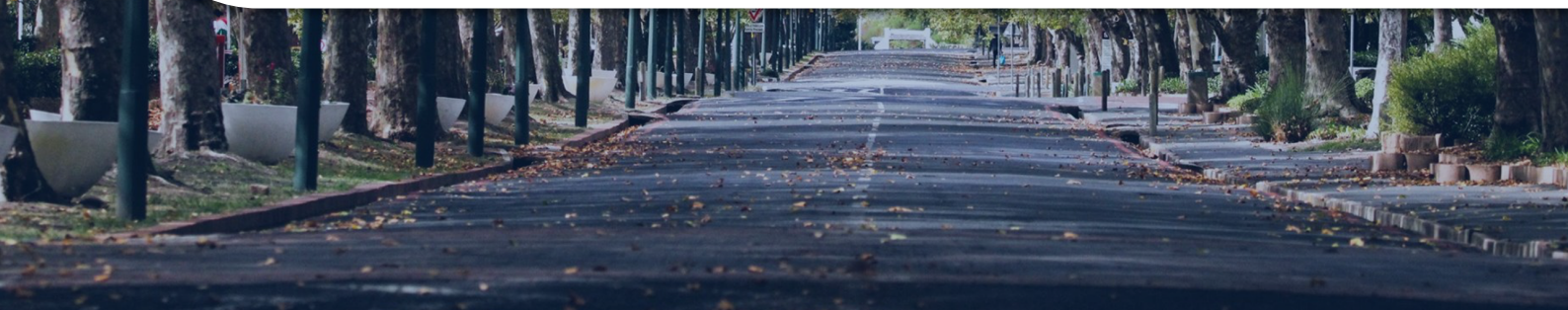
Stellenbosch Local Municipality

Capital Expenditure Framework

2023/24



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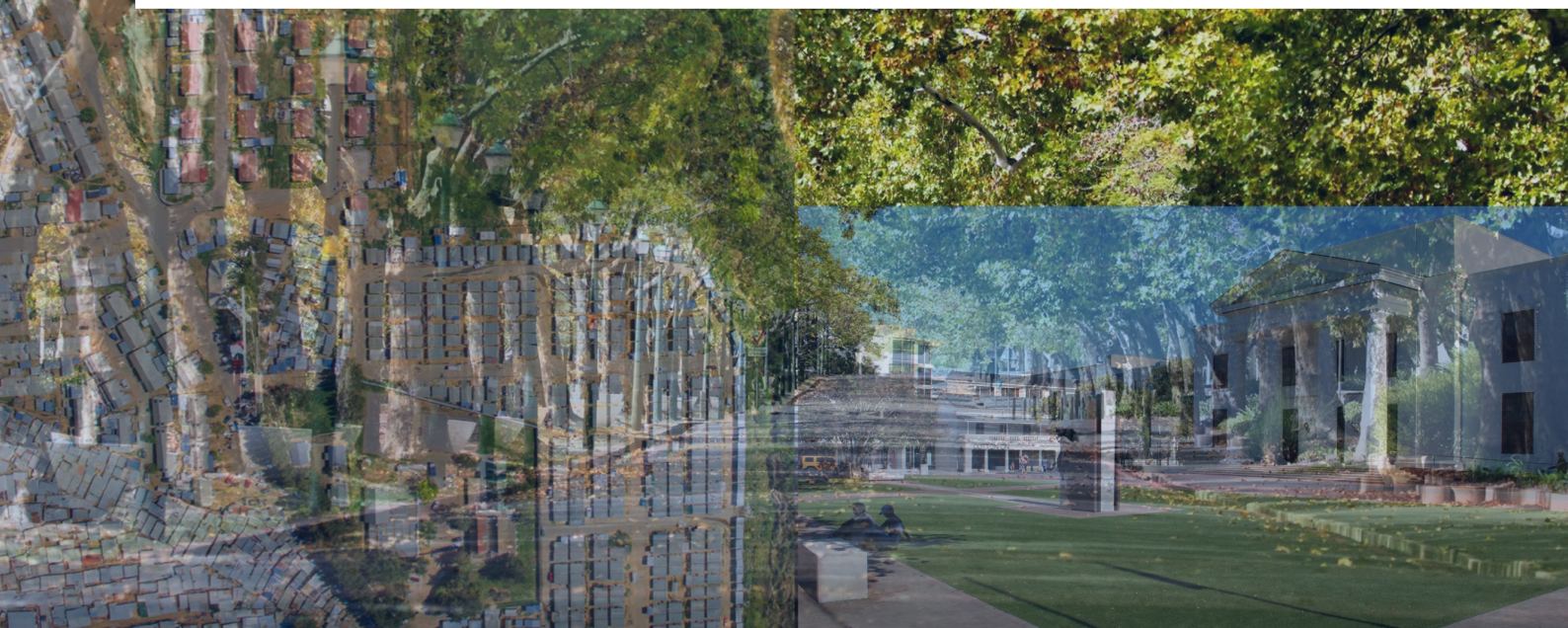
Client Representative	M Steyl M Francis C Hauptfleisch
Project Team	Novus3 Pty Ltd SDS Africa Pty Ltd



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The information presented in the report is based on data that was provided by the municipality and other data that was obtained from provincial and national sources that are in the public domain. Consequently, the document may be less relevant to any other party or at a different time and under different circumstances. The author does not warrant or guarantee that there will be no change to relevant facts and circumstances in the future or that future events or outcomes will transpire.

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Nomenclature / Abbreviations

CAPEX	Capital Expenditure
CEF	Capital Expenditure Framework
CBD	Central Business District
COGTA	Cooperative Governance and Traditional Affairs
CPF	Capital Planning Forum
CPM	Capital Prioritisation Model
CRC	Current Replacement Cost
CRR	Capital Replacement Reserve
DORA	Division of Revenue Act
DRC	Depreciated Replacement Cost
EUL	Economic Useful Life
FA	Functional Area
FY	Financial Year
IDP	Integrated Development Plan
IUDF	Integrated Urban Development Framework
IUDG	Integrated Urban Development Grant
LOS	Level of Service

LTFM	Long Term Financial Model
LTFP	Long Term Financial Plan
LTFS	Long Term Financial Strategy
mSCOA	Municipal Standard Chart of Accounts
MTREF	Medium Term Revenue Expenditure Framework
NT	National Treasury
PDA	Priority Development Area
RUL	Remaining Useful Life
SDF	Spatial Development Framework
SIG	Social infrastructure Grant
SPLUMA	Spatial Planning and Land use Management Act
STATSSA	Statistics South Africa

Part 1

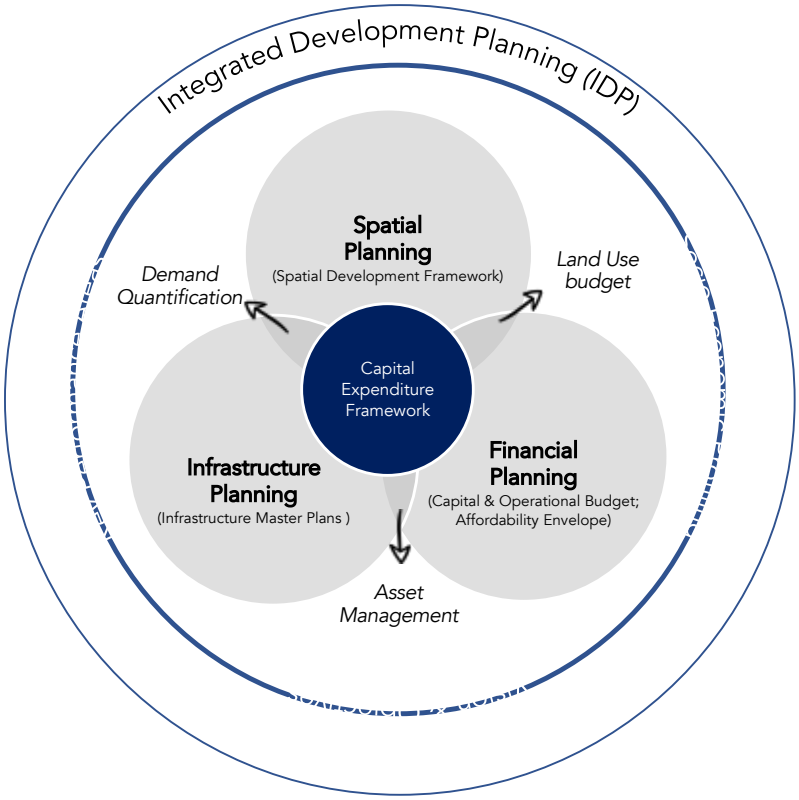
Introduction

1 Part 1: Introduction

1.1 What is a Capital Expenditure Framework

The Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) requires that a Municipal Spatial Development Framework (MSDF) "determine a Capital Expenditure Framework for the municipality's development programmes, depicted spatially". The intention of this regulation is to more effectively link the municipality's development strategies spatially with the municipality's budget, grounded in the existing and future infrastructure backlogs and demands, as well as the affordability envelope as defined by the Long Term Financial Plan, as illustrated in Figure 1-1.

Figure 1-1: The Capital Expenditure Framework within the built environment context

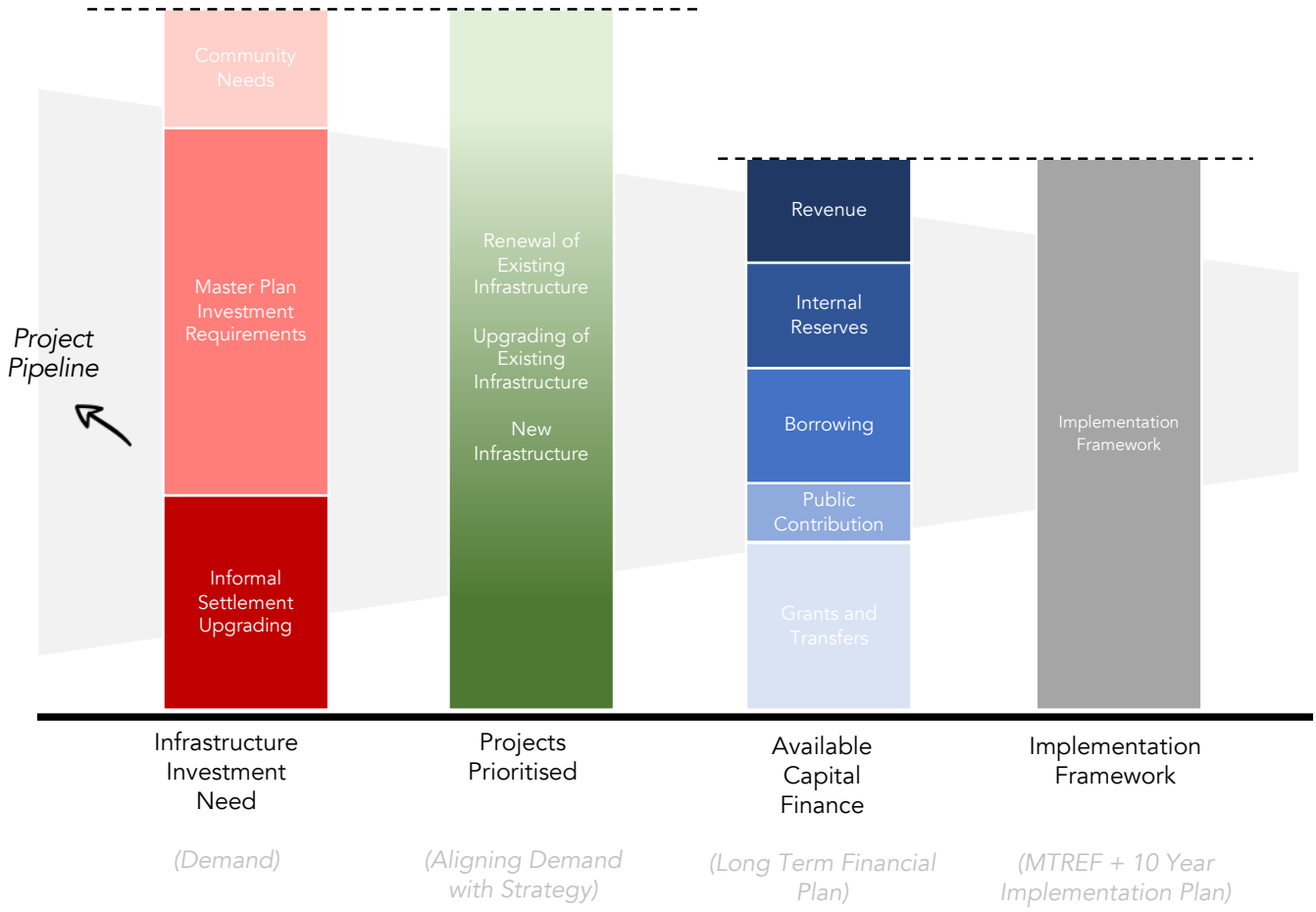


1.2 Aim of Capital Expenditure Framework

The intention of the CEF is to more effectively link the municipality's spatial development strategies with the municipality's budget and the budgets of other government stakeholders, grounded in the existing infrastructure backlogs and future demands, as well as the affordability envelope as defined by the Long Term Financial Plan.

From Figure 1-2 one can see the illustration that infrastructure investment need, expressed as projects, usually exceeds available capital finance, and therefore it is an imperative for municipalities to partake in a prioritisation process to determine which projects are best aligned with the strategy of the municipality, together with a budget scenario process to determine which projects are affordable and should be implemented when.

Figure 1-2: Relationship Between Infrastructure Investment Needs, Affordability Envelope, Prioritisation Process, and Budget Scenario Process



1.3 Role of the Capital Expenditure Framework as a Policy Instrument

One of the contributing factors to the lack of spatial transformation is that strategic policy seldom leads the implementation agenda of municipalities. Instead, the allocation and expenditure of funds are primarily concentrated on short-term objectives. This inclination is reinforced by the "term of office" political structure, outlined in the Integrated Development Plan, which sets a five-year program. Additionally, the Medium-Term Revenue and Expenditure Framework, which stipulates three-year budget cycles, further entrenches this pattern.

Ideally, the infrastructure and built environment programmes articulated in the 5-year Integrated Development Plan should align with the spatial objectives of the MSDF, which is a 20-year plan for the management of the physical growth and development of the municipality.

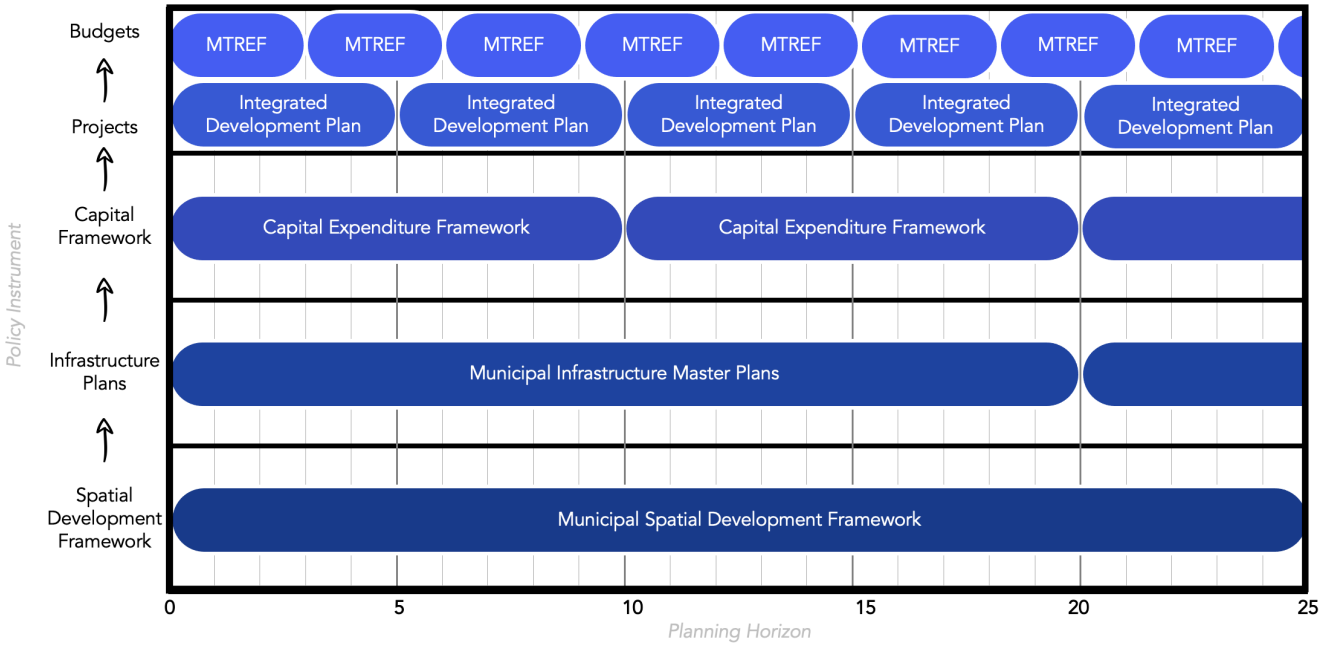
Annual assessments of municipal IDP's have generally shown a poor linkage between the spatial strategies and proposals articulated in MSDF's, and the proposed location of investment of budgeted infrastructure and built environment programmes within municipalities. This misalignment, while not apparent in all municipalities, is fundamentally problematic and must be addressed.

The problem lies not only with the IDP's content and process but also with the absence of clearly articulated infrastructure requirements to achieve the MSDF and the failure to integrate the MSDF as a strategic decision-making tool that impacts budgetary processes. This overwhelming misalignment between the three spheres shown in Figure 1-1 is thought to be improved through the formalisation of a CEF, but even more important, the collaboration required to compile one. Due to its effectiveness, this long-term planning horizon encourages decision-makers to adopt a long-term perspective.

A view that appreciates that decisions taken today are the foundation upon which the municipality's spatial form, infrastructure network and financial standing will be based in the years and decades ahead.

The Capital Expenditure Framework (CEF) offers a mechanism through which the municipality's long-term strategic development vision truly directs infrastructure implementation whilst remaining conscious of the municipality's financial position and infrastructure planning needs.

Figure 1-3: The Relationship Between Policy Instruments Effecting the Spatial Form



1.4 Objectives of Capital Expenditure Framework

The objectives of a Capital Expenditure Framework includes:

- **Compiling a list of infrastructure projects:** The first objective is to compile a list of all infrastructure projects based on engineering master plans, which provides a comprehensive understanding of the municipality's infrastructure needs.
- **Quantifying MSDF proposals:** The second objective is to determine the resources needed to implement each project by quantifying the Municipal Spatial Development Framework (MSDF) proposals in terms of functional areas.
- **Consolidating infrastructure demand:** The third objective is to consolidate infrastructure projects into a comprehensive list of infrastructure demand, which provides a comprehensive overview of the municipality's infrastructure needs.
- **Contextualizing affordability:** The fourth objective is to contextualize the affordability envelope, as set out in the Long-Term Financial Plan (LTFP), which helps to understand the expected revenue, expenditure, and capital budget available over a 10-year period.
- **Prioritizing infrastructure demand:** The fifth and final objective is to determine and apply a prioritisation framework to the infrastructure demand, taking into consideration the intent of the MSDF and the financial limitations of the LTFP. This helps to prioritise infrastructure projects based on their importance and affordability, ensuring that resources are allocated in the most effective way possible.

1.5 Structure of this Capital Expenditure Framework

This Capital Expenditure Framework is structured based on the adaptive version of the guidelines issues by COGTA. [1]

Table 1-1: Structure of this Capital Expenditure Framework

Document Reference	Adapted CEF Structure Reference	Adapted CEF Structure Aim
Part 1: Introduction	Not included	To provide a contextualisation to the Capital Expenditure Framework.
Part 2: Functional and Priority Development Areas	Phase 2a	This part introduces functional areas for priority investment which are defined and mapped to indicate the spatial strategy depicted in the MSDF (linked to the MSDF proposals). The identified functional areas are used to determine the future population, housing, and land demand based on existing socio-economic and related data.
Part 3: Infrastructure demand	Phase 1 Phase 2b	This part compiles a list of projects (budgeted and unbudgeted), sourced from various documents such as master plans, community needs, and sector plans, that are required to meet the infrastructure demand for the next 10 years. It also determines the investment requirements for each functional area, including operational and maintenance costs per asset class. The goal is to compare the optimal infrastructure requirements scenario with the known infrastructure demand based on current planning frameworks.
Part 4: Affordability Envelope	Phase 3	This part is a reflection of the municipality's financial health and long-term financial plan. Primarily it includes the results of the re-application of the long-term financial plan to determine the appropriate affordability envelope.
Part 5: Prioritisation and Budget Scenario	Phase 4	This part has a prioritisation framework that considers spatial, engineering, and financial factors to calculate a composite score indicating each project's relative importance in the pipeline. It also applies this framework to the budget fit process to determine how to allocate capital within the affordability envelope per project for the next 10 years.
Part 6: Capital Expenditure Programme	Phase 5	This part is a breakdown of the 10-year capital expenditure framework. Essentially, it analyses the fitted project pipeline in terms of spatial alignment, asset type alignment, and other attributes to ultimately verify that the 10-year capital expenditure framework is in line with the strategic intent of the prioritisation framework and the MSDF objectives.
Part 7: Institutional Arrangements	Not included	As a concluding chapter to the CEF, this part aims to identify areas of enhancement that will render the CEF not only as a compliance document but to solidify institutional change around the alignment of planning, engineering, and financial practices – with the ultimate aim to improve service delivery.

[1] Methodologies used to complete each part of this document are constantly under refinement, enhancement and improvement.

Figure 1-4: Overview of the Adapted CEF Methodology

Part 2

Functional and Priority Area Profiling

2 Part 2: Functional and Priority Area Profiling

2.1 Relationship between Functional Areas and the Spatial Development Framework

There is a direct relationship between an SDF and functional areas. The SDF seeks to understand the spatial environment and along with the spatial vision addresses issues. The SDF has several focus areas often referred to as "priority areas" or "priority development areas". These areas then need to be identified in terms of functional areas. The purpose of this is to have a wall-to-wall coverage of the municipality and ensure no area is left out. The purpose of this is to pack out the SDF in terms of functional areas. The purpose of this is to be able to identify and quantify the population growth across functional areas. This enables the municipality to quantity land requirements and economic growth opportunities within the municipality.

2.2 What is a Functional Area

COGTA's Guide to preparing a Capital Expenditure Framework expresses a functional area with similar characteristics in terms of service and developmental needs. A functional area can thus be defined as a delineated area with similar characteristics that require similar development and services. An example is demarcating rural and urban areas separately because of each area's unique aspects and needs, leading to a unique development approach. The functional areas must account for the total population and subsequent population growth over a 10-year period. The functional area also accounts for the capex awarded for a 10-year period towards infrastructure investments that fall within the affordability envelope.

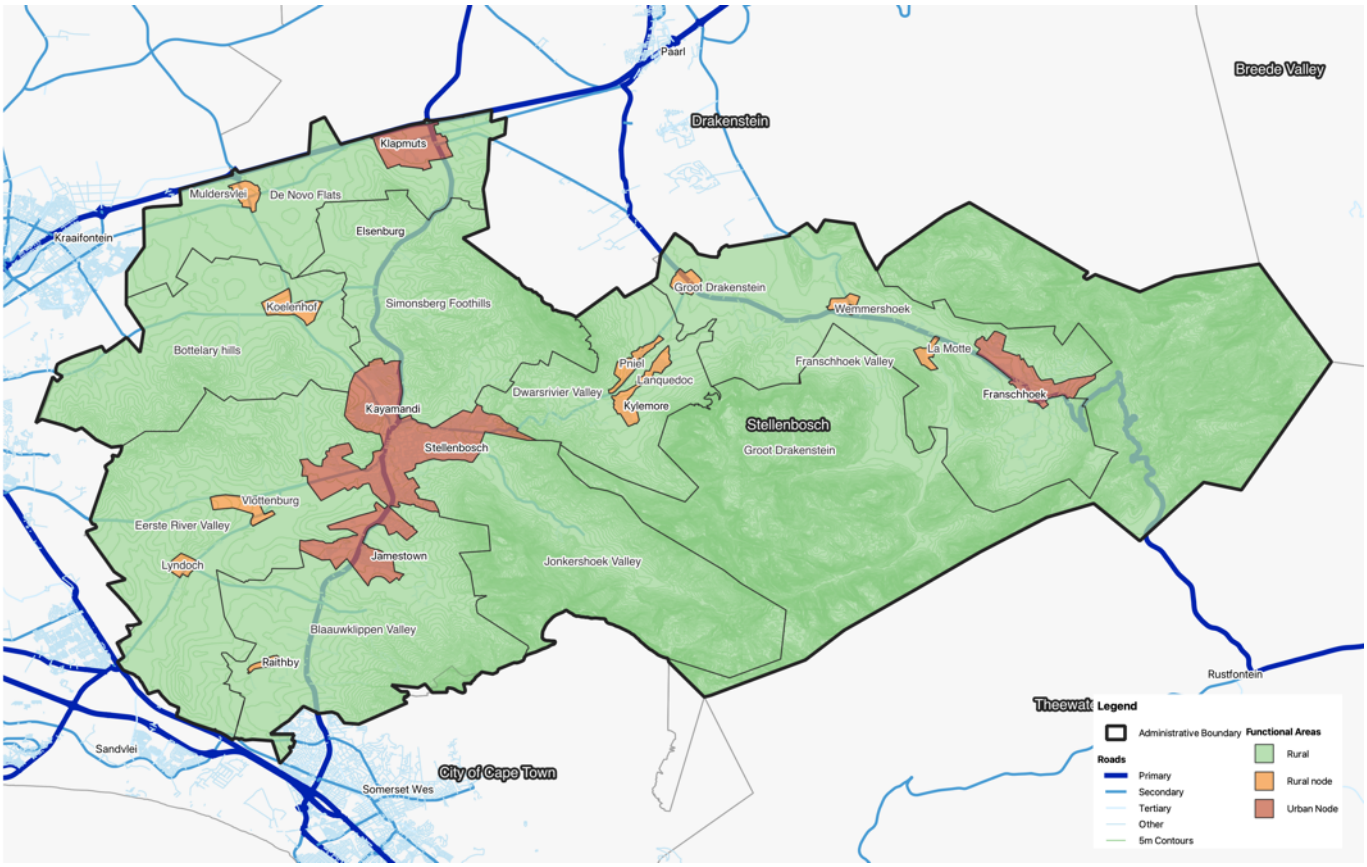
2.3 What is a Priority Area

Priority areas can be defined as areas where the municipality aims to focus investment to achieve the goals of the Spatial Development Framework or other lower-order plans. Priority areas are often referred to as focus areas and are defined in terms of functional areas. For this reason, functional areas can include specific priority areas such as specific nodes focusing on servicing rural areas. There is a direct relationship between functional areas and priority areas. Entire functional areas can be recognised as a priority areas or one functional area can include several priority areas.

2.4 Functional Area Delineation

The following shows the functional areas of Stellenbosch Local Municipality and explains what the three different functional areas and the total area they occupy within the municipality. Figure 2-1 visually showcases the delineated functional areas of the municipality. There are three main categories of functional areas within Stellenbosch: urban nodes, rural nodes, and rural areas.

Figure 2-1: Functional Areas



Urban Node: Areas that are considered urban in nature and include the urban core, urban centre and general urban areas. These areas have the greatest variety of uses such as commercial uses, office space, and public transport routes. Densification is often seen in urban nodes and this does include having accommodation for students as seen in Stellenbosch. The urban node is associated with larger towns and cities and serves as the main service centre to all surrounding smaller towns within the municipality. The urban node is approximately 1 076 ha or 1,29% of the area of the municipality. This indicates that the municipality has a small area that is devoted to being an urban node functional area.

Rural Node: These areas are mainly residential in nature but can serve the purpose of accommodating light industrial, office or retail uses. The rural node is also suburban in nature and is connected to more prominent urban nodes through transport networks or higher-order roads. Rural nodes also function as service nodes to rural areas and serve as the residency of many agricultural workers. The rural nodes cover approximately 3 726 ha or 4,48% of the municipality.

Rural: The most predominant area in the municipality is the rural functional area. As a result of the agricultural activities within the municipality, the rural functional area occupies approximately 94,23% of the municipality. As the name suggests this functional area includes several activities relating to agriculture and this is seen in the many wine estates present throughout the municipality. The rural functional area also includes several areas categorised as natural. These areas are areas with unfavourable development conditions or protected areas.

2.5 Functional Area Profiles

This section shows the demographic, socio-economic and spatial characteristics for the municipal area. The spatial and socio-economic profile of the municipality drives future demand and hence capital and operating investment and expenditure.

The aim of this analysis is to obtain an in-depth understanding of the demographic and socio-economic characteristics of the population that are being served in each FA of the municipality. This assessment typically includes access to infrastructure and social services and amenities, as well as the level of service of these services and amenities. The purpose of the municipal profiling is, therefore, twofold:

- Firstly, to identify the population within the municipality and FAs in order to determine the base unit of needs estimation as input to the infrastructure modelling and financial modelling, and;
- Secondly, to understand the status quo of services within the municipality.

These two basic elements can be used to quantify and project growth, which in turn will unlock the ability to project infrastructure provision demand over the planning horizon of 10-years. Understanding the socio-economic and spatial profile of the municipality enables the municipality to make more accurate and informed decisions regarding capital investment going forward.

Social profiling is usually presented in the SDF, however, given the lack of quantification in the existing SDFs across local governments nation-wide, municipal and FA profiling is deemed as a necessary step by the CEF guidelines as a prerequisite to evidence-based planning.

It is challenging to show all the required detail in the maps in this report. Therefore, each map in this section is linked to a URL. By clicking on the map, the map will open in the user's default browser. When in the browser, one can zoom in and out and change the selection of background maps Use the legend on the map in the report as a reference for the colours on the map in the browser

2.5.1 Data Sources

It is vital to consider as many as possible data sources in determining future population and household numbers. The following data and datasets informed the do estimates of future population and household levels.

- Official data sources:
  - Census data from StatsSA. This data covers 1996, 2001 and 2011;
  - Community Surveys from StatsSA for 2007 and 2016;
  - Mid-year population estimates from StatsSA, and;
  - Local housing data from the municipality.
- Commercial data sources:
  - Quantec that provides times series data per annum since 1993. This data is only available at the municipal level, and;
  - GeoTerraImage provides advanced demographic data at sub-municipal data. Their 2018 data release was used.

Data represented in the following tables potentially differ from previous CEF's completed due to the fact that the demarcation boundary of the municipality changed. Compared to 2016 data, a total of 480ha is added to the Stellenbosch jurisdiction. Through spatial analysis tools, particularly data partitioning protocols, population figures are assigned to the analysis areas factoring in the change in total area and demarcation and consequently represent a change in absolute data numbers. This is best seen in the Community Survey data of 2016.

2.5.2 Demographic Profile

A range of factors impacts the demographic profile of the municipality. These factors interact horizontally and, importantly, have a hierarchical relationship with national, provincial and regional demographics. The analysis of variables is therefore done on a comparative basis and by also exploring relationships

between demographic variables as well as the relationship that the demographics have with economic development. The factors considered are:

- Population size, household numbers and size and the expected change in these numbers;
- Age, language, and education;
- The impact of HIV and AIDS on population growth expectations, and;
- Migration

2.5.3 Population Characteristics

2.5.3.1 Population Structure, Age, and Gender

The total population is the starting point. For any planning assessment, the total population is fundamental to the current and long-term demand for services and facilities. The table below shows the population, with a gender split, for the three census periods, Community Survey 2016 and WolrdPop. From the time-related figures, inferences can be drawn about population growth or decline. Gender splits, if appropriate under local conditions, also serves as a proxy for migrant labour. Generally speaking, male absenteeism indicates that an area is shedding workers while surplus males show the area is attracting migrant labour based on expectations of economic growth and job creation.

Table 2-1 below shows that the region has always had a nearly equal split of gender in the population. As explained above, indications are that migrant labour is not a factor to consider.

Table 2-1: Population and Gender

	1996	2001	2011	2016	2020
Males	51,208	57,862	76,133	89,929	99,717
Females	53,392	61,138	79,508	92,956	100,581
Population density (persons/ha)	1.14	1.39	1.82	2.14	2.35
Total Population	104,600	119,001	155,641	182,886	200,642

Source: Census 1996, 2001, 2011,Community survey 2016, /SDSA (MapAble 2023) /WolrdPop2020

Age groups are significant in any demographic assessment. The population's age structure provides a clear indication of the expected long-term demand for community and social services, housing, and infrastructure services. The table below only reflects on four age categories. The first category is the preschool population; the second category is the extent of the school population, the third category is the economically active population, and the last group is the elderly population.

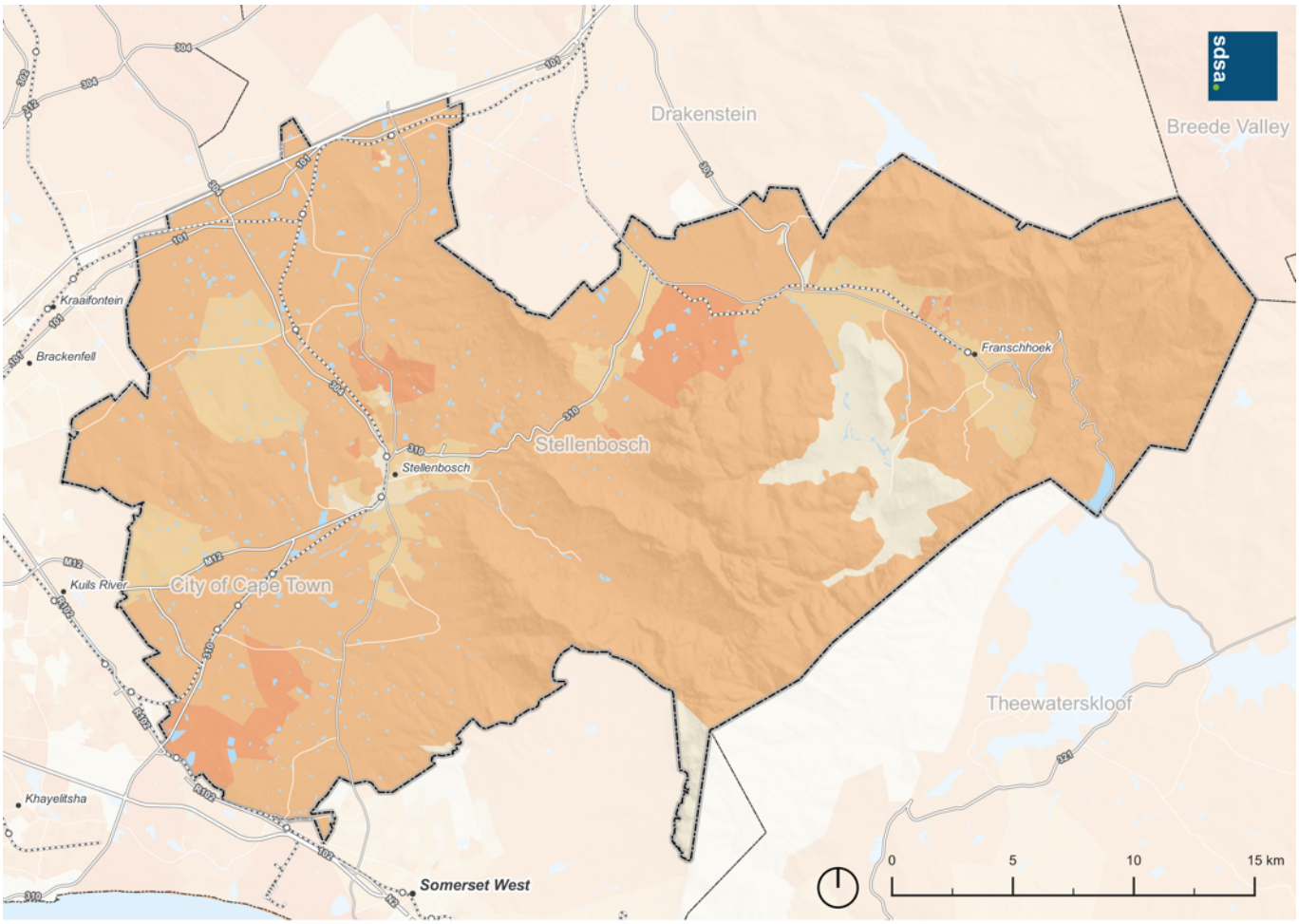
The age structure of the study area has remained relatively unchanged over all the age groups. Interestingly, over 63% of the population falls within the economically active group of 20 to 65 years of age, as reported in the 2016 community survey figures. This percentage has also increased from just over 50% in 1996. The two following maps (Figure 2-2 and Figure 2-3) show the percentage population below 19 years and the working-age group population. Figure 2-2 emphasises the high percentage of people within the working-age group in the municipality.

Table 2-2: Age Groups

	1996		2001		2011		2016	
	Male	Female	Male	Female	Male	Female	Male	Female
<5	5,679	5,527	8,008	7,858	5,735	5,812	7,318	7,754
5 to 20	15,403	16,104	19,802	20,730	17,528	18,213	23,169	22,224
20 to 65	27,777	28,708	45,413	46,874	32,522	34,303	56,073	58,595
>65	1,636	2,411	2,910	4,047	2,078	2,811	3,368	4,383
Unspecified	714	642	0		0		0	
Total	51,208	53,392	57,862	61,138	76,133	79,508	89,929	92,956
	104,600		119,001		155,641		182,886	

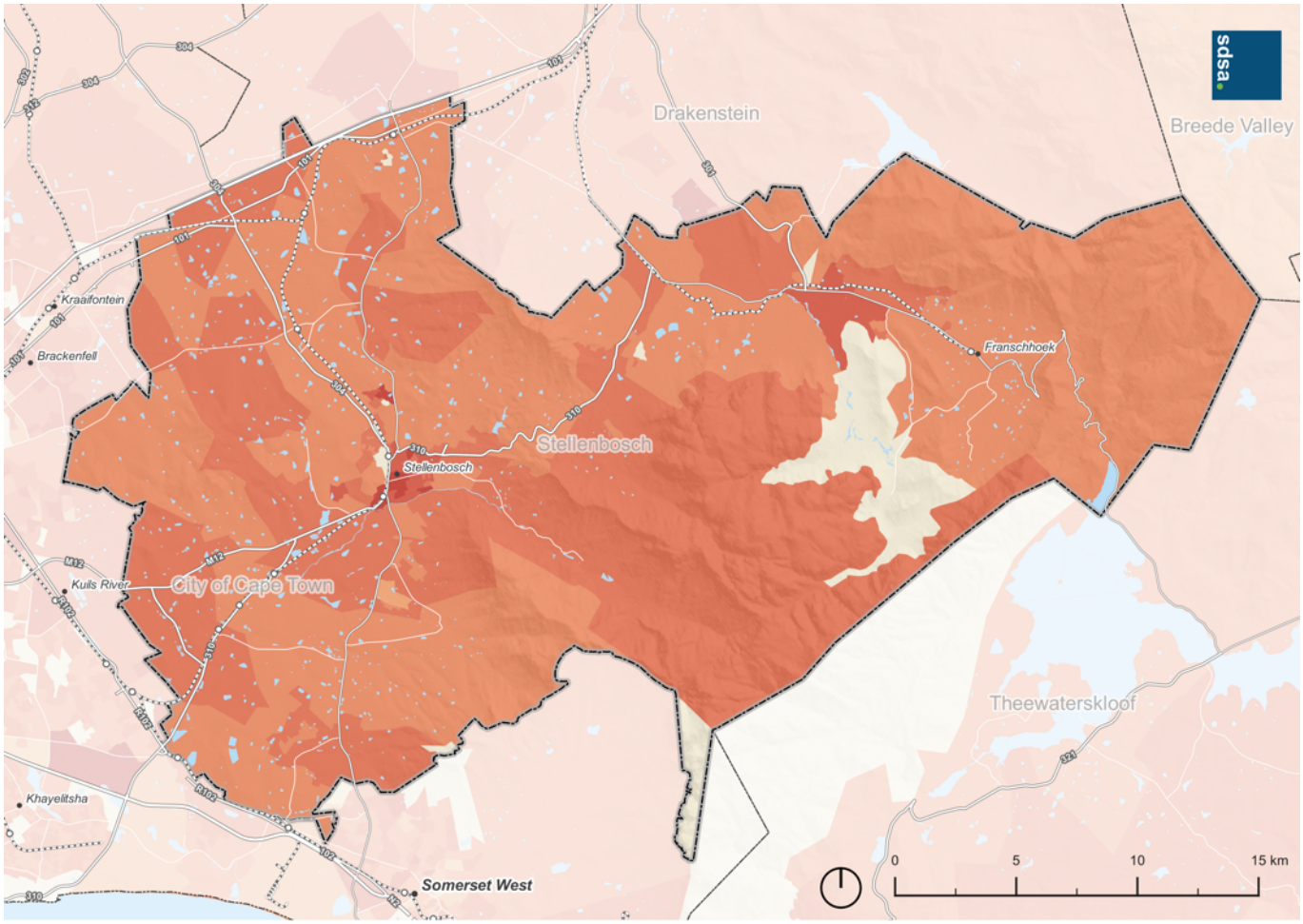
Source: Census 1996, 2001, 2011,Community survey 2016, /SDSA (MapAble 2023)

Figure 2-2: % of the Population: Younger than 19 Years 2011



Source: Census 2011 / MapAble 2023

Figure 2-3: % of the Population: Working Age (20 to 65 years) 2011



Source: Census 2011 / MapAble 2023

2.5.3.2 The Differences in Population Groups

Population groups need not be a central issue in development analysis. However, looking at the local population's composition might help explain current dynamics based on historical population settlement patterns.

Table 2-3 below shows the populations at various geographic levels in 2021. The population figures show structural differences in composition between the various scales and racial groups. The coloured population is the dominant group in the Stellenbosch municipality and accounts for more than half the population. The second-largest group is the black group with the white and Asian groups accounting for less than 15% of the population. This pattern is relatively similar in the larger district and the province. Compared to the national population structure, a clear difference is evident.

Table 2-3: Comparative Population Numbers by Population Group 2021

2021	South Africa		Western Cape		Cape Winelands		Stellenbosch	
	Total	%	Total	%	Total	%	Total	%
Black population	48 734 600	81,42%	2 701 985	38,23%	266 260	28,09%	60 140	32,67%
Coloured population	5 232 220	8,74%	3 372 083	47,72%	585 015	61,72%	98 024	53,25%
Asian population	1 472 856	2,46%	79 376	1,12%	3 545	0,37%	656	0,36%
White population	4 412 519	7,37%	913 657	12,93%	93 034	9,82%	25 256	13,72%
Population total	59 852 195	100,00%	7 067 100	100,00%	947 855	100,00%	184 076	100,00%

Source: Quantec 2023

Table 2-4 below shows the population in the municipality as it has changed over the last 26 years. The figures indicate substantial growth in the Black and Coloured populations while the other population groups declined.

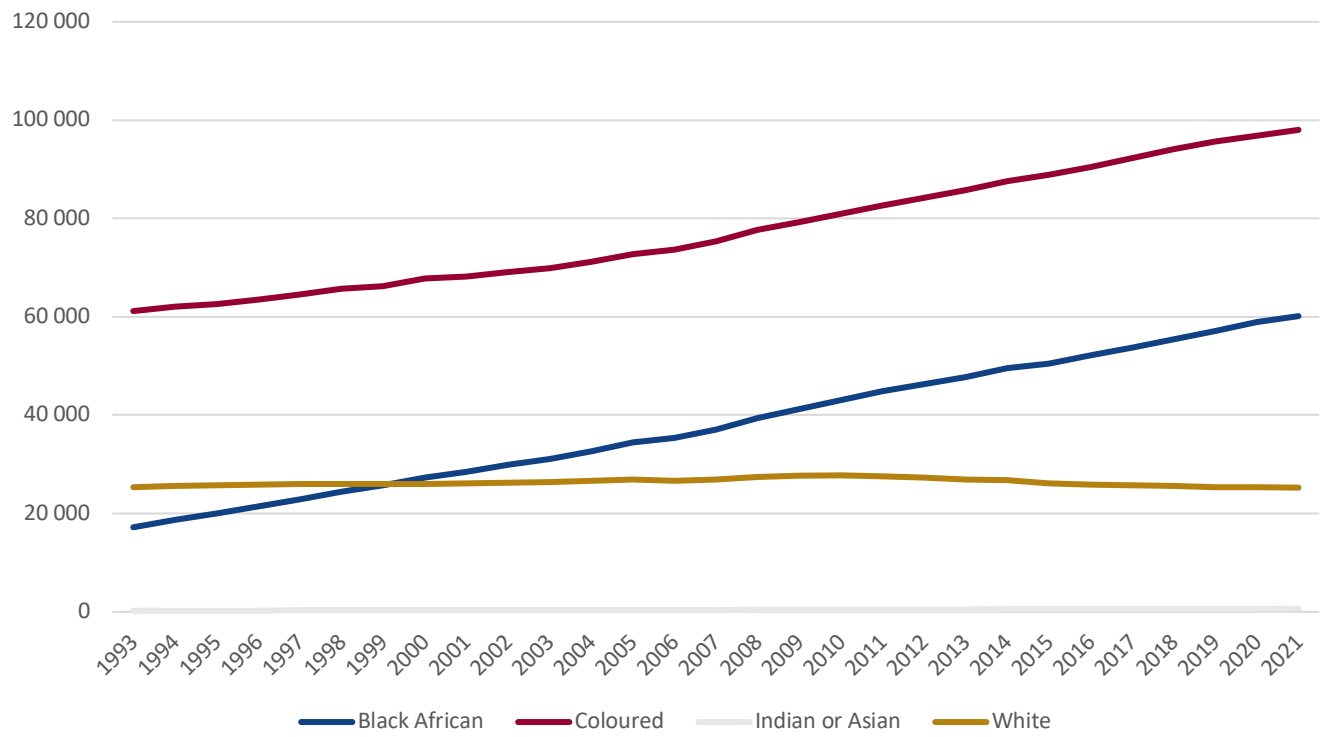
Table 2-4: Population Groups

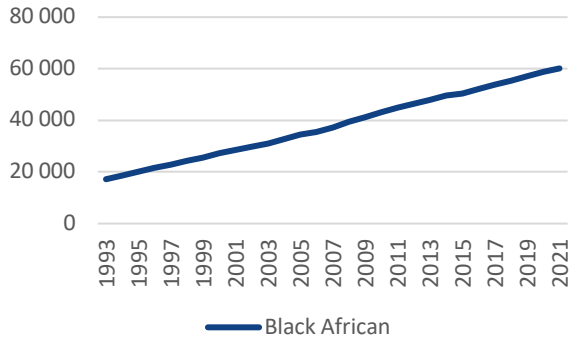
	1995	2000	2005	2010	2015	2021
Black	20 038	27 294	34 409	43 098	50 459	60 140
White	62 573	67 819	72 782	80 926	88 854	98 024
Coloured	258	299	362	468	556	656
Indian	25 694	26 055	26 945	27 757	26 130	25 256
Total	108 563	121 467	134 499	152 249	166 000	184 076

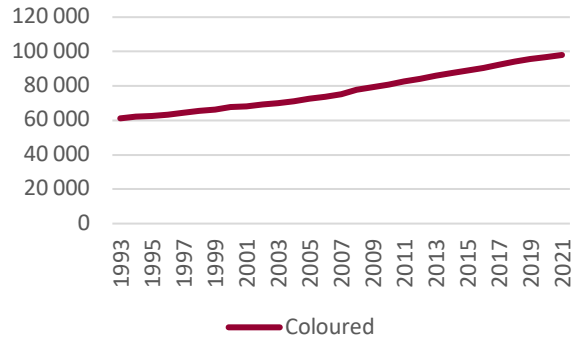
Source: Quantec 2023

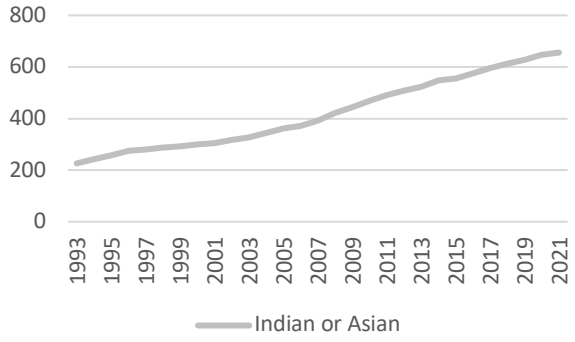
Figure 2-4 below illustrates these changes. The growth in the Black and Coloured population groups seems to be consistent over the assessed period. The white population group shows an increase in the population until 2010, whereafter there is a strong decline in numbers. The Asian population group has also increased, but from a small base.

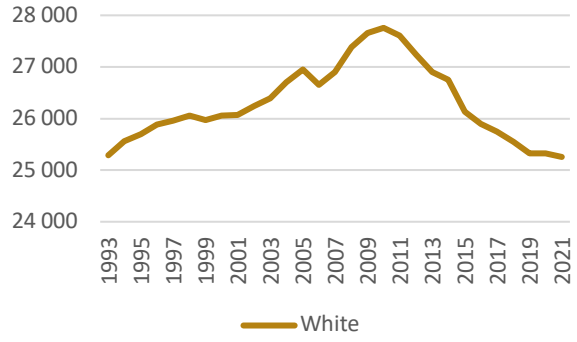
Figure 2-4: Population Growth 1993 to 2021







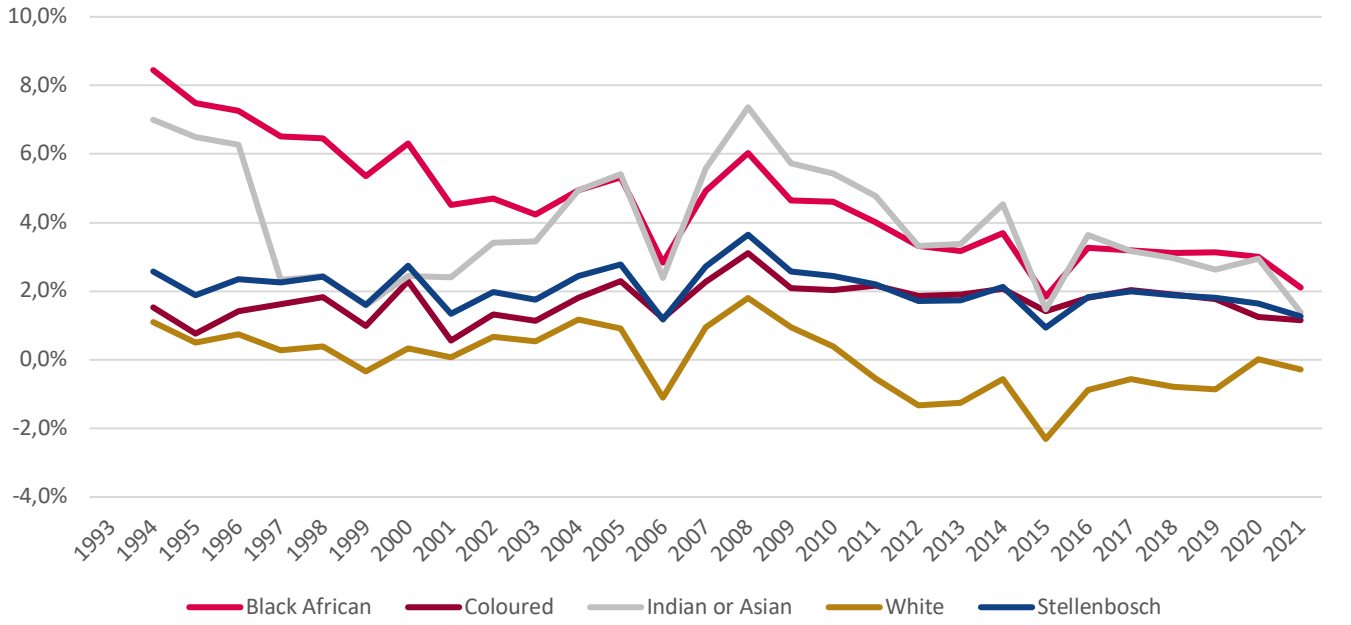




Source: Quantec 2023

Figure 2-5 below shows the rate of change of the population between different groups. All the population groups, except for whites, show a similar trend. The figures show a real decline in the number of whites since 2011.

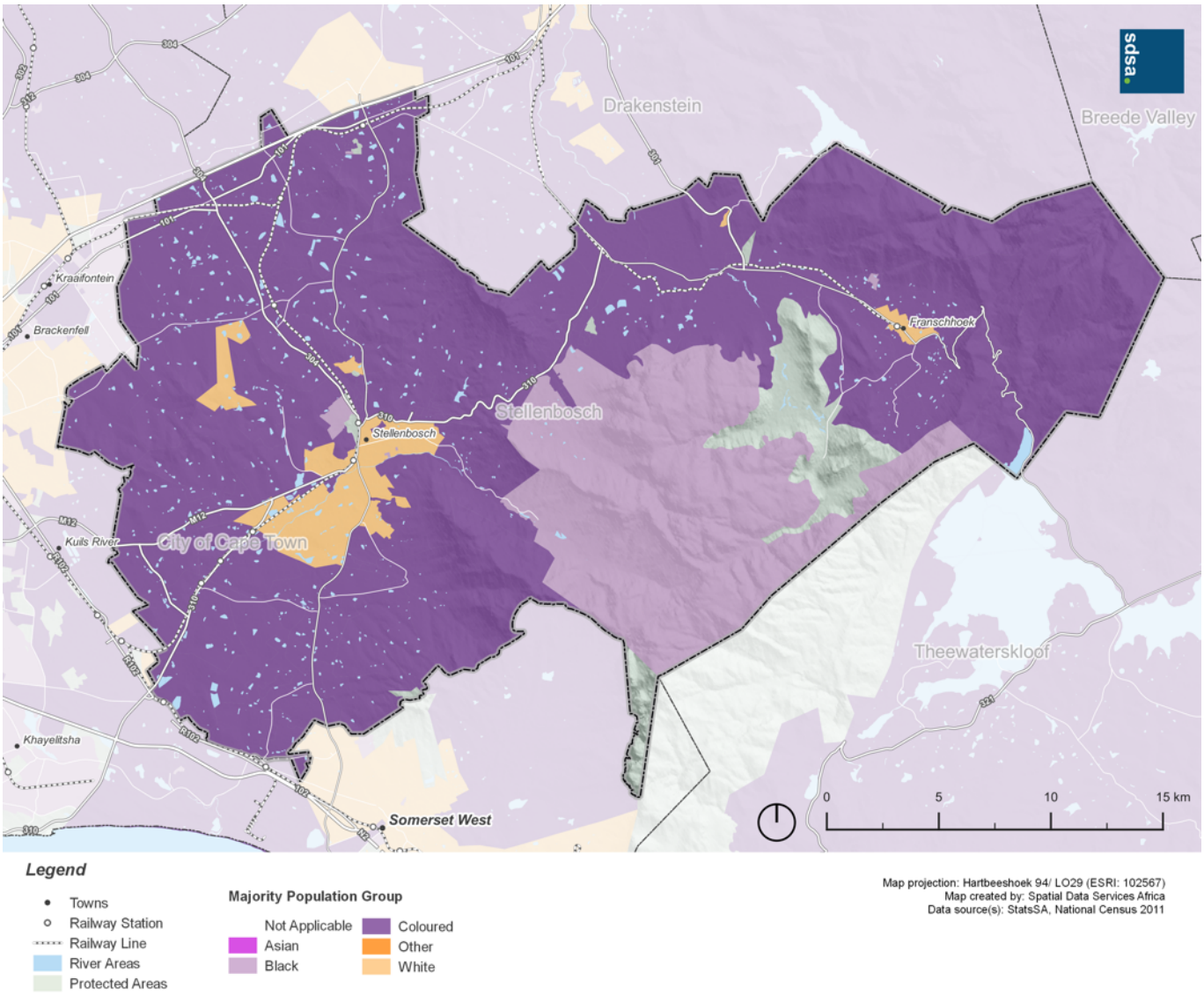
Figure 2-5: Population Growth Rates by Population Group



Source: Quantec 2023

The spatial distribution of the dominant population group in the municipality is shown in Figure 2-6 below.

Figure 2-6: Population Majority 2011



Source: Census 2011 / MapAble 2023

2.5.3.3 The Spatial Dynamics of the Population

The sections above dealt with the profile for the municipality. However, with the CEF aim to do spatial targeting, it is essential to give a perspective of where people are located and where changed occurred overtime throughout the municipality.

The table illustrates how spatial variances occur and why it is vital to consider population change's spatial dynamics. The next three maps show where changes occurred. The first essential element is the fact that population growth occurred in very specific localities. It is mainly associated with the more critical nodal points and then also with specific new developments.

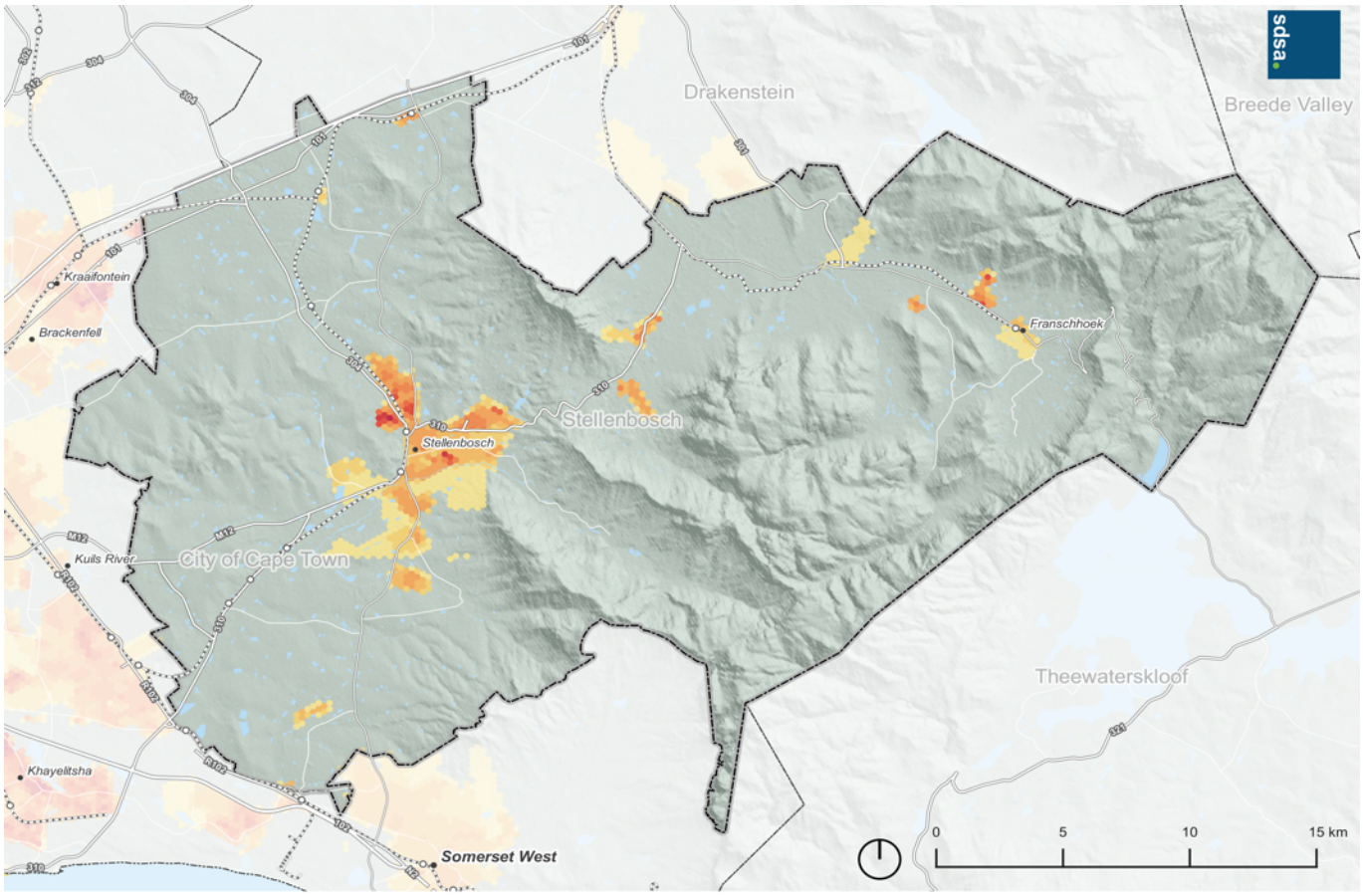
Table 2-5: Population change from 1996 to 2020

Population and households	
Population (1996):	104 600
Population (2020):	200 642
Population Change	96 042
Average annual population growth rate	2.8%
Population Density (People/Ha):	2.35

Source: Census 96, WorldPop 2020 (MapAble 2023)

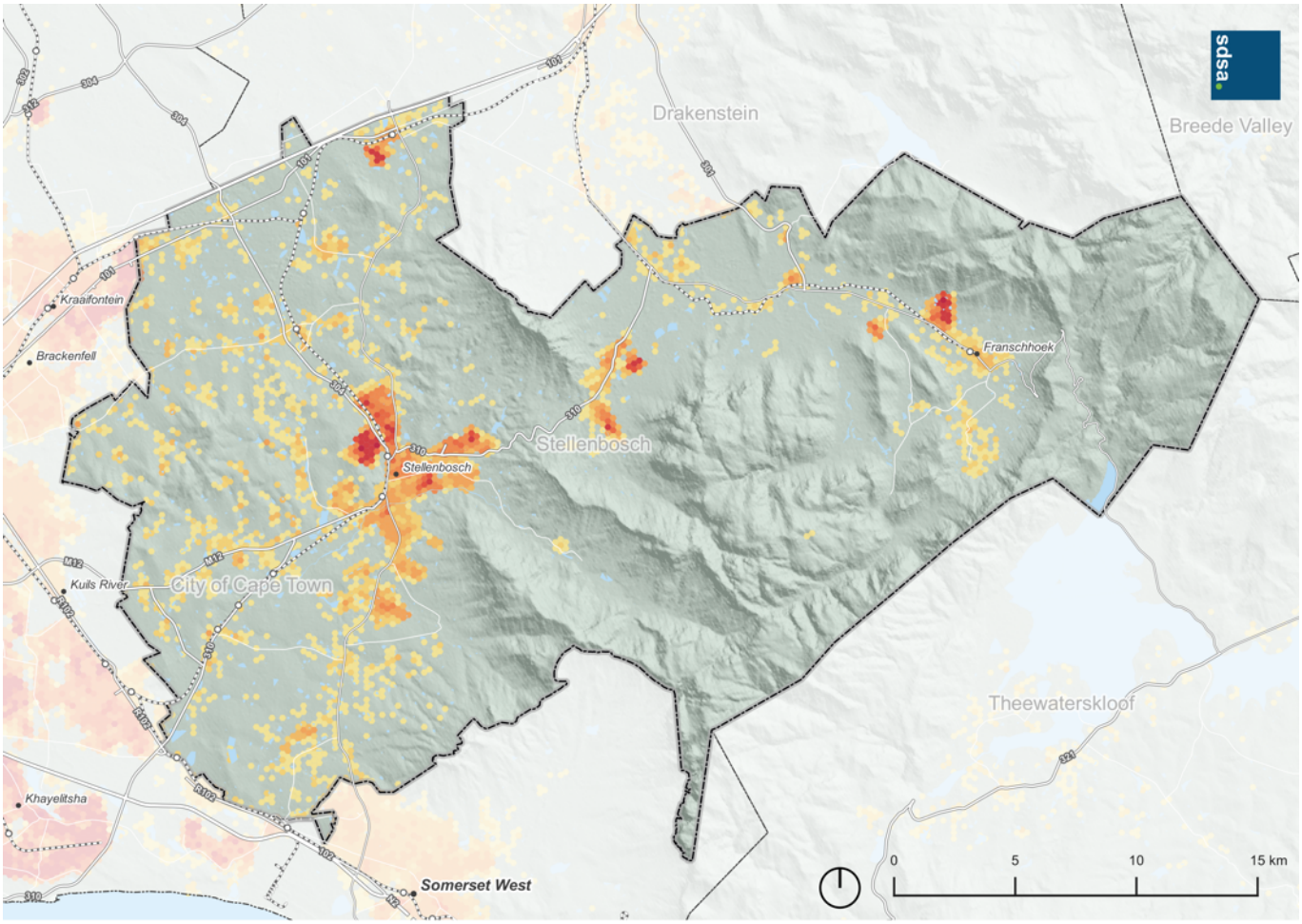
The second important aspect is that most of the rural areas increase in population in small numbers. Most of the depopulation found within the municipality is in the areas surrounding the existing towns and settlements, such as Stellenbosch and Franschhoek.

Figure 2-7: The Spatial Distribution of Population in 1996



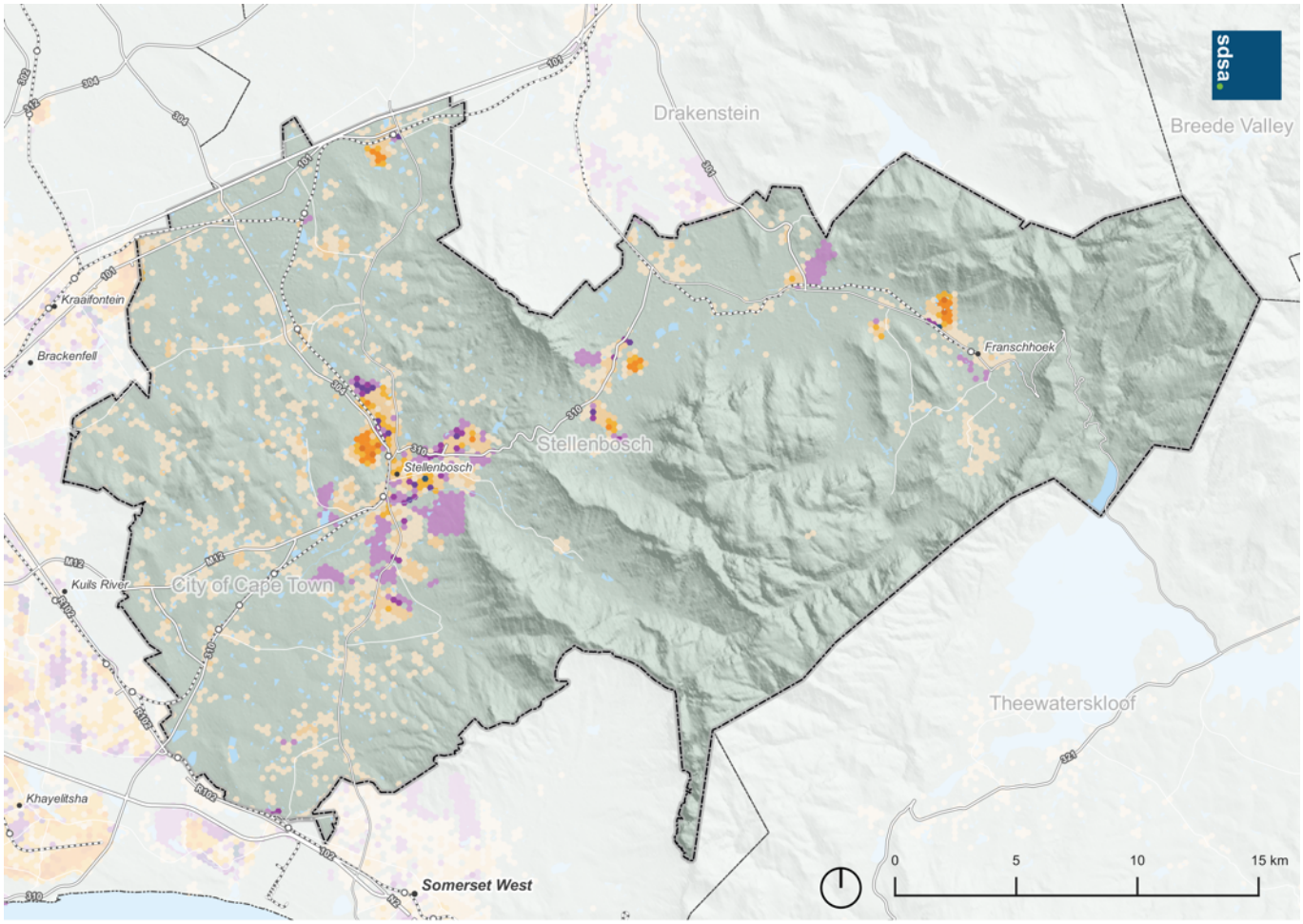
Source: SDSA (MapAble 2023)

Figure 2-8: The Spatial Distribution of Population in 2020



Source: SDSA (MapAble 2023)

Figure 2-9: Nett Population Changes Between 1996 and 2020



Legend

- Towns
- Railway Station
- Railway Line
- Hydrology
- Protected Areas

-800 - -350
-350 - -100
-100 - -50
-50 - -10
-10 - 10
10 - 50
50 - 250
250 - 750
750 - 1500
1500 - 3353

Map projection: Hartbeeshoek 94/ LO29 (ESRI: 102567)
Map created by: Brendan Jordaan
Data source(s): StatsSA - Census 1996; WorldPop 2020

Source: SDSA (MapAble 2023)

2.5.3.4 Population Change and Growth

Assessing population change in a municipal area is challenging for several reasons:

- Municipalities function in an integrated environment where changes at a national, provincial, and neighbouring areas directly impact local growth.
- Data sources differ in terms of baseline data used and hence in outcomes which complicate comparative assessments.
- Municipal population figures are, with a few exceptions, a disaggregation of higher-order data. Between censuses, mid-year population estimates at the district level are the only available sources. Most data sets use StatsSA's mid-year population estimates as a benchmark.
- Long-term projections (ten years and longer) are subject to high uncertainty levels because many factors drive local development.
- Interventionistic policies from the government are often unpredictable and focus on deliberately change historical trends. This increases the level of uncertainty in outcomes.

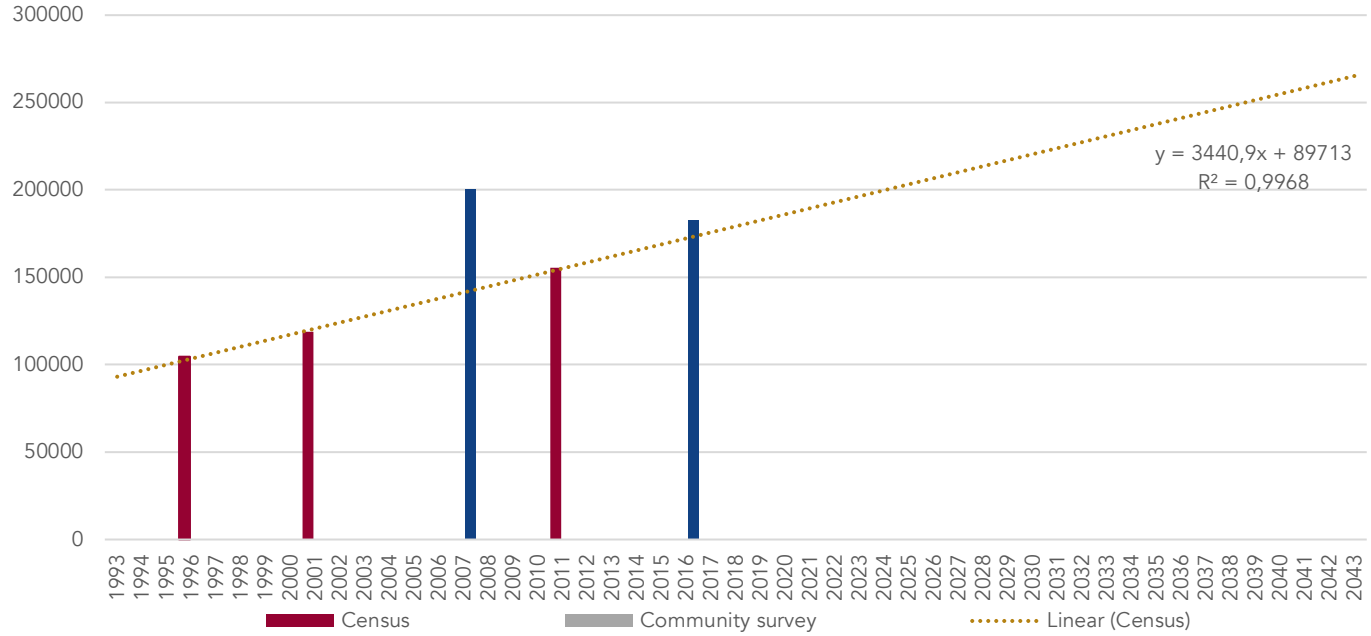
Notwithstanding these challenges, it remains essential to project and estimate future population and household numbers. Population and household changes are the drivers of the long-term demand for land and services.

The historical perspective on population and household changes are essential. It is also the basis for determining future household and population levels. However, countless factors impact population and household growth. Long-term estimates and the scale of a municipality remains challenging due to the open nature of the development systems and the free movement of people and access to goods and services across municipal boundaries. Any long-term projection must only be regarded as indicative, and changes need to be monitored continuously. Population and household growth ultimately determine the services demand in the municipality.

The next series of graphs show how the different available data sets relate. The approach is to build from the known official data and then add the commercial datasets after using trend analysis to reach a workable scenario.

Figure 2-10, below starts by looking at the main StatsSA data sources. These include the census data for 1996, 2001, and 2011 as well as the 2007 and 2016 Community Surveys. One can immediately see some questionable results, especially from the 2007 Community Survey where a figure of 200 524 people seems out of place compared to the other results. Applying a trend line to the Census data a near perfect correlation between the data occurs. Following this growth path, one sees an expected increase in the municipality's future population, reaching over 250 000 people by 2043.

Figure 2-10: Census and Community Survey Outcomes



The next graph shows the results when the Population estimates of StatsSA in Stellenbosch local municipality comes into play. This data was prepared for the Stellenbosch local municipality by StatsSA. The trendline also shows near-perfect correlation but unlike the census data is shows a predicted slowing down of the population growth rate over time. In this case, the expected future population by 2040 is below 250 000.

Figure 2-11: Projections Based on StatsSA Data

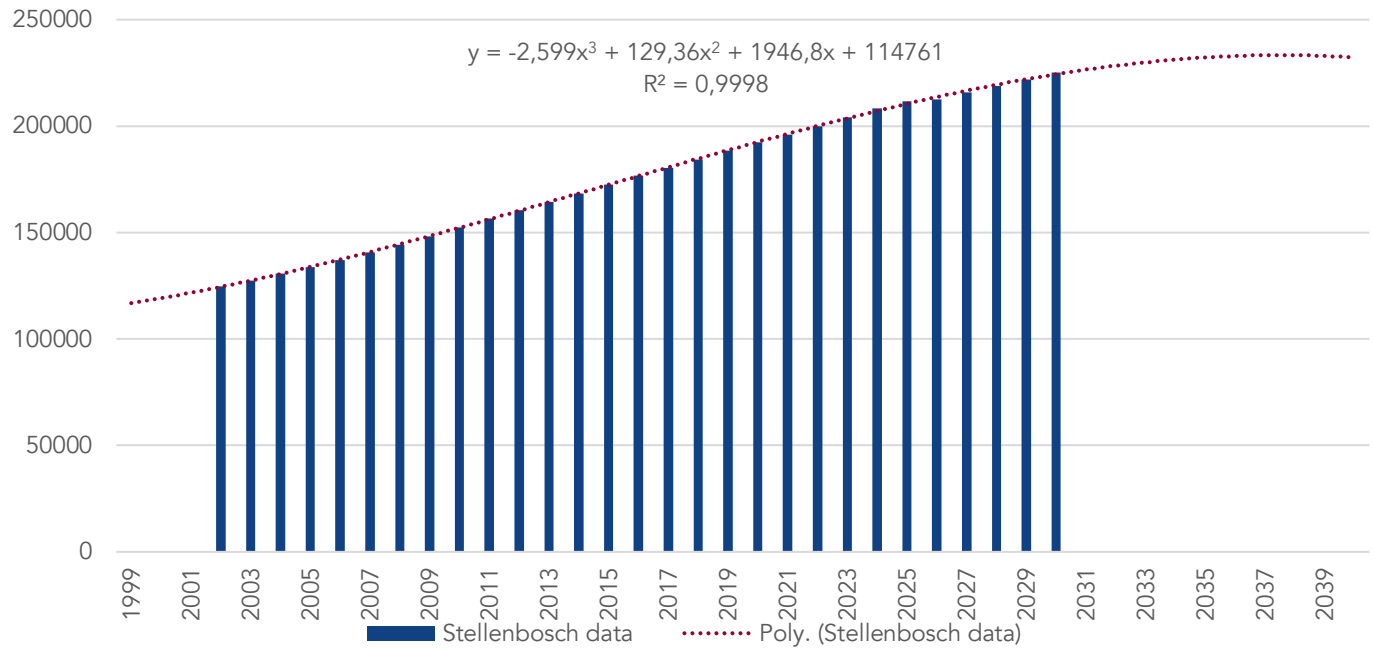
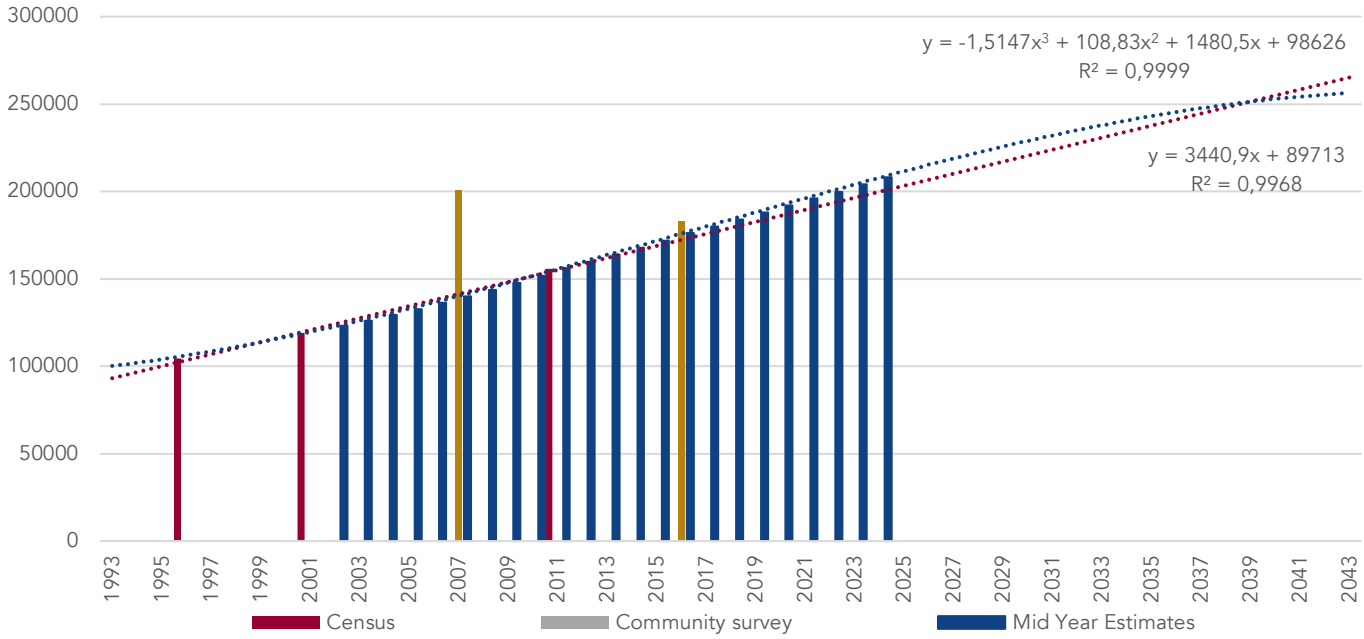


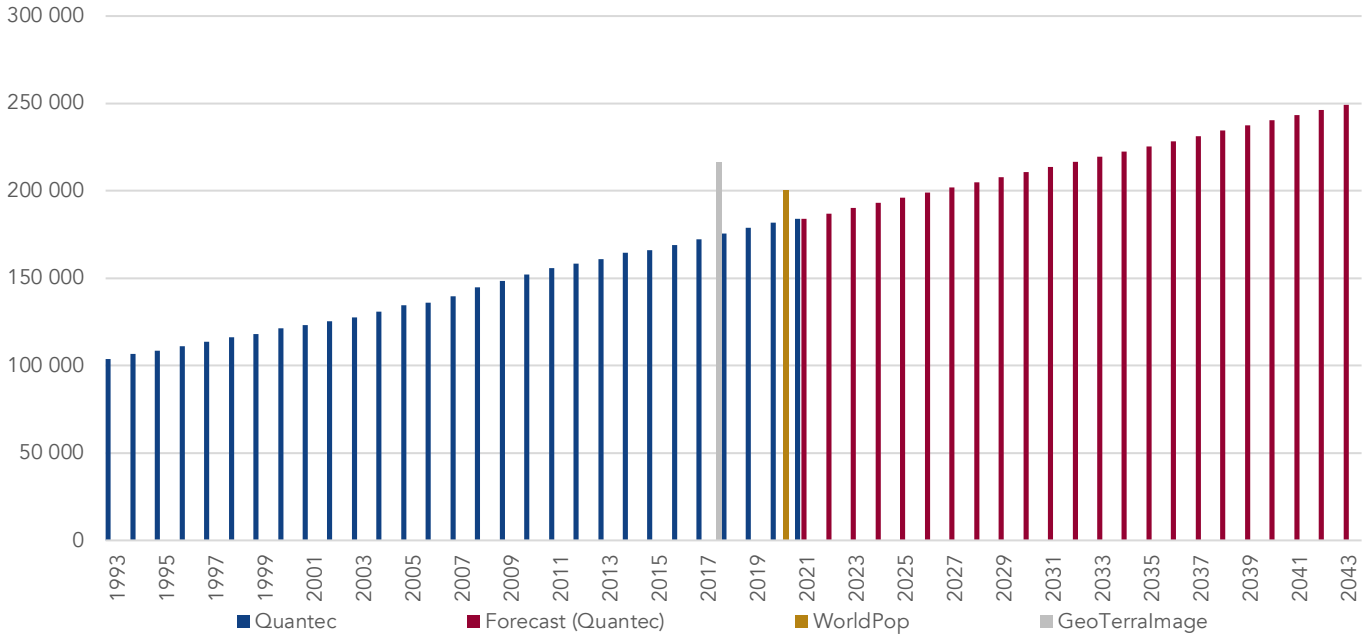
Figure 2-11 above shows the results when the mid-year population estimates of StatsSA. The trendlines of the mid-year estimates and the Stellenbosch StatsSA data show a similar trend and a strong correlation. Based on this, one can assume that a future estimate based only on the three census figures might present inaccurate results. The complication with these three data sets from Statistics South Africa is apparent.

Figure 2-12: Projections Based on StatsSA Data



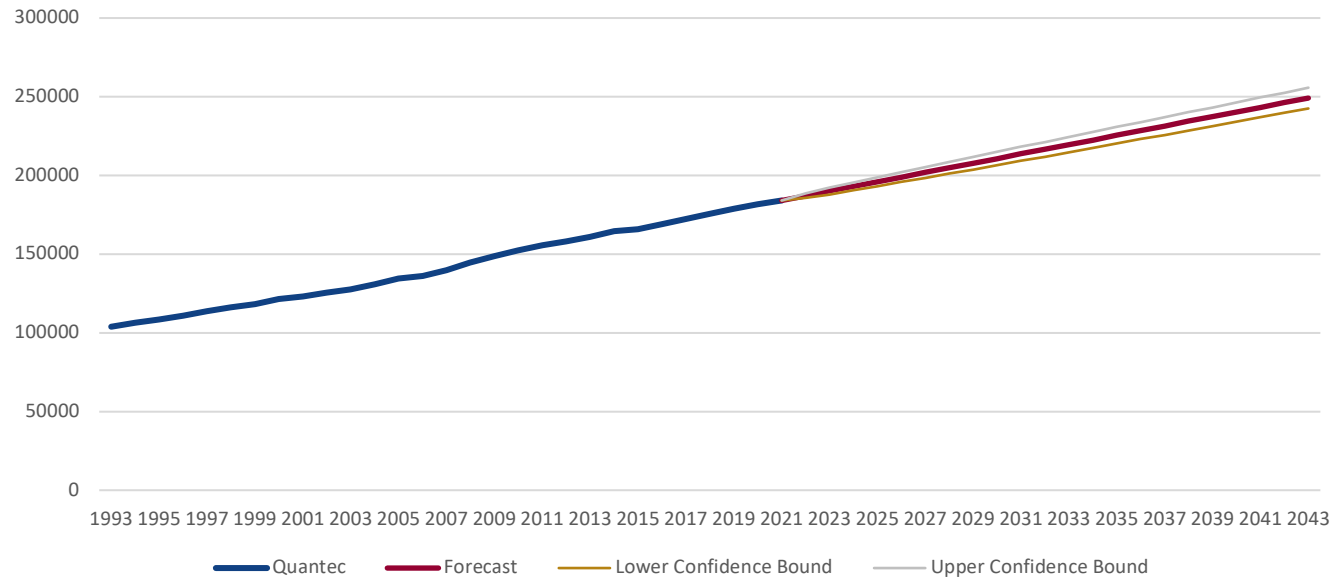
The chart below shows the Quantec data, a GTI data point for 2017 and a WorldPop data point of 2020. The Quantec data provides the most extended set of historical data. It is interesting to note the different trends between the data sets and that the Quantec data correlates with the results of StatsSA's mid-year population estimates. This is to be expected as the Quantec data benchmarks on the mid-year population estimates. GTI's data can be empirically verified, and it might point to an undercount of about 22.5% in the population. An undercount of this extent can have serious implication for planning in the municipality. Similarly, households show a 33.7% undercount based on the mid-year population estimates.

Figure 2-13: Quantec and GTI Population Data



When one uses the Quantec data and applies Microsoft Excel's forecast function, the following forecast shows the population levels until 2040 within a 95% confidence limit. The figure below shows the results.

Figure 2-14: Forecasting Population using Quantec Data



The forecast indicates that the expected population in 2043 is 249 146. Although this is statistically within 95% confidence levels, the upper and lower confidence bounds are different but possible. The variation in a 95% confidence between the upper and lower limits highlights the importance of closely monitoring population continuously.

Table 2-6 below shows the projected population figures. The Quantec and mid-year population estimate trends show growth in the expected population in 2043 at 249 146 and 256 272, respectively. At the same time, the Census forecast is higher than both previously mentioned indicators with the 2043 predicted population at 265 199. This is a difference of about 10 000 people in the estimated population of 2043 between the different data sets. There are various challenges with midyear population estimates and StatsSA did not realise updated estimates at the municipal level for 2021.

Table 2-6: Projected Population Numbers

	2021	2025	2030	2035	2040	2043
Quantec forecast	184 076	195 961	210 734	225 508	240 282	249 146
Census Trend	189 499	203 263	220 467	237 672	254 876	265 199
Mid-year population estimates trends (Stellenbosch working figures)	196 145	211 565	228 921	243 085	252 921	256 272

2.5.4 Household Characteristics

Households are usually assessed in the context of the total population. This gives rise to density ratios and household size. The total number of households is always an important factor in determining the overall demand for infrastructure services and housing. Household density is an important indicator of settlement efficiency and plays an important role in urban planning and development strategies. Household size has an impact on the extent of consumption of goods and services. One should note that housing support strategies have affected household formation to the extent that there are often different rates of change between households and population. The basic household profile for the assessment area is shown in Table 2-7 below. Table 2-8 shows the number of households per population group.

Table 2-7: Total Households, Size and Density

	1996	2001	2011	2016
Total households	26,147	35,170	43,322	55,338
Household density (households/ha)	0.29	0.41	0.51	0.65

	1996	2001	2011	2016
Ave household size	4.00	3.38	3.59	3.30

Source: Census 1996, 2001, 2011/MapAble 2023

Table 2-8: Number of Households by Group

	1995	2000	2005	2010	2015	2021
Black Households	5 712	7 949	10 342	13 445	16 207	19 752
Coloured households	13 359	14 537	15 580	17 261	18 884	20 758
Asian households	74	84	97	118	134	152
White households	11 182	11 945	12 228	12 130	10 956	10 130
Households total	30 327	34 516	38 248	42 954	46 181	50 792

Source: Quantec 2023

2.5.4.1 Historical Household Growth Trends

As shown in Figure 2-15 below, the trends for households are broadly the same as for population. This is also true for the next graph showing the growth rates (Figure 2-16: Comparative Household Growth Rates from 1993 to 20). However, the change dynamics in population and households are not precisely the same, and when the two data sets are used to show household sizes and the changes in household size, several important aspects emerge.

The number of black households has grown significantly between 1993 to 2021 and still shows the most robust growth of all population groups. Coloured households also show strong growth but not at the rate of black households. White households show an interesting pattern. There was a decline in white households since 2009, and by 2021 white households numbers decreased to below the 1993 level.

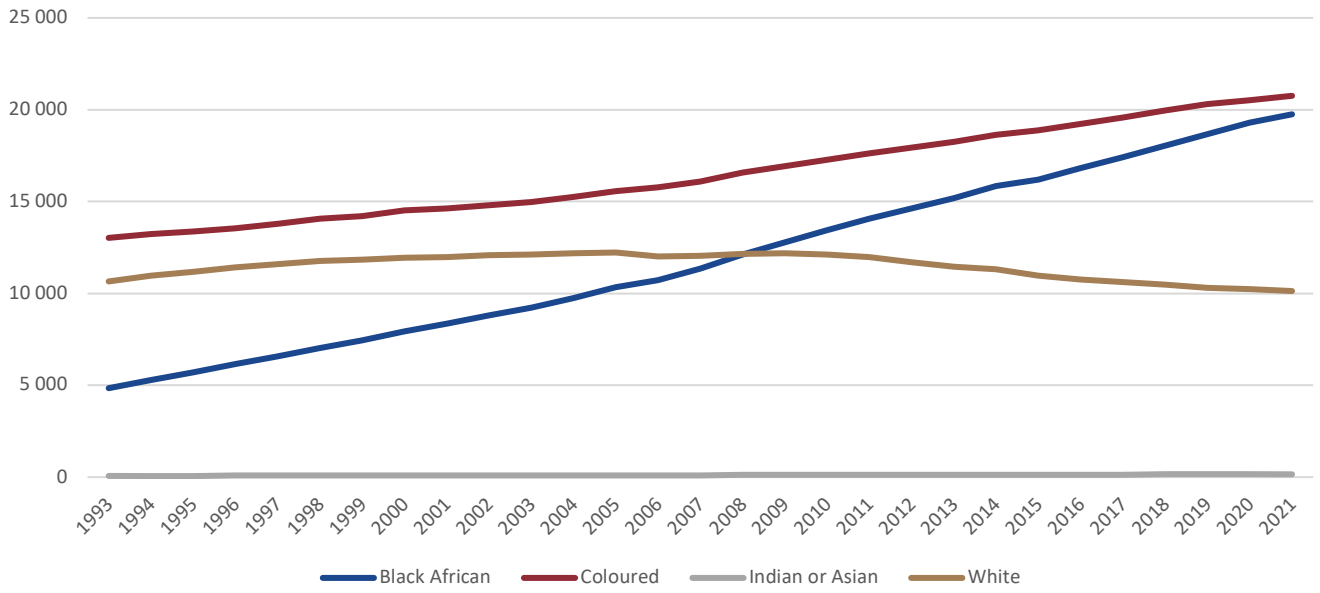
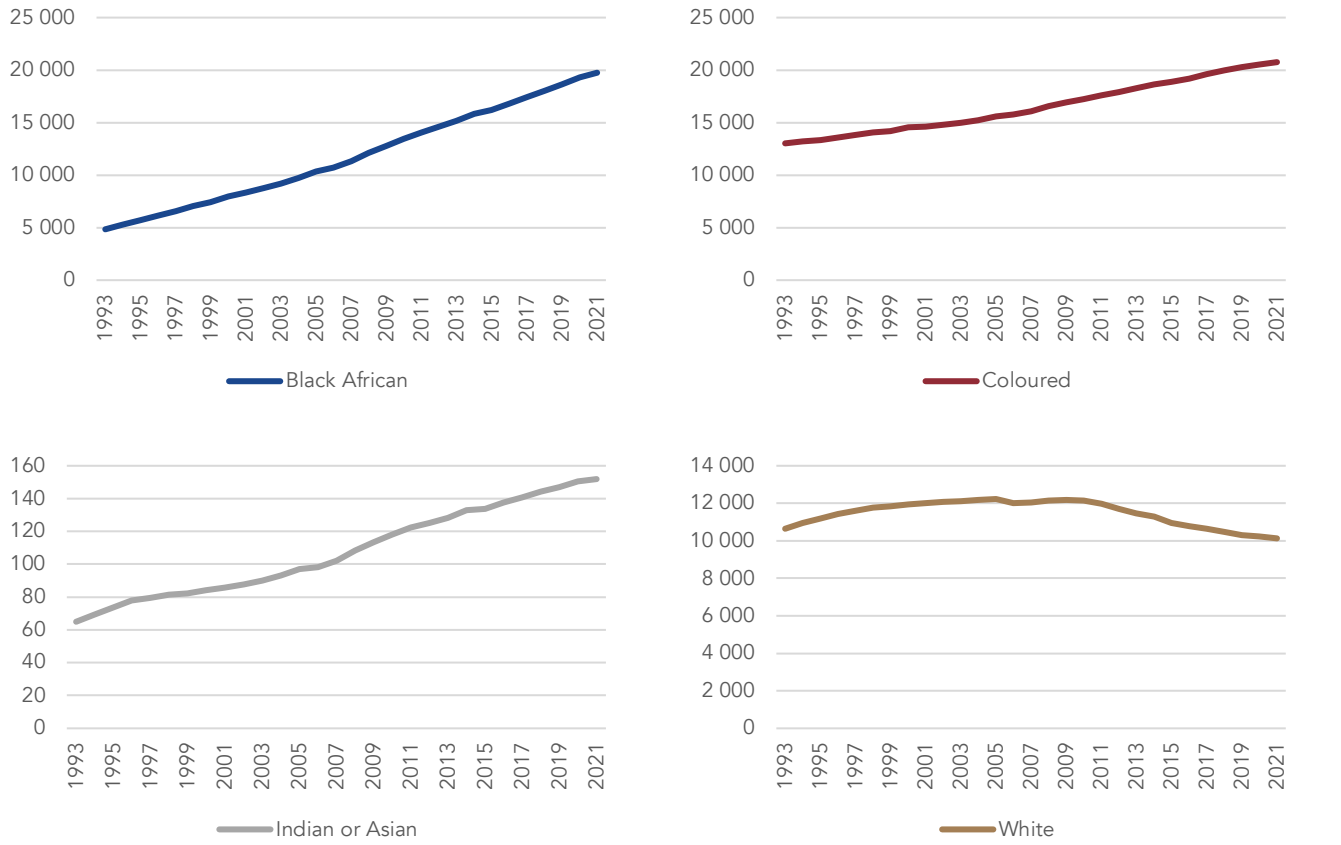


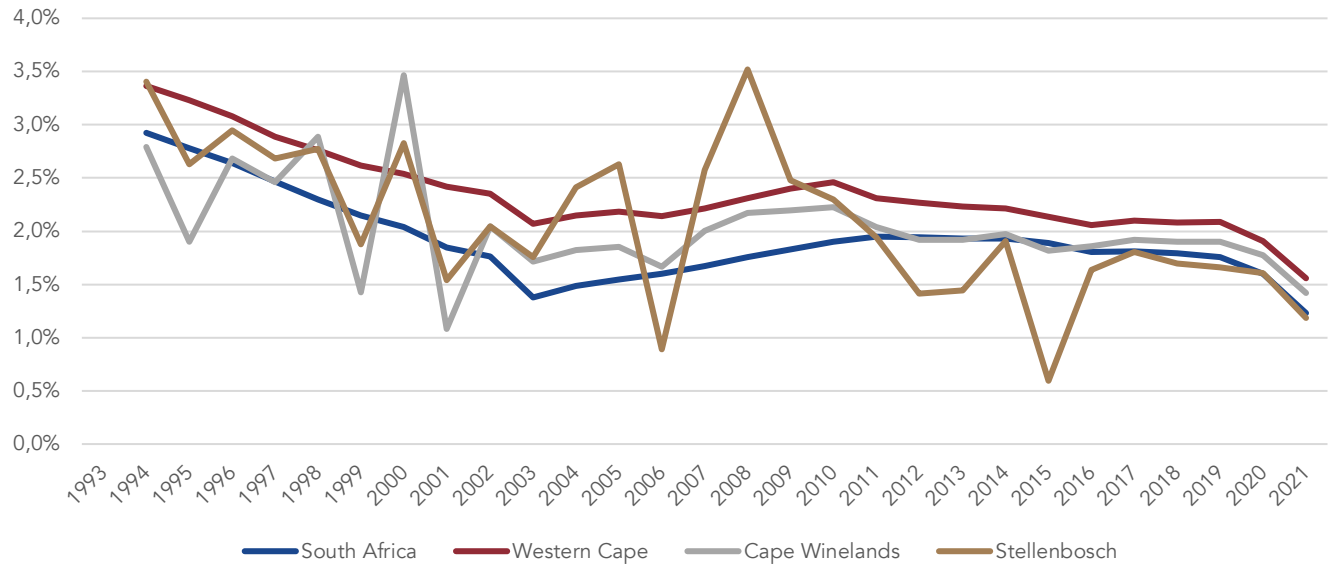
Figure 2-15: Household Growth from 1993 to 2021



Source: Quantec 2023

The corresponding growth rates are shown in the figure below. The graph shows a similar trend for the country, province, district, and the municipality. It is interesting to note that the household growth rate in the Stellenbosch Local Municipality has been below that of the district, province and national rates since 2012.

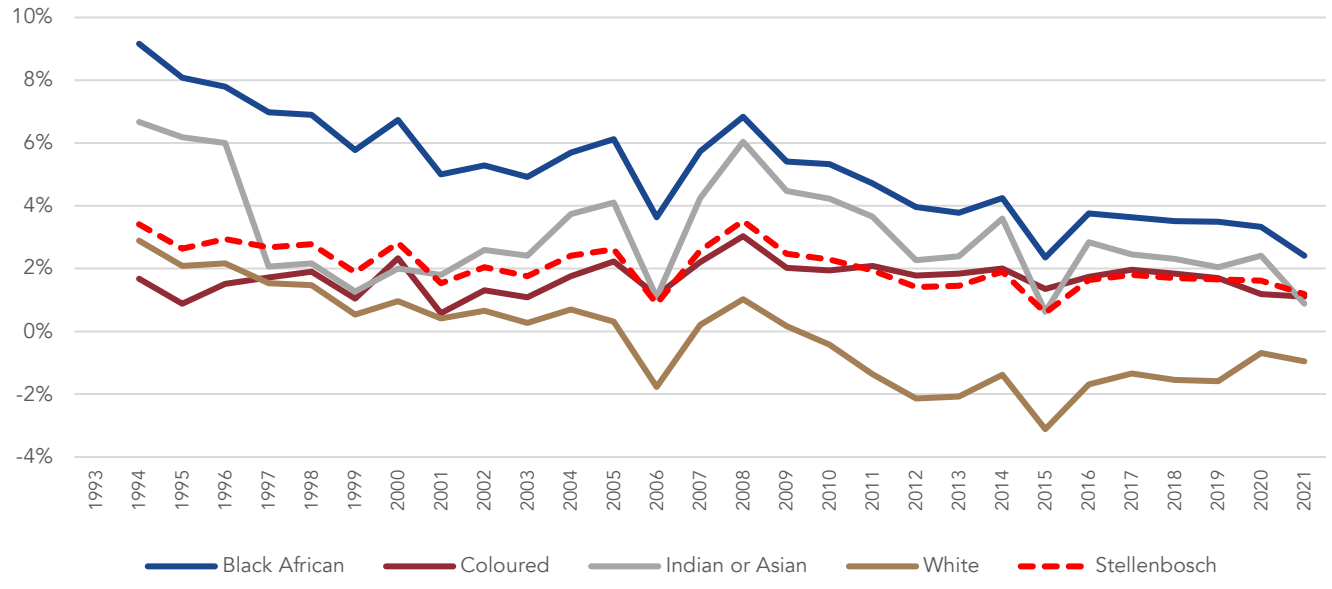
Figure 2-16: Comparative Household Growth Rates from 1993 to 2021



Source: Quantec 2023

The figure below confirms the declining growth rates and compares the household growth rates per population group in the municipality. The household growth rates for the black and Asian population groups have generally been above the municipality's total. The coloured population group follows a very similar trend that the total. This is to be expected as the coloured population group accounts for the majority of the population. The white population group is below the total for the municipality and is continuously declining. Since 2010 the household growth rate for the white population group has been negative.

Figure 2-17: Household growth rates in Stellenbosch Local Municipality 1993 to 2021

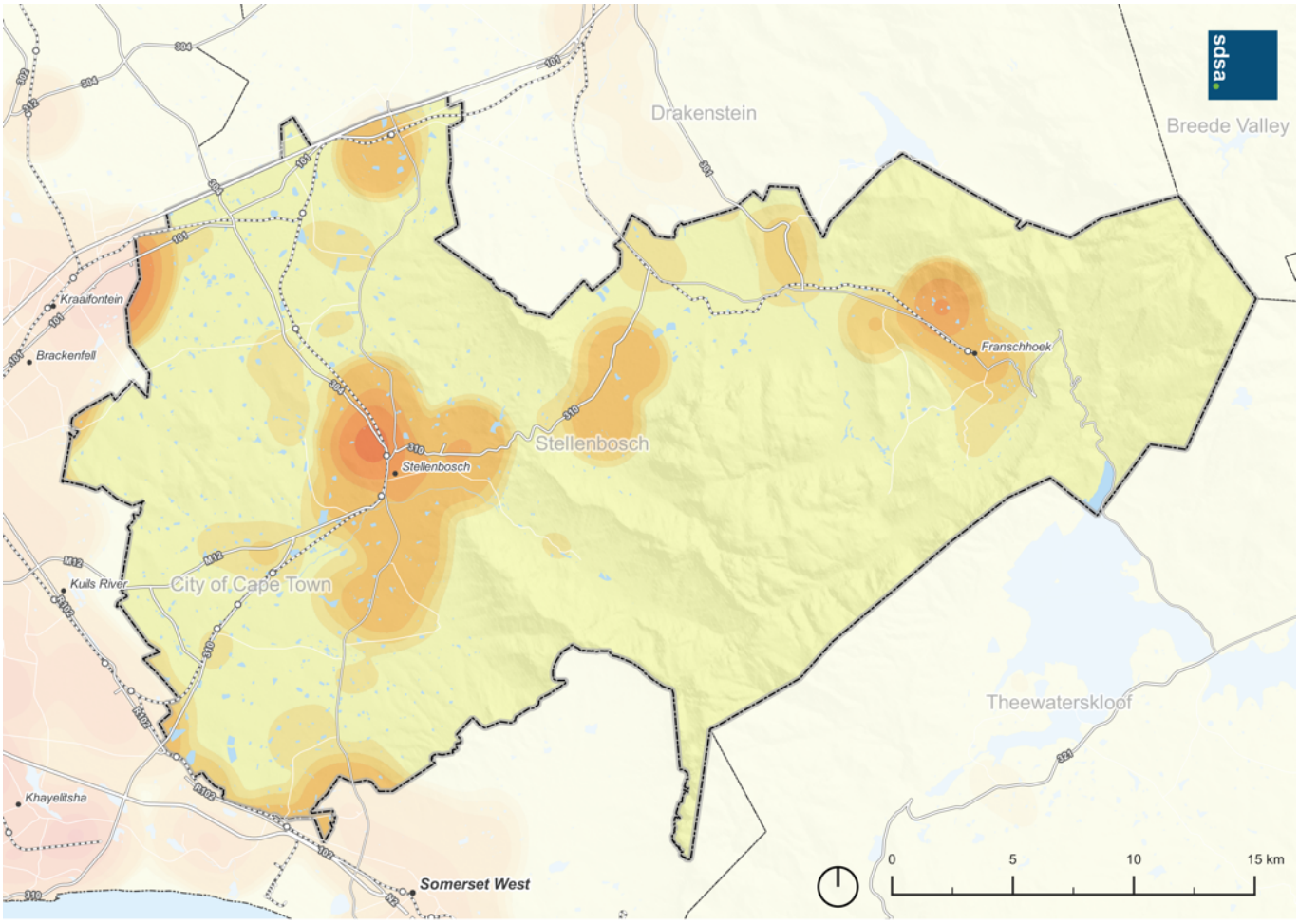


Source: Quantec 2023

Figure 2-18 below shows household densities in the municipality at a 2km kernel density. As can be expected, the overall densities follow a similar pattern to the population's spatial distribution. The highest

densities are in and around Stellenbosch with some lower densities being recorded in Franschhoek, Klapmuts and the area around Pniel, Languedoc and Kleymore.

Figure 2-18: Household Densities - Dwelling Units per km2 (2km Kernel)



Source: MapAble 2023

2.5.4.2 Household Size

Household size is an important indicator. In demographic terms, it relates to the stages of the demographic cycle, and decreasing household sizes is also an indicator of improving socio-economic conditions. However, increasing household sizes may also indicate economic stress leading to overcrowding and bigger households. Decreasing household sizes might also result from government housing programs that, in effect, encourage large family units to split up to access subsidised housing.

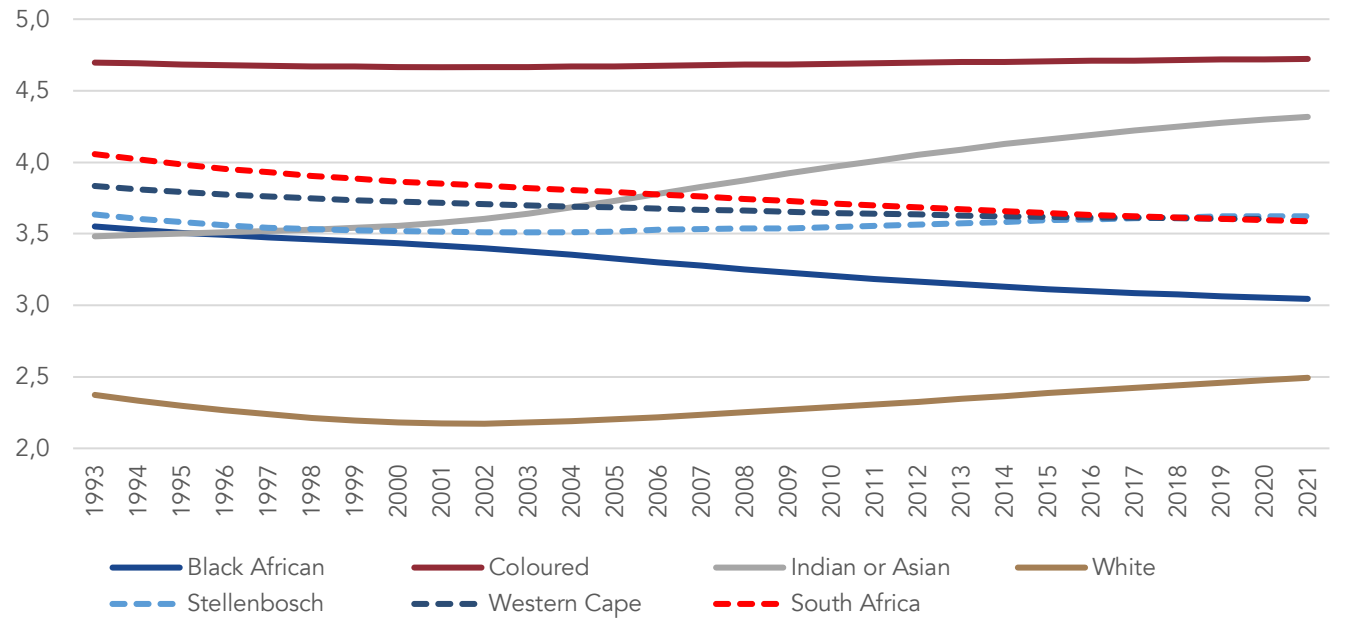
Table 2-9 below and the graph show that overall household sizes have relatively stable in the assessed period. The Coloured population's household size remains the same, while the Asian and White populations' households size increased.

Table 2-9: Household Size from 1993 to 2021

	1995	2000	2005	2010	2015	2021
Black population	3,5	3,4	3,3	3,2	3,1	3,0
Coloured population	4,7	4,7	4,7	4,7	4,7	4,7
Asian population	3,5	3,6	3,7	4,0	4,2	4,3
White population	2,3	2,2	2,2	2,3	2,4	2,5
Average HH Size	3,6	3,5	3,5	3,5	3,6	3,6

Source: Quantec 2023

Figure 2-19: Household Sizes by Population Group



Source: Quantec 2023

2.5.4.3 Household Change and Growth Forecasts

Households and household change are one of the most critical aspects of long-term planning in any area. The number of households translates into customer units, and households usually represent more than 95% of the customers in a municipality.

Except for the outdated censuses and community surveys, all official statistics used at a municipal or sub-municipal level are all derived from the mid-year population estimates of StatsSA. Both Quantec and GTI use the midyear estimates to calculate and calibrate their household figures. However, GTI also uses their building-based land use (BBLU) data derived from satellite imagery, to aggregate statistics and then to calibrate using mid-year population estimates.

The differences in sources of base year figures are noticeable, and when these figures are projected for planning purposes, small variations in number translates into big differences over a twenty-year planning horizon.

The necessity to do forecasts is important since it becomes the basis for all planning activities. Housing programmes, service delivery planning and budgets are all dependent on estimating and forecasting the long-term customer profiles of the service providers. As a previous section highlighted the challenges with population forecasts, housing units' forecasts are even more challenging. This does not imply that one should not do household forecasts, but it is important to continuously monitor changes and patterns. Underlying any planning implementation systems is a data and information monitoring system.

The following graphs highlight the implications of current household data sources for different forecast scenarios.

StatsSA shows household data in the censuses for 1996, 2001 and 2011, community surveys for 2016 and the mid-year estimates. The data points are shown in the figure below. The trendlines show very good correlation coefficient of 0.99 on the mid-year estimates and census points. The trend lines show about 74 845 and 60 402 households by 2043, repectively.

Figure 2-20: Household Trends Based on StatsSA Data

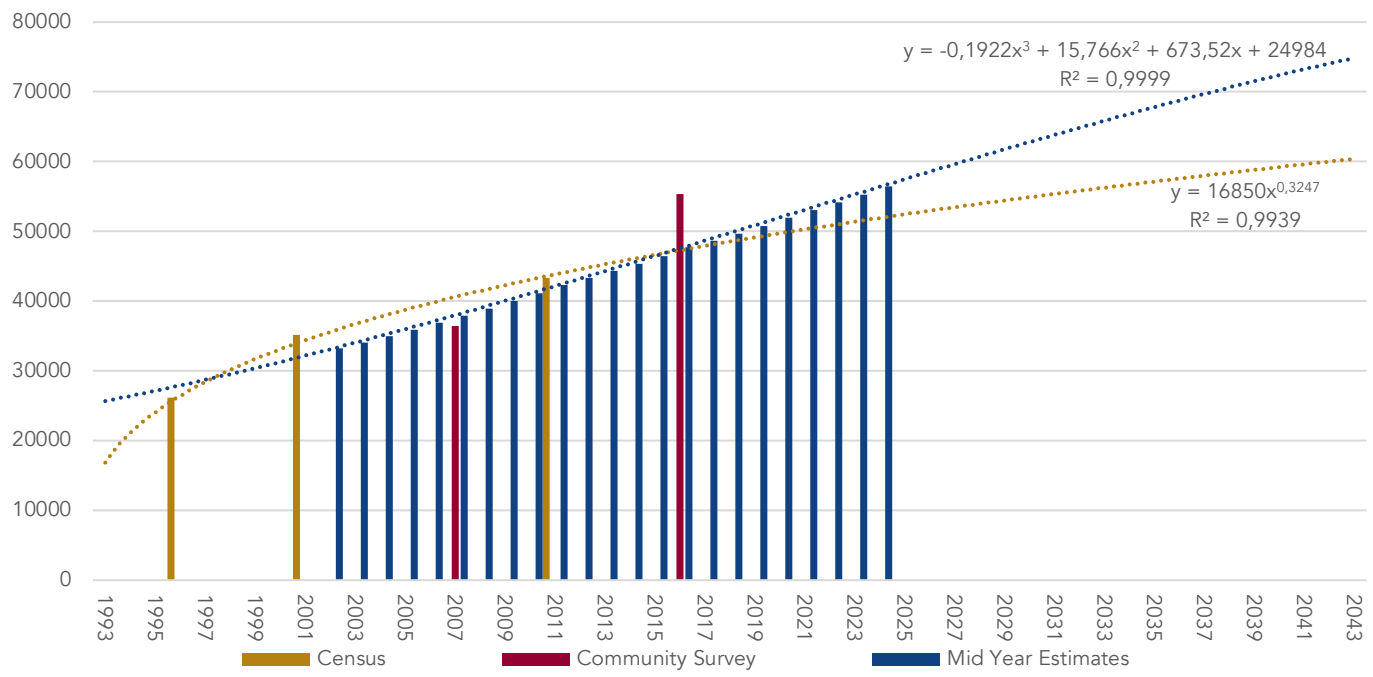
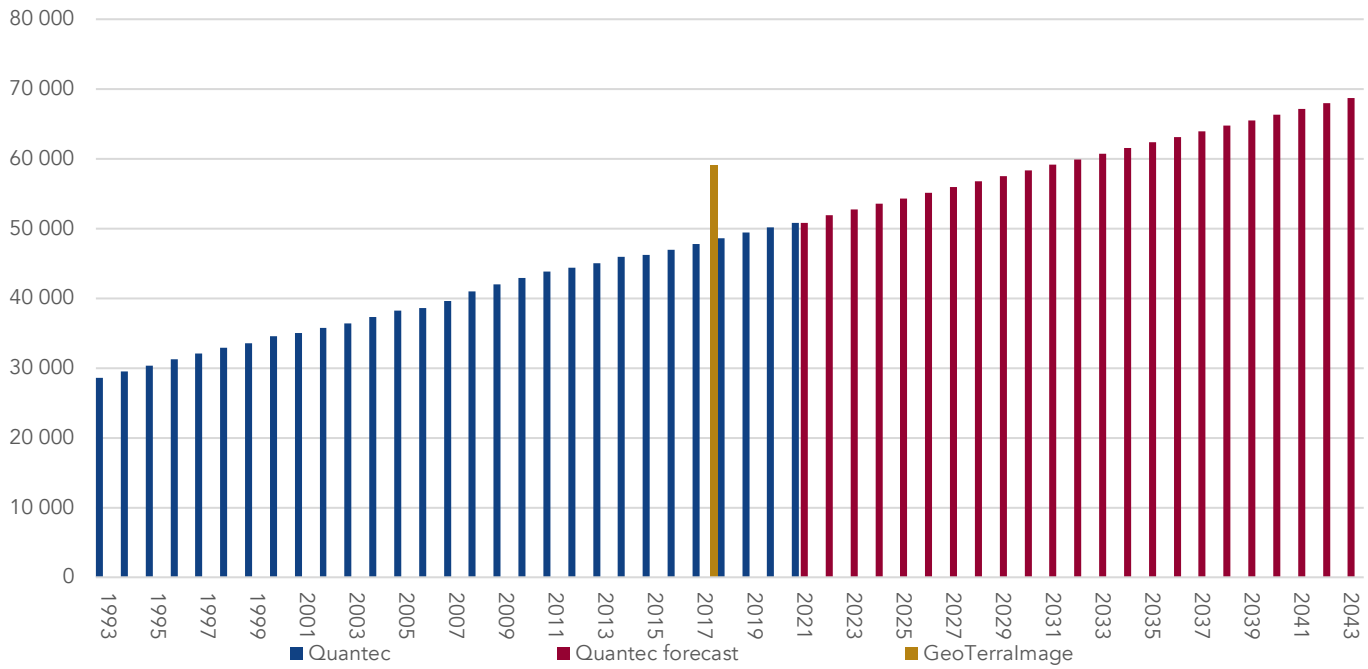


Figure 2-21 below shows Quantec data, benchmarked to mid-year population estimates, and also the GTI figure for 2017. The GTI figure is substantially higher, but it is verifiable as it based on observed structures. There are 59 078 physically observed housing structures compared to the 48 595 households according to the Quantec data based on the StatsSA baseline. It implies a substantial undercount as indicated In Figure 2-21.

Figure 2-21: Household Trends Based on Quantec Data



The Quantec household figures, mid-year estimates, and the current number of dwelling units per GeoTerraImage data are not within acceptable margins from each other as largest difference is 14 000 households. Establishing long trends remains a challenge.

The following household numbers support the identified trends.

Table 2-10: Projected household numbers

	2021	2025	2030	2035	2040	2043
Quantec forecast	50 792	54 326	58 329	62 333	66 336	68 738
Census trend	50 285	52 440	54 898	57 146	59 224	60 402
Mid-year population estimates trends (Figures adopted by Stellenbosch)	53 077	57 472	62 797	67 815	72 382	74 845

However, uncertainty is high and requires continuous growth monitoring.

2.6 Functional Area Summary

The following sections are summary profiles for the various functional areas identified within Stellenbosch Local Municipality. These areas are identified as follows:

- Urban nodes,
- Rural nodes, and
- Rural area

The profiles are broken in to separate tables for each functional area that showcase different data sets. These data sets include the following:

- Total area in hectares,
- Population and household numbers,
- Social and community facilities,
- Non-urban land cover,
- Urban land cover,
- Levels of Services,
- Points of interest, and

- Road types.

2.6.1 Functional Area 1: Urban Node Profile

The urban node profiles provide an overview of pertinent available socio-economic data and include the areas defined as urban nodes in the Stellenbosch Municipality Spatial Development Framework. These urban nodes are Stellenbosch, Franschhoek and Klapmuts.

2.6.1.1 The Extent of Urban Nodes

Table 2-11 below, shows the extent of the three urban nodes in hectare. Of the three urban nodes under investigation, the Stellenbosch node is the most extensive, comprising 2 868 hectares, while Franschhoek and Klapmuts are relatively similar in size, measuring 484 and 450 hectares, respectively.

Table 2-11: Total Area of Urban Nodes

Area	Stellenbosch	Franschhoek	Klapmuts	Total
Area (ha)	2 868	484	450	3 802

Source: Census / MapAble 2023

2.6.1.2 Population and Households

Table 2-12 provides an overview of pertinent population and household figures for the three urban nodes of Stellenbosch, Franschhoek and Klapmuts. Population and household figures are derived from StatsSA census data (1996, 2002, 2011) and WorldPop2020. Other third-party data are not considered as the data must be presented at a sub-municipal level. Most other data sources only provide figures for the municipal area. In all three areas, the population increased considerably between 2001 and 2011. However, the rate of growth declined between 2011 and 2020. Despite this, the population growth in the urban nodes is still growing at an average of 4% per annum and saw a total increase of 33%.

Population densities in the three urban nodes are similar to population growth. Franschhoek has the highest density (39.2 people/ha), shortly followed by Stellenbosch (36.7 people/ha), while Klapmuts has the lowest relative density (22.9 people/ha).

The growth in the number of households shows a more pronounced increase than the number of people. The data shows that in all three urban nodes, the number of households grew by 7% per annum between 2001 and 2011. Unfortunately, more recent data is not available to calculate current growth trends in household growth.

As with the relationship between population numbers and population densities, household figures also follow a similar growth trend. The average household size is expected to decline in all three urban nodes as household figures grow faster than compared to the population. This is confirmed in the figures. Franschhoek showed the most significant decline between 2001 and 2011 at 26%, while in Stellenbosch, the average household size declined by 15%. The average household size in Klapmuts only decreased by 7%. Overall the average annual household size in all three urban nodes decreased by 2%.

Table 2-12: Population and Household Numbers of Urban Nodes

Population and households	Year	Stellenbosch	Franschhoek	Klapmuts	Total
Total Population	1996	54 467	5 692	1 576	61 735
	2001	56 723	7 909	4 176	68 808
	2011	78 635	14 521	7 814	100 970
	2020	105 292	18 982	10 293	134 567
Population density (persons/ha)	1996	18,50	11,75	1,61	16,24
	2001	19,78	16,33	9,29	18,10
	2011	27,42	29,98	17,37	26,56

Population and households	Year	Stellenbosch	Franschhoek	Klapmuts	Total
	2020	36,71	39,22	22,87	35,39
Total households	1996	14 311	1 322	341	15 974
	2001	14 598	1 928	972	17 498
	2011	23 743	4 785	1 966	30 494
Household density (households/ha)	1996	4,86	2,73	0,35	4,20
	2001	5,09	3,98	2,16	4,60
	2011	8,28	9,88	4,37	8,02
Ave household size	1996	3,81	4,32	4,62	3,86
	2001	3,89	4,10	4,30	3,93
	2011	3,31	3,03	3,98	3,31

Source: Census / MapAble 2023

2.6.1.3 Social and Community Facilities

The dominance of Stellenbosch is again highlighted in the prevalence of social and community facilities as seen in Table 2-13 below. There is a total of 30 education facilities located in the urban nodes, 23 health care facilities, four SAPS stations and one lower court.

Table 2-13: Social and Community Facilities Numbers of Urban Nodes

Social and community facilities	Stellenbosch	Franschhoek	Klapmuts	Total
Primary schools	14	3	1	18
Secondary school	10	1	0	11
Intermediate school	0	0	0	0
Combined school	0	1	0	1
Public health	9	2	1	12
Private health	1	0	0	1
SAPS stations	2	1	1	4
Lower courts	1	0	0	1

Source: Department of Basic Education 2016 / Department of Health 2015 / South African Police Services 2015 / MapAble 2023

2.6.1.4 Land Cover

Because the areas under assessment are urban nodes, one would not expect extensive land cover related to non-urban activities. Table 2-14 below depicts the changes in Land Cover related to non-urban uses between 1990 and 2014. Land cover data for 2018 is available from the Department of Environmental Affairs - Directorate Geospatial Information Management. However, the 2018 data had been reclassified, making direct comparisons between the different timeframes difficult.

From the table below, the only significant changes to note are those related to Cultivated commercial fields, Cultivated commercial pivots, and Cultivated orchards and vines in the Stellenbosch Urban Node. All these categories have seen a slight decrease and can potentially result from urban expansion.

Table 2-14: Non-urban Land Cover in Hectares of Urban Nodes

Land cover non-urban	Year	Stellenbosch	Franschhoek	Klapmuts	Total
Cultivated commercial fields	1990	43,6	2,9	63,8	110,3
	2014	30,4	2,6	66,4	99,3
Cultivated commercial pivot	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0
Cultivated orchards and vines	1990	229,7	89,8	43,3	362,8
	2014	166,3	88,9	42,2	297,4

Land cover non-urban	Year	Stellenbosch	Franschhoek	Klapmuts	Total
Sugarcane	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0
Subsistence farming	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0
Forests & Plantations	1990	160,2	7,7	0,0	167,9
	2014	42,9	1,1	0,0	44,0
Mining	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0

Source: Department of Environmental Affairs / MapAble 2023

Regarding the urban-related land cover, most of the categories in all three urban nodes show a slight increase or decrease of 1% - 2%. The most significant change occurred in the urban informal category. The Stellenbosch urban node saw an increase of 111%. Franschhoek's informal category grew from 0 hectares in 1990 to 12.5 hectares in 2014. The urban informal category grew by a staggering 152% per annum between 1990 and 2014.

Table 2-15: Urban Land Cover in Hectares of Urban Nodes

Land cover Urban	Year	Stellenbosch	Franschhoek	Klapmuts	Total
Urban built-up	1990	0,0	0,0	1,6	1,6
	2014	15,7	0,0	3,8	19,5
Urban commercial	1990	277,4	7,9	1,3	286,6
	2014	300,3	5,3	0,5	306,1
Urban industrial	1990	158,5	4,6	3,2	166,3
	2014	139,4	3,8	1,8	145,1
Urban residential	1990	789,3	88,6	25,7	903,5
	2014	749,4	99,3	18,7	867,5
Urban townships	1990	87,2	36,6	2,4	126,2
	2014	123,4	54,7	40,0	218,1
Urban informal	1990	1,3	0,0	0,0	1,3
	2014	35,2	12,5	0,0	47,6
Rural villages	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0
Urban sports and golf	1990	192,7	4,2	0,0	196,9
	2014	268,2	5,3	3,1	276,7
School and sports grounds	1990	65,8	19,7	0,7	86,2
	2014	49,5	16,9	0,4	66,7
Smallholdings	1990	37,0	4,7	0,0	41,8
	2014	65,6	3,8	0,0	69,4

Source: Department of Environmental Affairs / MapAble 2023

2.6.1.5 Zoning and Vacant Land

An assessment of the zoning of the urban nodes is presented in Table 2-16 below. In the Stellenbosch urban node, the conventional residential zone (21%) and public roads and parking zone (15%) dominate. Despite the urban nature of the node, the largest zoning category is the agriculture and rural zone (25%). A similar pattern is also evident in Franschhoek but differs in that private open space is the largest category (25%). Klapmuts, despite being categorised as an urban node, still shows a largely rural nature based on prevalent zoning based on the fact that 54% of the node is zoned as agriculture and the rural

zone. The conventional residential zone makes up 9% of the Klapmuts area, with a variety of other zoning mainly in the range of 1% – 4%.

Table 2-16: Zoning

Zoning Category	Stellenbosch	Franschhoek	Klapmuts	Total
Agriculture and Rural Zone	713.22	78.40	246.12	1 037.73
Community Zone	39.39	13.16	5.66	58.21
Conventional Residential Zone	606.89	99.09	41.80	747.78
Education Zone	181.56	13.26	5.37	200.18
Industrial Zone	104.05	5.01	2.42	111.48
Less Formal Residential Zone	62.98	17.39	12.46	92.84
Limited Use Zone	0.89	5.18	3.33	9.39
Local Business Zone	14.69	0.92	7.31	22.92
Mixed Use Zone	123.42	12.47	7.39	143.28
Multi-unit Residential Zone	93.09	7.57	15.34	116.00
Natural Environment Zone	0	0	0	0
Private Open Space Zone	267.85	120.31	8.44	396.61
Public Open Space Zone	105.95	16.90	5.95	128.80
Public Roads and Parking Zone	421.81	46.12	31.86	499.78
Subdivisional Area	3.60	6.92	5.27	15.79
Transport Facility Zone	13.76	0.00	16.20	29.96
Utility Services Zone	33.82	2.46	16.25	52.52
Other	108.51	27.29	27.86	163.66
Total	2 895.48	472.46	459.02	3 826.96

Source: Stellenbosch Municipality

The data presented in Table 2-17 below shows that 437 hectares (15%) in Stellenbosch are indicated as vacant. In Franschhoek and Klapmuts 128 hectares (27%) and 300 hectares (65%) of the node are shown as vacant, respectively.

Table 2-17: Vacant Land

	Stellenbosch	Franschhoek	Klapmuts	Total
Vacant Land	437.5	128.7	300.2	866.3

Source: Stellenbosch Municipality

2.6.1.6 Access to Services

Water services have been a very high priority in service delivery strategies over the past two decades. One of the critical Millennium Goals adopted in 2000 stated that countries should aim to halve people's proportion without access to safe drinking water and basic sanitation by 2015. At least 50% of households should have access to at least basic services according to these goals. Table 2-18 below show the percentage of households that have access to full, intermediate, basic and below basic levels of services for water. The Stellenbosch urban node has maintained good service levels, with most of the population receiving water services above the basic standard. Franschhoek showed a drastic decline in the percentage of households that had access to full services between 1996 and 2001. This can potentially be explained by the increase in population during that time. One must also consider the increase in land cover in the urban informal category to explain this decline. In general, over time, the urban nodes show a recovery in water services provision.

Table 2-18: % Access to Water Services of Urban Nodes

Access to water services	LOS	Stellenbosch	Franschhoek	Klapmuts	Total
1996	Full	77,9%	76,3%	19,2%	76,5%
	Intermediate	6,5%	5,9%	25,4%	6,8%
	Basic	15,0%	17,0%	41,3%	15,7%
	Below Basic	0,2%	0,6%	11,5%	0,5%
	None	0,4%	0,3%	2,6%	0,4%
2001	Full	71,3%	25,9%	50,0%	65,1%
	Intermediate	10,4%	11,6%	21,7%	11,1%
	Basic	9,8%	24,0%	12,7%	11,5%
	Below Basic	8,3%	37,4%	15,3%	11,9%
	None	0,3%	1,1%	0,4%	0,4%
2011	Full	73,2%	47,6%	67,7%	68,8%
	Intermediate	5,6%	11,1%	16,4%	7,2%
	Basic	15,3%	32,0%	15,0%	17,9%
	Below Basic	5,3%	7,7%	0,2%	5,3%
	None	0,6%	1,7%	0,7%	0,8%

Source: Census / MapAble 2023

Access to appropriate sanitation services is a very high health priority. Table 2-19 below shows that despite the increase in population, the municipality has been able to keep up with the demand for sanitation services.

Table 2-19: % Access to Sanitation Services of Urban Nodes

Access to sanitation services	LOS	Stellenbosch	Franschhoek	Klapmuts	Total
1996	Full	92,1%	63,9%	21,3%	88,3%
	Intermediate	0,0%	0,0%	0,0%	0,0%
	Basic	0,0%	0,0%	0,0%	0,0%
	Below Basic	1,8%	9,1%	59,6%	3,6%
	None	6,1%	27,0%	19,1%	8,1%
2001	Full	97,0%	40,0%	62,8%	88,8%
	Intermediate	0,0%	0,4%	0,5%	0,1%
	Basic	0,2%	0,1%	12,7%	0,9%
	Below Basic	0,8%	1,9%	4,4%	1,1%
	None	2,0%	57,7%	19,6%	9,1%
2011	Full	97,0%	77,1%	88,6%	93,3%
	Intermediate	0,1%	0,1%	1,2%	0,2%
	Basic	0,2%	0,0%	0,4%	0,1%
	Below Basic	1,3%	18,6%	8,4%	4,4%
	None	1,5%	4,3%	1,4%	1,9%

Source: Census / MapAble 2023

Solid waste management and refuse removal are essential for health and environmental considerations. The three urban nodes show good service provision to households over the period assessed.

Table 2-20: % Access to Refuse Removal Services of Urban Nodes

Access to refuse removal services	LOS	Stellenbosch	Franschhoek	Klapmuts	Total
1996	Full	96,0%	82,1%	82,2%	94,7%
	Intermediate	0,4%	0,4%	1,3%	0,4%

	Basic	1,9%	0,8%	8,1%	1,9%
	Below Basic	0,5%	15,6%	6,6%	1,9%
	None	1,2%	1,0%	1,5%	1,2%
2001	Full	95,8%	80,9%	96,1%	94,2%
	Intermediate	1,0%	0,8%	0,4%	1,0%
	Basic	1,5%	3,8%	0,6%	1,7%
	Below Basic	1,5%	13,8%	2,9%	2,9%
	None	0,2%	0,6%	0,1%	0,2%
2011	Full	94,9%	96,2%	94,4%	95,1%
	Intermediate	0,7%	2,1%	1,3%	0,9%
	Basic	2,2%	0,2%	1,9%	1,9%
	Below Basic	1,2%	0,3%	0,7%	1,0%
	None	1,0%	1,3%	1,7%	1,1%

Source: Census / MapAble 2023

Although electricity does not have the same implications for health as water and sanitation, access to electricity is essential for general development, especially education. Access to electricity was, therefore, always a high priority. Table 2-21 below shows how access to electricity has changed since 1996. This table is based on access to lighting as a proxy for access to electricity. Stellenbosch and Klapmuts show good access to electricity since 1996, while Franschhoek has improved over time.

Table 2-21: % Access to Electricity Services of Urban Nodes

Access to electricity services	LOS	Stellenbosch	Franschhoek	Klapmuts	Total
1996	Full access	95,3%	56,3%	74,9%	91,6%
	No access	4,8%	43,7%	25,1%	8,4%
2001	Full access	97,7%	38,2%	71,8%	89,7%
	No access	2,3%	61,9%	28,3%	10,3%
2011	Full access	93,9%	88,8%	96,2%	93,2%
	No access	6,1%	11,2%	3,8%	6,8%

Source: Census / MapAble 2023

2.6.1.7 Points of Interest

The points of interest information are derived from a third-party data source (MapIT). Table 2-22 shows the number of points of interest, summarised into six (6) categories. As would be expected in urban nodes, there is a high concentration of Offices, Retail, Entertainment and Commercial activities, especially in the Stellenbosch Urban Node. Klapmuts, with its much smaller population, has much fewer points of interest to consider.

Table 2-22: Points of Interest in Urban Nodes

Points Of Interest	Stellenbosch	Franschhoek	Klapmuts	Total
Primary economic activities	4	3	0	7
Offices, Retail, entertainment and commercial	1220	159	25	1404
Multiple residential	112	8	0	120
Community and social facilities	228	39	4	271
Government, Infrastructure and Transport	95	11	3	109
Tourism, recreation, accommodation and natural features	189	84	5	278

Source: MapIT / MapAble 2023

2.6.1.8 Road types

Table 2-23 below shows the road types in each of the urban nodes. It also distinguishes between the length of paved and unpaved roads. In the Stellenbosch urban node, 95% of the roads are paved. This is mainly made up of main roads and residential roads, while the unpaved roads are related to informal road types. 85% of the roads in the Franschhoek urban node are paved, with suburban roads comprising the majority of these. 74% of roads in Klapmuts are paved, with Main roads (4.6km) and suburban roads (18.4km) accounting for the majority of paved road types.

Table 2-23: Road Types in Urban Nodes

Road type		Stellenbosch	Franschhoek	Klapmuts	Total
Major road	Paved road (km)	0,0	0,0	0,0	0,0
	Unpaved road (km)	N/A	N/A	N/A	0,0
Main road	Paved road (km)	47,7	3,3	4,6	55,6
	Unpaved road (km)	0,0	0,0	0,0	0,0
Secondary road	Paved road (km)	0,0	0,0	0,0	0,0
	Unpaved road (km)	0,0	0,0	0,0	0,0
Suburban road	Paved road (km)	252,4	43,6	18,4	314,5
	Unpaved road (km)	2,2	3,2	5,1	10,6
Informal roads	Paved road (km)	13,4	0,2	0,7	14,3
	Unpaved road (km)	13,9	5,1	3,4	22,4
Tracks	Paved road (km)	0,0	N/A	N/A	0,0
	Unpaved road (km)	N/A	N/A	N/A	0,0
Trails	Paved road (km)	N/A	N/A	N/A	0,0
	Unpaved road (km)	N/A	N/A	N/A	0,0
Totals	Paved road (km)	314,2	47,0	N/A	361,2
	Unpaved road (km)	16,2	8,3	8,5	33,0

Source: MapIT / MapAble 2023

2.6.2 Functional Area 2: Rural Node Profile

The rural node profiles provide an overview of pertinent available socio-economic data and include the areas defined as rural nodes in the Stellenbosch Municipality Spatial Development Framework. These rural nodes are Muldersvlei, Koelhof, Vlottenburg, Lynedoch, Raithby, Kylemore, Pniel, Groot Drakenstein, Wemmershoek and La Motte.

2.6.2.1 The Extent of Rural Nodes

Table 2-24 below shows the extent of the rural nodes in the Stellenbosch Municipality. The largest of these nodes, in terms of area in hectares, is Kylemore (184 ha), Koelhof (182 ha) and Vlottenburg (153 ha). The smallest rural nodes are Raithby (45 ha), Wemmershoek (66 ha), and La Motte (69 ha). The average size of a rural node is 110 ha.

Table 2-24:Total area of Rural Nodes

Area	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
Area (ha)	105	182	153	78	45	184	119	98	66	69	1 099

Source: Census / MapAble 2023

2.6.2.2 Population and Households

The rural nodes in the Stellenbosch Municipality have all seen a sharp increase in population. When looking at these figures in terms of percentages, one must also consider that this growth has taken place from a small base. Overall, between 1996 and 2020, the rural nodes showed total increase of 286% or 12% per annum. In terms of numbers, Kleymore has seen the most significant growth adding 8 990 people between 1996 and 2020. Pniel, Wemmershoek and La Motte have also shown sharp increases in recent years but not to the extent of Kleymore. These increases can also be because of new housing projects that make it difficult to assess trends effectively.

With the increase in population, one can expect an increase in population density. Most rural nodes remain sparsely populated, with Muldersvlei, Koelhof, Vlottenburg, Lynedoch, and Groot Drakenstein having a population density below six (6) person/ha. Interestingly Kleymore has the highest population density (57 persons/ha) of any node in the municipal area.

Household growth shows a similar pattern as population growth. Where the data differs from the data in the urban nodes is in the average household sizes. The smaller rural nodes have shown an increase in the average household size, while the most prominent rural nodes have shown a decrease in household sizes but not to the extent that it happened in the urban nodes.

Table 2-25: Population and Household Numbers of Rural Nodes

Population and households	Year	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
Total Population	1996	50	150	98	35	262	1 483	1 983	102	190	906	5 259
	2001	98	118	99	50	34	3 527	2 412	71	554	50	7 013
	2011	72	448	334	164	440	7 233	1 725	118	859	1 606	12 999
	2020	266	1 080	750	249	788	10 473	2 878	318	1 299	2 209	20 310
Population density (persons/ha)	1996	0,40	0,82	0,64	0,45	5,85	8,06	16,70	1,04	2,87	13,18	4,79
	2001	0,93	0,65	0,65	0,65	0,77	19,17	20,32	0,73	8,35	0,73	6,38
	2011	0,68	2,46	2,19	2,11	9,83	39,31	14,53	1,20	12,96	23,37	11,83
	2020	2,53	5,93	4,90	3,19	17,51	56,92	24,18	3,24	19,68	32,01	18,48
Total households	1996	14	39	24	11	72	286	434	19	38	154	1 091
	2001	24	28	23	12	8	687	566	14	104	10	1 476
	2011	17	97	86	36	105	1 645	428	27	202	397	3 040
Household density (households/ha)	1996	0,11	0,21	0,16	0,14	1,60	1,55	3,65	0,19	0,57	2,24	0,99
	2001	0,23	0,15	0,15	0,15	0,19	3,73	4,76	0,14	1,57	0,14	1,34
	2011	0,16	0,53	0,56	0,47	2,34	8,94	3,61	0,27	3,04	5,78	2,77

Population and households	Year	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmersho ek	La Motte	Total
Ave household size	1996	3,61	3,84	4,08	3,34	3,65	5,18	4,59	5,36	5,00	5,90	4,82
	2001	4,10	4,28	4,28	4,28	4,15	5,14	4,27	5,11	5,32	5,11	4,75
	2011	4,16	4,68	3,87	4,40	4,22	4,40	4,03	4,36	4,31	4,06	4,28

Source: Census / MapAble 2023

2.6.2.3 Social and Community Facilities

Social and community services are limited in rural nodes, with most rural nodes only consisting of a single primary school. Only Kylemore and Groot Drakenstein have a public health facility. A SAPS is located in Groot Drakenstein.

Table 2-26: Social and Community Facilities Numbers of Rural Nodes

Social and community facilities	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmersho ek	La Motte	Total
Primary schools	0	1	1	1	1	1	1	0	1	0	7
Secondary school	0	0	0	0	0	0	0	0	0	0	0
Intermediate school	0	0	0	0	0	0	0	0	0	0	0
Combined school	0	0	0	0	0	0	0	0	0	0	0
Public health	0	0	0	0	0	1	0	1	0	0	2
Private health	0	0	0	0	0	0	0	0	0	0	0
SAPS stations	0	0	0	0	0	0	0	1	0	0	1
Lower courts	0	0	0	0	0	0	0	0	0	0	0

Source: Department of Basic Education 2016 / Department of Health 2015 / South African Police Services 2015 / MapAble 2023

2.6.2.4 Land Cover

Non-urban land uses have remained relatively the same for most rural nodes. The most prevalent non-urban land cover category is cultivated orchards and vines, located mainly in Vlottenburg and Lynedoch.

Table 2-27: Non-urban land cover in hectares of Rural Nodes

Land cover non-urban	Year	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmersho ek	La Motte	Total
Cultivated commercial fields	1990	0,6	0,1	17,6	0,1	0,0	7,8	0,2	0,0	0,0	0,0	26,5
	2014	0,5	0,1	15,1	0,0	0,0	6,5	0,6	0,0	0,0	0,0	22,8
Cultivated commercial pivot	1990	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Cultivated orchard and vines	1990	3,9	13,3	47,6	43,0	9,8	0,0	6,9	3,2	0,0	1,5	129,2
	2014	4,2	14,5	48,6	47,3	6,3	0,4	6,8	2,8	0,0	1,8	132,7
Sugarcane	1990	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

Land cover non-urban	Year	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
	2014	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Subsistence farming	1990	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Forests & Plantations	1990	4,1	0,0	0,0	0,0	0,0	7,0	10,7	0,0	21,0	17,3	60,1
	2014	3,4	0,0	0,0	0,0	0,0	0,0	8,9	0,0	0,0	2,8	15,0
Mining	1990	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	2014	0,0	17,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	17,1

Source: Department of Environmental Affairs / MapAble 2023

As with the non-urban land cover, the urban land cover also shows small changes. The most prominent category is indicated as urban townships. This category also showed the most considerable growth. This is most significant in Kleymore, where an additional 16.7 hectares of urban townships is indicated. This relates to or can be explained by the increase in population in this node.

Table 2-28: Urban Land Cover in Hectares of Rural Nodes

Land cover Urban	Year	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
Urban built-up	1990	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	1,1
	2014	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,3
Urban commercial	1990	0,0	0,0	1,6	0,0	0,2	0,0	0,0	0,0	0,0	0,0	1,9
	2014	0,0	0,0	0,8	0,0	0,5	0,0	0,0	0,0	0,0	0,0	1,3
Urban industrial	1990	0,0	3,6	11,3	3,5	0,0	0,0	0,0	9,6	4,2	0,0	32,1
	2014	0,0	2,1	8,5	1,6	0,0	0,0	0,0	6,5	2,1	0,0	20,8
Urban residential	1990	0,0	0,0	1,4	0,0	18,6	0,0	0,0	2,0	13,3	0,0	35,3
	2014	0,0	1,3	0,4	0,0	14,7	0,0	0,0	1,0	11,5	0,0	28,9
Urban townships	1990	0,0	0,0	6,2	0,0	0,0	58,9	62,4	0,0	0,0	11,1	138,5
	2014	0,0	0,0	2,7	0,0	0,0	75,6	58,9	0,0	0,0	23,6	160,8
Urban informal	1990	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Rural villages	1990	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Urban sports and golf	1990	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	4,7	0,0	4,7
	2014	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	3,5	0,0	3,5
School and sports grounds	1990	0,0	3,9	0,0	6,9	2,8	4,0	0,0	0,0	1,5	0,0	19,1
	2014	0,0	2,4	0,0	4,9	1,5	3,4	0,0	0,0	0,9	0,0	13,1
Smallholdings	1990	0,0	0,0	0,0	0,0	2,4	0,0	0,0	0,0	0,0	0,0	2,4
	2014	0,0	0,0	0,0	0,0	12,8	0,0	0,0	0,0	0,0	0,0	12,8

Source: Department of Environmental Affairs / MapAble 2023

2.6.2.5 Zoning and Vacant Land

An assessment of the zoning of the rural nodes is presented in Table 2-29 below. Most of the rural nodes, 63% in total, are zoned as Agricultural and Rural Zone. Another 14% is zoned as Conventional Residential Zone.

Table 2-29: Zoning

Zoning Category	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
Agriculture and Rural Zone	183.05	120.28	27.15	85.10	4.91	93.87	32.44	54.99	65.54	56.27	723.59
Community Zone	0.00	2.95	0.00	0.00	0.00	0.96	1.43	0.00	0.08	0.09	5.50
Conventional Residential Zone	0.00	6.38	4.78	0.71	9.00	53.39	45.14	0.00	7.83	31.10	158.34
Education Zone	0.00	0.00	0.00	0.00	4.49	4.32	3.86	0.00	0.38	0.29	13.34
Industrial Zone	0.00	6.33	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.00	7.75
Less Formal Residential Zone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Limited Use Zone	0.00	0.00	0.14	0.80	0.00	0.04	0.81	0.00	0.00	0.00	1.79
Local Business Zone	0.00	1.14	0.00	0.00	0.00	0.00	0.54	0.00	0.10	0.33	2.11
Mixed Use Zone	0.00	0.00	0.00	0.38	0.00	0.32	0.64	0.00	0.00	0.00	1.34
Multi-unit Residential Zone	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60
Natural Environment Zone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private Open Space Zone	0.00	7.38	7.73	0.64	2.90	10.00	0.00	0.00	0.00	1.20	29.84
Public Open Space Zone	0.00	0.00	0.00	0.29	1.21	1.02	1.05	0.00	8.78	6.57	18.92
Public Roads and Parking Zone	0.00	12.34	3.44	0.00	4.52	25.71	9.14	0.00	3.30	5.98	64.43
Subdivisional Area	0.00	1.27	0.00	3.85	1.02	1.34	0.00	0.00	0.00	0.00	7.48
Transport Facility Zone	1.36	0.25	0.00	1.43	0.00	0.00	0.00	0.00	0.00	0.00	3.04
Utility Services Zone	0.00	10.33	0.00	0.00	0.07	0.00	0.77	0.00	2.10	1.29	14.56
Other	0.00	4.11	85.62	0.00	2.27	5.94	5.30	0.00	0.00	0.10	103.32
Total	184.41	174.34	128.85	93.19	30.40	196.90	101.11	54.99	89.53	103.22	1 156.95

Source: Stellenbosch Municipality

The data presented in Table 2-30 below shows that 112 hectares are indicated as vacant land. 95 Hectares are allocated in Kleymore and the other 17 hectares is located in Pniel.

Table 2-30: Vacant Land

	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
Vacant Land	0.00	0.00	0.00	0.00	0.00	95.08	17.68	0.00	0.00	0.00	112.76

Source: Stellenbosch Municipality

2.6.2.6 Access to Services

Table 2-31 to Table 2-34 below show access to services concerning water, sanitation, refuse removal and electricity. In general, the pattern between these different services is the same. Muldersvlei, Koelhof,

Vlottenburg and Lynedoch all show limited access to full services for the various service categories. However, by 2011 most of the households in these areas were served with full services across the service spectrum. Raithby, Kylemore, Pniel, Groot Drakenstein, Wemmershoek and La Motte shows that full services have been available to almost all households since 1996.

Table 2-31: % Access to Water Services of Rural Nodes

Access to water services	LOS	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
1996	Full	47,1%	38,7%	60,7%	58,4%	73,4%	72,9%	94,4%	84,6%	92,2%	98,3%	84,0%
	Intermediate	47,3%	55,5%	19,4%	23,9%	23,2%	15,3%	4,7%	6,9%	0,4%	0,2%	10,8%
	Basic	1,4%	0,5%	7,2%	8,5%	0,1%	0,1%	0,0%	6,3%	0,0%	0,5%	0,5%
	Below Basic	0,9%	4,5%	7,2%	2,5%	2,6%	8,0%	0,2%	0,4%	0,0%	0,3%	2,8%
	None	3,2%	0,8%	5,6%	6,8%	0,7%	3,8%	0,6%	1,9%	7,4%	0,6%	1,9%
2001	Full	72,2%	70,2%	70,2%	70,2%	72,3%	83,4%	94,2%	69,0%	94,8%	69,0%	87,3%
	Intermediate	17,7%	19,0%	19,0%	19,0%	17,3%	9,7%	4,5%	22,9%	2,8%	22,9%	8,0%
	Basic	6,9%	7,2%	7,2%	7,2%	4,9%	2,0%	0,7%	2,7%	0,1%	2,7%	1,7%
	Below Basic	3,0%	2,8%	2,8%	2,8%	4,2%	4,6%	0,1%	4,7%	2,3%	4,7%	2,6%
	None	0,3%	0,7%	0,7%	0,7%	1,3%	0,3%	0,5%	0,8%	0,0%	0,8%	0,4%
2011	Full	91,5%	30,4%	65,6%	86,7%	87,9%	83,4%	93,3%	78,2%	91,5%	82,0%	83,2%
	Intermediate	5,5%	8,0%	13,0%	10,3%	9,7%	16,0%	2,5%	5,5%	6,9%	16,6%	12,8%
	Basic	1,4%	55,8%	14,9%	1,7%	0,0%	0,1%	0,0%	3,4%	0,6%	0,7%	2,4%
	Below Basic	0,0%	5,6%	5,4%	0,8%	1,4%	0,1%	1,8%	6,0%	0,5%	0,5%	0,9%
	None	1,6%	0,2%	1,1%	0,6%	0,9%	0,4%	2,5%	6,9%	0,5%	0,3%	0,8%

Source: Census / MapAble 2023

Table 2-32: % Access to Sanitation Services of Rural Nodes

Access to sanitation services	LOS	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
1996	Full	43,3%	61,3%	68,0%	51,8%	70,5%	78,0%	93,8%	83,9%	92,2%	98,5%	85,7%
	Intermediate	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
	Basic	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
	Below Basic	49,9%	30,7%	30,0%	35,6%	29,0%	21,7%	4,5%	12,1%	0,5%	0,9%	12,5%
	None	6,9%	8,0%	2,0%	12,6%	0,5%	0,3%	1,7%	4,1%	7,4%	0,6%	1,8%
2001	Full	80,0%	81,0%	81,0%	81,0%	82,8%	85,5%	96,0%	85,9%	97,4%	85,9%	90,1%
	Intermediate	0,7%	0,4%	0,4%	0,4%	0,6%	0,0%	0,0%	0,8%	0,0%	0,8%	0,1%
	Basic	8,8%	5,8%	5,8%	5,8%	3,5%	0,1%	0,0%	1,9%	0,1%	1,9%	0,5%
	Below Basic	7,5%	7,9%	7,9%	7,9%	7,5%	13,0%	0,1%	4,8%	0,2%	4,8%	6,7%
	None	3,0%	5,0%	5,0%	5,0%	5,6%	1,4%	3,8%	6,6%	2,3%	6,6%	2,7%
2011	Full	92,6%	31,8%	74,8%	91,7%	89,0%	89,6%	97,6%	85,4%	91,4%	88,4%	88,4%
	Intermediate	2,6%	3,7%	2,6%	0,9%	1,3%	0,0%	0,0%	8,3%	0,0%	0,0%	0,3%
	Basic	0,0%	1,6%	0,6%	0,9%	2,7%	0,0%	0,6%	0,0%	0,0%	0,0%	0,3%
	Below Basic	4,8%	29,6%	21,0%	6,0%	2,9%	9,3%	0,6%	3,2%	2,9%	5,2%	7,7%
	None	0,1%	33,3%	1,0%	0,5%	4,0%	1,1%	1,2%	3,2%	5,8%	6,5%	3,3%

Source: Census / MapAble 2023

Table 2-33: % Access to Refuse Removal Services of Rural Nodes

Access to refuse removal services	LOS	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
1996	Full	12,2%	16,5%	44,3%	23,9%	84,4%	93,8%	99,0%	58,2%	88,1%	97,1%	89,3%
	Intermediate	0,0%	0,9%	1,9%	4,7%	0,1%	0,1%	0,0%	4,9%	1,3%	0,1%	0,3%
	Basic	39,9%	48,8%	30,8%	14,4%	1,4%	0,9%	0,0%	29,2%	0,0%	0,2%	3,9%
	Below Basic	32,0%	11,3%	15,5%	46,6%	13,3%	3,6%	0,3%	2,2%	1,6%	1,9%	4,0%
	None	15,8%	22,6%	7,3%	9,3%	0,7%	1,7%	0,7%	5,2%	8,2%	0,8%	2,5%
2001	Full	34,4%	33,4%	33,4%	33,4%	43,1%	98,6%	99,2%	58,8%	98,8%	58,8%	94,1%
	Intermediate	1,0%	2,4%	2,4%	2,4%	1,3%	0,0%	0,0%	1,6%	0,1%	1,6%	0,2%
	Basic	7,3%	16,7%	16,7%	16,7%	7,5%	0,2%	0,1%	3,0%	0,1%	3,0%	1,1%
	Below Basic	56,5%	45,5%	45,5%	45,5%	44,8%	1,1%	0,7%	35,6%	1,1%	35,6%	4,5%
	None	0,8%	2,0%	2,0%	2,0%	3,2%	0,0%	0,0%	0,9%	0,0%	0,9%	0,2%
2011	Full	48,0%	82,0%	57,9%	63,4%	95,1%	99,6%	92,9%	54,5%	100,0%	94,8%	95,0%
	Intermediate	4,2%	7,0%	6,6%	4,3%	1,4%	0,0%	0,5%	9,8%	0,0%	4,0%	1,2%
	Basic	11,3%	2,4%	2,1%	8,3%	1,5%	0,2%	0,0%	3,1%	0,0%	0,2%	0,5%
	Below Basic	29,1%	6,7%	10,8%	10,3%	1,9%	0,2%	0,8%	10,8%	0,0%	0,9%	1,3%
	None	7,4%	1,9%	22,5%	13,8%	0,1%	0,1%	5,8%	21,9%	0,0%	0,1%	2,0%

Source: Census / MapAble 2023

Table 2-34: % Access to Electricity Services of Rural Nodes

Access to electricity services	LOS	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
1996	Full access	68,4%	80,7%	83,7%	79,4%	94,3%	94,4%	92,5%	94,0%	91,2%	97,9%	92,8%
	No access	31,6%	19,3%	16,3%	20,6%	5,7%	5,6%	7,5%	6,0%	8,9%	2,1%	7,2%
2001	Full access	91,1%	92,7%	92,7%	92,7%	92,8%	95,7%	96,2%	87,8%	96,1%	87,8%	95,6%
	No access	8,9%	7,3%	7,3%	7,3%	7,2%	4,3%	3,8%	12,2%	3,9%	12,2%	4,4%
2011	Full access	96,5%	37,9%	82,8%	97,5%	94,5%	97,8%	97,6%	91,8%	97,6%	97,1%	95,1%
	No access	3,7%	62,1%	17,5%	2,6%	5,6%	2,2%	2,4%	8,3%	2,3%	2,9%	4,9%

Source: Census / MapAble 2023

2.6.2.7 Points of Interest

Table 2-35 below provides a breakdown of points of interest in each rural node. In general, one can deduce that most of the nodes serve a local function. Muldersvlei and Koelhof show a more significant concentration of offices, retail, entertainment and commercial points. In contrast, the points of interest in other nodes primarily relate to community or tourism-related activities.

Table 2-35: Points of Interest in Rural Nodes

Points Of Interest	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
Primary economic activities	1	0	1	0	0	0	0	1	0	0	3

Points Of Interest	Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmersho ek	La Motte	Total
Offices, Retail, entertainment and commercial	17	13	6	5	3	4	7	6	1	0	62
Multiple residential	1	0	0	0	0	1	0	1	0	1	4
Community and social facilities	1	6	2	4	1	5	2	1	1	1	24
Government, Infrastructure and Transport	0	0	1	2	0	0	1	3	0	0	7
Tourism, recreation, accommodation, and natural features	1	0	5	0	1	3	6	2	2	0	20

Source: Census / MapAble 2023

2.6.2.8 Road Types

Most roads in the rural nodes are categorised as suburban roads. These roads make up 54% of all roads. 17% of roads are informal and unpaved, while 11% are classified as main roads.

Table 2-36: Road Types in Rural Nodes

Road type		Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoe k	La Motte	Total
Major road	Paved road (km)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	Unpaved road (km)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Main road	Paved road (km)	1,9	0,9	2,3	2,2	0,0	0,0	1,4	1,7	0,6	0,2	11,3
	Unpaved road (km)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Secondary road	Paved road (km)	0,0	1,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,6
	Unpaved road (km)	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,4
Suburban road	Paved road (km)	2,0	2,4	2,1	0,4	3,0	17,9	8,7	0,0	3,6	3,1	43,2
	Unpaved road (km)	0,4	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,2	3,1	4,5
Informal roads	Paved road (km)	0,2	0,4	0,0	0,1	0,0	0,0	0,1	0,0	0,0	0,0	0,7
	Unpaved road (km)	1,1	2,5	4,6	2,4	0,1	1,6	0,6	3,2	0,3	1,0	17,6
Tracks	Paved road (km)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Unpaved road (km)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trails	Paved road (km)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Unpaved road (km)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Totals	Paved road (km)	4,1	5,2	4,4	2,7	3,0	17,9	10,2	1,7	4,2	3,3	56,7

Road type		Muldersvlei	Koelhof	Vlottenburg	Lynedoch	Raithby	Kylemore	Pniel	Groot Drakenstein	Wemmershoek	La Motte	Total
	Unpaved road (km)	1,5	2,9	4,6	2,4	0,1	1,6	1,5	3,2	0,5	4,1	22,6

Source: Census / MapAble 2023

2.6.3 Combined Functional Areas Profiles

The combined functional area profiles provide an overview of crucial socio-economic data for the sum of the urban and rural nodes, and the remaining municipality termed the rural functional area.

2.6.3.1 The Extent of Functional Areas

The urban nodes cover 4% of the municipality's total area, while the rural nodes cover only 1% of the total area. Most of the municipality (94%) is classified as rural.

Table 2-37: Total Area of Functional areas

Area	Urban Node	Rural Node	Rural Area	Total
Area (ha)	3 802	1 099	80 458	85 359

Source: Census / MapAble 2023

2.6.3.2 Population and Households

In total, the Stellenbosch Municipality grew by an estimated 95 979 people between 1996 and 2020. 76% of that growth occurred within the urban nodes, while the larger rural area accounts for 8%. The municipality grew by 92% between 1996 and 2020, or 3.8% per annum. This is more than the national average of 1.7% and the western cape provincial average of 2.7% between the same periods. As indicated, most of that growth occurred in the urban nodes. However, when comparing growth rates, rural areas have grown the fastest at 11.9% per annum.

The growth in population in the urban and rural nodes has seen a marked increase in the population densities of these nodes. Overall densities increased by 210% in urban and 286% in rural nodes. The densities in rural areas are, as to be expected, much lower increasing by 22% over the period assessed. The municipality's densities have increased by 106% between 1996 and 2020, or 4.4% per annum.

Household growth shows similar trends to population growth. Household growth in the urban nodes has been prominent, accounting for 85% of all new households in the municipality since 1996. But as with the population, the growth rate in the rural nodes has been far more pronounced. Overall, household growth has occurred at 4.4% per annum for the municipality between 1996 and 2011 or 66%.

Overall, household growth took place at a faster rate than population growth. This means that the average household size in the municipality has decreased. The average household size reduced by 10% for the municipality, and decreased by 19% in the urban and 11% in the rural nodes. This decrease is often related to migrant labour, where males move in search of economic opportunities.

Table 2-38: Population and Household Numbers of Functional areas

Population and households	Year	Urban Node	Rural Node	Rural Area	Total
Total Population	1996	61 735	5 259	37 325	104 319
	2001	68 808	7 013	43 178	118 999
	2011	100 970	12 999	41 690	155 659
	2020	134 567	20 310	45 421	200 298
Population density (persons/ha)	1996	16,24	4,79	0,46	1,14
	2001	18,10	6,38	0,54	1,39

Population and households	Year	Urban Node	Rural Node	Rural Area	Total
	2011	26,56	11,83	0,52	1,82
	2020	35,39	18,48	0,56	2,35
Total households	1996	15 974	1 091	9 082	26 147
	2001	17 498	1 476	10 153	29 127
	2011	30 494	3 040	9 788	43 322
Household density (households/ha)	1996	4,20	0,99	0,11	0,29
	2001	4,60	1,34	0,13	0,34
	2011	8,02	2,77	0,12	0,51
Ave household size	1996	3,86	4,82	4,11	4,00
	2001	3,93	4,75	4,25	4,09
	2011	3,31	4,28	4,26	3,59

Source: Census / MapAble 2023

2.6.3.3 Social and Community Facilities

Regarding social facilities, most education (61%) and health facilities (87%) are located within urban nodes. There are 12 education facilities in the rural area, compared to the 7 in the rural nodes.

Table 2-39: Social and Community Facilities Numbers of Functional areas

Social and community facilities		Urban Node	Rural Node	Rural Area	Total
Primary schools		18	7	5	30
Secondary school		11	0	2	13
Intermediate school		0	0	1	1
Combined school		1	0	4	5
Public health		12	2	0	14
Private health		1	0	0	1
SAPS stations		4	1	0	5
Lower courts		1	0	1	2

Source: Department of Basic Education 2016 / Department of Health 2015 / South African Police Services 2015 / MapAble 2023

2.6.3.4 Land Cover

Non-urban land uses have decreased from 31 923 hectares to 26 584 hectares. This is a reduction of 16.7%. A similar reduction took place in the rural nodes, where the non-urban land cover was reduced by 13%. The urban nodes saw non-urban land cover reduced by 200 hectares from 640 ha to 440 ha. This is a 31% reduction and can be due to new development in these areas.

Table 2-40: Non-Urban Land Cover in Hectares of Functional areas

Land cover non-urban	Year	Urban Node	Rural Node	Rural Area	Total
Cultivated commercial fields	1990	110,3	26,5	4 078,5	4 215,3
	2014	99,3	22,8	3 870,5	3 992,6
Cultivated commercial pivot	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	84,1	84,1
Cultivated orchard and vines	1990	362,8	129,2	19 197,9	19 689,8
	2014	297,4	132,7	19 005,2	19 435,4
Sugarcane	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0
Subsistence farming	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0

Land cover non-urban	Year	Urban Node	Rural Node	Rural Area	Total
Forests & Plantations	1990	167,9	60,1	7 789,9	8 017,8
	2014	44,0	15,0	2 951,1	3 010,1
Mining	1990	0,0	0,0	0,0	0,0
	2014	0,0	17,1	44,6	61,6

Source: Department of Environmental Affairs / MapAble 2023

Table 2-41 below shows the land cover changes related to urban activities for the urban nodes, rural nodes, and rural areas. Urban land cover grew by 375 hectares in the municipal area. 55% of that change occurred within the urban nodes, while the rural area's urban footprint increased from 796 ha to 960 ha or 43%. Changes in the Rural nodes were small, where the urban footprint increased by six (6) ha.

In the urban nodes, the residential category is the largest, but the informal category saw the most growth, from 1.3 ha to 48 ha. In the rural nodes, the informal category covers the most area and saw the most significant increase. Industrial land cover is the largest urban-related category in the rural area but did decline somewhat. Smallholdings saw the most growth, increasing by 135% from 23 ha to 339 ha.

Table 2-41: Urban Land Cover in Hectares of Functional Areas

Land cover Urban	Year	Urban Node	Rural Node	Rural Area	Total
Urban built-up	1990	1,6	1,1	21,4	24,1
	2014	19,5	0,3	14,5	34,2
Urban commercial	1990	286,6	1,9	51,2	339,6
	2014	306,1	1,3	42,3	349,7
Urban industrial	1990	166,3	32,1	285,9	484,3
	2014	145,1	20,8	265,9	431,8
Urban residential	1990	903,5	35,3	51,5	990,3
	2014	867,5	28,9	58,5	954,9
Urban townships	1990	126,2	138,5	128,4	393,1
	2014	218,1	160,8	102,2	481,1
Urban informal	1990	1,3	0,0	0,0	1,3
	2014	47,6	0,0	3,9	51,5
Rural villages	1990	0,0	0,0	0,0	0,0
	2014	0,0	0,0	0,0	0,0
Urban sports and golf	1990	196,9	4,7	86,9	288,4
	2014	276,7	3,5	110,7	390,9
School and sports grounds	1990	86,2	19,1	27,7	133,0
	2014	66,7	13,1	22,9	102,6
Smallholdings	1990	41,8	2,4	144,0	188,2
	2014	69,4	12,8	338,9	421,1

Source: Department of Environmental Affairs / MapAble 2023

2.6.3.5 Zoning and Vacant Land

According to the data presented in Table 2-42 below 89% of the municipality is zoned as Agriculture and Rural. In the rural area that number is higher at 93% and 63% in the rural nodes. This highlights the rural nature of the municipality. In the urban nodes this category is far less and only constitutes 27% of all zonings. In the urban nodes the Conventional Residential Zone (20%), Public Roads and Parking Zone (13%), and the Private Open Space Zone (10%) also features prominently.

Table 2-42: Zoning

Zoning Category	Urban Node	Rural Node	Rural Area	Total
Agriculture and Rural Zone	1 037.73	723.59	74 943.32	76 705.54
Community Zone	58.21	5.50	20.78	84.51
Conventional Residential Zone	747.78	158.34	25.83	932.28
Education Zone	200.18	13.34	252.23	465.81
Industrial Zone	111.48	7.75	39.30	158.57
Less Formal Residential Zone	92.84	0.00	0.00	92.87
Limited Use Zone	9.39	1.79	1 685.74	1 696.93
Local Business Zone	22.92	2.11	0.00	25.04
Mixed Use Zone	143.28	1.34	0.00	144.67
Multi-unit Residential Zone	116.00	1.60	17.22	134.85
Natural Environment Zone	0.00	0.00	203.70	203.70
Private Open Space Zone	396.61	29.84	175.53	602.11
Public Open Space Zone	128.80	18.92	3.83	151.60
Public Roads and Parking Zone	499.78	64.43	178.39	742.79
Subdivisional Area	15.79	7.48	0.00	23.28
Transport Facility Zone	29.96	3.04	49.86	82.87
Utility Services Zone	52.52	14.56	105.59	172.69
Other	163.66	103.32	3 301.01	3 568.13
Total	3 826.96	1 156.95	81 002.32	85 988.23

Source: Stellenbosch Municipality

In terms of vacant land 23% of the urban node category is indicated as being vacant, while 10% and 11% are shown as vacant in the rural node and rural area categories respectively. In terms of vacant land as it relates to the total area of the municipality only 1% of vacant land is located within the urban node and 11.6% in the rural areas. The rural nodes only contain 0.1% of all vacant land in the municipality.

Table 2-43: Vacant land

	Urban Node	Rural Node	Rural Area	Total
Vacant Land	866.29	112.76	9 035.61	10 014.67

Source: Stellenbosch Municipality

2.6.3.6 Access to Services

Table 2-44 to Table 2-47 below show access to services concerning water, sanitation, refuse removal and electricity. The figures show that households are well served in most service categories, with almost all households having access to full-service levels. It is only in terms of refuse removal in rural areas where people have less access. This is to be expected as refuse removal is usually not provided in these areas.

Table 2-44: % Access to Water Services in Functional Areas

Access to water services	LOS	Urban Node	Rural Node	Rural Area	Total
1996	Basic and above	97,77%	98,43%	94,24%	96,57%
	Below Basic	2,23%	1,57%	5,76%	3,43%
2001	Basic and above	95,7%	95,9%	80,5%	90,4%
	Below Basic	4,3%	4,1%	19,5%	9,6%
2011	Basic and above	98,78%	99,32%	81,15%	94,84%
	Below Basic	1,2%	0,7%	18,9%	5,2%

Source: Census / MapAble 2023

Table 2-45: % Access to Sanitation Services in Functional areas

Access to sanitation services	LOS	Urban Node	Rural Node	Rural Area	Total
1996	Full	95,3%	97,2%	62,6%	84,0%
	Intermediate	0,0%	0,0%	0,0%	0,0%
	Basic	0,0%	0,0%	0,0%	0,0%
	Below Basic	3,5%	1,9%	19,4%	8,9%
	None	1,2%	0,9%	18,1%	7,0%
2001	Full	97,1%	90,1%	69,4%	87,1%
	Intermediate	0,4%	1,0%	0,1%	0,3%
	Basic	0,3%	1,4%	5,0%	2,0%
	Below Basic	0,6%	5,7%	7,9%	3,4%
	None	1,6%	1,8%	17,5%	7,2%
2011	Full	98,1%	95,1%	67,7%	91,0%
	Intermediate	0,4%	1,9%	1,4%	0,7%
	Basic	0,2%	0,4%	1,4%	0,5%
	Below Basic	1,1%	2,0%	19,9%	5,4%
	None	0,2%	0,6%	9,6%	2,4%

Source: Census / MapAble 2023

Table 2-46: % Access to Refuse Removal Services of Functional areas

Access to refuse removal services	LOS	Urban Node	Rural Node	Rural Area	Total
1996	Full	94,5%	95,6%	41,6%	76,2%
	Intermediate	0,1%	0,4%	2,6%	1,0%
	Basic	0,4%	0,4%	25,8%	9,3%
	Below Basic	3,2%	1,8%	23,1%	10,1%
	None	1,5%	1,8%	7,0%	3,4%
2001	Full	96,9%	90,0%	46,6%	79,0%
	Intermediate	1,7%	1,9%	0,1%	1,1%
	Basic	0,1%	0,1%	12,3%	4,4%
	Below Basic	0,9%	7,7%	39,9%	14,8%
	None	0,4%	0,3%	1,1%	0,7%
2011	Full	98,1%	95,1%	49,6%	86,9%
	Intermediate	0,1%	0,8%	10,4%	2,5%
	Basic	0,1%	1,7%	13,1%	3,1%
	Below Basic	1,3%	1,7%	16,1%	4,7%
	None	0,4%	0,6%	10,7%	2,7%

Source: Census / MapAble 2023

Table 2-47: % Access to Electricity Services in Functional Areas

Access to electricity services	LOS	Urban Node	Rural Node	Rural Area	Total
1996	Full access	94,7%	97,0%	80,9%	90,0%
	No access	5,3%	3,0%	19,1%	10,0%
2001	Full access	98,9%	98,6%	76,2%	91,0%
	No access	1,1%	1,4%	23,8%	9,1%
2011	Full access	98,5%	99,2%	73,9%	93,0%

Access to electricity services	LOS	Urban Node	Rural Node	Rural Area	Total
	No access	1,5%	0,8%	26,1%	7,0%

Source: Census / MapAble 2023

2.6.3.7 Points of Interest

The allocation of points of interest per each functional area is presented in Table 2-48 below. 60% of all points of interest are located within the urban nodes and 37% in the rural area. The rural nodes have limited access to these points of interest and only account for 3% of the total points. As one would expect, activities related to primary economic activities are primarily found in rural areas. In contrast, Offices, Retail, entertainment, commercial, community facilities, government, infrastructure and transport activities are concentrated within the urban nodes.

Table 2-48: Points of interest in Functional Areas

Points Of Interest	Urban Node	Rural Node	Rural Area	Total
Primary economic activities	7	3	65	75
Offices, Retail, entertainment and commercial	1404	62	661	2127
Multiple residential	120	4	33	157
Community and social facilities	271	24	57	352
Government, Infrastructure and Transport	109	7	42	158
Tourism, recreation, accommodation and natural features	278	20	497	795

Source: Census / MapAble 2023

2.6.3.8 Road Types

Table 2-49 below shows the road types and the length of paved or unpaved roads within the different functional areas as they relate to the three main functional area categories. 92% of all roads in the urban nodes are paved, with the suburban road category accounting for 75% or 315 km of that total. In the rural nodes, 72% (57 km) of the roads are paved, while only 33% (403 km) of roads in the rural areas are paved. Of the 1 710 km of road in the municipality, 49% are paved, and 51% are unpaved. Suburban roads account for most of the paved surfaces in total, while informal roads are generally unpaved.

Table 2-49: Road Types in Functional areas

Road type		Urban Node	Rural Node	Rural Area	Total
Major road	Paved road (km)	0,0	0,0	25,2	25,2
	Unpaved road (km)	N/A	N/A	N/A	N/A
Main road	Paved road (km)	55,6	11,3	125,8	192,6
	Unpaved road (km)	0,0	0,0	0,0	0,0
Secondary road	Paved road (km)	0,0	1,6	18,2	19,8
	Unpaved road (km)	0,0	0,4	4,8	5,2
Suburban road	Paved road (km)	314,5	43,2	226,8	584,4
	Unpaved road (km)	10,6	4,5	27,3	42,4
Informal roads	Paved road (km)	14,3	0,7	3,2	18,2
	Unpaved road (km)	22,4	17,6	778,4	818,4
Tracks	Paved road (km)	N/A	N/A	N/A	N/A
	Unpaved road (km)	N/A	N/A	N/A	N/A

Road type		Urban Node	Rural Node	Rural Area	Total
Trails	Paved road (km)	N/A	N/A	N/A	N/A
	Unpaved road (km)	N/A	N/A	N/A	N/A
Totals	Paved road (km)	361,2	56,7	426,40	844,34
	Unpaved road (km)	33,0	22,6	810,4	866,0

Source: Census / MapAble 2023

2.6.4 Summary and Conclusions of the Functional Area Profiles

2.6.4.1 Urban Nodes

- The population growth in the urban nodes is still growing at an average of 4% per annum and saw a total increase of 33%;
- In terms of densities, Franschhoek has the highest density (39.2 people/ha), shortly followed by Stellenbosch (36.7 people/ha), while Klapmuts has the lowest relative density (22.9 people/ha);
- Households in Franschhoek showed the most significant decline between 2001 and 2011 at 26%, while in Stellenbosch, the average household size declined by 15%. The average household size in Klapmuts only decreased by 7%. Overall the average annual household size in all three urban nodes decreased by 2%;
- The Stellenbosch urban node saw an increase of 111% in urban informal settlement growth. Franschhoek's informal category grew from 0 hectares in 1990 to 12.5 hectares in 2014. The urban informal category grew by a staggering 152% per annum between 1990 and 2014;
- By zoning, in the Stellenbosch urban node, the conventional residential zone (21%) and public roads and parking zone (15%) dominate. Despite the urban nature of the node, the largest zoning category is the agriculture and rural zone (25%). A similar pattern is also evident in Franschhoek but differs in that private open space is the largest category (25%). Klapmuts, despite being categorised as an urban node, still shows a largely rural nature based on prevalent zoning based on the fact that 54% of the node is zoned as agriculture and rural zone;
- In Stellenbosch 437 hectares (15%) are indicated as vacant. In Franschhoek and Klapmuts 128 hectares (27%) and 300 hectares (65%) of the node are shown as vacant, respectively, and;
- The Stellenbosch urban node has maintained good service levels, with most of the population receiving water services above the basic standard. Franschhoek showed a drastic decline in the percentage of households that had access to full services between 1996 and 2001. This can potentially be explained by the increase in population during that time. One must also consider the increase in land cover in the urban informal category to explain this decline. In general, over time, the urban nodes show a recovery in water services provision.

2.6.4.2 Rural Nodes

- Between 1996 and 2020, the rural nodes showed a total population increase of 286% or 12% per annum. Kleymore has seen the most significant growth adding 8 990 people between 1996 and 2020. Pniel, Wemmershoek and La Motte have also shown sharp increases in recent years but not to the extent of Kleymore;
- With urban landcover, the most prominent category is indicated as urban townships. This category also showed the most considerable growth. This is most significant in Kleymore, where an additional 16.7 hectares of urban townships is indicated. This relates to or can be explained by the increase in population in this node;

- In the assessment of the zoning of the rural nodes, 63% in total are zoned as Agricultural and Rural Zone. Another 14% is zoned as Conventional Residential Zone;
- Within the rural nodes 112 hectares are indicated as vacant land. 95 hectares are allocated in Kleymore and the other 17 hectares is located in Pniel, and;
- Muldersvlei, Koelhof, Vlottenburg and Lynedoch all show limited access to full services for the various service categories. However, by 2011 most of the households in these areas were served with full services across the service spectrum. Raithby, Kylemore, Pniel, Groot Drakenstein, Wemmershoek and La Motte show that full services have been available to almost all households since 1996.

2.6.4.3 Combined Functional Areas

- The urban nodes cover 4% of the municipality's total area, while the rural nodes cover only 1% of the total area. Most of the municipality (94%) is classified as rural;
- In total, the Stellenbosch Municipality grew by an estimated 95 979 people between 1996 and 2020. 76% of that growth occurred within the urban nodes, while the larger rural area accounts for 8%. The municipality grew by 92% between 1996 and 2020, or 3.8% per annum. This is more than the national average of 1.7% and the western cape provincial average of 2.7% between the same periods. However, when comparing growth rates, rural areas have grown the fastest at 11.9% per annum;
- Overall densities increased by 210% in urban and 286% in rural nodes. The densities in rural areas are, as to be expected, much lower only increasing by 22% over the period assessed. The municipality's densities have increased by 106% between 1996 and 2020, or 4.4% per annum;
- Household growth shows similar trends to population growth. Household growth in the urban nodes has been prominent, accounting for 85% of all new households in the municipality since 1996. But as with the population, the growth rate in the rural nodes has been far more pronounced. Overall, household growth has occurred at 4.4% per annum for the municipality between 1996 and 2011 or 66%;
- The average household size reduced by 10% for the municipality, and decreased by 19% in the urban and 11% in the rural nodes;
- Regarding social facilities, most education (61%) and health facilities (87%) are located within urban nodes. There are 12 education facilities in the rural area, compared to the 7 in the rural nodes;
- Non-urban land uses have decreased from 31 923 hectares to 26 584 hectares. This is a reduction of 16.7%. A similar reduction took place in the rural nodes, where the non-urban land cover was reduced by 13%. The urban nodes saw non-urban land cover reduce by 200 hectares from 640 ha to 440 ha (31% reduction);
- Urban land cover grew by 375 hectares in the municipal area. 55% of that change occurred within the urban nodes, while the rural area's urban footprint increased from 796 ha to 960 ha or by 43%. Changes in the Rural nodes were small, where the urban footprint increased by only six (6) ha;
- In the urban nodes, the residential category is the largest, but the informal category saw the most growth, from 1.3 ha to 48 ha. In the rural nodes, the informal category covers the most area and saw the most significant increase. Industrial land cover is the largest urban-related category in the rural area but did decline somewhat. Smallholdings saw the most growth, increasing by 135% from 23 ha to 339 ha;
- 89% of the municipality is zoned as Agriculture and Rural. In the rural area that number is higher at 93% and 63% in the rural nodes. This highlights the rural nature of the municipality. In the urban nodes this category is far less and only constitutes 27% of all zonings. In the urban nodes the

Conventional Residential Zone (20%), Public Roads and Parking Zone (13%), and the Private Open Space Zone (10%) also features prominently;

- In terms of vacant land 23% of the urban node category is indicated as being vacant, while 10% and 11% are shown as vacant in the rural node and rural area categories respectively. In terms of vacant land as it relates to the total area of the municipality only 1% of vacant land is located within the urban node and 11.6% in the rural areas. The rural nodes only contain 0.1% of all vacant land in the municipality;
- Households are well served in most service categories, with almost all households having access to full-service levels. It is only in terms of refuse removal in rural areas where people have less access. This is to be expected as refuse removal is usually not provided in these areas;
- 60% of all points of interest are located within the urban nodes and 37% in the rural area. The rural nodes have limited access to these points of interest and only account for 3% of the total points, and;
- 92% of all roads in the urban nodes are paved, with the suburban road category accounting for 75% or 315 km of that total. In the rural nodes, 72% (57 km) of the roads are paved, while only 33% (403 km) of roads in the rural areas are paved. Of the 1 710 km of road in the municipality, 49% are paved, and 51% are unpaved. Suburban roads account for most of the paved surfaces in total, while informal roads are generally unpaved.

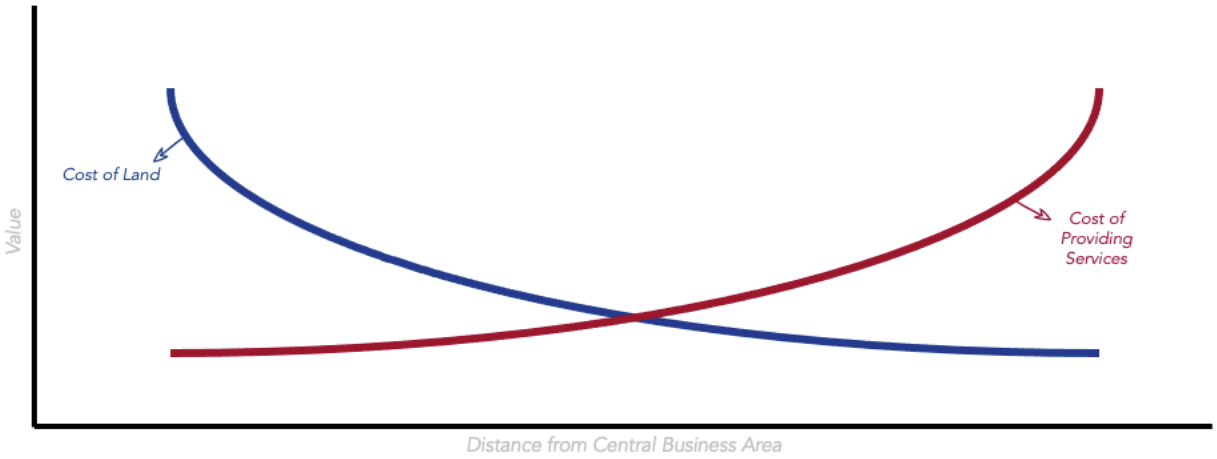
2.7 Functional Area Investment Priority

The bid-rent model is an economic model that attempts to explain the relationship between the price of land and its location. The model is based on the concept that the highest price that someone is willing to pay for a particular piece of land, based on the land's location and the potential revenue that can be generated from it – usually directly correlated to accessibility to various activities.

According to the bid-rent model, as you move away from the central business areas of a city, the land becomes less valuable, and the bid rent decreases. This is because the further away you get from the central business area, the lower the potential revenue from the land.

The bid-rent model can be represented graphically as a downward-sloping curve, with the bid rent declining as you move away from the central business areas of a city. This relationship between land value and location is important from a capital expenditure point of view, as the bid-rent model is indirectly proportionally related to the cost of services. Services, are more expensive the further away it is from central business areas as the service per person delivered per Rand invested increase as distance increases.

Figure 2-22: Bid-Rent Model vs Cost of Services



It is based on the fundamental principles of the relationship between the two models above, that the priority assessment as expressed in Table 2-50, indicate the municipality's investment priorities.

Table 2-50: Functional Areas and Their Investment Priority

Summary	Spatial Areas	Function	Priority
FA 1 Urban Node	• Stellenbosch • Kayamandi • Klamputs • Jamestown • Franschhoek	• Function as urban areas and main service centre • Variety of uses • Densification in certain urban nodes	Primary Investment Node
FA 2 Rural Node	• Muldersvlei • Koelenhof • Vlottenburg • Lyndoch • Raithby • Kylemore • Lanquedoc • Pniel • Groot Drakenstein • Wemmershoek • La Motte	• Residential and suburban areas • Serves as accommodation to Agricultural workers • Light industry • Linked to urban nodes	Upgrading Area
FA 3 Rural Area	• De Novo Flats • Simonsberg Foothills • Jonkerhoek Valley • Groot Drakenstein • Franschhoek Valley • Eerste River Valley • Dwarsrivier Valley • Bottelary Hills • Blaauwklippen Valley	• Rural areas • Agricultural activities • Unfavourable development conditions • Largest functional area	Maintenance Area

Part 3

Infrastructure Demand Quantification

3 Part 3: Infrastructure Demand Quantification

The infrastructure demand quantification section aims to understand the specific infrastructure demand that a municipality has. This section will look at all the masterplans provided by the municipality and consolidate these masterplans into one project 'wish list'. These master plans will be unpacked to ensure we understand the demand identified in all the master plans. The demand will be quantified per functional areas that were identified in part 2. The infrastructure demand quantification chapter aims to compare the Quantified Demand and master plans can be compared to identify differences.

3.1 Summary of Masterplans

Table 3-1 provides a summary of all the municipality's master plans that are required to meet the infrastructure demand over the planning horizons. This table summarizes infrastructure master plans by examining their update year, planning horizon, timespan, and whether they contain project-specific information.

Table 3-1: Master Plan Register

Service Type	Master Plan	Update By	Update Year	Planning Horizon	Timespan	Project Specific Detail
Roads	Comprehensive Integrated Transport Plan	PGWC SLM CWDM	2011	2015	5 years	Yes
Water	River Management Plan Update	Jeffares & Green (Pty) Ltd	2011	-	-	Yes
Electricity	Electrical Infrastructure Master Plan	Royal HaskoningDHV (Pty) Ltd	2015	2034	20 years	Yes
Roads	The Development and Implementation of a Stormwater Management System	V&V Consulting Engineers	2018	2047	20 years	Partial
Waste Management	Integrated Waste Management Plan	JCPE (Pty) Ltd	2020	2024	5 years	Yes
Water	Stellenbosch Municipality Bulk Water Resources: Water Resilience Master Planning for The Stellenbosch System	GLS	2021	2030	5 years & 10 Years	Yes
Roads	Roads Master Plan 2022 Update	WSP	2022	2040	5 years, 10 years, 15 years & 20 years	Yes

Table 3-1 highlights key observations that can be made from the array of masterplans. These masterplans have long-term planning horizons but some master plans such as the Comprehensive Integrated Transport Plan and River Management Plan Update have planning horizons that are in the past and require updating. Most of the master plans have project-specific detail with the only exception being the River Management Plan Update that only has partial project detail listed in terms of listing the upgrades that need to be implemented. Many of the master plans have 20-year or 10-year planning horizons and indicating the longer-term planning vision within these master plans.

3.1.1 Water

3.1.1.1 River Management Plan Update

The River Management Plan evaluates the three rivers in the Stellenbosch municipality and the associated legal framework. It conducts a status quo analysis of the rivers and surrounding areas, identifies issues

affecting the river corridors, and provides maintenance planning interventions based on identified problem areas.

The main objective of the River Management Plan is to assess the condition of the rivers and identify issues within the municipality. Subsequently, this information is used to develop a plan that addresses these issues effectively. The process is done to receive environmental authorisation in order to tackle remedial work within the municipality. The River Management Plan identifies 20 key projects to resolve issues identified in river corridors.

3.1.1.2 Stellenbosch Municipality Bulk Water Resources: Water Resilience Master Planning for The Stellenbosch System

The Bulk Water Resources master plan analyses the bulk water demand and resources of the towns and cities within the municipality. The master plan aims to enhance Stellenbosch's water resilience by improving its understanding of water demand. In order to understand this the masterplan must be read in conjunction with the *Water Master Plan 2019* and *Bulk Water Resources: Drought Intervention Projects*. This provides a perspective and ensures understanding of the implemented projects that will improve water resilience.

The main objective of the Bulk Water Resources master plan is to analyse water demand in order to improve the operation of bulk water systems. The master plan identifies necessary projects for improving bulk water resources over 5- and 10-year periods. Lastly, the master plan identifies future resources that need to be monitored, to reach future demand and ensure more resilience in periods of drought.

3.1.2 Electricity

3.1.2.1 Electrical Infrastructure Master Plan

The Electrical Master Plan focuses on providing a 20-year plan to maintain electrical infrastructure in good condition while meeting the demands of the municipality. The master plan begins with an examination of the load forecast of certain areas and their subsequent substations. Thereafter, it evaluates the current condition of the infrastructure. The Electrical Master Plan further examines the network development projects that are needed for the growth estimated by 2034. Costs are estimated for these projects and the report concludes by giving recommendations and considerations.

The main objective of the Electrical Master Plan is to provide the municipality with a long-term plan for the development and renewal of the current electrical infrastructure. The master plan provides a 20-year timeline for numerous projects relating to the upgrading and renewal of electrical infrastructure.

3.1.3 Roads

3.1.3.1 Comprehensive Integrated Transport Plan

The Comprehensive Integrated Transport Plan is a 5-year integrated transport plan that aims to comprehend public transport, and travel demand. The plan creates a shared vision for integrating different forms of transport. The Transport Plan aims to understand legislation, which guides a vision and several goals. Different aspects of transport are observed such as transport needs assessment, public transport, transport infrastructure, travel demand and freight transport strategy. This facilitates the determination of a strategy and subsequent discussion of a funding plan. The Comprehensive Integrated Transport Plan discusses numerous projects related to transport over a 5-year timeline.

The main objective of the Comprehensive Integrated Transport Plan is to develop a public transport network that is sustainable and accessible to all. The Comprehensive Integrated Transport Plan aims to boost the economy by connecting citizens and visitors in Stellenbosch through offering affordable options of different forms of transport.

3.1.3.2 The Development and Implementation of a Stormwater Management System

The Development and Implementation of a Stormwater Management System consists of two parts: the As-Built Report and the Hydro Report. These reports combine to form the master plan for the Stormwater Management System of Stellenbosch. The purpose of these reports is to identify problem areas, give management actions, estimate costs and propose remedial measures. The master plan estimates the costs of repairing key stormwater infrastructure through 2-year and 20-year proposals.

The main objective of the master plan is to provide guidance on what the best practices are for the implementation of new and upgrading infrastructure in underdeveloped areas. The master plan is a guideline that offers budget proposals and upgrade plans.

3.1.3.3 Roads Master Plan 2022 Update

The 2022 Roads Master Plan is an update of the 2012 Roads Master Plan. This master plan integrates and coordinates the planning of future road infrastructure. The roads master plan identifies roads and plans them in the short, medium and long-term timeline. The roads master plan is an effective planning tool that allocates funds for road projects to improve road infrastructure and overall public transport. The roads master plan aids strategic plans such as IDPs and SDFs.

The roads master plan aims to assist Stellenbosch Municipality, and other organisations such as the South African National Roads Agency Ltd (SANRAL) and the Western Cape Provincial Government in effective planning and coordinating of road infrastructure. The roads master plan identifies and quantifies several road projects within the municipality, and serves as a tool to assist in the allocation of funds for these projects.

3.1.4 Waste Management

3.1.4.1 Integrated Waste Management Plan

The Integrated Waste Management Plan is a statutory requirement of the National Environmental Management: Waste Act, 2008. The development of an IWMP is an important tool that investigates the current state of the solid waste removal system and identifies the current needs to sustain waste management practices. An evaluation of the status quo identifies gaps in the waste management system, and implementation items are identified at an authority level to improve it.

The overall aim of the IWMP is to integrate and optimise the waste management system. This is done to reduce the environmental and financial impacts of waste management. The plan underlines the principles of the National Waste Management Strategy:

- The prevention of waste generation;
- The recovery of waste of which the generation cannot be prevented, and
- The safe disposal of waste that cannot be recovered.

3.2 Single Infrastructure Projects Portfolio

The Single Infrastructure Profile combines all projects from different masterplans into one project wish list. The benefit of having one infrastructure project portfolio includes centralising the area of needs and identifying service areas that have specific requirements. A project portfolio assists in monitoring the status of projects, making monitoring easier. Annexure A comprises of a single infrastructure project portfolio that includes all projects from the master plans, which are subdivided based on their service type. Based on this, we can make the following observations:

- There are approximately 344 projects, and;
- These projects are divided according to the following service types:
  - Electricity: 25 projects;

- Roads and Stormwater: 241 projects;
- Waste management: 18 projects, and;
- Water: 60 projects.

The following table outlines the completeness of data found in the single infrastructure project portfolio:

Table 3-2: Breakdown of the Completeness of Data in Annexure A

Service Type	Project Name		Budget		Project Description		Project Location		Funding Source	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Electricity	25	0	25	0	25	0	0	25	0	25
Roads and Stormwater	258	16	226	48	83	191	0	274	131	143
Waste Management	18	0	18	0	0	18	0	18	18	0
Water	60	0	21	39	0	60	27	33	60	0
Total	**361**	**16**	**290**	**87**	**108**	**269**	**27**	**350**	**209**	**168**
% Total	**95,76%**	**4,24%**	**76,92%**	**23,08%**	**28,65%**	**71,35%**	**7,16%**	**92,84%**	**55,44%**	**44,56%**

Table 3-2 confirms that 331 of 341 (96,22%) of projects have a project name and confirms that 67,73% of the projects have a budget or demand over time. This high number suggests that most projects have a budget captured and price estimation. The project description, location and funding source have very low numbers when compared to the rest of the data. In conclusion, it is indicated that the project name and budget is the most frequent captured information in the infrastructure portfolio.

3.2.1 Unpacking The Infrastructure Projects Portfolio

Unpacking the infrastructure projects portfolio allows us to make numerous observations regarding the total project cost of the different service types. In this section, we will explore the nuisances of the data by unpacking it per directorate and department; asset class and sub-class; and action and sub-action, in relation to the total cost of projects. By doing this, we can observe specific details of the infrastructure projects portfolio.

The complete Infrastructure Projects Portfolio can be found in the Annexure at the end of the document.

3.2.2 Unpacking Projects per Directorate and Department

Figure 3-1 and Table 3-3 reveal that the infrastructure projects portfolio has been unpacked per directorate and department. This view allows us to see which specific directorates and departments have more projects or projects with a higher total cost.

Figure 3-1: Total Project Demand per Department

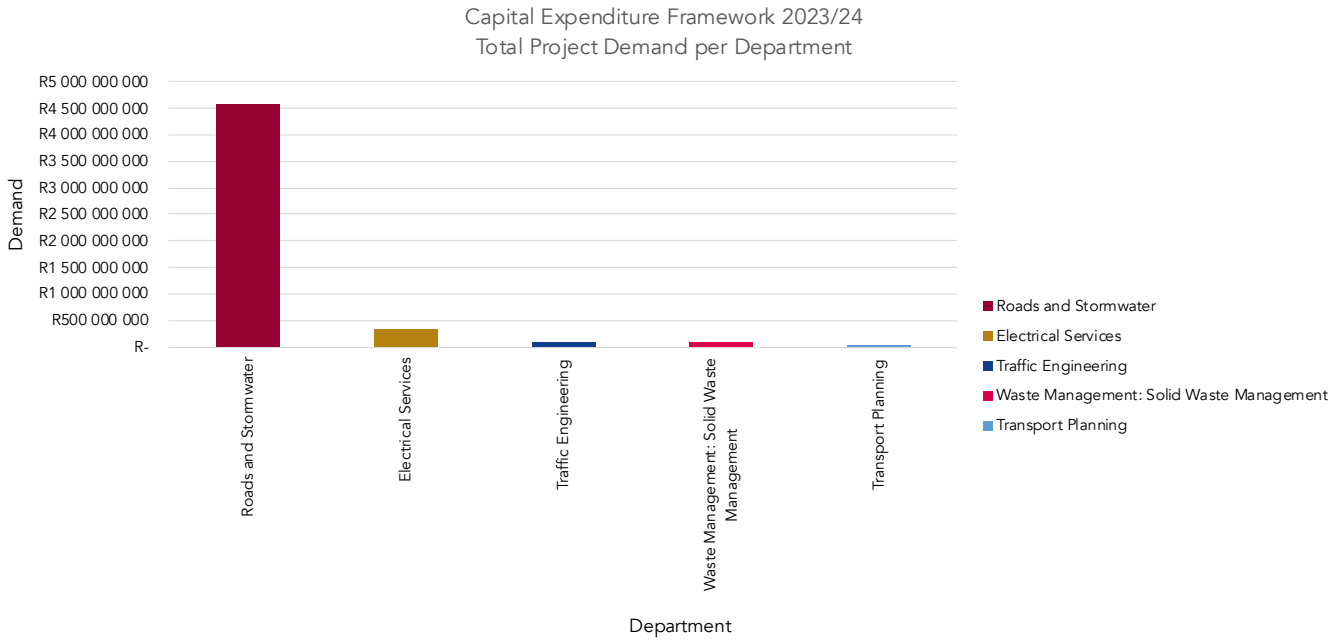


Table 3-3: Total Project Demand per Directorate and Department

Directorate	Department	Sum of Total Project Demand	Total %
Infrastructure Services	Roads and Stormwater	R4 568 546 380,31	90,24%
Infrastructure Services	Electrical Services	R329 301 049,00	6,50%
Infrastructure Services	Traffic Engineering	R76 724 300,00	1,52%
Infrastructure Services	Waste Management: Solid Waste Management	R75 735 000,00	1,50%
Infrastructure Services	Transport Planning	R12 390 000,00	0,24%
Infrastructure Services	Water and Wastewater Services: Water	R-	0,00%
Total			**R5 062 696 729,31**

What is immediately evident from Figure 3-1: Total Project Demand per Department is the large total project demand for the Department of Roads and Stormwater. The reason for this can be attributes to the three master plan documents that comprise all projects linked to this department – Comprehensive Infrastructure Plan, Roads Master Plan 2022 and The Development and Implementation of a Stormwater Management System. The two projects with the largest total project demand are from these master plans. The 6810 Conduits to be upgraded in Stellenbosch, Rehabilitation and improvements to MR168 between MR159 and MR177 in the Stellenbosch Area. These master plans have a comprehensive and long-term focus which results in a large amounts of project costs such as the Conduits Upgrade project in Stellenbosch that has a 20-year project timeline. Table 3-3 provides the exact amounts and reveals that 90,24% of the total project demand in the infrastructure is attributed to roads and stormwater projects. The table also highlights that all projects within the portfolio are from the same directorate – Infrastructure Services, which indicates the need of projects to address infrastructure concerns.

3.2.3 Unpacking Projects per Asset Class and Sub-Class

Asset class and sub-class indicates which assets have more demand within the infrastructure project portfolio. Unpacking the projects in this manner enables us to analyse the departments in greater detail and shifts our focus to the asset level. By using this method we can see which assets types are more prevalent in the infrastructure projects portfolio.

Figure 3-2: Total Project Demand per Asset Sub-Class

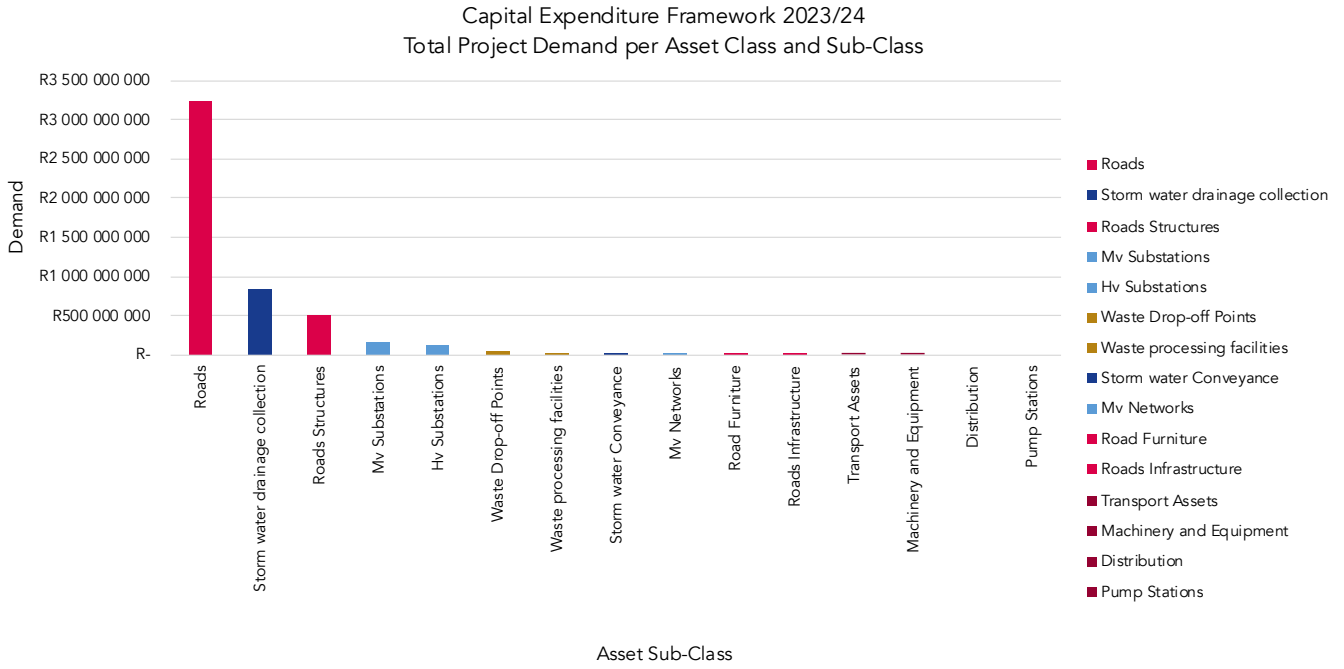
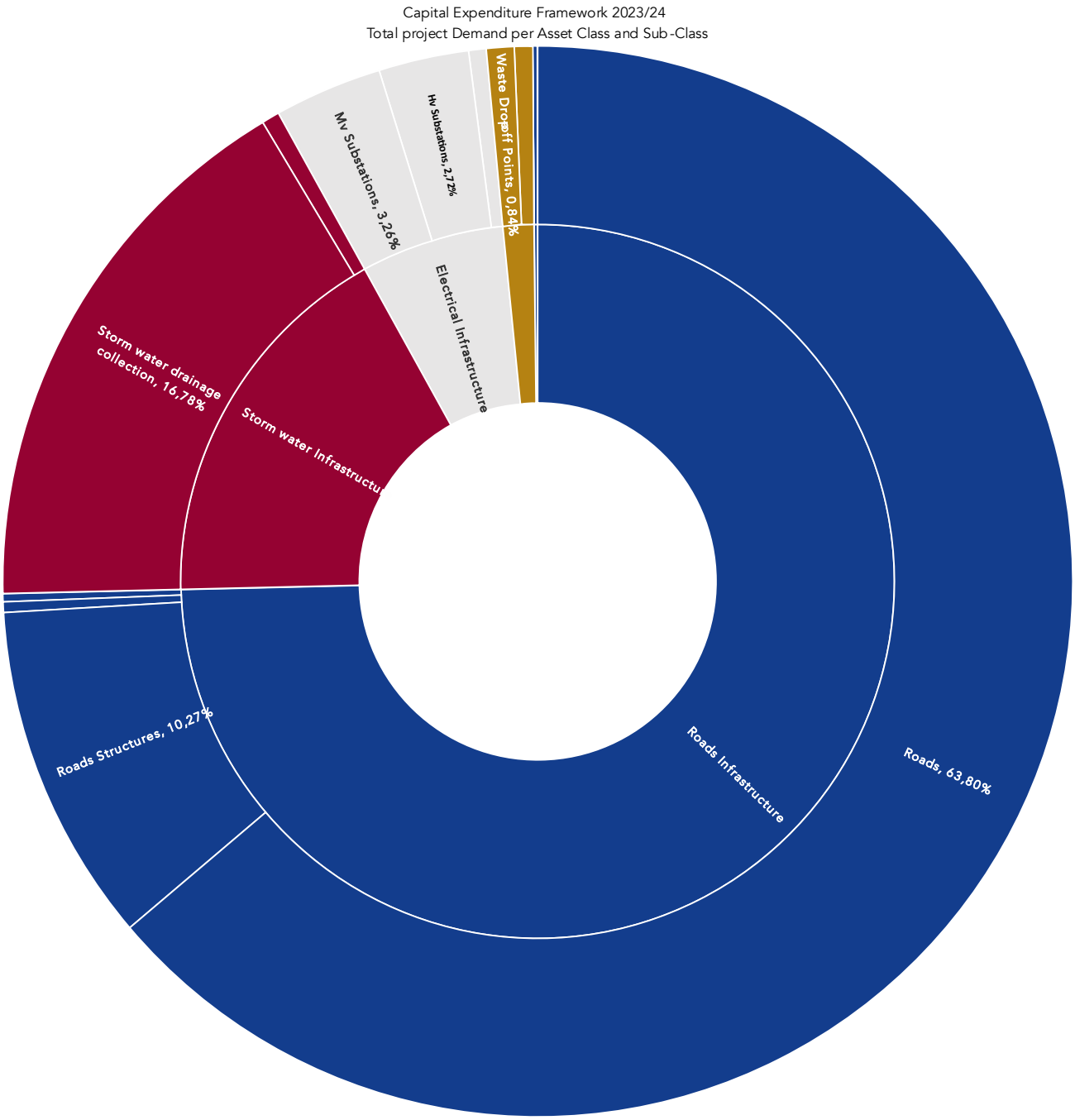


Table 3-4: Total Cost per Asset Class and Sub-Class

Class	Sub-Class	Sum of Total Project Demand	Total %
Roads Infrastructure		**R3 778 497 300,00**	**74,63%**
	Road Furniture	R16 150 000,00	0,32%
	Roads	R3 230 137 300,00	63,80%
	Roads Infrastructure	R12 310 000,00	0,24%
	Roads Structures	R519 900 000,00	10,27%
Storm water Infrastructure		**R876 563 380,31**	**17,31%**
	Storm water Conveyance	R27 090 000,00	0,54%
	Storm water drainage collection	R849 473 380,31	16,78%
Electrical Infrastructure		**R329 301 049,00**	**6,50%**
	Hv Substations	R137 700 000,00	2,72%
	Mv Networks	R26 407 075,00	0,52%
	Mv Substations	R165 193 974,00	3,26%
Solid Waste Infrastructure		**R70 600 000,00**	**1,39%**
	Waste Drop-off Points	R42 300 000,00	0,84%
	Waste processing facilities	R28 300 000,00	0,56%
Transport Assets	**Transport Assets**	**R7 150 000,00**	**0,14%**
Machinery and Equipment	**Machinery and Equipment**	**R585 000,00**	**0,01%**
Water Supply Infrastructure		**R0,00**	**0,00%**
	Distribution	R0,00	0,00%
	Pump Stations	R0,00	0,00%
Total		**R 5 062 696 729,31**	

What becomes evident when analysing Figure 3-2 is the two largest asset sub-classes contributing to total project cost – Roads and Storm water drainage collection. Table 3-4 confirms that Roads (74,63%) and Storm water infrastructure (17,31%) account for 91,85% of the total demand in the infrastructure projects portfolio. Roads (63,80%) and Storm Water Drainage (16,78%) are the asset sub-classes that contribute to 80,58% of the total demand of projects. These plans have a 20-year focus and explain the large project costs incurred within these master plans. From the top ten projects with the highest total project demand nine of the projects are projects that are from the asset class of Roads Infrastructure. This clarifies the high infrastructure demand that roads and stormwater projects have. Figure 3-3 visually illustrates the the proportion of total project demand each asset class and sub-class has.

Figure 3-3: Share of Total Project Demand per Asset Class and Sub-Class



3.2.4 Unpacking Projects per Action and Sub-Action

By examining projects per action and sub-action observations can be made regarding where the total demand of projects is. Is the demand higher in new projects, or is it focused on existing projects, specifically those concerning renewal or upgrading? Unpacking projects in this manner reveals the number of projects for each action and sub-action and their respective total demand.

Figure 3-4: Total Demand per Action and Sub-Action

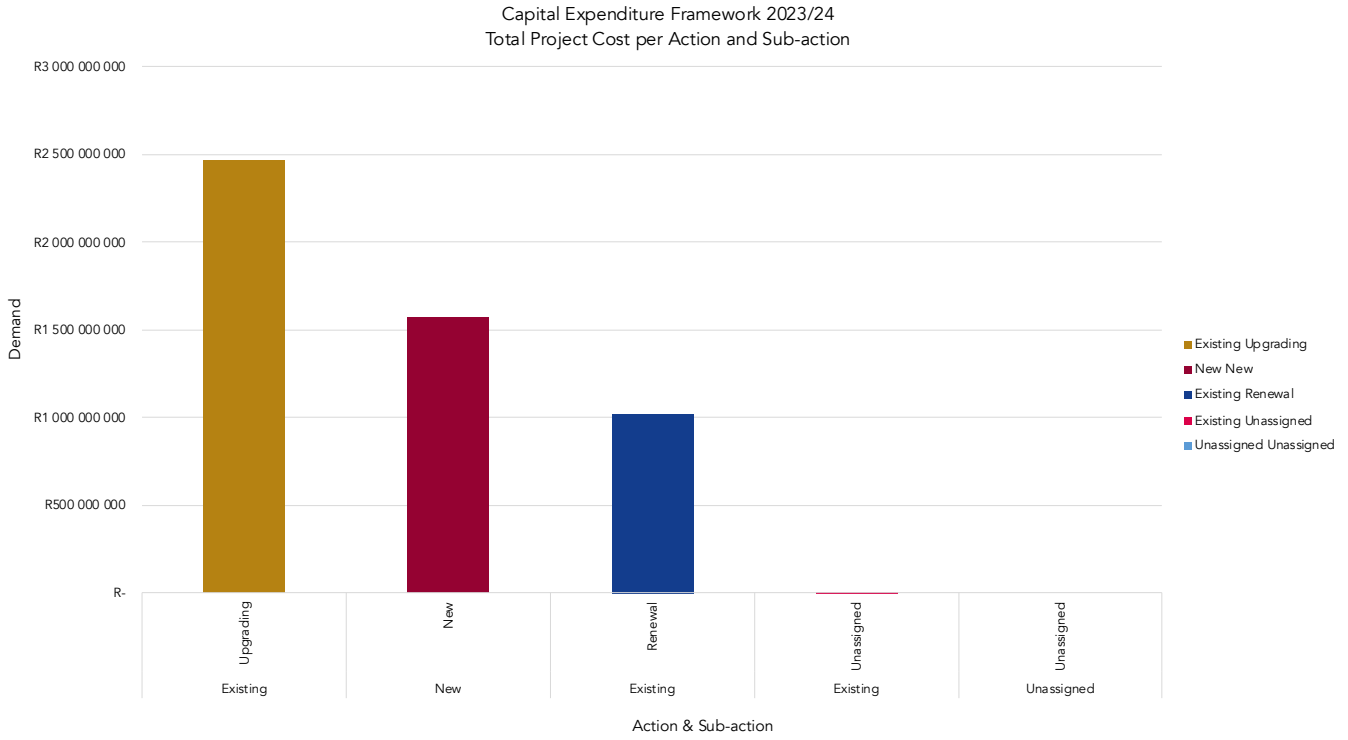


Table 3-5: Total Demand per Action and Sub-Action

Action	Sub Action	Number of Projects	Sum of Total Project Demand	Total%
Existing	Upgrading	106	R2 464 744 891,31	48,68%
New	New	169	R1 574 806 129,00	31,11%
Existing	Renewal	92	R1 021 945 709,00	20,19%
Existing	Unassigned	2	R1 200 000,00	0,02%
Unassigned	Unassigned	8	R0,00	0,00%
Total			**R5 062 696 729**	**100,00%**

When observing Figure 3-4 and Table 3-5 what becomes evident is that projects relating to upgrading have the highest total project demand. The table confirms this by indicating that upgrading projects account for 48,68% of the total project demand, whilst new projects (31,11%) and renewal projects (20,19%) have the second and third-largest total project demand. The table indicates that most projects in the infrastructure projects portfolio are new projects (169), and that there are more upgrading projects (106) than renewal projects (92).

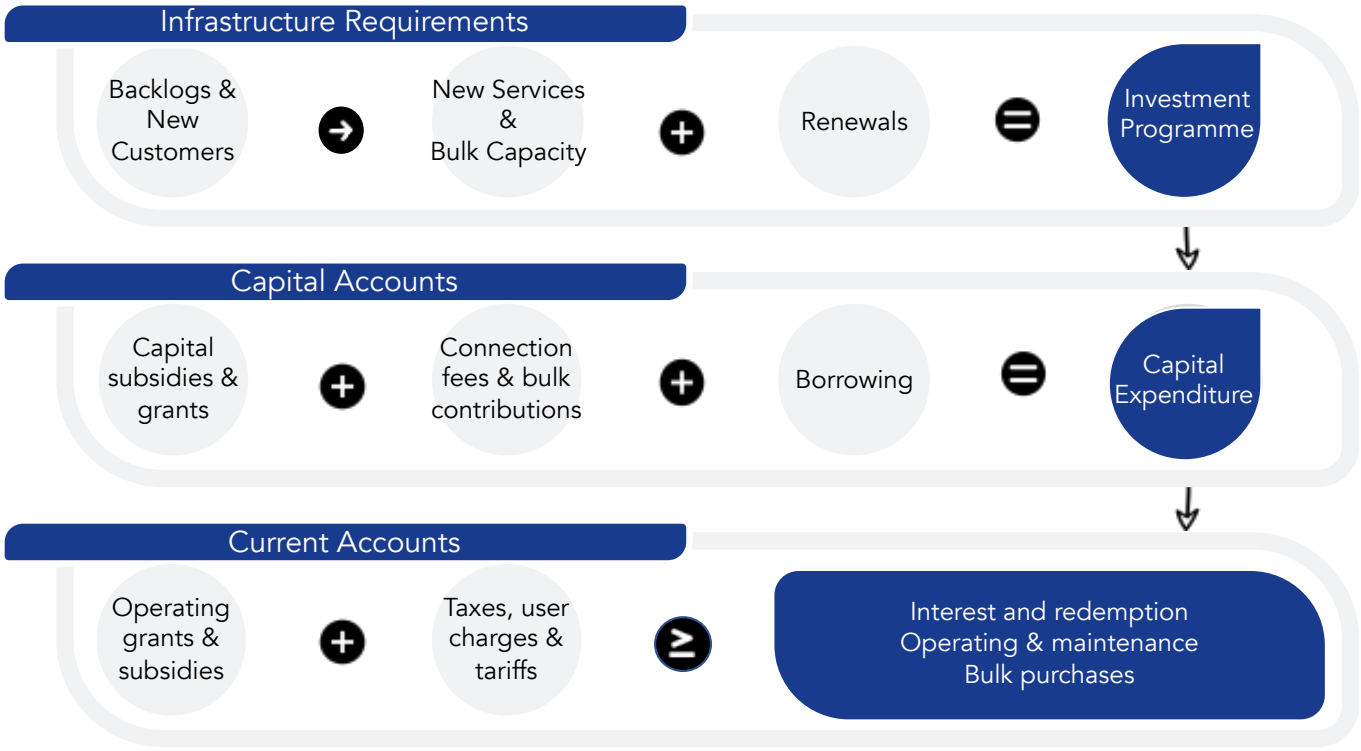
3.3 Investment Demand and Growth: The Infrastructure Planning Equation

Long-term customer growth is usually one of the biggest drivers of investment demand. The ability to address annual customer growth ensures, at a minimum, that increases in backlogs do not occur. However, it adds to operating expenditure and the maintenance burden of a service provider that must offset income and revenue streams through appropriate cost recovery processes.

below shows the relationship and components of infrastructure and service delivery. Within this framework, the demand for infrastructure services (investment programme) is the sum of existing backlogs and household growth plus service upgrading requirements and asset renewals. Capital expenditure funds the investment programme. The capital expenditure adds interest and redemption, operating and maintenance, and bulks purchases costs to the current or operating account of the Council. Capital subsidies and grants, connection and bulk service contributions, and borrowing funds the capital account.

Maintaining this equilibrium over the long term ensures financial sustainability. In terms of the CEF, the planning horizon is a minimum of ten years.

Figure 3-5: Infrastructure Investment Planning Equation[2]



Investment demand is a function of three core processes, namely:

- The investment required to address backlogs in services access;
- Investment to address the required renewal of assets and renewal backlogs, and;
- The investments to address the demand created through growth.

The quantification of investment requirements is a detailed and very complicated process. The assessment below addresses all the elements necessary for the CEF process. Within the scope and timeframes of the project, it was, for example, not possible to assess the impact of existing infrastructure capacity. Available capacities will lower investment demands.

3.3.1 Dealing with Infrastructure Backlogs

The drive behind government infrastructure and service policies since 1994 was to eradicate backlogs. Many factors do affect the extent of backlogs and also the ability of municipalities to address the matter. The project brief did not allow for a backlogs study to determine the current size of the backlogs. However, the assessment of backlogs was made and addressed as part of the demand for capital investment.

Determining the extent of the backlog is difficult. There are conflicting figures on backlogs that cannot be reconciled. The following were considered:

- Census 2011 was the last comprehensive dataset on service access and backlogs;
- Backlogs reflect the total position in the municipality irrespective of service areas or service server provider responsibilities;

[2] BC Gildenhuys, Creating a framework to develop revenue enhancement strategies and support asset management planning in a sustainable investment and service delivery environment (2018)

- Service areas differ for each service. The service area for water and sanitation is not the same as that for electricity or refuse removal services or the Council's responsibility for constructing and maintaining roads;
- The CEF addresses services in terms of the different functional areas, which implies no wall-to-wall service coverage; for example, the Council may not provide reticulated water and sanitation services to farms. Within the project's scope and the timeframes, it was not possible to further explore this matter, and;
- Policy decisions directly impact the extent of the backlog, such as a policy position on the acceptability of backyard shacks as a housing typology. There are an estimated 4 530 backyard shacks in Stellenbosch. If backyard shacks represent an acceptable housing typology, then they are not part of the backlog. However, as the provincial housing policy suggests, they are indeed part of the backlog, then it adds an estimated R380 million to the capital requirements of the Council. Policy decisions have a considerable impact on the Council's finances and impact on capital and operating expenditure.

The sections and tables below show the backlog situation as calculated from the different censuses. It was impossible to desegregate any 2016 Community Survey figures or other official data source at a sub-municipal level.

3.3.1.1 Access to Water Services

Table 3-6: Change in Access to Water Services per Functional Area per Census

Level of service	Census	Urban		Rural		Farms		Total Area	
		Total	% for census	Total	% for census	Total	% for census	Total	% for census
Full	1996	12 235	76%	947	83%	6 398	71%	19 580	75%
	2001	16 234	70%	1 414	87%	7 357	71%	25 005	71%
	2011	21 035	69%	2 606	83%	7 696	80%	31 337	72%
Intermediate	1996	1 100	7%	126	11%	1 569	17%	2 795	11%
	2001	2 134	9%	133	8%	1 799	17%	4 066	12%
	2011	2 192	7%	413	13%	916	10%	3 521	8%
Basic	1996	2 525	16%	6	1%	348	4%	2 879	11%
	2001	2 106	9%	23	1%	577	6%	2 706	8%
	2011	5 477	18%	75	2%	679	7%	6 231	14%
Below Basic	1996	82	1%	43	4%	535	6%	660	3%
	2001	2 578	11%	52	3%	513	5%	3 143	9%
	2011	1 628	5%	26	1%	181	2%	1 835	4%
None	1996	72	0%	24	2%	144	2%	240	1%
	2001	159	1%	3	0%	83	1%	245	1%
	2011	231	1%	23	1%	150	2%	404	1%

Table 3-6 shows the following:

- Farms and rural nodes generally have better higher levels of services than the municipality's urban component, and no access and access to less than basic services is also higher in the urban areas.
- The figures highlight the urban components' pressure, notwithstanding substantial increases in the number of households with service access.

The municipality reported the following figures to Statistic South Africa for the Non-Municipal Financial Census released in 2021.

Table 3-7: Number of Consumer Units Receiving Water Services

	Number of domestic consumer units served through a delivery point				Total number of non-domestic consumer units receiving water services	Total number of consumer units receiving water services
	Inside the yard	Less than 200m from a yard	More than 200m from a yard	Total number of domestic consumer units receiving water services		
2017	39 044	6 231	1830	47 105	903	48 008
2018	41 623	9 699	0	51 322	903	52 225
2019	41623	9699	0	51 322	903	52225
2020	41633	9699	0	51 332	903	52235

According to these figures, there are no service backlogs in the Municipal area and access to full services increased by more than 32% in 8 years. The figures show an increase from 31 337 households with access to full services in 2011 to 41 623 households in 2019. However, one should consider the fact that there are currently more than 15 000 informal and backyard structures in the municipal area.

3.3.1.2 Access to Sanitation Services

Access to sanitation follows a similar pattern to water services, and again, the pressure on the urban areas is evident. The number of households with below basic services is proportionally higher than in the urban areas. From the table, the policy to provide full services to all households is evident.

Table 3-8: Change in Access to Sanitation Services per Functional Area per Census

		Urban		Rural		Farms		Total Area	
		Total	%	Total	%	Total	%	Total	%
Full	1996	14 121	88%	968	84%	6 871	76%	21 960	84%
	2001	21 031	91%	1 456	90%	8 645	84%	31 132	89%
	2011	28 532	93%	2 760	88%	8 145	85%	39 437	91%
Intermediate	1996	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	2001	25	0%	3	0%	86	1%	114	0%
	2011	56	0%	12	0%	251	3%	319	1%
Basic	1996	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	2001	168	1%	8	0%	420	4%	596	2%
	2011	41	0%	7	0%	158	2%	206	0%
Below Basic	1996	587	4%	160	14%	1 601	18%	2 348	9%
	2001	250	1%	113	7%	704	7%	1 067	3%
	2011	1 345	4%	255	8%	731	8%	2 331	5%
None	1996	1 306	8%	19	2%	521	6%	1 846	7%
	2001	1 737	7%	44	3%	476	5%	2 257	6%
	2011	587	2%	109	3%	339	4%	1 035	2%

The Statistic South Africa for the Non-Municipal Financial Census released in 2019 shows Table 3-9 figures. These figures confirm full services as the preferred service option. However, it shows only 40 373 households receiving services while the data on water services shows a total of 51 322 households in the municipal area. It is not possible to account for the more than 10 000 household discrepancy.

Table 3-9: Number of Consumer Units Receiving Sanitation Services

	Flush toilets connected to a public sewerage system	Flush toilets connected to septic tank	Bucket system	Ventilated improved pit latrines	Other	Total number of domestic consumer units receiving sanitation services	Total number of non-domestic consumer units receiving sanitation services	Total number of consumer units receiving sanitation services
2017	37 939	1079	0	0	1 193	40 211	1024	41 235
2018	38 027	1079	0	0	1 267	40 373	925	41 298
2019	38 027	1079	0	0	1267	40 373	925	41 298
2020	38 027	1079	0	0	1267	40 373	925	41 298

3.3.1.3 Access to Electricity Services

Access to electricity is generally with households without electricity remaining about 7% of total households. The non-financial census does not report on access to electricity. Even though the percentage access improved, the available data shows that more people are without electricity in real terms. The current position not be confirmed, and backlogs used for modelling purposes were estimated as the percentages of the current households per functional areas shown in Table 3-10.

Table 3-10: Change in Access to Electricity Services per Functional Area per Census

		Urban		Rural		Farms		Total Area	
		Total	%	Total	%	Total	%	Total	%
Full	1996	14 646	91%	1 065	93%	7 819	87%	23 530	90%
	2001	21 253	92%	1 570	97%	9 539	92%	32 362	92%
	2011	28 472	93%	2 990	95%	8 843	92%	40 305	93%
No Access	1996	1 368	9%	82	7%	1 175	13%	2 625	10%
	2001	1 958	8%	54	3%	791	8%	2 803	8%
	2011	2 090	7%	153	5%	780	8%	3 023	7%

3.3.1.4 Access to Sanitation

The table confirms the focus on urban and rural nodes with only between 2% and 3% of the households without access.

Table 3-11: Change in Access to Refuse Removal Services per Functional Area per Census

		Urban		Rural		Farms		Total Area	
		Total	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**
Full	1996	15 145	95%	1 024	89%	3 777	42%	19 946	76%
	2001	21 877	94%	1 528	94%	5 238	51%	28 643	81%
	2011	29 068	95%	2 990	95%	5 614	58%	37 672	87%
Intermediate	1996	60	0%	3	0%	194	2%	257	1%
	2001	368	2%	6	0%	187	2%	561	2%
	2011	288	1%	35	1%	745	8%	1 068	2%
Basic	1996	317	2%	46	4%	2 052	23%	2 415	9%
	2001	324	1%	17	1%	979	9%	1 320	4%
	2011	561	2%	16	1%	770	8%	1 347	3%
Below Basic	1996	303	2%	45	4%	2 284	25%	2 632	10%
	2001	587	3%	71	4%	3 784	37%	4 442	13%
	2011	301	1%	37	1%	1 715	18%	2 053	5%

		Urban		Rural		Farms		Total Area	
		Total	%	Total	%	Total	%	Total	%
None	1996	189	1%	28	2%	688	8%	905	3%
	2001	1 737	7%	44	3%	476	5%	2 257	6%
	2011	344	1%	65	2%	779	8%	1 188	3%

3.3.1.5 The Customer Base for Service Delivery

The previous sections provide available base profiles of service access in the municipality. The demand for services is a function of the municipality's existing customer base's current profile and characteristics. There is a distinction between the following customer categories:

- Residential or domestic customers. Domestic customers are entitled to a range of social and community services from the Council, irrespective of where they reside in the municipal area. However, the Council focus its housing support in particular areas, and generally, people living on farms are excluded from the Council delivered infrastructure and housing services. However, this does not absolve the Council from its Constitutional obligation to ensure that these households have access to essential services. However, practically, service delivery focuses on the urban and rural nodes in the municipality.
- Non-residential customers are all other customers that receive services from the municipality, and the focus of service delivery is again on the urban and rural nodes. However, this does not exclude service delivery outside these areas. The demand for services is a derivative of socio-economic growth and changes.

For modelling purposes, Table 3-12 shows the distinction in the residential customer base between a "service population" (those who uses social and community services) and a "housing population", which is representative of the number of households that fall within the housing mandate of the Council and Government. The next table shows the key numbers:

Table 3-12: Service Demand and Housing Demand Inputs to Model Demand

	Service demand	Housing demand
Average household size	3.07	3.07
Base year population	200 091	136 364
Population growth rate	1.62%	2.31%
Population estimate at end of programme	235 033	171 306
Households	65 176	44 418

The smaller number that constitutes the gross housing demand excludes the following:

- A total of 8 827 households in hostels and student residences;
- The 1 094 households were accommodated in institutions such as nursing homes, orphanages, etc. ;
- The 5 041 households residing of farms, and;
- 3 323 "other" formal households that live outside the urban and rural areas on farms.

The housing demand also excludes 2 473 households living in backyard shacks.

3.3.1.6 The Backlog Profile

It is not possible to provide an exact number for backlogs. The available data is irreconcilable, and the figures are estimates based on available information.

Table 3-13: Assignment of Levels of Services for Assessment Purposes

	Number of households	Comments
Water services		
House/building connection unlimited metered supply	25 924	This figure does not affect the outcomes of the assessment as they are fully serviced. Their impact reflects in asset renewal demand.
Communal standpipe less than 200m distance	9 699	It was assumed all informal structures in the urban and rural nodes have access to a communal standpipe within 200m of the residence
Waterpoint more than 200m distance	0	These are the informal structure outside the urban and rural nodes which the Council will have to accommodate.
No formal service	8 941	These are the households currently residing in backyards
Water total	**44 418**	
Sanitation services		
Waterborne sewerage to each stand 110mm connection	28 248	These are the total formal households in urban areas
Septic or conservancy tank with toilet structure	2 536	The households in rural nodes were assigned here.
Communal chemical toilet	1 193	The "other" category reported by the Council to StatsSA were assumed to be in this category
No formal service	12 441	This is the balance of the households.
Sanitation total	**44 418**	
Electricity services		
Electricity connections	35 171	The total of all formal households in the urban and rural nodes
No formal services	9 247	Households in the urban and rural nodes not included above
Electricity total	**44 418**	
Refuse		
Weekly kerbside waste removal	34 274	Assumed that all formal households receive a weekly refuse removal service
Communal waste collection point	8 258	All informal structures in the urban and rural nodes were included here.
No formal service	10 144	Households in the urban and rural nodes not included above
Refuse removal total	**44 418**	
Roads & stormwater		
Paved 6.5	3 998	These figures were derived from the data in the Council's Roads Asset Management Plan. The figures remain an estimate.
Paved 5.5	29 249	
Paved 4.5	4 886	
Gravel/graded	1 777	
No service	4 509	
Roads & stormwater total	**44 418**	

3.3.2 Asset Renewals and Renewal Backlog

Asset renewals and renewal backlogs should be calculated from asset registers. Asset registers for the main infrastructure services were not available, and the figures used came from the Council's unaudited financial statements for FY2122. The assets' valuation/cost was assumed to be equal to the current replacement cost (CRC), and carrying value is representative of the depreciated replacement cost (DRC) of the assets

The general rule is that asset renewals should more or less be equal to the annual depreciation on assets based on their Economic Useful Life (EUL). Renewal backlogs is a function of the condition of an asset

and renewal backlogs occur where an asset's Remaining Useful Life (RUL) is less than about 45% of its Current Replacement Cost (CRC).

Table 3-14: The Council's Asset Base

Asset group	Current replacement cost (CRC)	Depreciated replacement cost (DRC)	DRC as % of CRC	Renewal backlog	Renewal target years	% of CRC	CRC per serviced household	CRC per serviced household
	R'000	(R'000)		(R)	n.a		(R)	R'000
Water	1 845 786	1 377 472	74.6%	0	10	30.6%	27 329	52 027
Sanitation	1 283 713	1 051 417	81.9%	0	10	21.2%	19 007	40 145
Electricity	1 445 744	992 045	68.6%	0	10	23.9%	21 406	41 106
Roads & Stormwater	1 399 509	871 785	62.3%	0	10	23.2%	20 722	35 067
Refuse removal	66 824	52 195	78.1%	0	10	1.1%	989	1 950
	6 041 576	4 344 914	71.9%	0	0	100.0%	89 453	170 295

The Council has a substantial asset base that amounts to an average of about R89 453 per household for the five major infrastructure services. However, the average cost per serviced households is R170 295. The high cost per household reflects the high levels of services in the municipal area.

The figures show that the Council's assets are in excellent condition but that roads and stormwater may present challenges within the next few years if asset renewal is not addressed to the extent required. According to these figures, there are no renewal backlogs in the municipal area.

3.3.3 Demand Created Through Growth

- In the processes to determine the demand created through growth, four elements were addressed.
- Land demand created through growth expectations;
- Long-term capital requirements to meet the growing demand;
- Operating impact of capital expenditure, and;
- Consumption and use.

3.3.3.1 Land Demand

Land demand is determined by norms standards that were applied to various land uses. S explained earlier, a distinction was made between the demand for housing (residential demand) and demand for other land uses, including business, industrial, open space, community, and social facilities. Land demand for residential purposes was restricted to the urban and rural nodes, as shown in the report's previous section. It was assumed that the municipality would prioritise infrastructure services in these areas.

However, the land demand for the other uses is a function of thresholds to sustain them, and it was therefore calculated on the total growth demand in the municipal area. This is technically not 100% correct since the service function of these uses may exceed administrative boundaries. It gives recognition that factors outside its jurisdiction may determine development demand in a municipality. In this assessment, the long-term demand was only calculated based on growth expectations within the municipal area. It is not practical to separate Stellenbosch from it region.

3.3.3.2 Long-Term Capital Expenditure

Long-term capital expenditure is a function of land demand and the growth in customers. The results show the incremental cost for bulk and reticulated infrastructure. The point of departure is the assignment of appropriate service levels to each user or customer category. This is essentially a policy matter. For the purposes of assessment, the Council's current approach of providing a full level of service was adopted. This is one area where different approaches and policy options can be introduced to assess the impact

of service level approaches on demand for capital and the operating impact thereof. The capital cost per service for each of the land use categories was calculated.

3.3.3.3 The Operating Impact of Capital Expenditure

It is relatively easy to calculate capital demand. However, the critical aspects are the long-term operating impact of capital expenditure. Furthermore, an over-investment in services that do not address affordability may lead to structural impediments where the municipality will find it difficult to meet customers' operating obligations that cannot pay for services. This is usually one of the main contributors to cash flow constraints in municipalities. Operating cost is based on a life-cycle approach that considers both maintenance and operating costs. All costs are presented as marginal costs.

3.3.3.4 Consumption and Use

Since consumptions and use norms and standards are used to calculate operating costs, the same values are used to calculate the demand for water, wastewater discharge, electricity consumption, the roads required and the solid waste volume and tonnage. The results are also presented as annual increments to reflect the impact of growth.

3.4 Modelling Outcomes and Growth Impact Forecasts

A development cost model[3] was used to model and forecast long-term investment demand.

3.4.1 Population Growth as the Basis for Modelling Investment Demand

As indicated earlier, the investment demand modelling is premised on population growth that translated into customer units. The first step was to do a population growth forecast. A forecast was done for the municipality. (See the section of the socio-economic profile of the municipality) This represents the growth of the service population. The housing population was calculated using the forecast for the whole municipality and factoring the household characteristics of the urban and rural nodes into the equation.

The issues and challenges with reliable population and household figures were highlighted in the previous section on the socio-economic characteristics of the municipal area. In being consistent with a conservative approach, low population growth was accepted where the population would increase at an average rate of 1.4% per annum. There is, however, the possibility that this may even be lower. The following projection were used for modelling purposes

Table 3-15: Population as the Basis for the Assessment

Year	Population increment	Residential customers	Non-residential customers	Total customers
2 023	3 892	1 095	31	1 126
2 024	3 828	1 145	41	1 186
2 025	3 754	1 114	46	1 160
2 026	3 672	1 143	42	1 185
2 027	3 581	1 017	37	1 054
2 028	3 480	1 050	45	1 095
2 029	3 371	1 007	34	1 041
2 030	3 252	994	36	1 030
2 031	3 125	908	36	944

[3] The Development Cost Model V15 is propriety model develop and applied by BC Gildenhuys and Associates over the past 20 years to address the land use and capital expenditure demand and the operating consequences thereof in municipal service delivery.

Year	Population increment	Residential customers	Non-residential customers	Total customers
2 032	2 988	894	32	926
Total	40 650	10 364	380	10 744

3.4.2 Scenario Assessment

The scenario applied for assessment tried to emulate the current policy and strategy choices of the municipality as closely as possible. However, it is important to remember that this remains a modelling approach that crudely aims to replicate a very complicated system. It was, therefore, necessary to make some basic assumptions before the model was calibrated.

3.4.2.1 Assumptions and Inputs on Housing Variables

As described above, the model uses the growth in population to determine housing demand as well as ancillary uses. However, there several key inputs that need to be considered. They are:

- Residential typologies;
- The residential mix in terms of stand sizes, and;
- Stand sizes assigned to the different typologies.

Housing typologies for the CEF are configured around low, medium and high-density residential development that includes different housing typologies. Stand, and households sizes were linked to each of these typologies. Household sizes and cars per household were also considered in the model. Table 3-16 shows the input assumptions for housing typologies, stand sizes and household sizes.

Table 3-16: Assumptions on Housing Typologies, Mix Stand and Household Sizes

Residential types	Residential mix	Stand sizes	Household size
Single Residential: Low income	20.0%	250	4.11
Single Residential: Medium income	22.5%	500	3.75
Single Residential: High income	15.5%	850	3.00
Medium Density: Low income	15.0%	5 000	3.50
Medium Density: Medium income	7.0%	4 000	3.25
Medium Density: High income	5.0%	3 000	2.90
High Density: Low income	2.5%	5 000	3.00
High Density: Medium income	2.5%	4 000	2.50
High Density: High income	5.0%	3 000	2.10

Future backyard dwellers were included as part of the demand for capital expenditure in the equation. It was assumed that this would remain for the full assessment period although there are indications that household incomes have been decreasing.

3.4.2.2 Norms and Standards for Land Use Budgeting

The following land use norms and standards were used in the land use budgeting process.

Table 3-17: Land Use Budgeting Norms and Standards

Land use	Provision unit	Provision norm - persons/cars/ children	Ruling stand size m2
Residential			
Single Res: Low Inc	units per net ha (net)	40	250
Single Res: Med Inc	units per net ha (net)	20	500
Single Res: High Inc	units per net ha (net)	12	850
Medium Dens: Low Inc	units per net ha (net)	40	2 000

Land use	Provision unit	Provision norm - persons/cars/ children	Ruling stand size m2
Medium Dens: Med Inc	units per net ha (net)	30	3 000
Medium Dens: High Inc	units per net ha (net)	25	3 000
High Dens: Low Inc	units per net ha (net)	80	2 000
High Dens: Med Inc	units per net ha (net)	75	3 000
High Dens: High Inc	units per net ha (net)	60	3 000
Backyard dwellings	units per household	0	0
Business			
3rd Order commercial	m2 per capita	2.00	2 000
2nd Order Commercial	m2 per capita	3.00	5 000
1st Order Commercial	m2 per capita	6.00	25 000
Market/trading area	m2 per capita	7.00	5 000
Garages & filling stations	per 2500 cars	1	2 000
Industrial & commercial			
Light industrial	ha per 7500 people	3	3 000
Heavy industrial	ha per 5000 people	3	10 000
Commercial	ha per 5000 people	3	10 000
Public spaces: recreation			
Parks: public	ha per 1000 people	0.33	5 000
Parks: private	ha per 1000 people	1	10 000
Sports fields	per 1000 housing units	3.5	10 000
Stadiums	per 125000 people	1	50 000
Community facilities: municipal			
Municipal office	per 75000 people	1.00	3 000
Community hall	per 25000 people	1.00	3 000
Local library	per 50000 people	1.00	1 500
Primary health clinic	per 50000 people	1.00	3 000
Fire station & Ambulance	per 75000 people	1.00	7 500
Ambulance station	per 75000 people	1.00	3 000
Cemeteries	ha per 5500 people	1.00	20 000
Public parking areas	m2 per capita	0.20	3 000
Market/trading area	ha per 10000 people	1.00	7 500
Taxi ranks	m2 per capita	0.10	3 000
Community facilities: other			
Post office	per 20000 people	1.00	1 500
Lower Court	per 100000 people	1.00	2 000
Post collection point	per 3000 housing units	1.00	200
Police station	per 80000 people	1.00	5 000
District hospital	per 300000 people	1.00	50 000
Community health centre	per 100000 people	1.00	2 000
Hospice	per 50000 people	1.00	2 000
Old age home	per 50000 people	1.00	10 000
Children's homes	per 200000 people	1.00	5 000
Thusong centre	per 70000 people	1.00	10 000
Place of worship	per 1000 people	1.00	2 000
Crèche	per 2800 people	1.00	2 000

Land use	Provision unit	Provision norm - persons/cars/ children	Ruling stand size m2
Nursery school	per 5000 people	1.00	3 000
Primary school	per 6700 people	1.00	32 000
Secondary school	per 12400 people	1.00	45 000
After school centre	per 5000 people	1.00	2 000
ABET/Skills training	per 50000 people	1.00	50 000

The norms and standards were derived from different sources. The main sources were the cadastre from the office of the Surveyor General, the CSIR norms and standards for social and community facilities and then also calculated from the current land cover in the municipality. The approach was to calibrate the model on local data as far as possible.

3.4.2.3 Service Levels

Service levels relate to the technology used to supply a customer with a service. It should not be confused with a service standard which represents the qualitative aspects of service delivery.

The following describes the levels of services (LOS) available for the modelling process.

Table 3-18: Levels of Service Options for Water

Level of services	Description
LOS00	No formal service
LOS01	Water point more than 200m distance
LOS02	Communal standpipe less than 200m distance
LOS03	Yard tap connection (single tap) and or limited supply with a dry on-site system
LOS04	Yard tap connection (single tap) and or limited supply linked to waterborne sanitation
LOS05	House/building connection unlimited metered supply
LOS06	Supply volume. is limited to 100mm connection, peak flow limited, and on-site storage required
LOS07	All requirements met up to 150mm pipe, 150mm connection

Table 3-19: Levels of Service Options for Sanitation

Level of services	Description
LOS00	No formal service
LOS01	Bucket system
LOS02	Unventilated pit latrines and soakaways
LOS03	Ventilated improved pit (VIP)
LOS04	Dry composting toilet
LOS05	Communal chemical toilet
LOS06	Low flow (small bore) system with toilet structure
LOS07	Septic or conservancy tank with toilet structure
LOS08	Waterborne sewerage to each stand 110mm connection (no toilet structure)
LOS09	Waterborne sewerage to each stand 110mm connection, with toilet structure
LOS10	Waterborne sewer available, max connection size 150 mm or larger
LOS11	Waterborne sewerage, discharge load is above normal limits.

Table 3-20: Levels of Service Options for Electricity

Level of services	Description
LOS00	No electricity service
LOS01	None grid electricity service

Level of services	Description
LOS02	Grid-connected and metered - Single phase 230V up to 20A or 4.6 kVA
LOS03	Grid-connected and metered - Single phase 230V up to 60A or 13.8kVA
LOS04	Grid-connected and metered - Three phase / Multiphase 230/400V up to 150A or 100kVA
LOS05	Grid-connected and metered - Bulk higher than 230/400V - not exceeding 11kV (at least 25 kVA)
LOS06	Grid-connected and metered - Bulk - exceeding 11kV (at least 100 kVA)

Table 3-21: Levels of Service Options for Roads and Stormwater

Level of services	Description
LOS00	No service
LOS01	Tracks (Graded)
LOS02	Gravel within 500m
LOS03	Gravel
LOS04	Paved 4.5m
LOS05	Paved 5.5m
LOS06	Paved 6.5
LOS07	Paved heavy capacity of 7.5m

Table 3-22: Levels of Service Options for Refuse Removal Services

Level of services	Description
LOS00	None
LOS01	Communal waste collection point
LOS02	Weekly kerbside waste removal
LOS03	Bi-weekly kerbside waste removal
LOS04	Bi-weekly waste removal from site 1
LOS05	Daily waste removal from site 1
LOS06	Bi-weekly waste removal from site 2
LOS07	Daily waste removal from site 2

Based on the available service level options, the following levels of services were assigned to the land uses in the development cost model. Changes in the levels of service do have significant impacts on the demand for capital and also the operating position of the Council and hence its sustainability. The impact of different service level choices and resulting scenario were not tested as part of this report.

Table 3-23: Level of Service Assigned per Land Use

	Water	Sanitation	Electricity	Roads & stormwater	Refuse removal
Residential					
Single Res: Low Inc	LOS05	LOS09	LOS02	LOS04	LOS02
Single Res: Med Inc	LOS05	LOS08	LOS03	LOS05	LOS02
Single Res: High Inc	LOS05	LOS08	LOS03	LOS06	LOS02
Medium Dens: Low Inc	LOS05	LOS09	LOS02	LOS04	LOS02
Medium Dens: Med Inc	LOS05	LOS08	LOS03	LOS05	LOS02
Medium Dens: High Inc	LOS05	LOS08	LOS03	LOS06	LOS02
High Dens: Low Inc	LOS05	LOS09	LOS02	LOS04	LOS02
High Dens: Med Inc	LOS05	LOS08	LOS03	LOS05	LOS02
High Dens: High Inc	LOS05	LOS08	LOS03	LOS06	LOS02
Backyard dwellings	LOS00	LOS00	LOS00	LOS00	LOS00
Business					

	Water	Sanitation	Electricity	Roads & stormwater	Refuse removal
3rd Order commercial	LOS05	LOS08	LOS04	LOS06	LOS05
2nd Order Commercial	LOS05	LOS08	LOS05	LOS06	LOS05
1st Order Commercial	LOS07	LOS08	LOS05	LOS07	LOS05
Market/trading area	LOS07	LOS08	LOS05	LOS07	LOS07
Garages & filling stations	LOS05	LOS08	LOS05	LOS07	LOS03
Industrial & commercial					
Light industrial	LOS05	LOS08	LOS05	LOS06	LOS05
Heavy industrial	LOS07	LOS08	LOS05	LOS07	LOS05
Storage and warehouses	LOS05	LOS08	LOS05	LOS06	LOS04
Public spaces: recreation					
Parks: public	LOS05	LOS00	LOS04	LOS05	LOS02
Parks: private	LOS05	LOS00	LOS04	LOS05	LOS02
Sports fields	LOS05	LOS08	LOS04	LOS06	LOS02
Stadiums	LOS05	LOS08	LOS04	LOS07	LOS02
Community facilities: municipal					
Municipal office	LOS05	LOS08	LOS04	LOS07	LOS02
Community hall	LOS05	LOS08	LOS04	LOS06	LOS02
Library	LOS05	LOS08	LOS04	LOS06	LOS02
Primary health clinic	LOS05	LOS08	LOS04	LOS06	LOS02
Fire station & Ambulance	LOS07	LOS08	LOS04	LOS06	LOS02
Solid waste/Mini dump/depot	LOS05	LOS08	LOS04	LOS06	LOS02
Cemeteries	LOS05	LOS08	LOS03	LOS06	LOS02
Crematorium	LOS05	LOS08	LOS03	LOS06	LOS02
Service utilities	LOS05	LOS08	LOS04	LOS06	LOS05
Taxi ranks	LOS05	LOS08	LOS03	LOS07	LOS05
Community facilities: other					
Post office	LOS05	LOS08	LOS05	LOS06	LOS02
Lower Court	LOS05	LOS08	LOS04	LOS06	LOS02
Post collection point	LOS05	LOS08	LOS04	LOS06	LOS02
Police station	LOS05	LOS08	LOS05	LOS06	LOS02
Hospital	LOS06	LOS08	LOS07	LOS06	LOS05
Community health centre	LOS05	LOS08	LOS05	LOS06	LOS05
Hospice	LOS05	LOS08	LOS05	LOS06	LOS02
Old age home	LOS05	LOS08	LOS05	LOS06	LOS02
Children's homes	LOS05	LOS08	LOS07	LOS06	LOS02
Thusong centre	LOS05	LOS08	LOS08	LOS06	LOS02
Place of worship	LOS05	LOS08	LOS05	LOS06	LOS02
Crèche	LOS05	LOS08	LOS03	LOS06	LOS02
Grade R / Nursery	LOS05	LOS08	LOS03	LOS06	LOS02
Primary school	LOS05	LOS08	LOS05	LOS06	LOS02
Secondary school	LOS05	LOS08	LOS04	LOS06	LOS02
After school centre	LOS05	LOS08	LOS03	LOS06	LOS02
Tertiary/Skills training centre	LOS06	LOS08	LOS05	LOS06	LOS02

3.4.3 The Modelling Outcomes

This section documents the results of the modelling process. The outcomes are presented as a high-level summary. It is important to note that the tables show incremental quantities, which includes all service elements and components. It is currently impossible to model the impact of major interventions such as building a new wastewater treatment work or significant investment to reconfigure the management of solid waste. Those aspects must be discounted in the project prioritisation process.

Although the results link the demand to a specific year, it is still important to take note of budgeting processes and the extent of lead times before project implementation can commence. The figures are indicative, annual demands and the actual demands will be reflected in the project prioritisation process as part of the project outputs.

3.4.3.1 Land Use Demand

Table 3-24 shows the summary of land use demand which is a result of the growth forecasts.

Table 3-24: Land Use Demand for the Programme Period 2019 to 2028

	No of units	% of the total land	No of stand required	Area (ha) included
Residential	**10 428**	**69.1%**	**5 912**	**422.1**
Single Res: Low Inc	1 702	7.0%	1 702	42.5
Single Res: Med Inc	2 097	17.1%	2 097	104.8
Single Res: High Inc	1 805	25.1%	1 805	153.5
Medium Dens: Low Inc	1 997	8.2%	100	49.9
Medium Dens: Med Inc	753	4.1%	63	25.1
Medium Dens: High Inc	602	3.9%	80	24.1
High Dens: Low Inc	291	0.6%	7	3.6
High Dens: Med Inc	349	0.8%	12	4.7
High Dens: High Inc	832	2.3%	46	13.9
Backyard dwellings	0	0.0%	0	0.0
Business		**10.1%**	**115**	**61.8**
3rd Order commercial		1.1%	34	6.8
2nd Order Commercial		1.6%	20	10.0
1st Order Commercial		3.3%	8	20.0
Market/trading area		3.9%	48	24.0
Garages & filling stations		0.2%	5	1.0
Industrial & commercial		**11.3%**	**150**	**68.8**
Light industrial		5.7%	116	34.8
Heavy industrial		2.8%	17	17.0
Storage and warehouses		2.8%	17	17.0
Public spaces: recreation		8.9%	56	54.5
Parks: public		0.2%	3	1.5
Parks: private		2.8%	17	17.0
Sports fields		5.9%	36	36.0
Stadiums		0.0%	0	0.0
Community facilities: municipal		**2.5%**	**13**	**15.5**
Municipal office		0.0%	0	0.0
Community hall		0.0%	1	0.3
Library		0.0%	0	0.0
Primary health clinic		0.0%	0	0.0

	No of units	% of the total land	No of stand required	Area (ha) included
Fire station & Ambulance		0.0%	0	0.0
Solid waste/Mini dump/depot		0.0%	0	0.0
Cemeteries		2.0%	6	12.0
Crematorium		0.1%	2	0.6
Service utilities		0.4%	3	2.3
Taxi ranks		0.0%	1	0.3
Community facilities: other		**4.9%**	**44**	**30.0**
Post office		0.0%	1	0.2
Lower Court		0.0%	0	0.0
Post collection point		0.0%	0	0.0
Police station		0.0%	0	0.0
Hospital		0.0%	0	0.0
Community health centre		0.1%	3	0.6
Hospice		0.0%	0	0.0
Old age home		0.0%	0	0.0
Children's homes		0.0%	0	0.0
Thusong centre		0.0%	0	0.0
Place of worship		0.3%	10	2.0
Crèche		0.4%	12	2.4
Grade R / Nursery		0.3%	6	1.8
Primary school		2.1%	4	12.8
Secondary school		1.5%	2	9.0
After school centre		0.2%	6	1.2
Tertiary/Skills training centre		0.0%	0	0.0
Roads		26.0%	0	158.8

3.4.3.2 Summary of General Elements

Table 3-25 and Table 3-26 show the context and main elements that define the expected level of capital and operating expenditure. The outcomes are shown per annum (refer to Table 3-25) and cumulative (refer to Table 3-26).

Table 3-25: Summary of Totals per Annum (annual increments)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Service population	3 892	3 828	3 754	3 672	3 581	3 480	3 371	3 252	3 125	2 988
Housing population	3 892	3 828	3 754	3 672	3 581	3 480	3 371	3 252	3 125	2 988
Total area (ha)	81	86	83	83	78	79	74	71	68	66
Average stand size m2	1 188.1	1 249.0	1 221.8	1 242.9	1 219.7	1 241.1	1 231.9	1 205.9	1 206.2	1 224.4
Population density (p/ha):	47.8	44.5	45.1	44.4	45.7	44.2	45.4	45.9	45.9	45.4
Household density (hh/ha):	13.5	13.3	13.4	13.8	13.0	13.3	13.5	14.0	13.3	13.6
Residential Cus	1 095	1 145	1 114	1 143	1 017	1 050	1 007	994	908	894
Other CUs:	31	41	46	42	37	45	34	36	36	32
Total customer units	1 126	1 186	1 160	1 185	1 054	1 095	1 041	1 030	944	926
Total no of stands	685.0	688.0	681.0	665.0	642.0	634.0	603.0	588.0	564.0	537.0
Roads area (ha)	15.8	15.2	14.9	14.7	14.4	13.8	13.5	13.0	12.6	12.1
Roads as % of total area	19.4%	17.7%	17.9%	17.8%	18.4%	17.6%	18.2%	18.4%	18.6%	18.5%

Table 3-26: Summary of Totals per Annum (Cumulative)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Service population	3 892	7 719	11 473	15 146	18 726	22 207	25 578	28 830	31 954	34 942
Housing population	3 892	7 719	11 473	15 146	18 726	22 207	25 578	28 830	31 954	34 942
Total area (ha)	81	167	251	333	411	490	564	635	703	769
Average stand size m2	1 188	2 437	3 659	4 902	6 121	7 363	8 594	9 800	11 006	12 231
Population density (p/ha):	48	46	46	45	46	45	45	45	45	45
Household density (hh/ha):	13	13	13	13	13	13	13	13	13	13
Residential Cus	1 095	2 240	3 353	4 496	5 513	6 563	7 569	8 563	9 471	10 364
Other CUs:	31	72	118	160	197	242	276	312	348	380
Total customer units	1 126	2 312	3 471	4 656	5 710	6 805	7 845	8 875	9 819	10 744
Total no of stands	685	1 373	2 054	2 719	3 361	3 995	4 598	5 186	5 750	6 287
Roads area (ha)	15.8	31.0	45.9	60.7	75.1	89.0	102.5	115.5	128.1	140.3
Roads as % of total area	19.4%	18.5%	18.3%	18.2%	18.3%	18.1%	18.2%	18.2%	18.2%	18.2%

3.4.3.3 Summary of Capital Expenditure per Service

Table 3-27 and Table 3-28 show the required capital expenditure incrementally per annum (refer to Table 3-27) and cumulative per annum (refer to Table 3-28) to accommodate the forecasted demand.

Table 3-27: Incremental Capital Expenditure: All Services (R'000)

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Growth investments	113 041	120 295	118 248	120 710	107 772	111 681	104 763	104 110	96 750	94 084
Access backlogs	149 280	149 280	149 280	149 280	149 280	149 280	149 280	149 280	149 280	149 280
Renewals	119 436	121 808	124 336	126 835	129 366	131 642	134 004	136 195	138 382	140 427
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total (R'000)	**381 757**	**391 382**	**391 863**	**396 825**	**386 418**	**392 602**	**388 046**	**389 584**	**384 412**	**383 791**
Water										
Growth investments	17 230	18 874	18 637	19 071	16 498	17 568	16 501	16 411	14 903	14 942
Access backlogs	13 727	13 727	13 727	13 727	13 727	13 727	13 727	13 727	13 727	13 727
Renewals	24 586	24 815	25 067	25 315	25 569	25 789	26 023	26 242	26 461	26 659
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**55 543**	**57 417**	**57 431**	**58 113**	**55 794**	**57 084**	**56 251**	**56 380**	**55 092**	**55 329**
Sanitation										
Growth investments	30 500	31 359	30 355	30 932	28 441	28 581	27 645	26 763	25 404	24 041
Access backlogs	62 145	62 145	62 145	62 145	62 145	62 145	62 145	62 145	62 145	62 145
Renewals	37 962	38 864	39 791	40 689	41 604	42 445	43 290	44 108	44 899	45 650
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**130 607**	**132 368**	**132 291**	**133 766**	**132 190**	**133 171**	**133 080**	**133 015**	**132 448**	**131 836**
Electricity										
Growth investments	28 760	31 088	30 583	31 617	27 999	28 940	26 812	26 922	25 148	24 436
Access backlogs	22 292	22 292	22 292	22 292	22 292	22 292	22 292	22 292	22 292	22 292
Renewals	28 824	29 398	30 018	30 627	31 258	31 816	32 393	32 928	33 464	33 966
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**79 876**	**82 778**	**82 892**	**84 537**	**81 549**	**83 048**	**81 497**	**82 141**	**80 904**	**80 694**
Roads & Stormwater										
Growth investments	35 522	37 512	36 839	37 626	33 443	34 809	32 811	32 662	29 966	29 375
Access backlogs	50 695	50 695	50 695	50 695	50 695	50 695	50 695	50 695	50 695	50 695

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Renewals	23 480	24 076	24 705	25 323	25 955	26 516	27 100	27 650	28 198	28 701
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**109 697**	**112 283**	**112 240**	**113 644**	**110 093**	**112 019**	**110 606**	**111 008**	**108 859**	**108 771**
Refuse removal										
Growth investments	1 029	1 462	1 834	1 463	1 391	1 783	993	1 352	1 330	1 290
Access backlogs	420	420	420	420	420	420	420	420	420	420
Renewals	4 584	4 655	4 755	4 881	4 981	5 076	5 199	5 267	5 360	5 451
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**6 033**	**6 537**	**7 009**	**6 764**	**6 792**	**7 280**	**6 612**	**7 039**	**7 110**	**7 161**

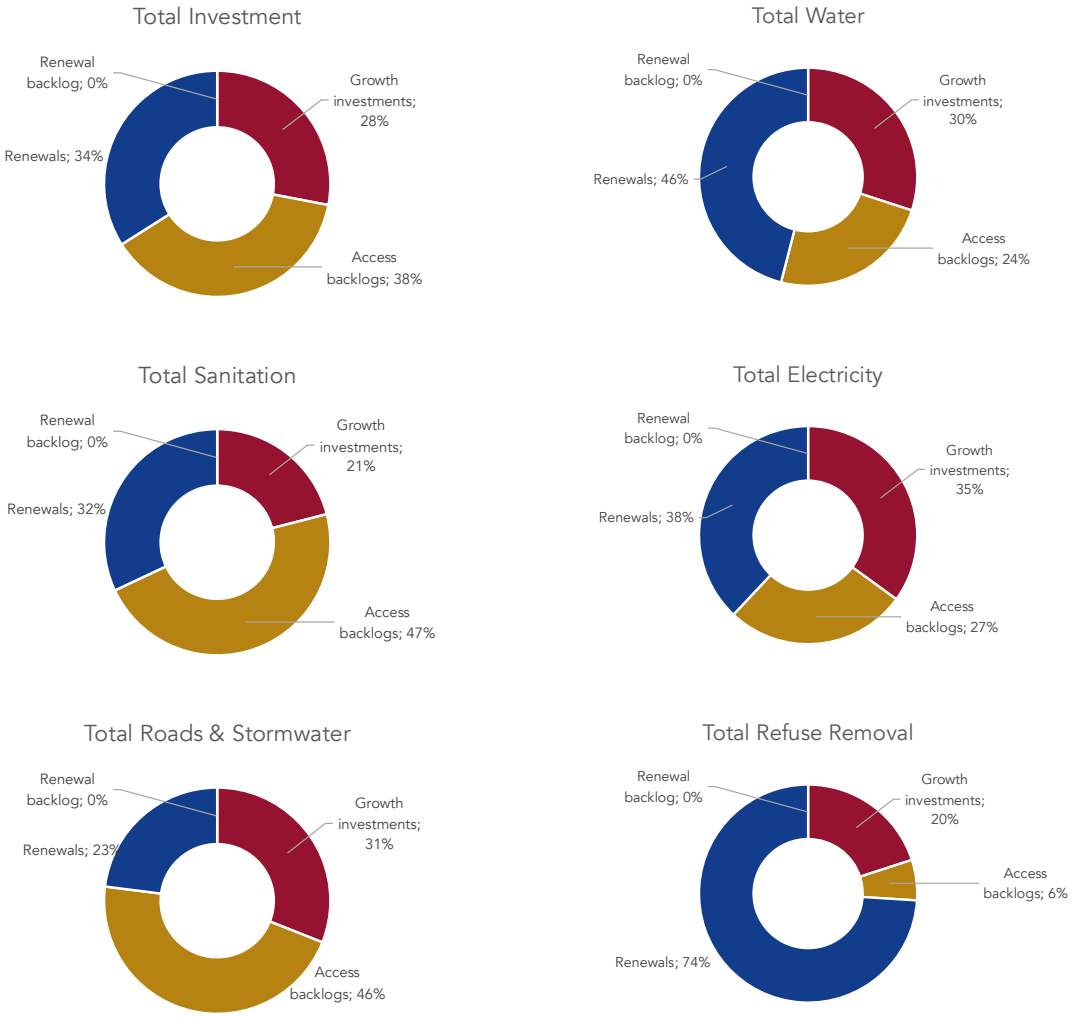
Table 3-28: Capital Expenditure (All Services (R'000) (Cumulative)

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Growth investments	113 041	233 336	351 584	472 294	580 066	691 747	796 510	900 620	997 370	1 091 454
Access backlogs	149 280	298 559	447 839	597 118	746 398	895 677	1 044 957	1 194 236	1 343 516	1 492 795
Renewals	119 436	241 244	365 579	492 415	621 781	753 422	887 427	1 023 621	1 162 003	1 302 430
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total (R'000)	**381 757**	**773 139**	**1 165 002**	**1 561 827**	**1 948 244**	**2 340 847**	**2 728 893**	**3 118 477**	**3 502 889**	**3 886 679**
Water										
Growth investments	17 230	36 105	54 742	73 813	90 310	107 878	124 379	140 790	155 693	170 635
Access backlogs	13 727	27 455	41 182	54 910	68 637	82 365	96 092	109 819	123 547	137 274
Renewals	24 586	49 401	74 467	99 782	125 351	151 139	177 162	203 404	229 865	256 525
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**55 543**	**112 960**	**170 392**	**228 504**	**284 298**	**341 382**	**397 633**	**454 013**	**509 105**	**564 434**
Sanitation										
Growth investments	30 500	61 859	92 213	123 146	151 587	180 168	207 813	234 576	259 980	284 021
Access backlogs	62 145	124 290	186 435	248 580	310 725	372 870	435 015	497 160	559 306	621 451
Renewals	37 962	76 826	116 618	157 307	198 910	241 355	284 645	328 753	373 652	419 302
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**130 607**	**262 975**	**395 266**	**529 032**	**661 223**	**794 394**	**927 474**	**1 060 490**	**1 192 938**	**1 324 774**
Electricity										
Growth investments	28 760	59 848	90 430	122 048	150 047	178 987	205 799	232 721	257 869	282 305
Access backlogs	22 292	44 583	66 875	89 167	111 459	133 750	156 042	178 334	200 625	222 917
Renewals	28 824	58 222	88 240	118 868	150 125	181 941	214 335	247 262	280 726	314 692
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**79 876**	**162 654**	**245 546**	**330 082**	**411 631**	**494 679**	**576 176**	**658 317**	**739 220**	**819 914**
Roads & Stormwater										
Growth investments	35 522	73 035	109 874	147 500	180 943	215 752	248 563	281 226	311 191	340 567
Access backlogs	50 695	101 390	152 085	202 780	253 475	304 170	354 865	405 560	456 255	506 950
Renewals	23 480	47 556	72 261	97 585	123 539	150 055	177 154	204 805	233 003	261 704
Renewal backlog	0	0	0	0	0	0	0	0	0	0
Total	**109 697**	**221 980**	**334 220**	**447 864**	**557 957**	**669 976**	**780 582**	**891 590**	**1 000 449**	**1 109 220**
Refuse removal										
Growth investments	1 029	2 490	4 324	5 788	7 179	8 962	9 955	11 307	12 637	13 927
Access backlogs	420	841	1 261	1 681	2 102	2 522	2 942	3 363	3 783	4 204
Renewals	4 584	9 239	13 993	18 874	23 855	28 931	34 130	39 397	44 757	50 208
Renewal backlog	0	0	0	0	0	0	0	0	0	0

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total	**6 033**	**12 570**	**19 579**	**26 343**	**33 136**	**40 416**	**47 028**	**54 067**	**61 177**	**68 338**

The next set of figures summarises the total capex position per service.

Figure 3-6: Capex Position per Service



3.4.3.4 Summary of Operating Expenditure

One of the key elements that are often overlooked in capital investment planning is the operating consequences of capital investment. The next two tables show the forecasted operating and maintenance cost associated with the projected capital expenditure. It is an incremental cost and does not reflect on the revenue side and cost recovery strategies that the municipality may apply.

Table 3-29: Incremental Operating & Maintenance Expenditure: All Services per Annum (R'000)

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Growth investments	11 420	12 417	12 418	12 532	11 193	11 768	10 618	10 813	10 079	9 800
Access backlogs	11 718	11 718	11 718	11 718	11 718	11 718	11 718	11 718	11 718	11 718
Total (R'000)	**23 138**	**24 134**	**24 136**	**24 250**	**22 911**	**23 486**	**22 336**	**22 531**	**21 797**	**21 518**
Water										
Growth investments	518	569	563	576	497	530	497	496	449	451
Access backlogs	383	383	383	383	383	383	383	383	383	383
Total	**900**	**952**	**946**	**959**	**879**	**913**	**880**	**878**	**832**	**834**

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Sanitation										
Growth investments	1 618	1 677	1 628	1 661	1 514	1 534	1 475	1 439	1 351	1 293
Access backlogs	3 069	3 069	3 069	3 069	3 069	3 069	3 069	3 069	3 069	3 069
Total	**4 686**	**4 746**	**4 696**	**4 730**	**4 583**	**4 602**	**4 544**	**4 507**	**4 420**	**4 361**
Electricity										
Growth investments	6 028	6 516	6 411	6 632	5 875	6 069	5 612	5 652	5 267	5 112
Access backlogs	4 185	4 185	4 185	4 185	4 185	4 185	4 185	4 185	4 185	4 185
Total	**10 213**	**10 701**	**10 596**	**10 817**	**10 060**	**10 254**	**9 797**	**9 837**	**9 452**	**9 297**
Roads & Stormwater										
Growth investments	2 666	2 815	2 764	2 823	2 509	2 611	2 463	2 451	2 248	2 204
Access backlogs	3 840	3 840	3 840	3 840	3 840	3 840	3 840	3 840	3 840	3 840
Total	**6 507**	**6 655**	**6 604**	**6 663**	**6 349**	**6 451**	**6 303**	**6 291**	**6 088**	**6 044**
Refuse removal										
Growth investments	591	839	1 053	840	799	1 024	570	776	763	741
Access backlogs	241	241	241	241	241	241	241	241	241	241
Total	**832**	**1 081**	**1 294**	**1 082**	**1 040**	**1 265**	**811**	**1 018**	**1 005**	**982**

Table 3-30: Operating & Maintenance Expenditure: All Services per Annum (R'000) (Cumulative)

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Growth investments	11 420	23 836	36 254	48 786	59 980	71 748	82 366	93 179	103 257	113 057
Access backlogs	11 718	23 436	35 154	46 872	58 589	70 307	82 025	93 743	105 461	117 179
Total (R'000)	**23 138**	**47 272**	**71 408**	**95 658**	**118 569**	**142 055**	**164 391**	**186 922**	**208 718**	**230 236**
Water										
Growth investments	518	1 087	1 650	2 226	2 723	3 253	3 751	4 246	4 695	5 147
Access backlogs	383	765	1 148	1 531	1 913	2 296	2 679	3 061	3 444	3 827
Total	**900**	**1 852**	**2 798**	**3 757**	**4 636**	**5 549**	**6 429**	**7 308**	**8 139**	**8 973**
Sanitation										
Growth investments	1 618	3 295	4 922	6 584	8 098	9 631	11 107	12 545	13 896	15 189
Access backlogs	3 069	6 137	9 206	12 274	15 343	18 411	21 480	24 548	27 617	30 686
Total	**4 686**	**9 432**	**14 128**	**18 858**	**23 440**	**28 043**	**32 586**	**37 094**	**41 513**	**45 874**
Electricity										
Growth investments	6 028	12 543	18 954	25 586	31 461	37 530	43 142	48 794	54 061	59 173
Access backlogs	4 185	8 370	12 555	16 740	20 925	25 111	29 296	33 481	37 666	41 851
Total	**10 213**	**20 914**	**31 509**	**42 326**	**52 387**	**62 641**	**72 438**	**82 275**	**91 727**	**101 024**
Roads & Stormwater										
Growth investments	2 666	5 481	8 245	11 068	13 577	16 188	18 651	21 102	23 350	25 554
Access backlogs	3 840	7 680	11 521	15 361	19 201	23 041	26 882	30 722	34 562	38 402
Total	6 507	13 162	19 766	26 429	32 778	39 229	45 533	51 824	57 912	63 956
Refuse removal										
Growth investments	591	1 430	2 483	3 323	4 121	5 145	5 715	6 492	7 255	7 996
Access backlogs	241	483	724	965	1 207	1 448	1 689	1 931	2 172	2 413
Total	**832**	**1 912**	**3 207**	**4 288**	**5 328**	**6 593**	**7 405**	**8 422**	**9 427**	**10 409**

3.4.3.5 Summary of Consumption and Use

Service delivery is about consumption and use. The next two tables show the expected demand for water and electricity. Also, the estimated wastewater and solid waste generated was calculated. These number can be used to assess the impact of future demand on the existing capacities of bulk facilities.

Table 3-31: Incremental Consumption and Usage

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Water (Ml/day)[4]										
Growth investments	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Access backlogs	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6
Total	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**
Sanitation (Ml/day)	**1.0**	**1.1**	**1.1**	**1.1**	**1.0**	**1.1**	**1.0**	**1.0**	**1.0**	**0.9**
Growth investments										
Access backlogs	0.5	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5
Total	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**
Electricity (MWh/day)	**0.8**	**0.9**	**0.9**	**0.9**	**0.8**	**0.9**	**0.8**	**0.8**	**0.8**	**0.8**
Growth investments										
Access backlogs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**119.6**	**135.2**	**134.1**	**147.5**	**114.3**	**129.3**	**116.0**	**122.6**	**107.7**	**109.6**
Roads & Stormwater (km/a)	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**
Growth investments	125.4	140.9	139.8	153.2	120.1	135.1	121.7	128.4	113.4	115.3
Access backlogs										
Total	**12.4**	**13.0**	**12.8**	**13.0**	**11.6**	**12.1**	**11.4**	**11.3**	**10.4**	**10.2**
Refuse removal (tons/day)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Growth investments										
Access backlogs										
Total	**32.2**	**51.3**	**55.6**	**54.2**	**49.0**	**51.9**	**45.3**	**33.8**	**44.9**	**42.4**
Refuse removal (m3/day)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Growth investments	32.2	51.3	55.6	54.2	49.0	51.9	45.3	33.8	44.9	42.4
Access backlogs										
Total	**64.6**	**102.8**	**111.5**	**108.5**	**98.1**	**103.9**	**90.9**	**67.7**	**90.0**	**85.0**

Table 3-32: Cumulative Consumption and Usage

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Water (Ml/day)[5]										
Growth investments	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Access backlogs	73%	155%	239%	322%	397%	478%	547%	620%	686%	750%
Total	**30%**	**59%**	**89%**	**119%**	**148%**	**178%**	**207%**	**237%**	**267%**	**296%**
Sanitation (Ml/day)	**1.0**	**2.1**	**3.3**	**4.4**	**5.5**	**6.6**	**7.5**	**8.6**	**9.5**	**10.5**
Growth investments										
Access backlogs	0.5	1.1	1.7	2.3	2.8	3.4	3.9	4.4	4.9	5.3

[4] Water consumption reflects net consumption based on delivery norms and strandards. It excluded unaccound for water and waterlosses.

[5] Water consumption reflects net consumption based on delivery norms and strandards. It excluded unaccound for water and waterlosses.

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total	**0.3**	**0.6**	**0.9**	**1.2**	**1.5**	**1.8**	**2.1**	**2.4**	**2.7**	**3.0**
Electricity (MWh/day)	**0.8**	**1.7**	**2.6**	**3.5**	**4.3**	**5.2**	**6.0**	**6.8**	**7.6**	**8.3**
Growth investments										
Access backlogs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**120**	**255**	**389**	**536**	**651**	**780**	**896**	**1 019**	**1 126**	**1 236**
Roads & Stormwater (km/a)	**6**	**11**	**17**	**23**	**29**	**34**	**40**	**46**	**52**	**57**
Growth investments	125	266	406	559	679	814	936	1 065	1 178	1 293
Access backlogs										
Total	**12**	**25**	**38**	**51**	**63**	**75**	**86**	**98**	**108**	**118**
Refuse removal (tons/day)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Growth investments	12	25	38	51	63	75	86	98	108	118
Access backlogs										
Total	**32**	**84**	**139**	**193**	**242**	**294**	**339**	**373**	**418**	**461**
Refuse removal (m3/day)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Growth investments	32.2	84	139	193	242	294	339	373	418	461
Access backlogs										
Total	**65**	**167**	**279**	**387**	**485**	**589**	**680**	**748**	**838**	**923**

3.4.4 Issues to be Considered

The modelling was done against the backdrop of uncertainty and doubtful data critical to the process. The following should be considered:

- Conflicting population sources necessitated an estimate. The availability of data and an appropriate system to track and monitor change is a challenge and may directly impact the ability of the Council to quantify, measure and manage change and development.
- There are a range of policy options regarding service levels, the backlog eradication rate, backyard settlement, and other issues that need to be considered. This assessment gives a broad outline of the current approach and policies within the municipality.
- There is no detailed bulk services capacity assessment data available. As a result, the extent of current bulk capacities is not known and may impact capital expenditure estimates.
- The recent announcement regarding changes in housing policies of the national government will have to be considered. It might have an impact on settlement and urbanisation pattern that will have to be monitored.
- Many of the current issues may lead to long term structural problems resulting from a long history of investment in appropriate service levels and the impact it had and will continue to have on the operations of the Council.
- The current economic climate and the impact of government interventions may have a negative impact on the customer base and hence the ability to recover cost and sustain itself financially with the framework of current delivery policies. Measures are required to monitor the medium and long-term impact on the Council continuously.

Part 4

Affordability Envelope

4 Part 4: Affordability Envelope

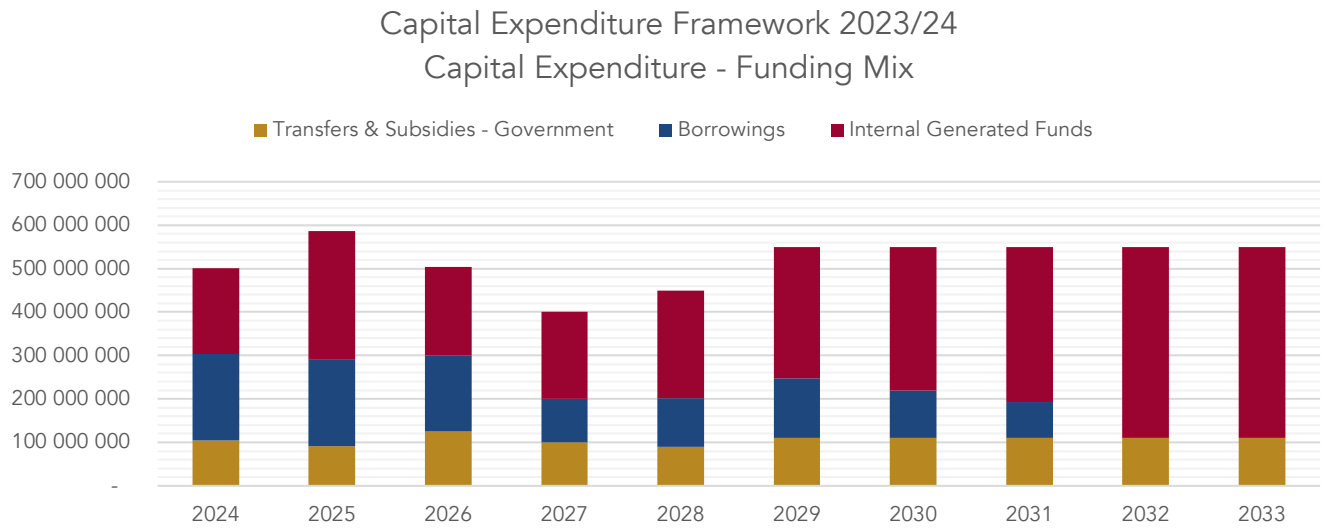
4.1 What is an Affordability Envelope

The affordability envelope is the result of the Long-Term Financial Strategy. The aim of the Long-Term Financial Model is to define a set of parameters to which the municipality can roll out capital expenditure projects. The key parameter of interest for the budget scenario process to continue is the total capital expenditure that is deemed as affordable per year.

The purpose of this section is therefore to take the results of the Long-Term Financial Strategy and to indicate what should be actively used to guide capital investment.

4.2 10-Year Affordability Envelope

Figure 4–1: The Funding Mix of Affordable Capital Expenditure Over the Next 10 Years



provides a financial roadmap for the municipality, showing how it plans to finance its capital expenditure projects over the next decade. It is important to note that the actual amounts of funding and spending may vary based on a range of factors, including economic conditions, political priorities, and unforeseen events.

Table 4-1: Capital Expenditure

R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditure	501,550	585,895	503,456	400,000	450,000	550,000	550,000	550,000	550,000	550,000

Capital Expenditure represents the total amount of capital that the municipality plans to spend on capital projects each year. The amounts for each year range from R501 million in 2024 to R550 million in 2033. This amount is the sum of the funding from all sources mentioned below, and it represents the maximum amount that the municipality can afford to spend on capital projects in each year. The capital expenditure represents the investment that the municipality will make in its infrastructure and facilities to support economic growth and improve the quality of life for its residents.

Table 4-2:Funding Mix of Planned Capital Expenditure

R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

Transfers & Subsidies - Government	103,856	91,949	125,864	100,000	90,000	110,000	110,000	110,000	110,000	110,000
Borrowings	200,000	200,000	175,000	100,000	112,500	137,500	110,000	82,500		
Internal Generated Funds	197,694	293,946	202,592	200,000	247,500	302,500	330,000	357,500	440,000	440,000
Total	**501,550**	**585,895**	**503,456**	**400,000**	**450,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**

Table 4-3: Funding Mix as a Percentage of Capital Expenditure

Percentage	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Transfers & Subsidies - Government	21%	16%	25%	25%	20%	20%	20%	20%	20%	20%
Borrowings	40%	34%	35%	25%	25%	25%	20%	15%	0%	0%
Internal Generated Funds	39%	50%	40%	50%	55%	55%	60%	65%	80%	80%

Transfers & Subsidies - Government: This funding source represents the amount of money that the municipality expects to receive from the government in the form of transfers and subsidies. The amounts for each year range from R104 million in 2024 to R110 million in 2033. These funds are typically used to finance specific projects, such as infrastructure development or social programs.—The Transfers & Subsidies over the 10 years range between 16% and 25% of the municipality's total funding for capital expenditure. The municipality will not be able to continue with the implementation of grant funded projects unless it is critical for service delivery purposes and therefor the budget must be reprioritised.

Borrowings: This funding source represents the amount of money that the municipality plans to borrow from financial institutions to finance capital projects. The amounts for each year range from R200 million in 2024 to R82.5 million in 2031 with no borrowings for 2032 and 2033. Borrowings are typically used to finance large capital projects that require significant upfront investment, such as building a new facility or acquiring a major asset.

Internal Generated Funds: This funding source represents the amount of money that the municipality expects to generate from its own revenue streams, such as taxes, fees, and fines. The amounts for each year range from a minimum R198 million in 2024 to R440 million in 2033. Internal generated funds are typically used to finance ongoing capital projects, such as maintenance and upgrades to existing infrastructure and facilities.

4.3 Recommendations from LTFP

The long-term financial plan is a critical document that outlines the financial sustainability of the municipality over a 10-year period. It plays a significant role in determining the affordability envelope, which is the limit to which the municipality can commit to capital projects without compromising its financial stability. The plan is based on assumptions and historic financial results. The process involves testing the plan using various financial ratios and general principles of affordability to determine the affordable capital expenditure and funding mix.

The detail long term financial plan is included in Annexure of the financial report. This plan is essential for the municipality as it helps them to make informed financial decisions that align with their strategic objectives and long-term goals.

Part 5

Prioritisation

5 Part 5: Prioritisation

5.1 What Does Prioritisation Entail

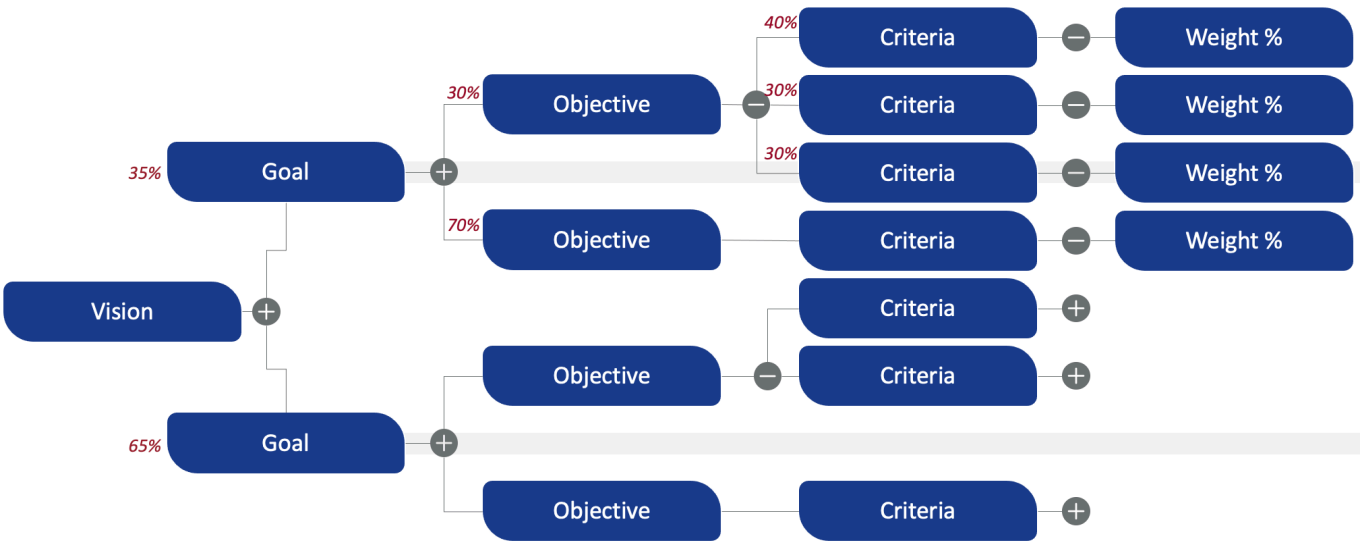
Prioritisation in a capital expenditure framework refers to the process of ranking and selecting investment projects based on their relative importance, measured in terms of their strategic alignment. This is typically done in order to ultimately allocate limited resources to the most deserving projects, and ensure that the organization's goals and objectives are met in the most efficient and effective manner.

Multi-criteria assessment frameworks are often used in prioritization, as they provide a systematic and comprehensive approach to evaluating and comparing projects. These frameworks consider multiple dimensions or criteria that are relevant to the organization, such as financial performance, strategic alignment, risk, and impact.

In a multi-criteria assessment framework, each project is rated against each criterion using a set of predefined weights and scales. The ratings are then combined to generate an overall score or rank for each project, which can be used to determine its priority. The selection of criteria and their relative importance is determined based on the specific goals and objectives of the organization, as well as any relevant constraints or limitations.

Using a multi-criteria assessment framework can help organizations to make more informed and objective decisions about their capital expenditure priorities, by taking into account a wide range of factors and considering trade-offs between different criteria. This can lead to better alignment with strategic goals, improved allocation of resources, and increased return on investment.

Figure 5-1: Prioritisation Framework



5.2 Prioritisation Rationale

A prioritisation rationale is a written explanation that outlines the reasoning behind prioritising projects, initiatives, or investments. The criteria used in the prioritisation process and how each project was evaluated and ranked are detailed in the rationale. This document provides transparency and accountability in the decision-making process and allows stakeholders to understand why certain projects were given priority.

The prioritisation rationale is influenced by the strategic goals and objectives of the organization. It typically includes objectives, criteria, and weights associated to each. Having a clear Prioritisation rationale can help build trust and support among stakeholders and serve as a reference for future

decision-making. The rationale is an important tool for ensuring that resources are allocated in a way that aligns with the organization's goals and objectives.

5.2.1 Objectives

The Stellenbosch Prioritisation model is a framework used to evaluate and rank capital projects based on multiple criteria. The objectives of this model are as follows:

- **Strategic Focus Area Alignment:** This objective assesses how well a project aligns with the strategic focus areas identified by the organization. This helps ensure that resources are being allocated to initiatives that support the organization's overall goals and objectives.
- **Master Plan Alignment:** This objective evaluates how well a project aligns with the organization's master plan, which outlines its long-term vision for growth and development. Projects that are in line with the master plan are given priority, as they support the organization's overall direction.
- **Urban Edge Alignment:** This objective assesses how well a project aligns with the organization's vision for the urban edge, which refers to the physical and functional boundaries of the city. Projects that are consistent with the vision for the urban edge are given priority as they help shape the city's future.
- **Adam Tas Corridor Alignment:** This objective evaluates how well a project aligns with the Adam Tas Corridor, which is a key transportation and development corridor in the city. Projects that support the Adam Tas Corridor are given priority, as they help to improve connectivity and support economic growth.
- **Beneficial Area Alignment:** This objective assesses the potential benefits a project will bring to the community, including economic, social, and environmental benefits. Projects that are expected to have a positive impact on the community are given priority, as they support the overall well-being of the city.

Figure 5-2: Prioritisation Objectives

5.3 Prioritisation Criteria

5.3.1 Strategic Focus Area Alignment

The Strategic Focus Area Alignment branch evaluates to which of the IDP strategic Focus Areas each capital project aligns to. The Strategic focus areas of Stellenbosch includes:

- **Good Governance and Compliance:** This area focuses on ensuring that the municipality is run in a transparent and accountable manner, with processes and policies in place to ensure compliance

with local and national regulations. This could include areas such as financial management, ethics, and corruption, and ensuring that all decision-making is in the best interest of the community.

- **Green and Sustainable Valley:** This area focuses on promoting sustainability and environmental responsibility in the municipality. This could include initiatives to reduce the municipality's carbon footprint, protect natural resources, and promote sustainable development practices.
- **Dignified Living:** This area focuses on improving the quality of life for all residents in the municipality. This could include initiatives to address poverty and inequality, promote affordable housing, and ensure access to basic services such as healthcare, education, and employment.
- **Safe Valley:** This area focuses on improving safety and security for residents in the municipality. This could include initiatives to reduce crime and improve emergency response times, as well as promoting community engagement and public safety awareness programs.
- **Valley of Possibility:** This area focuses on promoting economic growth and development in the municipality. This could include initiatives to attract investment, create jobs, and support small businesses and entrepreneurs.

5.3.2 Master Plan Alignment

The Master Plan Alignment branch evaluates to which degree each capital project aligns to the various sector master plans. The sector master plans include:

- Comprehensive Integrated Transport Plan;
- River Management Plan Update;
- Electrical Infrastructure Master Plan;
- The Development and Implementation of a Stormwater Management System;
- Integrated Waste Management Plan;
- Stellenbosch Municipality Bulk Water Resources: Water Resilience Master Planning for The Stellenbosch System, and;
- Roads Master Plan 2022 Update.

By prioritising projects emanating from the sector Master Plans, the municipality aims to leverage from expertise encapsulated within each masterplan. This is to take into consideration the comprehensive understanding of the needs, challenges, and opportunities in each sector, such as transportation, water, or housing. This information is used to develop a vision and goals for the sector that align with the overall development objectives of the municipality. By prioritising projects within the sector master plans, the municipality can focus its investment in areas that will have the greatest impact in achieving the desired outcomes for that sector.

Prioritising projects within sector master plans provides a clear and transparent process for decision-making, providing technical backing and comfort during the decision-making process. The process of Prioritisation within the sector master plans involves considering the needs and constraints of the sector, as well as the available resources, and determining which projects should receive priority based on a set of criteria. This process helps to ensure that investments are made in a strategic and evidence-based manner, and that they are aligned with the overall goals and objectives of the municipality.

5.3.3 Urban Edge Alignment

Urban Edge alignment branch evaluates to which degree each capital project aligns to the spatial boundary of the Urban Edge. Focusing investment within the urban edge is an important strategy for cities seeking to promote sustainable and equitable development. By taking advantage of opportunities in these areas, cities can help to create vibrant, liveable communities that meet the needs of all residents. It is further regarded as an important prioritisation criteria as it:

- Firstly, helps to mitigate urban sprawl and promote compact, sustainable development patterns. By investing in and revitalizing areas along the urban edge, cities can encourage more efficient use of land, reduce the need for long commutes, and minimize the negative impacts of urbanization on the environment.
- Secondly, result in investing within in the urban edge which can help to create new job opportunities and support local economic development. By developing and improving commercial, retail, and industrial centres within the urban edge, cities can attract new businesses and workers, which can help to drive economic growth and improve overall quality of life.
- Thirdly, guide investment spatially that helps to address social and environmental challenges, such as poverty, crime, and environmental degradation. By improving housing, transportation, and other infrastructure in these areas, cities can create safer and more liveable communities, which can help to support the health and well-being of residents.

5.3.4 Adam Tas Corridor Alignment

Adam Tas Corridor alignment branch evaluates to which degree each capital project aligns to the spatial delineation of the Adam Tas Corridor. Projects within this area are prioritised more than projects not within this area. This is important for Stellenbosch, especially in terms of spatial planning, financial management and infrastructure delivery:

- Spatial Planning: The Adam Tas Corridor alignment helps in creating a cohesive and integrated spatial development plan for the area. By prioritising projects within the corridor, it ensures that development takes place in an orderly and planned manner. This helps in avoiding haphazard and piecemeal development that can result in land-use conflicts, degradation of the environment, and reduced effectiveness of infrastructure investments.
- Financial Management: Prioritising projects within the Adam Tas Corridor alignment can also lead to cost savings and more efficient use of resources. By focusing on the corridor, it becomes possible to optimize the use of existing infrastructure and services, and to leverage economies of scale in the development of new infrastructure. This leads to a more cost-effective and efficient use of public funds.
- Infrastructure Delivery: Focusing investment within the Adam Tas Corridor also helps to ensure that adequate infrastructure is in place to support development. This includes both hard infrastructure, such as roads and water supply systems, as well as soft infrastructure, such as health and education services. By prioritising the development of infrastructure in the corridor, it becomes possible to provide the necessary support for sustainable and equitable growth and development in the area. This helps to create an enabling environment for economic growth, and to improve the quality of life for residents and businesses in the area.

5.3.5 Beneficial Area Alignment

The alignment of capital projects in terms beneficial areas evaluates to which degree each capital project aligns to the various wards of the municipality. Wards are used to align capital investment based on the following three arguments:

- Community Impact: Wards are used to align capital projects to the beneficial area because they allow for a localized approach to identifying areas where the project will have the greatest impact on the community. This enables decision-makers to prioritise projects that are expected to bring significant benefits to the people living in a particular ward, improving their quality of life and supporting the overall well-being of the city.
- Equity and Fairness: By aligning capital projects with wards, the Prioritisation process ensures that investment is distributed equitably across the city. Projects that bring significant benefits to

underserved or marginalized communities are given priority, reducing disparities, and promoting a more equitable and just society.

- Data-Driven Decision-Making: Using ward-level data in the Prioritisation process allows for a more informed and data-driven decision-making approach. By considering the specific locational attributes of capital projects, and their alignment to each ward, decision-makers can make more informed and strategic investment decisions, leading to better outcomes for the community and the municipality.

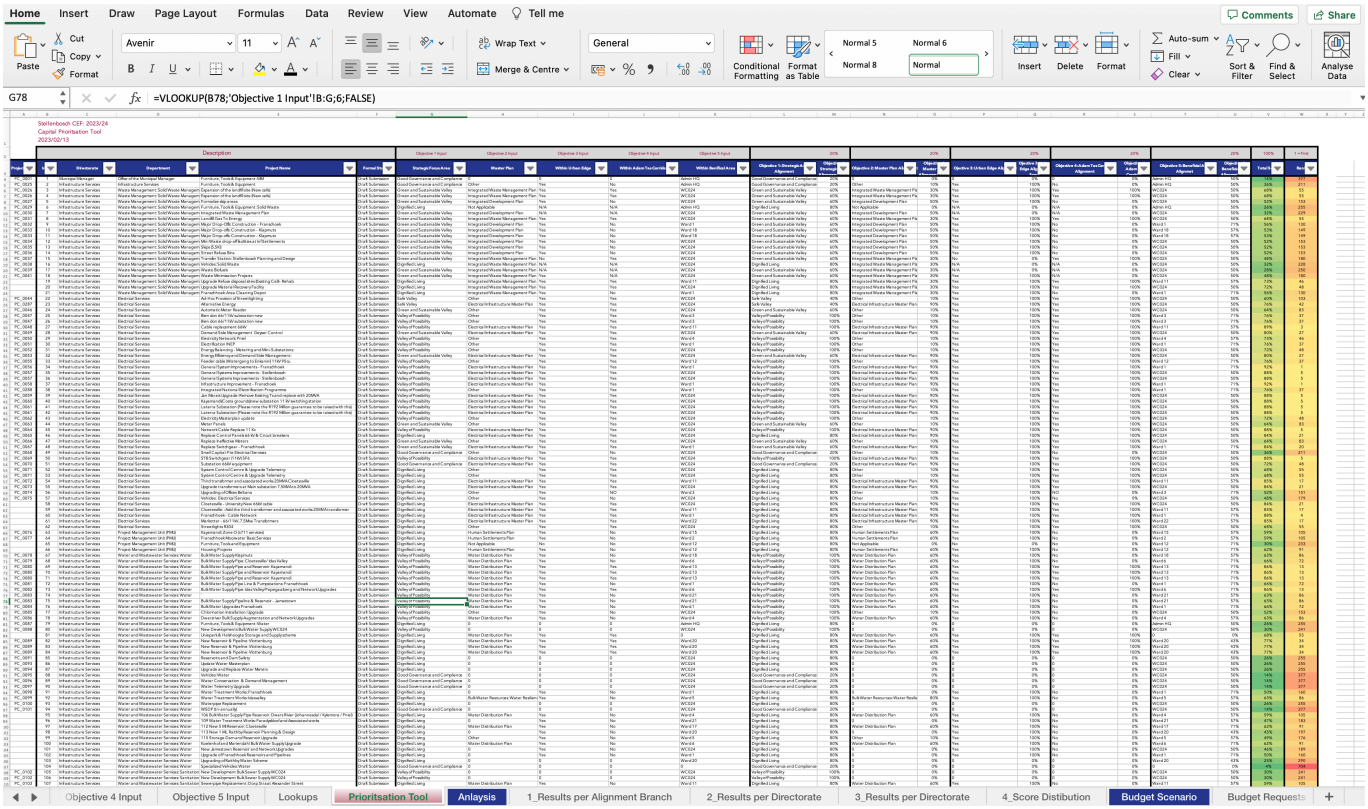
5.4 Prioritisation Tool

An excel-based project prioritisation tool was developed based on the prioritisation rationale of the municipality and is represented in Figure 5-3. It is based on a multi-criteria assessment framework, incorporating financial, environmental, social, governance (ESG), economic, technical, strategic, and spatial metrics. The aim of the model is to apply all capital projects identified and provide a relative ranking that can be used in the budget scenario section. There are several benefits of using an excel based tool, some of which are listed below:

- Centralised data storage: the excel-based project prioritisation tool allows you to store all project-related information in one place, making it easier to access and update.
- Accessible: the excel-based project prioritisation tool will be accessible to all the municipalities employees to use without the need for extensive training.
- Customizable: the tool allows you to customize your project prioritisation tool to fit your municipality's strategic objectives and priorities.
- Collaboration: the excel-based project prioritisation tool allows multiple users to access and edit the project prioritisation tool simultaneously, making it easy for teams to collaborate on project prioritisation.

Overall, the excel-based project prioritisation tool helps municipalities to make more informed decisions about project priorities, leading to more successful outcomes and better use of resources.

Figure 5-3: Excel Based Prioritisation Tool



5.5 Output of the Prioritisation Application and Results

A multi-criteria assessment framework is a decision-making tool that helps in evaluating different options based on multiple criteria. It involves a step-by-step process that assigns scores to each alternative based on their performance against the criteria. The scores are then converted into points for each criterion and project. The weightage of each criterion is pre-determined using a points system, where a higher number indicates a greater level of importance.

By applying this framework, decision-makers can assess multiple options objectively, based on their performance against various criteria. It helps in identifying the most suitable option that meets the needs of the organisation or project. This approach also ensures transparency in the decision-making process, as the criteria and weightage assigned to each criterion are clearly defined beforehand.

The outcome of a multi-criteria assessment framework is a set of scores or rankings for each alternative being evaluated, based on their performance against multiple criteria. The scores are typically presented as a set of numbers, where each number represents the performance of a specific alternative on a particular criterion.

5.6 How to determine prioritisation results

5.6.1 Step 1: Define The Relative Preferences for Each Goal That Was Set Out

Weights for relative preferences are best determined through consultative stakeholder debates to prioritise goals. In some cases, all goals may be given equal weight, indicating their equal importance.

5.6.2 Step 2: Define Relative Preferences for Each Objective That was Set Out

Objectives vary in their contribution to achieving a goal, with some being more important than others and contributing more to the project's score. This approach allows for prioritisation principles to become important discussion points, rather than individual project merits. Using this model allows for fair comparison of all projects, regardless of their origin or complexity.

5.6.3 Step 3: Set-Up Each Criterion to Evaluate Relative Importance

Objectives are evaluated using criteria that can be derived from a performance indicator framework or through spatial, qualitative, or quantitative measures. It is crucial to avoid any unfair discrimination, ensuring that each project has an equal opportunity to compete in the criterion's test. This is achieved by defining evaluation criteria for each project.

5.6.4 Step 4: Data Collection & Standardisation: Project Data

Availability of suitable data is crucial to measure each project. If the base data is not readily available, a proxy criterion can be used to address the main issue. Typical data required for Prioritisation include project name, implementing department, project scope, spatial details, project cost, and project duration.

5.6.5 Step 5: Calculate Score

After defining criteria, weights, evaluation criteria, and setting up a project portfolio, the projects are subjected to the multi-criteria assessment framework, which ranks them based on their attributes, providing a relative ranking of projects from most important to least important.

5.6.6 Step 6: Assess outcome

As with any model, this step enables the decision maker to calibrate the model to ensure that the model is reliable in its results, and provides justifiable validity to the outcome of the model.

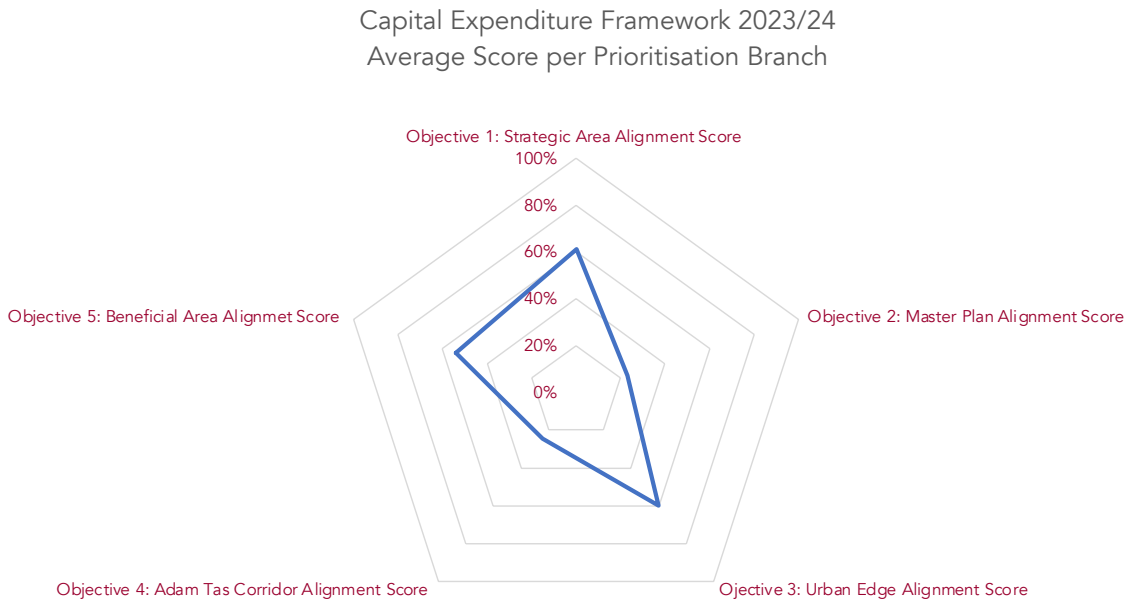
5.7 Prioritisation Results

The Capital Prioritisation Model (CPM) is a critical tool used by municipalities to identify and rank capital projects based on their potential impact and benefit to the community. Prioritising capital projects is a critical process that involves identifying and ranking impactful projects for government investment. This helps allocate resources and focus efforts on the municipality's strategic overview. The next section will discuss the relative ranking resulting from the CPM.

5.7.1 Project Scores

A cluster analysis is a statistical technique used to group data points that share similar characteristics or features. In the context of the Capital Prioritisation Model, the cluster analysis can be used to group projects based on similarities in their objectives, resource requirements, or potential impact. This can be illustrated through the number of project scores which relates to the different branch alignments as shown in Figure 5-4.

Figure 5-4: Average Score per Prioritisation Branch



From Figure 5-4, the following are noted:

- Objective 1 has majority of the project scores which is the Strategic Area criteria of the model. This could be attributed to the data completeness of the capital project's information – mainly leveraging from the details regarding each project's strategic alignment. By prioritising each capital project in terms of its alignment with these strategic focus areas, the municipality can ensure that its resources are being used in the most effective and efficient way possible.
- Objective 3 that evaluates the degree to which capital projects align with the spatial boundary of the urban edge has the second highest alignment, which is indicative of promoting sustainable and equitable development. This prioritisation criterion helps to mitigate urban sprawl, promote compact and sustainable development patterns, create new job opportunities, support local economic development, whilst addressing social and environmental challenges.

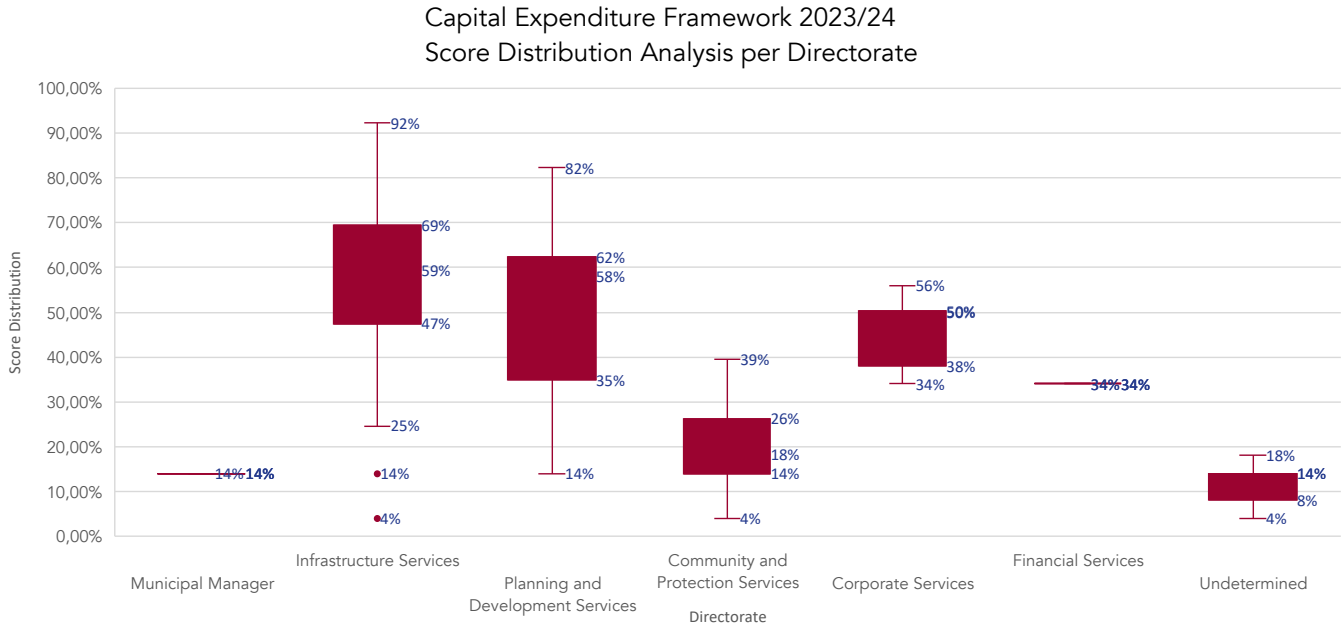
- The branch of the model related to Objective 2 and 4 contributes least to total project scores signifying that either more information or criteria is required or that more effective planning is required in terms project budgeting.

Having this kind of view over the data allows the municipality to gain insights into the alignment of different projects with the prioritisation model and its criteria. This information can then be used to make informed decisions about which projects to prioritise and allocate resources towards, based on their alignment with the specific objectives and goals of the model. For example, the municipality can use this information to identify gaps in project alignment and adjust their planning and budgeting accordingly. They can also identify areas where more emphasis is needed in terms of financial alignment or locational analysis to improve project outcomes and maximize their impact. Overall, having a comprehensive understanding of project alignment to each branch or theme can help the municipality make more informed decisions about how to either enhance the prioritisation criteria, or to support specific directorates within the municipality.

5.7.2 Score Distribution

When comparing project scores within Stellenbosch Municipality, it can help identify which projects are more strategically aligned with the municipality's strategic goals and rationale. Looking at the overall scores of the projects within the municipality is illustrated in the box and whisker diagram shown in Figure 5-5. A box and whisker diagram is a visual tool that helps to summarise a range of data points. It shows the median score of a unit, the minimum and maximum scores, and the distribution of scores between the 25th and 75th percentile. The average score of the unit is depicted by the "x". the ends of the whiskers are the maximum and minimum scores. Projects scoring between the minimum value and the 25th percentile are arranged along the bottom whisker, and projects scoring between the maximum value and the 75th percentile are arranged along the top whisker and the box.

Figure 5-5: Score Distribution per Directorate



The results show the following:

- Outliers: Infrastructure Services is the only directorate that are represented by outliers. This means that some of their projects performs exceptionally worst compared to all the other projects.
- Skewness: The size and position of each block per organisation is indicative of skewness in data. For instance, directorates such as Planning and Development Services and Infrastructure Services,

is relatively balanced compared to all other organisations, which shows a skewness to the lower end of the scoring range.

- Grouping: Directorates such as Municipal Manager and Financial Services scores are all relatively grouped around the same score range indicating misalignment with the priorities encapsulated in this model.

This analysis can further be useful in:

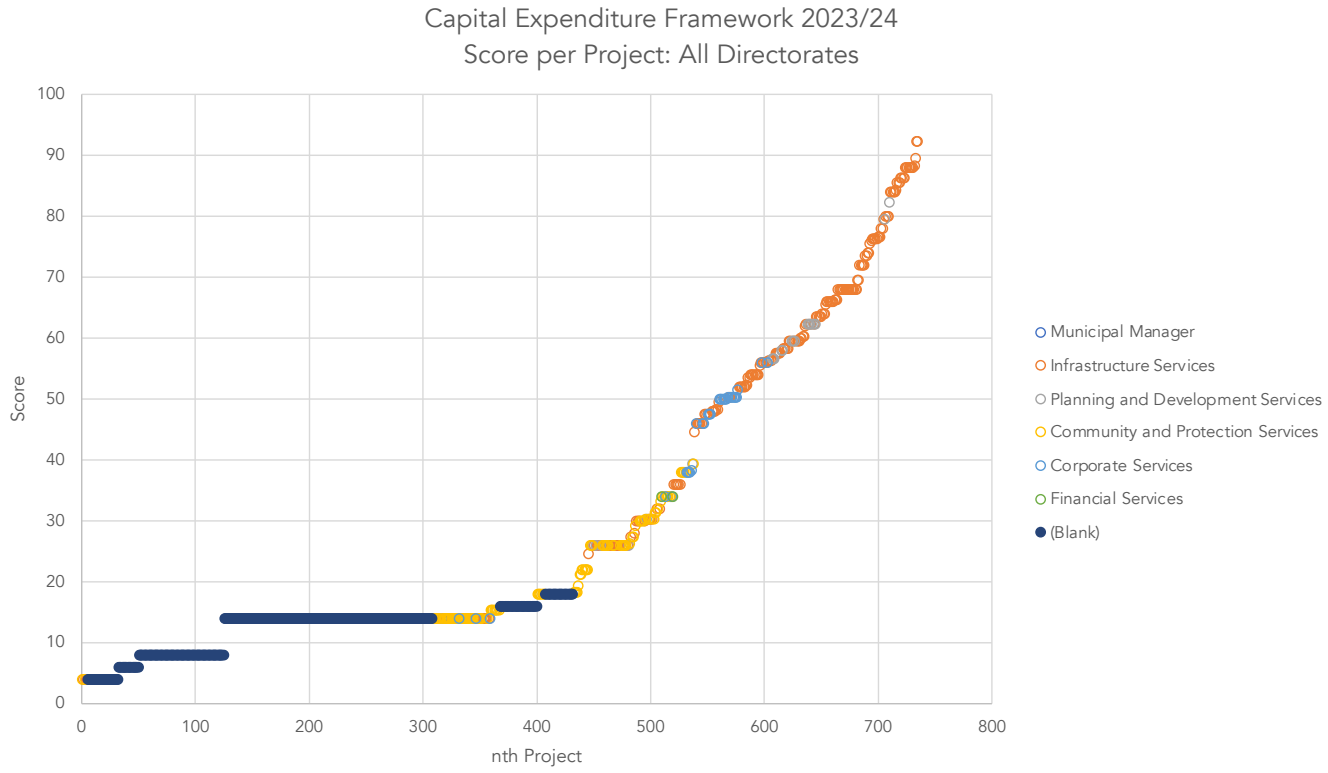
- Identify areas of misalignment in municipal planning and budgeting processes. Specifically, it can help the municipality to target resources and support towards specific directorates that may be struggling to align their projects with the strategic objectives of the model, and;
- By identifying outliers and skewness in the data, the municipality can also gain insights into which directorates are performing exceptionally well or poorly in their planning practices and use that information to inform resource allocation and support strategies.

Overall, this analysis can help the municipality to make more informed decisions about how to support directorates with their planning and budgeting processes, ultimately leading to more effective and aligned project implementation across the province.

5.7.3 Project Score Analysis per Directorate

The prioritisation model is used to rank projects in order of importance. To validate the model, the distribution of scores of projects must be considered. A fair score distribution should show a gradual increase in the number of projects with respect to the score. A clustered distribution of scores could indicates bias within the model, or an under representation of data attributes. For example, if most projects do not have a location, or a budget, then majority of projects will score low resulting in a clustered distribution – even if the model is well calibrated.

Figure 5-6: Score per Project for All Directorates



The following observations can be noted from Figure 5-6:

- A gradual increase in project scores indicating an unbiased model.
- Directorates such as Infrastructure Services, Planning & Development Services and Community & Protection Services represent a wide range of scores, potentially because of the number of projects as well as the data completeness of the said projects.
- Conversely, Financial Services and Municipal Manager directorates do not represent a wide spread of scores by projects, neither are they representative of high scores, indicating that these directorates are not aligned or responsive in terms of the prioritisation model.

This is useful to understand for various reasons. Firstly, to verify that the model is not representative of an unfairly biased outcome and secondly, because of the limited variability in scores in some organisations, it could be suggested that additional criteria should be applied.

5.7.4 Project Distribution per Project

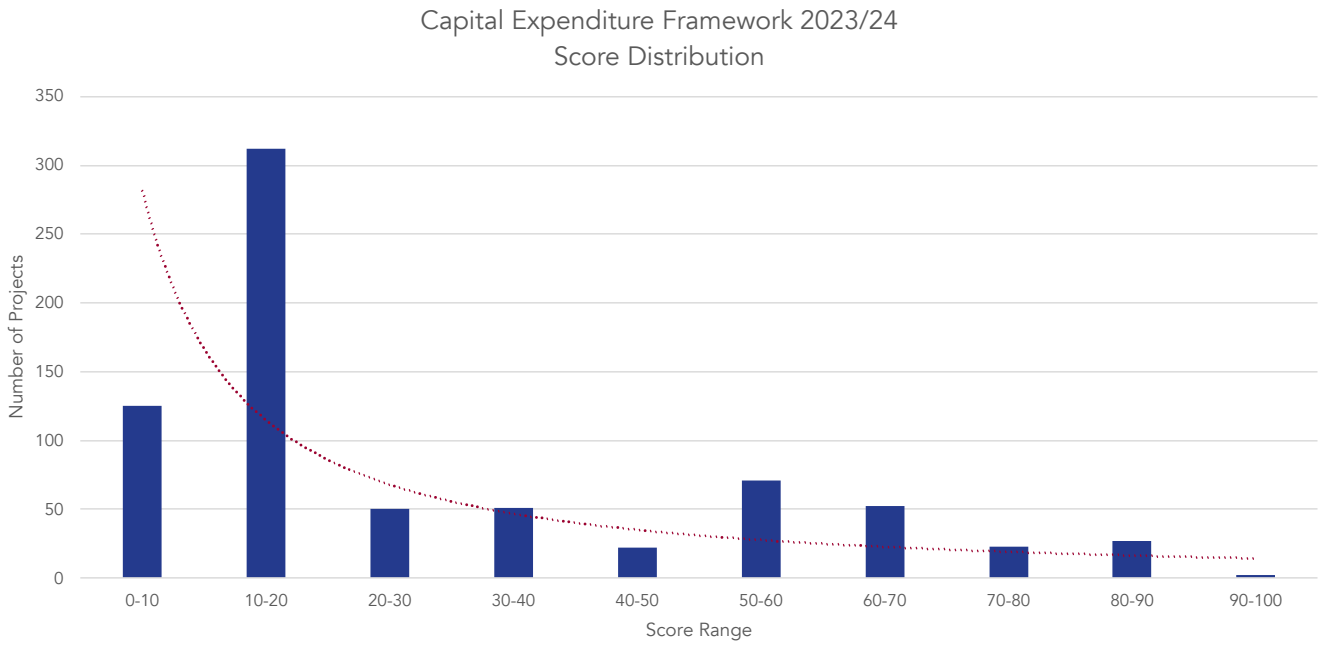
Score distribution is an important tool for visualising and analysing prioritised projects. By looking at the distribution of scores, we can identify trends and patterns in the data, and determine whether there are any gaps or biases that need to be addressed. One measure of distribution is skewness, which indicates the extent to which the data is asymmetrical. A perfectly symmetrical distribution has a skewness of zero, while a positive skewness indicates that the data is skewed to the right, with a longer tail on the positive

side of the axis. In the context of project scores, a positive skewness indicates that there are a greater number of projects with lower scores and fewer projects with higher scores. This could suggest:

- that there is a need for standardisation of data collection, to ensure that all projects are evaluated using the same criteria, and;
- a need for an additional criterion to enhance the prioritisation process.

Overall, understanding the skewness of the score distribution can help the municipality improve their project planning practices and ensure that resources are allocated effectively.

Figure 5-7: Score Distribution



From Figure 5-7 a positive skewness can be identified, implying that several projects either may not have all attributes in place to participate in the scoring process, or do have attributes, but do not score well with respect to the prioritisation model. If the projects in the lower end of the range is ignored, then an approximation towards a normal distribution can be observed. The effect of the positive skewness is useful to observe as it indicates that from the vast number of projects, there are projects soring very well – understanding why, could lead to alternative project preparation and planning practices for other projects.

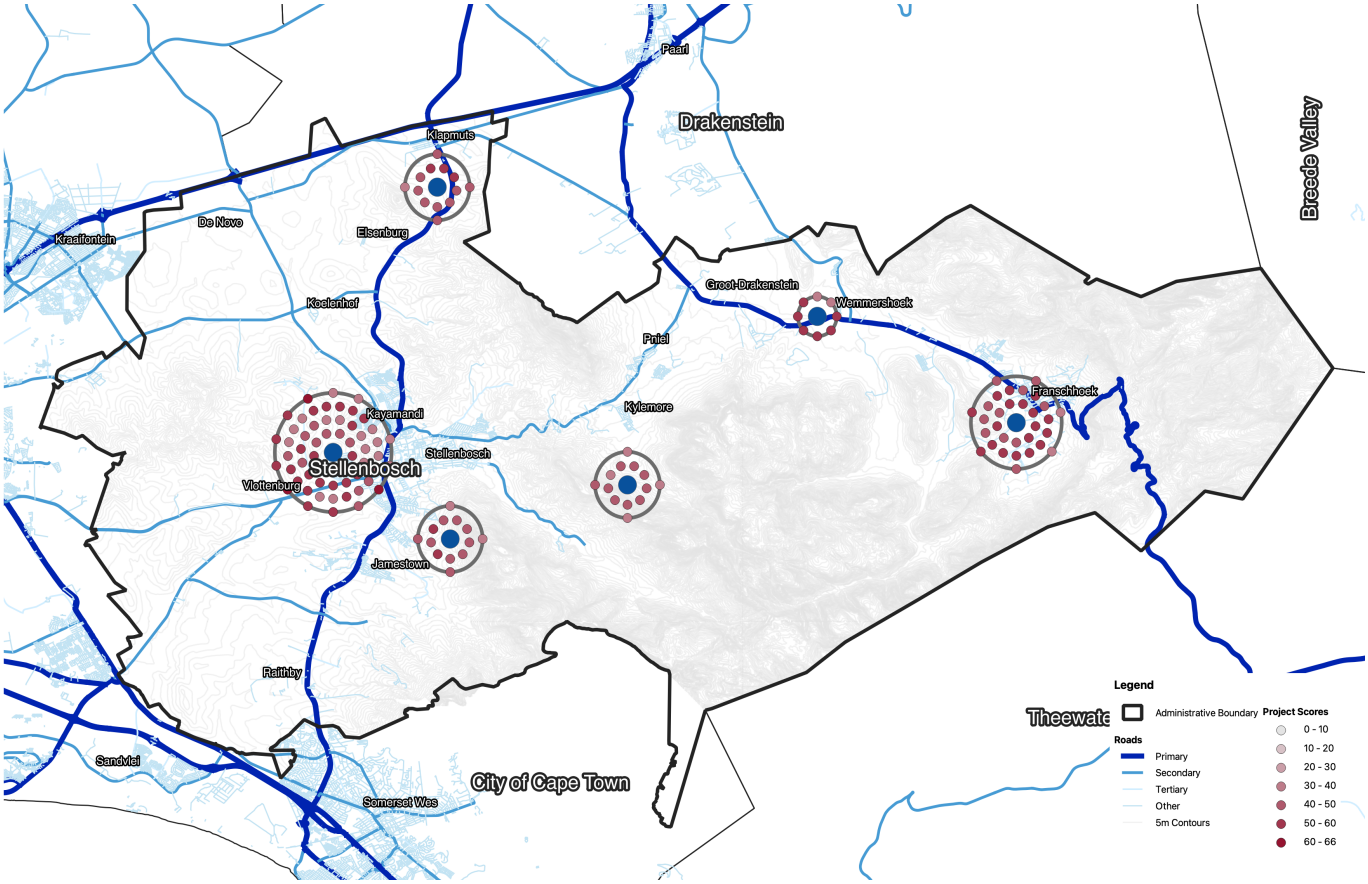
In summary, understanding the score distribution of prioritised projects is a crucial step in ensuring that resources are allocated effectively and equitably. Skewness is one measure of distribution that can help decision-makers to identify patterns and gaps in the data, and to make informed decisions about which projects to fund and how to improve the prioritisation process.

5.7.5 Spatial Alignment

The prioritisation tool provides a significant advantage in that it allows for both alphanumeric and spatial data analytics. This means that spatial inputs can be used to prioritise projects, allowing for a more targeted approach. This is not only a requirement under SPLUMA, but it is also an important policy objective under the IUDF. Spatially based prioritisation ensures that projects are aligned with spatial strategy and are targeted towards the areas that need them the most from a spatial equity, spatial sustainability, spatial governance, and spatial planning perspective.

This approach enables public sector to make more informed decisions about where to allocate resources and can lead to better outcomes for the community. Ultimately, the use of spatial data analytics in the prioritisation process helps to ensure that resources are allocated efficiently and effectively, resulting in more equitable and sustainable development. Figure 5-8 represents the concentration of scores of projects spatially.

Figure 5-8: Spatial Representation of Project Scores



From Figure 5-8 respectively, the following can be explained:

- Spatial Concentration: majority of projects is located in and around the urban centres of Stellenbosch and Franschhoek which indicates that investment is aligned in accordance with the current spatial structure of Stellenbosch. Prioritising projects in urban centres leads to stronger economic growth and sustainable development as these areas typically have better access to services, amenities and infrastructure which attracts business and investors.
- Projects scoring average to medium, are in areas like Jamestown, Klapmuts and south of Kylemore. This indicates that the municipality is prioritising spatial equity and development beyond the typical urban centres.

5.8 What is the difference between Prioritisation and a Budget Scenario

Prioritisation and budget scenarios are related but distinct concepts in the local government space. Prioritisation involves identifying and ranking the most important projects that a municipality should undertake based on their level of strategic importance and impact on the community. Prioritisation is typically done during the planning process, before the budget is developed, and involves determining which initiatives should receive the most attention and resources.

Budget scenario, on the other hand, involves allocating resources to the initiatives that have been prioritised. It involves creating a financial plan that outlines how much money will be allocated to each

initiative, and how it will be spent. Budget scenarios are developed based on various factors, such as a municipality's financial resources, priorities, and objectives.

It is important to understand that just because an initiative is prioritised and deemed strategically important, it does not necessarily mean that it will be allocated funds in the current budget cycle. Budgets are developed based on available resources, and some priorities may have to be deferred or delayed until a municipality has sufficient funds to allocate to them.

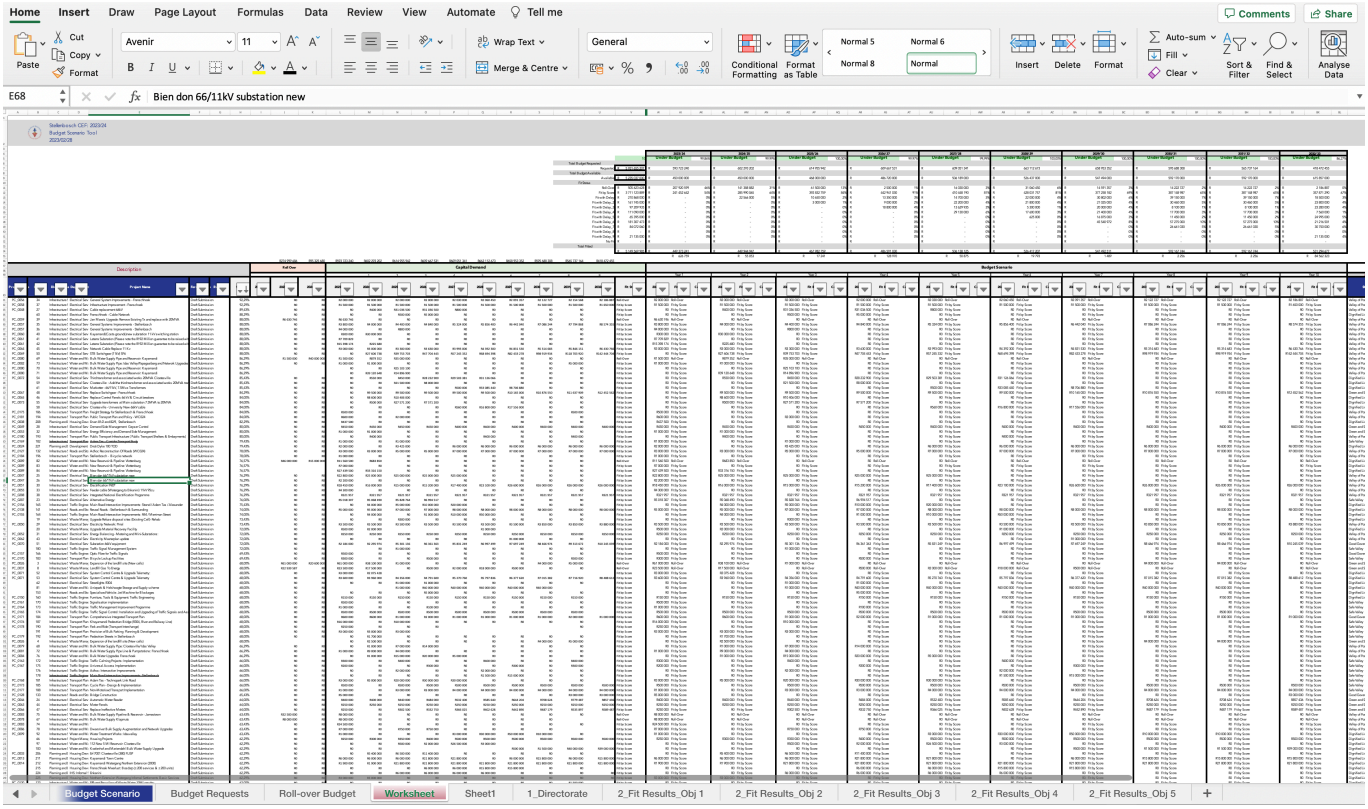
The use of software/tools to facilitate the prioritisation and budget scenario process in local government can bring several benefits that can help streamline and optimize the decision-making process.

5.8.1 Budget Scenario Methodology

Developing a budget scenario is a systematic approach that builds on the annual capital planning process to determine which projects should be included in the 10-year capital expenditure framework and annual draft budget based on pre-defined rules and scenario parameters. The main objectives of this section include defining the budget determination process, modelling demand, planning capital expenditure, and ensuring affordability. The Stellenbosch Local Municipality uses the budget scenario methodology annually to determine the draft Medium Term Revenue and Expenditure Framework (MTREF) capital budget. To prepare for this, they assess the outcomes of the demand quantification process, prepare an integrated infrastructure investment framework, align the Long-Term Financial Model (LTFM) to budget scenario parameters, ensure a balanced funding mix, and determine a relative ranking of importance for projects. This is done by incorporating the outcomes of the Stellenbosch Capital Prioritisation Model (CPM) into the budget scenario preparation process.

An excel-based tool was developed to sequence and fit the prioritised projects to the available/affordable funding over the analysis period and is represented in Figure 5-9. Where the previous phases determined the capital needs (demand), and the available funds (supply), this tool enabled the municipality to determine which demand will be met, by the available supply (in line with the LTFM outputs provided by the municipality). It must be noted that the first three years output of the budget fit process represents the MTREF budget and therefore develops a MTREF budget for consideration by the municipality.

Figure 5-9: Excel-Based Budget Scenario Tool



5.8.2 Preparing for a Budget Scenario

To initiate the process of applying a budget scenario, several input variables should be prepared. These variables provide the content of the budget scenario and how the budget scenario parameters are applied, to achieve a draft capital budget. These input variables include the project status and relative project score.

5.8.2.1 Project Status

During the budget scenario process, project status is given priority. This status is determined by considering projects that are Assets Under Construction (AUCs), committed projects from previous budgets, and projects that are ready for implementation.

5.8.2.2 Relative Project Score

The CPM is a methodology to rank projects based on their alignment to the municipality's objectives. It derives a numerical value to determine a project's priority. During budget scenario preparation, the CPM is applied to obtain an order of importance for projects and capital demand. The relative importance determines budget allocation within the scenario's parameters.

5.8.3 Budget Scenario Set Up

To create a budget scenario template, parameters are used to set rules for planned capital expenditure. The template determines the available capital budget for the MTREF and is distributed based on grant allocations in the DoRA. The LTFM determines a 10-year affordability envelope.

5.8.3.1 Applying a Budget Scenario

Projects and requested capital budgets are assigned a status and fitted into the budget scenario template using a predefined routine. This routine determines the sequence of project allocation and corresponding financial year. The status of projects in the draft capital budget is assigned in the following order:

- Committed projects have top priority due to contractual commitments, followed by provisioned-in projects. Provisioned-in projects are fitted without delay if there is available budget but cannot exceed the allocated budget.
- Projects fitted with delay are assigned to the first available financial year due to unavailability in the budget scenario template.
- Projects fitted are allocated a budget based on their relative project score, provided there is available budget, and cannot exceed the total allocated budget within the template. Projects fitted with delay are assigned a delay to the first year with available funds due to insufficient budget allocation in the template.

5.8.3.2 Negotiated Adjustments

Once a draft capital budget has been developed using the budget scenario process, the portfolio of projects which make up the draft capital budget needs to undergo several municipal approvals.

It is inconceivable that any portfolio of capital projects, which has been prepared in a complex multi-disciplinary collaborative framework will meet all the expectations. Therefore, a negotiated adjustment process is accommodated in the budget scenario process whereby projects can be added or removed from the portfolio of capital projects based on motivations and representations made during budget forums.

The next pat of this document unpack the results of the budget scenario.

Part 6

Capital Expenditure Programme

6 Part 6: Capital Expenditure Programme

6.1 What is the Capital Expenditure Programme

A Capital Expenditure Programme (CEP) refers to a detailed programme that outlines the municipality's list of projects that is required to be implemented over a multi-year period. This program is the municipality's list of projects that are prioritised according to the strategic prioritisation process in which projects were given a ranking. Using the budget scenario tool, these projects were allocated resources efficiently whilst ensuring that their capital spending aligns with the affordability envelope and demand quantification of the municipality.

There are multiple benefits of having this overview, some of which are listed below:

- Improved service delivery: A Capital Expenditure Programme identifies the most essential projects required to improve service delivery in the municipality. It allows for more effective planning and allocation of resources to meet the needs of the population.
- Strategic planning: A Capital Expenditure Programme enables the municipality with a strategic plan, based on an understanding of the projects that are necessary to meet the needs of the municipality. It allows for a long-term vision to be developed that is aligned with the goals of the municipality.
- Increased efficiency: By understanding the projects that are essential, the municipality can ensure that resources are used efficiently. Projects are already prioritised based on their importance, and resources have been allocated accordingly.
- Attraction of investment: A comprehensive overview of necessary projects can help attract investment to the municipality. It provides potential investors with a clear understanding of the opportunities that exist in the area and the projects that are necessary to support growth and development.
- Attraction and retention of residents: By addressing the needs of the population through these essential projects, the municipality can attract new residents whilst retaining the current population. This can lead to increased economic activity and a higher quality of life for those living in the region.

In essence, the CEP furnishes the municipality with a comprehensive perspective on the essential undertakings it must carry out to fulfil its service delivery responsibilities, while concurrently enticing investment, commerce, and inhabitants from throughout the province.

6.2 Budget Scenario Results

As municipalities strive to deliver basic infrastructure services and meet the needs of their communities, budgeting is a critical process. Budget scenarios help municipalities assess the financial impact of various decisions and align resources with their strategic priorities. In this section of the report, we present the results of the budget scenario results using different perspectives, detailing the proposed expenditure and revenue for each area over the MTTEF and 10-year horizon. This section aims to provide insight into how the municipality intends to allocate its resources to meet its objectives. Understanding the budget scenario results can help stakeholders assess the municipality's financial performance and ensure that resources are being used effectively and efficiently to serve the community.

6.2.1 Planned Capital Expenditure Review

Understanding the planned capital expenditure over the next 10 years in a municipality is crucial for effective long-term planning. A clear understanding of the planned capital expenditure enables municipalities to prioritise the right capital projects, allocate resources accordingly, and ensure that funds are available to complete critical projects. This understanding can also support infrastructure maintenance and improvement, economic growth, and development, and promote transparency and accountability in government. In this section, we will explore the importance of understanding the planned capital expenditure for 10 years in a municipality.

The overall planned capital expenditure is estimated at R5 302 851 329 across the planning period, after the second capital demand capturing cycle. Table 6-1: Planned Capital Expenditure and Affordable Capital Expenditure outlines the total planned capital expenditure per annum for the next 10 years.

Table 6-1: Planned Capital Expenditure and Affordable Capital Expenditure

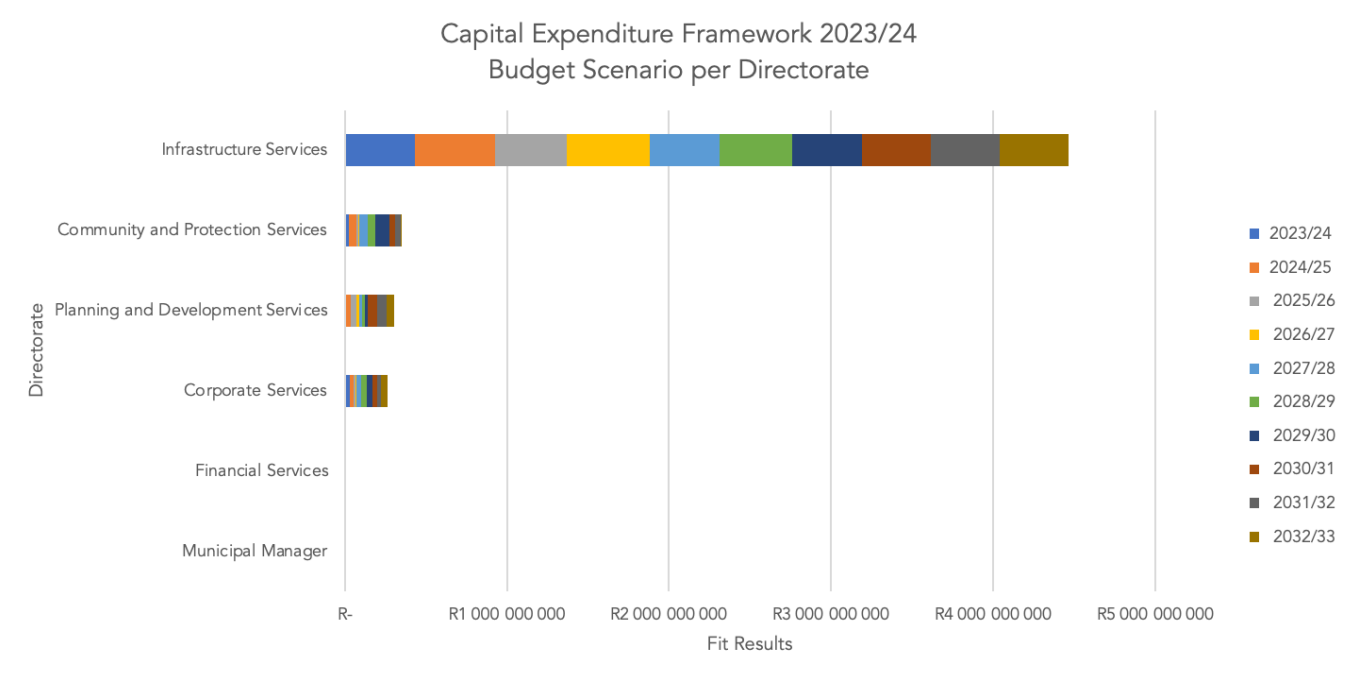
Year	Total	Percentage
2023/24	R498 549 865	9%
2024/25	R581 895 464	11%
2025/26	R494 955 975	9%
2026/27	R543 177 234	10%
2027/28	R505 342 841	10%
2028/29	R538 642 233	10%
2029/30	R549 981 481	10%
2030/31	R549 951 619	10%
2031/32	R540 202 163	10%
2032/33	R500 152 455	9%
Total	**R5 302 851 329**	**100%**

Having this view of the long-term capital planning is vital for municipalities as it enables them to allocate resources appropriately and prioritise the right capital projects. By allocating capital expenditures over time, municipalities can maintain fiscal responsibility and avoid compromising essential services such as housing, public safety or education.

6.3 Budget Scenario Analysis per Directorate

In this section of the report, we will examine the budget scenario per directorate in a municipality, detailing the proposed expenditure and revenue for each directorate. Figure 6-1 illustrates how much money is allocated to each directorate, from which we can gain insight into the municipality's priorities and how it intends to allocate its resources to serve the community.

Figure 6-1: Budget Scenario per Directorate



As depicted in Figure 6-1, the municipality has allocated most of its funds to both Infrastructure Services and Planning and Development Services over the 10-year planned capital expenditure, which suggests that the municipality recognises the importance of investing in these areas for the long-term benefit of the municipality:

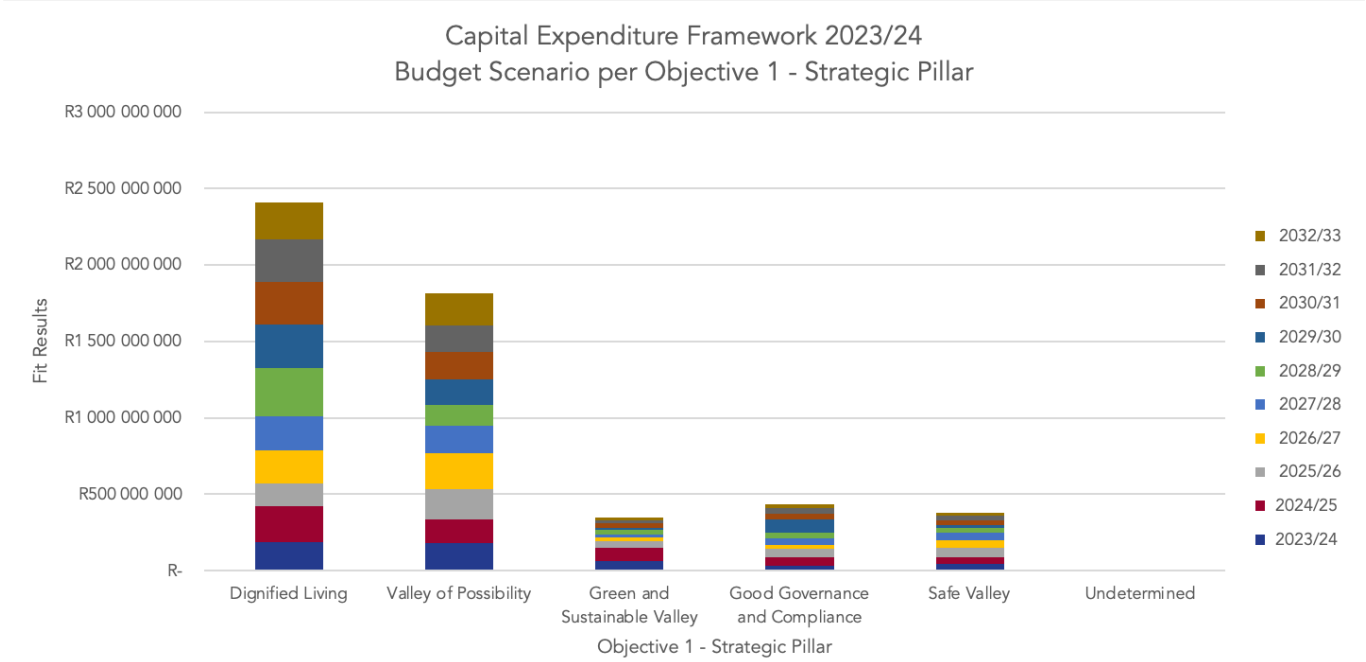
- Allocating funds to Infrastructure Services can help ensure the proper maintenance and improvement of the municipality's infrastructure, including roads, bridges, and water supply systems. This investment can lead to improved safety, reduced maintenance costs, and increased economic activity by making the municipality more attractive to businesses and residents.
- Allocating funds to Planning and Development Services can facilitate economic growth and development by investing in transportation infrastructure, public spaces, or cultural facilities. This investment can attract new businesses and residents, leading to increased economic activity and job creation.
- Directorates such as Community and Protection Services and Corporate Services, also have funds allocated to it however, it is not as large as the others.

Overall, allocating funds to both these directorates over the 10-year planned capital expenditure demonstrates the municipality's commitment to meeting the needs of its municipality by investing in critical areas for sustainable growth and development.

6.4 Budget Scenario Analysis per Objective 1: Strategic Alignment

By evaluating the budget in relation to its conformity with the municipality's strategic focus areas, the allocation of resources can be directed towards capital projects that support the municipality's overall objectives and priorities. This is exemplified in Figure 6-2.

Figure 6-2: Budget Scenario per Objective 1



Upon analysing Figure 6.2, it becomes apparent that the municipality has prioritised both social and economic development by allocating funds towards the strategic objectives of Dignified Living and Valley of Possibility over the 10-year planned capital expenditure:

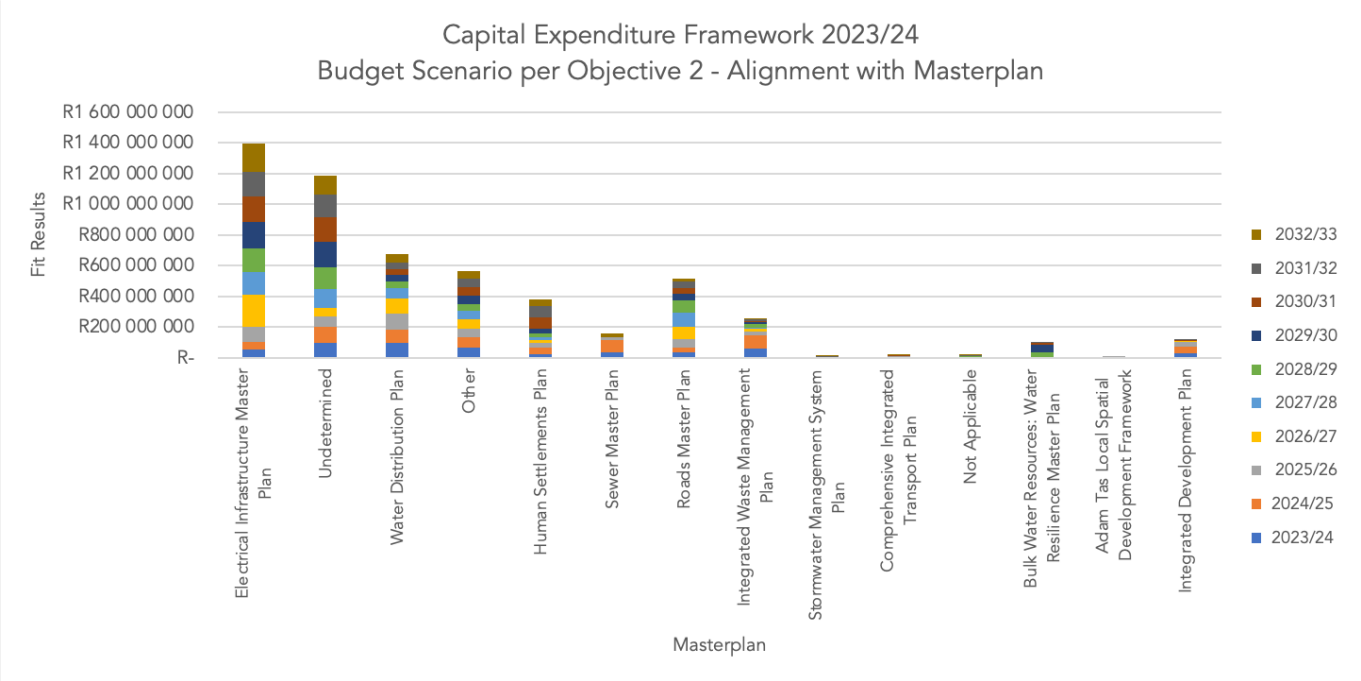
- Allocating funds to Dignified Living helps to ensure that the municipality is investing in capital projects that improve the quality of life for its residents. By addressing poverty and inequality, promoting affordable housing, and ensuring access to basic services such as healthcare, education, and employment, the municipality can create a more inclusive and equitable community over the 10-year horizon.
- Allocating funds to Valley of Possibility facilitates economic growth and development by investing in capital projects to attract investment, create jobs, and support small businesses and entrepreneurs. Over the 10-year horizon, this can lead to increased economic activity, job creation, and an overall improvement in the municipality's economic health.
- A limited amount of money is allocated to the strategic objective of Good Governance and Compliance over the complete 10-years, which could mean that the municipality may face challenges in maintaining good governance and compliance over the long term. Good governance and compliance require sustained efforts and resources to ensure that policies and processes are regularly reviewed and updated, and that staff members are trained and supported in their roles. If there is a limited budget associated to this objective, there is a risk that the municipality may regress to previous, ineffective, or non-conforming practices.

Allocating funds to the strategic objectives of Dignified Living and Valley of Possibility over the 10-year planned capital expenditure demonstrates the municipality's commitment to both social and economic development. However, it is important ensure sufficient funding is allocated to the other objectives as well, particularly Good Governance and Compliance.

6.5 Budget Scenario Analysis per Objective 2: Master Plan Alignment

Master Plan Alignment involves assessing the degree to which capital projects align with the municipality's sector master plans. This process leverages the expertise and understanding within each plan, including sector-specific challenges and opportunities. By prioritizing and budgeting for projects within the sector master plans, the municipality can focus its investment on areas with the greatest impact on achieving desired outcomes. Figure 6-3 illustrates the allocated funds per masterplan over the next 10-years in the municipality.

Figure 6-3: Budget Scenario per Objective 2



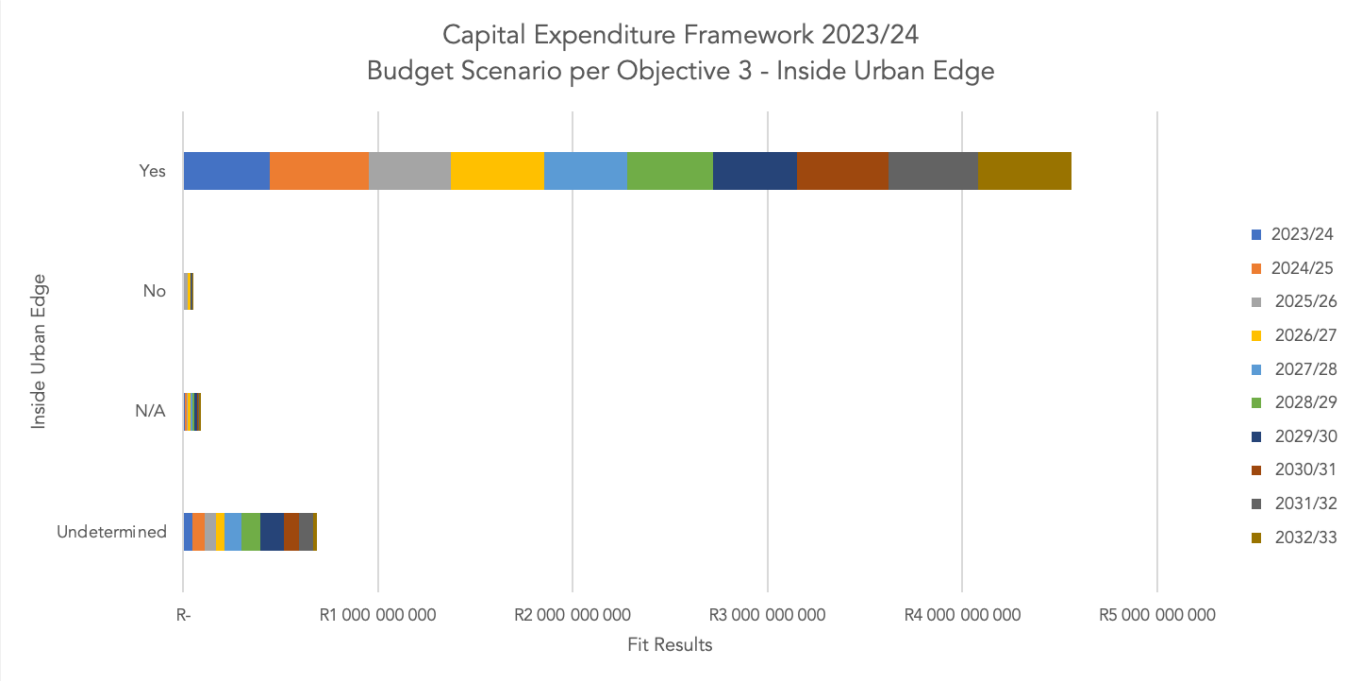
The 10-year capital expenditure allocation for each masterplan significantly impacts the municipality's development. Key points to note include:

- Majority of the allocated budget goes towards the Electrical Infrastructure Master Plan, which indicates that the municipality is prioritising the development and improvement of its electrical infrastructure. This may be due to the increased demand for electricity as the population grows or due to an outdated or insufficient electrical infrastructure.
- The allocation to the Human Settlements Plan and Water Distribution Plan indicates that the municipality is committed to addressing housing needs and providing adequate housing for its residents, as well as recognizing the importance of ensuring that its residents have access to clean and reliable water.
- The portion of projects that will be funded originating to the "Undetermined" category is a matter of concern as many capital projects are not assigned to any of the municipality's masterplans. This lack of clarity has the potential to create concern and uncertainty, which may affect decision-making and implementation processes.
- The allocation to the Integrated Waste Management Plan and to the Sewer Master Plan raises concerns about the municipality's commitment to environmental sustainability and sanitation. These areas are crucial for the health and well-being of the municipality's residents and require sustained investment to ensure their continued operation and improvement.

6.6 Budget Scenario Analysis per Objective 3: Urban Edge

Investing in areas within the urban edge is necessary to promote sustainable and equitable development. By taking advantage of opportunities within these areas, cities can create vibrant and liveable communities that meet the needs of all residents. Therefore, in this analysis, we will examine the results of the budget scenario through the lens of the urban edge, evaluating the degree to which each capital project aligns with the spatial boundary of the urban edge. Figure 6-4 provides insight into how the budget has been allocated to projects within the Urban Edge.

Figure 6-4: Budget Scenario per Objective 3



From Figure 6-4, it appears that the majority of the capital expenditure is allocated to capital projects within the urban edge over the 10-year horizon. This is a significant proportion of the budget, indicating a strong commitment to promoting sustainable and equitable development in the municipality. Over the course of the 10-year period, this investment in urban edge capital projects is likely to have a number of positive impacts on the municipality. By promoting more compact, walkable communities, the investment could help to reduce traffic congestion and air pollution, while also making it easier for residents to access the services and amenities they need.

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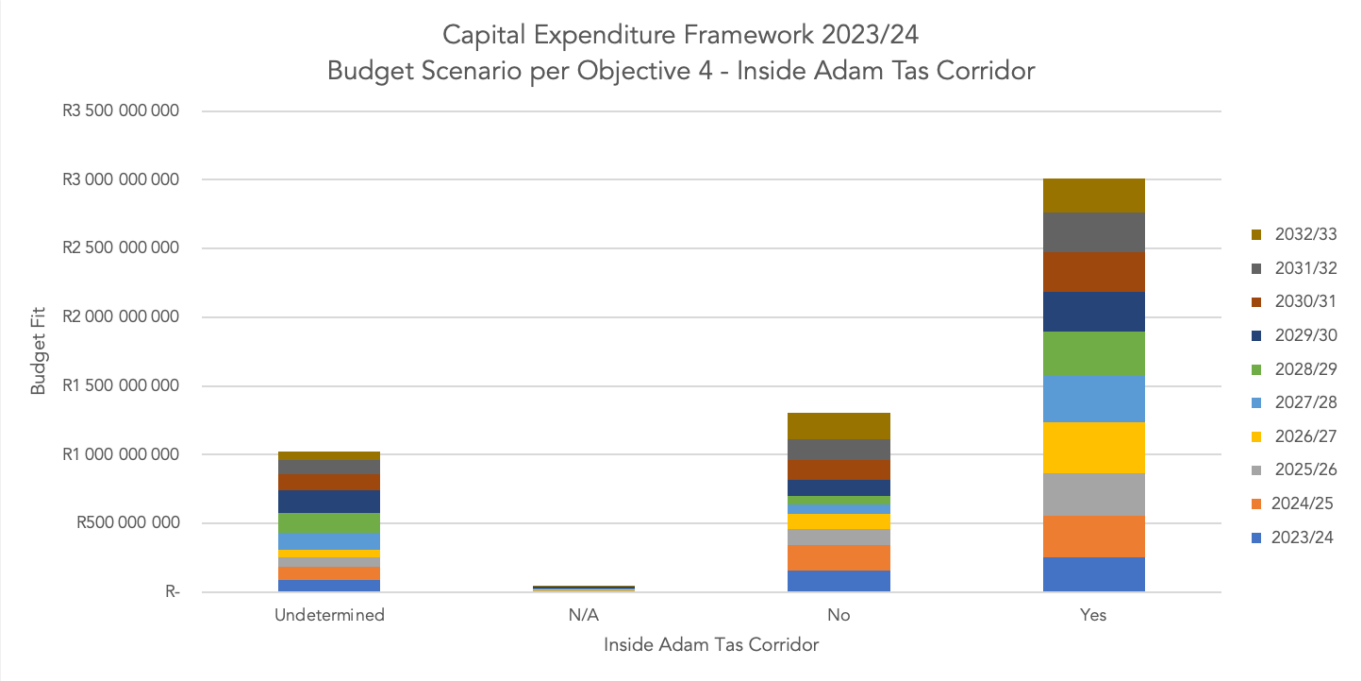
6.7 Budget Scenario Analysis per Objective 4: Adam Tas Corridor

The allocation of funding for capital projects based on their alignment with the Adam Tas Corridor can have significant benefits for the municipality in terms of spatial planning, financial management, and infrastructure delivery. Funding projects within the Adam Tas Corridor alignment can help the municipality to develop in a sustainable, equitable, and efficient way. Figure 6-5 illustrates the capital projects within the Adam Tas Corridor.

Figure 6-5: Budget Scenario per Objective 4

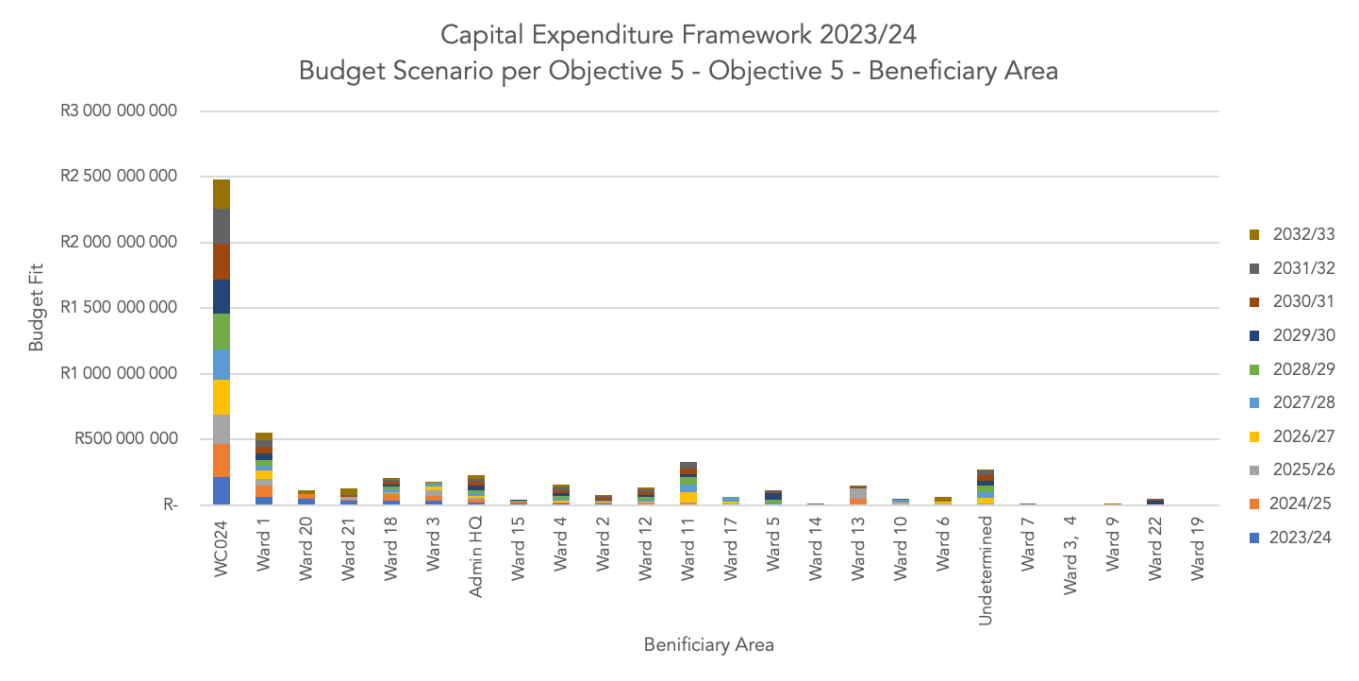


Majority of the allocated budget is directed towards capital projects within the Adam Tas Corridor alignment indicates that the municipality is prioritising the development of this area over other areas. This suggests that the municipality recognizes the importance of developing the corridor in a cohesive and sustainable manner. By funding projects within the corridor, the municipality can ensure that development takes place in an orderly and planned manner. This means that there will be less conflict in land use and the negative impact on the environment will be minimized. By having a clear plan for the development of the corridor, Stellenbosch municipality can ensure that infrastructure investments are well-coordinated and that development is sustainable in the long term.

6.8 Budget Scenario Analysis per Objective 5: Beneficial Area

Aligning capital projects with specific wards in the municipality can have a significant impact on community engagement and support. Prioritising projects that benefit specific wards can build stronger relationships between the municipality and its residents, promoting a sense of ownership and pride. This analysis evaluates the allocation of funding for capital projects aligned with beneficial areas, examining the degree to which each ward is funded and the potential benefits and challenges. See Figure 6-6 for further details on this.

Figure 6-6: Budget Scenario per Objective 5



From the Figure 6-6 above, it is evident that the WC024 (City Wide) receives the highest allocation of funds for capital projects over the next ten years. This prioritisation brings significant benefits to the overall municipality including improved infrastructure, increased economic opportunities, and a better quality of life. However, it is important to note that other wards with lower allocations of funds may face challenges in terms of development and growth, highlighting the need for ongoing evaluation and monitoring of the allocation of capital projects.

Ward 1, 11, 18 have been allocated a higher percentage of the budget – potentially due to their higher population density. Higher population density can create greater demand for infrastructure, public services, and amenities, such as transportation, housing, and recreational spaces. Overall, the allocation of a higher percentage of funds these wards indicates that the municipality is taking a targeted approach to allocating its funds and aims to address the unique needs and priorities of each ward. By prioritising investment in areas with higher population density, the municipality can improve the quality of life for residents, promote economic growth, and build stronger relationships with the community.

6.9 Project List

Table 6-2: List of Projects

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Electrical Services	General System Improvements - Franschhoek	External Loan	92,29 %	Provisioned In	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 030 000	R2 060 450	R2 091 357	R2 122 727	R2 122 727	R2 186 887	R20 614 147
Infrastructure Services	Electrical Services	Infrastructure Improvement - Franschoek	External Loan	92,29 %	Provisioned In	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 650 000	R15 150 000
Infrastructure Services	Electrical Services	Cable replacement 66kV	CRR (Own funds)	89,43 %	Provisioned In	R0	R0	R400 000	R31 036 500	R31 036 500	R800 000	R0	R0	R0	R0	R63 273 000
Infrastructure Services	Electrical Services	Franschhoek - Cable Network	CRR (Own funds)	88,29 %	Provisioned In	R0	R0	R500 000	R5 000 000	R0	R0	R0	R0	R0	R0	R5 500 000
Infrastructure Services	Electrical Services	General Systems Improvements - Stellenbosch	CRR (Own funds)	88,00 %	Provisioned In	R0	R0	R800 000	R0	R0	R0	R0	R0	R0	R0	R800 000
Infrastructure Services	Electrical Services	General Systems Improvements - Stellenbosch	External Loan	88,00 %	Provisioned In	R5 000 000	R4 000 000	R4 400 000	R4 840 000	R5 324 000	R5 856 400	R6 442 040	R7 086 244	R7 086 244	R8 574 355	R58 609 283
Infrastructure Services	Electrical Services	Jan Marais Upgrade: Remove Existing Tx and replace with 20MVA	External Loan	88,00 %	Provisioned In	R6 630 746	R0	R0	R0	R0	R0	R0	R0	R0	R0	R6 630 746
Infrastructure Services	Electrical Services	Kayamandi(Costa grounds)new substation 11 kV switching station	External Loan	88,00 %	Provisioned In	R300 000	R30 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R30 300 000
Infrastructure Services	Electrical Services	Laterra Substation (Please note the R192 Million guarantee to be raised with this)	DC - electricity	88,00 %	Provisioned In	R7 709 829	R0	R0	R0	R0	R0	R0	R0	R0	R0	R7 709 829
Infrastructure Services	Electrical Services	Laterra Substation (Please note the R192 Million guarantee to be raised with this)	External Loan	88,00 %	Provisioned In	R15 398 174	R225 680	R0	R0	R0	R0	R0	R0	R0	R0	R15 623 854
Infrastructure Services	Electrical Services	Network Cable Replace 11 Kv	CRR (Own funds)	88,00 %	Provisioned In	R3 000 000	R3 000 000	R3 300 000	R3 630 000	R3 993 000	R4 392 300	R4 831 530	R5 314 683	R5 314 683	R6 430 766	R43 206 962

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Electrical Services	STB Switchgear (11kV) SF6	External Loan	88,00 %	Provisioned In	R0	R0	R27 606 738	R87 458 146	R57 245 332	R68 694 398	R82 433 278	R98 919 934	R98 919 934	R142 444 704	R663 722 464
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Pipe and Reservoir: Kayamandi	CRR (Own funds)	86,29 %	Provisioned In	R0	R39 120 648	R14 896 900	R0	R0	R0	R0	R0	R0	R0	R54 017 548
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Pipe and Reservoir: Kayamandi	External Loan	86,29 %	Provisioned In	R1 500 000	R879 352	R35 000 000	R0	R0	R0	R0	R0	R0	R0	R37 379 352
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Pipe and Reservoir: Kayamandi	IUDG	86,29 %	Provisioned In	R0	R0	R25 103 100	R0	R0	R0	R0	R0	R0	R0	R25 103 100
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Pipe: Idas Valley/Papegaaiberg and Network Upgrades	CRR (Own funds)	86,29 %	Provisioned In	R1 000 000	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R2 000 000
Infrastructure Services	Electrical Services	Third transformer and associated works 20MVA Cloetesville	CRR (Own funds)	85,43 %	Provisioned In	R0	R550 000	R450 000	R28 232 900	R29 503 381	R31 126 066	R0	R0	R0	R0	R89 862 347
Infrastructure Services	Electrical Services	Cloetesville: : Add the third transformer and associated works 20MVA transformer	CRR (Own funds)	85,43 %	Fit with Delay_2			R0	R0	R0	R21 500 000	R8 000 000	R0	R32	R0	R29 500 032
Infrastructure Services	Electrical Services	Markotter - 66/11kV, 7.5Mva Transformers	CRR (Own funds)	85,43 %	Fit with Delay		R0	R0	R0	R0	R500 000	R33 085 440	R8 706 880	R8 706 880	R0	R50 999 200
Infrastructure Services	Electrical Services	Replace Switchgear - Franschhoek	CRR (Own funds)	84,29 %	Provisioned In	R0	R0	R9 500 000	R14 250 000	R14 250 000	R9 500 000	R10 165 000	R10 876 550	R10 876 550	R12 452 562	R91 870 662
Infrastructure Services	Electrical Services	Replace Control Panels 66 kV & Circuit breakers	External Loan	84,00 %	Provisioned In	R0	R0	R8 664 498	R10 406 000	R0	R0	R0	R0	R0	R0	R19 070 498
Infrastructure Services	Electrical Services	Upgrade transformers at Main substation 7.5MVA to 20MVA	CRR (Own funds)	84,00 %	Provisioned In	R0	R500 000	R27 571 200	R7 571 200	R0	R0	R0	R0	R0	R0	R35 642 400
Infrastructure Services	Transport Planning	Freight Strategy for Stellenbosch & Franschhoek	CRR (Own funds)	84,00 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Infrastructure Services	Transport Planning	Public Transport Plan and Policy - WC024	CRR (Own funds)	84,00 %	Provisioned In	R600 000	R0	R2 000 000	R0	R0	R0	R0	R0	R0	R0	R2 600 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Electrical Services	Cloetesville - University New 66kV cable	CRR (Own funds)	84,00 %	Fit with Delay		R0	R0	R0	R0	R560 000	R16 800 000	R17 556 000	R17 556 000	R0	R52 472 000
Planning and Development Services	Housing Development	Erven 81/2 and 82/9, Stellenbosch	CRR (Own funds)	82,29 %	Provisioned In	R437 500	R0	R0	R0	R0	R0	R0	R0	R0	R0	R437 500
Infrastructure Services	Electrical Services	Demand Side Management Geyser Control	CRR (Own funds)	80,00 %	Provisioned In	R450 000	R450 000	R450 000	R450 000	R400 000	R400 000	R400 000	R400 000	R400 000	R400 000	R4 200 000
Infrastructure Services	Electrical Services	Energy Efficiency and Demand Side Management:	CRR (Own funds)	80,00 %	Provisioned In	R1 000 000	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R2 000 000
Infrastructure Services	Transport Planning	Public Transport Infrastructure (Public Transport Shelters & Embayments)	CRR (Own funds)	80,00 %	Provisioned In	R0	R400 000	R0	R0	R0	R400 000	R0	R0	R0	R0	R800 000
Planning and Development Services	Development Planning	Droë Dyke 100 TOD	Human Settlements Grant	79,43 %	Provisioned In	R1 400 000	R3 425 000	R0	R0	R0	R0	R0	R0	R0	R0	R4 825 000
Infrastructure Services	Transport Planning	Adam Tas - Corridor Transport Study	CRR (Own funds)	79,43 %	Provisioned In	R1 000 000	R0	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R2 000 000
Planning and Development Services	Development Planning	Droë Dyke 100 TOD	CRR (Own funds)	79,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Infrastructure Services	Roads and Stormwater	Adhoc Reconstruction Of Roads (WC024)	IUDG	78,00 %	Provisioned In	R3 000 000	R3 000 000	R5 000 000	R5 000 000	R7 000 000	R7 000 000	R7 000 000	R7 000 000	R7 000 000	R7 000 000	R58 000 000
Infrastructure Services	Transport Planning	Stellenbosch - Bicycle network	CRR (Own funds)	78,00 %	Provisioned In	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000
Infrastructure Services	Water and Wastewater Services: Water	New Reservoir & Pipeline: Vlottenburg	CRR (Own funds)	76,57 %	Provisioned In	R7 060 500	R10 683 850	R0	R0	R0	R0	R0	R0	R0	R0	R17 744 350
Infrastructure Services	Water and Wastewater Services: Water	New Reservoir & Pipeline: Vlottenburg	DC - Water	76,57 %	Provisioned In	R7 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R7 000 000
Infrastructure Services	Water and Wastewater Services: Water	New Reservoir & Pipeline: Vlottenburg	IUDG	76,57 %	Provisioned In	R31 939 500	R23 316 150	R0	R0	R0	R0	R0	R0	R0	R0	R55 255 650
Infrastructure Services	Electrical Services	Bien don 66/11kV substation new	DC - electricity	76,29 %	Provisioned In	R847 227	R0	R0	R0	R0	R0	R0	R0	R0	R0	R847 227

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Electrical Services	Bien don 66/11kV substation new	External Loan	76,29 %	Provisioned In	R24 152 773	R25 000 000	R25 000 000	R25 000 000	R25 000 000	R0	R0	R0	R0	R0	R124 152 773
Infrastructure Services	Electrical Services	Electrification INEP	INEP	76,29 %	Provisioned In	R18 450 000	R16 000 000	R15 000 000	R15 200 000	R17 400 000	R23 100 000	R26 600 000	R26 000 000	R26 000 000	R26 000 000	R209 750 000
Infrastructure Services	Electrical Services	Feeder cable (Watergang to Enkanini) 11kV 95cu	INEP	76,29 %	Provisioned In	R4 300 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R4 300 000
Infrastructure Services	Electrical Services	Integrated National Electrification Programme	CRR (Own funds)	76,29 %	Provisioned In	R321 957	R321 957	R321 957	R321 957	R321 957	R321 957	R321 957	R321 957	R321 957	R321 957	R3 219 570
Infrastructure Services	Electrical Services	Alternative Energy:	External Loan	76,00 %	Provisioned In	R5 018 307	R5 068 490	R5 828 764	R6 994 517	R0	R0	R0	R0	R0	R0	R22 910 078
Infrastructure Services	Traffic Engineering	Main Road Intersection Improvements: Strand / Adam Tas / Alexander	DC-Roads	75,43 %	Provisioned In	R0	R4 000 000	R5 000 000	R10 000 000	R20 000 000	R0	R0	R0	R0	R0	R39 000 000
Infrastructure Services	Roads and Stormwater	Reseal Roads - Stellenbosch & Surrrounding	CRR (Own funds)	74,00 %	Provisioned In	R3 000 000	R4 000 000	R5 000 000	R7 000 000	R8 000 000	R8 000 000	R8 000 000	R8 000 000	R8 000 000	R8 000 000	R67 000 000
Infrastructure Services	Traffic Engineering	Main Road Intersection Improvements: R44 / Merriman Street	DC-Roads	74,00 %	Provisioned In	R0	R4 000 000	R0	R1 000 000	R10 000 000	R50 000 000	R0	R0	R0	R0	R65 000 000
Infrastructure Services	Electrical Services	Electricity Network: Pniel	External Loan	73,43 %	Provisioned In	R3 500 000	R3 500 000	R3 500 000	R3 500 000	R3 500 000	R3 500 000	R3 500 000	R3 850 000	R3 850 000	R3 880 000	R36 080 000
Infrastructure Services	Waste Management: Solid Waste Management	Upgrade Refuse disposal sites (Existing Cell)- Rehab	CRR (Own funds)	73,43 %	Provisioned In	R0	R0	R300 000	R0	R0	R0	R0	R0	R0	R0	R300 000
Infrastructure Services	Electrical Services	Energy Balancing - Metering and Mini-Substations:	CRR (Own funds)	72,00 %	Provisioned In	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R2 500 000
Infrastructure Services	Electrical Services	Electricity Masterplan update	CRR (Own funds)	72,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R1 000 000	R0	R0	R0	R1 000 000
Infrastructure Services	Electrical Services	Substation 66kV equipment	CRR (Own funds)	72,00 %	Provisioned In	R2 184 000	R2 295 974	R5 301 136	R6 361 363	R5 831 249	R6 997 499	R7 697 249	R8 466 974	R8 466 974	R10 245 039	R63 847 458
Infrastructure Services	Waste Management:	Upgrade Material Recovery Facility	CRR (Own funds)	72,00 %	Provisioned In	R500 000	R2 000 000	R0	R0	R0	R1 000 000	R0	R0	R0	R0	R3 500 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
	Solid Waste Management															
Infrastructure Services	Traffic Engineering	Traffic Signal Management System	CRR (Own funds)	72,00 %	Provisioned In	R0	R0	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R1 000 000
Infrastructure Services	Traffic Engineering	Optic Fibre for Traffic Signals	CRR (Own funds)	69,43 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Infrastructure Services	Transport Planning	Bicycle Lockup Facilities	CRR (Own funds)	69,43 %	Provisioned In	R300 000	R0	R0	R500 000	R0	R0	R0	R0	R0	R0	R800 000
Infrastructure Services	Waste Management: Solid Waste Management	Expansion of the landfill site (New cells)	CRR (Own funds)	68,00 %	Provisioned In	R0	R16 348 950	R0	R0	R0	R0	R0	R4 000 000	R4 000 000	R0	R24 348 950
Infrastructure Services	Waste Management: Solid Waste Management	Expansion of the landfill site (New cells)	External Loan	68,00 %	Provisioned In	R46 000 000	R39 251 050	R1 000 000	R0	R0	R0	R0	R4 000 000	R4 000 000	R0	R94 251 050
Infrastructure Services	Waste Management: Solid Waste Management	Landfill Gas To Energy	External Loan	68,00 %	Provisioned In	R10 000 000	R20 000 000	R11 000 000	R500 000	R2 000 000	R18 000 000	R500 000	R0	R0	R0	R62 000 000
Infrastructure Services	Electrical Services	System Control Centre & Upgrade Telemetry:	External Loan	68,00 %	Provisioned In	R3 000 000	R2 075 428	R0	R0	R0	R0	R0	R0	R0	R0	R5 075 428
Infrastructure Services	Electrical Services	System Control Centre & Upgrade Telemetry	CRR (Own funds)	68,00 %	Provisioned In	R3 600 000	R3 960 000	R4 356 000	R4 791 600	R5 270 760	R5 797 836	R6 377 620	R7 015 382	R7 015 382	R8 488 612	R56 673 190
Infrastructure Services	Traffic Engineering	Furniture, Tools & Equipment: Traffic Engineering	CRR (Own funds)	68,00 %	Provisioned In	R150 000	R150 000	R150 000	R150 000	R150 000	R150 000	R150 000	R150 000	R150 000	R0	R1 350 000
Infrastructure Services	Traffic Engineering	Signalisation implementation	CRR (Own funds)	68,00 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Infrastructure Services	Traffic Engineering	Traffic Management Improvement Programme	CRR (Own funds)	68,00 %	Provisioned In	R1 000 000	R0	R0	R100 000	R0	R0	R0	R0	R0	R0	R1 100 000
Infrastructure Services	Traffic Engineering	Traffic Signal Control: Installation and Upgrading of Traffic Signals and Associated Components	CRR (Own funds)	68,00 %	Provisioned In	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R0	R4 500 000
Infrastructure Services	Transport Planning	Comprehensive Integrated Transport Plan	CRR (Own funds)	68,00 %	Provisioned In	R600 000	R0	R372 000	R2 000 000	R1 000 000	R1 000 000	R1 000 000	R1 000 000	R1 000 000	R1 000 000	R8 972 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Transport Planning	Comprehensive Integrated Transport Plan	ITP	68,00 %	Provisioned In	R0	R628 000	R628 000	R0	R0	R0	R0	R0	R0	R0	R1 256 000
Infrastructure Services	Transport Planning	Khayamandi Pedestrian Bridge (R304, River and Railway Line)	IUDG	68,00 %	Provisioned In	R11 000 000	R10 000 000	R10 000 000	R0	R0	R0	R0	R0	R0	R0	R31 000 000
Infrastructure Services	Transport Planning	Park and Ride (Transport Interchange)	CRR (Own funds)	68,00 %	Provisioned In	R250 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R250 000
Infrastructure Services	Transport Planning	Pedestrian Streets in Stellenbosch	CRR (Own funds)	68,00 %	Provisioned In	R0	R1 700 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 700 000
Infrastructure Services	Electrical Services	Streetlights R304	CRR (Own funds)	68,00 %	Provisioned In	R0	R0	R1 000 000	R1 000 000	R0	R0	R0	R0	R0	R0	R2 000 000
Infrastructure Services	Water and Wastewater Services: Water	Uniepark & Helshoogte Storage and Supply scheme	CRR (Own funds)	68,00 %	Provisioned In	R0	R0	R1 000 000	R40 000 000	R40 000 000	R40 000 000	R40 000 000	R40 000 000	R40 000 000	R0	R241 000 000
Infrastructure Services	Roads and Stormwater	Specialised Vehicle: Jet Machine for Blockages	CRR (Own funds)	68,00 %	Fit with Delay_2			R0	R0	R0	R5 000 000	R0	R0	R32	R0	R5 000 032
Infrastructure Services	Transport Planning	Provision of Bulk Parking Planning & Development	CRR (Own funds)	68,00 %	Provisioned In	R3 000 000	R3 000 000	R3 000 000	R0	R0	R0	R0	R0	R0	R0	R9 000 000
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Pipe: Cloetesville/ Idas Valley	CRR (Own funds)	66,29 %	Provisioned In	R0	R1 000 000	R7 000 000	R14 000 000	R0	R0	R0	R0	R0	R0	R22 000 000
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Pipe Line & Pumpstations: Franschhoek	External Loan	66,29 %	Provisioned In	R1 000 000	R9 000 000	R4 000 000	R0	R0	R0	R0	R0	R0	R0	R14 000 000
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Upgrades Franschoek	CRR (Own funds)	66,29 %	Provisioned In	R0	R1 000 000	R15 000 000	R20 000 000	R5 000 000	R0	R0	R0	R0	R0	R41 000 000
Infrastructure Services	Traffic Engineering	Traffic Calming Projects: Implementation	CRR (Own funds)	66,00 %	Provisioned In	R300 000	R0	R400 000	R0	R0	R400 000	R0	R0	R0	R0	R1 100 000
Infrastructure Services	Traffic Engineering	Universal Access Implementation	CRR (Own funds)	66,00 %	Provisioned In	R200 000	R0	R0	R300 000	R0	R0	R300 000	R0	R0	R0	R800 000
Infrastructure Services	Transport Planning	Adam Tas - Technopark Link Road	CRR (Own funds)	66,00 %	Provisioned In	R3 000 000	R5 000 000	R20 000 000	R30 000 000	R30 000 000	R0	R0	R0	R0	R0	R88 000 000
Infrastructure Services	Transport Planning	Cycle Plan - Design & Implementation	CRR (Own funds)	66,00 %	Provisioned In	R500 000	R0	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R4 500 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Transport Planning	Non-Motorised Transport Implementation	CRR (Own funds)	66,00 %	Provisioned In	R1 000 000	R0	R3 000 000	R3 000 000	R4 000 000	R4 000 000	R4 000 000	R4 000 000	R4 000 000	R4 000 000	R31 000 000
Infrastructure Services	Traffic Engineering	Adhoc: Intersection Improvements	CRR (Own funds)	66,00 %	Provisioned In	R0	R0	R2 000 000	R0	R0	R2 000 000	R0	R0	R0	R0	R4 000 000
Infrastructure Services	Traffic Engineering	Main Road Intersection Improvements: Stellenbosch	CRR (Own funds)	66,00 %	Fit with Delay		R0	R0	R0	R0	R0	R1 500 000	R15 000 000	R15 000 000	R0	R31 500 000
Infrastructure Services	Roads and Stormwater	Bridge Construction	IUDG	65,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Infrastructure Services	Electrical Services	Automatic Meter Reader	CRR (Own funds)	64,00 %	Provisioned In	R400 000	R400 000	R440 000	R484 000	R532 400	R585 640	R644 204	R708 624	R708 624	R857 436	R5 760 928
Infrastructure Services	Electrical Services	Meter Panels	CRR (Own funds)	64,00 %	Provisioned In	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R2 500 000
Infrastructure Services	Electrical Services	Replace Ineffective Meters	CRR (Own funds)	64,00 %	Provisioned In	R250 000	R0	R302 500	R332 750	R366 025	R402 628	R442 890	R487 179	R487 179	R589 487	R3 660 638
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Klapmuts	External Loan	63,43 %	Provisioned In	R8 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R8 000 000
Infrastructure Services	Water and Wastewater Services: Water	`	External Loan	63,43 %	Provisioned In	R32 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R32 500 000
Infrastructure Services	Water and Wastewater Services: Water	Bulk Water Supply Pipeline & Reservoir - Jamestown	CRR (Own funds)	63,43 %	Roll-Over	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Infrastructure Services	Water and Wastewater Services: Water	Dwarsriver Bulk Supply Augmentation and Network Upgrades	CRR (Own funds)	63,43 %	Provisioned In	R7 000 000	R0	R750 000	R750 000	R0	R0	R0	R0	R0	R0	R8 500 000
Infrastructure Services	Water and Wastewater Services: Water	Water Treatment Works: Idasvalley	External Loan	63,43 %	Provisioned In	R1 000 000	R0	R0	R0	R3 000 000	R30 000 000	R50 000 000	R10 000 000	R10 000 000	R0	R104 000 000
Planning and Development Services	Housing Development	Housing Projects	CRR (Own funds)	62,29 %	Provisioned In	R500 000	R500 000	R500 000	R4 300 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R14 800 000
Planning and Development Services	Housing Development	Erf 7001 Cloetesville (380) FLISP	Human Settlements Grant	62,29 %	Provisioned In	R1 300 000	R0	R6 000 000	R0	R0	R0	R0	R0	R0	R0	R7 300 000
Planning and	Housing Development	Kayamandi Town Centre	ISUPG	62,29 %	Provisioned In	R0	R6 000 000	R6 000 000	R0	R0	R0	R0	R0	R0	R0	R12 000 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Development Services																
Planning and Development Services	Housing Development	Kayamandi Watergang Northern Extension (2000)	Human Settlements Grant	62,29 %	Provisioned In	R0	R6 000 000	R6 000 000	R0	R0	R0	R0	R0	R0	R0	R12 000 000
Infrastructure Services	Project Management Unit (PMU)	Housing Projects	CRR (Own funds)	62,29 %	Provisioned In	R250 000	R300 000	R350 000	R400 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R4 300 000
Infrastructure Services	Water and Wastewater Services: Water	112 New 5 Ml Reservoir: Cloetesville	CRR (Own funds)	62,29 %	Provisioned In	R0	R0	R500 000	R2 000 000	R26 500 000	R3 000 000	R0	R0	R0	R0	R32 000 000
Infrastructure Services	Water and Wastewater Services: Water	Koelenhof and Mariendahl Bulk Water Supply Upgrade	CRR (Own funds)	62,29 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R500 000	R500 000	R40 000 000	R41 000 000
Planning and Development Services	Housing Development	Erf 7001 Cloetesville (380) FLISP	CRR (Own funds)	62,29 %	Provisioned In	R0	R4 100 000	R500 000	R11 400 000	R0	R0	R0	R0	R0	R0	R16 000 000
Planning and Development Services	Housing Development	Kayamandi Town Centre	CRR (Own funds)	62,29 %	Fit with Delay_4					R0	R0	R0	R6 000 000	R6 000 000	R6 000 000	R18 000 000
Planning and Development Services	Housing Development	Kayamandi Watergang Northern Extension (2000)	CRR (Own funds)	62,29 %	Fit with Delay_4					R0	R0	R0	R6 000 000	R6 000 000	R6 000 000	R18 000 000
Planning and Development Services	Housing Development	Franschhoek Meerlust: Bosdorp (±200 services & ±200 units)	Human Settlements Grant	62,29 %	Fit with Delay_4					R0	R0	R0	R6 000 000	R6 000 000	R15 800 000	R27 800 000
Planning and Development Services	IHS: Informal Settlements	Enkanini	CRR (Own funds)	62,29 %	Fit with Delay_4					R0	R0	R0	R6 000 000	R6 000 000	R6 000 000	R18 000 000
Planning and Development Services	Housing Development	Northern Extension Watergang Informal Settlements Basic Services	CRR (Own funds)	62,29 %	Fit with Delay_4					R0	R0	R0	R3 000 000	R3 000 000	R0	R6 000 000
Infrastructure Services	Water and Wastewater	Effluent Recycling of Waste Water 10Ml per day	CRR (Own funds)	62,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
	Services: Sanitation															
Infrastructure Services	Water and Wastewater Services: Sanitation	Upgrade of WWTW Wemmershoek	External Loan	60,29 %	Provisioned In	R19 500 000	R45 000 000	R5 000 000	R0	R0	R0	R0	R0	R0	R0	R69 500 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Cloetesville Bulk Sewer Upgrade	CRR (Own funds)	60,29 %	Provisioned In	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000
Infrastructure Services	Electrical Services	Ad-Hoc Provision of Streetlighting	CRR (Own funds)	60,00 %	Provisioned In	R2 000 000	R2 100 000	R2 140 000	R2 289 800	R2 450 086	R2 621 592	R2 805 103	R3 001 460	R3 001 460	R3 436 372	R25 845 874
Infrastructure Services	Transport Planning	Stellenbosch Tour Bus Parking	CRR (Own funds)	60,00 %	Provisioned In	R600 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R600 000
Planning and Development Services	Housing Development	Jamestown: Housing	Human Settlements Grant	59,43 %	Provisioned In	R0	R6 000 000	R6 000 000	R0	R0	R0	R0	R0	R0	R0	R12 000 000
Planning and Development Services	Housing Development	Klapmuts La Rochelle (100)	Human Settlements Grant	59,43 %	Provisioned In	R283 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R283 000
Infrastructure Services	Project Management Unit (PMU)	Kayamandi: Zone O (±711 services)	ISUP	59,43 %	Provisioned In	R13 350 000	R10 080 000	R0	R0	R0	R9 152 000	R10 000 000	R0	R0	R0	R42 582 000
Infrastructure Services	Project Management Unit (PMU)	Franschhoek Mooiwater Basic Services	ISUP	59,43 %	Provisioned In	R5 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R5 000 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Sewerpipe Replacement: Dorp Straat Alexander Street	CRR (Own funds)	59,43 %	Provisioned In	R0	R0	R2 000 000	R18 000 000	R0	R0	R0	R0	R0	R0	R20 000 000
Infrastructure Services	Roads and Stormwater	Klapmuts Transport Network	CRR (Own funds)	59,43 %	Provisioned In	R600 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R600 000
Infrastructure Services	Roads and Stormwater	Wilderbosch Extention to Trumali	CRR (Own funds)	59,43 %	Provisioned In	R1 500 000	R1 500 000	R3 000 000	R7 000 000	R7 000 000	R0	R0	R0	R0	R0	R20 000 000
Infrastructure Services	Project Management Unit (PMU)	Franschhoek Mooiwater Basic Services	CRR (Own funds)	59,43 %	Fit with Delay_4					R0	R0	R0	R15 136 000	R15 136 000	R0	R30 272 000
Infrastructure Services	Water and Wastewater Services: Water	106 Bulk Water Supply Pipe Reservoir: Dwars	CRR (Own funds)	59,43 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R500 000	R500 000	R17 500 000	R18 500 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
		Rivier (Johannesdal / Kylemore / Pniel)														
Infrastructure Services	Roads and Stormwater	Adam Tas Road Intersection Upgrades	CRR (Own funds)	59,43 %	Provisioned In	R1 000 000	R300 000	R300 000	R0	R0	R2 000 000	R10 000 000	R0	R0	R0	R13 600 000
Planning and Development Services	Housing Development	Erf 64, Kylemore	Human Settlements Grant	59,43 %	Provisioned In	R833 000	R2 000 000	R0	R6 000 000	R15 000 000	R15 000 000	R15 800 000	R15 800 000	R15 800 000	R0	R86 233 000
Planning and Development Services	Housing Development	Jamestown: Housing	CRR (Own funds)	59,43 %	Fit with Delay_4					R0	R0	R0	R6 000 000	R6 000 000	R6 000 000	R18 000 000
Planning and Development Services	Housing Development	Klapmuts La Rochelle (100)	CRR (Own funds)	59,43 %	Fit with Delay_4					R0	R0	R0	R6 600 000	R6 600 000	R0	R13 200 000
Infrastructure Services	Roads and Stormwater	Gravel Roads Devon Valley - Safety Improvements Structural Repairs	CRR (Own funds)	58,29 %	Provisioned In	R0	R500 000	R300 000	R0	R0	R0	R0	R0	R0	R0	R800 000
Infrastructure Services	Roads and Stormwater	Reseal Roads - Kylemore & Surrounding	CRR (Own funds)	58,29 %	Provisioned In	R100 000	R100 000	R1 500 000	R0	R0	R1 500 000	R0	R0	R0	R0	R3 200 000
Infrastructure Services	Roads and Stormwater	Reseal Roads - Franschhoek & Surrrounding	CRR (Own funds)	58,29 %	Provisioned In	R2 000 000	R100 000	R100 000	R2 000 000	R0	R0	R2 000 000	R0	R0	R0	R6 200 000
Infrastructure Services	Traffic Engineering	Main Road Intersection Improvements: Franschhoek	CRR (Own funds)	58,29 %	Provisioned In	R10 000 000	R2 129 950	R0	R0	R0	R1 500 000	R10 000 000	R750 000	R750 000	R0	R25 129 950
Infrastructure Services	Traffic Engineering	Main road intersection improvements: Helshoogte rd/La Colline	CRR (Own funds)	58,29 %	Provisioned In	R3 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R3 000 000
Planning and Development Services	IHS: Informal Settlements	Upgrading of Informal Settlements: General	CRR (Own funds)	58,00 %	Fit with Delay_3				R0	R0	R0	R0	R500 000	R500 000	R500 000	R1 500 000
Infrastructure Services	Water and Wastewater	Upgrade of WWTW: Klapmuts	CRR (Own funds)	57,43 %	Provisioned In	R15 040 350	R35 000 000	R10 500 000	R0	R0	R0	R0	R0	R0	R0	R60 540 350

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
	Services: Sanitation															
Infrastructure Services	Traffic Engineering	Jamestown Transport Network - School Street	CRR (Own funds)	57,43 %	Provisioned In	R3 000 000	R0	R2 000 000	R0	R0	R0	R0	R0	R0	R0	R5 000 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Bulk Sewer Upgrade: Dwarsriver Area (Kylemore, Boschendal, Pniel)	CRR (Own funds)	57,43 %	Fit with Delay_4					R0	R0	R0	R1 500 000	R1 500 000	R8 500 000	R11 500 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Klapmuts Bulk Sewer Upgrade	CRR (Own funds)	57,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R15 000 000	R15 000 000
Infrastructure Services	Traffic Engineering	LDV Roads and Signs Maintenance	CRR (Own funds)	57,43 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R1 000 000	R0	R0	R0	R1 500 000
Planning and Development Services	IHS: Informal Settlements	Langrug UISP (1899) Subdivisional area	CRR (Own funds)	56,57 %	Provisioned In	R250 000	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R750 000
Planning and Development Services	IHS: Informal Settlements	LangrugFranschhoek Mooiwater 236	ISUPG	56,57 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Planning and Development Services	IHS: Informal Settlements	Rehabilitation of Langrug Dam and Engineering Services	CRR (Own funds)	56,57 %	Fit with Delay_4					R0	R0	R0	R1 050 000	R1 050 000	R2 000 000	R4 100 000
Infrastructure Services	Waste Management: Solid Waste Management	Major Drop-Offs: Construction - Franschoek	External Loan	56,29 %	Provisioned In	R500 000	R3 000 000	R2 000 000	R0	R0	R0	R0	R0	R0	R0	R5 500 000
Infrastructure Services	Waste Management: Solid Waste Management	Franschhoek: Area Cleaning Depot	CRR (Own funds)	56,29 %	Provisioned In	R1 000 000	R2 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R3 000 000
Infrastructure Services	Transport Planning	Taxi Rank Franschhoek CDB	CRR (Own funds)	56,29 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Infrastructure Services	Traffic Engineering	Road Upgrades at School Precincts	CRR (Own funds)	56,00 %	Provisioned In	R200 000	R200 000	R200 000	R0	R0	R0	R0	R0	R0	R0	R600 000
Corporate Services	Properties and Municipal Building Maintenance	Kayamandi: Upgrading of Makapula Hall	CRR (Own funds)	56,00 %	Provisioned In	R2 000 000	R1 000 000	R0	R0	R0	R0	R0	R1 100 000	R1 100 000	R0	R5 200 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Roads and Stormwater	Specialist Vehicle TLB - Digger Loader	CRR (Own funds)	56,00 %	Provisioned In	R0	R3 000 000	R0	R0	R0	R0	R3 000 000	R0	R0	R0	R6 000 000
Infrastructure Services	Roads and Stormwater	Vehicles Replacement: Light Vehicles (LDV)	CRR (Own funds)	56,00 %	Fit with Delay_2			R0	R0	R0	R0	R0	R1 000 000	R32	R0	R1 000 032
Infrastructure Services	Traffic Engineering	Heavy Duty Vehicle (Truck)	CRR (Own funds)	56,00 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R3 000 000	R3 000 000	R0	R6 000 000
Infrastructure Services	Transport Planning	Non-Motorised Transport Plan	CRR (Own funds)	56,00 %	Fit with Delay_2			R0	R0	R0	R1 000 000	R0	R0	R32	R0	R1 000 032
Corporate Services	Properties and Municipal Building Maintenance	Upgrading of Public Amenities: Kayamandi	CRR (Own funds)	56,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R500 000	R500 000	R0	R1 000 000
Infrastructure Services	Roads and Stormwater	Reseal Roads - Klapmuts, Raithby & Surrounding	CRR (Own funds)	55,43 %	Provisioned In	R1 250 000	R100 000	R100 000	R0	R1 500 000	R0	R0	R1 500 000	R1 500 000	R0	R5 950 000
Infrastructure Services	Roads and Stormwater	River Rehabilitation Implementation	CRR (Own funds)	54,00 %	Provisioned In	R1 000 000	R100 000	R100 000	R0	R1 000 000	R100 000	R100 000	R0	R0	R0	R2 400 000
Infrastructure Services	Roads and Stormwater	Rivers Rehabilitation Planning & Design	CRR (Own funds)	54,00 %	Fit with Delay_4					R0	R0	R0	R500 000	R500 000	R0	R1 000 000
Infrastructure Services	Roads and Stormwater	Upgrade Stormwater Retention Facilities	CRR (Own funds)	54,00 %	Provisioned In	R500 000	R1 000 000	R500 000	R0	R1 500 000	R0	R0	R0	R0	R1 500 000	R5 000 000
Infrastructure Services	Traffic Engineering	Bird Street Dualling - Adam Tas to Kayamandi	CRR (Own funds)	54,00 %	Provisioned In	R500 000	R5 000 000	R10 000 000	R15 000 000	R0	R0	R0	R0	R0	R0	R30 500 000
Infrastructure Services	Roads and Stormwater	Upgrade Stormwater System	CRR (Own funds)	54,00 %	Provisioned In	R100 000	R50 000	R50 000	R200 000	R0	R0	R200 000	R0	R0	R0	R600 000
Infrastructure Services	Roads and Stormwater	Wilderbosch Extention to Technopark	CRR (Own funds)	54,00 %	Fit with Delay_3				R0	R0	R0	R0	R1 500 000	R1 500 000	R0	R3 000 000
Infrastructure Services	Roads and Stormwater	Adhoc Minor Upgrading of Roads - WC024	CRR (Own funds)	54,00 %	Provisioned In	R300 000	R300 000	R700 000	R0	R0	R700 000	R0	R0	R0	R0	R2 000 000
Infrastructure Services	Transport Planning	Public Transport Service (Inclusive of Disabled)	CRR (Own funds)	54,00 %	Provisioned In	R0	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Infrastructure Services	Waste Management: Solid Waste Management	Major Drop-offs: Construction - Klapmuts	CRR (Own funds)	53,43 %	Provisioned In	R800 000	R4 000 000	R3 000 000	R0	R0	R0	R0	R0	R0	R0	R7 800 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Waste Management: Solid Waste Management	Major Drop-offs: Construction - Klapmuts	DC - Refuse	53,43 %	Provisioned In	R0	R2 199 985	R0	R0	R0	R0	R0	R0	R0	R0	R2 199 985
Infrastructure Services	Electrical Services	Upgrading of Offices Beltana	CRR (Own funds)	52,29 %	Provisioned In	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R500 000	R5 000 000
Infrastructure Services	Transport Planning	Public Transport Facilities (Taxi Ranks) Adhoc Upgrades	CRR (Own funds)	52,29 %	Provisioned In	R0	R500 000	R0	R1 000 000	R0	R1 000 000	R0	R0	R0	R0	R2 500 000
Infrastructure Services	Waste Management: Solid Waste Management	Formalize skip areas	CRR (Own funds)	52,00 %	Fit with Delay		R0	R0	R0	R0	R200 000	R0	R0	R0	R0	R200 000
Infrastructure Services	Waste Management: Solid Waste Management	Mini Waste drop-off facilities at Inf Settlements	CRR (Own funds)	52,00 %	Provisioned In	R200 000	R100 000	R0	R0	R0	R0	R0	R0	R0	R0	R300 000
Infrastructure Services	Waste Management: Solid Waste Management	Skips (5,5Kl)	CRR (Own funds)	52,00 %	Provisioned In	R200 000	R0	R200 000	R0	R200 000	R0	R200 000	R0	R0	R0	R800 000
Infrastructure Services	Waste Management: Solid Waste Management	Street Refuse Bins	CRR (Own funds)	52,00 %	Provisioned In	R300 000	R0	R0	R400 000	R0	R0	R0	R0	R0	R0	R700 000
Infrastructure Services	Water and Wastewater Services: Water	Chlorination Installation: Upgrade	CRR (Own funds)	52,00 %	Provisioned In	R2 000 000	R2 000 000	R1 500 000	R500 000	R0	R500 000	R1 000 000	R2 000 000	R2 000 000	R0	R11 500 000
Infrastructure Services	Transport Planning	Update Roads Master Plan for WC024	CRR (Own funds)	52,00 %	Provisioned In	R0	R2 000 000	R0	R0	R2 000 000	R0	R0	R0	R0	R0	R4 000 000
Corporate Services	Properties and Municipal Building Maintenance	Structural Upgrade: Jamestown Ward Office and Library	CRR (Own funds)	51,43 %	Provisioned In	R2 900 000	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R3 900 000
Infrastructure Services	Water and Wastewater Services: Water	Water Treatment Works: Franschhoek	CRR (Own funds)	50,29 %	Provisioned In	R2 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R2 500 000
Corporate Services	Properties and Municipal Building Maintenance	Upgrade Millenium Hall Pniel	CRR (Own funds)	50,29 %	Provisioned In	R200 000	R800 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Water and Wastewater Services: Water	Upgrade of Franschhoek Reservoirs and Pipelines	CRR (Own funds)	50,29 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Corporate Services	Properties and Municipal Building Maintenance	Flats: Terrain Improvements: Kayamandi	CRR (Own funds)	50,29 %	Fit with Delay_3				R0	R0	R0	R0	R4 000 000	R4 000 000	R0	R8 000 000
Corporate Services	Properties and Municipal Building Maintenance	Multi- Purpose Centre: Kayamandi	CRR (Own funds)	50,29 %	Provisioned In	R0	R0	R400 000	R0	R10 000 000	R15 000 000	R15 000 000	R0	R0	R0	R40 400 000
Corporate Services	Properties and Municipal Building Maintenance	Upgrading of Creche: Kayamandi	CRR (Own funds)	50,29 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R350 000	R350 000	R0	R700 000
Corporate Services	Properties and Municipal Building Maintenance	Upgrading of Groendal Community Hall	CRR (Own funds)	50,29 %	Fit with Delay		R0	R0	R0	R0	R0	R300 000	R800 000	R800 000	R500 000	R2 400 000
Corporate Services	Properties and Municipal Building Maintenance	Upgrading of Groendal Sports Grounds	CRR (Own funds)	50,29 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R700 000	R700 000	R500 000	R1 900 000
Corporate Services	Properties and Municipal Building Maintenance	Upgrading of Stellenbosch Town Hall	CRR (Own funds)	50,29 %	Fit with Delay_2			R0	R0	R0	R5 000 000	R0	R0	R32	R0	R5 000 032
Corporate Services	Information and Communications Technology (ICT)	Public WI-FI Network	CRR (Own funds)	50,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Corporate Services	Properties and Municipal Building Maintenance	Structural Improvement: General	CRR (Own funds)	50,00 %	Provisioned In	R2 000 000	R3 000 000	R0	R0	R1 500 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R0	R14 500 000
Corporate Services	Properties and Municipal Building Maintenance	Structural improvements at the Van der Stel Sport grounds	CRR (Own funds)	50,00 %	Provisioned In	R3 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R3 500 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Corporate Services	Properties and Municipal Building Maintenance	Structural Maintenance/Upgrade: Beltana	CRR (Own funds)	50,00 %	Provisioned In	R2 000 000	R2 000 000	R0	R0	R0	R0	R4 000 000	R4 000 000	R4 000 000	R0	R16 000 000
Corporate Services	Properties and Municipal Building Maintenance	Structural Upgrade: Heritage Building	CRR (Own funds)	50,00 %	Provisioned In	R5 781 000	R0	R0	R0	R4 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R0	R17 781 000
Corporate Services	Information and Communications Technology (ICT)	Communication Tower / Highsites	CRR (Own funds)	50,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Corporate Services	Information and Communications Technology (ICT)	Cable Reticulation and Management. Main building	CRR (Own funds)	50,00 %	Provisioned In	R1 000 000	R500 000	R500 000	R1 000 000	R1 000 000	R500 000	R500 000	R1 000 000	R1 000 000	R500 000	R7 500 000
Infrastructure Services	Water and Wastewater Services: Water	115 Storage Dam and Reservoir Upgrade	CRR (Own funds)	49,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R500 000	R500 000	R0	R1 000 000
Infrastructure Services	Roads and Stormwater	Lanquedoc Access road and Bridge	CRR (Own funds)	48,29 %	Provisioned In	R0	R3 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R3 000 000
Infrastructure Services	Roads and Stormwater	Lanquedoc Access road and Bridge	DC-Roads	48,29 %	Provisioned In	R5 000 000	R12 000 000	R15 000 000	R0	R0	R0	R0	R0	R0	R0	R32 000 000
Infrastructure Services	Electrical Services	Vehicles: Electrical Services	CRR (Own funds)	48,00 %	Provisioned In	R0	R2 800 000	R0	R3 200 000	R0	R0	R0	R3 800 000	R3 800 000	R5 700 000	R19 300 000
Infrastructure Services	Waste Management: Solid Waste Management	Transfer Station: Stellenbosch Planning and Design	External Loan	48,00 %	Provisioned In	R0	R1 000 000	R10 000 000	R11 000 000	R0	R0	R0	R0	R0	R0	R22 000 000
Infrastructure Services	Waste Management: Solid Waste Management	Waste Minimization Projects	CRR (Own funds)	48,00 %	Provisioned In	R500 000	R500 000	R500 000	R0	R0	R500 000	R1 000 000	R1 000 000	R1 000 000	R0	R5 000 000
Infrastructure Services	Transport Planning	Technopark Kerb and Channel Upgrade	CRR (Own funds)	48,00 %	Provisioned In	R0	R1 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 500 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Extention Of WWTW: Stellenbosch	CRR (Own funds)	47,43 %	Provisioned In	R2 000 000	R4 000 000	R0	R0	R0	R0	R4 000 000	R45 000 000	R45 000 000	R0	R100 000 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Water and Wastewater Services: Water	109 Water Treatment Works: Paradyskloof and Associated works	CRR (Own funds)	47,43 %	Fit with Delay_3				R0	R0	R0	R0	R500 000	R500 000	R18 000 000	R19 000 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Blaauwklippen Drainage Area (Sewer Network Jamestown)	CRR (Own funds)	47,43 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R1 000 000	R1 000 000	R20 000 000	R22 000 000
Corporate Services	Properties and Municipal Building Maintenance	New Multi-purpose centre: Jamestown	CRR (Own funds)	47,43 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R500 000	R500 000	R10 000 000	R11 000 000
Infrastructure Services	Electrical Services	Emergency Electricity Supply: Pniel Offices	CRR (Own funds)	47,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Corporate Services	Properties and Municipal Building Maintenance	Upgrading of Business Hub: La Motte	CRR (Own funds)	47,43 %	Fit with Delay		R0	R0	R0	R0	R500 000	R0	R0	R0	R0	R500 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Refurbish Plant & Equipment - Raithby WWTW	External Loan	46,00 %	Provisioned In	R5 500 000	R2 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R8 000 000
Infrastructure Services	Traffic Engineering	Pedestrian Crossing Implementation	CRR (Own funds)	46,00 %	Provisioned In	R300 000	R100 000	R100 000	R300 000	R0	R0	R300 000	R0	R0	R0	R1 100 000
Infrastructure Services	Traffic Engineering	Raised Intersection Implementation	CRR (Own funds)	46,00 %	Provisioned In	R0	R600 000	R0	R0	R600 000	R0	R0	R600 000	R600 000	R0	R2 400 000
Infrastructure Services	Traffic Engineering	Road Safety Improvements	CRR (Own funds)	46,00 %	Provisioned In	R0	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Corporate Services	Properties and Municipal Building Maintenance	Airconditioners	CRR (Own funds)	46,00 %	Provisioned In	R300 000	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R800 000
Corporate Services	Properties and Municipal Building Maintenance	Upgrade Facilities for the Disabled	CRR (Own funds)	46,00 %	Provisioned In	R200 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R200 000
Infrastructure Services	Water and Wastewater Services: Water	New Jamestown Reservoir and Network Upgrades	CRR (Own funds)	46,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Corporate Services	Properties and Municipal	Upgrading of Traffic Offices: Stellenbosch	CRR (Own funds)	46,00 %	Fit with Delay_2			R0	R0	R0	R0	R0	R2 000 000	R32	R14 000 000	R16 000 032

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
	Building Maintenance															
Infrastructure Services	Water and Wastewater Services: Water	113 New 1 ML Raithby Reservoir Planning & Design	CRR (Own funds)	44,57 %	Fit with Delay_4					R0	R0	R0	R500 000	R500 000	R25 000 000	R26 000 000
Planning and Development Services	Housing Development	La Motte Old Forest Station (±430 services & ±430 units)	Human Settlements Grant	39,43 %	Provisioned In	R1 500 000	R0	R6 000 000	R0	R0	R0	R0	R0	R0	R0	R7 500 000
Community and Protection Services	Fire and Rescue Services	Major Fire Pumper	CRR (Own funds)	39,43 %	Fit with Delay_2			R0	R0	R0	R6 000 000	R0	R0	R32	R0	R6 000 032
Planning and Development Services	Housing Development	La Motte Old Forest Station (±430 services & ±430 units)	CRR (Own funds)	39,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Corporate Services	Properties and Municipal Building Maintenance	New Depot: La Motte	CRR (Own funds)	38,29 %	Provisioned In	R0	R300 000	R0	R0	R0	R0	R0	R0	R0	R0	R300 000
Corporate Services	Properties and Municipal Building Maintenance	Upgrading Fencing	CRR (Own funds)	38,00 %	Provisioned In	R1 000 000	R1 000 000	R1 000 000	R0	R500 000	R500 000	R500 000	R500 000	R500 000	R0	R5 500 000
Community and Protection Services	Fire and Rescue Services	Rapid Response Vehicle	CRR (Own funds)	38,00 %	Provisioned In	R0	R1 000 000	R0	R0	R1 500 000	R0	R0	R2 000 000	R2 000 000	R0	R6 500 000
Community and Protection Services	Law Enforcement and Security	Install and Upgrade CCTV/ LPR Cameras In WC024	CRR (Own funds)	38,00 %	Provisioned In	R1 000 000	R2 000 000	R0	R0	R2 000 000	R2 000 000	R2 000 000	R0	R0	R0	R9 000 000
Community and Protection Services	Law Enforcement and Security	Install Computerized Access Security Systems and CCTV Cameras At Municipal Buildings	CRR (Own funds)	38,00 %	Provisioned In	R1 200 000	R1 000 000	R0	R0	R850 000	R900 000	R950 000	R0	R0	R0	R4 900 000
Community and Protection Services	Law Enforcement and Security	Law Enforcement Tools and Equipment	CRR (Own funds)	38,00 %	Provisioned In	R0	R300 000	R0	R0	R750 000	R750 000	R750 000	R750 000	R750 000	R0	R4 050 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Community and Protection Services	Law Enforcement and Security	K9 Unit/ Horse Stables	CRR (Own funds)	38,00 %	Fit with Delay_2			R0	R0	R0	R2 500 000	R0	R0	R32	R0	R2 500 032
Infrastructure Services	Electrical Services	Alternative Energy (UPS for buildings - ICT equipment)	CRR (Own funds)	38,00 %	Provisioned In	R1 000 000	R2 000 000	R2 000 000	R2 000 000	R1 000 000	R1 000 000	R1 000 000	R2 000 000	R2 000 000	R2 000 000	R16 000 000
Corporate Services	Information and Communications Technology (ICT)	Backup and Disaster Recovery	CRR (Own funds)	38,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000	R1 000 000
Corporate Services	Information and Communications Technology (ICT)	Communication Network	CRR (Own funds)	38,00 %	Provisioned In	R4 000 000	R1 500 000	R1 500 000	R750 000	R2 250 000	R1 100 000	R1 100 000	R1 100 000	R1 100 000	R1 100 000	R15 500 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Upgrade of WWTW: Pniel & Decommissioning Of Franschhoek	External Loan	36,00 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R684 431	R684 431	R0	R1 368 862
Infrastructure Services	Infrastructure Services	Furniture, Tools & Equipment	CRR (Own funds)	36,00 %	Provisioned In	R75 000	R75 000	R75 000	R50 000	R75 000	R75 000	R75 000	R50 000	R50 000	R75 000	R675 000
Infrastructure Services	Electrical Services	Small Capital: Fte Electrical Services	CRR (Own funds)	36,00 %	Provisioned In	R100 000	R100 000	R333 183	R366 501	R403 151	R443 466	R487 813	R536 594	R536 594	R649 279	R3 956 579
Infrastructure Services	Roads and Stormwater	Furniture, Tools & Equipment: Roads & Stormwater	CRR (Own funds)	36,00 %	Provisioned In	R400 000	R400 000	R400 000	R400 000	R400 000	R400 000	R400 000	R400 000	R400 000	R400 000	R4 000 000
Infrastructure Services	Roads and Stormwater	Specialized Vehicles: Heavy Duty Vehicles: Roads	CRR (Own funds)	36,00 %	Provisioned In	R2 500 000	R2 000 000	R2 500 000	R0	R0	R0	R6 000 000	R0	R0	R0	R13 000 000
Infrastructure Services	Traffic Engineering	Specialized Equipment: Roadmarking Machine + Trailer	CRR (Own funds)	36,00 %	Provisioned In	R0	R500 000	R600 000	R0	R0	R0	R0	R0	R0	R0	R1 100 000
Corporate Services	Properties and Municipal Building Maintenance	Furniture, Tools & Equipment: Property Management	CRR (Own funds)	34,00 %	Provisioned In	R250 000	R250 000	R0	R0	R250 000	R250 000	R250 000	R250 000	R250 000	R0	R1 750 000
Community and Protection Services	Fire and Rescue Services	Furniture, Tools & Equipment: Fire	CRR (Own funds)	34,00 %	Provisioned In	R200 000	R50 000	R0	R0	R100 000	R0	R0	R0	R0	R0	R350 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Community and Protection Services	Law Enforcement and Security	Furniture, Tools & Equipment: Law Enforcement	CRR (Own funds)	34,00 %	Provisioned In	R150 000	R200 000	R0	R0	R200 000	R200 000	R200 000	R0	R0	R0	R950 000
Community and Protection Services	Law Enforcement and Security	Vehicle Fleet: Law Enforcement	CRR (Own funds)	34,00 %	Provisioned In	R1 365 972	R2 500 000	R0	R0	R2 500 000	R2 500 000	R2 500 000	R0	R0	R0	R11 365 972
Community and Protection Services	Traffic Services	Furniture, Tools & Equipment: Traffic Services	CRR (Own funds)	34,00 %	Provisioned In	R130 000	R45 000	R0	R0	R0	R0	R0	R0	R0	R0	R175 000
Community and Protection Services	Traffic Services	Specialized Equipment: Traffic	CRR (Own funds)	34,00 %	Provisioned In	R0	R1 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 500 000
Community and Protection Services	Traffic Services	Specialized Vehicles: Traffic	CRR (Own funds)	34,00 %	Provisioned In	R0	R1 750 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 750 000
Community and Protection Services	Traffic Services	Vehicle Fleet: Traffic	CRR (Own funds)	34,00 %	Provisioned In	R1 200 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R1 200 000
Financial Services	Financial Management Services	Furniture, Tools & Equipment	CRR (Own funds)	34,00 %	Provisioned In	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R250 000	R2 500 000
Financial Services	Vehicle Fleet: FMS	Vehicle Fleet: FMS	CRR (Own funds)	34,00 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Corporate Services	Information and Communications Technology (ICT)	Server Storage expansion and upgrades	CRR (Own funds)	34,00 %	Provisioned In	R2 000 000	R1 000 000	R1 000 000	R2 000 000	R1 000 000	R1 000 000	R2 000 000	R2 000 000	R2 000 000	R1 000 000	R15 000 000
Community and Protection Services	Sports Grounds and Picnic Sites	Skate Board Park	CRR (Own funds)	33,14 %	Fit with Delay_2			R0	R0	R0	R0	R0	R550 000	R32	R0	R550 032
Infrastructure Services	Waste Management: Solid Waste Management	Vehicles: Solid Waste	CRR (Own funds)	32,00 %	Provisioned In	R2 500 000	R2 500 000	R3 500 000	R9 600 000	R3 500 000	R5 000 000	R7 000 000	R0	R0	R3 800 000	R37 400 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Waste Management: Solid Waste Management	Integrated Waste Management Plan	CRR (Own funds)	32,00 %	Fit with Delay		R0	R0	R0	R0	R0	R100 000	R600 000	R600 000	R0	R1 300 000
Community and Protection Services	Environmental Management: Implementation	Papegaaiberg Nature Reserve	CRR (Own funds)	32,00 %	Fit with Delay_2			R0	R0	R0	R0	R0	R2 000 000	R32	R0	R2 000 032
Community and Protection Services	Sports Grounds and Picnic Sites	Jonkershoek Picnic Site upgrades	CRR (Own funds)	31,43 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Community and Protection Services	Environmental Management: Implementation	Jonkershoek Picnic Site: Upgrade of Facilities.	CRR (Own funds)	31,43 %	Provisioned In	R700 000	R0	R0	R0	R0	R200 000	R0	R200 000	R200 000	R0	R1 300 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Kayamandi Bulk Sewer	CRR (Own funds)	30,29 %	Fit with Delay_2			R0	R0	R0	R5 000 000	R0	R0	R32	R0	R5 000 032
Community and Protection Services	Community Services: Library Services	Upgrading: Cloetesville Library	CRR (Own funds)	30,29 %	Provisioned In	R180 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R180 000
Community and Protection Services	Sports Grounds and Picnic Sites	Kayamandi Sports Ground	CRR (Own funds)	30,29 %	Provisioned In	R300 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R300 000
Planning and Development Services	Economic Development & Tourism	Establishment of the Kayamandi Informal Trading Area	RSEP	30,29 %	Provisioned In	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000
Infrastructure Services	Project Management Unit (PMU)	Furniture, Tools and Equipment	CRR (Own funds)	30,29 %	Provisioned In	R50 000	R75 000	R75 000	R110 000	R120 000	R130 000	R140 000	R150 000	R150 000	R170 000	R1 170 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Northern Extension: Phase 2 Sanitation Infrastructure	CRR (Own funds)	30,29 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Sports Grounds and Picnic Sites	Canopy	CRR (Own funds)	30,29 %	Fit with Delay		R0	R0	R0	R0	R25 000	R0	R0	R0	R0	R25 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Community and Protection Services	Sports Grounds and Picnic Sites	Feasibility Studies - Swimming Pools	CRR (Own funds)	30,29 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Infrastructure Services	Water and Wastewater Services: Water	New Developments Bulk Water Supply WC024	IUDG	30,00 %	Provisioned In	R1 500 000	R1 500 000	R1 500 000	R3 000 000	R3 500 000	R3 500 000	R4 000 000	R4 000 000	R4 000 000	R0	R26 500 000
Infrastructure Services	Water and Wastewater Services: Sanitation	New Development Bulk Sewer Supply WC024	CRR (Own funds)	30,00 %	Provisioned In	R0	R0	R2 000 000	R6 000 000	R7 000 000	R7 000 000	R7 000 000	R7 000 000	R7 000 000	R8 000 000	R51 000 000
Infrastructure Services	Water and Wastewater Services: Sanitation	New Development Bulk Sewer Supply WC024	IUDG	30,00 %	Provisioned In	R2 000 000	R2 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R4 000 000
Infrastructure Services	Roads and Stormwater	Update Stormwater Masterplan	CRR (Own funds)	30,00 %	Provisioned In	R1 000 000	R0	R0	R0	R0	R1 000 000	R0	R0	R0	R0	R2 000 000
Community and Protection Services	Sports Grounds and Picnic Sites	Recreational Equipment Sport	CRR (Own funds)	30,00 %	Fit with Delay		R0	R0	R0	R0	R500 000	R50 000	R100 000	R100 000	R150 000	R900 000
Community and Protection Services	Sports Grounds and Picnic Sites	Re-Surface of Netball/Tennis Courts	CRR (Own funds)	30,00 %	Fit with Delay_2			R0	R0	R0	R0	R0	R550 000	R32	R0	R550 032
Community and Protection Services	Sports Grounds and Picnic Sites	Sight Screens/Pitch Covers Sports Grounds	CRR (Own funds)	30,00 %	Fit with Delay_3				R0	R0	R0	R0	R250 000	R250 000	R250 000	R750 000
Community and Protection Services	Sports Grounds and Picnic Sites	Sport Special Equipment	CRR (Own funds)	30,00 %	Fit with Delay_3				R0	R0	R0	R0	R300 000	R300 000	R350 000	R950 000
Community and Protection Services	Parks and Cemeteries	Beautification of Parks and Cemeteries	IUDG	29,14 %	Provisioned In	R300 000	R800 000	R1 000 000	R0	R0	R0	R0	R400 000	R400 000	R0	R2 900 000
Infrastructure Services	Waste Management: Solid Waste Management	Waste Biofuels	CRR (Own funds)	28,00 %	Fit with Delay_2			R0	R0	R0	R300 000	R0	R300 000	R32	R250 000	R850 032
Infrastructure Services	Water and Wastewater	Dorp Street Bulk Sewer Upgrade	CRR (Own funds)	27,43 %	Provisioned In	R0	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R500 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
	Services: Sanitation															
Community and Protection Services	Cemeteries	Extension of Cemetery Infrastructure	CRR (Own funds)	27,43 %	Provisioned In	R0	R10 000 000	R0	R0	R8 000 000	R9 000 000	R10 000 000	R5 000 000	R5 000 000	R0	R47 000 000
Community and Protection Services	Cemeteries	Extension of Cemetery Infrastructure	IUDG	27,43 %	Provisioned In	R5 500 000	R0	R0	R0	R8 000 000	R9 000 000	R10 000 000	R5 000 000	R5 000 000	R0	R42 500 000
Community and Protection Services	Sports Grounds and Picnic Sites	Upgrading of swimmingpool	CRR (Own funds)	27,43 %	Provisioned In	R0	R0	R200 000	R0	R150 000	R0	R0	R200 000	R200 000	R0	R750 000
Community and Protection Services	Environmental Management: Implementation	Mont Rochelle Nature Reserve: Upgrade of Facilities	CRR (Own funds)	26,29 %	Provisioned In	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000
Planning and Development Services	Development Planning	Furniture, Tools and Equipment: Spatial Planning	CRR (Own funds)	26,00 %	Provisioned In	R75 000	R75 000	R75 000	R0	R0	R0	R0	R0	R0	R0	R225 000
Infrastructure Services	Waste Management: Solid Waste Management	Furniture, Tools & Equipment: Solid Waste	CRR (Own funds)	26,00 %	Provisioned In	R45 000	R50 000	R50 000	R50 000	R50 000	R0	R0	R0	R0	R0	R245 000
Infrastructure Services	Water and Wastewater Services: Water	Furniture, Tools & Equipment: Water	CRR (Own funds)	26,00 %	Provisioned In	R150 000	R150 000	R200 000	R200 000	R200 000	R250 000	R250 000	R300 000	R300 000	R0	R2 000 000
Infrastructure Services	Water and Wastewater Services: Water	Reservoirs and Dam Safety	External Loan	26,00 %	Provisioned In	R2 000 000	R0	R500 000	R1 000 000	R500 000	R3 000 000	R3 000 000	R2 000 000	R2 000 000	R0	R14 000 000
Infrastructure Services	Water and Wastewater Services: Water	Update Water Masterplan	CRR (Own funds)	26,00 %	Provisioned In	R1 000 000	R1 000 000	R1 000 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R1 500 000	R0	R12 000 000
Infrastructure Services	Water and Wastewater Services: Water	Upgrade and Replace Water Meters	CRR (Own funds)	26,00 %	Provisioned In	R2 500 000	R1 000 000	R1 000 000	R2 000 000	R1 500 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R0	R16 000 000
Infrastructure Services	Water and Wastewater Services: Water	Waterpipe Replacement	External Loan	26,00 %	Provisioned In	R4 000 000	R4 000 000	R7 000 000	R8 000 000	R8 000 000	R8 000 000	R9 000 000	R9 000 000	R9 000 000	R0	R66 000 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Infrastructure Services	Water and Wastewater Services: Sanitation	Sewer Pumpstation & Telemetry Upgrade	CRR (Own funds)	26,00 %	Provisioned In	R500 000	R2 500 000	R2 500 000	R2 500 000	R1 500 000	R1 000 000	R1 500 000	R1 500 000	R1 500 000	R0	R15 000 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Sewerpipe Replacement	CRR (Own funds)	26,00 %	Provisioned In	R4 000 000	R4 000 000	R8 000 000	R9 000 000	R10 000 000	R11 000 000	R11 000 000	R11 000 000	R11 000 000	R0	R79 000 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Specialized Vehicles: Sanitation	CRR (Own funds)	26,00 %	Provisioned In	R0	R4 500 000	R0	R0	R6 000 000	R0	R0	R0	R0	R0	R10 500 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Furniture, Tools & Equipment: Sanitation	CRR (Own funds)	26,00 %	Provisioned In	R300 000	R400 000	R400 000	R400 000	R400 000	R500 000	R500 000	R350 000	R350 000	R0	R3 600 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Upgrade Laboratory Equipment	CRR (Own funds)	26,00 %	Provisioned In	R0	R500 000	R0	R0	R0	R650 000	R0	R0	R0	R0	R1 150 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Upgrade Auto-Samplers	CRR (Own funds)	26,00 %	Provisioned In	R200 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R200 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Franschhoek Sewer Network Upgrade (Langrug/Mooiwater)	External Loan	26,00 %	Roll-Over	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Infrastructure Services	Water and Wastewater Services: Sanitation	Industrial Effluent Monitoring	CRR (Own funds)	26,00 %	Provisioned In	R1 500 000	R0	R0	R0	R0	R1 000 000	R0	R0	R0	R0	R2 500 000
Community and Protection Services	Halls	Community Hall	CRR (Own funds)	26,00 %	Provisioned In	R200 000	R1 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 700 000
Community and Protection Services	Halls	Upgrading of Halls	CRR (Own funds)	26,00 %	Provisioned In	R0	R250 000	R0	R0	R500 000	R500 000	R1 500 000	R0	R0	R0	R2 750 000
Community and	Halls	Specialised Equipment	CRR (Own funds)	26,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Protection Services																
Community and Protection Services	Halls	Vehicle Fleet	CRR (Own funds)	26,00 %	Fit with Delay_2			R0	R0	R0	R0	R0	R900 000	R32	R0	R900 032
Community and Protection Services	Sports Grounds and Picnic Sites	Borehole: Rural Sportsgrounds	CRR (Own funds)	26,00 %	Provisioned In	R0	R1 100 000	R0	R0	R0	R1 500 000	R0	R0	R0	R0	R2 600 000
Community and Protection Services	Sports Grounds and Picnic Sites	Install Prepaid Meters at Sports Facilities	CRR (Own funds)	26,00 %	Provisioned In	R0	R200 000	R0	R0	R0	R0	R0	R0	R0	R0	R200 000
Community and Protection Services	Sports Grounds and Picnic Sites	Installation of Boreholes	CRR (Own funds)	26,00 %	Provisioned In	R0	R1 500 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 500 000
Community and Protection Services	Sports Grounds and Picnic Sites	La Motte Open Air Gym	CRR (Own funds)	26,00 %	Provisioned In	R300 000	R0	R0	R0	R0	R0	R0	R400 000	R400 000	R0	R1 100 000
Community and Protection Services	Sports Grounds and Picnic Sites	Upgrade of netball courts	CRR (Own funds)	26,00 %	Provisioned In	R0	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000
Community and Protection Services	Sports Grounds and Picnic Sites	Upgrade of Sport Facilities	CRR (Own funds)	26,00 %	Provisioned In	R0	R3 000 000	R0	R0	R3 500 000	R4 000 000	R4 000 000	R4 500 000	R4 500 000	R0	R23 500 000
Community and Protection Services	Sports Grounds and Picnic Sites	Upgrade of Sport Facilities	DC - Community	26,00 %	Provisioned In	R3 561 030	R0	R0	R0	R0	R0	R0	R0	R0	R0	R3 561 030
Planning and Development Services	Economic Development & Tourism	Furniture, Tools & Equipment: LED	CRR (Own funds)	26,00 %	Provisioned In	R75 000	R75 000	R75 000	R0	R0	R0	R0	R0	R0	R0	R225 000
Planning and Development Services	Housing Administration	Flats: Interior Upgrading - Kayamandi	CRR (Own funds)	26,00 %	Provisioned In	R1 000 000	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R2 000 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Planning and Development Services	Housing Administration	Furniture, Tools & Equipment: Housing Administration	CRR (Own funds)	26,00 %	Provisioned In	R70 000	R80 000	R150 000	R0	R0	R0	R0	R0	R0	R0	R300 000
Community and Protection Services	Sports Grounds and Picnic Sites	Construction of Soccer Field: Langrug	CRR (Own funds)	26,00 %	Fit with Delay_3				R0	R0	R0	R0	R3 000 000	R3 000 000	R0	R6 000 000
Community and Protection Services	Sports Grounds and Picnic Sites	Installation of cricket nets	CRR (Own funds)	26,00 %	Provisioned In	R200 000	R150 000	R0	R250 000	R0	R0	R0	R0	R0	R0	R600 000
Community and Protection Services	Sports Grounds and Picnic Sites	Kayamandi Multi Purpose Centre	CRR (Own funds)	26,00 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R350 000	R350 000	R0	R700 000
Community and Protection Services	Sports Grounds and Picnic Sites	New Project: Building of a clubhouse at Papplaas Sport Facility (Devon Valley)	CRR (Own funds)	26,00 %	Provisioned In	R0	R200 000	R2 000 000	R0	R0	R0	R0	R0	R0	R0	R2 200 000
Community and Protection Services	Sports Grounds and Picnic Sites	Specialised Vehicles	CRR (Own funds)	26,00 %	Provisioned In	R0	R1 000 000	R0	R0	R0	R1 200 000	R0	R0	R0	R0	R2 200 000
Community and Protection Services	Sports Grounds and Picnic Sites	Upgrading of Tennis Courts: Idas Valley & Cloetesville	CRR (Own funds)	26,00 %	Fit by Score	R0	R0	R0	R0	R0	R700 000	R0	R0	R0	R0	R700 000
Infrastructure Services	Water and Wastewater Services: Water	Upgrading of Raithby Water Scheme	CRR (Own funds)	24,57 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Sports Grounds and Picnic Sites	Upgrade of Irrigation System	CRR (Own funds)	22,00 %	Fit with Delay_3				R0	R0	R0	R0	R400 000	R400 000	R200 000	R1 000 000
Community and Protection Services	Environmental Management: Urban Forestry	Design and implement electronic Urban Forestry management tool	CRR (Own funds)	22,00 %	Provisioned In	R250 000	R250 000	R0	R0	R500 000	R0	R0	R0	R0	R0	R1 000 000
Community and	Parks and Cemeteries	Irrigation Systems	CRR (Own funds)	22,00 %	Fit with Delay		R0	R0	R0	R0	R100 000	R30 000	R30 000	R30 000	R50 000	R240 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Protection Services																
Community and Protection Services	Parks and Cemeteries	Nursery: Facilities upgrade	CRR (Own funds)	22,00 %	Fit with Delay		R0	R0	R0	R0	R50 000	R0	R30 000	R30 000	R50 000	R160 000
Community and Protection Services	Parks and Cemeteries	Pathways: Parks and Gardens	CRR (Own funds)	22,00 %	Fit with Delay_2			R0	R0	R0	R0	R0	R100 000	R32	R200 000	R300 032
Community and Protection Services	Parks and Cemeteries	Upgrading of Parks	CRR (Own funds)	22,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R1 000 000	R1 000 000	R0	R2 000 000
Community and Protection Services	Environmental Management: Urban Forestry	Security Fencing Gate	CRR (Own funds)	21,14 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R200 000	R200 000	R0	R400 000
Community and Protection Services	Parks and Cemeteries	Expand offices for Dept Community Services	CRR (Own funds)	21,14 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R1 500 000	R1 500 000	R0	R3 000 000
Community and Protection Services	Fire and Rescue Services	Fire Station - Jamestown	CRR (Own funds)	19,43 %	Provisioned In	R300 000	R1 000 000	R8 000 000	R0	R0	R0	R0	R0	R0	R0	R9 300 000
Community and Protection Services	Community Services: Library Services	Upgrading: Kayamandi Library	CRR (Own funds)	18,29 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R250 000	R250 000	R0	R500 000
Community and Protection Services	Environmental Management: Implementation	Air and Noise Control: FTE	CRR (Own funds)	18,29 %	Fit with Delay		R0	R0	R0	R0	R150 000	R0	R200 000	R200 000	R250 000	R800 000
Community and Protection Services	Parks and Cemeteries	CBD Beautification	CRR (Own funds)	18,29 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Parks and Cemeteries	Franschhoek Pedestrian Paths	CRR (Own funds)	18,29 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R500 000	R500 000	R0	R1 000 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Community and Protection Services	Sports Grounds and Picnic Sites	Fencing of Netball Courts	CRR (Own funds)	18,00 %	Provisioned In	R350 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R350 000
Community and Protection Services	Sports Grounds and Picnic Sites	Fencing: Sport Grounds (WC024)	CRR (Own funds)	18,00 %	Provisioned In	R0	R1 750 000	R0	R0	R2 000 000	R2 500 000	R2 500 000	R0	R0	R0	R8 750 000
Community and Protection Services	Parks and Cemeteries	Fencing :Parks and Gardens	IUDG	18,00 %	Provisioned In	R200 000	R200 000	R0	R0	R200 000	R200 000	R200 000	R0	R0	R0	R1 000 000
Community and Protection Services	Fire and Rescue Services	Specialized Vehicles: Fire	CRR (Own funds)	18,00 %	Provisioned In	R2 500 000	R0	R0	R0	R0	R0	R3 000 000	R0	R0	R3 500 000	R9 000 000
Community and Protection Services	Fire and Rescue Services	Rescue equipment	CRR (Own funds)	18,00 %	Provisioned In	R0	R1 000 000	R0	R0	R1 000 000	R0	R0	R0	R0	R0	R2 000 000
Community and Protection Services	Law Enforcement and Security	Neighborhood Watch Safety equipment	CRR (Own funds)	18,00 %	Provisioned In	R250 000	R250 000	R0	R0	R500 000	R500 000	R500 000	R0	R0	R0	R2 000 000
Community and Protection Services	Law Enforcement and Security	Security Upgrades	CRR (Own funds)	18,00 %	Provisioned In	R0	R650 000	R0	R0	R250 000	R250 000	R250 000	R250 000	R250 000	R0	R1 900 000
Community and Protection Services	Environmental Management: Implementation	Workshop: Upgrading of facilities	CRR (Own funds)	15,43 %	Provisioned In	R0	R0	R3 500 000	R0	R0	R0	R0	R0	R0	R0	R3 500 000
Community and Protection Services	Community Services: Library Services	New Library: Kylemore	CRR (Own funds)	15,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R1 500 000	R1 500 000	R0	R3 000 000
Community and Protection Services	Environmental Management: Implementation	Upgrading of Jonkershoek Office Complex and Hatchery	CRR (Own funds)	15,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and	Environmental Management: Urban Forestry	Boreholes	CRR (Own funds)	15,43 %	Provisioned In	R500 000	R0	R0	R0	R0	R0	R0	R350 000	R350 000	R0	R1 200 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Protection Services																
Community and Protection Services	Environmental Management: Urban Forestry	Revitalization of the Arboretum	CRR (Own funds)	15,43 %	Fit with Delay_2			R0	R0	R0	R0	R0	R2 200 000	R32	R0	R2 200 032
Community and Protection Services	Environmental Management: Urban Forestry	Urban Forestry: Purchasing of bakkie 1 ton with canopy	CRR (Own funds)	15,43 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R450 000	R450 000	R0	R900 000
Community and Protection Services	Environmental Management: Urban Forestry	Urban Forestry: Purchasing of trailer	CRR (Own funds)	15,43 %	Fit by Score	R0	R0	R0	R0	R0	R80 000	R0	R0	R0	R0	R80 000
Community and Protection Services	Parks and Cemeteries	Landscaping of Circles in Stellenbosch	CRR (Own funds)	15,43 %	Fit with Delay_2			R0	R0	R0	R0	R0	R150 000	R32	R0	R150 032
Municipal Manager	Office of the Municipal Manager	Furniture, Tools & Equipment: MM	CRR (Own funds)	14,00 %	Provisioned In	R40 000	R40 000	R40 000	R50 000	R50 000	R50 000	R50 000	R50 000	R50 000	R50 000	R470 000
Planning and Development Services	Housing Development	Furniture, Tools & Equipment: Housing Development	CRR (Own funds)	14,00 %	Provisioned In	R70 000	R80 000	R150 000	R150 000	R80 000	R85 000	R90 000	R150 000	R150 000	R0	R1 005 000
Infrastructure Services	Water and Wastewater Services: Water	Vehicles: Water	CRR (Own funds)	14,00 %	Provisioned In	R0	R1 000 000	R1 000 000	R0	R0	R750 000	R1 500 000	R0	R0	R0	R4 250 000
Infrastructure Services	Water and Wastewater Services: Water	Water Conservation & Demand Management	External Loan	14,00 %	Provisioned In	R2 000 000	R2 000 000	R6 000 000	R6 000 000	R1 000 000	R1 500 000	R1 000 000	R2 000 000	R2 000 000	R0	R23 500 000
Infrastructure Services	Water and Wastewater Services: Water	Water Telemetry Upgrade	CRR (Own funds)	14,00 %	Provisioned In	R1 500 000	R1 500 000	R1 500 000	R0	R0	R1 750 000	R1 750 000	R0	R0	R0	R8 000 000
Infrastructure Services	Water and Wastewater Services: Water	WSDP (tri-annually)	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R400 000	R0	R0	R0	R0	R400 000
Infrastructure Services	Water and Wastewater Services: Sanitation	Update Sewer Masterplan	CRR (Own funds)	14,00 %	Provisioned In	R500 000	R500 000	R500 000	R600 000	R600 000	R700 000	R700 000	R700 000	R700 000	R0	R5 500 000
Infrastructure Services	Water and Wastewater	Compilation of Water Service	CRR (Own funds)	14,00 %	Provisioned In	R300 000	R300 000	R400 000	R400 000	R400 000	R500 000	R500 000	R500 000	R500 000	R0	R3 800 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
	Services: Sanitation	Development Plan (tri-annually)														
Infrastructure Services	Water and Wastewater Services: Sanitation	Vehicles: Sanitation	CRR (Own funds)	14,00 %	Provisioned In	R800 000	R1 500 000	R2 000 000	R0	R0	R1 250 000	R0	R0	R0	R0	R5 550 000
Infrastructure Services	Roads and Stormwater	Update Pavement Management System	CRR (Own funds)	14,00 %	Provisioned In	R1 000 000	R0	R0	R0	R0	R1 500 000	R0	R0	R0	R0	R2 500 000
Corporate Services	Information and Communications Technology (ICT)	Purchase and Replacement of Computer/software and Peripheral devices	CRR (Own funds)	14,00 %	Provisioned In	R1 270 000	R1 270 000	R1 270 000	R1 500 000	R1 500 000	R1 500 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R16 310 000
Corporate Services	Information and Communications Technology (ICT)	Upgrade and Expansion of IT Infrastructure Platforms (Including council chambers and fibre)	CRR (Own funds)	14,00 %	Provisioned In	R3 500 000	R3 500 000	R2 000 000	R2 000 000	R2 000 000	R2 500 000	R2 500 000	R2 500 000	R2 500 000	R2 500 000	R25 500 000
Community and Protection Services	Community Development	Furniture, Tools & Equipment: Comm Development	CRR (Own funds)	14,00 %	Provisioned In	R55 000	R60 000	R0	R0	R60 000	R70 000	R0	R0	R0	R0	R245 000
Community and Protection Services	Community Services: Library Services	Furniture, Tools & Equipment: Pniel Library	CRR (Own funds)	14,00 %	Provisioned In	R20 000	R0	R10 000	R0	R0	R35 000	R20 000	R0	R0	R0	R85 000
Community and Protection Services	Community Services: Library Services	Library Books	CRR (Own funds)	14,00 %	Provisioned In	R180 000	R180 000	R200 000	R200 000	R200 000	R210 000	R21 000	R210 000	R210 000	R220 000	R1 831 000
Community and Protection Services	Halls	Furniture, Tools & Equipment: Halls	CRR (Own funds)	14,00 %	Provisioned In	R150 000	R0	R0	R0	R250 000	R250 000	R100 000	R0	R0	R0	R750 000
Community and Protection Services	Sports Grounds and Picnic Sites	Furniture, Tools & Equipment: Sports	CRR (Own funds)	14,00 %	Provisioned In	R0	R400 000	R0	R0	R200 000	R200 000	R250 000	R250 000	R250 000	R0	R1 550 000
Community and Protection Services	Environmental Management: Implementation	Furniture, Tools & Equipment: Environmental Management	CRR (Own funds)	14,00 %	Provisioned In	R100 000	R150 000	R150 000	R200 000	R0	R250 000	R0	R300 000	R300 000	R0	R1 450 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Community and Protection Services	Environmental Management: Urban Forestry	Furniture, Tools & Equipment: Urban Forestry	CRR (Own funds)	14,00 %	Provisioned In	R0	R1 500 000	R0	R0	R2 000 000	R0	R25 000 000	R0	R0	R0	R28 500 000
Community and Protection Services	Environmental Management: Urban Forestry	Specialized equipment: Urban Forestry	CRR (Own funds)	14,00 %	Provisioned In	R0	R1 500 000	R0	R0	R2 500 000	R0	R0	R0	R0	R0	R4 000 000
Community and Protection Services	Environmental Management: Implementation	Specialized Equipment: Workshop	CRR (Own funds)	14,00 %	Provisioned In	R0	R1 500 000	R0	R0	R0	R0	R3 000 000	R0	R0	R0	R4 500 000
Community and Protection Services	Environmental Management: Implementation	Specialized Vehicles: Workshop	CRR (Own funds)	14,00 %	Provisioned In	R800 000	R0	R0	R0	R0	R0	R0	R0	R0	R0	R800 000
Community and Protection Services	Environmental Management: Implementation	Vehicle Fleet: Workshop	CRR (Own funds)	14,00 %	Provisioned In	R0	R100 000	R0	R0	R0	R0	R0	R0	R0	R0	R100 000
Community and Protection Services	Cemeteries	Vehicle Fleet: Cemeteries	CRR (Own funds)	14,00 %	Provisioned In	R0	R500 000	R0	R0	R0	R0	R0	R0	R0	R0	R500 000
Community and Protection Services	Parks and Cemeteries	Furniture, Tools & Equipment: Parks & Cemetries	CRR (Own funds)	14,00 %	Provisioned In	R0	R50 000	R0	R0	R200 000	R30 000	R30 000	R30 000	R30 000	R0	R370 000
Community and Protection Services	Parks and Cemeteries	Vehicle Fleet: Parks & Cemeteries	CRR (Own funds)	14,00 %	Provisioned In	R0	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R1 000 000
Community and Protection Services	Environmental Management: Implementation	Jan Marais Nature Reserve: Upgrading and maintenance of the reserve	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R2 000 000	R2 000 000	R0	R4 000 000
Community and Protection Services	Community Development	SRD Vehicle	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R500 000	R0	R0	R0	R0	R500 000
Community and	Community Services: Library Services	Idas Valley: Furniture, Tools and Equipment	CRR (Own funds)	14,00 %	Provisioned In	R0	R30 000	R0	R0	R0	R0	R0	R0	R0	R0	R30 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Protection Services																
Community and Protection Services	Community Services: Library Services	Groendal Library: Furniture Tools and Equipment	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Community Services: Library Services	Kayamandi: Furniture, Tools and Equipment	CRR (Own funds)	14,00 %	Provisioned In	R0	R0	R20 000	R0	R0	R10 000	R0	R0	R0	R0	R30 000
Community and Protection Services	Community Services: Library Services	Security cameras: All libraries	CRR (Own funds)	14,00 %	Fit with Delay		R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Community Services: Library Services	Vehicles	CRR (Own funds)	14,00 %	Fit with Delay		R0	R0	R0	R0	R300 000	R0	R0	R0	R0	R300 000
Community and Protection Services	Environmental Management: Implementation	Hiking Trails in Nature Areas	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Environmental Management: Implementation	4x4 bakkie	CRR (Own funds)	14,00 %	Fit with Delay		R0	R0	R0	R0	R700 000	R0	R0	R0	R0	R700 000
Community and Protection Services	Environmental Management: Implementation	Nature Conservation:Vehicle Fleet	CRR (Own funds)	14,00 %	Fit with Delay_3				R0	R0	R0	R0	R0	R0	R1 000 000	R1 000 000
Community and Protection Services	Environmental Management: Implementation	Workshop : FTE	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R100 000	R0	R0	R0	R0	R100 000
Community and Protection Services	Environmental Management: Urban Forestry	Office furniture	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Environmental Management: Urban Forestry	8 Ton Tipper Truck	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Community and Protection Services	Parks and Cemeteries	Artificial grass on parks and gardens	CRR (Own funds)	14,00 %	Fit with Delay_4					R0	R0	R0	R0	R0	R200 000	R200 000
Community and Protection Services	Parks and Cemeteries	Grab/crane truck	CRR (Own funds)	14,00 %	Fit with Delay_3				R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Parks and Cemeteries	Ornamental Horticulture FTE	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R30 000	R0	R30 000	R30 000	R0	R90 000
Community and Protection Services	Parks and Cemeteries	Purchase Fleet	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Parks and Cemeteries	Purchase of Specialised Equipment	CRR (Own funds)	14,00 %	Fit with Delay_3				R0	R0	R0	R0	R30 000	R30 000	R30 000	R90 000
Community and Protection Services	Parks and Cemeteries	Purchase of Specialised Vehicles	CRR (Own funds)	14,00 %	Fit with Delay_3				R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Parks and Cemeteries	Radios	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R10 000	R0	R0	R0	R0	R10 000
Community and Protection Services	Parks and Cemeteries	River developement	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R250 000	R250 000	R400 000	R400 000	R0	R1 300 000
Community and Protection Services	Parks and Cemeteries	Spray/Water Parks	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R15 000 000	R0	R17 000 000	R0	R0	R0	R32 000 000
Community and Protection Services	Parks and Cemeteries	Storage Containers: Fertilisers & Pesticides.	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R30 000	R0	R0	R0	R0	R0	R30 000
Community and	Parks and Cemeteries	Urban Greening: Beautification: Main	CRR (Own funds)	14,00 %	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R250 000	R250 000	R0	R500 000

Directorate	Department	Project Name	Funding Source	Score	Fit Status	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Protection Services		Routes and Tourist Routes														
Corporate Services	Information and Communications Technology (ICT)	Fibre Optic Strategy/Blueprint	CRR (Own funds)	14,00 %	Provisioned In	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 500 000	R2 500 000	R2 500 000	R2 500 000	R2 500 000	R2 500 000	R23 000 000
Infrastructure Services	Water and Wastewater Services: Water	Specialized Vehicles: Water	CRR (Own funds)	4,00%	Provisioned In	R0	R0	R5 500 000	R0	R0	R6 000 000	R0	R0	R0	R8 000 000	R19 500 000
Infrastructure Services	Roads and Stormwater	Roads Safety Plan	CRR (Own funds)	4,00%	Fit by Score	R0	R0	R0	R0	R0	R1 000 000	R0	R0	R0	R0	R1 000 000
Infrastructure Services	Transport Planning	Transport Study Stellenbosch CBD	CRR (Own funds)	4,00%	Fit by Score	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0	R0
Community and Protection Services	Community Development	Upgrading and Maintenance: ECD Facilities	IUDG	4,00%	Provisioned In	R1 000 000	R1 000 000	R1 000 000	R1 000 000	R1 000 000	R0	R0	R0	R0	R0	R5 000 000
Community and Protection Services	Environmental Management: Urban Forestry	Landscaping of Nature Areas	CRR (Own funds)	4,00%	Fit by Score	R0	R1 000 000	R0	R0	R0	R0	R0	R0	R0	R0	R1000000

Part 7

Institutional Arrangements

7 Part 7: Institutional Arrangements

7.1 Functional Area Determination

It is recommended that a Development Potential Index are used to determine the Functional Areas. The Development Potential Index is a standardised spatial multi-criteria assessment framework based on hexagon modelling units, which takes into consideration factors related to morphology, demographics, socio-economics, land uses, accessibility and connectivity, social facilities and more. This result in the identification of homogonous zones – ideal for infrastructure demand calculations. This approach will ensure that the investment in infrastructure is aligned with the development potential of the area, leading to better use of resources.

7.2 Infrastructure Demand

After review of key masterplan documents, it was found that several masterplans are outdated. Of the masterplans reviewed, it was not clear what the infrastructure projects are that is required to invest in for the respective services. It was also found that the asset management framework of the municipality is under review. It is recommended that through the capital planning forum, several key masterplan documents are updated to clearly express, per capital project, what is required from an investment perspective over the next 20-50 years. This will provide a clear understanding of the infrastructure demands and ensure that investments are made based on updated and accurate information.

7.3 Prioritisation Rationale

Currently, the municipality considers five key objectives when it comes to differentiating between capital projects vying for capital investment over the analysis period. To determine an even more representative score, it is recommended that the municipality investigate the usage of more criteria when evaluating projects. It is further recommended that the data used to determine the adherence to the said criteria, is verifiable, otherwise put, that the data utilised to determine the strategic alignment of each capital project is evidence based leading to a more objective prioritisation process.

7.4 Budget Scenario Tool

The budget scenario tool used to develop the 10-year capital expenditure framework encapsulated in this document, is configured in a MS-word application, MS Excel. This does pose limitations in flexibility when it comes to scenario testing and require significant input to conduct a budget scenario. It is recommended that the municipality consider applications that are integrated with the entire capital planning process, to facilitate scenario-based decision making in optimising investment towards capital investment.

7.5 Capital Planning Forum

It is recommended that the Capital Planning Forum is continued as a vehicle to enable stakeholder engagement relevant to the planning and prioritisation process of infrastructure investment. A Terms of Reference for the Capital Planning Forum is appended as an annexure.

Annexure

Annexure A: Masterplan - Infrastructure Projects Portfolio

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Water	River Management Plan	2011	A-EM-3.001	Extension of Gabion Mattress Protection	-	-33,9380549 18,8781321	-	R685 000,00
Water	River Management Plan	2011	A-EM-3.002	Protection of Tree Roots	-	-33,9382755 18,8806553	-	R1 354 800,00
Water	River Management Plan	2011	A-EM-3.003	Protection of Embankment Downstream of Retaining Wall	-	-33,9383700 18,8694894	-	R592 500,00
Water	River Management Plan	2011	A-EM-3.004	Stabilisation of Steep Embankment Adjacent to Roadway	-	-33,9400612 18,8639149	-	R4 000 000,00
Water	River Management Plan	2011	A-EM-3.005	Protection of Steep Embankment	-	-33,9404090 18,8631515	-	R16 500 000,00
Water	River Management Plan	2011	A-EM-3.006	Protection of Steep Eroded Embankment	-	-33,9410723 18,8608588	-	R3 500 000,00
Water	River Management Plan	2011	A-EM-3.007	Slope Stabilisation	-	-33,9192942 18,8956502	-	R4 500 000,00
Water	River Management Plan	2011	A-EM-3.008	Cascade	-	-33,9198894 18,8946341	-	R50 000,00
Water	River Management Plan	2011	A-EM-3.009	Embankment Protection	-	-33,9418224 18,8558531	-	R150 000,00
Water	River Management Plan	2011	A-EM-3.010	Headwall Undercut Protection	-	-33,9233790 18,8695698	-	R50 000,00
Water	River Management Plan	2011	A-EM-3.011	Retaining Wall at 'Die Rand'	-	-33,9288560 18,8558776	-	R250 000,00
Water	River Management Plan	2011	A-EM-3.012	Protection of Retaining Wall Foundation at 'Die Rand'	-	-33,9294295 18,8538664	-	R500 000,00
Water	River Management Plan	2011	A-EM-3.013	Stabilisation of Slope at 'Die Rand'	-	-33,9299669 18,8530558	-	R150 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Water	River Management Plan	2011	A-EM-3.014	Protection of Banks Downstream of Cascade	-	-33,9294295 18,8538664	-	R400 000,00
Water	River Management Plan	2011	A-EM-3.015	Protection of Steep Embankment	-	-33,9205569 18,8527734	-	R145 000,00
Water	River Management Plan	2011	A-EM-3.016	Stabilisation of Eroded Embankment Toe	-	-33,9040300 18,8433890	-	R1 500 000,00
Water	River Management Plan	2011	A-EM-3.017	Stabilisation of Unconsolidated Embankment Toe	-	-33,9057362 18,8450708	-	R6 000 000,00
Water	River Management Plan	2011	A-EM-3.018	Extension of Gabion Wing-Wall	-	-33,9206698 18,8527588	-	R1 000 000,00
Water	River Management Plan	2011	A-EM-3.019	Protection of Eroded Embankment	-	-33,9260605 18,8518234	-	R2 200 000,00
Water	River Management Plan	2011	A-EM-3.020	Retaining Wall at Wine Processing Factories	-	-33,9390887 18,8472346	-	R5 000 000,00
Water	River Management Plan	2011	A-EM-4.001	Coetzenburg Street - Berm Flood Protection	-	-33,9390299 18,8657698	-	R1 200 000,00
Water	River Management Plan	2011	A-EM-4.002	Helderberg Street - Berm Flood Protection	-	-33,9404090 18,8631515	-	R950 000,00
Water	River Management Plan	2011	A-EM-4.003	Brandewyn Museum – Gabion Flood Protection	-	-33,9415345 18,8525800	-	R300 000,00
Water	River Management Plan	2011	A-EM-4.004	'Die Boord' - Berm Flood Protection	-	-33,9431489 18,8493278	-	R1 700 000,00
Water	River Management Plan	2011	A-EM-4.005	Eerste & Plankenbrug Confluence – Demolition of Existing Structure	-	-33,9431489 18,8493278	-	R900 000,00
Water	River Management Plan	2011	A-EM-4.006	Helshoogte Crossing – Berm Flood Protection	-	-33,9294295 18,8538664	-	R2 000 000,00
Water	River Management Plan	2011	A-EM-4.007	'Die Rand' – Removal of Obstructions and Alien Vegetation	-	-33,9231749 18,8717839	-	R4 000 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Improve the operation of the weir at the current extraction point in the Eerste River at Jonkershoek.	-	-	-	R7 410 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Wynland WUA transfer of water allocations.	-	-	-	R1 250 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Additional development of the Central boreholes in Stellenbosch.	-	-	-	R1 840 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Develop the Mariendahl borehole source in the Koelenhof system.	-	-	-	R100 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The	2021	-	Develop the borehole next to the Koelenhof reservoir.	-	-	-	R300 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	Stellenbosch System							
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Increase allocation from WCWSS to SM.	-	-	-	R450 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Increase yield allocated from Jonkershoek Valley.	-	-	-	R145 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Increase the allocation from CCT to SM.	-	-	-	R600 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Re-use of treated effluent at the Stellenbosch WWTW.	-	-	-	R3 000 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For	2021	-	Polkadraai bulk supply upgrades	-	-	-	R800 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	The Stellenbosch System							
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Idas Valley WTW upgrade.	-	-	-	R0,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Jonkershoek reservoir water treatment ckage plant.	-	-	-	R1 500 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	pegaaiberg water treatment ckage plant.	-	-	-	R600 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Koelenhof bulk supply upgrades.	-	-	-	R150 000,00
Water	Bulk Water Resources: Water Resilience Master	2021	-	Stellenbosch WWTW re-use plant.	-	-	-	R750 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	Planning For The Stellenbosch System							
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Kayamandi Upper system.	-	-	-	R15 250 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Helshoogte system.	-	-	-	R2 450 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Vlottenburg system.	-	-	-	R1 250 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Jamestown system.	-	-	-	R1 200 000,00
Water	Bulk Water Resources: Water Resilience	2021	-	Koelenhof system.	-	-	-	R650 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	Master Planning For The Stellenbosch System							
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Kayamandi Upper system	-	-	-	R300 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Helshoogte system	-	-	-	R500 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Vlottenburg system	-	-	-	R59 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Jamestown system	-	-	-	R60 000,00
Water	Bulk Water Resources: Water	2021	-	Jonkershoek Weir	-	-	-	R85 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	Resilience Master Planning For The Stellenbosch System							
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Idas Valley WTW upgrade.	-	-	-	R40 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Jonkershoek reservoir water treatment ckage plant	-	-	-	R16 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Wynland WUA transfer of water allocations.	-	-	-	R145 000,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Develop Central boreholes	-	-	-	R45 000,00
Water	Bulk Water Resources:	2021	-	pegaaiberg water treatment (for Central boreholes)	-	-	-	R685 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	Water Resilience Master Planning For The Stellenbosch System							
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Develop the Mariendahl borehole source in the Koelenhof system.	-	-	-	R1 354 800,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Develop the borehole next to the Koelenhof reservoir.	-	-	-	R592 500,00
Water	Bulk Water Resources: Water Resilience Master Planning For The Stellenbosch System	2021	-	Koelenhof system	-	-	-	R4 000 000,00
Electricty	Electrical Infrastructure Master Plan	2016	-	Jan Marais Upgrade	Remove Existing Tx 1 and 2 and replace with 20MVA units	-		R16 500 000,00
Electricty	Electrical Infrastructure Master Plan	2016	-	Comission Tennant feeders	Install MV switchgear and comission sub with previously installed cables	-		R3 500 000,00
Electricty	Electrical Infrastructure Master Plan	2016	-	Upgrade Groendal feeders	11kV 3 core 185mmsq PILC(Table19) copper cabling 2km	-		R4 500 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Electricty	Electrical Infrastructure Master Plan	2017	-	Markotter Upgrade	Remove Aged Existing Tx 1 2 and 3 and replace with New units	-		R50 000,00
Electricty	Electrical Infrastructure Master Plan	2018	-	Upgrade Engineering Fac feeders	11kV 3 core 185mmsq PILC(Table19) copper cabling 0.5km	-		R150 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Kayamandi Sub - HV	Create 66/11 kV substation complete	-		R50 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Kayamandi Sub - Munic MV/MV	Substation building and switchgear	-		R250 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Stellenbosch Main - Tx upgrade	Remove Existing Tx 1 2 and 3 and replace with 20MVA units	-		R500 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Stellenbosch Main - Kwarentyn sub	Substation building and switchgear	-		R150 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Kwarentyn Sub cables	11kV 3 core 185mmsq PILC(Table19) copper cabling 3.8km	-		R400 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Franshoek - Hugentoe feeder cables	11kV 3 core 185mmsq PILC(Table19) copper cabling 2km	-		R145 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Franshoek: Upgrade Groendal feeders	11kV 3 core 185mmsq PILC(Table19) copper cabling 2km	-		R1 500 000,00
Electricty	Electrical Infrastructure Master Plan	2020	-	Stellenbosch Main Upgrade	Renew Transformers 1 2 and 11kV 3 core 185mmsq PILC(Table19) copper cabling from Stellenbosch Main to Polkadraai 1km.	-		R6 000 000,00
Electricty	Electrical Infrastructure Master Plan	2022	-	Kayamandi Sub - HV	Create 66/11 kV substation complete	-		R1 000 000,00
Electricty	Electrical Infrastructure Master Plan	2022	-	Kayamandi Sub - Munic MV/MV	Substation building and switchgear	-		R2 200 000,00
Electricty	Electrical Infrastructure Master Plan	2022	-	Golf Club Third Tx	Add third 20MVA transformer	-		R5 000 000,00
Electricty	Electrical Infrastructure Master Plan	2023	-	Jan Marais- Third Tx	Add third 20MVA transformer bay	-		R1 200 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Electricty	Electrical Infrastructure Master Plan	2024	-	Franshoek - Groendal feeders	11kV 3 core 185mmsq PILC(Table19)copper cabling 2km	-		R950 000,00
Electricty	Electrical Infrastructure Master Plan	2025	-	Kayamandi Sub - HV	Create 66/11 kV substation complete	-		R300 000,00
Electricty	Electrical Infrastructure Master Plan	2025	-	Kayamandi Sub - Munic MV/MV	Substation building and switchgear	-		R1 700 000,00
Electricty	Electrical Infrastructure Master Plan	2030	-	Cloetesville: Upgrade Langstraat suid	New Substation building switcgear and feeder cables	-		R900 000,00
Electricty	Electrical Infrastructure Master Plan	2030	-	Cloetesville: Third Tx	Add third 20MVA transformer	-		R2 000 000,00
Electricty	Electrical Infrastructure Master Plan	2030	-	Franschoek: New Groendal 2 Sub	Substation building switchgear and	-		R4 000 000,00
Electricty	Electrical Infrastructure Master Plan	2030	-	Kayamandi: Third Tx	Add third 20MVA transformer	-		R7 410 000,00
Electricty	Electrical Infrastructure Master Plan	2033	-	Jan Marais	Add third 20MVA transformer bay	-		R1 250 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP001	Western byss	New road between R310 heading north to link with the R304 to tie into the existing intersection with Welgevonden Boulevard. The route runs east of the Stellenbosch land-fill and joins Devon Valley Road for a portion before deviating to ss over the hill	-	PGWC	R1 840 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP002	Western byss	New road rallel to existing Techno Avenue from the R44 to R3R44 and R310 will be grade-serated intersections. The road will have limited intersections with a 2nd access to Techno rk linking into Neutron Road. The route crosses the Eerste river (new bridge) and sses to the west of Van Ryn's Distillery before crossing the railway line (new bridge) and intersecting with Adam Tas. Detailed planning and investigation of route alternatives will be required and an EIA process due to potentially environmentally sensitive areas	-	PGWC	R100 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Roads Master Plan	2018	SRMP003	Western byss	New north-south link road between Annandale Road and Adam Tas running to the east of the airport and De Zalze Estate. The route will cross the Eerste River (new bridge) and sses to the west of Van Ryn's Distillery before crossing the railway line (new bridge) and intersecting with Adam Tas. Detailed planning and investigation of route alternatives will be required and an EIA process due to potentially environmentally sensitive areas.	-	PGWC	R300 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP004	Kromme Rhee Road	Upgrade to dual carriageway with shoulders replacement of level crossing at Koelenhof Station with road over rail bridge.	-	PGWC	R450 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP005	R44	Provide a left turn slip along van Reede Road. Extend existing right turn lane along R44 northbound.	-	Internal	R145 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP006	R44	Extend the existing right turn lane along the R44 northbound and widen the carriageway. Provide left turn slip and acceleration lane for left turning traffic on Merriman Street. Provide a left-turning slip and additional lane from Dennesig to Merriman southbound.	-	Internal	R600 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP007	Bottelary Road	Upgrade Bottelary Rd to dual carriageway between Devonvale Road and R30New roundabout proposed at intersection with Devonvale Road.	-	PGWC	R3 000 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP008	R44/R310	Provide a left turn slip lane on the R44 southbound and upgrade Helshoogte westbound to left turn through and double right turn lanes.	-	Internal	R800 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP009	Adam Tas	Realign Alexander Road to form the 4th leg opposite Adam Tas Road southbound.	-	PGWC	R0,00
Roads and Stormwater	Roads Master Plan	2018	SRMP010	R44	Grade Seration of intersection with free flow on the R44	-	PGWC	R1 500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP011	R44	Grade Seration of intersection with free flow on the R44	-	PGWC	R600 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Roads Master Plan	2018	SRMP012	Huguenot Road	Intersection upgrade and potentially a new layout / control type	-	Internal	R150 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP013	Huguenot Road	Intersection upgrade and potentially a new layout / control type	-	Internal	R750 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP014	Huguenot Road	Intersection upgrade and potentially a new layout / control type	-	Internal	R15 250 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP015	Huguenot Road	Provide medians on approaches to Huguenot Road / Louis Botha intersection to improve safety.	-	Internal	R2 450 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP016	Huguenot Road	Intersection upgrade and potentially a new layout / control type	-	Internal	R1 250 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP017	Lambrechts Road	Intersection upgrade and potentially a new layout / control type	-	Internal	R1 200 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP018	R44	Provision of additional lanes to increase road link cacity and intersection stop line cacity	-	PGWC	R650 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP019	-	-	-	-	R300 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP020	R44	Provision of intersection upgrades and/or dedicated lanes in congested sections	-	PGWC	R500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP021	R310	Provision of intersection upgrades and/or dedicated lanes in congested sections	-	PGWC	R59 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP022	Western byss	Dualling of full length of Western Byss	-	PGWC	R60 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP023	Western byss	Upgrade to grade-serated interchange	-	PGWC	R85 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP024	Western byss	Upgrade to grade-serated interchange	-	PGWC	R40 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP025	Western byss	Upgrade to grade-serated interchange. Possible roundabout to accommodate Techno rk access proposed new east-west route and possibly De Zalze access. Refer to SRMP003.	-	PGWC	R16 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP026	-	-	-	-	R145 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP027	R45	Road improvement and intersection improvements	-	PGWC	R45 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP028 (Full)	R304	Upgrade to dual carriageway.	-	PGWC	R685 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP028 (rtial)	R304	Upgrade to dual carriageway.	-	PGWC	R1 354 800,00
Roads and Stormwater	Roads Master Plan	2018	SRMP029	Vlaeberg Road	Realignment of road in accordance with the AMP for the R310 with a road over rail bridge	-	PGWC	R592 500,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Roads Master Plan	2018	SRMP030	Welgevonden Boulevard	Extension of Welgevonden Boulevard to byss north of Welgevonden residential area follow a new alignment and link to the R44 with a signalised intersection. A new entrance to Welgevonden will be required.	-	Internal	R4 000 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP031	-	-	-	-	R16 500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP033	Robertsvlei Road	Upgrade of Robertsvlei Road to accommodate Heavy Vehicles which will allow byssing of Franschhoek town centre.	-	PGWC	R3 500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP034	Groenfontein Road	Upgrade of Groenfontein Road to serve proposed new developments in Klapmuts (north and south of the N1).	-	Internal	R4 500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP035	George Balke Road	Grade seration of George Blake Road over railway line and R44 to link directly to Merriman Avenue. New slips off/onto R44 from new overss. Signalised.	-	Internal	R50 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP036	-	-	-	-	R150 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP037	tbc	Road rehabilitation and provision of new intersections with Eikendal Road Bredell Road and the R44.	-	PGWC	R50 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP038	Old arl Road	Road rehabilitation of the R10	-	PGWC	R250 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP039	Stellenbosch Arterial	Road rehabilitation of the M1	-	PGWC	R500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP040	Annandale Road	Road rehabilitation of Annandale Road.	-	PGWC	R150 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP041	Groenfontein Road	Regravel Groenfontein Road	-	PGWC	R400 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP042	Sandringham Road	Road improvement	-	PGWC	R145 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP043	Baden Powell Drive	Rehabilitation and upgrade of Baden Powell between the N2 and Vlaeberg Road. Section between Polkadraai and Annandale Road is planned.	-	PGWC	R1 500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP044	Robertsvlei Road	Regravelling of existing road	-	PGWC	R6 000 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP045	Winery Road / Main Street	Realignment of Macassar Road to connect with Winery Road to create improved mobility from south of the N Existing portion of Winery Road to be maintained for local farm access only. Main Road to be extended	-	PGWC	R1 000 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
					to meet with new road as a priority intersection.			
Roads and Stormwater	Roads Master Plan	2018	SRMP046	-	-	-	-	R2 200 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP047	R44 / Stellenbosch Airport Service Road	New road between the existing service road and tying into proposed intersection on the R44 - required as rt of the Stellenrust Road realignment. Allows closure of several private driveways along the R44 with a consolidated access road. May require upgrading of the existing gravel service road. Closure of existing unsafe Aerodrome access off the R44	-	Internal	R5 000 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP048	Stellenrust Road	Realignment of Stellenrust Road over the R44 to link onto proposed new road and the closure of the existing unsafe access on the R44.	-	Internal	R1 200 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP049	New Jamestown Road	New Jamestown Road linking existing and proposed residential developments south to Stellenrust Road and north to Blaauwklippen Road.	-	Internal	R950 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP050	School Road	Investigate Proposals for the upgrading and extension of School street to R44.	-	Internal	R300 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP051	jaro Avenue	Extend jaro Avenue northwards to intersect with Blaauwklippen Road and south to Stellenrust Road. Provides additional access to future Jamestown developments proposed.	-	Internal	R1 700 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP052	Wildebosch Rd Ext – South	The extension of Wildebosch Road to link onto Techno Avenue at the R44	-	Internal	R900 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP053A	Wildebosch Rd Ext – North	The extension of Wildebosch Road north to link with Trumali Road.	-	Internal	R2 000 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP053B	Dwarslaan	Investigate upgraded crossing over Eerste River on Dwarslaan	-	Internal	R4 000 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP054	Van Reede Road	Portion of Van Reede Road to be upgraded/widened and extended to link with Neutron Road that will provide second access to Techno rk.	-	Internal	R7 410 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP055	Van Reede Road	Investigate extension of Van Reede Road to link with Piet Retief.	-	Internal	R1 250 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP056	Suidwal Road	Extension of Suidwal Road between Doornbosch Road to Koch Road. The route is near sensitive areas and requires changes	-	Internal	R1 840 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
					to Bloemhof Girls High School rking area.			
Roads and Stormwater	Roads Master Plan	2018	SRMP057	Stellentia Road	Extension of Stellentia Road over the Eerste River (new bridge) to link onto Rokewood Road at the eastern Culemborg Crescent intersection. Provides an alternative access from Die Boord to the R310 without using the R44.	-	Internal	R100 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP058	storie Street	storie Street link with Suidwal Road over the Eerste River (new bridge required)	-	Internal	R300 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP059	Old Bottelary Road	The extension of Old Bottelary Rd to link Blumberg Drive (Devonvale Road) and the R304	-	Internal	R450 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP060	-	Road link between Bottelary Road and Old Bottelary Rd.	-	Internal	R145 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP061	Merchant Street	The realignment of Merchant Street to link to the R45 at the R44 intersection & closure of the Merchant Street T-junction access on the R44.	-	Internal	R600 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP062	-	New Class 4 road between the R44 and R101 Klapmuts	-	Internal	R3 000 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP063	Simonsberg Street	Simonsberg St extension over the R310 to Main Rd Ext Johannesdal.	-	Internal	R800 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP064	Sonnestraal Street	The extension of Sonnestraal Street from the R310 to Main Rd Johannesdal.	-	Internal	R0,00
Roads and Stormwater	Roads Master Plan	2018	SRMP065	-	-	-	-	R1 500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP066	Main Road	Upgrade and extension of Main Road to the south to link to planned Simonsberg St Extension & potentially Kylemore	-	Internal	R600 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP067	Dirkie Uys Street	Extension of Dirkie Uys Street to connect with La Provence Street - connecting Groendal with Franschhoek.	-	Internal	R150 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP068	Nerina Street	Extension of Nerina Road from the R45 to Middagkrans Road Franschhoek.	-	Internal	R750 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP069	The Avenue	Widening of the existing bridge over the Eerste River to allow two-way traffic	-	Internal	R15 250 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP070	Vlottenburg Road	Realignment of Vlottenburg Road to intersect with existing Stellenbosch Kloof Road intersection. This improves safety and reduces the number of intersections and level crossings along Baden Powel. Existing	-	Internal	R2 450 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
					intersection along Baden Powell Drive to be closed.			
Roads and Stormwater	Roads Master Plan	2018	SRMP071	Trumali Street	Upgrade of Trumali Street to surfaced carriageway to link with proposed Wilderbosch extention. Provides additional linkages for proposed future developments.	-	Internal	R1 250 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP072	-	Future Eastern Link Road (Johannesdal).	-	Internal	R1 200 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP073	Stellenrust Road	Upgrading of Stellenrust Road between Blaauwklippen and the new realigned section	-	PGWC	R650 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP074	-	-	-	-	R300 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP075	-	-	-	-	R500 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP076	Dorp Street	Upgrade to dual carriageway. Increased cacity from CBD to Adam Tas and northbound traffic on the R44 can access Adam Tas without using the Adam Tas/R44 intersection	-	Internal	R59 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP077	Schuilplaats Rd	Extension of Schuilplaats Rd - New link road from radyskloof Rd to Trumali Street. The link will provide a safer alternative access for residents of radyskloof to the R44 via the signalised intersection of Trumali Street with the R4 This will also improve overall LOS and safety along this section of the R44.	-	Internal	R60 000,00
Roads and Stormwater	Roads Master Plan	2018	SRMP078	Lanquedoc access road	Upgrade Lanquedoc access road between R310 & Main Road including a new bridge adjacent to the existing single carriageway bridge	-	Internal	R85 000,00
Roads and Stormwater	Roads Master Plan	2018	tbc	Ben du Toit Extension	Extension of Ben du Toit Street - Potential link road from radyskloof Rd to Trumali St	-	Internal	R40 000,00
Roads and Stormwater	Roads Master Plan	2018	tbc	-	Connect Jamestown (southern areas) to housing developments and Stellenrust Road	-	Internal	R16 000,00
Roads and Stormwater	Roads Master Plan	2018	tbc	-	Road network planning and development to accommodate new housing developments	-	Internal	R145 000,00
Roads and Stormwater	Roads Master Plan	2018	tbc	-	Road network planning and development to accommodate new housing developments	-	Internal	R45 000,00
Roads and Stormwater	Roads Master Plan	2018	tbc	-	Road network planning and development to accommodate new housing developments	-	Internal	R685 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Roads Master Plan	2018	tbc	-	Road network planning and development to accommodate new housing developments	-	Internal	R1 354 800,00
Roads and Stormwater	Roads Master Plan	2018	tbc	Dassenberg Road	Road rehabilitation	-	Internal	R592 500,00
Roads and Stormwater	Roads Master Plan	2018	tbc	La Provence	Road rehabilitation	-	Internal	R4 000 000,00
Roads and Stormwater	Roads Master Plan	2018	tbc	Devonvale	Assessment of regravelling of roads in Devonvale	-	Internal	R16 500 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Exnsion of the landfill site (New cells)	-	-	External Loan	R3 500 000,00
Waste Management	Integrated Waste Management Plan	2023	-	Formalize skip areas in Franschhoek and Kayamandi	-	-	Own funds	R4 500 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Skips (55Kℓ)	-	-	Own funds	R50 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Furniture Tools and Equipment: Solid Waste	-	-	Own funds	R150 000,00
Waste Management	Integrated Waste Management Plan	2023	-	Integrated Waste Management Plan	-	-	Own funds	R50 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Landfill Gas to Energy	-	-	Own funds	R250 000,00
Waste Management	Integrated Waste Management Plan	2023	-	Mini Waste drop-off facilities at inf. Settlements	-	-	Own funds	R500 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Street Refuse Bins	-	-	Own funds	R150 000,00
Waste Management	Integrated Waste	2021	-	Transfer Station: Stellenbosch Planning and Design	-	-	IUDG	R400 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	Management Plan							
Waste Management	Integrated Waste Management Plan	2022	-	Transfer Station: Stellenbosch Planning and Design	-	-	External Loan	R145 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Upgrade Refuse disposal site (Existing Cell)- Rehab	-	-	Developers Contribution	R1 500 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Upgrade Refuse disposal site (Existing Cell)- Rehab	-	-	CRR	R6 000 000,00
Waste Management	Integrated Waste Management Plan	2022	-	Vehicles	-	-	CRR	R1 000 000,00
Waste Management	Integrated Waste Management Plan	2023	-	Waste Biofuels	-	-	CRR	R2 200 000,00
Waste Management	Integrated Waste Management Plan	2023	-	Waste Management Software	-	-	CRR	R5 000 000,00
Waste Management	Integrated Waste Management Plan	2021	-	Waste Minimization Projects	-	-	CRR	R1 200 000,00
Waste Management	Integrated Waste Management Plan	2023	-	Waste to Energy - Implementation	-	-	CRR	R950 000,00
Waste Management	Integrated Waste Management Plan	2023	-	Waste to Energy - Planning	-	-	CRR	R300 000,00
Roads and Stormwater	The Development and Implementation of a	2039	-	FRANSCHHOEK 20 YEAR MODEL	269 Conduits to be upgarde in Franschoek	-	-	R1 700 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
	Stormwater Management System							
Roads and Stormwater	The Development and Implementation of a Stormwater Management System	2039	-	STELLENBOSCH 20 YEAR MODEL	6810 Conduits to be upgarde in Stellenbosch	-	-	R900 000,00
Roads and Stormwater	The Development and Implementation of a Stormwater Management System	2039	-	RAITHBY 20 YEAR MODEL	10 Conduits to be upgarde in Rathby	-	-	R2 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2014	-	The building of a second carriage way on MR174 from the N1 to Stellenbosch.	-	-	PGWC	R4 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2012	-	The upgrade of the Stellenbosch arterial between Range road and Polkadraai	-	-	PGWC	R7 410 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2013	-	Upgrade of the Bredell and Stellenrust intersections on MR27 in Stellenbosch	-	-	PGWC	R1 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2010	-	Rehabilitation and reconstruction of MR172 between Helshoogte and Boschendal through the Pniel village including hard & soft landscaping.	-	-	PGWC	R1 840 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2012	-	The upgrade of 10km of MR191 between arl and Franschhoek.	-	-	PGWC	R100 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2012	-	The rehabilitation of MR166 resealing 1km of DR1039 & upgrade of 2km of DR1043.	-	-	PGWC	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2012	-	Rehabilitation and improvements to MR168 between MR159 and MR177 in the Stellenbosch Area.	-	-	PGWC	R450 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Rehabilitation of sections of MR177 between Blackheath and Stellenbosch.	-	-	PGWC	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2014	-	Rehabilitation of DR1050 from Annandale Road (km0.00) at MR168 in Lynedoch to Groene Rivier (km7.34) in the Stellenbosch area. The R44 (MR27) to Stellenbosch / Somerset West is crossed at km47.	-	-	PGWC	R600 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Investigate the feasibility of relocating Du Toit railway station with a possible rk and ride facility.	-	-	-	R3 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Compile the Final Feasibility Study for additional public transport vehicles/routes for the general public once the US routes are operational.	-	-	-	R800 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The establishment of a planning working group between relevant rties the US and the SLM regarding future public transport operations.	-	-	-	R0,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Develop own Stellenbosch Operating Licence Databank	-	-	-	R1 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Compile a feasibility study on the development of the Stellenbosch aerodrome as a corporate jet hub for the Cape Town Metropole.	-	-	-	R600 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Annual revision and surveys of the OLS	-	-	-	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Integration and co-ordination of Public Health and Public Transport needs	-	-	-	R750 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Investigate dedicated rking sce for tour buses.	-	-	-	R15 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Updating the CITP	-	-	-	R2 450 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Transport and Public Transport Organogram to include additional posts	-	-	-	R1 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Scholar Transport Study	-	-	-	R1 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Initiate a detailed cycle plan for the Municility of Stellenbosch. (Plan for additional future cycle lanes and the provision of cycle racks and lockers).	-	-	-	R650 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Exnd pedestrian studies to surrounding towns in the Municility.	-	-	-	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Investigate alternative rking sce for Church street NMT project.	-	-	-	R500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Marketing and promotion of NMT.	-	-	-	R59 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Establish a NMT working group with relevant rties	-	-	-	R60 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Additional/ alternative CBD and office rking feasibility study	-	-	-	R85 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Investigate the provision of a rk-and-Ride facility for the Stellenbosch (local airport.)	-	-	-	R40 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Investigate the provision of a rk-and-Ride facility for the CT international airport.	-	-	-	R16 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Compile a rking NMT and off loading (deliveries) Standards and Guidelines/ manual for the Stellenbosch Municility	-	-	-	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Stellenbosch Western Scenic Tourism route feasibility study and environmental imct assessment.	-	-	-	R45 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Stellenbosch Southern access route feasibility study and environmental	-	-	-	R685 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
				imct assessment.				
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Require all prospective developers to undertake a Traffic Imct Assessment	-	-	-	R1 354 800,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The generation of a traffic calming master plan for all the built-up areas in the Municility.	-	-	-	R592 500,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Develop Stellenbosch town Arterial and CBD Micro-simulation Study	-	-	-	R4 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Franschhoek Transport Master Plan	-	-	-	R16 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Klapmuts Transport Master Plan	-	-	-	R3 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Updating and integrations of Greater Stellenbosch LM (WC024) Transport Master Plans	-	-	-	R4 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Updating and integrations of Greater Stellenbosch LM (WC024) Transport Macro Model	-	-	-	R50 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Inner Municil Provincial Roads	-	-	-	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	(long term) optimisation and integration of district and local networks	-	-	-	R50 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Movement Management System	-	-	-	R250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Integrated Infrastructure Management System (NMT Bridges Signs Stormwater pipes and channals)	-	-	-	R500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Establishment of a formal platform between freight industry delegates and SLM.	-	-	-	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The investigation of measures to prevent freight vehicles from using the Franschhoek ss in order to miss	-	-	-	R400 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
				the future N1/N2 toll gates.				
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The identification of a suitable location for the construction of a weighbridge and holding area.	-	-	-	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	A proper survey to be conducted of all the existing freight operators currently operating in the SLM.	-	-	-	R1 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The compilation of a databank of hazardous chemical operators must be initiated and designated routes must be identified for the transportation of these materials.	-	-	-	R6 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	A business plan for the resurrection of the rail mode of Transport to Stellenbosch based on perception and behavioural surveys.	-	-	-	R1 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Conduct road safety audits on the 50 worst accident locations within the Municility.	-	-	-	R2 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Investigate measures to increase safety at all the level railway crossings in SLM.	-	-	-	R5 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Improve accident data capturing software and mapping.	-	-	-	R1 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic signal investigations and signal synchronization	-	-	-	R950 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Road Signs Management System	-	-	-	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Radios for Traffic Engineering	-	-	-	R1 700 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Calming Master Plan for WC024	-	-	-	R900 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Upgrading of Bergzicht Taxi Rank	-	-	-	R2 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	BERGZICHT: additional bays.	-	-	-	R4 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	KAYAMANDI SUBURB: The design and implementation of a new ranking facility.	-	-	-	R7 410 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	KAYAMANDI BRIDGE: The design and implementation of a new ranking facility.	-	-	-	R1 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	KLAPMUTS: The design and implementation of a new ranking facility.	-	-	-	R1 840 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	FRANSCHHOEK: The implementation and design of a ranking facility.	-	-	-	R100 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	FRANSCHHOEK: Shelters to be implemented throughout the town.	-	-	-	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	PNIEL: Eight shelters to be implemented adjacent to the newly constructed lay-bys.	-	-	-	R450 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	STELLENBOSCH RAILWAY STATION: Shelter to be implemented.	-	-	-	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	JAMESTOWN Ranking facility	-	-	-	R600 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	LANQUEDOC: An ablution block shelters and improved lighting to be implemented.	-	-	-	R3 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Merriman Avenue US Terminus	-	-	-	R800 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Implementation of US shelters route flags and improved lighting at stops.	-	-	-	R0,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Transport Facilities	-	-	-	R1 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Development of rking Facilities in CBD	-	-	-	R600 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Development of rking Facilities on outskirts and office rks	-	-	-	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Engineering Faculty rking	-	-	-	R750 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	rk-and Ride (Helshoogte Road)	-	-	-	R15 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Coetzenburg rking garage	-	-	-	R2 450 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Lentelus sports grounds rking	-	-	-	R1 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Northern campus rking garage	-	-	-	R1 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Structural Reirs (rking)	-	-	-	R650 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Intersection upgrade of Van Reede and Strand Streets.	-	-	-	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Intersection upgrade of Lang/Helshoogte and Adam Tas Streets.	-	-	-	R500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Intersection upgrade of Merriman Avenue and Adam Tas Street.	-	-	-	R59 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Upgrading of existing gravel roads by means of small contractors.	-	-	-	R60 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Calming implementation plan	-	-	-	R85 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Improvement of Signage	-	-	-	R40 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Signal control	-	-	-	R16 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Improvement of Traffic controls lights	-	-	-	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Welgevonden and R44 intersection upgrading	-	-	-	R45 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Merriman and Bosman Intersection Signal	-	-	-	R685 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Ryneveld and Hammanshand Intersection Signal	-	-	-	R1 354 800,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Upgrading R44 and R304 intersection and link to Kayamandi	-	-	-	R592 500,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Franschhoek Traffic Circle	-	-	-	R4 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Reconstruction Of Roads	-	-	-	R16 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Management Improvement Programme	-	-	-	R3 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Improvement Programme	-	-	-	R4 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Upgrade Roads Klapmuts	-	-	-	R50 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Upgrading Main Roads and Streets	-	-	-	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Major Roads	-	-	-	R50 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Construction of River Road Pniel	-	-	-	R250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Special equipment (small plant)	-	-	-	R500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The building of a second carriage way on MR174 from the N to Stellenbosch.	-	-	-	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The upgrade of the Stellenbosch arterial between Range road and Polkadraai	-	-	-	R400 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Upgrade of the Bredell and Stellenrust intersections on MR27 in Stellenbosch	-	-	-	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Rehabilitation and reconstruction of MR172 between Helshoogte and Boschendal through the Pniel village including hard & soft landscaping.	-	-	-	R1 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The upgrade of 10km of MR191 between arl and Franschhoek.	-	-	-	R6 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The rehabilitation of MR166 resealing 1km of DR1039 & upgrade of 2km of DR1043.	-	-	-	R1 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Rehabilitation and improvements to MR168 between MR159 and MR177 in the Stellenbosch Area.	-	-	-	R2 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Rehabilitation of DR1050 from Annandale Road (km0.00) at MR168 in Lynedoch to Groene Rivier (km7.34) in the Stellenbosch area. The R44 (MR27) to Stellenbosch / Somerset West is crossed at km47.	-	-	-	R5 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Specialized Vehicles: Roads	-	-	-	R1 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Specialized Vehicles: Lines and Signs Management	-	-	-	R950 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Depot Improvements	-	-	-	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The implementation of the "Woonerf" on the US campus including pedestrianisation of De Beer Street (access only for vehicles).	-	-	-	R1 700 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Improve walkway on Plein/Van Riebeeck for pedestrians.	-	-	-	R900 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The implementation of a raised pedestrian crossing on the intersection of De Beer and Banghoek.	-	-	-	R2 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The implementation of a signalised pedestrian crossing on Van Riebeeck Street.	-	-	-	R4 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Provision of cycle racks and lockers at strategic locations.	-	-	-	R7 410 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Construct a ved walkway along Eersterivier "wandeld".	-	-	-	R1 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	The widening of Jonkershoek Class 2 NMT facility	-	-	-	R1 840 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Complete sidewalk along northern section of Lang Street on both sides.	-	-	-	R100 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Sidewalk required on both sides along western section of Merriman Street close to R44.	-	-	-	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Add sidewalk along Marais Street/Cluver Street between Merriman Street and Van Riebeeck Street.	-	-	-	R450 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Add sidewalk along Piet Retief Street between Noordwal West Street and Vrede Street on the eastern side	-	-	-	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Add sidewalk on the southern side of Vrede Street	-	-	-	R600 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Add sidewalk along radyskloof Road up to Wildebosch Street.	-	-	-	R3 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Add sidewalk along Blaauwklippen Road up to Wildebosch Street.	-	-	-	R800 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Upgrade ved shoulder along the northern side of Webbersvallei Road to a proper NMT facility i.e. construct kerbs.	-	-	-	R0,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Add sidewalk along Fresno Street.	-	-	-	R1 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Increase width of class 2 NMT facility along R44 from Van Reede Street to radyskloof/Jamestown.	-	-	-	R600 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Sidewalk/cycle th into Techno rk with Bicycle Storage Facilities.	-	-	-	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	George Blake sidewalk improvement (between Rand and Strand Street).	-	-	-	R750 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Banghoek Street sidewalk upgrading (between Bosman and Cluver Street).	-	-	-	R15 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Bosman Street sidewalk upgrading (between Drostdy and Marais Street).	-	-	-	R2 450 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Pedestrianisation of Church and Andringa Street.	-	-	-	R1 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Kayamandi Bird Street link.	-	-	-	R1 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Pedestrian Kayamandi Over Rail Bridge over rail crossing	-	-	-	R650 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Widening of Road over Rail Bridge	-	-	-	R300 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Investigate signal timings on the R44 between Dorp and Adam Tas Street.	-	-	-	R500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Construction & Improvement of surfaced sidewalks	-	-	-	R59 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Calming Projects	-	-	-	R60 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Calming Improve Visibility of Existing Measures	-	-	-	R85 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Traffic Calming Jamestown	-	-	-	R40 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Specialized Equipment: Road Traffic Maintenance	-	-	-	R16 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	-	Pedestrian and Cycle ths Upgrade	-	-	-	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0182a	Ward 8: Rehabilitation of Eerste River	-	-	Capital Replacement	R45 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-02-0339	Sundry stormwater projects	-	-	Capital Replacement	R685 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-02-0397	Reconstruction of roads	-	-	Capital Replacement	R1 354 800,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-02-0405	Traffic Management Improvement Programme	-	-	Capital Replacement	R592 500,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-03-0133	River rehabilitation	-	-	Capital Replacement	R4 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-06-0101	Public Transport Projects	-	-	Provincial Gov	R16 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj07-0095	Upgrade gravel roads	-	-	Capital Replacement	R3 500 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-07-0155	Traffic Improvement Programme	-	-	Capital Replacement	R4 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0009	Flood prevention projects	-	-	Capital Replacement	R50 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0010	Transport Facilities	-	-	Capital Replacement	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0011	Structural repairs (parking)	-	-	Capital Replacement	R50 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-096	Upgrade Roads: Klapmuts	-	-	Capital Replacement	R250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0149	Upgrading Main Roads and Streets	-	-	Capital Replacement	R500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-04-0133	Bergzicht development (Taxi Rank)	-	-	MIG Private	R150 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-02-0424	Pedestrian and cycle paths	-	-	Capital Replacement	R400 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-04-0006	Major roads	-	-	CDF Roads Provincial Gov	R145 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-07-0096	Construction of River Road Pniel	-	-	Capital Replacement	R1 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0016	Specialised equipment (small plant)	-	-	Capital Replacement	R6 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	Pj-09-0151	Construction of Tar Sidewalks	-	-	Capital Replacement	R1 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0178	Ward 4: Tarring of sidewalk – School street Kylemore	-	-	Capital Replacement	R2 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2012	pj-07-0151j	Specialised vehicles: Roads	-	-	Capital Replacement	R5 000 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-02-0335	Storm water Master Plan Implementation	-	-	Capital Replacement	R1 200 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-07-0092	Storm water master plan update	-	-	Capital Replacement	R950 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0017	Comprehensive Integrated Transport Master Plan	-	-	Capital Replacement Provincial Gov	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-08-0085	Public transport	-	-	Capital Replacement	R1 700 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0154	Depot Improvements and Planning	-	-	Capital Replacement	R900 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-02-0409	Traffic calming projects	-	-	Capital Replacement	R2 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0155	Traffic Calming: Improve visibility of existing measures	-	-	Capital Replacement	R4 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0156	Traffic Calming: Jamestown	-	-	Capital Replacement	R7 410 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	Pj-09-0158	Traffic Signal Control: WC024 (SCOOT)	-	-	Capital Replacement	R1 250 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0159	Traffic signal control: Upgrading of signal lights	-	-	Capital Replacement	R1 840 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0157	Directional Information Signage	-	-	Capital Replacement	R100 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0160	Specialised Vehicles: Traffic Signal Maintenance	-	-	Capital Replacement	R300 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2012	pj-09-0161	Specialised vehicles: Roads and signs Maintenance	-	-	Capital Replacement	R450 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2012	pj-09-0162	Roads Signs Management System	-	-	Capital Replacement	R145 000,00

Service Type	Master Plan	Year	Project ID	Project Name	Project Description	Project Location	Funding Source	Demand over time
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-00-9184c	Capital Replacement	-	-	Capital Replacement	R600 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0180a	Ward 6: Traffic Calming Bo-Jonkershoek Weg	-	-	Capital Replacement	R3 000 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0180b	Ward 6: Traffic Calming Rowan Street	-	-	Capital Replacement	R800 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0181a	Ward 7: Speed bumps (Soeteweide)	-	-	Capital Replacement	R0,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0184a	Ward 10: Speed hump Waaierpalm Street	-	-	Capital Replacement	R1 500 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0185a	Ward 11: Speed humps	-	-	Capital Replacement	R600 000,00
Roads and Stormwater	Comprehensive Integrated Transport plan	2011	pj-09-0185b	Ward 13: Speed humps	-	-	Capital Replacement	R150 000,00

Annexure B: Long-Term Financial Plan

8 Purpose and Scope

The purpose of this Long-Term Financial Plan (LTFP) is to provide a comprehensive financial roadmap that supports the Municipality's strategic objectives and service delivery mandate over a ten-year period. The LTFP outlines the financial implications of the Municipality's operating and capital expenditure requirements, the funding mix, and the potential impact on rates and taxes.

The LTFP covers the period from 2024 to 2033 and is intended to be a living document that is updated annually to reflect any changes in the Municipality's financial position, priorities, or strategic objectives. It provides a framework for decision-making by the Municipality's leadership and stakeholders and ensures that financial resources are allocated efficiently and effectively to support service delivery.

The LTFP incorporates historic financial data, assumptions, and key performance indicators to model the Municipality's future financial position. The plan was then tested using various ratios and general affordability principles to determine the sustainable funding mix and affordable capital expenditure.

8.1 Assumptions

The long-term financial plan relies on a set of assumptions that guide the financial projections for the municipality. These assumptions include the inflation rate, interest rate, employee cost escalation, bulk water and electricity escalation, depreciation rate, property rates escalation, service charges escalation for electricity, water, sanitation, and refuse, collection rate, creditors payment days, household growth rate, and estimated collection percentages for property rates, service charges for electricity, water, waste water, waste collection, fines, and all other debtors. These assumptions are used to project revenue and expenditure over the planning period and to test the affordability of capital expenditure plans. The assumed rates and percentages are as follows for the planning period of 2026 to 2033.

Table 8-1: LTFP Assumptions

Description	Unit	2027	2028	2029	2030	2031	2032	2033
Inflation Rate	%	4.70	4.70	4.70	4.70	4.70	4.70	4.70
Interest Rate	%	9.75	9.75	9.75	9.75	9.75	9.75	9.75
Employee Cost Escalation	%	4.70	4.70	6.00	6.50	6.00	8.00	8.00
Bulk Water Escalation	%	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Bulk Electricity Escalation	%	4.70	4.70	4.70	4.70	4.70	4.70	4.70
Depreciation Rate	%	3.44	3.44	3.44	3.44	3.44	3.44	3.44
Property Rates Escalation	%	15.00	4.70	4.70	4.70	4.70	4.70	4.70
Service Charges Escalation - Electricity	%	4.70	4.70	4.70	4.70	4.70	4.70	4.70
Service charges Escalation - Water	%	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Service charges Escalation - Sanitation	%	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Service charges Escalation - Refuse	%	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Creditors Payment Days	%	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Household Growth Rate	%	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Property Rates Collection	%	96.00	96.00	96.00	96.00	96.00	96.00	96.00
Services Charges - Electricity Collection	%	97.00	97.00	97.00	97.00	97.00	97.00	97.00
Services Charges - Water Collection	%	96.00	96.00	96.00	96.00	96.00	96.00	96.00
Services Charges - Waste Water Collection	%	96.00	96.00	96.00	96.00	96.00	96.00	96.00
Services Charges - Waste Collection	%	96.00	96.00	96.00	96.00	96.00	96.00	96.00
Fines Collection	%	25.00	25.00	25.00	25.00	25.00	25.00	25.00
All other debtors - not specified collection	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00

The assumptions used to generate the LTFP (Long Term Financial Plan) are as follows:

- **Inflation Rate:** The inflation rate is assumed to be constant at 4.70% for all years from 2027 to 2033. This assumption is based on National Treasury Budget Guidelines.

- **Interest Rate:** The interest rate is also assumed to be constant at 9.75% for all years from 2027 to 2033. This assumption is based on the prevailing interest rates in the market and is subject to change based on the monetary policies of the Reserve Bank.

- **Employee Cost Escalation:** Employee cost escalation is assumed to increase by 4.70% in 2027 and 2028, and then increase to 6.00% in 2029 and 6.50% in 2030, and then increase to 8.00% in 2032 and remain constant at that rate in 2033. This assumption is based on the expected increase in salaries and wages as well as additional employees to meet the growth demand.

- **Bulk Water Escalation:** Bulk water escalation is assumed to remain constant at 6.00% for all years from 2027 to 2033. This assumption is based on the expected increase in the cost of bulk water procurement.

- **Bulk Electricity Escalation:** Bulk electricity escalation is assumed to remain constant at 4.70% for all years from 2027 to 2033. This assumption is based on the expected increase in the cost of bulk electricity procurement.

- **Depreciation Rate:** Depreciation rate is assumed to increase from 3.44% in 2027 and 2028 to 4.00% in 2029 and remain constant at that rate to 2033. This assumption is based on the planned capital expenditure.

- **Property Rates Escalation:** Property rates escalation is assumed to increase by 15.00% in 2027 and then remain constant at 4.70% for all years from 2028 to 2033. This assumption is based on the expected increase in the property values and the new valuation roll as well as the increase in customers due to planned expansion in the ATC.

- **Service Charges Escalation:** Electricity, Water, Sanitation, and Refuse: Service charges escalation for these four categories is assumed to remain constant at 4.70% and 6.00% for all years from 2027 to 2033, respectively. This assumption is based on the expected increase in the cost of providing these services.

- **Collection Rates per Service:** Collection rate is assumed to remain constant for all years from 2027 to 2033. This assumption is based on the historical data of the collection rate for each service. Historically traffic fines have been the lowest and Is set at 25% throughout the 10 years.

- **Creditors Payment Days:** Creditors payment days are assumed to remain constant at 45.00 days for all years from 2027 to 2033. This assumption is based on the expected payment terms with suppliers. This Is above the norm of 30 days but historically capital expenditure towards the end of the year has Increased this ratio. It Is expected the trend will continue.

- **Household Growth Rate:** Household growth rate is assumed to remain constant at 2.00% for all years from 2027 to 2033. This assumption is based on the expected population growth in the urban area specifically due to the development of the ATC.

8.2 Financial Ratios

Table 8-2: LTFP Financial Ratios

		YEAR 1 - 3			YEAR 4 - 10						
Ratio	Norm	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Asset Management/ Utilisation											
Capital Expenditure to Total Expenditure	10-20%	18.06	19.27	15.70	12.34	13.03	14.75	14.03	13.37	12.69	12.07
Debtors Management											
Collection Rate - Service Charges	>= 95%	101.36	101.01	100.75	96.74	96.73	96.73	96.72	96.71	96.71	96.70
Net Debtors Days	<= 30 days	54.49	54.56	56.27	57.72	60.46	63.16	65.81	68.43	71.00	73.53
Liquidity Management											
Cash / Cost Coverage Ratio (Excl. Unspent Conditional Grants)	1-3 months	1.71	1.46	1.15	1.36	1.63	1.64	1.62	1.68	1.43	1.40
Current Ratio	1.5-2 : 1	1.78	1.61	1.54	1.87	2.01	2.02	2.08	2.17	2.17	2.26
Liability Management											
Capital Cost (Interest Paid and Redemption) as a % of Total Operating Expenditure	6-8%	5.01	5.97	6.86	7.43	7.89	9.17	9.32	9.26	9.69	8.74
Debt (Total Borrowings) / Revenue	<= 45%	32.47	37.60	40.79	41.01	41.95	42.40	41.75	40.26	36.04	32.26
Solvency Ratio (Net Income + Depreciation) / All Liabilities	>= 20%	23.40	21.78	18.21	20.83	20.69	21.85	22.58	23.86	25.76	28.21
Efficiency											
Net Operating Surplus Margin	>= 0%	4.84	5.43	4.10	6.35	6.69	7.81	8.22	8.80	9.04	9.56
Revenue Management											
Growth in Number of Active Consumer Accounts	None				2.00	2.00	2.00	2.00	2.00	2.00	2.00
Revenue Growth	>= 5%	8.02	8.51	8.71	7.54	6.13	7.04	6.47	6.42	6.44	6.47
Revenue Growth (Excluding capital grants)	>= 5%	9.23	9.42	9.14	7.39	6.68	6.60	6.69	6.62	6.63	6.64
Expenditure Management											
Creditors Payment Period (Trade Creditors)	<= 30 days	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Remuneration as % of Total Operating Expenditure	25-40%	28.40	28.40	25.87	25.77	25.53	25.56	25.66	25.71	26.13	26.63
Contracted Services % of Total Operating Expenditure	2-5%	12.80	12.70	10.80	10.05	9.96	9.85	9.73	9.63	9.50	9.40
Grant Dependency											
Own funded Capital Expenditure (Internally generated funds + Borrowings) to Total Capital Expenditure	None	79.29	84.31	75.00	75.00	80.00	80.00	80.00	80.00	80.00	80.00
Own funded Capital Expenditure (Internally Generated Funds) to Total Capital Expenditure	None	39.42	50.17	40.24	50.00	55.00	55.00	60.00	65.00	80.00	80.00
Own Source Revenue to Total Operating Revenue (Including Agency Revenue)	None	89.63	90.28	89.74	90.00	90.18	90.36	90.54	90.71	90.88	91.04

Overall, the strengths of LTFP's financial ratios indicate that Stellenbosch Municipality is being managed efficiently and sustainably. Some notes regarding the LTFP and calculated financial ratios:

- Capital expenditure to total expenditure ratio is within the recommended range of 10-20% in all years, indicating prudent spending on investments for growth and maintenance.

- Collection rate of service charges is consistently above the recommended level of >= 95%, indicating efficient debtors' management.
- Net debtors' days are consistently higher than the recommended maximum of 30 days, indicating a build-up of potential bad debt over the term.
- Liquidity ratios such as cash/cost coverage ratio and current ratio are consistently above the recommended levels, indicating sufficient liquidity to cover short-term obligations.
- The solvency ratio is consistently above the recommended minimum of 20%, indicating LTFP has adequate net income to cover its liabilities.
- Net operating surplus margin is consistently positive, indicating LTFP is generating surplus revenue.
- Capital cost as a percentage of total operating expenditure is consistently higher than the recommended range of 6-8%, indicating high borrowing costs. However, the debt to revenue ratio is remains below the recommended maximum of 45%, indicating that borrowings remain within the norm.
- Remuneration as a percentage of total operating expenditure is consistently lower than the recommended range of 25-40%, indicating efficiency and low staff costs. However contracted services as a percentage of total operating expenditure are consistently above the recommended range of 2-5%, indicating higher reliance on outsourced services. This is due to the municipal landfill site that has reached its capacity and waste currently being diverted to City of Cape Town, Vissershok landfill site. This is an interim measure whilst the municipality is expanding the existing landfill site by adding a new cell.
- Creditors payment period is set at 45 days during the period 2023/24 to 2032/33. This does not indicate that payments are not made within 30 days, in terms of Section 65 of the MFMA. Included in trade and other payables are retention, unallocated deposits, as well as advance payments.
- Own funded capital expenditure to total capital expenditure and own source revenue to total operating revenue are not specified with recommended ranges, but their consistent increase over time suggests that LTFP may be becoming increasingly reliant on internal funds. Efforts to increase grant funding could benefit the municipality over the medium to long term and improve solvency significantly. The municipality has resolved to actively source grant funding for the implementation of major infrastructure projects.

8.3 Long-term Financial Plan

Financial Performance

Overall, the plan suggests that the municipality's financial performance will be stable, with operating surpluses throughout the planning period.

Operating revenue: The municipality is expecting a steady increase in operating revenue from 2026 to 2033. However, the rate of increase is slowing down in the later years. Electricity is the biggest contributor to operating revenue, followed by property rates, and water revenue.

Operating expenditure: Electricity Bulk Purchases is the largest contributor to Operating Expenditure. Employee-related costs is the 2nd largest contributor to operating expenditure, followed by other expenditure. It is important to note that the municipality is making operating surpluses throughout the 10-year period that will assist with the financing of capital projects.

Debt impairment: The municipality expects to incur debt impairment costs for consumer debtors and traffic fines in all years.

Finance charges: Finance charges are expected to increase steadily over time, reflecting the municipality's increased borrowing to finance its operations.

Table 8-3: Financial Performance of LTFP Over a 10-Year Period, Divided Into Two Parts (MTREF - Year 1-3 and Year 4-10)

	YEAR 1 - 3			YEAR 4 - 10						
R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
OPERATING REVENUE										
Property rates	475,741	504,285	534,542	627,018	669,618	715,112	763,696	815,582	870,992	930,168
Service charges - electricity revenue	913,669	1,046,151	1,160,182	1,239,004	1,323,182	1,413,079	1,509,084	1,611,611	1,721,104	1,838,036
Service charges - water revenue	185,622	194,903	204,648	221,266	239,232	258,658	279,661	302,369	326,922	353,468
Service charges - sanitation revenue	108,647	115,165	122,075	131,988	142,705	154,293	166,822	180,368	195,013	210,848
Service charges - refuse revenue	107,654	117,342	127,903	138,289	149,518	161,659	174,786	188,978	204,323	220,914
Rental of facilities and equipment	10,604	11,102	11,624	12,170	12,742	13,341	13,968	14,625	15,312	16,032
Interest earned - external investments	41,193	41,484	41,778	10,000	12,500	12,500	15,000	15,000	15,000	15,000
Interest earned - outstanding debtors	18,705	19,080	19,461	20,376	21,333	22,336	23,386	24,485	25,636	26,841
Dividends received	-	-	-	-	-	-	-	-	-	-
Fines, penalties and forfeits	131,570	137,754	144,228	151,007	158,104	165,535	173,315	181,461	189,990	198,920
Licences and permits	7,872	8,242	8,629	9,034	9,459	9,904	10,369	10,856	11,367	11,901
Agency services	3,358	3,516	3,681	3,854	4,035	4,224	4,423	4,631	4,849	5,076
Transfers and subsidies	236,790	242,825	279,718	292,865	306,629	321,041	336,130	351,928	368,468	385,787
Other revenue	41,535	56,131	67,811	70,998	74,335	77,828	81,486	85,316	89,326	93,524
Gains on disposal of PPE										
Total Operating Revenue	**2,282,958**	**2,497,979**	**2,726,280**	**2,927,869**	**3,123,394**	**3,329,511**	**3,552,126**	**3,787,211**	**4,038,303**	**4,306,515**
OPERATING EXPENDITURE										
Employee related costs	-617,696	-631,370	-674,746	-706,459	-739,662	-784,042	-835,005	-885,105	-955,914	-1,032,387
Remuneration of councillors	-22,097	-23,422	-24,828	-25,995	-27,216	-28,495	-29,835	-31,237	-32,705	-34,242
Debt impairment - Consumer Debtors	-42,379	-40,332	-38,533	-40,344	-42,241	-44,226	-46,305	-48,481	-50,760	-53,145
Debt impairment - Traffic Fines	-87,638	-88,278	-89,063	-113,255	-118,578	-124,152	-129,987	-136,096	-142,493	-149,190
Depreciation and asset impairment	-220,283	-225,791	-230,391	-228,455	-234,356	-241,775	-252,377	-262,616	-272,502	-282,048
Finance charges	-59,688	-72,517	-91,615	-100,002	-117,077	-127,753	-137,646	-144,586	-148,654	-141,911
Bulk purchases	-636,393	-776,399	-947,207	-1,011,560	-1,080,286	-1,153,680	-1,232,061	-1,315,768	-1,405,161	-1,500,628
Other materials	-100,449	-103,003	-105,309	-110,258	-115,440	-120,866	-126,547	-132,494	-138,722	-145,242
Contracted services	-288,668	-287,845	-292,041	-285,767	-299,198	-313,260	-327,984	-343,399	-359,539	-376,437
Transfers and subsidies	-20,636	-21,048	-21,469	-22,478	-23,535	-24,641	-25,799	-27,012	-28,281	-29,610

	YEAR 1 - 3			YEAR 4 - 10						
R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Other expenditure	- 180,339	- 184,408	- 188,605	-197,470	-206,751	-216,468	-226,642	- 237,294	-248,447	- 260,124
Loss on disposal of PPE										
Total Operating Expenditure	**-2,276,266**	**-2,454,413**	**-2,703,806**	**-2,842,044**	**-3,004,341**	**-3,179,359**	**-3,370,188**	**-3,564,088**	**-3,783,176**	**-4,004,963**
Operating Surplus / (Deficit) - Total Revenue Less Total Expenses	**6,692**	**43,566**	**22,474**	**85,825**	**119,053**	**150,152**	**181,939**	**223,123**	**255,127**	**301,551**
Transfers and subsidies - capital (monetary allocations) (National / Provincial and District)	103,856	91,949	89,259	100,000	90,000	110,000	110,000	110,000	110,000	110,000
Transfers and subsidies - capital (monetary allocations) (Nat / Prov Departm Agencies)										
Transfers and subsidies - capital (in-kind - all)										
Surplus / (Deficit) After Tax, Cross Subsidies & Share of Associate	**110,548**	**135,516**	**111,733**	**185,825**	**209,053**	**260,152**	**291,939**	**333,123**	**365,127**	**411,551**

Over the 10-year period, LTFP's operating revenue is projected to increase from R2.82 billion in 2024 to R4.3 billion in 2033, representing an annual compounded growth rate of 7.3%. This is due to the expected increase in service charges, particularly for electricity revenue, as well as property rates, which are expected to rise steadily. LTFP's operating expenditure is projected to increase from R2.26 billion in 2024 to R4.02 billion in 2033, representing an annual compounded growth rate of 6.6%. The largest cost is bulk purchases, which are projected to increase from R636 million in 2024 to R1.5 billion in 2033. Employee-related costs are also a significant expense for LTFP, projected to increase from R617 million in 2024 to R1.03 billion in 2033.

Surplus, which is projected to increase from R110,5 million in 2024 to R411.5 million in 2033, represents an annual compounded growth rate of 15.72%.

Table 8-4: LTFP Financial Position

	YEAR 1 - 3			YEAR 4 - 10						
R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ASSETS										
Current assets										
Cash	65,434	47,197	65,532	67,770	87,679	110,522	79,108	115,296	77,775	94,242
Call deposits and investments	200,000	200,000	150,000	200,000	250,000	250,000	300,000	300,000	300,000	300,000
Consumer debtors	269,010	297,331	333,169	374,737	420,235	469,990	524,357	583,716	648,480	719,092
Other debtors	114,538	129,575	148,684	155,672	162,989	170,649	178,670	187,067	195,859	205,065
Current portion of long-term receivables	-	-	-	-	-	-	-	-	-	-
Inventory	31,658	29,039	31,246	32,715	34,252	35,862	37,548	39,313	41,160	43,095
Total current assets	**680,640**	**703,142**	**728,631**	**830,894**	**955,155**	**1,037,024**	**1,119,683**	**1,225,392**	**1,263,274**	**1,361,494**
Non current assets										
Long-term receivables	6,721	6,721	6,721	6,721	6,721	6,721	6,721	6,721	6,721	6,721

	YEAR 1 - 3			YEAR 4 - 10						
R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Investments	-	-	-	-	-	-	-	-	-	-
Investment property	415,076	414,774	446,297	467,273	489,235	512,229	536,304	561,510	587,901	615,533
Investment in Associate	-	-	-	-	-	-	-	-	-	-
Property, plant and equipment	6,007,971	6,368,076	6,641,141	6,812,686	7,028,330	7,336,555	7,634,178	7,921,562	8,199,060	8,467,012
Biological	6,821	7,071	7,609	7,966	8,341	8,733	9,143	9,573	10,023	10,494
Intangible	4,674	2,777	2,988	3,129	3,276	3,430	3,591	3,760	3,936	4,121
Other non-current assets	10,865	10,865	11,691	12,241	12,816	13,418	14,049	14,709	15,401	16,125
Total non current assets	**6,452,128**	**6,810,285**	**7,116,448**	**7,310,016**	**7,548,718**	**7,881,086**	**8,203,985**	**8,517,835**	**8,823,042**	**9,120,006**
TOTAL ASSETS	**7,132,768**	**7,513,427**	**7,845,079**	**8,140,910**	**8,503,873**	**8,918,110**	**9,323,668**	**9,743,227**	**10,086,316**	**10,481,499**
LIABILITIES										
Current liabilities										
Bank overdraft										
Borrowing	-74,119	-93,934	-111,199	-80,053	-87,353	-94,117	-98,862	-101,644	-97,033	-92,632
Consumer deposits	-27,805	-31,143	-34,129	-36,575	-39,197	-42,009	-45,024	-48,257	-51,724	-55,442
Trade and other payables	-210,501	-238,876	-251,090	-247,199	-265,275	-290,253	-303,686	-317,953	-333,107	-349,204
Provisions	-69,750	-73,029	-76,461	-80,055	-83,817	-87,757	-91,881	-96,200	-100,721	-105,455
Total current liabilities	**-382,175**	**-436,982**	**-472,878**	**-443,881**	**-475,642**	**-514,136**	**-539,454**	**-564,054**	**-582,586**	**-602,733**
Non current liabilities										
Financial liabilities	-667,072	-845,404	-1,000,791	-1,120,740	-1,222,938	-1,317,641	-1,384,072	-1,423,010	-1,358,467	-1,296,850
Provisions	-364,782	-376,786	-405,422	-424,477	-444,428	-465,316	-487,185	-510,083	-534,057	-559,158
Total non current liabilities	-1,031,854	-1,222,191	-1,406,213	-1,545,217	-1,667,366	-1,782,956	-1,871,258	-1,933,093	-1,892,524	-1,856,008
TOTAL LIABILITIES	**-1,414,030**	**-1,659,172**	**-1,879,091**	**-1,989,098**	**-2,143,008**	**-2,297,092**	**-2,410,712**	**-2,497,147**	**-2,475,109**	**-2,458,741**
NET ASSETS	**5,718,739**	**5,854,254**	**5,965,988**	**6,151,812**	**6,360,865**	**6,621,018**	**6,912,956**	**7,246,080**	**7,611,207**	**8,022,758**
COMMUNITY WEALTH/EQUITY										
Accumulated Surplus/(Deficit)	-5,436,304	-5,546,852	-5,682,367	-5,794,101	-5,979,925	-6,188,978	-6,449,131	-6,741,070	-7,074,193	-7,439,320
Current Surplus/(Deficit)	-110,548	-135,516	-111,733	-185,825	-209,053	-260,152	-291,939	-333,123	-365,127	-411,551
Reserves	-171,887	-171,887	-171,887	-171,887	-171,887	-171,887	-171,887	-171,887	-171,887	-171,887
TOTAL COMMUNITY WEALTH/EQUITY	**-5,718,739**	**-5,854,254**	**-5,965,988**	**-6,151,812**	**-6,360,865**	**-6,621,018**	**-6,912,956**	**-7,246,080**	**-7,611,207**	**-8,022,758**

Assets: The calculated total asset book value of the municipality Is R9.1 billion at the end of the 2033 financial year. The largest asset category is property, plant, and equipment, which makes up 81% of the total assets compared to 84% in 2024.

Liabilities: The total liabilities of the municipality are R2.5 billion. The largest liability category is financial liabilities, which makes up 75% of the total liabilities. This suggests that the municipality has borrowed a significant amount of money to fund its capital expenditures. This Is expected as long-term debt can provide the necessary funding for projects, as long as it remains affordable.

Equity: The equity of the municipality is R8 billion at the end of LTFP, indicating a strong financial position. Since equity represents the residual interest in the assets of the municipality after deducting its liabilities, a higher equity value suggests that the municipality has fewer liabilities to pay off. This implies that the municipality's LTFP has sufficient revenue to cover its expenses and debts and investing in infrastructure. A strong equity position provides comfort with regards to sustainable future as it indicates the municipality's ability to withstand financial shocks and continue operating in the long term.

Overall, the balance sheet provides useful insights into the financial position of the municipality. While the municipality has a significant amount of assets, it also has a significant amount of long-term debt, which will need to be managed carefully to maintain a strong financial position.

Table 8-5: LTFP Cash Flow

	YEAR 1 - 3			YEAR 4 - 10						
R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
CASH FLOW FROM OPERATING ACTIVITIES										
Receipts										
Property rates	456,711	484,114	513,161	601,937	642,833	686,507	733,148	782,959	836,153	892,961
Service charges	1,262,968	1,414,620	1,550,216	1,661,325	1,780,453	1,908,182	2,045,138	2,191,993	2,349,468	2,518,336
Other revenue	94,140	111,208	125,477	131,374	137,549	144,013	150,782	157,869	165,289	173,057
Transfers and Subsidies - Operational	236,790	242,825	279,718	292,865	306,629	321,041	336,130	351,928	368,468	385,787
Transfers and Subsidies - Capital	103,856	91,949	89,259	100,000	90,000	110,000	110,000	110,000	110,000	110,000
Interest	58,700	59,352	60,014	29,768	33,157	34,139	37,618	38,695	39,823	41,004
Dividends										
Payments										
Suppliers and employees	(1,789,876)	(1,948,058)	(2,189,354)	(2,297,798)	(2,438,268)	(2,585,451)	(2,744,673)	(2,909,893)	(3,102,250)	(3,307,764)
Finance charges	(45,363)	(55,113)	(69,627)	(76,002)	(88,979)	(97,093)	(104,611)	(109,885)	(112,977)	(107,853)
Transfers and Subsidies	(20,636)	(21,048)	(21,469)	(22,478)	(23,535)	(24,641)	(25,799)	(27,012)	(28,281)	(29,610)
NET CASH FROM/(USED) OPERATING ACTIVITIES	357,290	379,849	337,394	420,991	439,839	496,698	537,733	586,654	625,693	675,918
CASH FLOWS FROM INVESTING ACTIVITIES										
Receipts										
Proceeds on disposal of PPE										
Decrease (increase) in non-current receivables										

	YEAR 1 - 3			YEAR 4 - 10						
R'000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Decrease (increase) in non-current investments										
Payments										
Capital assets	(451,395)	(527,306)	(453,110)	(360,000)	(405,000)	(495,000)	(495,000)	(495,000)	(495,000)	(495,000)
NET CASH FROM/(USED) INVESTING ACTIVITIES	**(451,395)**	**(527,306)**	**(453,110)**	**(360,000)**	**(405,000)**	**(495,000)**	**(495,000)**	**(495,000)**	**(495,000)**	**(495,000)**
CASH FLOWS FROM FINANCING ACTIVITIES										
Receipts										
Short term loans										
Borrowing long term/refinancing	200,000	200,000	175,000	100,000	112,500	137,500	110,000	82,500		
Increase (decrease) in consumer deposits	4,844	3,339	2,985	2,446	2,623	2,812	3,015	3,233	3,467	3,718
Payments										
Repayment of borrowing	(54,255)	(74,119)	(93,934)	(111,199)	(80,053)	(87,353)	(94,117)	(98,862)	(101,644)	(97,033)
Rehabilitation of landfill site						(31,814)	(43,045)	(42,337)	(70,037)	(71,135)
NET CASH FROM/(USED) FINANCING ACTIVITIES	**150,589**	**129,220**	**84,051**	**(8,753)**	**35,070**	**21,145**	**(24,147)**	**(55,466)**	**(168,214)**	**(164,450)**
NET INCREASE/ (DECREASE) IN CASH HELD	**56,484**	**(18,238)**	**(31,665)**	**52,238**	**69,909**	**22,843**	**18,586**	**36,188**	**(37,522)**	**16,468**
Cash/cash equivalents at the year begin:	208,950	265,434	247,197	215,532	267,770	337,679	360,522	379,108	415,296	377,775
Cash/cash equivalents at the year end:	**265,434**	**247,197**	**215,532**	**267,770**	**337,679**	**360,522**	**379,108**	**415,296**	**377,775**	**394,242**

Net cash generated or used by operating activities: This is a key metric used to evaluate financial performance and in the case of the LTFP we see a gradual upward trend (positive) In the cash flows from operations, even when accounting for anticipated inflation at 4.7%. It is important to adjust the values for inflation to determine the real growth and trend of net cash from operating activities. Inflation reduces the purchasing power of money over time, so if net cash from operating activities grows at a rate lower than the inflation rate, it points to sustainability issues.

Net cash used by investing activities: LTFP Indicates that the municipality Intends to spend between R500 million and R579 million on assets amounting to R5.3 billion over the 10 year planning period. Borrowings of R1.1 billion over the same period represents 20% gearing ratio on new assets.

Net cash from financing activities: Initial borrowings in the first 8 years of the LTFP with net repayment in 2032 and 2033. Overall, the cash flows from financing activities is supporting the improvement in solvency.

Capital Expenditure Framework

2023/24