toilet advances physical health as well as providing the user with sense of human dignity. The state of sanitation reflects the state of human development in any community. Access to adequate sanitation has many advantages for public health, dignity and the advantages extend beyond households to the entire communities. However, when sanitation systems are inadequate the health impacts can be extremely serious.

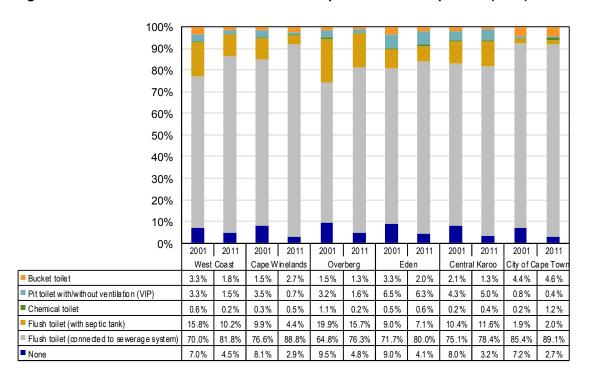


Figure 12 Access to sanitation in the Western Cape - District Comparison (2011)

Source: Stats SA Census 2001 & 2011

All the districts have improved access flush toilets (connected to sewerage system) between 2001 and 2011 with the largest improvement in Cape Winelands at 12.2 percentage points, followed by the West Coast at 11.8 percentage points, Overberg at 11.5 percentage points, Eden 8.3 percentage points. The Central Karoo and the City of Cape Town has shown the smallest improvement over all the districts at 3.3 per cent and 3.7 per cent respectively. The percentage of households without any access to sanitation has decreased across all the districts from 2001 to 2011.

Table 38 Access to Sanitation in the Central Karoo, 2001 and 2011

Toilet facilities	2001	% share of households 2001	2011	% share of households 2011	Average annual growth 2001 - 2011
Flush toilet (connected to sewerage system)	11 361	74.9%	14 803	77.6%	4.5%
Flush toilet (with septic tank)	1 568	10.3%	2 198	11.5%	5.8%
Dry toilet facility	0	0.0%	193	1.0%	
Pit toilet with ventilation	413	2.7%	664	3.5%	8.2%
Pit toilet with out ventilation	227	1.5%	285	1.5%	3.9%
Chemical toilet	27	0.2%	76	0.4%	18.8%
Bucket toilet system	1 262	8.3%	253	1.3%	-23.5%
None	315	2.1%	601	3.2%	11.4%
Total	15 173	100.0%	19 073	100.0%	3.9%

Source: Stats SA Census 2001 & 2011

Access to sanitation generally improved for acceptable forms of sanitation in Central Karoo between 2001 and 2011 resulting in the combined level of sanitation below the acceptable standard (i.e. none, bucket, pit toilet without ventilation) being reduced

from 11.9 per cent to 6 per cent between 2001 and 2011. Within these sanitation categories which are below the acceptable standard the following trends were observed; pit without ventilation remained unchanged at 1.5 per cent, the bucket toilet system were reduced to 1.3 per cent but none increased to 3.2 per cent.

Table 39 Access to Sanitation per municipality in the Central Karoo District

	Laingsburg		Prince	Albert	<b>Beaufort West</b>	
	2001	2011	2001	2011	2001	2011
None	8.2%	4.9%	11.8%	4.3%	5.9%	2.6%
Flush toilet (connected to sew erage system)	61.6%	68.5%	63.3%	65.8%	82.6%	83.6%
Flush toilet (w ith septic tank)	12.8%	14.6%	15.7%	18.7%	7.4%	9.2%
Chemical toilet	0.3%	1.0%	0.3%	0.1%	0.1%	0.4%
Pit toilet with ventilation (VIP)	9.7%	5.6%	1.4%	5.1%	2.1%	2.7%
Pit toilet w ithout ventilation	3.3%	1.4%	5.9%	4.3%	0.9%	0.6%
Bucket toilet	3.3%	1.4%	5.9%	4.3%	0.9%	0.6%

Source: Stats SA Census 2011

All the municipalities in the Central Karoo region have increased its access to flush toilets that are connected to the sewerage system between 2001 and 2011. Laingsburg, Prince Albert and Beaufort West have also decreased their percentage of households that does not have basic sanitation between 2001 and 2011.

Table 40 Access to sanitation per ward

Municipality	None	Flush toilet (connected to sewerage system)	Flush toilet (with septic tank)	Chemical toilet	Pit toilet with ventilation (VIP)	Sanitation Access	Pit toilet without ventilation	Bucket toilet	Other	No Access	Total
DC5: Central Karoo	601	14 802	2 198	75	664	17 739	285	253	197	735	19 076
WC051: Laingsburg	117	1 641	351	25	134	2 151	95	33	11	139	2 408
10501001: Ward 1	37	589	72	6	26	693	29	22	1	52	781
10501002: Ward 2	4	236	27	3	20	286	5	-	-	5	295
10501003: Ward 3	-	126	-	1	-	127	-	-	-	0	127
10501004: Ward 4	76	691	252	15	88	1 046	61	11	10	82	1 205
WC052: Prince Albert	148	2 274	645	3	175	3 097	62	148	125	335	3 578
10502001: Ward 1	60	531	169	-	38	738	18	121	9	148	947
10502002: Ward 2	3	568	197	-	-	765	1	10	106	117	885
10502003: Ward 3	2	568	1	-	-	569	-	-	-	0	571
10502004: Ward 4	82	607	278	3	137	1 025	43	16	10	69	1 176
WC053: Beaufort West	336	10 887	1 202	48	355	12 492	128	72	61	261	13 089
10503001: Ward 1	73	1 384	235	36	137	1 792	63	30	12	105	1 970
10503002: Ward 2	135	1 260	320	-	77	1 657	30	25	5	60	1 852
10503003: Ward 3	2	1 537	1	-	-	1 538	1	-	4	5	1 545
10503004: Ward 4	9	1 593	93	-	-	1 686	-	1	15	16	1 711
10503005: Ward 5	15	1 798	54	-	3	1 855	-	2	12	14	1 885
10503006: Ward 6	3	1 152	6	2	-	1 160	-	-	2	2	1 166
10503007: Ward 7	99	2 162	492	9	137	2 800	35	14	11	60	2 960
Total	601	14 802	2 198	75	664	17 739	285	253	197	735	19 076

Source: Stats SA, Census 201

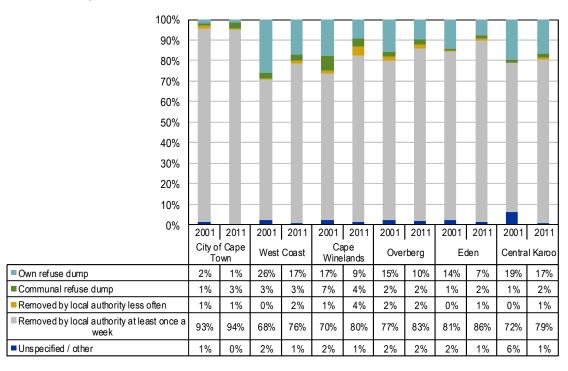
According to Table 40 Beaufort Municipality has the highest number of households with no access to sanitation (597) of which the majority (195) are located in Ward 2, followed by Ward 1 (178) and Ward 7 (159).

Prince Albert reflects 483 households with no access to sanitation of which 208 are located in Ward 14 and 151 in Ward 4.

Laingsburg reflects 256 households without sanitation of which 158 are in Ward 4 and 89 are in Ward 1.

#### 2.6.4 Refuse Removal

Figure 13 Access to refuse removal by local authority/private company in the Western Cape



Source: Stats SA Census 2011

All the districts as well as the City of Cape Town have recorded an improvement in access to refuse removal from 2001 to 2011. In 2011 the Central Karoo and the West Coast has the highest percentage households with own refuse dump at 17 per cent between 2001 and 2011.

Table 41 Access to Refuse Removal Services in the Central Karoo, 2001 and 2011

Refuse Removal	Census 2001	% share of households 2001	Census 2011	% share of households 2011	Average annual growth 2001 - 2011
Removed by local authority at least once a week	11 788	77.7%	15 018	78.7%	4.0%
Removed by local authority less often	51	0.3%	201	1.1%	26.0%
Communal refuse dump	186	1.2%	313	1.6%	9.0%
Own refuse dump	3 064	20.2%	3 164	16.6%	1.0%
No rubbish disposal	84	0.6%	261	1.4%	21.0%
Other	0	0.0%	120	0.6%	0.0%
Total	15 173	100.0%	19 077	100.0%	3.9%

Source: Statistics South Africa Census 2001 and Census 2011

The number of households that has access to refuse removal by the local authority at least once a week has increased with 3 230 households over the period from 2001 until 2011. The composition of the different levels of access to refuse removal service remained the same in 2001 and 2011, except for the category 'Own Refuse Dumps' which reduced from 20.2 per cent to 16.6 per cent.

Table 42 Access to refuse removal in the Central Karoo District

	Laings	Laingsburg		Prince Albert		rt West
Refuse Removal	2001	2011	2001	2011	2001	2011
Removed by local authority/ private company at least once a w eek	62.0%	59.5%	71.6%	73.4%	85.4%	83.7%
Removed by local authority/ private company less often	0.0%	6.2%	10.0%	0.4%	0.4%	0.3%
Communal refuse dump	1.0%	4.7%	0.8%	1.4%	0.8%	1.1%
Ow n refuse dump	36.0%	27.7%	27.0%	20.2%	12.9%	13.6%

Source: Stats SA Census 2011

Almost 80 per cent of households in the Central Karoo municipalities have access to refuse removal by the local authority or a private company at least once a week in 2001 and 2011. In 2011, Laingsburg (27.7 per cent) has the highest percentage of households that dump their own refuse, followed by Prince Albert at 20.2 per cent and Beaufort West with 13.6 per cent.

Table 43 Access to refuse removal per ward

Municipality	Removed by local authority/ private company at least once a week	Removed by local authority/ private company less often	Communal refuse dump	Own refuse dump	No rubbish disposal	Other	Total
DC5: Central Karoo	15 018	201	312	3 163	261	120	19 076
WC051: Laingsburg	1 433	149	114	666	37	10	2 408
10501001: Ward 1	584	12	9	147	21	8	781
10501002: Ward 2	251	-	-	40	3	-	295
10501003: Ward 3	127	-	-	-	-	-	127
10501004: Ward 4	470	137	105	478	14	2	1 205
WC052: Prince Albert	2 625	16	51	721	113	52	3 578
10502001: Ward 1	639	-	17	205	68	18	947
10502002: Ward 2	863	-	2	12	2	5	885
10502003: Ward 3	569	-	2	-	-	-	571
10502004: Ward 4	555	16	29	503	43	29	1 176
WC053: Beaufort West	10 960	36	148	1 777	111	58	13 089
10503001: Ward 1	1 258	3	32	634	27	15	1 970
10503002: Ward 2	1 238	4	28	511	58	15	1 852
10503003: Ward 3	1 544	1	-	-	-	-	1 545
10503004: Ward 4	1 696	5	1	6	1	2	1 711
10503005: Ward 5	1 872	9	1	-	4	-	1 885
10503006: Ward 6	1 154	10	-	-	-	2	1 166
10503007: Ward 7	2 198	5	85	626	21	25	2 960
Total	15 018	201	312	3 163	261	120	19 076

Source: Stats SA, Census 2011

According to Table 43 the highest number of households with no rubbish disposal is found in Prince Albert (113) with 68 in Ward 1, 43 in Ward 4 and only 2 in Ward 2.

Beaufort West has the second highest number of households without any rubbish disposal with 111, of which 58 are in Ward 2, 27 in Ward 1 and 21 in Ward 7. Laingsburg reflects 37 households without rubbish disposal of which 21 is located in Ward 1, in Ward 4 and 3 in Ward 2.

# 3. Economically active population

#### 3.1 Labour Force

Economically active people (those in the labour force) are those between the ages of 15 and 65 years who chose to participate in the labour market, by being willing to supply their labour in exchange for an income. Being defined as being economically active does not depend on being employed; as long as there is a desire, willingness and availability to work, even if that desire does not translate into employment, then you are seen as part of the labour force. The term labour force refers to those people who are available for employment in a certain area.

Participation in the labour market is influenced by many factors which includes disability, early retirement choices, long-term illness which includes Aids, study choices or even feelings of discouragement from participating. Participation levels have a direct impact on the labour force statistics e.g. high levels of labour force participation with few employment opportunities is easily evident in a high unemployment rate, while low levels of participation with few employment opportunities results in a lower unemployment rate. The differences in participation levels as a result of discouragement, people who want to work but have given up hope in finding employment and therefore are not taking active steps to look for work is what is typically captured difference between South Africa's official versus the broad/expanded unemployment definition.

Table 44 Labour Force Details Central Karoo, 2001 & 2011

	Labour force	Employed	Unemployed	Unemployment rate (Percentage)
2011	22 714	17 460	5 254	23.1
2001	21 768	13 592	8 176	37.6

Source: Statistics South Africa, Census 2001 and Census 2011

In terms of Table 44 above the labour force of the Central Karoo District increased with 946 people between 2001 and 2011. The number of employed people increased with 3 868 people and the number of unemployed decreased with 2 922 people between 2001 and 2011. It is positive to note that the unemployment rate decreased from 37.6 per cent in 2001 to 23.1 per cent in 2011.

Table 45 The Composition of the Western Cape Labour Force across Districts, 2011

Census 2011	Labour force	Percentage of Western Cape labour force	Employed	Percentage of Western Cape employed	Unemployed	Percentage of Western Cape unemployed	Unemployment rate (Percentage)
City of Cape Town	1 700 228	66.3	1 294 239	64.4	405 989	73.5	23.9
West Coast	165 321	6.4	141 117	7.0	24 204	4.4	14.6
Cape Winelands	337 252	13.2	289 765	14.4	47 487	8.6	14.1
Overberg	112 072	4.4	93 061	4.6	19 011	3.4	17.0
Eden	225 842	8.8	175 055	8.7	50 787	9.2	22.5
Central Karoo	22 714	0.9	17 460	0.9	5 254	1.0	23.1
Western Cape	2 563 430	100.0	2 010 697	100.0	552 733	100.0	21.6

Source: Statistics South Africa, Census 2011

The Western Cape labour force consists of 2 563 million people of whom 66.3 per cent resides in the City of Cape Town, 13.2 per cent in the Cape Winelands District, 8.8 per cent in the Eden District, 6.5 per cent in West Coast, 4.4 per cent in Overberg and 0.9 per cent in the Central Karoo District. Furthermore, the Western Cape labour force consist of 2.011 million employed people and 552 733 unemployed people. The Central Karoo labour force consists of 22 714 people, 17 460 employed people and 5 254 unemployed people.

Table 46 The Composition of the Cape Labour Force across municipalities, 2011

Census 2011	Labour force	Percentage of District's labour force	Employed	Percentage of District's employed	Unemployed	Percentage of District's unemployed	Unemployment rate
Central Karoo	22 714	100.0	17 460	100.0	5 254	100.0	23.1
Laingsburg	3 573	15.7	2 935	16.8	638	12.1	17.9
Prince Albert	4 357	19.2	3 513	20.1	844	16.1	19.4
Beaufort West	14 784	65.1	11 012	63.1	3 772	71.8	25.5

Source: Statistics South Africa, Census 2011

The Central Karoo labour force consist of 22 714 people of whom 14 784 resides in Beaufort West, 4 357 in Prince Albert and 3 573 in Laingsburg. Beaufort West's labour force consist of 11 012 employed and 3 772 unemployed people, followed by Prince Albert with 3 513 employed and 844 unemployed and Laingsburg with 2 935 employed and 638 unemployed.

## 3.1.1 Characteristics of the Unemployed

Although unemployment impacts across gender, race, age and other social divides its effects within certain groups are more pronounced. This could be as a result of a number of factors which could include past or current discrimination or differences in skill or education levels of individuals.

Some of the differential impacts of unemployment can be found within the breakdown of gender, population group and age. This is highlighted in the table below.

Table 47 Characteristics of the Unemployed, 2011

Central Karoo District 2011	Number of unemployed	Unemployment rate within group	Percentage share of the labour force	Percentage share of unemployed
Gender				
Male	2 431	19.1	56.0	46.3
Female	2 824	28.3	44.0	53.7
Population Group				
Black	856	33.0	11.4	16.3
Coloured	4 249	25.6	73.2	80.9
Indian or Asian	21	25.0	0.4	0.4
White	108	3.4	14.1	2.1
Other	20	9.9	0.9	0.4
Age				
15 - 19	658	52.8	5.5	12.5
20 - 24	1 079	35.6	13.3	20.5
25 - 34	1 521	24.3	27.6	28.9
35 - 44	1 158	19.7	25.8	22.0
45 - 54	670	15.3	19.2	12.7
55 - 65	169	8.7	8.5	3.2

Source: Statistics South Africa, Census 2011

### **Unemployment by Gender**

The gender split of Central Karoo's labour force shows males to be slightly better represented than females, with males making up 56 per cent of the district's total labour force. Although males represent more than half of the labour force, they represent only 46.3 per cent of the district's total unemployed population. Conversely, females represent less than half of the labour force but represent more than half of the unemployed.

#### **Unemployment by Population Group**

The coloured population group (4249) represent the highest number of unemployed within the Central Karoo District followed by blacks (856) whites (108), Indian/Asian (21) and other (20).

## **Unemployment by Age**

Disparities are also found within different age groups, with those at younger age groups experiencing higher levels of unemployment and representing significantly higher shares of the unemployed in comparison with their share of the labour force.

The unemployment rate for those in younger age groups is significantly higher than the older age groups; a comparison of the youngest and oldest represented groups, 15 to 19 years and 55 to 65 years differs greatly, with 52.8 per cent compared with 8.7 per cent. A general decline in the unemployment rate is noticeable when moving from younger to older age groups is noted. The vast differences in unemployment rates between age groups may in part be accounted for in the higher education, skill and experience levels of relatively older workers – these characteristics make workseekers more attractive to prospective employers and improve their chances of finding employment. The highest number of unemployed people in the Central Karoo falls in the 25 – 34 age group, followed by 35 – 44 year olds and then 20 – 24 year olds.

## 4. Economic Structure and Performance

According to the Municipal Economic Review & Outlook (MERO 2013), there appears to be grounds – despite current uncertainties – for a more optimistic outlook for the economy over the next three to five years. The baseline outlook is for global demand conditions to be compromised by the fiscal austerity in key developed countries, i.e. while growth should recover from the 2011/12 slowdown it is unlikely to become robust by any time soon.

The Western Cape economy grew at a rate of 3 per cent during calendar 2012 compared to the 2.5 per cent real GDP growth rate of the national economy as the region did not experience the impact of the sharp decline in mining output experienced in other regions. However, economic activity was impacted adversely by the unrest in the agricultural sector, which erupted towards the end of the year. Real economic growth in the region decelerated from 3.5 per cent in 2011 to an estimated 3 per cent in 2012. The slowdown was mainly driven by the impact of weaker global economic growth and the recovery in the national consumer sector

running out of steam. Economic growth, as measured by Regional Gross Domestic Product (GDP-R), is driven by two components: population growth and labour productivity. Labour productivity reflects the ability for increased output from the existing quantity of labour in the economy. Various government agencies and independent analysts produce measures of labour productivity. For high-level analyses of the second component of economic growth, a productivity measure using overall economic production provides the most comprehensive and consistent measurement of economic productivity. For the purpose of this socio-economic profile, a trend analysis is carried out below (Western Cape & District) on GDP-R figures from 2000 - 2010 followed by an assessment of the sector composition of the Economy as well as a review of Average Annual Growth rates per sector across the District for the period 2000 - 2010.

Table 48 Western Cape economy sectoral growth and employment: 2000 – 2011

	Real G	DPR growth (	Yoy %)	Net employment creation			
Sector	Trend	Recession	Recovery	Trend	Recession	Recovery	
	2000 - 2011	2008 - 2009	2010 - 2011	2000 - 2011	2008 - 2009	2010 - 2011	
Agriculture, forestry and fishing	2.0	8.2	-0.8	-186 297	-48 263	-5 874	
Mining and quarrying	-1.4	-7.5	1.1	1 138	872	871	
Manufacturing	2.7	-3.3	4.3	-63 932	-27 506	-1 828	
Electricity, gas and water	2.8	-1.6	1.2	1 487	-1 370	764	
Construction	7.1	5.5	0.7	-14 843	-17 160	735	
Wholesale and retail trade, catering and accommodation	4.4	-0.6	4.3	70 280	-4 115	16 461	
Transport, storage and communication	5.1	2.0	2.5	6 858	479	6 778	
Finance, insurance, real estate & business services	5.8	3.9	2.9	105 169	-18 699	10 452	
Community, social and personal services	3.0	1.4	1.3	46 831	9 333	-5 016	
General government	2.4	4.2	3.9	71 647	12 189	23 763	
Total Western Cape economy	4.1	1.7	3.0	38 338	-94 241	47 107	

Table 48 shows the sectoral growth and employment trends in the Western Cape economy. Whereas growth hovered at 4.1 per cent per annum (this compares to 3.6 per cent per annum nationally), it slowed sharply during the recession years (i.e. 2008/09) to 1.7 per cent per annum. The sharp contraction in the manufacturing sector (3.3 per cent per annum and with this sector contributing around 17 per cent of GDPR) is notable and – to a lesser extent – that of mining, electricity & water and wholesale & retail. Sustained growth in the agriculture, forestry & fishing sector, construction, transport & communication, finance & business services, CSP services and – importantly – the general government in an attempt at (national) countercyclical fiscal policy ensured the continued expansion of the regional economy.

As one would expect, the rate of employment creation deteriorated during the recession years – from trending at 0.6 per cent per annum (i.e. 38 000 net additional jobs, 2000 - 2011), net retrenchments amounted to 2.7 per cent per annum (i.e. around 94 000 net job losses, 2008 - 2009) during the recession. During the economic recovery the rate of employment creation was restored to 1.4 per cent per annum (i.e. around 47 000 net new jobs).

Table 49 Western Cape: Real GDPR Growth Forecast: 2013 - 2017

Sector	2012e	2013f	2014f	2015f	2016f	2017f	Average annual growth, 2013 - 2017
Agriculture, forestry and fishing	1.7	0.8	2.0	1.7	1.8	2.0	1.7
Mining and quarrying	-5.1	1.3	1.0	0.6	1.0	1.2	1.0
Manufacturing	2.0	2.5	2.7	3.0	3.6	3.3	3.0
Electricity, gas and water	-1.4	2.6	2.9	2.7	3.0	2.8	2.8
Construction	2.6	4.1	4.6	4.6	5.0	5.3	4.7
Wholesale and retail trade, catering and accommodation	4.3	3.3	3.7	3.9	3.8	4.0	3.8
Transport, storage and communication	2.5	3.2	4.1	4.5	4.5	4.8	4.2
Finance, insurance, real estate and business services	3.5	3.5	4.5	4.8	5.1	5.3	4.6
Community, social and personal services	2.0	2.6	2.8	3.0	3.0	3.2	2.9
General government	3.5	2.5	3.0	3.0	3.2	3.0	2.9
Total Western Cape	3.0	3.0	3.7	3.9	4.1	4.2	3.8
Primary sector	1.4	0.8	2.0	1.7	1.8	2.0	1.6
Secondary sector	1.9	2.8	3.1	3.3	3.8	3.7	3.3
Tertiary sector	3.4	3.2	3.9	4.2	4.3	4.5	4.0

Source: Western Cape Government: Provincial Budget Review, February 2013 (e = estimate; f = forecast)

Regarding the outlook for real economic growth in the region (see Table 49), the weakness in the global economy, the second-quarter financial volatility, brittle business and consumer confidence and the slowdown in the (national) consumer sector are likely to continue to weigh on the provincial economic performance during calendar 2013. Real GDPR growth is forecast at a similar rate compared to 2012 (i.e. 3 per cent per annum) and projected to accelerate thereafter, with an average real growth rate of 3.8 per cent over the medium term<sup>5</sup>.

During both calendar 2013 and the remainder of the forecast period, the tertiary sector is expected to drive real economic growth in the region, with growth averaging 4 per cent per annum, 2013 - 2017. However, the slowdown in the consumer sector will likely drive somewhat slower growth in the tertiary sector in 2013 compared to 2012, whereas the secondary sector recovery is projected to strengthen from 1.9 per cent average growth in 2012 to 2.8 per cent in 2013 and projected at 3.3 per cent over the medium term.

\_

<sup>&</sup>lt;sup>5</sup> The forecast was compiled with information known up to and including the middle of June 2013; it is possible that growth may be slower during 2012/13 than forecast here.

## 4.1 The Central Karoo District Economy

In the 2012 report the structure of the CKD economy was discussed in detail. While the CKD economy is small (contributing close to one per cent of the Western Cape GDPR and employment), its growth has been mixed, characterised by pockets of strength amidst some under-performing sectors. A key challenge for the region is its shrinking agricultural sector, impacting adversely on the retail & wholesale trade as well as transport & storage, with each being important services sub-sectors in the region. This challenge is being met with the rapid expansion of light industries (growing off a low base) while financial & business services also grow strongly. Three quarters of the regional economy consist services. It has been light manufacturing, construction and financial & business services driving the growth in the region, which came in close to the provincial average of 4.1 per cent per annum.

The finance, insurance, real estate & business services sector accounts for 27 per cent of GDPR and grew by close to 8 per cent per annum over the period 2000 to 2011. Furthermore, the share of manufacturing in GDPR almost doubled from 6 to 11 per cent over the corresponding period, while construction activities grew close to double digit rates. Apart from agro-processing activities (accounting for more than a third of manufacturing real value add), building materials fabrication, metals & engineering and electrical machinery are the key contributors to the region's manufacturing sector (with the value of GDPR amounting to R220 million in 2011).

The CKD experienced a relatively serious recession impact in 2009, with growth stalling that year following very rapid expansion in the preceding years (real GDPR growth averaged 5.7 per cent per annum, 2004 - 2008). However, while the recession did impact on manufacturing (with growth receding from double digit rates to 1.9 per cent in 2009), the main contraction occurred in agriculture (close to 8 per cent), which spilled over the retail & wholesale and transport & storage given the strong linkages between these sectors. Somewhat inexplicably the community, social & personal services sector also contracted. While only 7.4 per cent of the regional workforce lost their jobs in 2008 - 2009 during the recession, this accounted for close to half of all net job losses over the complete 2000 - 2011 period. The job losses stabilised and recovered somewhat during the first two years of economic recovery, 2010 - 2011. Real GDPR growth is estimated to have slowed down from 4.1 per cent in 2011 to 3.0 per cent in 2012 in line with the slowdowns in the global and national economies.

Table 50 Central Karoo District: Sectoral contribution to recovery growth, 2010 - 2011 & employment creation

Sector	Ave real GDPR growth, 2010/11	% point contribution	% share	Net employment creation 2010/11
Agriculture, forestry & fishing	2.1	0.2	5.7%	90
Mining & quarrying	0.8	0.0	0.0%	1
Manufacturing	5.8	0.6	19.1%	-37
Electricity, gas & water	-0.3	0.0	-0.1%	3
Construction	1.3	0.1	2.2%	-8
Wholesale & retail trade, catering & accommodation	2.6	0.4	10.8%	-30
Transport, storage & communication	3.2	0.4	11.6%	13
Finance, insurance, real estate & business services	4.0	1.1	32.6%	89
Community, social & personal services	1.1	0.1	2.2%	-143
General government	4.1	0.5	16.0%	178
Total District economy	3.3	3.3	100.0%	156

Source: Quantec Research/CER

Table 50 shows the sector spread of the recovery growth in the district economy during calendars 2010/11, including net employment creation over the corresponding period. From the table it is clear that the growth in the finance, insurance, real estate & business services sector contributed strongest to the economic recovery in the region, followed by manufacturing and the general government's counter cyclical fiscal policy. A welcome recovery in the agricultural sector also restored some growth in the region's relatively large retail & wholesale and transport & storage sectors, assisting the general economic recovery. Unfortunately, small job losses persisted in manufacturing, construction and the retail & wholesale trade during the first two years of economic recovery. The community, social & personal services sector also continued to shed jobs; however, this was more than compensated for the new jobs in the public sector.

## 4.2 Current profile – growth & employment trends in a provincial context

Table 51 shows the composition of the Central Karoo District economy in the context of the five other districts of the province. Similar to all the other Western Cape districts, the finance, insurance, real estate & business services sector is the largest in the region. In the CKD this sector accounts for 27 per cent of GDPR, which is the same as for the Overberg, the second smallest regional economy in the province. The relative share of this sector in Eden and the West Coast is slightly less, but of the same order; only in the Cape Metro this sector is much more prominent, both in relative and absolute terms. Where the CKD's economic structure deviates somewhat, is the relatively small size of its manufacturing sector (contributing only 11 per cent of GDPR); however, as noted, this sector is expanding rapidly from a low base and also played an important part in the region's recovery from the recession. The other notable feature of the CKD's economic structure is the relative large contribution of the transport, storage & communication sector. This region sells most

of its produce in the rest of the country and given the geographical remoteness transport & storage is a key economic function. Finally, the relative contribution of the government sector (i.e. 13 per cent) is the largest compared to the other Western Cape regions, albeit only moderately so.

Table 51 Central Karoo District economy in provincial perspective: Sectoral composition: 2011

Sector	Central Karoo	Cape	Cape Winelands	Eden	West Coast	Overberg
Agriculture, forestry & fishing	9.0	1.4	11.1	5.5	14.6	11.6
Mining & quarrying	0.1	0.1	0.2	0.2	0.7	0.1
Manufacturing	11.1	15.9	24.2	16.5	17.7	16.2
Electricity, gas & water	1.1	1.5	0.9	1.5	0.9	1.2
Construction	5.6	3.9	3.5	8.7	4.3	7.7
Wholesale & retail trade, catering & accommodation	13.9	15.2	13.8	17.9	12.8	13.9
Transport, storage & communication	12.2	10.9	7.3	7.7	8.5	7.9
Finance, insurance, real estate & business services	27.4	36.1	22.9	24.3	25.6	27.1
Community, social & personal services	6.5	5.1	5.8	5.3	4.1	4.2
General government	13.1	9.8	10.2	12.4	10.7	10.2
Total District economy	100.0	100.0	100.0	100.0	100.0	100.0

Source: Quantec Research/CER

Regarding the growth of the CKD economy over the 2000s, the relatively strong growth of the region's largest sector, i.e. financial & business services, stand out. Only in the West Coast and Overberg did this sector expand faster over the period 2000 - 2011. Furthermore, as noted, the region's manufacturing sector is catching up and posted close to double digit real growth over the corresponding period; however, this is from a very low base. Construction activity also expanded strongly over the 2000s, i.e. a characteristic shared by all the other Western Cape regions. The tendencies noted here are positive elements of the CKD economy.

On the downside, the comparatively sharper contraction of the agricultural sector is notable and this probably explains why both the retail, wholesale, catering & accommodation sector and the transport, storage & communication sector's growth has been below the average in the province. The sluggish growth in these sectors also possibly point to untapped tourism potential in the region.

Table 52 Central Karoo District economy in provincial perspective: real GDPR growth 2000 – 2011

Sector	Central Karoo	Cape Metro	Cape Winelands	Eden	West Coast	Overberg
Agriculture, forestry & fishing	-1.2	10.0	0.3	1.1	-0.4	-0.7
Mining & quarrying	15.8	-0.8	2.1	-4.1	-4.0	0.1
Manufacturing	9.7	2.3	2.4	4.1	1.2	6.7
Electricity, gas & water	-0.3	3.4	2.1	0.6	-2.2	1.1
Construction	9.3	6.5	7.2	10.3	6.6	9.0
Wholesale & retail trade, catering & accommodation	3.1	4.1	5.4	5.5	3.8	3.6
Transport, storage & communication	2.0	5.0	6.8	5.5	4.5	6.3
Finance, insurance, real estate & business services	7.9	5.5	7.1	7.1	10.6	11.0
Community, social & personal services	2.6	2.8	3.8	5.0	2.9	3.6
General government	2.4	1.9	3.3	4.5	2.4	3.3
Total District economy	4.0	4.1	3.9	5.2	3.3	5.2

Source: Quantec Research/CER+

Table 53 Central Karoo District GDPR and employment trends, 2000 – 2011

	Real (	GDPR growth (	Yoy %)	Net employment creation			
Sector	Trend	Recession	Recovery	Trend	Recession	Recovery	
	2000 - 2011	2008 - 2009	2010 - 2011	2000 - 2011	2008 - 2009	2010 - 2011	
Agriculture, forestry and fishing	-1.2	0.3	2.1	-4 318	-980	90	
Mining and quarrying	15.8	16.5	0.8	10	4	1	
Manufacturing	9.7	7.3	5.8	390	84	-37	
Electricity, gas and water	-0.3	-3.2	-0.3	-10	-7	3	
Construction	9.3	9.3	1.3	100	-124	-8	
Wholesale and retail trade, catering and accommodation	3.1	-1.6	2.6	140	-171	-30	
Transport, storage and communication	2.0	-2.3	3.2	-161	-43	13	
Finance, insurance, real estate & business services	7.9	7.8	4.0	841	-14	89	
Community, social and personal services	2.6	1.7	1.1	175	72	-143	
General government	2.4	4.6	4.1	529	120	178	
Total Central Karoo District	4.0	3.3	3.3	-2 303	-1 059	156	

Source: Quantec Research / CER

Table 53 shows that the CKD economy witnessed a mild recession impact, with real GDPR averaging 3.3 per cent during 2008 - 2009. However, this is mainly due to still strong growth in calendar 2008 as growth did stall in 2009 before the recovery kicked in again at the end of 2009. Real GDPR growth accelerated from zero in 2009 to 2.6 per cent in 2010 and 4.1 per cent in 2011, averaging 3.3 per cent over this period. It would appear for the retrenchment of agricultural workers subsided during the recession and actual net job growth took place over the 2010 - 2011 period in line with some recovery growth in the agricultural sector (averaging 2.1 per cent, 2010 - 2011). Overall net retrenchments also stabilized during 2010 - 2011. Real

economic growth in the region has tapered down to around 3.0 per cent (2012 - 2013) – in line with the slowdowns in the rest of the country and the world.

## 4.3 Macro implications and district economic outlook

The CKD economy is estimated to have slowed down from real GDPR growth of 4.1 per cent in 2011 to 3.0 per cent in 2012 in line with the slowdown in the provincial (from 3.5 to 3.0 per cent) and the national economies (from 3.1 to 2.5 per cent). The drivers of the slowdown have been the local consumer recovery running out of steam (due to sluggish employment growth, lower wage growth, higher energy and food costs, declining consumer confidence and stricter credit standards limiting credit spending) as well as some adverse impact on exports related to the global slowdown in economic activity.

70 80 60 65 40 60 Net balance 55 20 Index 50 0 45 -20 40 -40 35 -60 Jan-09 9 ဗု Jan-07 89 \$ Jan-1 д Jan д Jan Jan Jan Global MNF PMI Kagiso PMI WC mnf prod (BER)

Figure 14 Global PMI vs Kagiso PMI vs Western Cape manufacturing production (BER survey)

Source: JP Morgan/BER

Furthermore, private fixed investment spending has been weak due to the impact of uncertainty (at the global level and, domestically, regarding economic policy and the general political climate) and slowing domestic demand. The weak tendency in private fixed investment spending is countered by the public sector infrastructure investment drive.

The recovery growth in the district since 2010 has been in line with that of the province and it would appear that the region has embarked on an upswing phase of the business cycle in synch with the provincial and national economies – see tracking the composite global PMI, the Kagiso PMI (revealing manufacturing business conditions domestically) and the trajectory of manufacturing production in the wider province. There is a broad correspondence between the global, the national and the regional business cycle as depicted in, albeit evident that the improvement in economic activity has followed a hesitant pattern since the end of 2010.

CKD real GDPR growth is projected to come in at 3.0 per cent during 2013, remaining under pressure due to the factors noted above. Thereafter growth is projected to accelerate on the assumption of a sustained global economic recovery (see footnote 5). The rapid expansion (and catch-up) of the manufacturing sector is projected to continue, with the average growth in this sector being the fastest over the forecast period (i.e. 6.1 per cent per annum). While no allowance was made regarding the potential shale gas exploration activities over the forecast period, this is obviously a potential source of future growth in the mining sector of the region (see chapter 3). The above-average growth of the finance, insurance, real estate & business services sector (5.2 per cent per annum) and the construction sector (4.4 per cent) is projected to continue. The forecast growth rates in the 'lagging' retail, wholesale, catering & accommodation and transport, storage & communication sectors are in line with the 2000s' trend growth rates, which assume some positive impact from increased tourism activity in the region.

Central Karoo District Manufacturing 6.1 Mining Finance & business services 5.2 Construction Trade CSP services 2.6 Government 2.4 Transport & communication 2.0 Agriculture 0.5 Electricity & water -0.2 -1.0 0.0 1.0 2.0 3.0 4.0 6.0 7.0 Ave annual GDPR growth, 2012 - 2017

Figure 15 Central Karoo District economy: forecast real GDPR growth by broad sector: 2012 - 2017

Source: Quantec Research/CER

Overall CKD real GDPR growth is forecast to average 3.6 per cent per annum over the forecast period (2012 - 2017), more or less in line with the average growth rate forecast for the province (3.7 per cent per annum). The sectoral forecast is motivated in more detail in Chapter 3.

## 4.4 Economy: Conclusion Remarks

The CKD economy is small in a provincial context and its economy exhibits mixed tendencies. Whereas the agricultural sector is important from a historical perspective, it is shrinking which is impacting negatively on other sectors in the region. On the positive side, light industrial activity has been flourishing (in sectors such as building material fabrication, metals & engineering and electrical machinery) and combined with lively building & construction activities are compensating for the fading of agriculture. A relatively large financial & business services sector is also characteristic of the region's economy similar to the case in the rest of the province.

The regional output is almost exclusively sold into the domestic market (goods exports fluctuated between zero and two per cent of GDPR over the 2000 - 2011 period). The domestic market is likely to remain under pressure over the short term given the consumer sector slowdown nationally and the weak private investment prospects. The consumer sector is under pressure due to sluggish economic growth and employment creation, deteriorating confidence and the impact of higher energy and food prices on consumer budgets. The national government also has to tighten the growth of real expenditure in order to generate a better budget balance, which may impact on local government. The CKD may be particularly exposed to this impact given the relative size of the public sector in the region's economy. Public sector infrastructure spending could in the interim be a key countervailing source of economic growth and employment creation.

This outlook is for a stabilization of the global economic slowdown experienced last year and a gradual re-acceleration towards the end of 2013 and during next year. The domestic consumer slowdown is also expected to be of a temporary nature, with interest rates remaining low and with the stimulus from infrastructure investment adding to income growth. The weaker exchange rate should also act as some stimulus to the exporters in the region, as well as presenting import competing opportunities; however, given the domestic market orientation of the CKD economy, the rand's depreciation is likely to have an overall negative impact due to higher inflation and the erosion of real household incomes. While significant risks prevail (both on the global and domestic economic front), the CKD economy is projected to remain embarked on a recovery road.

## 5. Finance and Resource Mobilisation

#### 5.1 National Transfers

Unlike provinces, municipalities have the ability to raise revenue through property rates and tariffs on fees for rendered such as electricity, water, sanitation and refuse removal, administration fees and penalties. However, the South Africa's Fiscal Framework entitle municipalities to a share of national raised revenue through the unconditional equitable share grant and other allocations from national or provincial government in the form of conditional or unconditional grants.

The value of transfers varies between municipalities. The objectives of the transfers are to address historical imbalances between revenue and expenditure, to support national priorities to improve the quality of life of people and to promote good governance and strengthen administrative capacity.

The transfers from National Government to the Western Cape and from Provincial government to the Central Karoo Region, as well as the value of provincial spending within the Central Karoo, is set out in the figures and tables below.

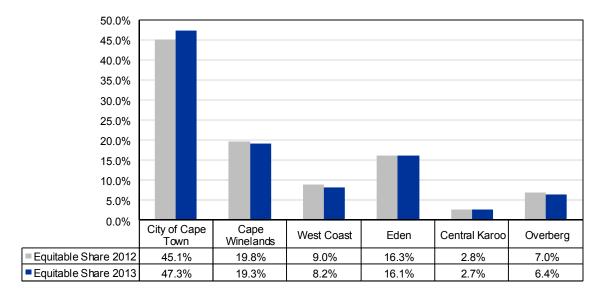


Figure 16 Equitable share distribution in the Western Cape

Source: Division of Revenue Act (No. 5 of 2012) and (No.2 of 2013)

The City of Cape Town share of the equitable share allocation to the Western Cape, which is the largest, have increased in 2013 with 2 percentage points whereas all the district's share has decreased marginally. Cape Winelands follows the City of Cape Town with 19.3 per cent of the Western Cape equitable share. Eden district is the next largest recipient with 16.1 per cent followed by West Coast (8.2 per cent), Overberg (6.4 per cent) and lastly Central Karoo with 2.7 per cent.

The disaggregated allocation of unconditional grants (equitable share) and conditional grants for the Central Karoo Region for 2012 and 2013 follows hereafter.

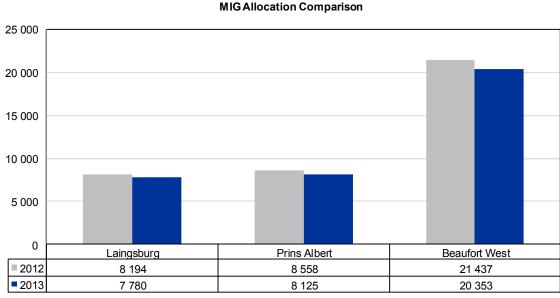
Table 54 Equitable Share within Central Karoo Region

Type of Transfer	Central Karoo District		Laingsburg		Prince Albert		Beaufort West	
	2012	2013	2012	2013	2012	2013	2012	2013
TOTAL	16 231	17 778	21 030	21 394	22 194	23 126	80 013	66 360
Equitable Share	12 981	14 638	9 536	10 224	10 586	11 661	32 765	35 567
Conditional Grants and	3 250	3 140	11 494	11 170	11 608	11 465	47 248	30 793
Local Government Financial Management Grant	1 250	1 250	1 500	1 500	1 250	1 450	1 250	1 450
Municipal Systems Improvement Grant Water Services Operating Subsidy Grant	1 000	890	800	890	800	890	800	890
Municipal Infrastructure Grant (MIG)			8 194	7 780	8 558	8 125	21 437	20 353
Municipal Infrastructure Grant (Cities)								
Regional bulk infrastructure Grant								3 100
Urban Settlement Development Grant								

Source: Division of Revenue Act, 2013 (No. 2 of 2013)

The largest recipient of equitable share is Beaufort West Municipality at nearly 50 per cent of the equitable share transferred to Central Karoo region followed by Central Karoo District at 20 per cent. Prince Albert received 16 per cent and Laingsburg 14 per cent of the equitable share of the region.

Figure 17 Municipal Infrastructure Grant within the Central Karoo Region



Source: Division of Revenue Act, 2012 (No. 5 of 2012)

Beaufort West Municipality is the largest recipient of the Municipal Infrastructure Grant within Central Karoo at 56.1 per cent for 2012/13. Both Laingsburg and Prince Albert received 22 per cent of the Municipal Infrastructure Grant.

## 5.2 Provincial Transfers

**Table 55 Provincial Transfers** 

		Outcome					M	l edium-teri	n estimat	e
Department and Transfer R'000	Audited 2009/10	A udited 2010/11	A udited 2011/12	Main appro- priation 2012/13	Adjusted appro- priation 2012/13	Revised estimate 2012/13	2013/14	Change from Revised estimate 2012/13	2014/15	2015/16
Provincial Treasury	2009/10	2010/11	800	2012/13	450	450	2013/14	(100.00)	2014/15	2015/16
Financial Management Support Grant			800		450	450		(100.00)		
Department of Health	529	1 179	1408	1571	1959	1959		(100.00)		
Global Fund	529	1179	1408	1571	1959	1959		(100.00)		
Department of Social	4 000							( ,		
Multi-Purpose Centres	4 000									
Department of Human	24 874	5 784	8 217	9 251	9 251	35 206	43 993	24.96		
Settlements										
Human Settlements Development Grant (Beneficiaries)	23 774	5 284	6 2 17	9 251	9 251	34 700	43 993	26.78		
Local Government Bulk Water and Provincial Contribution towards the Accelerating of Housing Delivery	1000	500	2 000			506		(100.00)		
Housing Consumer Education Grant	100									
Department of Transport and Public Works	120	5 5 5 7	1 147	287	2 287	2 287	192	(91.60)		
M aintenance and construction of Transport Infrastructure	120	57	547	287	287	287	192	(33.10)		
Public Transport Non Motorised Infrastructure		5 500	600		2 000	2 000		(100.00)		
Department of Cultural Affairs and Sport	708	520	2 931	4 540	4 540	4 540	5 191	14.34	5 082	5 426
Development of Sport and Recreation Facilities				200	200	200	200			
Library Services (Conditional Grant) Library Service Replacement funding	708	520	739 2 192	814 3 526	814 3 526	814 3 526	1 159 3 832	42.38 4060.00	1022 4 060	1 124 4 302
for most vulnerable B3 municipalities  Department of Local  Government	832	4 557	546	648	1939	1939		(100.00)		
Fire Fighting Assistance Provincial Management Support Grant	280	333 1600								
Thusong Service Centres Grant (Sustainability: Operational Support Grant)		2 000			872	872		(100.00)		
Community Development Worker IDP hands on support	552	624	546	648	567 500	567 500		(100.00) (100.00)		
Total Transfers	31063	17 597	15 049	16 297	20 426	46 381	49 376	6.46	5 082	5 426

Source: Provincial Treasury Local Government Database, 2013

Table 55 captures the different conditional transfers to municipalities of the Central Karoo region which is disaggregated for specific grants transferred by the provincial sector departments to municipalities within the Central Karoo District. The total transfers to the Central Karoo region is R16.297 million in 2012/13, R49.376 million in 2013/14 and R5.082 million in 2014/15.

The largest proportion of the transfers to municipalities in the Central Karoo Region flows from the Department of Human Settlements for the building of houses amounting to R43.993 million. The Department of Cultural Affairs and Sport intends to transfer the second largest amount, R5.191 million to Central Karoo, mainly for the funding of library services.

Table 56 Provincial Payments and Estimates in comparison with transfers

		Outcome						M edium-term estimate			
Department R'000	Audited	Audited	Audited	Main appro- priation	Adjusted appro- priation	Revised estimate		% Change from Revised estimate			
	2009/10	2010/11	2 0 11/ 12	2012/13	2012/13	2012/13	2013/14	2012/13	2014/15	2015/16	
Department of Community Safety	16 681	19 112	19 811	22 178	22 134	22 134	24 415	10.31	25 982	27 393	
Department of Education	132 831	149 634	165 963	176 532	176 532	176 532	156 018	(11.62)	160 573	173 689	
Department of Health	117 537	136 663	177 407	197 590	177 045	177 045	190 565	7.64	203 868	215 515	
Department of Social Development	76 893	81941	89 003	96 219	96 219	96 219	106 959	11.16	112 729	119 987	
Department of Human Settlements	27 607	5 784	6 215	8 351	8 351	8 351	43 993	426.80			
Department of Transport and Public Works	54 814	38 293	86 828	130 354	135 354		79 402		142 813	194 493	
Department of Agriculture	51217	9 565	8 660	19 660	19 660	19 660	21858	11.18	21858	21858	
Department of Economic Development and Tourism	5 5 13	4 726	728	5 678	5 678	5 678	6 000	5.67	6 000	6 000	
Department of Cultural Affairs and Sport	708	520	2 931	4 330	4 330	4 330	5 191	19.88	5 082	5 426	
Department of Local Government	832	4 557	546	567	1939	1939		(100.00)			
Total	484 633	450 795	558 092	661459	647 242	511 888	634 401	23.93	678 905	764 361	
Total Transfers to Central Karoo District	31063	17 597	15 049	16 297	20 426	46 381	49 376	6.46	5 082	5 426	
Transfers as a percentage of Provincial Payments and Estimates	6.41	3.90	2.70	2.46	3.16	9.06	7.78	(14.10)	0.75	0.71	

Source: Provincial Treasury Local Government Database, 2013

Table 56 captures the total provincial payments and estimates indirectly made by provincial departments in the Central Karoo District. The full amount that the Western Cape Government plan to spend in the Central Karoo amounts to R634.401 million in 2013/14, R678.905 million in 2014/15 and R764.361 million in 2015/16. The biggest contributors to provincial spending in 2013/14 are the Departments of Health R190.565 million, and Education R156.018 million.

# 6. Environmental Challenges and Status Quo

## 6.1 Environmental Management

As drivers of economic growth, development and innovation, municipalities need to recognise the challenges posed by climate change as well as the limitations on growth posed by its natural environment. This requires watchful management and care in protecting our natural resources to ensure sufficient availability of resources for both the current and future generations.

Although work in this regard is extensive, for the purpose of this work, only the quality of water and waste water as well as air quality are highlighted.

#### 6.1.1 Regional Water Volume and Losses

With regard to Water Balances Analysis and the Determination of Water Losses, Regulation 11 of the Compulsory National Standards in terms of section 9(1) of the Water Services Act (Act 108 of 1997) specifies that a Water Services Institution must every month measure the quantity of water provided to each supply zone within its supply area; and determine the quantity of unaccounted for water by comparing the measured quantity of water provided to each supply zone with the total measured quantity of water provided to all user connections within that supply zone.

#### A Water Services Institution must:

- Measure the quantity of water provided to each supply zone within its area;
- Determine the quantity of unaccounted for water by comparing the measured quantity of water provided to each supply zone with the total measured quantity of water provided to all user connections within that supply zone;
- Take steps to reduce the quantity of water unaccounted for; and
- Keep record of the quantities of water measured and of the calculations made.

It is believed that Water Services Authorities already report on an annual basis, as part of the Regulatory Performance Measurement System KPI 11, on their water use efficiency data at Municipal level. The Department of Water Affairs also monitors the water losses per distribution system and need to report on a quarterly basis on the volume of water saved per distribution system.

Table 57 Summary of Western Cape Regional System Input Volumes and Non-Revenue Water and Water Losses, 2013

Western Cape Regional Information	Supply of Water (12 months ending June 2013)		Demand for Water (12 months ending June 2013)		Loss 12 month	e Water es for ns ending 2013	Average Percentage Water Losses for 12 months ending June 2013	
	kl/yr	kl/m	kl/yr	kl/m	kl/yr	kl/m	%	
City of Cape Town	320 921 723	26 743 477	274 447 703	22 870 642	46 474 020	3 872 835	14.5	
Cape Winelands Region	57 111 202	4 759 267	48 384 112	4 032 009	8 727 090	727 258	15.3	
Overberg Region	15 292 567	1 274 381	11 983 994	998 666	3 308 573	275 714	21.6	
Eden Region	35 164 023	2 930 335	28 124 768	2 343 731	7 039 255	586 605	20.0	
Central Karoo Region	3 435 006	286 251	1 593 052	132 754	1 841 954	153 496	53.6	
West Coast Region	28 889 849	2 407 487	24 335 017	2 027 918	4 554 832	379 569	18.8	

Source: DWA Report 2013

The Central Karoo District Municipality's average monthly demand for water for the year ending June 2013 totalled 1.593 million kilolitres per month; monthly water losses for the year averaged 53.6 per cent. The Central Karoo's share of water supply exceeds the demand with 1.842 million kilolitres per year. This translated to registered average water losses in excess of 153 496 kilolitre per month which is considered extreme for a water scarce region.

Table 58 Summary of System Input Volume and Non-Revenue Water (NRW) - Central Karoo District Region 2013 - June 2013

WSA	System Input (12 months ending Jun 2013)		(12 months ending (Billed and Unbilled 12 months ending		Average Water Losses % for 12 months ending Jun 2013			
	kl/yr	kl/m	kl/yr	kl/m	kl/yr	kl/m	%	
Central Karoo	3 435 006	286 251	1 593 052	132 754	1 841 954	153 496	53.6%	
Laingsburg LM	755 200	62 933	235 413	19 618	519 787	43 316	68.8%	All towns monitored by DWA
Prince Albert LM	No Data	No Data	No Data	No Data	No Data	No Data	No Data	Bulk meters are not read regularly
Beaufort West LM	2 679 806	223 317	1 357 639	113 137	1 322 167	110 181	49.3%	All towns monitored by DWA
Total	460 814 370	38 401 198	364 533 629	30 377 802	96 280 741	8 023 395	20.9%	

Table 58 provides a summary of the system input volume and non-revenue water for the Central Karoo Region. Laingsburg experienced the highest water losses over the 12 month period ending June 2013 at 68.8 per cent and Beaufort West at 49.3 per cent. Water consumption in Laingsburg makes out 31.1 per cent of the annual supply and 50.66 per cent in Beaufort West.

### 6.1.2 Water Quality<sup>6</sup>

A satisfactory standard of quality water is essential to make it fit for human consumption and use. The Department of Water Affairs has developed a system of assessing the quality of drinking water throughout South Africa. Through the Blue Drop Certification Programme is mainly to ensure the quality of water that is used for consumption.

Compared to other provinces, in the 2011/12 financial year, the Western Cape was highly ranked in terms of its Blue Drop score; with a score of 94 per cent, the Western Cape was second to Gauteng who realised a 95 per cent Blue drop score. The next best score of 85 per cent was achieved by KwaZulu-Natal followed by a 77 per cent score by the Eastern Cape. The worst performing province was Mpumalanga with a Blue Drop score of 57 per cent.

The 100 per cent assessment coverage for the Western Cape included a total of 123 water systems for the Western Cape, with 29 Blue Drop awards. The City of Cape Town was the best performing Western Cape Municipality with a Blue Drop score of 97.6 per cent, receiving Blue Drop certification for the third year in a row.

\_

<sup>6 2011</sup> Blue Drop Report, Department of Water Affairs.

Table 59 Blue Drop and Green Drop Performance

Water Service Authority	Provincial Blue Drop log Position	Blue Drop Score 2012 in percentage	Blue Drop Score 2011 in percentage	Blue Drop Score 2010 in percentage	Green Drop Score 2011 in percentage
Central Karoo	no data	no data	11.5	45.6	57.3
Laingsburg LM	19	71.16	80.54	63.9	56.3
Prince Albert LM	21	70.09	70.72	55	68
Beaufort West LM	11	94.91	92.01	83.8	89.5

In the Central Karoo District, Beaufort West Municipality is the best performing municipality with a Blue Drop score of 94.91 per cent in 2012. Laingsburg (71.16 per cent) and Prince Albert (70.09 per cent) municipality also performed very well. However, Beaufort West was the only municipality in the Central Karoo that improved its Blue Drop score whereas both Laingsburg and Prince Albert Blue Drop scores regressed.

#### 6.2 Waste Water Treatment

Analysis of the Green Drop assessments and site inspection results indicate that performance vary from excellent to unsatisfactory. A total of **100 per cent municipalities** were assessed during the 2011/12 Green Drop Analysis.

Investigation into waste water services has indicated that the national standards and international best practice is often not adhered to.

This score places the Western Cape on the top of the national performance log in 1st place, with KZN 2nd with 82 per cent. The municipalities are commended for their individual contributions to ensure not only a remarkable turnaround in Green Drop performance, but also for successful risk abatement planning and results that indicate an overall reduction in provincial risk profile of waste water treatment facilities. Well done and continue to aspire to advance this good performance to even higher peripheries in the coming year.

Overall, Beaufort West Municipality scored 89.5 per cent for the Green Drop; followed by the Prince Albert Municipality with a 68 per cent and Laingsburg Municipality with a score of 56.3 per cent.

# 6.3 The current legislation around Water Services Development Plans (WSDPS)

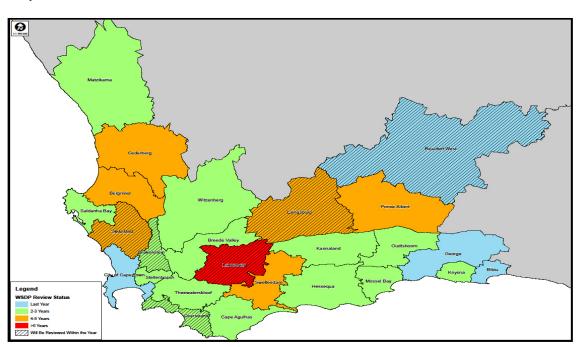
The current legislation around WSDPs is as follows:

"EVERY WATER SERVICE AUTHORITY HAS A DUTY TO ALL CUSTOMERS OR POTENTIAL CUSTOMERS IN ITS AREA OF JURISDICTION TO PROGRESSIVELY ENSURE EFFICIENT, AFFORDABLE, ECONOMICAL AND SUSTAINABLE ACCESS TO WATER SERVICES"

(Section 11 of the Water Services Act)

"THEREFORE: EVERY WATER SERVICES AUTHORITY MUST, PREPARE A WATER SERVICES DEVELOPMENT PLAN FOR IT'S AREA OF JURISDICTION"

(Section 12 of the Water Services Act)



Map 14 WSDP Review Status

Map 14 provides an indication of the status of the Water Services Development Plans of the different municipal areas within the Western Cape. The City of Cape Town, George, Bitou and Beaufort West's water services development plan are the most recently updated plan whereas Langeberg has been updated more than five years ago.

## 6.4 Integrated Waste Management Plans

Integrated Waste Management Planning is a basic requirement of all waste management activities in terms of the <u>National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)</u> (NEMWA) for government. The Waste Act requires that the development of an IWMP must follow a public participation and consultation process.

<u>Chapter 3, section 11</u> of the Waste Act requires that all government spheres must develop Integrated Waste Management Plans (IWMPs). <u>Section 12</u> of the Waste Act outlines what the contents of integrated waste management plans should be, whilst <u>section 13</u> stipulates the reporting mechanisms on the implementation of IWMPs.

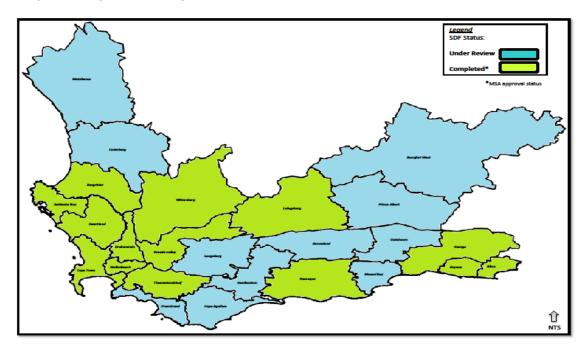
The primary objective of IWMPs is to integrate and optimise waste management planning in order to maximise efficiency and minimise the associated environmental impacts and financial costs, and to improve the quality of life for all South Africans.

As part of the IWMP development process, section 13 of the Waste Act requires the development of annual performance reports and it must be noted that this happens outside the actual IWMP development process. Section 13(3) of the Waste Act states that annual performance report must be prepared in terms of section 46 of the Municipal Systems Act and must contain information on the implementation of the municipal IWMP, including the information set out in paragraph (a) to (j) of subsection (2) insofar as it relates to the performance of the municipality.

## 6.5 Spatial Development Plan

In order to act in alignment with this Constitutional obligation, while remaining true to the Provincial planning mandate, the Department is placing greater emphasis on the Integrated Development Plan (IDP) alignment process in terms of the Municipal Systems Act (MSA, Act 32 of 2000) with the Spatial Development Framework (SDF) established as an integral component of the IDP.

With reference to the new Spatial Planning and Land Use Management Act, Act 16 of 2013 – (not yet effective), section 12 states that: "The national and provincial spheres of government and each municipality must prepare spatial development frameworks..."



Map 15 Spatial Development Plan

Most of the municipalities in the Western Cape have approved their Spatial Development Frameworks (SDF). Laingsburg is the only municipality in Central Karoo that has approved it SDF.

## 6.5.1 Background to Built Environment Support Program (BESP)

The Western Cape Province is confronted with the reality of persistent inequalities; the need for spatial restructuring and urban integration, while our life-supporting ecosystems are deteriorating at an alarming rate. There is an urgent need to change the way we do things so that we can make the notions of "shared growth" and "integrated" and "sustainable development" a reality. In some respects, the overriding need is to restructure settlements spatially so that they are more efficient and equitable in the opportunities they create.

In an attempt to address the above-mentioned needs, the Department of Human Settlements (DoHS) in partnership with the Department of Environmental Affairs and Development Planning (DEADP) and relevant stakeholders, embarked on the Built Environment Support Program (BESP). The aim of this Program is:

- 1. To support municipalities in the areas of spatial planning and human settlement development;
- 2. To build capacity; and
- 3. To provide legislative reform.

There are three basic components to the program; i.e.

<u>Component 1</u>: DoHS, DEADP as leading agents of the BESP provide support to targeted municipalities in revising their Spatial Development Framework (SDFs) and five-year Human Settlement Plan (HSPs).

<u>Component 2</u>: DEADP focus on the development of an enabling regulatory planning environment.

<u>Component 3</u>: The building of skills and capacity in municipalities around planning within the IDP context and the development of human settlement plans.

Table 60 Spatial Development Plan

Municipality	Part of BESP/ RD & LR SDF Support Programme	BESP/RD & LR Support Progress	State of SDF	MSA Approval Status	LUPO Approval Status	Status of Air Quality Management Plan
Central Karoo District Municipality	RD & LR SDF Support	Under Review as part of DRD & LR Municipal Support Programme. Anticipated date of completion September 2012.	SDF currently under review.	Not approved.	The Municipality has not indicated its intention to pursue LUPO approval as yet.	Draft
Beaufort West Municipality	BESP Round 3 Phase (2011/12- 2012/13/ 2013/14)	Round 3 Phase 1 completed-Gap analysis (2011/12). SDF under review as part of BESP Round 3 Phase 2 (2012/13) Anticipated date of completion September 2013.	SDF currently under review.	Not approved.	The Municipality has not indicated its intention to pursue LUPO approval as yet.	Plan not developed yet.
Prince Albert Municipality	RD&LR SDF Support	Under review as part of RD&LR Municipal Support programme. Anticipated date of completion September 2013.	SDF currently under review.	Not approved.	The Municipality has not indicated its intention to pursue LUPO approval as yet.	Plan not developed yet.
Laingsburg	DoRD & LR Support	Reviewed as part of DoRD & LR Municipal Support Programme.	Council approved 20 September 2012.	Approved.	The Munici- pality is intending to follow the LUPO Process.	Plan not developed yet.

## 6.5.2 Spatial Development Plan: Central Karoo Region

Table 60 indicates the latest status regarding the spatial development plans of the municipalities in the Central Karoo region. The Central Karoo District, Beaufort West and Prince Albert municipalities' Spatial Development Frameworks are currently under review and the Laingsburg Municipal Council approved theirs on 20 September 2012.

## 6.6 Air Quality Management<sup>7</sup>

The promulgation of the National Environmental Management: Air Quality Act<sup>8</sup> marked the turning point in the approach taken to air pollution control and governance in South Africa. The philosophy of Air Quality Management was introduced in line with international policy developments and the environmental right, i.e. Section 24 of the Constitution. The focus shifted from source control under the Atmospheric Pollution Prevention Act, Act No. 45 of 1965 (APPA), to the management of pollutants in the ambient environment, through air quality management planning. In accordance with the requirements of NEM: AQA, section 15(1), the Western Cape's Department of Environmental Affairs and Development Planning (DEADP) developed the Air Quality Management Plan (AQMP) for the Western Cape Province.

The development of the AQMP was undertaken in two phases. Phase 1 entailed the development of the report on the Status Quo of Air Quality Management in the Western Cape (DEADP, 2010). Phase 2 used the findings of this baseline air quality assessment and the resultant gap analysis to set the Vision, Mission and Goals for the AQMP, followed by a definition of the activities to address the identified gaps and to meet the objectives of the AQMP.

Air quality management in the Western Cape is addressed by Provincial and Local government. Management at Provincial level has progressed significantly, with a dedicated AQM unit set in DEADP's Directorate: Pollution Management, as well as the appointment of a Provincial Air Quality Officer (AQO). At the level of the District and Metropolitan Municipalities, an AQO has been appointed at all District Municipalities as well as the City of Cape Town.

District and Metropolitan Municipalities will become the Licensing Authorities in their respective jurisdictions when NEM: AQA is fully implemented. Chief Air Pollution Control Officer powers have been delegated to the AQO in the City of Cape Town, which includes the issuing of APPA registration certificates for Scheduled Processes. The City of Cape Town is therefore capable of absorbing the functions of the Licensing Authority and performing the functions associated with the licensing of Listed Activities.

-

<sup>&</sup>lt;sup>7</sup> This section is **drawn directly** from selected sections in the Air Quality Management Plan for the Western Cape Province, March 2010.

<sup>8</sup> Act No. 39 of 2004 (NEM: AQA)

The baseline air quality assessment undertaken during Phase 1 confirms that air quality in the Western Cape is generally good, except in localised areas where air quality can be poor at times. For example, in urbanised and industrialised areas, a combination of industrial emissions and emissions from motor vehicles result in air quality degradation. These areas include the City of Cape Town, Saldanha Bay and Mossel Bay, with ambient air quality concentrations being elevated in the vicinity of industrial sources. Air quality is compromised in low income residential areas across the Western Cape, where wood and other fuels are used for cooking and heating, while unpaved roads are a source of dust, and refuse and tyre burning take place. In agricultural areas, practices such as residue and waste burning and the burning of fire breaks can result in impacts on air quality on considerable scales, while crop spraying can result in more localised effects.

## 6.6.1 Air Quality Plans: Central Karoo District

Except for Central Karoo District, none of the local municipalities in the Central Karoo District have developed their Air Quality Plans. All of the municipalities in the Central Karoo region are currently developing their Air Quality Management Plans. The Department of Environmental Affairs are engaging with the various municipalities on establishing Air Quality Plans for their respective municipalities.

## **Cautionary Note**

The data used in this profile has been sourced from a number of data providers: Statistics South Africa (Census 2001, and Census 2011. The Western Cape Departments of Health, Community Safety, Education, Social Development, Environmental Affairs and Development Planning, Local Government, Transport and Public Works and Local Government and the Western Cape Provincial Treasury; the Bureau for Economic Research and Quantec.

Demographic information for 2001 and 2011 are from Statistics South Africa's 2001 Census and 2011 Census Statistics.

Labour statistics quoted in the profile are based on Census 2001 and Census 2011. The Census results provide a rough or broad indication of labour force trends for small geographical units such municipalities. The Census is not the most appropriate tool for collecting labour statistics as the survey questionnaire does not cover all the questions as per the Quarterly Labour Force Survey (QLFS), which provides a much more accurate reflection of the labour force status. The user of the profile needs to be aware of these limitations when interpreting the labour data.

Economic information is sourced from the Bureau for Economic Research; which calculations are based on Quantec Research data and the Municipal Economic Review Outlook 2013.

As with any data, users need to be cautious when interpreting and analysing data. The population and household data may not be an accurate head count; however the data does give an indication as to trends.