IDP Integrated Development Plan

2021-2022

Fourth Review of
2017 - 2021 Plan
Adopted 27 May 2021



CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

As prescribed by Section 34 of the Local Government: Municipal Systems Act, 32 of 2000

FOREWORD: EXECUTIVE MAYOR



As the Executive Mayor of the Cape Winelands District Municipality, I have mix emotions as we are concluding a challenging 5-year cycle (2017-2021). However, we are excited to learn and to discover what the future and its new cycle (2021 - 2025) will have in store. For now, we are entering the resurgence phase of the 3rd wave of COVID – 19 and all citizens in this beautiful district and country need to be on high alert, complying to alert levels and changing personal behavior to stop the spread of the virus. We are currently also rolling out the vaccination schedule in Cape Winelands and all citizens need to seriously consider registering themselves and taking the vaccination for us as a community to achieve herd immunity.

The past year has challenged each of us on all fronts, we have lost loved ones, had to make economic adjustments, and evolve and re-invent our ways of working. When faced with great and sudden change due to the impact of the COVID – 19 virus, the only option we had was to embrace it and move forward. Despite all the difficulties of 2020/21, I believe we should reflect on some of the successes the Cape Winelands District Municipality has:

- obtained its seventh consecutive clean audit for the 2019/2020 financial year.
- together with our partners at the local municipalities, SAPS and the departments of Health, Education, Agriculture, Local Government and Social Development established excellent working relationships resulting in decisive action regarding humanitarian relief and Covid-19 support to the benefit of our most vulnerable citizens. This team of representatives worked tirelessly, with little thought for their own safety. We have very dedicated public servants in our organisations.
- through our excellent intergovernmental relationships, repatriated families that would otherwise have been stranded in foreign countries.
- prepared and already implemented a thorough economic recovery plan; this includes the promotion of tourism and the attraction of investment opportunities.
- learnt that the Cape Winelands is home to no less than five of the six top wine destinations in the world, as identified by Great Wine Capitals of the World.Herewith I present to your our Fourth (and last) IDP Review. It is my privilege to share with you the Cape Winelands District Municipality's adjustments, re-inventions, innovations, and efforts over the last year and what we plan to roll out moving forward.
- despite a state of emergency, managed to execute our core functions such as fire-fighting and environmental health in a sterling manner contributing to maintaining a safe environment to all our citizens.
- managed our hotspot responsibility in a highly effective manner together with dept Health resulting in our #SafeInCapeWinelands.
- supported our local municipalities as and when needed also by transferring monetary means to assist with disaster management,
- succeeded in achieving an Operating Expenditure Budget Implementation Indicator of 84% during very difficult times.

In closing, I want to thank the Municipal Manager, Mr. Henry Prins and his team for their continuous and committed administrative leadership. I also would like to acknowledge all community leaders, organizations, and all other role players for their support to create a *Unified Cape Winelands of Excellence for sustainable development.*

Executive Mayor
Alderman (Dr) Helena von Schlicht

OVERVIEW / PREFACE: MUNICIPAL MANAGER



The Integrated Development Plan (IDP) is a strategic tool that guides all the activities of municipalities in consultation with citizens and other stakeholders. Its focus is on development in the broader sense, and it is a structured plan that informs budget priorities, decision making and the allocation of resources.

In my capacity as the Accounting Officer of Cape Winelands District Municipality it is my honor to present to you the Fourth (and final) IDP Review (2021/2022) of the 4th Generation IDP. The IDP is reviewed every year so that the necessary amendments can be made in line with our changing environment.

As an organization we continuously strive to deliver on our core mandate in support of our strategic objectives in order to protect and improve lives and livelihoods. Our IDP is aligned to both provincial and national priorities, however we aim to serve the citizens of the Cape Winelands District to deliver on the objectives.

It has been a year of sudden and extreme change. I always say that disruption can be good. The pandemic and its protocols provided us with the opportunity to implement innovative changes in record time, many of which would have taken years to implement under normal circumstances. Our challenge now is to find ways of implementing and enhancing these changes in a manner that not only benefits our organisation and citizens, but also demonstrates that a municipality can be a modern business that adds continued value to the economic development in its areas of expertise.

Despite these difficult issues, it is with quiet confidence that we celebrated our 7th Unqualified Audit with no findings. This continued recognition is due to our attitude toward the importance of clean governance and zero tolerance of maladministration.

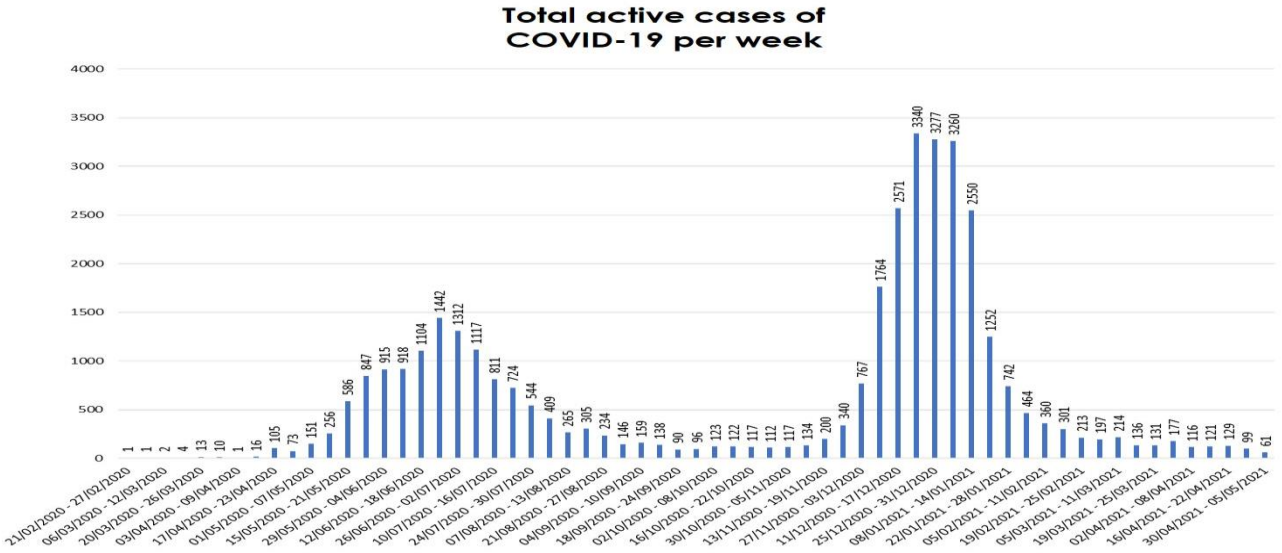
In closing, I would like to express my sincere appreciation towards my Executive Mayor, (Ald) Dr Elna von Schlicht for her exceptional leadership and to Council for their continued support. The senior Management team and all staff members, thank you for your dedication and willingness to make this a *"Unified Cape Winelands of excellence for sustainable development".*

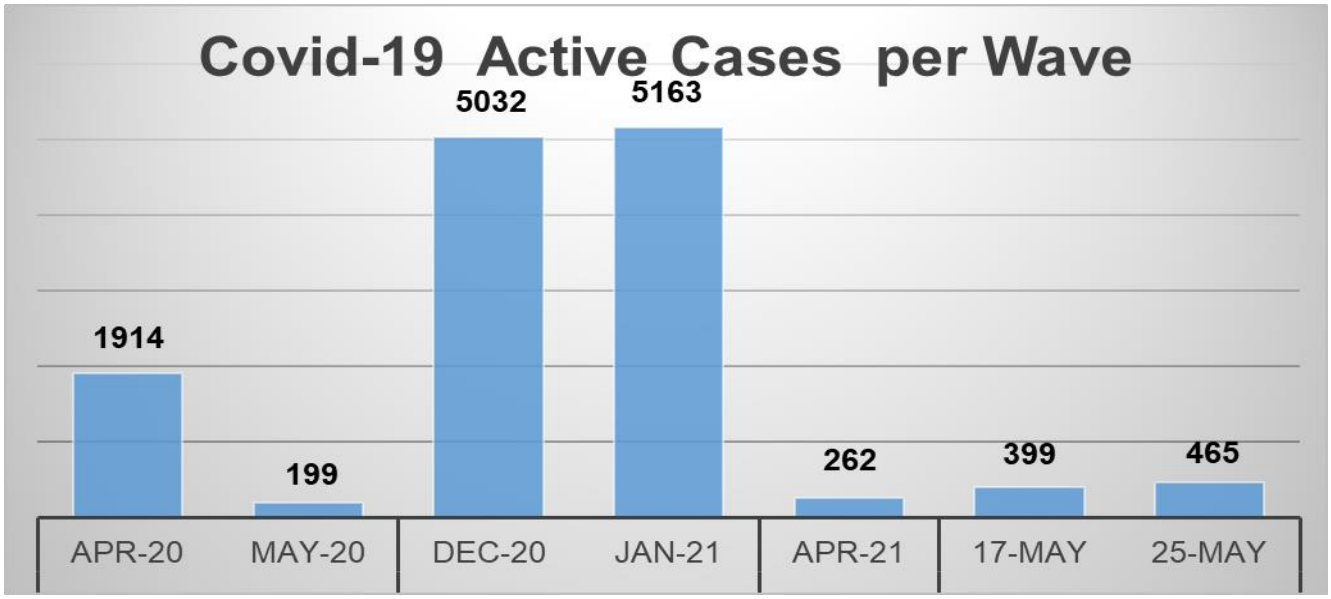
Municipal Manager

Mr Henry Prins

CORONAVIRUS DISEASE 2019 (COVID-19) – CAPE WINELANDS DISTRICT

Graphs illustrating the First, Second and Third Wave of the COVID-19 pandemic in the Cape Winelands area.





Communications department: Cape Winelands District

Western Cape Government Health

As we have seen with the wave one and two, the situation with COVID-19 can change quickly. To minimize the impact of a possible third wave, we need to still be mindful of our behaviour and to support the elderly who are the first of the broader public to have the opportunity to be vaccinated.

INTEGRATED DEVELOPMENT PLAN (IDP) REVIEW DOCUMENT

The Municipality's Integrated Development Plan (IDP) is its principal strategic planning instrument, which directly guides and informs its planning, budget, management and development actions. This framework is rolled out into objectives, key performance indicators and targets for implementation which directly inform the Service Delivery and Budget Implementation Plan (SDBIP).

Since the adoption of the Municipal Systems Act (MSA) in 2000, this represents the Fourth Review of the 4th Generation Integrated Development Plan adopted by Council on 25 May 2017. As per Section 34 of the Municipal Systems Act, 2000 (Act 32 of 2000):

(a) *"A municipal council **must** review its integrated development plan annually in accordance with an assessment of its performance measurements and to the extent that changing circumstances…"*

(b) *"A municipal council **may** amend its integrated development plan in accordance with a prescribed process"*

Council adopted the First Review of the 5-year plan on 31 May 2018, Second Review on 27 May 2019 and the Third Review on 28 May 2020.

It is imperative for this **Review to be read in conjunction with the Plan adopted on 25 May 2017, as well as subsequent reviews, as the Review does not constitute a new IDP.**

GLOSSARY OF ACRONYMS

AFS	Annual Financial Statements
AG	Auditor General
AGSA	Auditor General South Africa
AH	Agri-hub
B – Municipalities	Local Municipalities
BOWL	Breede Valley, Overberg, Witzenberg, Langeberg
C - Municipalities	District Municipalities
CFO	Chief Financial Officer
CoCT	City of Cape Town
CW	Cape Winelands
CWD	Cape Winelands District
CWDM	Cape Winelands District Municipality
CWDSDF	Cape Winelands District Spatial Development Framework
CW-IAOS	Cape Winelands Investment Attraction and Opportunities Strategy
CW-RLEDS	Cape Winelands Regional Local Economic Development Strategy
CW-TMS	Cape Winelands Tourism Marketing Strategy
DCAS	Department of Cultural Affairs and Sport
DEADP	Department of Environmental Affairs and Development Planning
DEDAT	Department of Economic Development and Tourism
DITP	District Integrated Transport Plan
DOA	Department of Agriculture
DPPCom	District Public Participation and Communication
DRDLR	Department of Rural Development and Land Reform
DUI	Driving Under the Influence
DWA	Department of Water Affairs
ECD	Early Childhood Development
EPWP	Expanded Public Works Programme
FPA	Fire Protection Association
FPSU	Farmer Production Support Unit
GDPR	General Data Protection Regulation
HIV/AIDS	Human Immune Virus/Acquired Immune Deficiency Syndrome
HR	Human Resources
HRIS	Human Resource Information System
HRM	Human Resource Management
ICLEI	International Council for Local Environmental Initiatives
ICT	Information and Communication Technology
IDP	Integrated Development Plan
IGR	Integrated Government Relations
IPTN	Integrated Public Transport Network
ITC	International Training Centre
JDA	Joint District Approach
KPA	Key Performance Area
KPI	Key Performance Indicator
LAB	Local Action for Biodiversity
LED	Local Economic Development
LG	Local Government
LTA	Local Tourism Association
LUMS	Land Use Management System
MEC	Member of the Executive Council
MFMA	Municipal Financial Management Act
MPAC	Municipal Public Accounts Committee
MSA	Local Government: Municipal Systems Act

MTREF	Medium-Term Revenue and Expenditure Framework
NGO	Non-Governmental Organisation
PMS	Performance Management System
PPPCom	Provincial Public Participation and Communication
RSA	Republic of South Africa
RTO	Regional Tourism Organisation
RUMC	Rural Urban Market Centre
SAMRAS	South African Municipal Resource System
SDBIP	Service Delivery and Budget Implementation Plan
SDF	Spatial Development Framework
SMME	Small Medium & Micro Enterprises
SMT	Senior Management Team
SO	Strategic Objective
SONA	State of the Nation Address
SPC	Spatial Planning Categories
TB	Tuberculosis
TRANCRAA	Transformation of Certain Rural Areas Act
WBRA	Ward base risk assessment
WC	Western Cape
WC DOA	Western Cape Provincial Department of Agriculture

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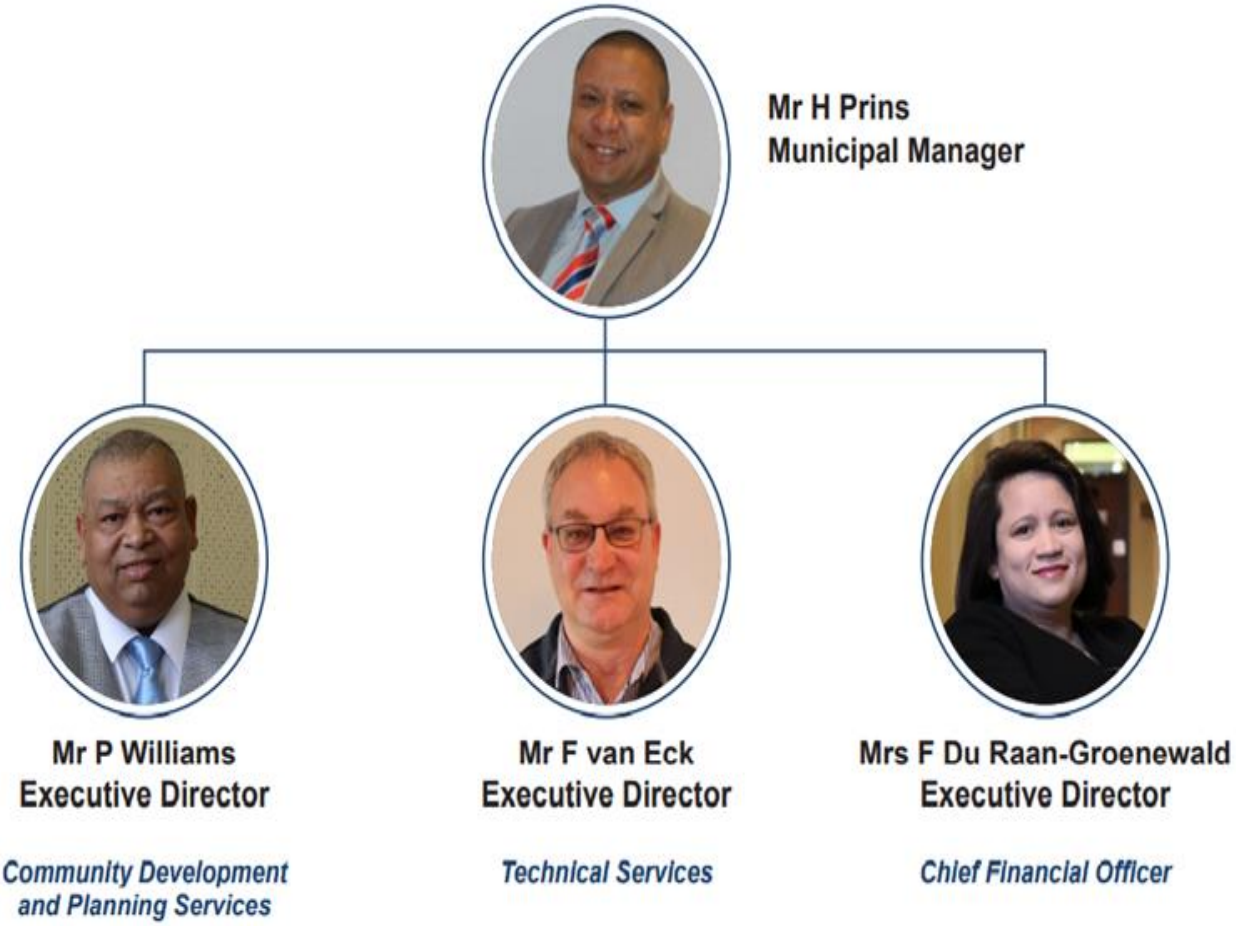
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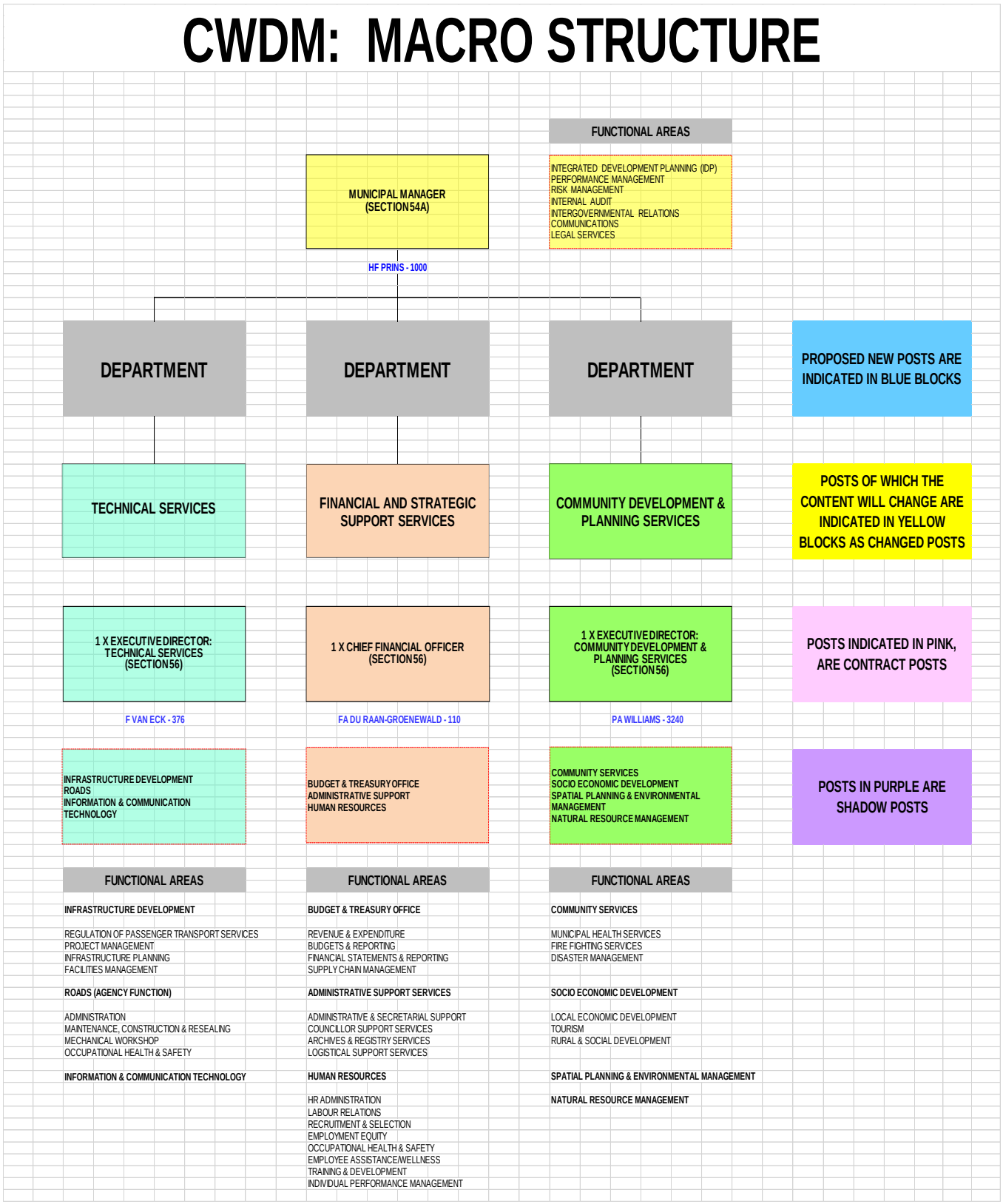
1.1 Vision, Mission and Core values



1.2 Cape Winelands District Municipality - Top administrative structure



1.3 Cape Winelands Macro Structure



Approved by Council on 21 October 2020

1.4 Strategic Objectives

OFFICE OF THE MUNICIPAL MANAGER Integrated Development Planning Performance Management Risk Management Internal Auditing Communications	
STRATEGIC OBJECTIVES	**PREDETERMINED DEVELOPMENT OBJECTIVES**
SO 1 Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District.	1.1 Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the CWDM. 1.2 Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery 1.3 Effective planning and coordination of specialized fire-fighting services throughout the CWDM 1.4 To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement. 1.5 To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.
SO 2 Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities	2.1 To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement. 2.2 To implement sustainable infrastructure services. 2.3 To increase levels of mobility in the whole of the CWDM area. 2.4 To improve infrastructure services for rural dwellers 2.5 To implement an effective ICT support system
SO 3 Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	3.1 To facilitate and enhance sound financial support services 3.2 To strengthen and promote participative and accountable IGR and governance. 3.3 To facilitate and enhance sound strategic support services

1.5 Horizontal alignment with District and Local Municipalities

	Cape Winelands	Stellenbosch	Drakenstein	Witzenberg	Breede Valley	Langeberg
Vision	A Unified Cape Winelands of excellence for sustainable development.	Valley of Opportunity and Innovation	A city of excellence	A Municipality that cares for its community, creating growth and opportunities.	A unique and caring Valley of service, excellence, opportunity and growth.	To progress and grow from being one of the best municipalities, to be the best municipality
Mission	Working together towards effective, efficient and economically sustainable development	Our Mission is to deliver cost-effective services that will provide the most enabling environment for civil and corporate citizens.	a) Protecting and enhancing of the quality of life of our residents and the unique environment of our area; b) Providing efficient and effective delivery of services which is responsive to the community's needs; c)Promoting the principles of access, equity and social justice in the development of services; d)Delivering an effective organisational culture which strives for service excellence; e) Exercising regulatory functions of Council consistently and without bias; f) Encouraging community participation in the processes of Council by consulting widely on its activities and policies; g) Creating an enabling environment for economic growth, job creation and the alleviation of poverty; and h) Employing a future-oriented approach to planning.	The Witzenberg Municipality is committed to improve the quality of life of its community by: • Providing and maintaining affordable services. • Promoting Social and Economic Development; • The effective and efficient use of available resources; and Effective Stakeholder and Community participation	To be a South African care capital by providing sustainable and affordable basic services in a safe and healthy environment which, promotes social and economic welfare through participative governance in a committed service orientated approach, and appreciates committed staff as the organisation's most valuable resource and key to service delivery.	By providing cost effective quality services to the Citizens, exercise good leadership, ensuring sound governance and financial management

	Cape Winelands	Stellenbosch	Drakenstein	Witzenberg	Breede Valley	Langeberg
Objectives	1. Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District. 2. Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities. 3. Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	1. Valley of possibility 2.A green and sustainable valley 3. A safe valley 4. Dignified Living 5. Good governance and compliance	1. Governance and stakeholder participation 2. Financial sustainability 3. Institutional transformation 4. Physical infrastructure and services 5. Planning and economic development 6. Safety and environmental management 7. Social and community development	1.Essential Services 2.Governance 3.Communal Services 4.Socio-Economic Support Services	1.To provide, maintain and assure basic service and social upliftment for the Breede Valley community 2. To create an enabling environment for employment creation and poverty eradication through proactive economic development and tourism 3.To ensure a safe, healthy, clean and sustainable external environment for all Breede Valley's people 4.To actively participate in determining the future of our country (nation building 5.To ensure a healthy and productive workforce and an effective and efficient work environment 6.Assure a sustainable future through: sound financial management; continuous revenue growth; corporate governance and risk management practices; quality resources; and, value-adding partnerships	**1.Housing:** Effective approach to integrated human settlements and improve living conditions of all households **2.Basic Service Delivery**: Maintain infrastructure to provide basic services to all citizens **3. Local Economic Development**: Create an enabling environment for economic growth and decent employment **4.** An Efficient, effective, responsive and **accountable administration** **5.Sound Financial Management**: Adherence to all laws and regulations applicable to LG **6. Effective stakeholder engagements** to promote civic education

1.6 Alignment between National, Provincial & CWDM

Medium Terms Strategic Framework 2019 - 2024 (MTSF)	National Priorities (2019 – 2024)	Western Cape Vision-inspired Priorities (2019 – 2024)	Cape Winelands District Municipality Strategic Objectives	CWDM Pre-determined objectives
Priority 3: Education, skills and health **Priority 6:** Social cohesion and safe community	**National Priority 5**: Social cohesion & safe communities **National Priority 2:** Education, skills & health	**Vision-inspired priority 1:** Safe and Cohesive communities	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.1** Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the area of Cape Winelands District Municipality. .
Priority 6: Social cohesion and safe community	**National Priority 5**: Social cohesion & safe communities	**Vision-inspired priority 1:** Safe and Cohesive Communities	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District.	. **PDO 1.2:** Ensuring coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment, Response and Recovery.
Priority 6: Social cohesion and safe community	**National Priority 5**:Social cohesion & safe communities	**Vision-inspired priority 1:** Safe and Cohesive Communities	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.3:** Effective planning and coordination of specialized fire-fighting services through the CWDM.

Medium Terms Strategic Framework 2019 - 2024 (MTSF)	National Priorities (2019 – 2024)	Western Cape Vision-inspired Priorities (2019 – 2024)	Cape Winelands District Municipality Strategic Objectives	CWDM Pre-determined objectives
Priority 2: Economic transformation & job creation	**National Priority 1**: Economic transformation & job creation	**Vision-inspired priority 3:** Empowering people	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.4:** To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information acknowledgement.
Priority 2: Economic transformation & job creation **Priority 3:** Education, skills and health **Priority 6:** Social cohesion and safe community	**National Priority 1**: Economic transformation & job creation **National Priority 1**: Education, skill & health **National Priority 5**:Social cohesion & safe communities	**Vision-inspired priority 1:** Safe and Cohesive Communities **Vision-inspired priority 2:** Economy and jobs **Vision-inspired priority 5:** Innovation and culture	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.5:** To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.
Priority 5: Social integration, human settlements and local government	**National Priority 4**: Spatial integration, human settlements & local government	**Vision-inspired priority 4:** Mobility and Spatial Transformation	**SO2:** Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities	**PDO 2.2:** To implement sustainable infrastructure services **PDO 2.4:** To improve infrastructure services for rural dwellers

Medium Terms Strategic Framework 2019 - 2024 (MTSF)	National Priorities (2019 – 2024)	Western Cape Vision-inspired Priorities (2019 – 2024)	Cape Winelands District Municipality Strategic Objectives	CWDM Pre-determined objectives
Priority 2: Economic transformation & job creation **Priority 6:** Social cohesion and safe community	**National Priority 1**: Economic transformation & job creation **National Priority 5**:Social cohesion & safe communities	**Vision-inspired priority 4:** Mobility and Spatial Transformation	**SO2:** Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities	**PDO 2.3:** To increase levels of mobility in the whole of the CWDM area.

Medium Terms Strategic Framework (MTSF) 2019 -2024 - *The National Development Plan (NDP) 2030 issued in 2012 set out a long-term vision for the country and provides the programme through which South Africa can advance radical economic transformation through Development planning. The Medium Term Strategic Framework (MTSF) 2014-2019 outlined the plan and outcome-based monitoring framework for implementing the NDP during the country's fifth democratic administration. This MTSF 2019-2024 outlines the priorities to be implemented in the sixth administration. It also outlines the priorities and interventions across South Africa's national development pillars.*

National Priorities 2019 – 2024 - *President Cyril Ramaphosa announced in the State of the Nation Address for 2019 that government will concentrate on seven National Priorities that will fast track South Africa's path to prosperity, hence finding ourselves in a time of great economic difficulty. Everything comes down to implementation if the country is to realise the vision of the National Development Plan (NDP).*

Western Cape Vision Inspired Priorities 2019 – 2024 - *The Western Cape Government has developed a strategic plan to guide their work over the next 5 years. Our vision is "A safe Western Cape where everyone prospers". The interventions that will realise this vision are outlined in the Western Cape Strategic Plan, 2019-2024. The plan includes 5 Vision-inspired Priorities.*

CHAPTER 2: STRATEGIC SUBSTANCE OF THE IDP

2.1 Public Participation and IDP/Budget consultation process

- The 2020/2021 Public Participation process was conducted in a very different way due to COVID-19 pandemic. For our public participation process we have done the following, and created the following platforms:

  - An advert was placed in various local newspapers across the district
  - IDP and Budget related documents are currently on our website
  - We did 3 radio interviews (local radio stations)
  - IDP email address (idp@capewinelands.gov.za)
  - Comment boxes at all our offices
  - Facebook

Furthermore, we held our Virtual Mayoral Business Breakfast on 22 April 2021. The theme was “Road Freight to Rail Freight”

Currently farmers within the Cape Winelands District are having consultations with the MEC for Agriculture and local mayors, to raise their concerns and share their experiences.

During this Public Participation process we received numerous “Call for Proposals” requests which was directed to the relevant officials. We received a substantial number of applications for funding.

All the other requests and questions we received was directed to relevant Provincial Departments.

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2.2 IDP / Budget Public Participation Road Map

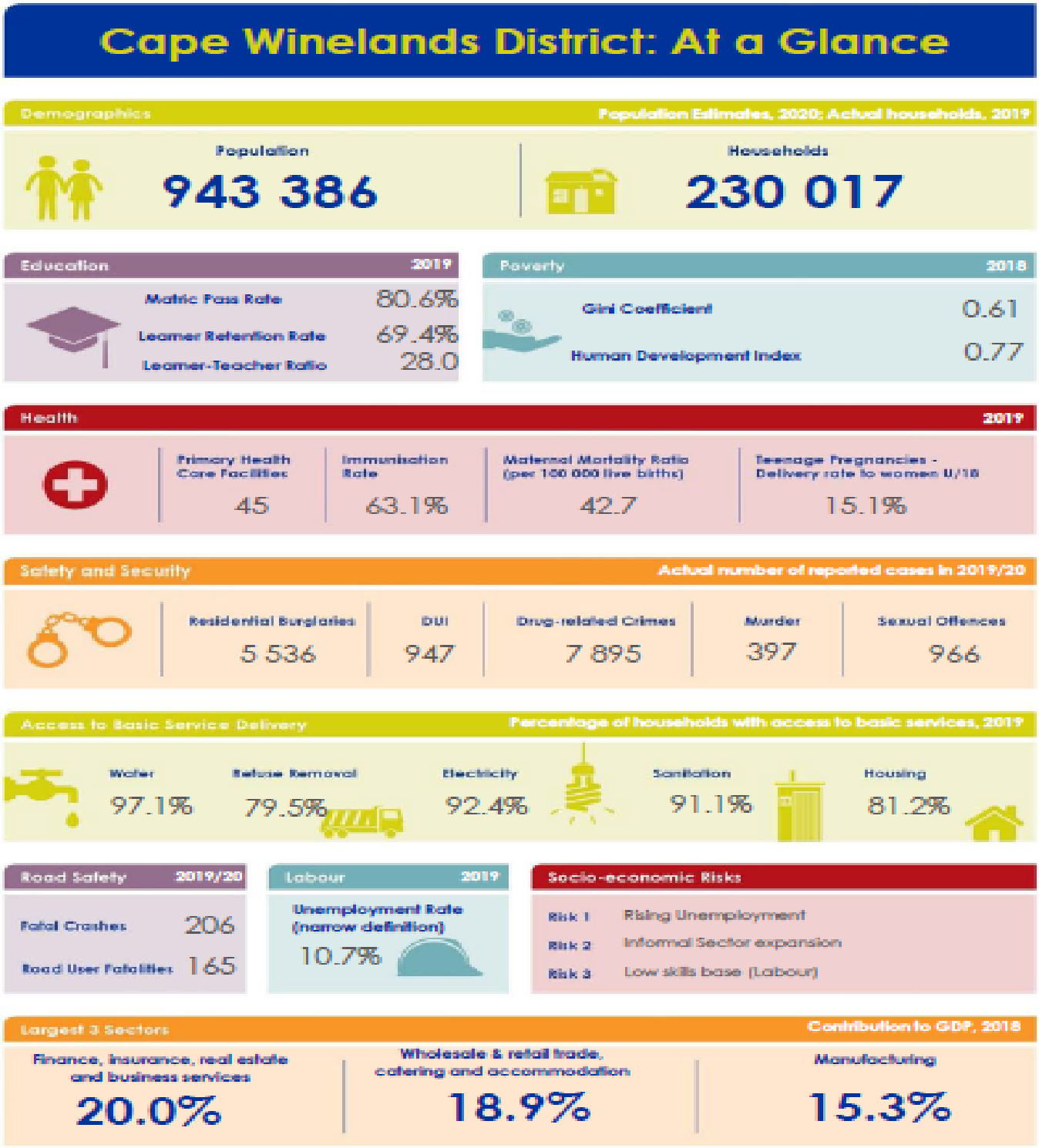
CWDM IDP/BUDGET Road Map for Public Participation 2021/22

MUNICIPALITY	VENUE	Public Participation DATES	IDP/Budget Consultation DATES
PUBLIC PARTICIPATION			
Stellenbosch	Wards	Sept – Oct 2021	April 2022
Drakenstein	Wards	Sept – Oct 2021	April 2022
Witzenberg	Wards	Sept – Oct 2021	April 2022
Breede Valley	Wards	Sept – Oct 2021	April 2022
Langeberg	Wards	Sept – Oct 2021	April 2022
DISTRICT CONSULTATION MEETINGS			
CWDM Public Participation Meetings	Worcester and Stellenbosch	Sept – Oct 2021	
CWDM IDP/Budget Consultation Meetings	Worcester and Paarl	April 2022	
Mayoral Business Breakfast	TBC	TBC	
BUDGET PROCESS			
Financial analysis	CWDM Office Stellenbosch	September 2020	December 2021
Programmes, Projects & Preliminary Capital Budget	CWDM Office Stellenbosch	September 2020	December 2021
Priorities and Outputs	CWDM Office Stellenbosch	September 2020	December 2021
Operating Budget	CWDM Office Stellenbosch	September 2020	December 2021
Final Approval of IDP, PMS and Annual Budget	CWDM Office Stellenbosch	May 2021	

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CHAPTER 3: SITUATION ANALYSIS

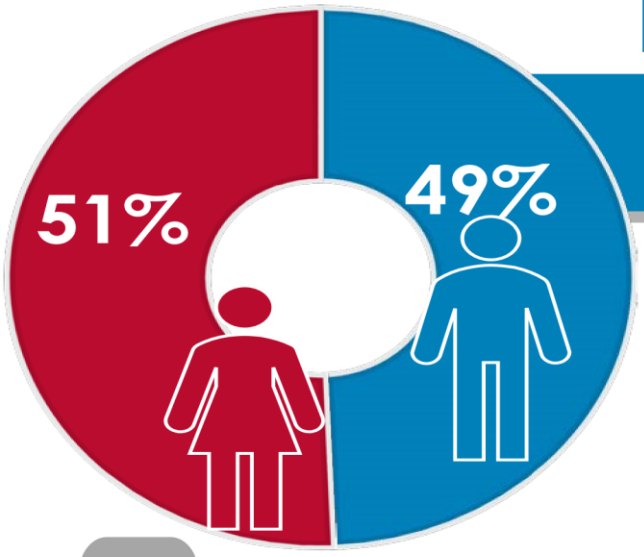
3.1 Cape Winelands Socio-Economic Snapshot

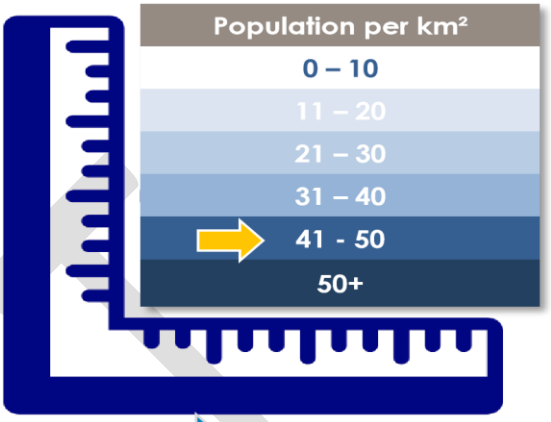


2020 Socio-economic Profile: Cape Winelands District Municipality

CAPE WINELANDS DISTRICT

DEMOGRAPHICS





Number of males per 100 females

	2020	2021	2022	2023	2024
Cape Metro	97.9	98.6	99.0	99.4	99.7
West Coast	97.8	98.4	98.7	99.0	99.3
Cape Winelands	97.3	97.8	97.9	98.0	98.1
Overberg	101.9	102.4	102.6	102.8	102.9
Garden Route	91.5	92.0	92.2	92.4	92.6
Central Karoo	93.0	93.5	93.7	93.9	94.0
Western Cape	**97.3**	**97.9**	**98.2**	**98.6**	**98.9**

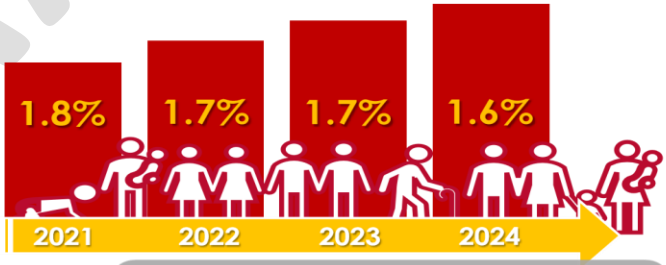
946 386
Current Population

1 009 822 2024
Estimated Population

Household size

2020	3.8
2021	3.7
2022	3.7
2023	3.7
2024	3.7

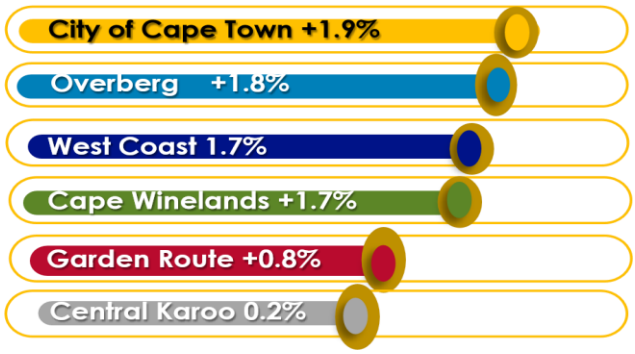
Population growth



Age cohorts

	Children: 0-14 Years	Working Age: 15-65 Years	Aged 65+ Years	Dependency Ratio
2020	238 398	651 352	53 636	44.8
2023	245 047	689 814	58 619	44.0
2026	251 343	710 052	64 392	44.5
	+0.9%	+1.4%	+3.1%	

Population growth 2020 – 2024



EDUCATION

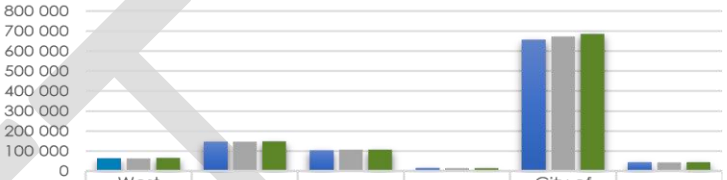
Educational facilities

269
Number of schools

205
Number of no-fee schools

14
Number of schools with libraries

Learner enrolment

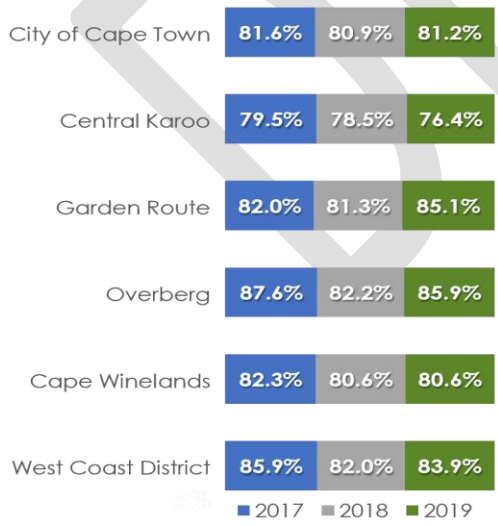


	West Coast District	Cape Winelands	Garden Route	Central Karoo	City of Cape Town	Overberg
2017	61 602	143895	104500	14308	655243	41944
2018	62 958	146495	106289	14529	672102	43103
2019	65 000	148136	107367	14735	685870	43887

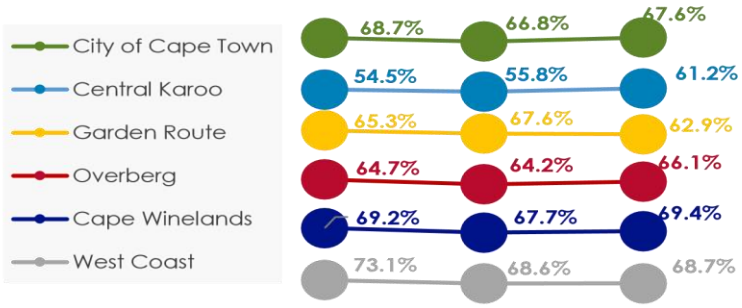
Learner-Teacher Ratio

West Coast District	28.9	30.6	30.9
Cape Winelands	26.6	27.9	28.0
Overberg	28.9	30.6	30.1
Garden Route	29.2	30.1	30.1
Central Karoo	30.3	32.8	32.7
City of Cape Town	29.6	25.1	30.1

Education outcomes



Learner retention

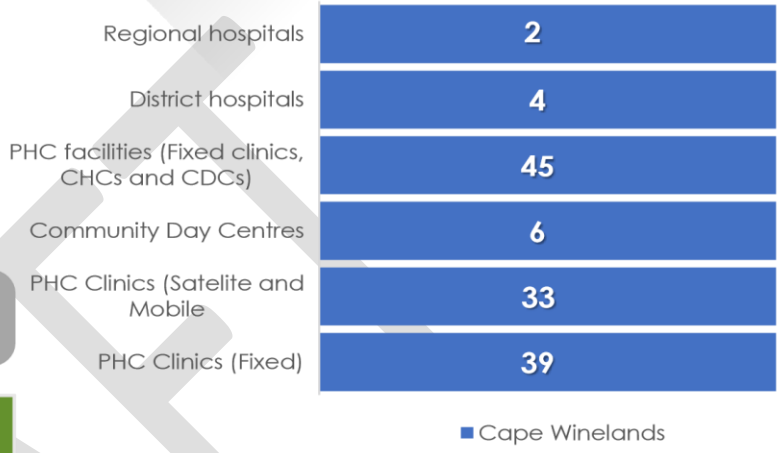


HEALTH

Tuberculosis



Healthcare facilities



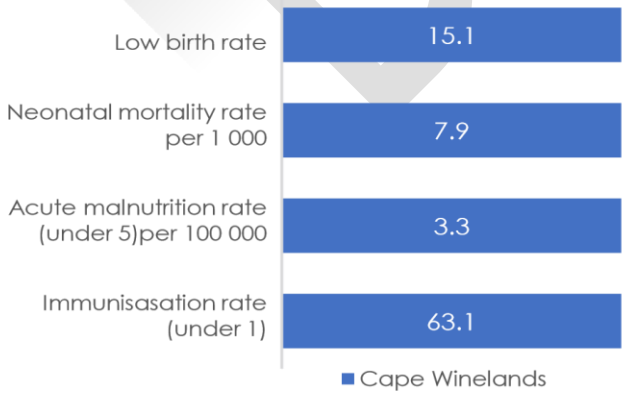
Maternal health

	Maternal Mortality Rate		Delivery rate to women under 2 0 years		Termination of pregnancy rate	
	2018	2019	2018	2019	2018	2019
Cape Winelands District	95.5	42.7	14.2	15.1	0.7	0.8

Emergency medical services

Health Indicator	Cape Winelands	Western Cape
No of operational ambulances per 10 000 people	2	2

Child health



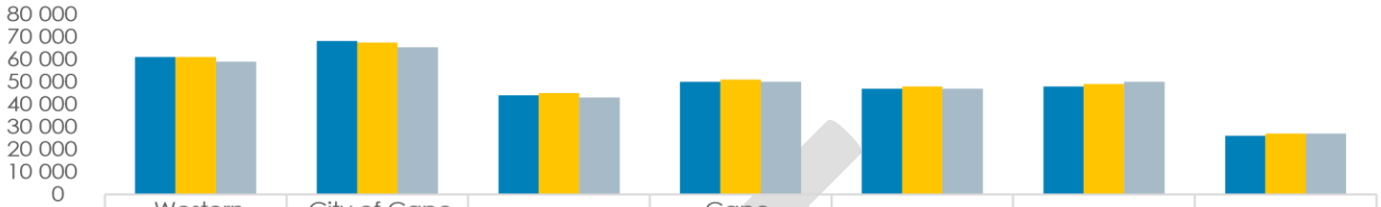
HIV/AIDS

Area	Registered patients receiving ART		Number of new ART patients	
	2018	2019	2018	2019
Cape Winelands District	30 724	32 366	3 851	3 434

2020 Socio-economic Profile: Cape Winelands District Municipality

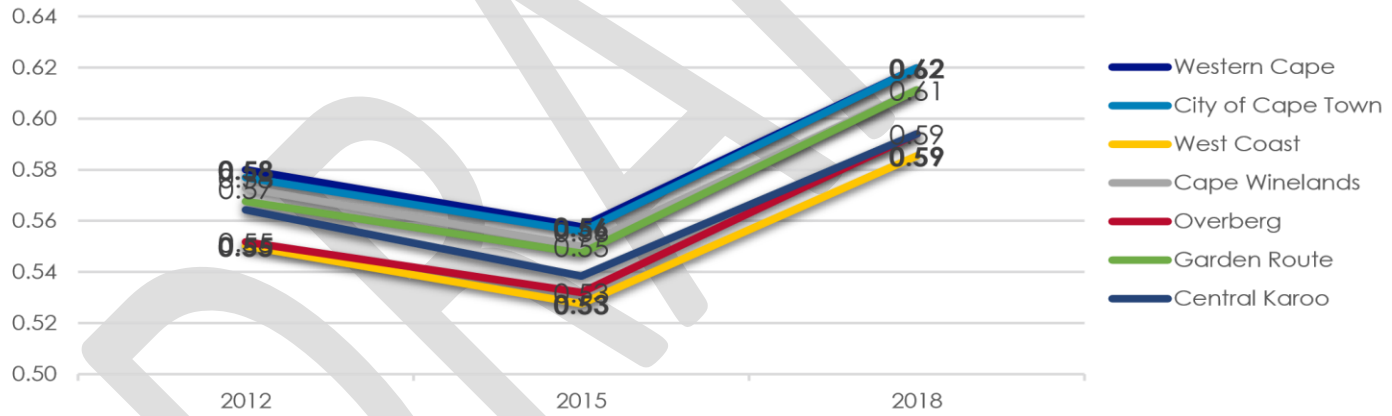
POVERTY

GDP per capita

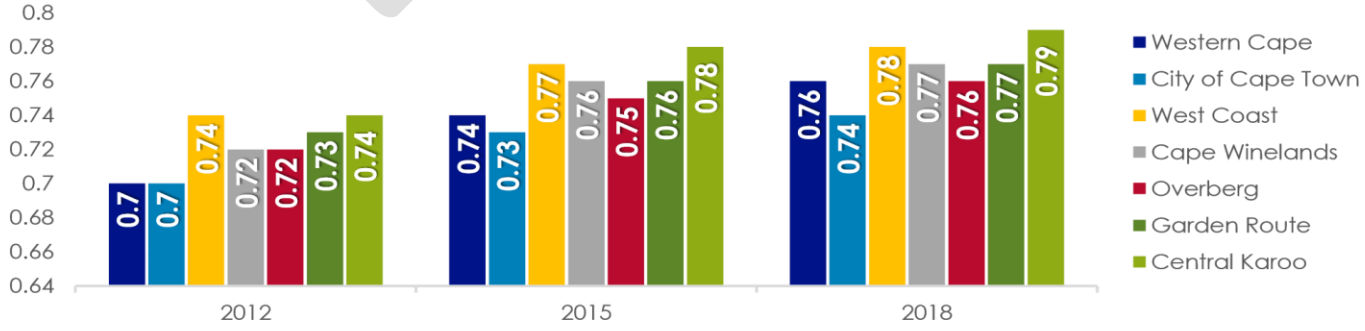


	Western Cape	City of Cape Town	West Coast	Cape Winelands	Overberg	Garden Route	Central Karoo
2012	61 000	68 170	44 000	50 000	47 000	48 000	26 000
2015	61 000	67 517	45 000	51 000	48 000	49 000	27 000
2018	59 000	65 302	43 000	50 000	47 000	50 000	27 000

Income inequality

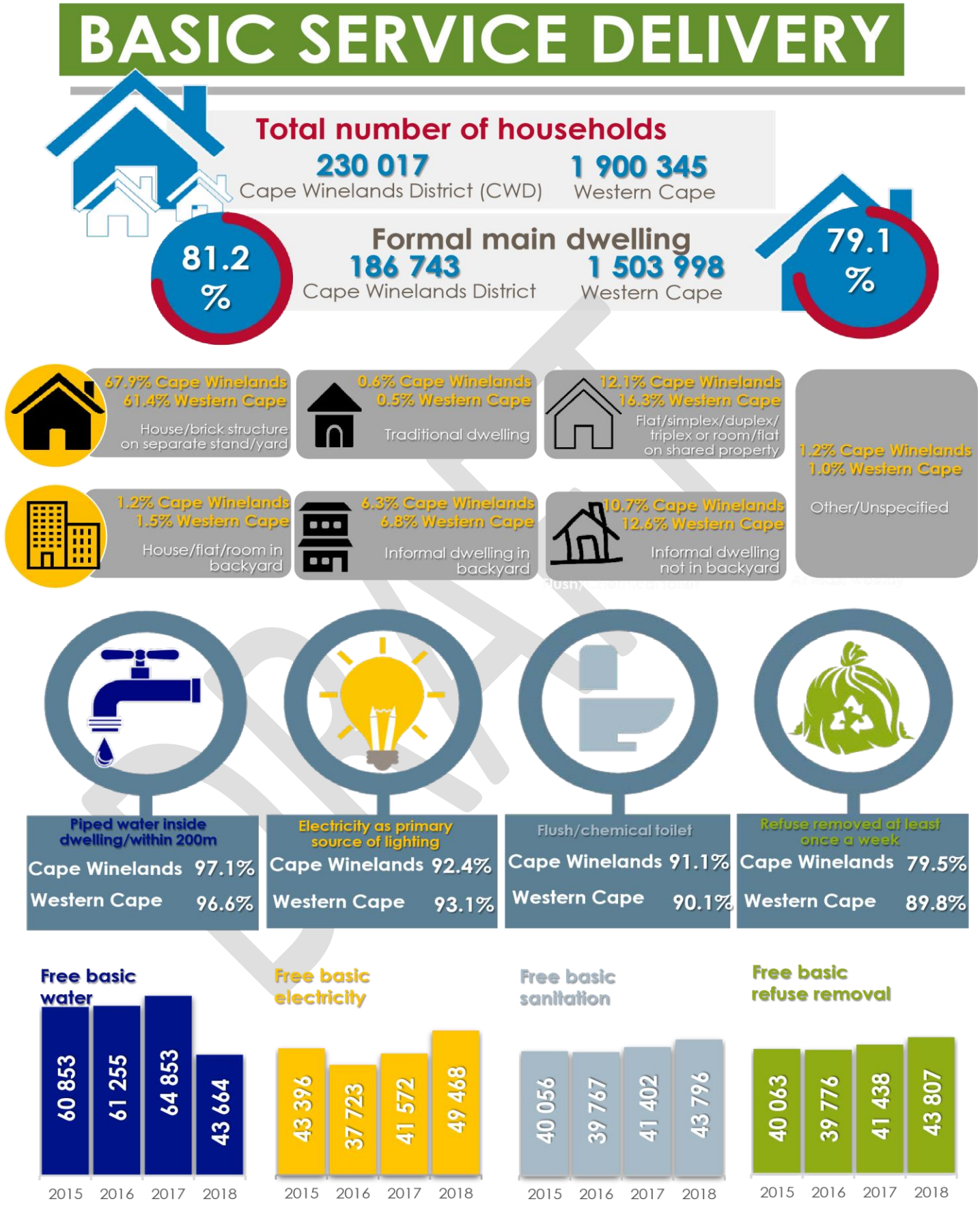


Human development



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2020 Socio-economic Profile: Cape Winelands District Municipality



2020 Socio-economic Profile: Cape Winelands District Municipality

SAFETY AND SECURITY



MURDER		2017/18	2018/19	2019/20
Per 100 000	Cape Winelands District	42	39	42
	Western Cape	55	58	57

SEXUAL OFFENCES		2017/18	2018/19	2019/20
Per 100 000	Cape Winelands District	110	95	102
	Western Cape	105	102	104





DRUG-RELATED OFFENCES		2017/18	2018/19	2019/20
Per 100 000	Cape Winelands District	1 832	1 211	837
	Western Cape	1 735	1 182	895

DRIVING UNDER THE INFLUENCE		2017/18	2018/19	2019/20
Per 100 000	Cape Winelands District	112	103	100
	Western Cape	189	183	176
FATAL CRASHES	Cape Winelands District	215	237	206
	Western Cape	1 267	1 157	1 209
ROAD USER FATALITIES	Cape Winelands District	196	172	165
	Western Cape	1 379	1 395	1 429





RESIDENTIAL BURGLARIES		2017/18	2018/19	2019/20
Per 100 000	Cape Winelands District	682	625	587
	Western Cape	632	573	515

CAPE WINELANDS DISTRICT MUNICIPALITY: PLANNED AND ESTIMATED PROVINCIAL INFRASTRUCTURE EXPENDITURE AND NATIONAL AND PROVINCIAL BUDGET ALLOCATIONS FOR THE MTEF PERIOD 2021/22 – 2023/24

Herewith the following information for consideration during the budgetary and integrated development planning cycle 2021/22:

Table 1: A summary of Provincial Infrastructure Projects & Programmes in the District Municipality for the MTEF period 2021/22 – 2023/24.

Annexure A: Map showing the spatial distribution of Provincial Infrastructure Investment Projects (Individual Projects) in the District Municipality for the MTEF period 2021/22 – 2023/24.

Annexure B: A list of Provincial Infrastructure Investment Projects and Programmes in the District Municipality for the MTEF period 2021/22 – 2023/24.

Table 1: Summary of Infrastructure Projects & Programmes in Cape Winelands District (MTEF 2021/22 – 2023/24)

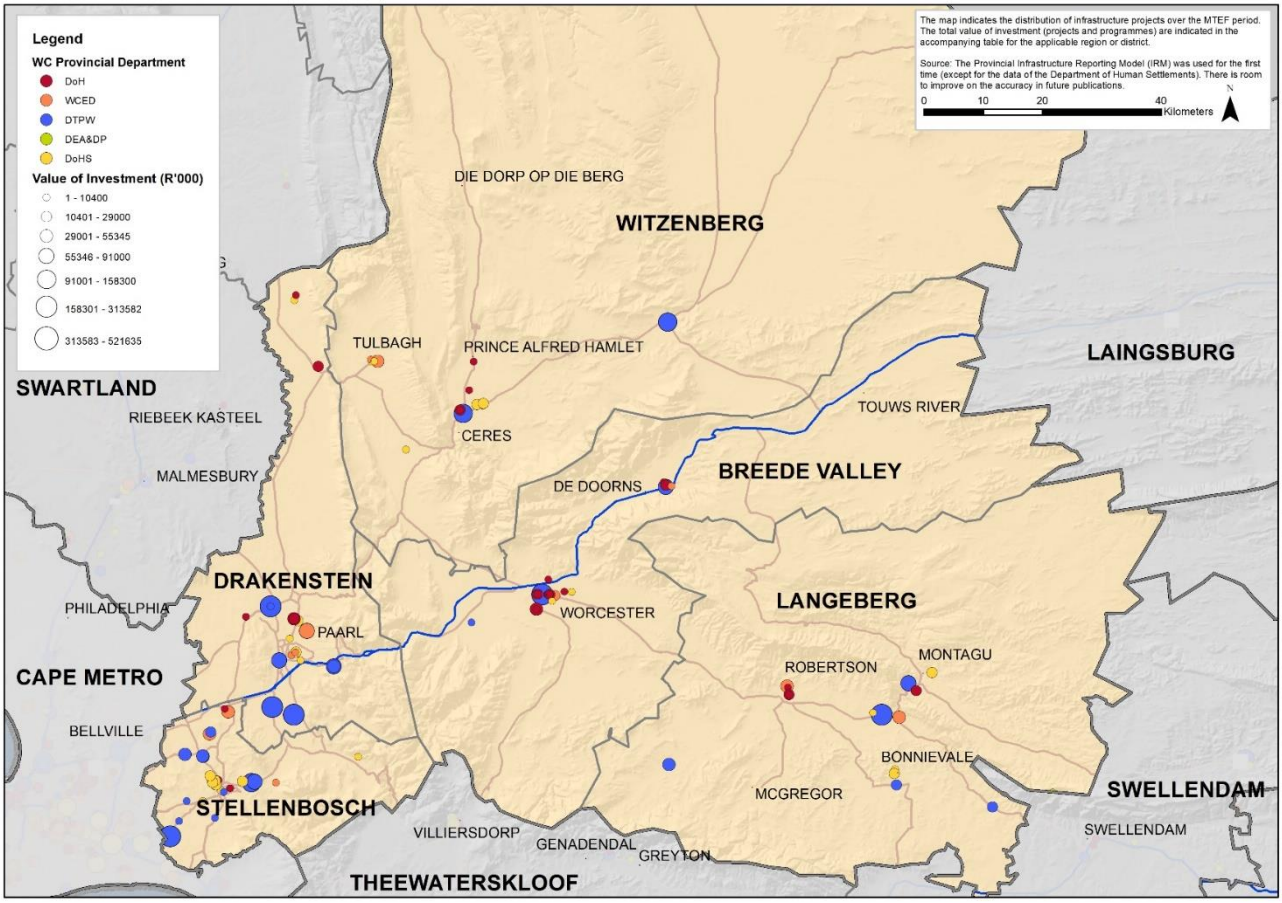
Department	No of Projects	Value (all amounts rounded to R'000)						
		Infrastructure Transfers - Capital	Maintenance and Repairs	New or Replaced Infrastructure	Non-Infrastructure	Rehabilitation, Renovations & Refurbishment	Upgrading and Additions	MTEF Total
Education	16			363000			11000	374000
Environ Affairs & Dev Plan (Cape Nature)	1						5000	5000
Health	51			103530	71229	51290	72417	298466
Human Settlements	37	478984						478984
Transport and Public Works	37		191010			2024687	233000	2448697
Total	**142**	**478984**	**191010**	**466530**	**71229**	**2075977**	**321417**	**3605147**

Source: Integrated Reporting Model (IRM)
[1] Source: DEA&DP using data from Integrated Reporting Model (IRM)
[1] Source: Integrated Reporting Model (IRM)
[1] Source: National Treasury and Western Cape Provincial Treasury
[1] DEA&DP: Directorate Development Planning Intelligence Management & Research

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Annexure A

Spatial distribution of Provincial Infrastructure Investment (Individual Projects) in Cape Winelands District (MTEF 2021/22 – 2023/24)



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Department of Environmental Affairs and Development Planning

Annexure B

List of Provincial Infrastructure Investment Projects in the Cape Winelands District for the MTEF period 2021/22 – 2023/24

Department	Nature of Investment	Funding Source	Local Municipality	Project Name	2021-22	2022-23	2023-24	MTEF Total
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Breede Valley	Roodewal PS	0	2000	15000	17000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Breede Valley	Stofland PS	5000	0	0	5000
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Breede Valley	De Doorns - De Doorns Ambulance Station - HT - Replacement	300	0	0	300
Health	New or Replaced Infrastructure	Health Facility Revitalisation Grant	Breede Valley	De Doorns - De Doorns Ambulance Station - Replacement	10	800	0	810
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Breede Valley	De Doorns - De Doorns CDC - HT - Upgrade and Additions	0	500	5500	6000
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Breede Valley	De Doorns - De Doorns CDC - Upgrade and Additions	2022	21205	10	23237
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Breede Valley	Worcester - Avian Park Clinic - HT - New	3000	1000	0	4000
Health	New or Replaced Infrastructure	Health Facility Revitalisation Grant	Breede Valley	Worcester - Avian Park Clinic - New	28554	797	849	30200
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Breede Valley	Worcester - Avian Park Clinic - OD QA - New	100	0	0	100
Health	Rehabilitation, Renovations & Refurbishment	Health Facility Revitalisation Grant	Breede Valley	Worcester - Brewelskloof Hospital - R & R (Alpha)	0	0	291	291
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Breede Valley	Worcester - Empilisweni Clinic - Upgrade and additions (Alpha)	0	0	216	216
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Breede Valley	Worcester - WCCN Boland - Additional Nurses accommodation - Erica Hostel	1	0	0	1

Health	Rehabilitation, Renovations & Refurbishment	Health Facility Revitalisation Grant	Breede Valley	Worcester - WCCN Boland - Nurses accommodation at Erica Hostel, R & R	170	0	0	170
Health	Non-Infrastructure	Equitable Share	Breede Valley	Worcester - Winelands & Overberg Maintenance Hub - Infrastructure Support	3609	3491	3491	10591
Health	Non-Infrastructure	Equitable Share	Breede Valley	Worcester - Winelands Overberg HT Hub - Infrastructure Support	1879	2002	2200	6081
Health	Rehabilitation, Renovations & Refurbishment	Health Facility Revitalisation Grant	Breede Valley	Worcester - Worcester Hospital - Fire compliance	7586	6399	621	14606
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Breede Valley	Worcester - Worcester Hospital - HT - Medical Waste	2400	0	0	2400
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Breede Valley	Worcester - Worcester Hospital - HT - Relocation of MOU	0	2000	1000	3000
Health	Rehabilitation, Renovations & Refurbishment	Health Facility Revitalisation Grant	Breede Valley	Worcester - Worcester Hospital - Relocation of MOU	3639	3897	282	7818
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Breede Valley	Avian Park Albatross Str-Rem-Erf 1 (500 services - 900 units) IRDP FLISP	0	2000	0	2000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Breede Valley	Breede Valley: Worcester: Zwelethemba: Erf 1 North of Mandela: 2000 Sites - UISP	0	6000	0	6000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Breede Valley	DHS: Breede Valley: Worcester: Transhex - 8280 Services - IRDP - Ph 1: 3231 Sites out of total of 8280 Sites	10581	0	0	10581

Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Breede Valley	Worcester Fisher St Portion Erf 1-10253 (307 services - 307 units) IRDP FLISP	0	1000	0	1000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Breede Valley	Worcester Transhex Phase 1 (2546 of 3231) Services	74800	0	0	74800
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Breede Valley	Worcester Transhex Phase 1 Tops (800)	26000	26000	19500	71500
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Breede Valley	C1140 Reseal De Droons	0	0	20000	20000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Breede Valley	C1148 reseal De Droons	50000	21000	0	71000
Transport and Public Works	Upgrading and Additions	Equitable Share	Drakenstein	Haasekraal DM	1000	0	0	1000
Transport and Public Works	Upgrading and Additions	Equitable Share	Breede Valley	Rawsonville DM	6000	0	0	6000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Drakenstein	Dal Josaphat PS (CWXXS1)	20000	35000	25000	80000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Drakenstein	Ebenezer PS	0	0	2000	2000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Drakenstein	Paarlzicht PS	0	0	2000	2000
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Drakenstein	Gouda - Gouda Clinic - HT - Replacement	0	1000	400	1400
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Drakenstein	Gouda - Gouda Clinic - OD QA - Replacement	9	0	0	9
Health	New or Replaced Infrastructure	Health Facility Revitalisation Grant	Drakenstein	Gouda - Gouda Clinic - Replacement	4200	14137	10	18347
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Drakenstein	Paarl - Paarl Ambulance Station - Upgrade and additions incl wash bay	0	0	81	81
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Drakenstein	Paarl - Paarl CDC - Enabling work incl fencing to secure new site	9625	1238	577	11440

Health	New or Replaced Infrastructure	Health Facility Revitalisation Grant	Drakenstein	Paarl - Paarl CDC - New	2195	16500	34583	53278
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Drakenstein	Paarl - Paarl Hospital - HT - New Obstetric Theatre in Maternity Unit	200	2000	800	3000
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Drakenstein	Paarl - Paarl Hospital - New Obstetric Theatre in Maternity Unit	2082	739	97	2918
Health	Non-Infrastructure	Equitable Share	Drakenstein	Paarl - Paarl HT Hub - Infrastructure Support	2375	2530	2700	7605
Health	Non-Infrastructure	Equitable Share	Drakenstein	Paarl - West Coast Maintenance Hub - Infrastructure Support	5636	5452	5452	16540
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Drakenstein	Wellington - Wellington CDC - Pharmacy Additions and Alterations	1	0	0	1
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Drakenstein	Wellington - Windmeul Clinic - HT - Upgrade and Additions (Alpha)	0	543	957	1500
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Drakenstein	Wellington - Windmeul Clinic - Upgrade and Additions (Alpha)	153	1563	82	1798
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	DHS: Drakenstein: Paarl: Vlakkeland: Planning - 3935 IRDP - Phase 1	6893	0	0	6893
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	Drakenstein: Paarl Dignified Informal Settlements - 298 - UISP	10800	6000	0	16800
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	Drakenstein: Paarl, Chester Williams: Planning 139 Sites - UISP	1476	5340	0	6816
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	Drakenstein: Paarl, Lovers Lane: Planning: 168 Sites - UISP	768	10080	0	10848

Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	Fairylands	0	5200	0	5200
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	Paarl Vlakkeland (Ph1.1 188 sites/188 units)	58110	0	0	58110
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	Saron (350)	0	6000	0	6000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Drakenstein	Siyahlala	0	1950	0	1950
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Drakenstein	C1102 PRMG Reseal Windmeul	227000	0	0	227000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Drakenstein	C1105 PRMG Du Toit`s kloof Pass	0	85000	0	85000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Drakenstein	C1105 Reseal Du Toits Kloof	30000	0	0	30000
Transport and Public Works	Upgrading and Additions	Equitable Share	Drakenstein	C1120 Pearl Valley	25000	120000	45000	190000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Drakenstein	C1142 Rehab Simondium Reseal	0	0	87224	87224
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Drakenstein	C749.2 Paarl - Franschoek	35000	0	0	35000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Langeberg	Dagbreek LS	2000	15000	30000	47000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Langeberg	New Ashton HS	2000	10000	25000	37000
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Langeberg	Montagu - Montagu Hospital - HT - Rehabilitation	0	0	1	1
Health	Rehabilitation, Renovations & Refurbishment	Health Facility Revitalisation Grant	Langeberg	Montagu - Montagu Hospital - Rehabilitation	771	1000	9247	11018

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Health	New or Replaced Infrastructure	Health Facility Revitalisation Grant	Langeberg	Robertson - Robertson CDC - New	0	0	894	894
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Langeberg	Robertson - Robertson Hospital - Acute Psychiatric Ward and New EC	641	1693	23958	26292
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Langeberg	Robertson - Robertson Hospital - HT - Acute Psychiatric Ward and New EC	0	2000	4000	6000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Langeberg	Bonnievale Uitsig (68)	0	8840	0	8840
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Langeberg	Langeberg: Bonnievale: Boekenhoutskloof - 563 - UISP	1000	13440	0	14440
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Langeberg	Langeberg: Montagu: Mandela Square Remainder Erf 937: Planning 269 Sites - IRDP	1000	10380	0	11380
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Langeberg	Zandvliet (520)	0	1000	0	1000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Langeberg	C1141 Reseal Montagu - Barrydale	25000	0	0	25000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Langeberg	C1141 Reseal Montagu-Barrydale	0	80000	0	80000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Langeberg	C1205 Bonnievale	0	0	18000	18000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Langeberg	C818 Ashton - Montagu	202000	5000	0	207000
Transport and Public Works	Upgrading and Additions	Equitable Share	Langeberg	Wansbek DM	0	20000	16000	36000
Education	Upgrading and Additions	Education Infrastructure Grant	Stellenbosch	Aviation	1000	0	0	1000

Education	New or Replaced Infrastructure	Education Infrastructure Grant	Stellenbosch	Elsenburg Agri School	2000	10000	30000	42000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Stellenbosch	New Klapmuts HS	2000	15000	20000	37000
Education	New or Replaced Infrastructure	Equitable Share	Stellenbosch	New Klapmuts PS	2000	15000	20000	37000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Stellenbosch	P.C. Peterson PS	10000	0	0	10000
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Stellenbosch	Stellenbosch - Klapmuts Clinic - Upgrade and Additions (Alpha)	0	0	413	413
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Stellenbosch	Stellenbosch - Stellenbosch Hospital - EC Upgrade and Additions	1	0	0	1
Health	Rehabilitation, Renovations & Refurbishment	Health Facility Revitalisation Grant	Stellenbosch	Stellenbosch - Stellenbosch Hospital - Hospital and stores repairs and renovation	343	2000	500	2843
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Stellenbosch	Stellenbosch- Kayamandi CDC- Clinic Replacement	0	541	1102	1643
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Adam Tas Transit Oriented Development (3500)	0	0	3500	3500
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Droe Dyke (1000)	0	0	2000	2000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	ISSP Kayamandi Zone 0 (711)	0	23140	0	23140
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	STELLENBOSCH : Kayamandi Watergang Basic Services UISP	6500	0	0	6500
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Stellenbosch Idas Valley (166) FLISP	11288	0	0	11288
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Stellenbosch: Enkanini: 1300 - Uisp	1500	17880	0	19380

Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Stellenbosch: Franschoek: Langrug Ess: 1900 - Uisp	4500	0	0	4500
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Stellenbosch: Kayamandi Zone 0 - 541 Services UISP	4680	9000	9000	22680
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Stellenbosch: Kayamandi: 1000 sites - UISP	3000	3000	6000	12000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Stellenbosch: Northern Ext: Planning for 2500 Sites - IRDP - Phase 1	2000	0	0	2000
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Stellenbosch	Vlottenburg Longlands (106 incr to 144) IRDP	17940	0	0	17940
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	C1080 Stellenbosch reseal	2000	0	0	2000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	C1092 SOMERSET WEST-STELLENBOSCH	2000	0	0	2000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Stellenbosch	C1150 Helshoogte rd - Franshoek	0	0	100000	100000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Stellenbosch	C749.2 Reconstruct Paarl- F/hoek	0	130000	125000	255000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	C914 Spier road phase 3	30000	120000	52920	202920
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	C914.2 Spier Road	3000	0	0	3000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	CK DM regravel	29568	30750	32980	93298
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	CW DM regravel	32000	27000	28000	87000

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Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	CYCC-Lindelani	0	4595	43467	48062
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Stellenbosch	Modernisation Elsenburg- Main Building Phase2 (Labs)	0	1200	23983	25183
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Witzenberg	Ndluli PS	0	0	2000	2000
Education	Upgrading and Additions	Education Infrastructure Grant	Witzenberg	Tulbagh HS	10000	0	0	10000
Education	New or Replaced Infrastructure	Education Infrastructure Grant	Witzenberg	Waveren SS	15000	30000	0	45000
Environ Affairs & Dev Plan (Cape Nature)	Upgrading and Additions	Equitable Share	Witzenberg	Wolwekloof Recreational Facilities Upgrade	5000	0	0	5000
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Witzenberg	Ceres - Bella Vista Clinic - HT - General maintenance (Alpha)	155	512	0	667
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Witzenberg	Ceres - Ceres CDC - HT - General upgrade, extension and maintenance	0	0	1300	1300
Health	Rehabilitation, Renovations & Refurbishment	Health Facility Revitalisation Grant	Witzenberg	Ceres - Ceres Hospital - Hospital and nurses home repairs and renovations	359	1439	12746	14544
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Witzenberg	Ceres - Ceres Hospital - HT - New Acute Psychiatric Ward	113	250	0	363
Health	Upgrading and Additions	Health Facility Revitalisation Grant	Witzenberg	Ceres - Ceres Hospital - New Acute Psychiatric Ward	4169	1	206	4376
Health	New or Replaced Infrastructure	Health Facility Revitalisation Grant	Witzenberg	Prince Alfred Hamlet - Prince Alfred Hamlet Clinic - Replacement	1	0	0	1
Health	Non-Infrastructure	Health Facility Revitalisation Grant	Witzenberg	Tulbagh - Tulbagh Clinic - HT - Structural repair	372	0	0	372

Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Witzenberg	Ceres Vredebes Phase H (529)	24540	0	0	24540
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Witzenberg	Tulbagh (225) IRDP	0	730	0	730
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Witzenberg	Witzenberg: Ceres: Nduli: 188 Sites - UISP	1598	11280	0	12878
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Witzenberg	Witzenberg: Tulbagh: Chris Hani 427 T/S UISP Stage 4	750	0	0	750
Human Settlements	Infrastructure Transfers - Capital	Human Settlements Development Grant	Witzenberg	Wolseley Montana (700)	0	0	1000	1000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Witzenberg	C1091.1 Aston - Swellendam	15000	0	0	15000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Equitable Share	Witzenberg	C1102 Reseal Windmeul	0	2000	0	2000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Witzenberg	C1116 PRMG Ceres Towsriver	0	34000	110000	144000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Witzenberg	C1145 Voor Paardeberg rd	0	0	60000	60000
Transport and Public Works	Rehabilitation, Renovations & Refurbishment	Provincial Roads Maintenance Grant	Witzenberg	C1203 Trunnt & Divisional rd	0	0	100000	100000
Transport and Public Works	Maintenance and Repairs	Equitable Share	Witzenberg	Routine Maintenance CW DM	65580	62000	63430	191010
TOTAL					**1212543**	**1140034**	**1252570**	**3605147**

DRAFT

3.2 Status of Cape Winelands plans and policies

Section	Statutory Plans	Status
Spatial Planning	District Spatial Development Framework	Approved by Council May 2019
	Non-Statutory Plans	**Status**
	Climate Change Strategy	Approved by Council May 2019
Regional Economic Development	**Statutory Plans**	**Status**
	Regional Local Economic Development Strategy	Approved by Council May 2019
Emergency Services	**Statutory Plans**	**Status**
	Disaster Management Plan	Approved by Council May 2019
Infrastructure Planning and Project Implementation	**Statutory Plans**	**Status**
IDP	IDP Framework	Approved by Council October 2016 (5 year plan)
	Process Plan	Approved by Council August 2020
	IDP	3rd Review IDP Adopted by Council 28 May 2020.
Budget	Financial Plan	Approved by Council May 2020.
	Budget	Approved by Council May 2020.
ICT	Employment Equity Report	15 January annually
	Workplace Skills Plan	30 April annually
	Non-Statutory Plans	**Status**
	ICT Disaster Recovery Plan	Approved by Municipal Manager and ICT Steering Committee, May 2018

CHAPTER 4: STRATEGIC PARTNERSHIPS AND PROJECTS

4.1 DISTRICT DEVELOPMENT MODEL AND ONE PLANS

Reference is made to Circular 11 of 2020 and 1 of 2021, the District Development Model (DDM) is an operational model for improving cooperative governance aimed at building a capable, ethical and developmental state. It embodies an approach by which the three spheres of government and state entities work collaboratively in an impact-oriented way, and where there is higher performance and accountability for coherent service delivery and development outcomes.
Circular No 2 of 2021 - This Circular is issued in terms of Cabinet approval of the District Development Model (DDM) concept and approach (21 August 2019), and subsequent launch and piloting of the DDM. It is a supplementary to Circular 1 of January 2021 issued by DCOG in January 2021. Therefore, the content of this circular should be read in conjunction with the Circular 1 of January 2021.

The DDM is an intergovernmental approach focusing on 52 district and metropolitan spaces as IGR impact zones for more effective joint planning, budgeting and implementation over multi-year planning and electoral cycles. This joint work is expressed through the formulation and implementation of a **"One Plan" which is a long-term strategic framework guiding investment, service delivery and development** in relation to each of the district and metropolitan spaces.

The institutional arrangements for the DDM are aimed at sustaining a programmatic approach to cooperative governance and IGR centred on the One Plan and the related reprioritisation processes to be undertaken by all spheres, departments, entities and municipalities. This will culminate in both political and technical work streams that will need to be managed at the level of district/metro hubs for the co-creation of the joined up one plans by and for all three spheres of Government.

The management is undertaken by two key committees. At the level of the district/metro hub, the two committees will be responsible for the management of the one plan process, i.e.

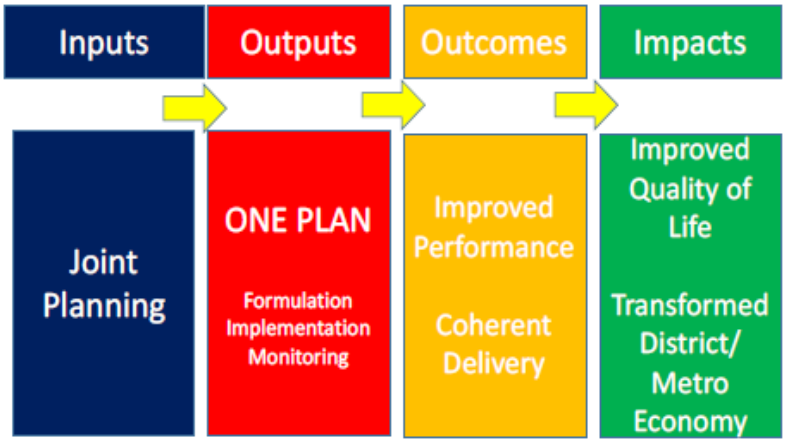
- The One Plan Political Committee: Provides political leadership, oversight and support to the hubs.
- The District Coordination Steering Committee will oversee the technical work of the district hubs.

Each of these committees will interface with the rest of the institutional teams based on political and technical interfaces. In essence, these committees will drive the work of the

district hubs including intergovernmental collaboration required to develop the joined up one plans.

The One Plan is also not a simple summation of entity plans but a strategic collaboratively synthesised plan that articulates development outcomes, targets and commitments. It is not in the same form or detail as existing long-term plans (Sector Plans, PGDSs, GDSs or CDSs) and does not play the same role as these plans. It is a strategic intergovernmental framework not belonging to any particular sphere or department. It is in the form of an intergovernmental and social compact that sets the broad direction, targets and synergies to inform all planning.

One Plan Development and Implementation Process



Following the support by the DCF as of 12 April 2021, the JDMA Implementation Plan or District Strategic Plan be adopted as the One Plan for Cape Winelands District Municipality.
Progress on project - implementation status can be reported as follows:

	Project	**Status**
1.	**Regional landfill site**	Finalisation of process underway. Site will be operational by October 2024, according to the Waste Management License
2. 2.1 2.2 2.3	**Resource Resilience** Climate Change Water Security Energy Security	Currently discussions are being held with various stakeholders 2.1 - Adaptation Strategy – completed - Risk and Vulnerability Assessments on sectors – will be considered - Sector response plans – completed 2.2 Draft Alien Clearing Map – in progress of being completed 2.3 Municipal Energy Resilience (MER) programme – next progress meeting and MoU first submission April 2021
3. 3.1 3.2	**Community Safety** CWDM Plan Ward-based safety plan	 3.1 Safety plan – Completed 3.2 Discussions underway to develop the Plan

4.	**Municipal Business Sustainability**	Financial Sustainability study is being conducted by DLG, PT and DEDAT with WC MM's and CFOs through University of Stellenbosch with Hanns Seidell Foundation funding.
4.1	Research	Report will be available once signed off.
4.2	Shared Services	4.2 - Shared Service Audit – completed - Models for 4 focus areas – under development
5.	**Unemployment Plan**	Economic Recovery Plan for CWDM – submitted to COGTA Progress on implementation – submitted to DEDAT Municipalities in conception phase of implementation plans
6.	**Communication**	Continuous feedback on progress made with the JDMA
7.	**Other focus areas**	
7.1	De Doorns N1	7.1 - Disaster Management equipment and smoke detectors – Ongoing project - Community Centre – Completed - Cameras – in process - Approximate of R3 million spent
7.2	Mega-human settlement projects	7.2 – Transhex - Vlakkeland - Vredebes DLG Infrastructure is monitoring progress – will set up discussions with DHS and Urbanisation Project Team
7.3	-N1 Eastern bypass -ESKOM – upgrading of infrastructure -Revenue Collection in ESKOM areas	Request DCF approval to add infrastructure projects to JDMA Implementation Plan that are currently on Operational Support Plans for Breede Valley and / or Witzenberg, in view of the strategic nature of these projects.
7.4	Land invasion – Kluitjieskraal wetland	7.4 Currently being investigated by DLG Infrastructure Unit

REVISED IDP GUIDELINES FOR MUNICIPALITIES – ROLL-OUT PLAN

- **Introduction and Background**

As per Circular 12 of 2020, the Revised Guidelines are aimed at providing guidance to municipalities for the development of IDPs that respond to key policy imperatives, which include the IUDF, NDP and most recently the District Development Model. The draft guidelines also provide guidance to other spheres of government and organs of state on how they should inform and support the development of municipal IDPs.

In this regard, the purpose of the revised IDP guidelines is to: • Assist municipalities to develop IDPs that are legally compliant, reassert the strategic nature of IDPs and ensure that they respond to key national and provincial policy imperatives. • Provide guidance on the adoption of IDPs during an election year. • Describe the process for transversal planning for municipal departments. • Clarify the roles and responsibilities of stakeholders in the development, review and implementation of IDPs. • Clarify the relationship between IDPs and One Plans.

- **Target Audience**

The primary audience for the Revised IDP Guidelines is all categories of municipalities for the development and implementation of IDPs in the context of the National Development Plan (NDP), Integrated Urban Development Framework (IUDF) and other policy imperatives.

- **Methodology**

The roll out plan focuses on how the Revised Guidelines will be rolled out to all municipalities for implementation. The guidelines are meant to support municipalities as they develop the next generation of IDPs (2022/23 – 2026/2027) given the expected Local Government Elections in 2021.

Virtual workshops will be conducted per province. A programme of the engagements for the roll out will be developed and shared with all participants. As far as possible, existing forums and meetings will be utilised to workshop the guidelines.

CHAPTER 5: PRIORITIES AND KEY INTERVENTIONS

This section of the IDP provides a more detailed exhibition of what interventions will contribute significantly to the attainment of our undertaking that all structures of the Cape Winelands will co-operate together towards effective, efficient and economically sustainable development.

5.1 STRATEGIC OBJECTIVE 1

COMMUNITY DEVELOPMENT AND PLANNING SERVICES DEPARTMENT

As this is the 4th and final review, Community Development and Planning Services department has no new projects or programmes for the 2021/2022 financial year.

5.2 STRATEGIC OBJECTIVE 2

TECHNICAL SERVICES

5.2.1 PRE-DETERMINED OBJECTIVE 2.3: *To increase levels of mobility in the whole of the CWDM area.*

Please note that Cape Winelands District Municipality has an approved Integrated Transport Plan (DITP) which was submitted and approved by the MEC on 10th October 2016. The overhaul Review of the Integrated Transport Plan for Cape Winelands District Municipality has been advertised and envisaged to be completed end of June 2022.

Currently busy with the Review of Transport Register and Public Transport Plan for Breede Valley Municipal area based on Annexure A, the minimum requirements for the transport register as included in the Government Gazette no 40174 dated 29 July 2016.
Thus, allowing the planning authority to give guidance to the Provincial Regulatory Entity (PRE) in disposing of operating licence applications submitted within the Breede Valley Municipal area as well as possible amendments to existing operating licence authorities.

Road Safety Education – a Transport Month event is planned to take place in October 2021.

CHAPTER 6: SUPPORT TO LOCAL MUNICIPALITIES – FINANCIAL IMPACT (2021/22)

All projects, planning initiatives and programmes are implemented within the jurisdiction areas of the applicable local municipality's or district wide, as illustrated in the following table:

District Wide Support			
Type of support	**Deliverable**	**Financial Impact**	
Subsidies – Water & Sanitation	Number of farms serviced (44) – Educationals (20)	R	1 000 000
Environmental Health Education	Number o f theatre performances	R	521 537
Clearing of road reserves	643 km cleaned	R	1 300 000
Rural infrastructure support	Provision of water services to schools	R	400 000
Renewable Infrastructure – Rural Areas	Solar systems supply to farmers	R	1 000 000
Upgrading of Sport Facilities	Number of Sport Facilities upgraded	R	2 200 000
Entrepreneurial Seed Funding	Number of SMME's supported	R	500 000
Business Retention Expansion Programme	Number of action plans for tourism sector	R	700 000
Investment Attraction Programme	Number of projects implemented	R	680 000
Small Farmers Support Programme	Number of small farmers supported	R	500 000

SMME Training and Mentorship	Number of processes implemented	R	750 000
Tourism Business Training	Number of training and mentoring sessions	R	950 000
Tourism Educational	Number of educational	R	300 000
Tourism Month	Tourism month activities	R	71 000
Township Tourism	Number of SMME’s linked with formal economy	R	500 000
LTA Projects	Number of LTA’s participating	R	450 000
Tourism Events	Number of tourism events	R	477 000
Sport Tourism Winter Campaign	Campaign implemented	R	528 000
EPWP Invasive Alien Management Programme	Number of hectares cleared	R	2 030 000

HIV/AIDS Programme	Number of HIV/AIDS Programmes Implemented	R	122 500
Elderly	Number of Active Age programmes implemented	R	342 240
Disabled	Number of interventions implemented which focus on the rights of people with disabilities	R	396 000
Community Support Programme	Number of Service Level Agreements signed with community-based organisations	R	400 000
Families and Children (Substance Abuse)	Programmes and support for vulnerable children Provision of sanitary towels Support for ECDs	R	601 500
Early Childhood Development	Number of Early Childhood Development Toolkits distributed	R	200 000
Sport, Recreation and Culture Programmes	Number of programmes	R	2 992 420
Youth	Number of youth development programmes	R	451 900
Women	Number of awareness programmes	R	101 890
Sidewalks and Embayment's	Number of sidewalks and Embayment's completed	R	2 100 000
Road Safety Education	Number of Road Safety Education programmes	R	928 000

River rehabilitation (EPWP)	Hectares cleared	R	100 000
Skills Development (EPWP)	Number of skills development initiatives implemented	R	150 000

CHAPTER 7: ORGANISATIONAL PERFORMANCE SCORECARD (PER STRATEGIC OBJECTIVE) AND FINANCIAL PLAN

CAPE WINELANDS DISTRICT MUNICIPALITY – STRATEGIC OBJECTIVES:	
Office of the Municipal Manager:	Strategic Support to the organisation to achieve the objectives as set out in the Integrated Development Plan through: • A well-defined and operational IDP Unit; • A well-defined and operational Performance Management Unit; • A well-defined and operational Risk Management Unit; • A well-defined and operational Internal Audit Unit; and • A well-defined and operational Communication Unit.

CAPE WINELANDS DISTRICT MUNICIPALITY: PREDETERMINED OBJECTIVES	
SO 1 Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District.	
1.1	Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the area of the Cape Winelands District Municipality.
1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery.
1.3	Effective planning and coordination of specialized fire-fighting services throughout the area of the Cape Winelands District Municipality.
1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.
1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.
SO 2 Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.	
2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.
2.2	To implement sustainable infrastructure services throughout the area of the Cape Winelands District Municipality.
2.3	To increase levels of mobility throughout the area of the Cape Winelands District Municipality.
2.4	To improve infrastructure services for rural dwellers throughout the area of the Cape Winelands District Municipality.
2.5	To implement an effective ICT support system.
SO 3 Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	
3.1	To facilitate and enhance sound financial support services.
3.2	To strengthen and promote participative and accountable Governance.
3.3	To facilitate and enhance sound strategic support services.

BUDGET ALLOCATION FOR 2021/2022 FINANCIAL YEAR

1.	To create an environment and forge partnerships that ensures the health, safety, social and economic development of all communities including the empowerment of the poor in the Cape Winelands District through economic, environmental and social infrastructure investment	**R142.772.728**	1.1	Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the CWDM.	**R40 593 154**
			1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery	**R8 544 294**
			1.3	Effective planning and coordination of specialized fire-fighting services throughout the CWDM	**R62 811 080**
			1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.	**R18 390 442**
			1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.	**R12 433.758**
.2.	Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.	**R164 194 138**	2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.	**R121 650 648**
			2.2	To implement sustainable infrastructure services.	**R8 026 930**
			2.3	To increase levels of mobility in the whole of the CWDM area.	**R6 562 927**
			2.4	To improve infrastructure services for rural dwellers	**R11 176 680**
			2.5	To implement an effective ICT support system.	**R16 776 953**
3.	To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	**R120 510 428**	3.1	To facilitate and enhance sound financial support services	**R29 325 075**
			3.2	To strengthen and promote participative and accountable IGR and governance.	**R36 236 489**
			3.3	To facilitate and enhance sound strategic support services	**R54 948 864**
Total		**R427 477 294**			**R427 477 294**

BUDGET ALLOCATION FOR 2022/2023 FINANCIAL YEAR

1.	To create an environment and forge partnerships that ensures the health, safety, social and economic development of all communities including the empowerment of the poor in the Cape Winelands District through economic, environmental and social infrastructure investment	**R142 902 818**	1.1	Provide a comprehensive and equitable Municipal health Service including Air Quality Management throughout the CWDM.	**R41 331 468**
			1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery	**R8 917 817**
			1.3	Effective planning and coordination of specialized fire-fighting services throughout the CWDM	**R61 749 427**
			1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.	**R18 081 720**
			1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.	**R12 822 386**
2.	Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.	**R171 120 408**	2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.	**R127 104 267**
			2.2	To implement sustainable infrastructure services.	**R8 061 615**
			2.3	To increase levels of mobility in the whole of the CWDM area.	**R6 595 156**
			2.4	To improve infrastructure services for rural dwellers	**R12 489 463**
			2.5	To implement an effective ICT support system.	**R16 869 907**
3.	To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	**R124 547 983**	3.1	To facilitate and enhance sound financial support services	**R28 782 266**
			3.2	To strengthen and promote participative and accountable IGR and governance.	**R40 11 306**
			3.3	To facilitate and enhance sound strategic support services	**R55 664 411**
Total		**R438 571 209**			**R438 571 209**

BUDGET ALLOCATION FOR 2023/2024 FINANCIAL YEAR

1.	To create an environment and forge partnerships that ensures the health, safety, social and economic development of all communities including the empowerment of the poor in the Cape Winelands District through economic, environmental and social infrastructure investment	**R144 790 710**	1.1	Provide a comprehensive and equitable Municipal health Service including Air Quality Management throughout the CWDM.	**R42 084 552**
			1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery	**R8 905 330**
			1.3	Effective planning and coordination of specialized fire-fighting services throughout the CWDM	**R62 474 472**
			1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.	**R18 377 972**
			1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.	**R12 948 384**
2.	Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.	**R171 553 082**	2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.	**R127 119 595**
			2.2	To implement sustainable infrastructure services.	**R8 204 516**
			2.3	To increase levels of mobility in the whole of the CWDM area.	**R6 679 030**
			2.4	To improve infrastructure services for rural dwellers	**R12 578 725**
			2.5	To implement an effective ICT support system.	**R16 971 216**
3.	To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	**R127 700 293**	3.1	To facilitate and enhance sound financial support services	**R29 248 604**
			3.2	To strengthen and promote participative and accountable IGR and governance.	**R41 577 013**
			3.3	To facilitate and enhance sound strategic support services	**R56 874 676**
Total		**R444 044 085**			**R444 044 085**

CHAPTER 8: MEDIUM TERM REVENUE AND EXPENDITURE FRAMEWORK

8.1 INTRODUCTION

The application of sound financial management principles for the compilation of the Municipality's financial plan is essential and critical to ensure that the Municipality remains financially viable and that municipal services are provide sustainably, economically and equitably to all communities.

The Municipality's business and service delivery priorities were reviewed as part of this year's planning and budget process. The municipality also strives to deliver sustainable services to its community without overburdening the consumers with excessive tariffs.

The top strategic risks identified by the annual risk assessments can be summarised as follows:

1. Financial viability
2. Inadequate contract management
3. Lack of Business Continuity
4. Climate change
5. Lack of succession planning and talent management
6. Increasing employee costs year-on-year
7. Lack of or delayed service delivery due to COVID 19

For each of the above risk areas the municipality has put mitigating measures in place aligned to the specific department in the budget. These measures will be implemented over the MTREF period.
Due to the decreasing Equitable Share Allocation the municipality could not budget for a surplus, which will have a negative effect on its Accumulated Surplus. In addressing the key considerations contained in National Treasury's MFMA Circular 74, the following are highlighted in the budget:

- The municipality cut back on capital and operating expenditure related to the upgrading of rural roads (which is the property of the Provincial Government) to maintain accumulated reserves and ensure long term sustainability of the municipality
- Capital projects were spread out over the MTREF to avoid large fluctuations in spending and ensure that priority is given to projects with high importance
- Tariff increases were kept as low as possible to ensure affordability thereof, whilst keeping in mind the cost of delivering services of a high quality.
- The municipality recognizes the importance of cash reserves and therefor strives to maintain a current ratio of not lower than 2.1(Current Assets: Current Liabilities)

In view of the aforementioned, the following table is a consolidated overview of the proposed 2021/2022 Medium-term Revenue and Expenditure Framework

OPERATING BUDGET

YEAR	EXPENDITURE	INCOME	SURPLUS (-) /DEFICIT
2021/2022	427.477.294	-427.477.294	0
2022/2023	438.571.209	-438.571.209	0
2023/2024	444.044.085	-444.044.085	0

CAPITAL BUDGET

YEAR	EXPENDITURE	INCOME	SURPLUS (-) /DEFICIT
2021/2022	68.838.011	-68.838.011	0
2022/2023	84.096.400	-84.096.400	0
2023/2024	40.532.500	-40.532.500	0

OPERATING BUDGET – REVENUE

The Cape Winelands District Municipality is reliant on Grant funding as its main source of revenue.

This is as a result of the abolishment of the RSC Levi.

The following table reflects the revenue sources for the 2020/2021 to 2023/2024 financial years:

Sources of Income	2020/2021	2021/2022	% Inc./-Dec. Between 2020/21 & 2021/22	2022/2023	2023/2024
Ex Rev: Operational Revenue	-10.839.051.00	-11.394.494.00	5%	-11.935.709	-12.503.985
Ex Rev: Rental Fixed Assets	-240.000.00	-240.000.00	0%	-240.000	-240.000
Ex Rev: Agency Services	-117.785.504.00	-120.461.200.00	2%	-126.347.900	-125.866.500
Ex Rev: Sales Goods and Services	-234.800.00	-274.800.00	17%	-274.800	-274.800
Ex Rev: Service Charges	-31.900.00	-203.000.00	536%	-203.000	-203.000
Ex Rev: Int Divident Rent on Land	-35.000.000.00	-39.000.000.00	11%	-39.000.000	-39.000.000
Non-Ex Rev:	-653.000.00	-600.000.00	-8%	-600.000	-600.000
Non-Ex Rev: Transfers & Subsidies	-250.972.288.00	-254.969.000.00	2%	-259.635.000	-265.021.000
- RSC Replacement Grant	-236.373.000.00	-242.546.000.00	3%	-248.404.000	-253.850.000
- Equitable Share	-2.512.000	-2.662.000	6%	-2.816.000	-2.841.000
- LG Finance Management Grant	-1.000.000.00	-1.000.000.00	0%	-1.000.000	-1.000.000
- Fire Services Capacity Grant	-1.046.000.00	-	100%	0	0
- CWDM Integrated Transprot Plan	-1.775.250.00	-900.000.00	-49%	-900.000	-900.000

- Community Development Workers	- 177.887.00	- 76.000.00	0%	-76.000	-76.000
- Local Government Internship Grant	- 160.000.00	-	-100%	0	0
- WC Financial Management Capacity Building Grant	- 300.000.00	- 250.000.00	-17%	0	0
- Subs. DOW.: Hiring of Toilets	- 985.000.00	- 1.051.000.00	7%	-1.120.000	-1.120.000
- Expanded Public Works Programme	- 1.503.000.00	- 1.413.000	-6%	-	-
- Safety Plan Implementation Grant	- 2.429.151	- 2.323.000	-4%	- 2.435.000	- 2.347.000
- Rural Roads Asset Man, System (Dora)	- 2.711.000	- 2.748.000	1%	- 2.884.000	- 2.887.000
Seta Refund	- 334.800	- 334.800	0%	- 334.800	- 334.800
Total	- 416.091.343	- 427.477.294	3%	- 438.571.209	- 444.044.085

- -

OPERATING BUDGET – EXPENDITURE

The table below illustrates the operating Expenditure for 2020/2021 to 2023/2024 financial years:

Expenditure Categories	2020/2021	2021/2022	% Inc./-Dec. Between 2020/21 & 2021/22	2022/2023	2023/2024
Employee Related Costs	230.890.871	230.811.234	0%	241.733.313	247.118.256
Remuneration of Councillors	12.980.885	13.240.503	2%	13.505.313	13.775.420
Operational Cost	64.875.662	76.224.623	17%	79.193.559	81.214.257
Contracted Services	55.898.415	54.487.758	-3%	53.642.658	53.753.047
Operating Leases	300.000	300.000	0%	300.000	300.000
Bad Debt Written Off	500.000	500.000	0%	500.000	500.000
Depreciation and Amortisation	7.726.520	7.792.995	1%	8.089.395	7.789.395
Inventory	29.888.839	23.687.541	-21%	26.012.331	24.087.070
Transfers and Subsidies	13.016.151	20.420.640	57%	15.582.640	15.494.640
Gains and Losses	14.000	12.000	-14%	12.000	12.000
Total	416.091.343	427.477.294	3%	438.571.209	444.044.085

EMPLOYEE RELATED COST:

Remuneration of Councilors is budgeted for in terms of the Public Office Bearers Act and the approval of the MEC

OPERATIONAL COST:

The decrease in Operational Cost is mainly due to savings identified during the budget process.

CAPITAL BUDGET

The capital budget increased from R 8 573 009 in 2020/2021 to R 68 838 011 in 2021/2022. In terms of the MFMA, the Mayor must at least 90 days before commencement of the new financial year, table a draft budget for consideration. The budget must be approved in May 2019 after the completion of the public participation process. The Annual Budget of a municipality must be prepared in terms of Section 17 of the MFMA. Council's Budget must be in line with the Government's spending priorities. Key legal provisions are to be Strictly Enforced.

All grants, including national, provincial and local allocations, should be included in the 2021/22 budget of the municipality as reflected under both the revenue and expenditure budget components. A three year capital and operating budgets for 2021/2022, 2022/23 and 2023/24 MTREF period should be prepared. Reporting requirements for conditional grants must be satisfied.

The budget must be tabled for consultation at least 90 days before the start of the Budget year (Section. (16)(2)) of the MFMA. There must be a clear link between the Budget, IDP and Performance Targets. Municipalities are required to seriously assess their revenue situation and financial health for purposes of determining whether or not they have sufficient revenue and adequate financial stability to fund and deliver on their proposed budget.

The Cape Winelands District Municipality will implement a five-year Medium Term Revenue and Expenditure Framework, aligned to the five-year Integrated Development Plan for the 2019/20 - 2023/24 cycle.

8.2 TOTAL ACTUAL BUDGET

	2021/2022	2022/2023	2023/2024
Operating Expenditure	403.733.307	415.605.122	420.937.998
Project Expenditure	23.743.987	22.966.087	23.106.087
Sub Total	**427.477.294**	**438.571.209**	**444.044.085**
Capital Expenditure	68.838.011	84.096.400	40.532.500
Total Budget	496.315.305	522.667.609	484.576.585

8.3 COMPARISON BETWEEN THE ADJUSTMENT BUDGET AND THE 2021/2022 BUDGET

	Adjustment budget Jan 2021	2021/2022	% Variance
Operating Expenditure	396.979.771	403.733.307	2%
Project Expenditure	19.111.572	23.743.987	24%
Sub Total	**416.091.343**	**427.477.294**	3%
Capital Expenditure	8.573.009	68.838.011	703%
Total Budget	424.664.352	496.315.305	17%

8.4 FUNDING OF THE BUDGET

Definition of a Reserve:

A reserve is part of retained earnings set aside for a specified purpose, and hence, unavailable for disbursements

The only reserves disclosed in Council's financial statements are the following:

- Capital Replacement Reserve – to finance Property Plant and Equipment
- Revaluation reserve – to offset depreciation on the re-valued portion of building and de-valuation of buildings

(*Both the above reserves are non-distributable reserves*)

Definition of a Provision:

Provisions are made to make future payments towards liabilities that you already have (Future Medical Aid Liability).

	2021/2022	2022/2023	2023/2024
RSC Replacement Grant	-242.546.000	-248.404.000	-253.850.000
Equitable Share	-2.662.000	-2.816.000	-2.841.000
Finance Management Grant	-1.000.000	-1.000.000	-1.000.000
EPWP Incentive	-1.413.000	0	0
Other National Dora Grants	-2.748.000	-2.884.000	-2.887.000
Provincial Dora Grants	-3.549.000	-3.411.000	-3.323.000
Other income	-14.098.094	-14.708.309	-15.276.585
Interest Received	-39000000	-39.000.000	-39.000.000
Agency Services:	-120461200	-126.347.900	-125.866.500
Total Budget	-427.477.294	-438.571.209	-444.044.085

8.5 FINANCIAL POSITION

	Adjustment Budget Jan 2021	2021/2021	2022/2023	2023/2024
Operating Expenditure	416.091.343	427.477.294	438.571.209	444.044.085
Operating Income	-416.091.343	-427.477.294	-438.571.209	-444.044.085
(Surplus) / Deficit	-	-	-	-

8.6 LIQUIDITY AND DEBT- EQUITY RATIO'S

Current Ratio = Current Assets / Current Liabilities

2019/20	2020/21(January 2021)
15.17:1	19:49:1

This ratio indicates that Council's Current Assets exceed its Current Liabilities
Cash Ratio = Cash and Cash Equivalents / Current Liabilities

2019/2020 2020/21(January 2021)
14:50:1 19:20:1

This ratio indicates that Council will be able to honour current payments

8.7 CAPITAL REPLACEMENT RESERVE FOR THE 2021/2022 - 2023/2024 MTREF

Capital Replacement Reserve	2021/2022	2022/2023	2023/2024
Opening Balance	70.766.026	71.928.015	47.831.615
Acquisitions for the year	-68.838.011	-84.096.400	-40.532.500
Contributions to Reserve	70.000.000	60.000.000	30.000.000
Closing Balance	71.928.015	47.831.615	37.299.115

8.8 KEY PROJECTS

					Annexure "H"	
PROJECTS BUDGET 2021/2022, 2022/2023 & 2023/2024						
				BUDGET 2021/2022	**BUDGET 2022/2023**	**BUDGET 2023/2024**
LOCAL ECONOMIC DEVELOPMENT						
	Unique Key	**Cost Account**	**Item Description**			
Small Farmer support						
Small Farmer Support_Stellenbosch	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	180.000	180.000	180.000
Small Farmer Support_Witzenberg	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	150.000	150.000	150.000
Small Farmer Support_Langeberg	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	170.000	170.000	170.000
				500.000	500.000	500.000
Entreprenurial Seed funding						
Entrepreneurial Seed Funding_Stellenbosch	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	109.000	109.000	109.000
Entrepreneurial Seed Funding_Drakenstein	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	108.000	108.000	108.000
Entrepreneurial Seed Funding_Breede Valley	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	154.000	154.000	154.000
Entrepreneurial Seed Funding_Witzenberg	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	74.000	74.000	74.000
Entrepreneurial Seed Funding_Langeberg	NEW UKEY	NEW COST CODE	Allocations_in-kind: Private Enterprises	55.000	55.000	55.000
				500.000	500.000	500.000
Investment Programme						
Wine Tourism	NEW UKEY	11004277880000	Tourism	250.000	250.000	250.000
Digital Tourism_Stellenbosch	NEW UKEY	11004278430000	Monetary Allocations:Local Tourism Boards	70.000	70.000	70.000
Digital Tourism_Drakenstein	NEW UKEY	11004278430000	Monetary Allocations:Local Tourism Boards	50.000	50.000	50.000
Digital Tourism_Breede Valley	NEW UKEY	11004278430000	Monetary Allocations:Local Tourism Boards	60.000	60.000	60.000
Digital Tourism_Witzenberg	NEW UKEY	11004278430000	Monetary Allocations:Local Tourism Boards	50.000	50.000	50.000
Digital Tourism_Langeberg	NEW UKEY	11004278430000	Monetary Allocations:Local Tourism Boards	70.000	70.000	70.000
Digital Tourism_District Wide	NEW UKEY	11004278430000	Monetary Allocations:Local Tourism Boards	130.000	130.000	130.000
				680.000	680.000	680.000
Mentorship Programme						
SMME Training and mentorship_Stellenbosch	NEW UKEY	11004200790000	Project Management	202.650	202.650	202.650
SMME Training and mentorship_Drakenstein	NEW UKEY	11004200790000	Project Management	121.650	121.650	121.650
SMME Training and mentorship_Breede Valley	NEW UKEY	11004200790000	Project Management	162.150	162.150	162.150
SMME Training and mentorship_Witzenberg	NEW UKEY	11004200790000	Project Management	141.900	141.900	141.900
SMME Training and mentorship_Langeberg	NEW UKEY	11004200790000	Project Management	121.650	121.650	121.650
				750.000	750.000	750.000
Business retention expansion						
Business Retension Expansion_Stellenbosch	NEW UKEY	11004277880000	Tourism	225.000	225.000	225.000
Business Retension Expansion_Drakenstein	NEW UKEY	11004277880000	Tourism	70.000	70.000	70.000
Business Retension Expansion_Breede Valley	NEW UKEY	11004277880000	Tourism	170.000	170.000	170.000
Business Retension Expansion_Witzenberg	NEW UKEY	11004277880000	Tourism	160.000	160.000	160.000
Business Retension Expansion_Langeberg	NEW UKEY	11004277880000	Tourism	75.000	75.000	75.000
				700.000	700.000	700.000
TOTAL: LOCAL ECONOMIC DEVELOPMENT				3.130.000	3.130.000	3.130.000

TOURISM						
Tourism training						
Tourism Training_Stellenbosch	NEW UKEY	11103200480000	Professional Staff		200.000	200.000	200.000
Tourism Training_Stellenbosch	NEW UKEY	11103200790000	Catering Services		10.000	10.000	10.000
Tourism Training_Drakenstein	NEW UKEY	11103200480000	Professional Staff		200.000	200.000	200.000
Tourism Training_Drakenstein	NEW UKEY	11103200790000	Catering Services		10.000	10.000	10.000
Tourism Training_Breede Valley	NEW UKEY	11103200480000	Professional Staff		200.000	200.000	200.000
Tourism Training_Breede Valley	NEW UKEY	11103200790000	Catering Services		8.300	8.300	8.300
Tourism Training_Witzenberg	NEW UKEY	11103200480000	Professional Staff		100.000	100.000	**100.000**
Tourism Training_Witzenberg	NEW UKEY	11103200790000	Catering Services		6.700	6.700	6.700
Tourism Training_Langeberg	NEW UKEY	11103200480000	Professional Staff		200.000	200.000	200.000
Tourism Training_Langeberg	NEW UKEY	11103200790000	Catering Services		15.000	15.000	15.000
					950.000	950.000	950.000
Tourism month						
Launch of Tourism Month						
	NEW UKEY	11103222630000	Transport Provided as Part of Departmental Act.		6.000	6.000	6.000
	NEW UKEY	11103223080000	Hire Charges		12.000	12.000	12.000
	NEW UKEY	11103201200000	Artists and Performers		2.000	2.000	2.000
	NEW UKEY	11103201670000	Stage and Sound Crew		3.000	3.000	3.000
	NEW UKEY	11103201270000	Catering Services		10.000	10.000	10.000
	NEW UKEY	11103201220000	Audio-visual Services		3.000	3.000	3.000
					36.000	36.000	36.000
Mayoral Tourism Awards						
	20170601023105	11103223080000	Hire Charges		35.000	35.000	100.000
	20170601023101	11103201200000	Artists and Performers		-	-	35.000
					35.000	35.000	135.000
Mayoral Tourism Awards Media Launch						
TOTAL: TOURISM MONTH					71.000	71.000	171.000
Educationals						
Visit Stellenbosch	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Hexriver Valley Toursim	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Franschhoek Wine Tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Drakenstein Tourism Association	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Breedekloof Wine & Tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Worcester Wine & Olive Tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Tulbagh Wine & Tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Wolseley Tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Ceres Tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
McGregor Tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Robertson Tourism Office	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Ashton-Montague Tourism office	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Wellington	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Dwarsriver tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
Touwsriver tourism	NEW UKEY	11103277880000	Tourism		20.000	20.000	20.000
					300.000	300.000	300.000
LTA Projects						
LTA Projects_Stellenbosch	NEW UKEY	11103277880000	Tourism		90.000	90.000	90.000
LTA Projects_Drakenstein	NEW UKEY	11103277880000	Tourism		60.000	60.000	60.000
LTA Projects_Breede Valley	NEW UKEY	11103277880000	Tourism		120.000	120.000	120.000
LTA Projects_Witzenberg	NEW UKEY	11103277880000	Tourism		90.000	90.000	90.000
LTA Projects_Langeberg	NEW UKEY	11103277880000	Tourism		90.000	90.000	90.000
					450.000	450.000	450.000
Tourism Campaign						
	20180704051102	11103221430000	Achievements and Awards		20.000	20.000	20.000
	20180704051118	11103221490000	Gifts and Promotional Items		29.000	29.000	29.000
	20170601023068	11103222630000	Transport Provided as Part of Departmental Act.		20.000	20.000	20.000
	NEW UKEY	0	Radio and TV Transmissions		439.000	20.000	20.000
	20180704050805	11103201270000	Catering Services		20.000	20.000	20.000
					528.000	109.000	109.000
Tourism Events						
Kayamandi Gospel Choir	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Youth Cultural Festival	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Franschhoek arts and Culture festival	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Stellenbosch Stadsaal Soiree	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Stellenbosch 50 years showcase	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Montagu Art Deco Festival	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Montagu Book Festival	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Montagu Local is Lekker Indaba	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
The Hills Challenge Mountain Bike & Trail Run	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Montagu Youth Arts Festival 2021	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Witzenville Festival Faire	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Tulbagh Vintage and Vine Faire	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Christmas in Winter	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Ceres Heritage Festival	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
The Ceres Mitcells pass Half Marathon	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Ceres Cherry Fair	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Ceres Jazz Festival	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
Drakenstein Jazz Festival	NEW UKEY	11103277880000	Tourism		27.000	27.000	27.000
Visit Stellenbosch	NEW UKEY	11103277880000	Tourism		25.000	25.000	25.000
					477.000	477.000	477.000
Township Tourism						
Township Tourism_Stellenbosch	NEW UKEY	11103200790000	Project Management		50.000	50.000	50.000
Township Tourism_Drakenstein	NEW UKEY	11103200790000	Project Management		100.000	100.000	100.000
Township Tourism_Breede Valley	NEW UKEY	11103200790000	Project Management		200.000	200.000	200.000
Township Tourism_Witzenberg	NEW UKEY	11103200790000	Project Management		50.000	50.000	50.000
Township Tourism Grant_Langeberg	NEW UKEY	11103277880000	Tourism		100.000	100.000	100.000
					500.000	500.000	500.000
TOTAL: TOURISM					3.276.000	2.857.000	2.957.000

LAND-USE AND SPATIAL PLANNING						
EPWP Invasive Alien Vegetation						
Invasive Alien Vegetation_BVM	NEW UKEY	11521200160000	Alien Vegetation Control	507.500	520.000	520.000
Invasive Alien Vegetation_Drakenstein	NEW UKEY	11521200160000	Alien Vegetation Control	507.500	520.000	520.000
Invasive Alien Vegetation_Langeberg (EPWP Grant)	NEW UKEY	11521200160000	Alien Vegetation Control	413.000	-	-
Invasive Alien Vegetation_Langeberg	NEW UKEY	11521200160000	Alien Vegetation Control	94.500	490.000	490.000
Invasive Alien Vegetation_Witzenberg (EPWP Grant)	NEW UKEY	11521200160000	Alien Vegetation Control	507.500	-	-
				2.030.000	1.530.000	1.530.000
River Rehabilitation						
	20170601022895	11521200160000	Alien Vegetation Control	100.000	100.000	100.000
				100.000	100.000	100.000
TOTAL: LAND-USE AND SPATIAL PLANNING				2.130.000	1.630.000	1.630.000
PROJECTS AND HOUSING						
Infrastructure Rural Area Farmers						
	20180704051403	11330247970000	Monetary Allocations:Farmer Support Households	1.000.000	1.000.000	1.000.000
				1.000.000	1.000.000	1.000.000
Provision of water to Schools						
Provision of Water Schools_Langeberg	NEW UKEY	11330247970000	Monetary Allocations:Farmer Support Households	400.000	500.000	500.000
				400.000	500.000	500.000
Upgrade of Sport Facilities						
Construction of Clubhouses_Witzenberg	NEW UKEY	11330276075200	Capacity Building and Other	550.000	450.000	450.000
Construction of Clubhouses_Breede Valley	NEW UKEY	11330276075200	Capacity Building and Other	530.000	450.000	450.000
Construction of Netball Court_Drakenstein	NEW UKEY	11330276075200	Capacity Building and Other	550.000	240.000	240.000
Construction of Netball Court_Langeberg	NEW UKEY	11330276075200	Capacity Building and Other	550.000	240.000	240.000
Building Plans	NEW UKEY	11330276075200	Capacity Building and Other	20.000	20.000	20.000
	20180704050816	11330201450000	Maintenance of Buildings and Facilities	-	12.000	12.000
	20190925003221	11330222630000	Events	-	-	40.000
				2.200.000	1.412.000	1.452.000
Clearing of Road Reserves						
Clearing of Road Reserves_Witzenberg	NEW UKEY	11330200350000	Outsourced Services:Clearing and Grass Cutting	343.000	661.000	661.000
Clearing of Road Reserves_Langeberg	NEW UKEY	11330200350000	Outsourced Services:Clearing and Grass Cutting	240.000	418.000	418.000
Clearing of Road Reserves_Stellenbosch	NEW UKEY	11330200350000	Outsourced Services:Clearing and Grass Cutting	37.000	183.000	183.000
Clearing of Road Reserves_Stellenbosch_EPWP	NEW UKEY	11330200350000	Outsourced Services:Clearing and Grass Cutting	200.000	-	-
Clearing of Road Reserves_Breede Valley	NEW UKEY	11330200350000	Outsourced Services:Clearing and Grass Cutting	260.000	450.000	450.000
Clearing of Road Reserves_Drakenstein	NEW UKEY	11330200350000	Outsourced Services:Clearing and Grass Cutting	220.000	385.000	385.000
				1.300.000	2.097.000	2.097.000
TOTAL: PROJECTS AND HOUSING				4.900.000	5.009.000	5.049.000

PUBLIC TRANSPORT REGULATION						
Road Safety Education						
Learner Peak Caps	NEW UKEY	11615221490000	Gifts and Promotional Items	300.000	200.000	200.000
Smart Shopper Bags	NEW UKEY	11615221490000	Gifts and Promotional Items	78.000	78.000	78.000
Cooler / Lunch Boxes	NEW UKEY	11615221490000	Gifts and Promotional Items	50.000	50.000	50.000
Transport Month Event	NEW UKEY	11615200790000	Project Management	500.000	600.000	600.000
				928.000	928.000	928.000
Sidewalks and Embayments						
	20181207004243	11615220180000	Standard rated	200.000	200.000	200.000
	20170601023679	11615200950000	Civil	1.900.000	1.900.000	1.900.000
				2.100.000	2.100.000	2.100.000
TOTAL: PUBLIC TRANSPORT REGULATION				3.028.000	3.028.000	3.028.000
MUNICIPAL HEALTH SERVICES						
Subsidy:Water/Sanitation-Farms						
Health & Hygiene Education - Breede Valley	NEW UKEY	11441200480000	Professional Staff	27.000	27.000	27.000
Health & Hygiene Education - Drakenstein	NEW UKEY	11441200480000	Professional Staff	9.000	9.000	9.000
Health & Hygiene Education - Langeberg	NEW UKEY	11441200480000	Professional Staff	27.000	27.000	27.000
Health & Hygiene Education - Stellenbosch	NEW UKEY	11441200480000	Professional Staff	4.500	4.500	4.500
Health & Hygiene Education - Witzenberg	NEW UKEY	11441200480000	Professional Staff	22.500	22.500	22.500
Subsidy allocations Breede Valley	NEW UKEY	11441277340000	Farmer Support Households (Cash)	166.000	166.000	166.000
Subsidy allocations Drakenstein	NEW UKEY	11441277340000	Farmer Support Households (Cash)	90.000	90.000	90.000
Subsidy allocations Langeberg	NEW UKEY	11441277340000	Farmer Support Households (Cash)	144.000	144.000	144.000
Subsidy allocations Stellenbosch	NEW UKEY	11441277340000	Farmer Support Households (Cash)	36.000	36.000	36.000
Subsidy allocations Witzenberg	NEW UKEY	11441277340000	Farmer Support Households (Cash)	174.000	174.000	174.000
Hot Spot Interventions Breede Valley	NEW UKEY	11441277340000	Farmer Support Households (Cash)	21.429	21.429	21.429
Hot Spot Interventions Drakenstein	NEW UKEY	11441277340000	Farmer Support Households (Cash)	214.286	214.286	214.286
Hot Spot Interventions Langeberg	NEW UKEY	11441277340000	Farmer Support Households (Cash)	64.285	64.285	64.285
				1.000.000	1.000.000	1.000.000
Annual Environmental Health Educ. Prog.						
	20170601023087	11441221490000	Gifts and Promotional Items	22.000	22.000	22.000
	20170601023088	11441222470000	Printing, Publications and Books	46.537	46.537	46.537
	20170601023084	11441201400000	Graphic Designers	3.000	3.000	3.000
Pre-Production District Wide	NEW UKEY	11441201200000	Artists and Performers	160.000	50.000	50.000
Theatre Performances Breede Valley	NEW UKEY	11441201200000	Artists and Performers	62.139	62.139	62.139
Theatre Performances Drakenstein	NEW UKEY	11441201200000	Artists and Performers	62.145	62.145	62.145
Theatre Performances Langeberg	NEW UKEY	11441201200000	Artists and Performers	62.145	62.145	62.145
Theatre Performances Stellenbosch	NEW UKEY	11441201200000	Artists and Performers	70.431	70.431	70.431
Theatre Performances Witzenberg	NEW UKEY	11441201200000	Artists and Performers	33.140	33.140	33.140
				521.537	411.537	411.537
TOTAL: MUNICIPAL HEALTH SERVICES				1.521.537	1.411.537	1.411.537

SOCIAL DEVELOPMENT						
Skills Development						
Drivers Licence	new ukey	11475200480000	Outsourced Services:Professional Staff	150.000	150.000	150.000
TOTAL: SKILLS DEVELOPMENT				150.000	150.000	150.000
HIV/AIDS						
Aids Day Event						
	20180704051129	11475221490000	Gifts and Promotional Items	5.000	5.000	5.000
	20180704051249	11475222630000	Transport Provided as Part of Departmental Act.	5.000	5.000	5.000
	20180704050706	11475200480000	Outsourced Services:Professional Staff	2.000	2.000	2.000
	20180704050756	11475201220000	Audio-visual Services	2.200	2.200	2.200
	20180704050793	11475201270000	Catering Services	30.700	30.700	30.700
	20180704051075	11475220180000	Consumables:Standard Rated	8.200	8.200	8.200
				53.100	53.100	53.100
Aids Awareness Programme Drakenstein						
	NEW UKEY	11475222630000	Transport Provided as Part of Departmental Act.	10.000	10.000	10.000
	NEW UKEY	11475201270000	Catering Services	7.500	7.500	7.500
				17.500	17.500	17.500
Aids Awareness programme Breede Valley						
	NEW UKEY	11475222630000	Transport Provided as Part of Departmental Act.	10.000	10.000	10.000
	NEW UKEY	11475201270000	Catering Services	7.500	7.500	7.500
				17.500	17.500	17.500
16 days of Activism Launch						
	20180704051259	11475222630000	Transport Provided as Part of Departmental Act.	19.400	19.400	19.400
	20180704050777	11475201270000	Catering Services	15.000	15.000	15.000
				34.400	34.400	34.400
TOTAL: HIV/AIDS				122.500	122.500	122.500
ELDERLY						
Active Age Programme Witzenberg						
	NEW UKEY	11475222630000	Transport Provided as Part of Departmental Act.	6.000	6.000	6.000
	NEW UKEY	11475201270000	Catering Services	8.000	8.000	8.000
				14.000	14.000	14.000
Active Age Programme Drakenstein						
	NEW UKEY	11475222630000	Transport Provided as Part of Departmental Act.	6.000	6.000	6.000
	NEW UKEY	11475201270000	Catering Services	8.000	8.000	8.000
	NEW UKEY	11475201670000	Stage and Sound Crew	1.600	1.600	1.600
				15.600	15.600	15.600
Active Age Programme Breede Valley						
	NEW UKEY	11475222630000	Transport Provided as Part of Departmental Act.	8.000	8.000	8.000
	NEW UKEY	11475201270000	Catering Services	10.000	10.000	10.000
				18.000	18.000	18.000
District Golden Games Event						
	20180704051107	11475221430000	Achievements and Awards	20.000	20.000	20.000
	20180704051253	11475222630000	Transport Provided as Part of Departmental Act.	30.000	30.000	30.000
	20180704050786	11475201270000	Catering Services	89.000	89.000	89.000
	20180704050842	11475201670000	Stage and Sound Crew	5.000	5.000	5.000
				144.000	144.000	144.000
Elderly Grant in Aid						
	NEW UKEY	11475277260000	Social Assistance: Old Age Grant	150.640	150.640	150.640
				150.640	150.640	150.640
TOTAL: ELDERLY				342.240	342.240	342.240
FAMILIES AND CHILDREN						
Families and Children						
	20180704050784	11475201270000	Catering Services	50.000	50.000	50.000
	20191029030319	11475201530000	Plants, Flowers and Other Decorations	2.700	2.700	2.700
	20180704050811	11475201430000	Interior Decorator	6.800	6.800	6.800
	0	0	Transport Provided as Part of Departmental Act.	30.000	30.000	30.000
	20180704051070	11475220180000	Consumables:Standard Rated	-	-	-
	20180704051410	11475277250000	Transfers and Subsidies	-	-	-
				89.500	89.500	89.500
Holiday Programmmes						
	20180704051265	11475222630000	Transport Provided as Part of Departmental Act.	70.000	70.000	70.000
	20180704050800	11475201270000	Catering Services	35.000	35.000	35.000
	20180704050848	11475201670000	Stage and Sound Crew	3.000	3.000	3.000
				108.000	108.000	108.000
Substance Abuse Awareness						
	20180704051256	11475222630000	Transport Provided as Part of Departmental Act.	30.000	30.000	30.000
	20180704050755	11475201220000	Audio-visual Services	3.000	3.000	3.000
	20180704050780	11475201270000	Catering Services	35.000	35.000	35.000
				68.000	68.000	68.000
Victim Empowerment Programmes						
	20180704051261	11475222630000	Transport Provided as Part of Departmental Act.	30.000	30.000	30.000
	20180704050765	11475201270000	Catering Services	35.000	35.000	35.000
				65.000	65.000	65.000
Teenage Pregnancy						
	20180704051248	11475222630000	Transport Provided as Part of Departmental Act.	10.000	10.000	10.000
	20180704050791	11475201270000	Catering Services	15.700	15.700	15.700
				25.700	25.700	25.700
Life skills workshops						
	20180704051260	11475222630000	Transport Provided as Part of Departmental Act.	28.600	28.600	28.600
	20180704051345	11475222970000	Non-employees	29.800	29.800	29.800
	20180704050745	11475201220000	Audio-visual Services	3.000	3.000	3.000
	20180704050768	11475201270000	Catering Services	10.600	10.600	10.600
				72.000	72.000	72.000
Educational Excursions Drakenstein						
	NEW UKEY	11475222630000	Transport Provided as Part of Departmental Act.	28.250	28.250	28.250
	NEW UKEY	11475201270000	Catering Services	7.500	7.500	7.500
	NEW UKEY	11475220190000	Consumables: Zero Rated	900	900	900
				36.650	36.650	36.650
Educational Excursions Breede Valley						
	NEW UKEY	11475222630000	Transport Provided as Part of Departmental Act.	28.250	28.250	28.250
	NEW UKEY	11475201270000	Catering Services	7.500	7.500	7.500
	NEW UKEY	11475220190000	Consumables: Zero Rated	900	900	900
				36.650	36.650	36.650
Sanitary Ware						
	20180704051067	11475220180000	Standard rated	100.000	100.000	100.000
				100.000	100.000	100.000
TOTAL: FAMILIES AND CHILDREN				601.500	601.500	601.500

EARLY CHILDHOOD DEVELOPMENT						
ECD Grant_Breede Valley	NEW UKEY	11475276075100	Capacity Building and Other	45.000	45.000	45.000
ECD Grant_Witzenberg	NEW UKEY	11475276075100	Capacity Building and Other	10.000	10.000	10.000
ECD Grant_Langeberg	NEW UKEY	11475276075100	Capacity Building and Other	40.000	40.000	40.000
ECD Grant_Drakenstein	NEW UKEY	11475276075100	Capacity Building and Other	55.000	55.000	55.000
ECD Grant_Stellenbosch	NEW UKEY	11475276075100	Capacity Building and Other	50.000	50.000	50.000
				200.000	200.000	200.000
COMMUNITY SUPPORT PROJECT						
Community Support Grant_Breede Valley	NEW UKEY	11475276075100	Capacity Building and Other	87.926	87.926	87.926
Community Support Grant_Drakenstein	NEW UKEY	11475276075100	Capacity Building and Other	153.852	153.852	153.852
Community Support Grant_Langeberg	NEW UKEY	11475276075100	Capacity Building and Other	71.284	71.284	71.284
Community Support Grant_Witzenberg	NEW UKEY	11475276075100	Capacity Building and Other	51.284	51.284	51.284
Community Support Grant_Stellenbosch	NEW UKEY	11475276075100	Capacity Building and Other	35.654	35.654	35.654
TOTAL: COMMUNITY SUPPORT PROJECT				400.000	400.000	400.000
YOUTH						
Youth Camp						
	20180704051273	11475222630000	Transport Provided as Part of Departmental Act.	-	203.100	203.100
	20201104042723	11475201270000	Catering Services	-	9.000	9.000
				-	212.100	212.100
Youth Day						
	20180704051128	11475221490000	Gifts and Promotional Items	10.000	10.000	10.000
	20180704051247	11475222630000	Transport Provided as Part of Departmental Act.	25.000	25.000	25.000
				35.000	35.000	35.000
Top Achievers Awards						
	20180704051123	11475221490000	Gifts and Promotional Items	50.000	50.000	50.000
	20180704051210	11475222470000	Printing, Publications and Books	5.000	5.000	5.000
	20191028060639	11475201530000	Plants, Flowers and Other Decorations	16.450	16.450	16.450
	20180704051388	11475223080000	Hire Charges	120.000	-	-
	20180704050750	11475201220000	Audio-visual Services	10.000	10.000	10.000
	20180704050771	11475201270000	Catering Services	120.000	120.000	120.000
	20180704050812	11475201430000	Interior Decorator	10.550	10.550	10.550
	20180704050847	11475201670000	Stage and Sound Crew	5.000	5.000	5.000
	20200109041036	11475200590000	Translators, Scribes and Editors	9.000	9.000	9.000
				346.000	226.000	226.000
Career Exhibitions						
	20180704051244	11475222630000	Transport Provided as Part of Departmental Act.	68.300	68.300	68.300
	20180704050753	11475201220000	Audio-visual Services	2.600	2.600	2.600
				70.900	70.900	70.900
TOTAL: YOUTH				451.900	544.000	544.000
WOMEN						
Sexual offence Awarness campaign						
	20180704051243	11475222630000	Transport Provided as Part of Departmental Act.	20.000	20.000	20.000
	20180704050801	11475201270000	Catering Services	29.000	29.000	29.000
	20180704051071	11475220180000	Consumables:Standard Rated	16.000	16.000	16.000
				65.000	65.000	65.000
Women's Day Event						
	20180704051263	11475222630000	Transport Provided as Part of Departmental Act.	10.000	10.000	10.000
	20180704050709	11475200480000	Outsourced Services:Professional Staff	2.000	2.000	2.000
	20180704050748	11475201220000	Audio-visual Services	750	750	750
	20180704050767	11475201270000	Catering Services	22.940	22.940	22.940
	20180704050849	11475201670000	Stage and Sound Crew	1.200	1.200	1.200
				36.890	36.890	36.890
TOTAL: WOMEN				101.890	101.890	101.890
TOTAL: SOCIAL DEVELOPMENT				2.370.030	2.462.130	2.462.130

RURAL DEVELOPMENT						
SPORTS, RECREATION AND CULTURE						
Sport,Recreation and culture events						
	20180704051103	11477221430000	Achievements and Awards	116.200	116.200	116.200
	20180704051130	11477221490000	Gifts and Promotional Items	14.600	14.600	14.600
	20180704051258	11477222630000	Transport Provided as Part of Departmental Act.	124.800	144.800	144.800
	20180704050702	11477200370000	Hygiene Services	35.000	35.000	35.000
	20180704050779	11477201270000	Catering Services	150.000	180.000	180.000
	20180704050754	11477201220000	Audio-visual Services	10.000	10.000	10.000
	20180704050845	11477201670000	Stage and Sound Crew	54.000	54.000	54.000
	20180704051056	11477220180000	Consumables:Standard Rated	5.000	5.000	5.000
	20191028061329	11477220190000	Consumables: Zero Rated	2.300	2.300	2.300
	20190701064074	11477276075200	Capacity Building and Other	-	-	-
				511.900	561.900	561.900
Sport And Rec support grant_Clubs_Witzenberg	NEW UKEY	11477276075200	Capacity Building and Other	25.000	25.000	25.000
Sport And Rec support grant_Clubs_Langeberg	NEW UKEY	11477276075200	Capacity Building and Other	100.000	100.000	100.000
Sport And Rec support grant_Clubs_Stellenbosch	NEW UKEY	11477276075200	Capacity Building and Other	350.000	350.000	350.000
Sport And Rec support grant_Clubs_Breede Valley	NEW UKEY	11477276075200	Capacity Building and Other	125.000	125.000	125.000
Sport And Rec support grant_Clubs_Drakenstein	NEW UKEY	11477276075200	Capacity Building and Other	100.000	100.000	100.000
Cape Winelands Sport Council	NEW UKEY	11477276075200	Capacity Building and Other	200.000	200.000	200.000
Drakenstein General Club	NEW UKEY	11477276075200	Capacity Building and Other	100.000	100.000	100.000
Boland Cricket	NEW UKEY	11477276075200	Capacity Building and Other	500.000	500.000	500.000
Boland Rugby Union	NEW UKEY	11477276075200	Capacity Building and Other	100.000	100.000	100.000
SAFA Capewinelands	NEW UKEY	11477276075200	Capacity Building and Other	100.000	100.000	100.000
Cape Winelands Farmworkers Association	NEW UKEY	11477276075200	Capacity Building and Other	50.000	50.000	50.000
				1.750.000	1.750.000	1.750.000
Vlakkie Cricket						
	20190701064021	11477221430000	Achievements and Awards	20.000	20.000	20.000
	20190701063913	11477201270000	Catering Services	30.000	30.000	30.000
	20190701064048	11477222630000	Transport Provided as Part of Departmental Act.	100.000	100.000	100.000
				150.000	150.000	150.000
Business Againts Crime						
	20180704051111	11477221430000	Achievements and Awards	6.000	6.000	6.000
	20180704051266	11477222630000	Transport Provided as Part of Departmental Act.	51.000	51.000	51.000
	20180704050762	11477201270000	Catering Services	30.000	30.000	30.000
	20180704050846	11477201670000	Stage and Sound Crew	10.000	10.000	10.000
				97.000	97.000	97.000
Tug of War						
	20190701064020	11477221430000	Achievements and Awards	15.000	15.000	15.000
	20190701064044	11477222630000	Transport Provided as Part of Departmental Act.	100.000	100.000	100.000
	20190701063906	11477201270000	Catering Services	25.000	25.000	25.000
	20190701063927	11477201670000	Stage and Sound Crew	10.000	10.000	10.000
				150.000	150.000	150.000
Easter Tournament						
	20180704051106	11477221430000	Achievements and Awards	33.320	33.320	33.320
	20180704051267	11477222630000	Transport Provided as Part of Departmental Act.	24.000	24.000	24.000
	20180704050747	11477201220000	Audio-visual Services	20.000	20.000	20.000
	20180704050798	11477201270000	Catering Services	61.000	61.000	61.000
				138.320	138.320	138.320
Drama Festival						
	20180704051250	11477222630000	Transport Provided as Part of Departmental Act.	60.000	60.000	60.000
	20180704050834	11477201670000	Stage and Sound Crew	5.200	5.200	5.200
	20190701063910	11477201270000	Catering Services	30.000	30.000	30.000
				95.200	95.200	95.200
Rieldans						
	20190701064047	11477222630000	Transport Provided as Part of Departmental Act.	60.000	60.000	60.000
	20190701063912	11477201270000	Catering Services	20.000	20.000	20.000
	20190701063930	11477201670000	Stage and Sound Crew	20.000	20.000	20.000
				100.000	100.000	100.000
TOTAL: SPORTS, RECREATION AND CULTURE				2.992.420	3.042.420	3.042.420

Disabled						
International day for persons with disabilities	NEW UKEY	11477201270000	Catering Services	40.000	40.000	40.000
	NEW UKEY	11477201630000	Transportation	66.000	66.000	66.000
	NEW UKEY	11477201670000	Stage and Sound Crew	10.000	10.000	10.000
				116.000	116.000	116.000
Disability Grant_Breede Valley	NEW UKEY	11477261980000	Social Assistance: Disability Grant	31.000	31.000	31.000
Disability Grant_Stellenbosch	NEW UKEY	11477261980000	Social Assistance: Disability Grant	32.000	32.000	32.000
Disability Grant_Drakenstein	NEW UKEY	11477261980000	Social Assistance: Disability Grant	117.000	117.000	117.000
Disabled adult diapers	NEW UKEY	11477220180000	Consumables:Standard Rated (Adult diapers)	100.000	100.000	100.000
				280.000	280.000	280.000
TOTAL: DISABLED				396.000	396.000	396.000
TOTAL: RURAL DEVELOPMENT				**3.388.420**	**3.438.420**	**3.438.420**
TOTAL PROJECTS				**23.743.987**	**22.966.087**	**23.106.087**

8.9 AREAS OF POTENTIAL SAVING

There is a strong strategic understanding that Cape Winelands District Municipality must exercise its functions as a Planning and Co-ordinating authority and not as an Executing authority. Therefore, these areas of potential savings must be contextualized accordingly:

- Don’t spend funds on unnecessary items such as:
    - Catering for meetings between officials and officials and councillors;
    - Excessive traveling; and
    - Replacement of old office furniture still in good condition.
- Save on Salary Bill;
- Co-operational agreements between councils;
- Excessive use of stationery;
- Decrease the use of consultants;
- Attend only necessary congresses; and
- Alienate under-utilized buildings.

CHAPTER 9: MONITORING AND EVALUATION

CWDM Performance Calendar – 2021/22 Financial Year:

No	Activity	Responsible Person	Action Due Date
1.	IDP Update	IDP Office	January/February 2021
2.	Budget Review	Finance	February/March 2021
3.	Review of Organisational KPI	PMS Office	April/May 2021
4.	Individual Scorecards Review	PMS Office/Management	April/May 2021
5.	Organisational KPI (SDBIP) Finalisation and Approval	Mayor	May 2021
6.	Budget approval	Council	May 2021
7.	IDP Approval	Council	May 2021
8.	Performance Agreements reviewed, signed by Executive Management and approved by Mayor	Municipal Manager/Executive Directors/Mayor	May 2021
9.	Monthly Monitoring of Performance (including update of SAMRAS)	PMS Office	Monthly effective 30 June 2021
10.	Quarterly Performance Reporting	PMS Office	15th day following the end of the quarter: • September 2021 • December 2021 • March 2022 • June 2022
11.	Quarterly Performance Report to Council	PMS Office	At the end of each quarter (1st following Council meeting): • September 2021 • December 2021 • March 2022 • June 2022
12.	Internal Audit Report on Performance Management System	Chief Audit Executive/Internal Audit	Internal audit each quarter: • September 2021 • December 2021 • March 2022 • June 2022
13.	Revisit budget and link to SDBIP	PMS Office/Finance	December 2021 - January 2022
14.	Annual Performance Report	PMS Office	31 August 2021
15.	Oversight Report to Council	MPAC	February/March 2021

QUARTERLY PROJECTIONS OF SERVICE DELIVERY TARGETS AND PERFORMANCE INDICATORS (ORGANISATIONAL KPI's) – draft *(to be read in conjunction with the final approved June 2021 SDBIP and any other adjusted approved SDBIP targets)*

STRATEGIC OBJECTIVE 1 - Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District																
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
1.1	1.1.1	To administer an effective environmental health management system in order to achieve the environmental health objectives set.	1.1.1.1	Monthly report to PGWC on all MHS matters by the 15th of the following month (Sinjani report).		3		3		3		3		12	
	1.1.2	To facilitate effective environmental pollution control through identification, evaluation and/or monitoring to prevent air pollution.	1.1.2.1	Submission of the annual Air Quality Officer Report to PGWC.		0		0		0		1		1	

STRATEGIC OBJECTIVE 1 - Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District																
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
	1.1.3	To improve the livelihoods of citizens in the Cape Winelands District.	1.1.3.1	Number of water and/or sanitation subsidies granted to citizens in the Cape Winelands District.		5		5		5		5		20	
1.2	1.2.1	To coordinate an effective disaster management division in order to achieve the disaster management objectives set.	1.2.1.1	Number of bi-annual Disaster Management Advisory Forums held.		0		1		0		1		2	
1.3	1.3.1	Effective planning and co-ordination of specialized fire-fighting services.	1.3.1.1	Pre-fire season and post-fire season reports submitted to Council for consideration for approval.		0		1		0		1		2	
	1.3.2	Build fire-fighting capacity.	1.3.2.1	Number of the officials trained by the CWDM Fire Services Academy.		20		0		0		20		40	
1.4	1.4.1	To fulfil a coordinating role in terms of town and regional planning	1.4.1.1	Annual review of CWDM's SDF, submitted to Council for consideration for approval.		0		0		0		1		1	

STRATEGIC OBJECTIVE 1 - Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District																
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
		within the Cape Winelands District.													
	1.4.2	Implement environmental management activities to achieve environmental sustainability.	1.4.2.1	Number of hectares cleared through the EPWP Invasive Alien Vegetation Management Project.		0		0		450		1300		1750	
	1.4.3	To fulfil a coordinating role in terms of Economic and Tourism Development within the Cape Winelands District.	1.4.3.1	Number of LTA Forums coordinated by the CWDM.		2		2		2		2		8	
			1.4.3.2	Number of LED Forums coordinated by the CWDM.		1		1		1		1		4	
1.5	1.5.1	To improve the livelihoods of citizens in the Cape Winelands District.	1.5.1.1	Number of ECD centres supported by the CWDM.		0		0		40		0		40	
			1.5.1.2	Number of youths who complete the skills development project.		0		0		15		0		15	

STRATEGIC OBJECTIVE 2 - Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities																
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
2.1	2.1.1	Roll-out and implementation of the maintenance function and activities for proclaimed roads as an agent on behalf of the Western Cape Department of Transport and Public Works.	2.1.1.1	Conclude the annual MOA or addendum with PGWC.	1	0		0		1		0		1	
			2.1.1.2	Kilometres of roads re-sealed.	0	0		0		0		0		0	
			2.1.1.3	Kilometres of roads bladed.	4 200	1 300		1 300		1 200		1 200		5 000	
			2.1.1.4	Kilometres of roads re-gravelled.	6	4		3		2		3		12	
2.2	2.2.1	Coordinate and improve the planning of infrastructure services in the Cape Winelands District.	2.2.1.1	Annual review, and alignment with review outcome, of the IWMP and submit to Council for consideration for approval.	1	0		0		0		1		1	
2.3	2.3.1	Improve pedestrian safety throughout the Cape Winelands District.	2.3.1.1	Annual review, and alignment with review outcome, of the DITP and submit to Council for	1	0		0		0		1		1	

				consideration for approval.											
			2.3.1.2	Number of sidewalks and/or embayments and/or bus shelters completed or upgraded.	0	0		0		0		24		24	
2.4	**2.4.1**	To improve infrastructure services for citizens in the Cape Winelands District.	**2.4.1.1**	Percentage of project budget spent on rural projects.	90	5		20		40		95		95	
	2.4.2	To improve the livelihoods of citizens in the Cape Winelands District.	**2.4.2.1**	Number of schools assisted with ablution facilities and/or improved water supply.	2	0		0		2		2		4	
			2.4.2.2	Number of solar geysers installed.	120	25		75		50		50		200	
			2.4.2.3	Number of sport facilities upgraded or completed and/or supplied with equipment.	7	0		3		2		2		7	
2.5	**2.5.1**	To improve ICT governance in the Cape Winelands District.	**2.5.1.1**	Annual review, and alignment with review outcome, of the ICT Governance Framework and/or the ICT Strategic Plan and submit to	1	0		0		0		1		1	

				Council for consideration for approval.											

STRATEGIC OBJECTIVE 3 - Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality (Chief Financial Officer and Municipal Manager)																
CW DM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
3.1	**3.1.1**	To compile a budget that is available before the start of the financial year.	**3.1.1.1**	Compilation of a budget and submitted to Council by 31 May.	1	0		0		0		1		1	
	3.1.2	Transparent and accountable reporting to all stakeholders.	**3.1.2.1**	Compilation of a mid-year assessment (section 72 report), submitted to Council by 31 January.	1	0		0		1		0		1	
	3.1.3	Fair, equitable, transparent, competitive and cost-effective SCM practices.	**3.1.3.1**	Submit to Council a report on the implementation of SCM (within 30 days after financial year-end).	1	1		0		0		0		1	
	3.1.4	To promote the financial viability of the CWDM	**3.1.4.1**	Maintaining a sound liquidity ratio as at financial year-end.	10,5:1	0		0		0		10,5:1		10,5:1	

STRATEGIC OBJECTIVE 3 - Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality (Chief Financial Officer and Municipal Manager)																
CW DM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
		through sound financial management practices	**3.1.4.2**	Maintaining a sound Impairment of Property, Plant and Equipment and Investment Property and Intangible Assets Ratio	NEW KPI	0%		0%		0%		0%		0%	
			3.1.4.3	Maintain a sound Cash / Cost Coverage Ratio as at financial year-end.	NEW KPI	0		0		0		1 to 3 months		1 to 3 months	
			3.1.4.4	Maintain a sound Level of Cash Backed Reserves Ratio as at financial year-end.	NEW KPI	0		0		0		100%		100%	
			3.1.4.5	Maintain a sound Net Operating Surplus Margin Ratio as at financial year-end.	NEW KPI	0		0		0		0		Equal to and greater than 0%	

STRATEGIC OBJECTIVE 3 - Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality (Chief Financial Officer and Municipal Manager)																	
CW DM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										Annual Target	Comments
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4				
			3.1.4.6	Maintain a sound Creditors Payment Period Ratio as at financial year-end.	NEW KPI	0		0		0		0				30 days	
3.2	**3.2.1**	To coordinate functional statutory and other committees	**3.2.1.1**	Number of Council meetings that are supported administratively	7	1		1		3		2				7	
			3.2.1.2	Number of MAYCO meetings that are supported administratively	9	2		2		3		2				9	
3.3	**3.3.1**	To capacitate a skilled and competent workforce in order to realise organisational SO's	**3.3.1.1**	Number of WSP submissions to the LGSETA.	1	0		0		0		1				1	
			3.3.1.2	The percentage of CWDM's training budget actually spent on implementing its WSP.	90%	5% (cumulative)		20% (cumulative)		40% (cumulative)		90% (cumulative)				90%	

	3.3.2	Facilitate an administrative function in so far as it relates to labour relations	**3.3.2.1**	Number of Employment Equity report submissions to the Department of Labour.	1	0		0		1		0		1	
3.3	**3.3.3**	To manage the capital funds spent in relation to the receipt thereof for improved service delivery	**3.3.3.1**	The percentage of CWDM's capital budget actually spent by the end of the financial year	90%	0		0		0		90%		90%	
	3.3.4	To promote a corruption-free CWDM.	**3.3.4.1**	Establishment of an externally managed corruption hotline	0	0		0		0		1		1	
	3.3.5	To transform the work force of the CWDM in terms of representation	**3.3.5.1**	Number of people from employment equity target groups employed in the 3 highest levels of management in compliance with CWDM's approved Employment Equity Plan	90%	0		0		0		90%		90%	
	3.3.6	To improve the livelihoods of citizens in the CWDM area	**3.3.6.1**	Number of work opportunities created (in person days) through CWDM's various initiatives	10 000	200		600		2100		900		3800	

	3.3.7	To improve inter-governmental relations within the district as with other districts.	**3.3.7.1**	Improve inter-governmental relations within the district by initiating and participating in the DCF and JDMA meetings.	14	1		2		1		2		4	

RATIONALISATION OF PLANNING AND REPORTING REQUIREMENTS FOR THE 2021/22 MTREF: Addendum 2 to MFMA Circular No. 88

MFMA Circular 88 on Rationalising Planning and Reporting Requirements, first issued on 30 November 2017 and the subsequent update Addenda in 2019, generally focused on the implementation of reporting forms. This Addendum updated issued on 17 December 2020 includes the work to date on planning and budgeting reforms to be factored into municipal planning, budgeting and reporting for the 2021/22 MTREF. The reforms will continue being incrementally implemented in the 2022/23 – 2025/26 MTREF, and apply on a differentiated basis per municipal category, first in metropolitan municipalities, and then to intermediate city municipalities, districts and all remaining municipalities.

Rolling out the Reform to other Categories of Municipalities

The Department of Cooperative Governance (DCoG) has further advanced the development and application of the MFMA Circular No. 88 indicator set to intermediate cities, districts and local municipalities. With a view to eventually regulating the reform, a broader set of municipal and sector consultations were undertaken in terms of the provisions of Section 43 of the Municipal Systems Act, 2000 (Act 32 of 2000) which provides for the Minister of CoGTA, after consultation with MECs for local government and organised local government representing local government nationally, to prescribe and regulate key performance indicators to local government.

It is therefore the intention of DCoG that the introduction of Circular 88 indicators across local government serve as a pilot process towards eventual issuing of a Regulation. **The pilot of the Circular 88 indicators is intended to replace the Local Government: Planning and Performance Management Regulations of 2001, potentially targeted for November 2022.**

Special Pilot Provisions for Roll-out across Local Government

In order to get the process of planning and reporting on the indicators going, to test the indicators and for municipalities to get the related planning and reporting processes and systems in place, a staggered pilot process will follow for the rest of local government. This is informed by audit considerations and in consultation with the Auditor-General of South Africa to support municipalities to adopt the reform **without the risk of receiving audit findings** as part of the pilot process.

Due to the pilot process in the 2021/22 financial year, intermediate cities, district and local municipalities will **not be required** to incorporate the indicators in their existing performance indicator tables in the IDP and SDBIP. Instead, these indicators should

find expression in a dedicated Annexure to the IDP (Annexure M) and SDBIP which clearly indicates the MFMA Circular No. 88 indicators applicable to the municipality at Tier 1 and 2 levels of readiness.

Annexures

Appendix 1	Cape Winelands Spatial Development Plan
Appendix 2	Corporate Disaster Management Plan
Appendix 3	Integrated Transport Plan
Appendix 4	Integrated Waste Management Plan
Appendix 5	Cape Winelands HRM Strategy and Plan

CAPE WINELANDS DISTRICT SPATIAL DEVELOPMENT FRAMEWORK

2019/2024

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

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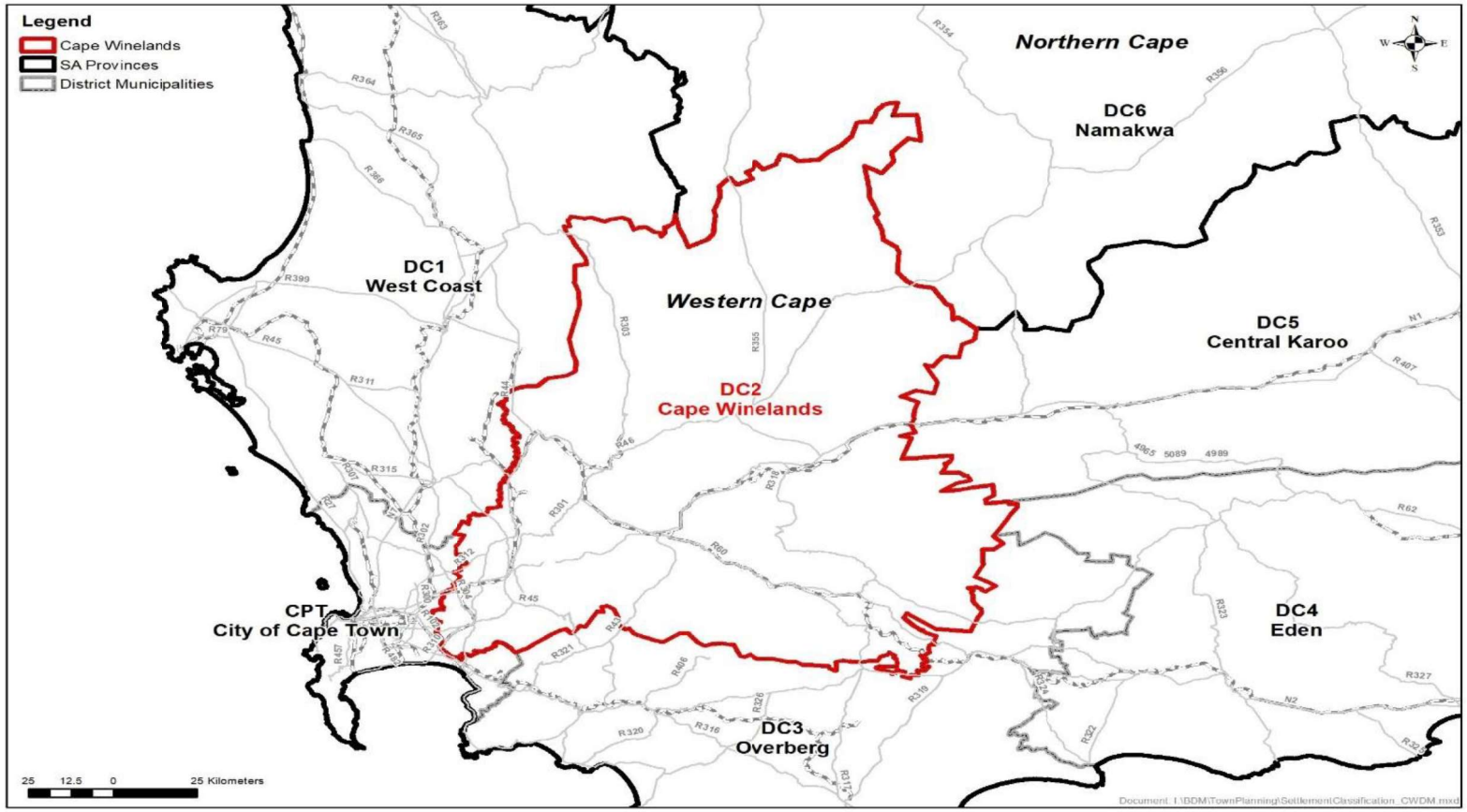
2: Cape Winelands District Capital Investment Framework

3: Cape Winelands District Municipal Climate Change Adaptation Summery Report

1. INTRODUCTION

1.1 STUDY AREA

The Cape Winelands district is situated next to the Cape Metropolitan area and encloses 22 309.47km². It is a landlocked area between two coastal regions, the West Coast and Overberg districts and inland regions, Namakwa (Northern Cape Province) and Central Karoo districts.



1.2 STRATEGIC CONTEXT

The Cape Winelands Spatial Development Framework identifies eighteen (18) key focus areas for intervention that are spread across four chapters (refer to table 1 below);

Chapters:	Key Focus areas:
A. DEMOGRAPHICS AND BUILT ENVIRONMENT:	1. Population growth & migration 2. Hierarchy of towns 3. Growth potential of towns 4. Municipal services financial model 5. Integrated district public transport network 6. Cultural landscapes: Sense of place 7. Water infrastructure 8. Energy & telecommunications infrastructure 9. Solid waste disposal 10. Disaster management
B. DISRTICT SPACE ECONOMY:	11. Economic growth sectors 12. Municipal space economy linkages 13. Agri parks
C. BIODIVERSITY & ECOSYSTEMS: SERVICES	14. Biodiversity 15. Ecosystem services 16. Invasive alien species 17. Cape Winelands Biosphere Reserve
D. CLIMATE CHANGE:	18. Rain and temperature

The key focus areas were chose based on the functions of the Cape Winelands District Municipality in terms of Section 84 (1) of the Municipal Structures Act (117 of 1998), assigned functions i.e. Disaster Management and relevant issues and concerns that have an impact on the Cape Winelands District and broader Cape Metropolitan Functional Region landscape.

Cognisance is also given to the structural deficiencies that was highlighted by the Greater Cape Metro Regional Spatial Implementation Framework (GCM RSIF) which are;

- Pervasiveness of socio-spatial segregation,
- Sprawling and low-density multi-nodal network of settlements,
- Mismatches between where people live and work,

- Isolated concentrations of poverty severed from economic opportunities, and
- Underinvestment in public transport and freight infrastructure, making the region inaccessible to most residents and inefficient for business to operate in.

These challenges must be addressed, although site specific and at a lower scale than the CWDM SDF's strategic focus, strategies will none the less be proposed to deal with these structural deficiencies that are evident throughout the CWDM.

Strategically, in the context of **human settlements**, the emphasis is on considering the functionality of settlements, their economic growth potential, migration and urbanisation challenges (bulk services, transport modes, solid waste disposal etc.) and the creation of a framework in which rational decisions can be made in terms of capital investment and social support programs.

The **district space economy** chapter highlights the strength of economic growth sectors that are located within the urban space economy, it also acknowledges the importance of the primary sector (agriculture). The industries that performs strongly in the urban space economy has backward linkages to agriculture. Strategically, this chapter emphasise the importance of integrated planning and the coordination of public sector investment within the urban space economy. The agri parks programme from the National Department of Rural Development and Land Reform will be implemented in each district municipality. In the case of the CWDM, the agri hub will be located in Ceres (Witzenberg Municipality). Various other towns were selected as farmer productions support unit points. The farmer production support unit points are aligned to poverty pockets. According to the Draft Rural Development Plan (19/12/2016) various projects were proposed for the farmer production support unit points. The CWDM SDF supports the proposed investment into the farmer production support unit points and agri hub (Ceres, Witzenberg Municipality) from a strategic perspective.

Biodiversity conservation remains a challenge in the CWDM area. Rapid urbanisation, agricultural expansion and the impact of climate change poses a major threat to the Cape Floristic Region as well as ecosystem sources (water, air, biodiversity and soil). The CWDM area consist of Fynbos, Succulent Karoo, Albany Thicket an Afro-temperate Forest biomes. The CWDM SDF spatially reflects the important areas for protection and refers users to the Western Cape Biodiversity Spatial Plan and its accompanying handbook.

The impact of **climate change** has already been felt with the recent and potential ongoing drought as well as rain surges that causes flooding. From a land use planning perspective various site-specific measures needs to be put in place as well as disaster risk related systems that relates more to adaptation to anticipated and un anticipated occurrences. Strategically, adaptation and mitigation measures are prioritised.

In conclusion, the purpose of the Cape Winelands Spatial Development Framework is to lay down a 'set of guidelines' to:

- Interpret and apply higher-order spatial policy within the Cape Winelands district;
- Guide regional and local policy interventions;
- Act as a strategic forward-planning tool to guide planning and decisions on land use and land development;
- Develop a spatial logic that guides public and private-sector investment;
- Ensure the social, economic, built and environmental sustainability of the area, and

- Formulate proposals to redress the spatial legacy of apartheid;

1.3 PRINCEPLES OF THE CWDM SDF

The CWD SDF adopts the principles of the Spatial and Land Use Planning Act (16 of 2013, which are;

Spatial Justice: A socially just society is one that embraces the qualities of equity, solidarity and inclusion. Whilst equal opportunity targets everyone in the community, social justice targets marginalised and disadvantaged groups. Inclusionary settlements focus on the public realm rather than on private enclaves; support civic interaction and equitable access throughout the public environment; and make urban opportunities accessible to all, especially the poor. Inclusionary economies have low barriers to entry, do not discriminate between the formal and informal sectors, and take active measures to empower those previously restricted in their access to the means of production. Past spatial imbalances are redressed by improving access to, and use of, land.

Spatial Sustainability: Land development should be spatially compact, resource- frugal, compatible with cultural land scenic landscapes, avoid alienating productive landscapes, and not compromise the functionality of ecosystems.

Spatial Resilience: Resilience is about the capacity of regions to withstand shocks and disturbances such as climate change or economic crises, and to use such events to catalyse renewal, novelty and innovation. The focus is on creating complex, diverse and resilient spatial systems that are sustainable in all contexts.

Spatial Efficiency: Efficiency relates to the form of regional settlements and use of resources compaction as opposed to sprawl; mixed- use as opposed to mono-functional land uses; residential areas close to work opportunities as opposed to dormitory settlement; and prioritisation of public transport over private car use. When a settlement is compact higher densities provide thresholds to support viable public transport, reduce overall energy use, and lower user costs as travel distances are shorter and cheaper. Spatially efficient economies are more productive as they minimize business transaction costs and maxsimise outputs. Spatially compact city-regions provide for the fluid exchange of ideas, goods and services, which establishes an enabling environment for businesses and households to operate in.

Spatial Governance: Effective governance of city-regions is based on collaboration and coordination, integration and alignment, and transparency. Planning is evidenced based, informs the budgeting process, and spatial targets are incorporated into public investment programmes.

1.4 VISION, MISSION AND OBJECTIVES

The Cape Winelands District Spatial Development Framework as a sector plan of the Cape Winelands District Integrated Development Plan (CWD IDP) adopts the CWD IDP's vision which is "A unified Cape Winelands of Excellence for sustainable development", mission, "All structures of the Cape Winelands co-operate together towards effective, efficient and economically sustainable development".

The objectives of the CWD SDF are;

- To improve the quality of life for the people of the region by ensuring principle led responses
- To plan in advance by considering future population growth, economic and climatic changes
- To manage the impact and exposure of external and internal threats to growth and development
- To restructure urban settlements through compaction and densification
- To promote sustainable resource use and responsible rural development
- To improve and conserve the district's natural environment

1.5 LEGISLATIVE REQUIREMENT FOR THE FRAMEWORK

The Cape Winelands District Municipality compiled a Spatial Development Framework for its area of jurisdiction in terms of Section 26 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000). The CWDM is mandated to do a Spatial Development Framework as a sector plan of the CWDM Integrated Development Plan in terms of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000).

As per the Spatial and Land Use Planning Act, local government must compile a municipal spatial development framework in terms of Chapter 4, Section 12 (1) of the mentioned Act.

2. DEMOGRAPHICS AND BUILT ENVIRONMENT

2.1 POPULATION GROWTH AND MIGRATION

According to the South African Institute for Race Relations, the Western Cape has shown significant growth in its population. This increase is due to internal migration as people seek job opportunities, facilities and housing. The PSDF (2014) states that the Western Cape's population is growing faster than national averages, largely on account of in-migration (i.e. Stats SA estimate that the province received a net gain of 225 657 people between 2006 and 2011, 35% of whom were from outside the country, 31% from the Eastern Cape, and some 14% from Gauteng). The fertility rate in the Western Cape has declined considerably over the years and is lower than the rest of the country. Of significance is that in-migration accounts for approximately one-third of the population growth rate, which places additional burdens on government's service delivery efforts particularly in the main economic centres. In the Cape Winelands district, the current growth statistics are as follow;

Table 2: Municipal Annual Growth rates between Census 2001 and Census 2011(Source: Stats SA)

Municipality	**Total Population in 2001**	**Total population in 2011**	**Annual Growth rate between 2001 and 2011**
Witzenberg	83 567	115 946	3.27%
Drakenstein	194 417	251 626	2.6%
Stellenbosch	118 709	155 733	2.71%
Breede Valley	146 028	166 825	1.33%
Langeberg	81 271	97 724	1.84%

Table 3: Municipal Annual Growth rate between Census 2011 and Community Survey 2016

Municipality	**Total Population in 2011**	**Total population in 2016**	**Annual Growth rate between 2011 and 2016**
Witzenberg	115 946	130 548	2.37%
Drakenstein	251 626	280 915	2.2%
Stellenbosch	155 733	173 418	2.25%
Breede Valley	166 825	176 578	1.14%
Langeberg	97 724	105 483	1.53%

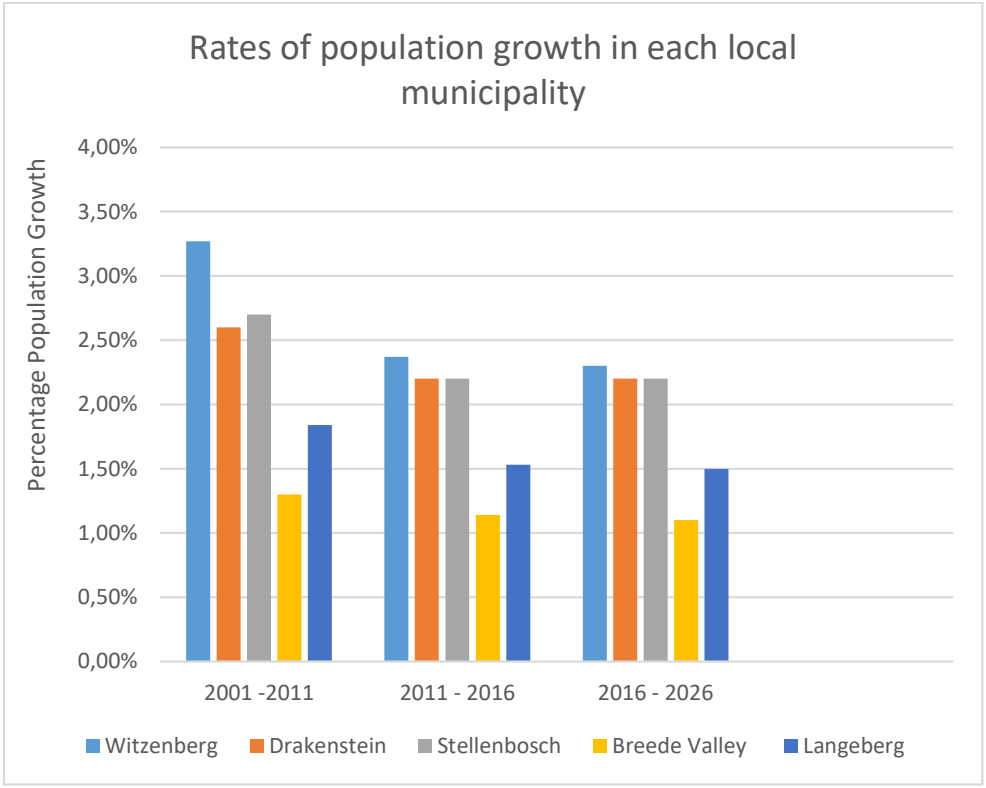
Table 4: Comparing annual population growth rates between two time frames, namely 2001 – 2011 and 2011 - 2016 to check if the growth rates themselves have increased or declined.

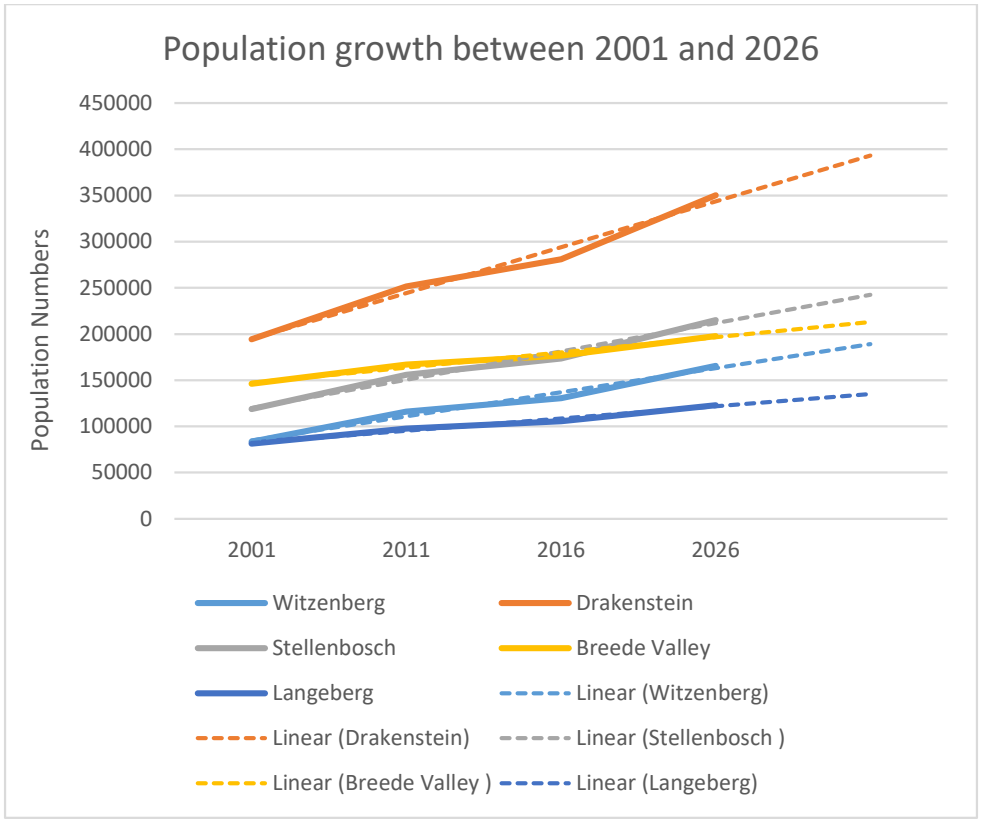
Municipality	Annual Growth rate between 2001 and 2011	Annual Growth rate between 2011 and 2016	Increase (↑) Or Decline (↓) in annual population growth rates comparing two time frames
Witzenberg	3.27%	2.37%	↓
Drakenstein	2.6%	2.2%	↓
Stellenbosch	2.7%	2.25%	↓
Breede Valley	1.3%	1.14%	↓
Langeberg	1.84%	1.53%	↓

Table 5: Population Growth Projections for 2026, based on the annual population growth rates between 2011 and 2016

Municipality	Population figures in 2016 according to the Community Survey	Annual projected population growth rates	Anticipated population growth rates for 2026
Witzenberg	130 548	2.4%	165 500
Drakenstein	280 915	2.2%	350 117
Stellenbosch	173 418	2.2%	215 040
Breede Valley	176 578	1.1%	197 827
Langeberg	105 483	1.5%	122 898

Graph 1: Rates of population growth per period 2001-2011, 2011-2016, 2016-2026

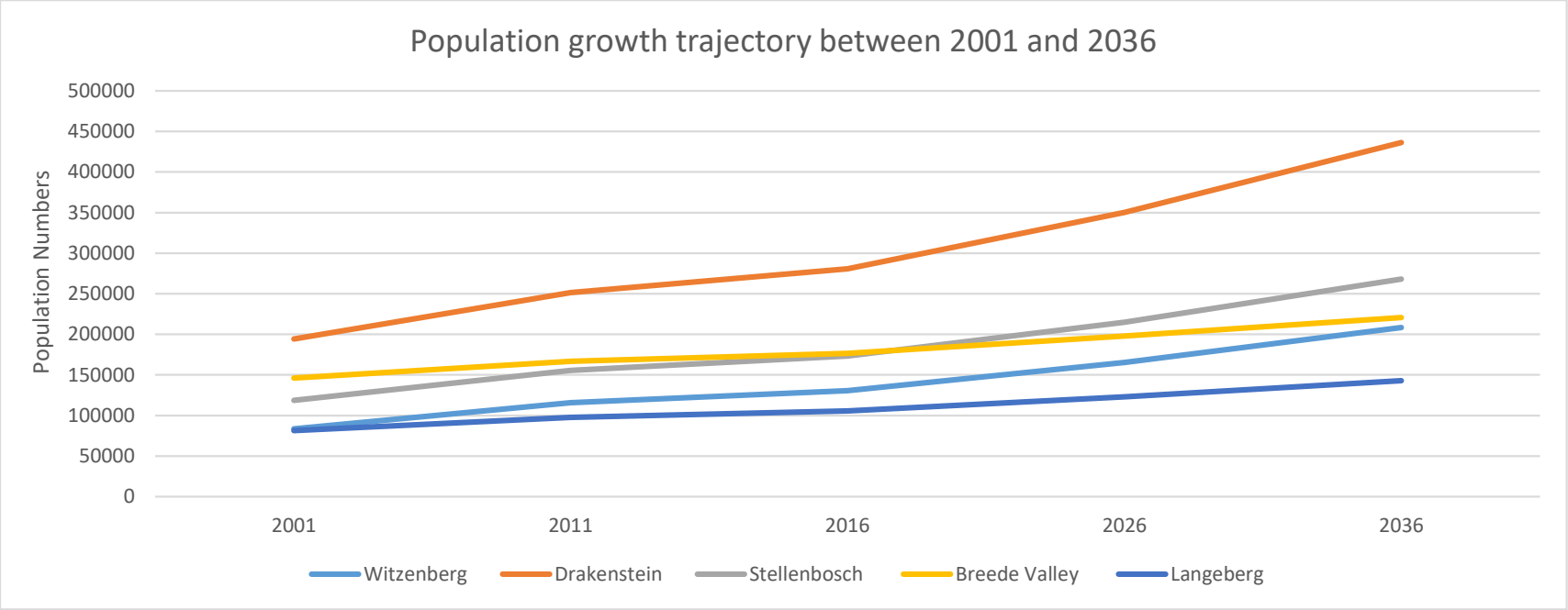




Graph 2: Population growth between 2001 and 2026

From the above it is interesting to note that by 2026 it is anticipated that the total population of Stellenbosch Municipality would have overtaken that of Breede Valley Municipality.

Graph 3: Population growth trajectory between 2001 and 2036



The above graph would seem to indicate that if population growth rates continue at the same levels that they did between 2011 and 2016, then Witzenberg's population will overtake that of Breede Valley soon after 2036. Witzenberg shows a similar growth trajectory to Drakenstein and Stellenbosch, with Breede Valley and Langeberg showing a slightly different growth trajectory.

We have entered a new planning paradigm in South Africa with the advent of SPLUMA. The mentioned Act requires that municipal spatial development frameworks must include a longer-term spatial development vision statement for the municipal area which indicates a desired spatial growth and development pattern for the next 10 to 20 years. Depending on the date of developing/reviewing spatial development frameworks, municipalities must include population growth estimates for the next five-year period. These estimates will be reviewed every five years to ensure that it is relevant. Stats SA does surveys on a five-year cycle (Formal Stats SA publications occur every 10 years with a Community survey in between). Municipal spatial development frameworks must also include estimates on the demand for housing units across different socio-economic categories and the planned location and density of future housing development. Proactive planning is essential to achieving good governance and efficient service delivery.

2.1.1 Potential risks associated with population growth and migration:

It is essential to guard against risks that manifests with population growth with specific emphasis on migration and the difficulties of migrants assimilating into regions that is culturally different. The impact of a growing labour-intensive agricultural sector that is making use of brokers whom source labourers from outside the province and the influx of foreign nationals is a common phenomenon in the CWDM area. Apart from impacts mentioned, the ability of municipalities and government to provide housing and related services remains nearly an impossible challenge.

Social conflict is highlighted in the CWDM Risk Assessment Report (2014) as being an 'extremely high-risk priority'. Early warning signals are identified as follow;

- Sudden demographic changes and population displacement
- Increasing population resulting in rising unemployment rates
- An increase in numbers of demonstrations or rallies especially around local elections
- An increase in new faces in the area, i.e. strange people attempting to organise unrest
- Organised land invasions
- Dissent with regard to new housing developments and allocations in areas
- Increase in foreign immigration
- Increase in spaza (informal) shops owned by foreign nationals in townships

2.1.2 Key findings: Population Growth and Migration

2.1.2.1 Over a 15-year period from 2001 to 2016, population growth statistics reflects substantial growth within the CWDM. Stellenbosch municipality (46%), Drakenstein municipality (45%), Witzenberg municipality (56%) municipality had the highest growth percentages. Breede Valley municipality (21%) and Langeberg municipality (30%) relatively lower than the others. The PSDF (2014) indicates that between 2006 and 2011, the province received a net gain of 225 657 people from which 80% were because of migration. It is essential that long term population growth projections must be done, at least 20-year projections. The CWDM area has 42 756 indigent households according to the CWDM Socio Economic Profile (2017), this figure will most likely increase. The proposed population projections will enable government to determine growth hotspots and plan accordingly for essential services to mitigate potential risks relating to social conflict.

2.1.2.2 Due to the labour-intensive nature of commercial farming, Commercial farmers source labour from Lesotho, Swaziland, Rural Eastern Cape etc. due to local inhabitants listed on databases from the Department of Labour not being interested in the opportunities presented in the agricultural sector. The potential impact of this is workers settling permanently in the relevant areas i.e. Ceres Koue Bokkeveld and Langeberg municipal area. This creates further issues in terms of housing provision and related indigent services.

2.1.2.3 Growth projections between 2016 and 2026 shows a slight decline if annual percentages between 2011-2016 is continued. External factors that have not been taken into calculations are drought and the impact of climate change as well as the national and municipal government elections. The external factors could either lead to further decline in population growth or a slight increase in certain municipalities.

2.1.3 Implementation proposals:

FOCUS AREA:	POPULATION GROWTH AND MIGRATION
STRATEGIES:	1. Population growth projections must be done at least every five years to determine future population growth and hotspots.
	2. The municipality must play a facilitative role and assist Commercial farmers in Witzenberg and Langeberg municipalities with the recruitment of local unemployed people registered on the database of the Department of Labor.
	3. Social conflict risks and early warning signals associated with migration must be included in municipal Integrated development plans and spatial development frameworks. Refer to the CWDM Risk Assessment Report (2014).
	4. Develop a migration policy to accommodate and manage new or relocated entrants. This must be dealt with as a developmental rather than a security concern.
	5. Indigent policies must be updated on a regular basis to keep up with new entrants into a municipal area.
	6. Facilitate the movement of households to larger urban areas as it may be as relevant as ad hoc social support and improvements in the most basic infrastructure services.
	7. Municipalities to register indigent cases.
PRIORITY:	HIGH

2.1.4 CWDM Implementation Plan : Population Growth and Migration

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Revision of Risk Assessment	R243 500, 00	Disaster Management Section	2018/2019

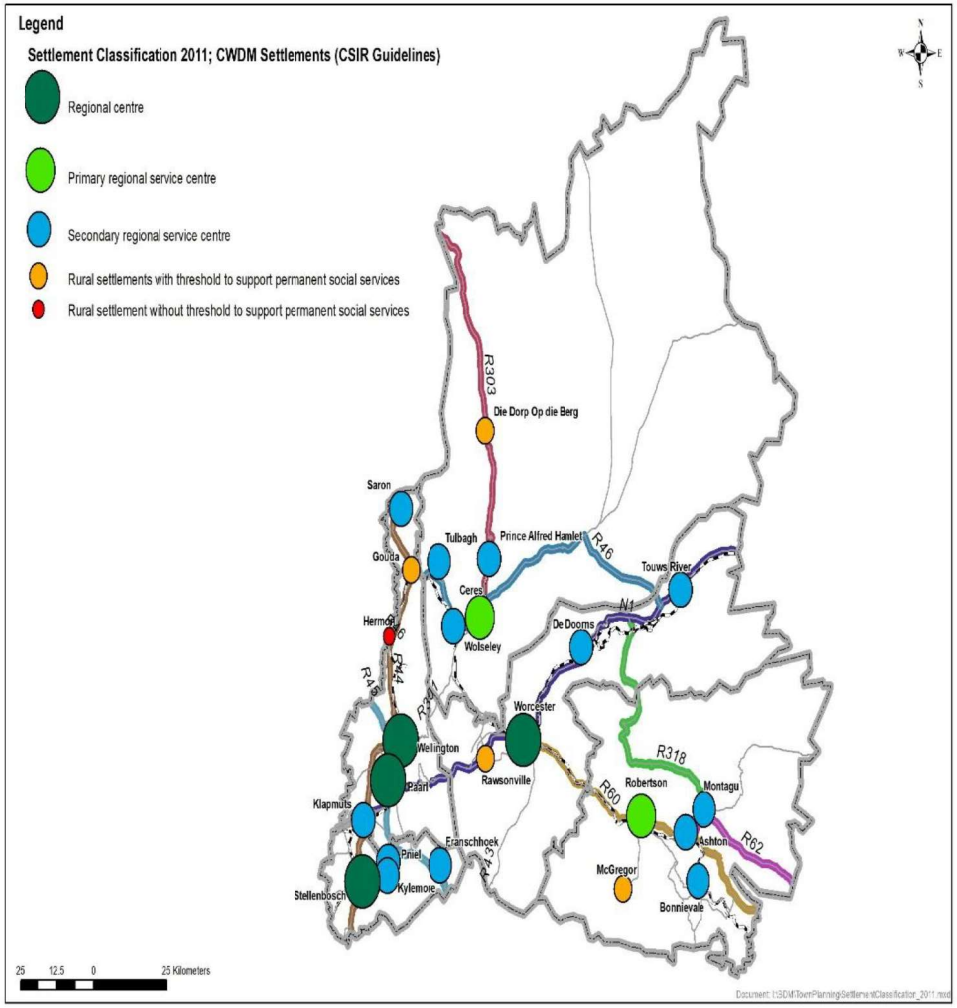
2.2 HIERARCHY OF TOWNS

Settlement classification based on the CSIR guidelines remains an important indicator of the distribution of existing primary social facilities in relation to settlement thresholds.

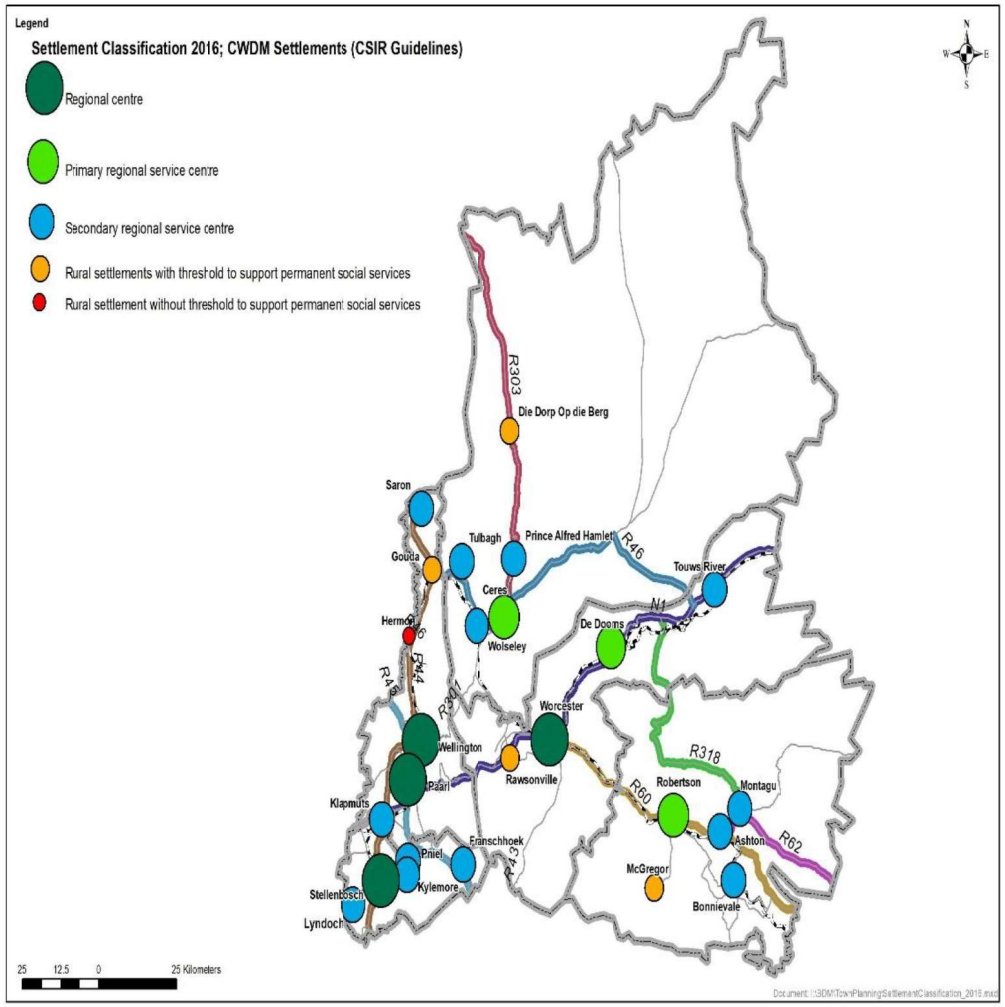
Table 6: PSDF 2014, Settlement Classifications; CWDM Settlements (CSIR Guidelines), Projections based on "Draft Data Estimate percentages, Data source: Statistics South Africa & Western Cape DEA&DP".

Settlements Classifications based on 2011 populations statistics (Stats SA)	Population Thresholds	Population, Community Survey (2016)	Population projection (2026)	Population projection (2036)
REGIONAL CENTRE Paarl, Stellenbosch, Wellington, Worcester,	**>70 000**	**REGIONAL CENTRE** **Paarl:** 126 975 **Stellenbosch:** 89 903 **Wellington:** 63 557+35 089 **Worcester:** 104 527	**REGIONAL CENTRE** **Paarl:** 162 539 **Stellenbosch:** 112 858 **Wellington:** 83 771+45 357 **Worcester:** 121 308	**REGIONAL CENTRE** **Paarl:** 208 063 **Stellenbosch:** 141 673 **Wellington:** 110 414+58 630 **Worcester:** 140 783
PRIMARY REGIONAL SERVICE CENTRE Ceres, Robertson	**>20 000-70 000**	**PRIMARY REGIONAL SERVICE CENTRE** Ceres: 36 043 Robertson: 30 675 De Doorns: 20 586	**PRIMARY REGIONAL SERVICE CENTRE** Ceres: 42 243 Robertson: 37 761 De Doorns: 26 352 Franschhoek: 21 692 Montagu: 23 587	**PRIMARY REGIONAL SERVICE CENTRE** Ceres: 49 510 Robertson: 46 484 De Doorns: 33 373 Franschhoek: 26 966 Montagu: 31 699 Klapmuts: 22 038 Prince Alfred Hamlet: 20 004 Wolseley: 27 328
SECONDARY REGIONAL SERVICE CENTRE Ashton, Bonnievale, **De Doorns,** Montagu,	**>5000-20 000**	**SECONDARY REGIONAL SERVICE CENTRE** Ashton: 14 133 Bonnievale: 10 229 Montagu: 17 551 Klapmuts: 9 495 Kylemore, Pniel, Lyndoch:12 031	**SECONDARY REGIONAL SERVICE CENTRE** Ashton: 15 924 Bonnievale: 12 967 Klapmuts: 14 466 Kylemore, Pniel, Lyndoch: 15 552 Prince Alfred Hamlet: 13 005	**SECONDARY REGIONL SERVICE CENTRE** Ashton: 17 941 Bonnievale: 16 437 Kylemore, Pniel, Lyndoch: 20 102 Saron: 13 837 Touwsriver: 19 964 Tulbagh: 17 906

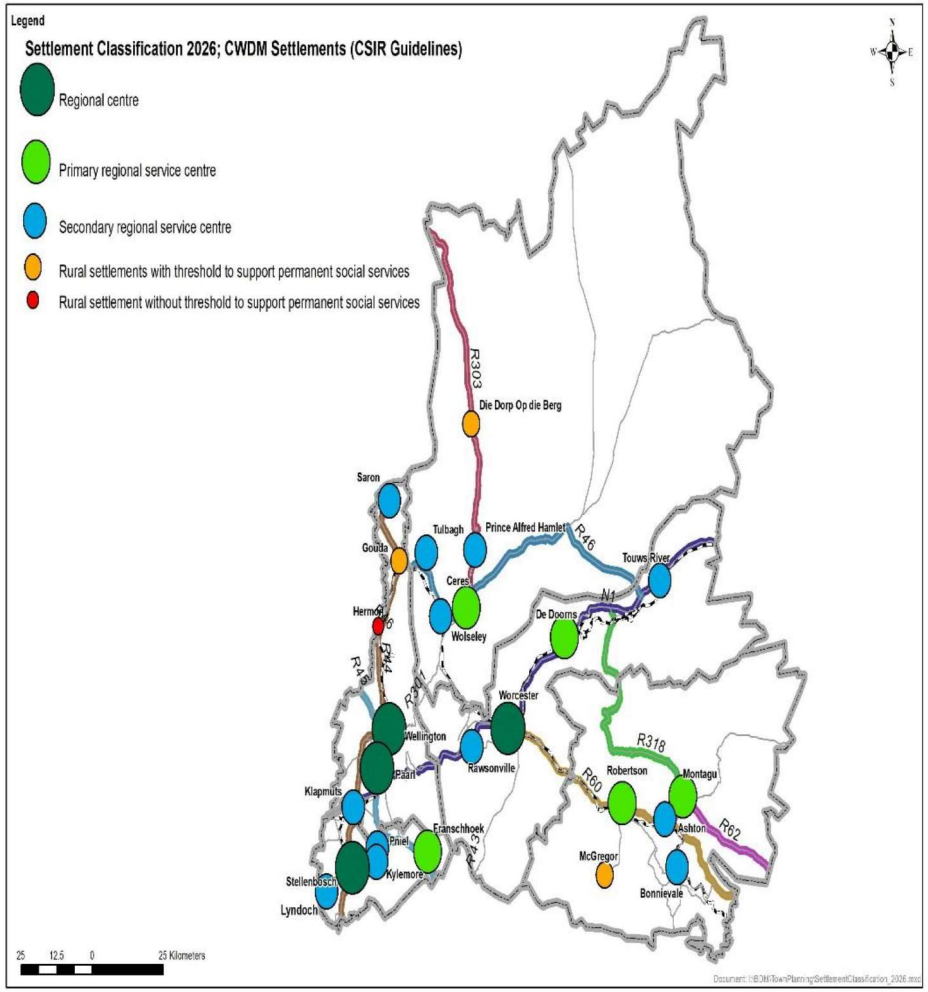
Klapmuts, Kylemore, Pniel Lyndoch Prince Alfred Hamlet, Saron, Touwsriver, Tulbagh, Wolseley, Franschhoek		Prince Alfred Hamlet: 8 455 Saron: 8 781 Touwsriver: 8 768 Tulbagh: 10 307 Wolseley: 14 276 Franschhoek: 17 450	Saron: 11 023 Touwsriver: 13 231 Tulbagh: 13 585 Wolseley: 19 752 Rawsonville: 5047	Gouda: 6232 McGregor: 5398 Rawsonville: 6983
RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES Gouda, McGregor, Op Die Berg, Rawsonville,	**>1000-5000**	**RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES** Gouda: 3878 McGregor: 3493 Op Die Berg: 1843 Rawsonville: 3648	**RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES** Gouda: 4916 McGregor: 4342 Op Die Berg: 2676	**RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES** Op Die Berg: 3886
RURAL SETTLEMENT WITHOUT THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES Hermon	**< 1000**	Hermon	Hermon	Hermon



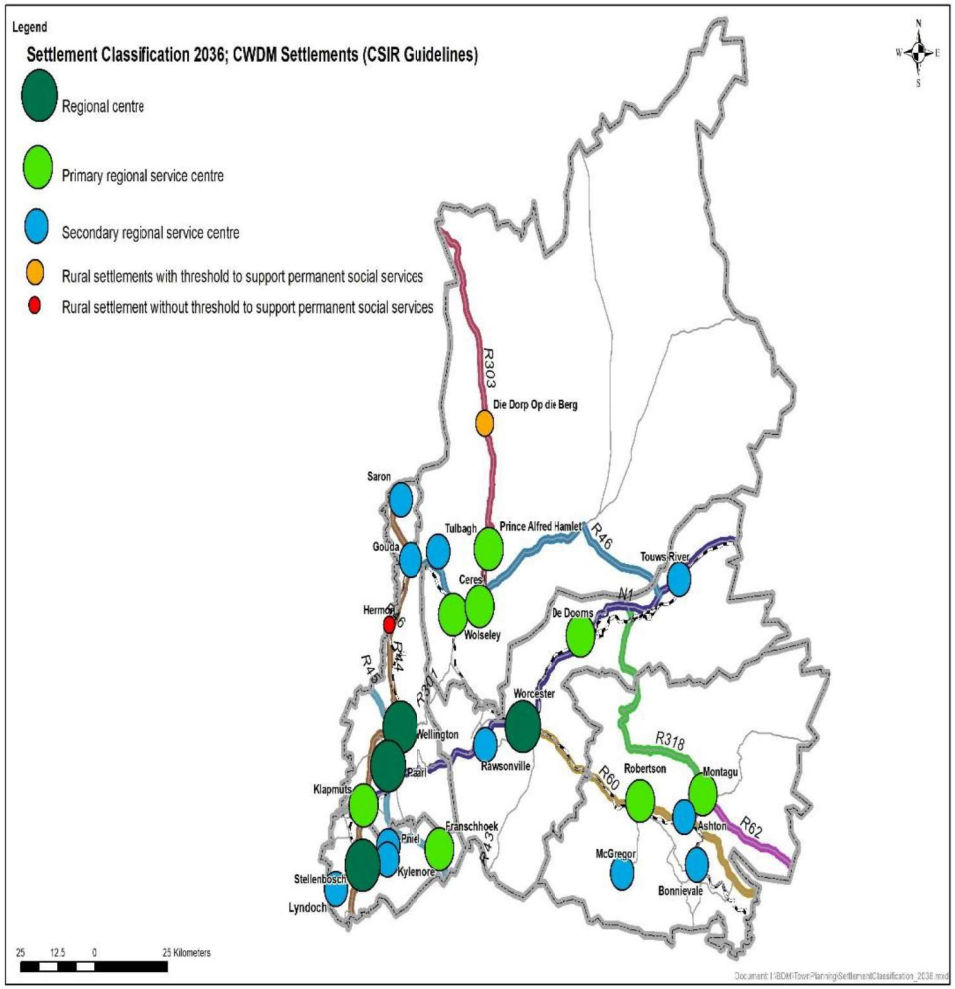
Map 1: CWDM Settlement Classifications 2011 (PSDF 2014)



Map 2: CWDM Settlement Classifications 2016 (based on Community Survey)



Map 3: CWDM Settlement Classification 2026 (based on projections)



Map 4: CWDM Settlement Classification 2036 (based on projections)

2.2.1 Regional Centres

The Draft Greater Cape Metro Regional Spatial Implementation Framework (GCMRSIF) highlights the importance and functionality of regional centres within the greater cape metro region. Stellenboch, Paarl/ Wellington and Worcester are in the CWDM. In the context of the CWDM, four regional centres exist;

Stellenbosch: Southern Winelands service & admin centre, tertiary education & research, agri processing, multi-national HQs, tourism destination, tech industry, very high growth potential;

Paarl-Wellington: Northern Winelands service & admin centre, tertiary education, agri processing & distribution, tourist destination, very high/high growth potential;

Worcester: Northern Boland service centre, admin centre, N/S & E/W regional logistics hub, specialist disability treatment, tertiary education, agri processing & distribution, high growth potential and;

Both Stellenbosch and Drakenstein Municipalities have identified Klapmuts as a prospective sub-regional urban node along the N1. Residential and industrial development opportunities have been identified north and south of the N1, and the area has also been identified as having potential to serve as a regional freight logistics hub. Stellenbosch and Paarl/Wellington falls within the functional region of the metro economy. These nodes function more as an extension of the metropolitan area rather than being significant centres for services and goods to the surrounding countryside. Worcester remains an important, and probably the only, 'major regional service centre' due to easy accessibility from surrounding towns and towns located in the Langeberg & Witzenberg municipal area.

2.2.2 Primary Regional Service Centre

Ceres: Agricultural regional service centre, regional gateway to Tankwa Karoo, Koue and Warmbokkeveld, administrative centre, linkages to N1.

Robertson: The Langeberg municipal area did not form part of the study area of the draft GCMRSIF. Robertson, Ashton, Bonnievale and Montagu fulfil important roles as service centres/agricultural service centres. Robertson has a medium growth potential forecast but can build upon being the largest town with the broadest economic base within the Langeberg municipal area.

2.2.3 Other Municipal Towns

The development of towns (district wide) is rooted in their role as service centres for the surrounding agricultural environment as rural communities need a centrally located core town for religious, health, educational and services/shopping facilities, as well as a market for their products. Apart from the economics that drive the growth and development of these towns, aspects regarding technological innovation, the environment, the particular spatial location, cultural patterns and management systems also play a role. Thus, each municipal area in the district has distinct growth forces and historically evolved relations between the towns, villages and neighbourhoods, which will shape the potential for future growth. It is critical for pro-growth (and pro-poor) municipal strategies that these towns and their development potential are taken into account.

Table 7: Social Facilities (CSIR Guidelines for the Provision of Social Facilities in South African Settlements, 2012)

Categories	Facilities
Health & Emergency Services:	Tertiary, Regional and District Hospital
	Community Health Centre
	Primary Health Clinic
	Fire Station
	Police Station
Social and Cultural (Public Service)	Performing Arts Centre
	Museum
	Library
	Civic Centre/City Hall Major Public Event Venue
	Home Affairs Office
	Thusong Centre
Civic Services	Labour Office
	Magistrate's Court
	Municipal Office
	Prison and Place of Safety
	Solid Waste Disposal Site and Recycling Depot
	Community Hall
	Children's Home
	Home for the Aged
	Hospice and Health Centre
	ICT Access Points
Social Services	Post Office/Agency and Post Boxes
	South African Social Security Agency (SASSA) Office and Social Grant Pay Point
	Cemetery and Crematorium
	Informal Urban Agriculture
	Local Market
	Worship Centre
Education Services	Further Education and Tertiary Institutions
	Special Education
	Secondary School
	Primary School
	Early Childhood Development (ECD): Grade R
	Early Childhood Development (ECD): Crèche
	Early Childhood Development (ECD): Resource Hub and Care Centre
Parks and Recreation Services	Parks
	Sports and Recreation: Overall Allocations for Sports Fields and Facilities

2.2.4 Key findings: Hierarchy of Towns

2.2.4.1. Settlement classification of CWDM towns per the PSDF (2014) based on the CSIR Guidelines is essential to indicate the distribution of existing primary social facilities in relation to settlement thresholds. This in tandem with population growth projections will assist government/municipalities in determining which towns are in a transition to a new classification (higher/lower order) which will in turn determine the types of social facilities that is needed.

2.2.5 Implementation proposals:

FOCUS AREA:	HIERARCHY OF TOWNS
STRATEGIES:	1. Population growth projections must be done at least every five years at settlement level to determine future population growth and hotspots.
	2. Settlements that are in transition to a higher/lower order classification as per the CSIR Settlement Classifications must be determined and included in municipal spatial development frameworks and integrated development plans well in advance to ensure that sufficient planning is done.
	3. Ensure higher levels of sustainable growth through, *inter alia*, focusing investment and development on a number of significant urban areas (according to a hierarchal order), whilst maintaining rural integrity and ensuring biodiversity conservation; to use growth as a catalyst to address poverty alleviation, spatial restructuring and the safeguarding of sustainability
	4. Consider and incorporate the growth and development of Cape Town as critical informant for district planning and implementation
PRIORITY:	HIGH

2.3 GROWTH POTENTIAL OF TOWNS

The Growth Potential Study (2013) determined the following growth potential for municipalities and towns in the Cape Winelands district based on assessing five thematic indices, namely: human capital, infrastructure availability, economy, physical attributes, and institutional capacity (refer to table 4 below);

The CW SDF does not propose an investment typology. Municipalities must assess settlements individually and consider strengths and weaknesses in terms of the thematic indices.

The GPS provides a comprehensive profile for each settlement based on 85 individual indicators. The information generated from these assessments can inform strategies and projects aimed at addressing the weaknesses of individual settlements and optimising the strengths to unlock opportunities for growth and development. These assessments are crucial and must be prioritised. Detail planning and broad consultations that include all stakeholders (private sector, government etc.) must have parity on the way forward.

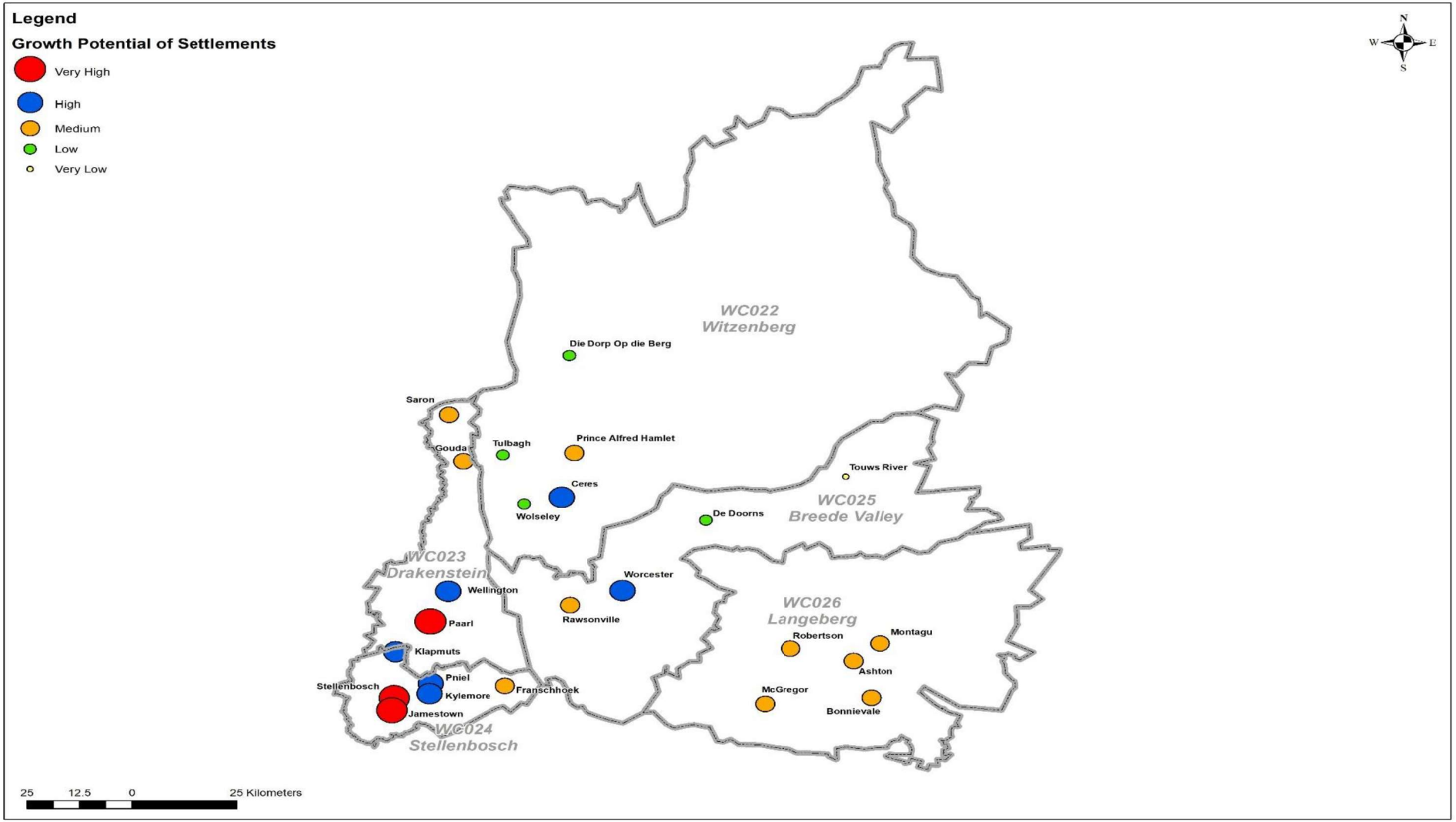
The PSDF (2014) identifies Stellenbosch, Klapmuts, Paarl, Ceres and Worcester as settlements that have very high growth potential and very high social needs. This is a deviation from the GPS (2013). The deviation is specifically aimed at Ceres and Klapmuts. Reasons given are based on the relationship between areas of urban growth pressure and important natural and agricultural resources.

Ceres as a primary regional service centre's growth outlook is strengthened by the proposed R45 000 000, 00 Agri-Park development that will be developed within the next five (5) years and as having a strong agricultural sector. Klapmuts, on the other hand, is near Stellenbosch, Paarl and the City of Cape Town. Klapmuts together with Paarl and Stellenbosch is located within the functional region of the Metro Economy.

Wellington is viewed by the draft GCMRSIF as a regional node in tandem with Paarl and has a very high/ high growth potential. This regional node fulfils a service, tertiary education, agri processing & distribution, tourist destination and administrative center function for the northern winelands region.

Table 8: Growth Potential and Socio-Economic Needs of CWDM Towns (GPS 2013)

B Municipalities:	Growth Potential: Settlement level	Growth Potential: Municipal level	Socio-economic needs
WITZENBERG		Low	
Ceres	*Medium (GPS 2013)* **Very High (PSDF2014)**		**High** **Very High (PSDF2014)**
Prince Alfred Hamlet	Medium		Medium
Op die Berg	Low		Medium
Tulbagh	Low		Medium
Wolseley	Low		Medium
LANGEBERG		Medium	
Montagu	Medium		Medium
Ashton	Medium		Medium
Robertson	Medium		**High**
MgGregor	Medium		Very low
Bonnievale	Medium		Medium
BREEDE VALLEY		Medium	
Worcester	**High**		**Very high**
Rawsonville	Medium		Low
De Doorns	Low		Low
Touwsrivier	Very low		Low
DRAKENSTEIN		Very high	
Paarl	**Very high**		**Very high**
Wellington	*Medium* **Medium -High (PSDF 2014)**		**Very high**
Gouda	Medium		Very low
Saron	Medium		Low
STELLENBOSCH		Very high	
Stellenbosch-Jamestown	**Very-high**		**Very high**
Pniel-Kylemore	**High**		Low
Franschhoek	Medium		Medium
Klapmuts	*Medium (GPS 2013)* **Very High (PSDF 2014)**		Low **Very High (PSDF 2014)**



Map 5: CWDM Growth Potential of Towns. The designations are informed by the GPS (2013), PSDF (2014) and draft GCMRSIF

2.3.1 Key findings: Growth Potential of Towns

- Ceres as a primary regional service centre's growth outlook is strengthened by the proposed R45 000 000, 00 Agri-Park development that will be developed within the next five (5) years and as having a strong agricultural sector. According to Witzenberg Municipality, the agricultural sector economy located within the Warm & Koue Bokkeveld are going to grow with 20-30% within the next five years. Farmers have planted new orchards etc. that will produce fruit within the mentioned period. The challenge for the municipality is the provision of adequate services and possible industrial land for cold storage facilities. The town of Ceres is further constrained by a lack of land for urban expansion. The expansion of the agricultural industry and in-migration must be monitored as can be seen from the high population growth percentages.
- The Growth Potential Study (2013) determined growth potential for municipalities and towns in the Cape Winelands district based on assessing five thematic indices, namely: human capital, infrastructure availability, economy, physical attributes, and institutional capacity. Municipalities must assess settlements individually and consider strengths and weaknesses in terms of the thematic indices. The latter will potentially highlight opportunities for investment.
- Stellenbosch, Paarl and Wellington are located within the functional metro economy of Cape Town. These towns function more as an extension of the metropolitan area, people live in the metro and work and make use of services in these towns and vice versa. The economic growth outlook will therefor always remain positive although the long-term impact of a "drying" Cape Winelands region is not known at this stage.

2.3.2 Implementation proposals:

FOCUS AREA:	GROWTH POTENTIAL OF TOWNS
STRATEGIES:	1. The thematic indices that was used to score municipalities and settlements in terms of potential for economic growth must be analysed. The high scoring thematic indices will present opportunities for investment and vice versa, the low scoring thematic indices will present strategic opportunities for investment that could improve the growth potential of a municipal area or settlement.
	2. Identify and consider the growth forces and historically evolved relations between the towns, villages and neighbourhoods as informants of future growth potential and options
	3. Integrate disadvantaged communities into the urban fabric through infill development on strategically located vacant land and corridor development along the main linkages between these communities and the major concentrations of job opportunities (where possible)
PRIORITY:	HIGH

2.4. INTEGRATED HUMAN SETTLEMENTS

Efficient settlements are underpinned by 'good' and effective governance/ municipal decision making, utilizing structural elements and existing resources efficiently to deal with legacy challenges (apartheid spatial layout of towns) and the availability of infrastructure. SPLUMA (16 of 2013) is founded on the development principle of efficiency whereby, "land development optimises the use of existing resources and infrastructure; decision-making procedures are designed to minimise negative financial, social economic or environmental impacts; and development application procedures are efficient and streamlined and timeframes are adhered to by all parties". The CW SDF embraces this as a key principle to enable efficient settlement.

The CWSDF will also build upon the three (3) frameworks that are mentioned below;

The Draft Greater Cape Metro Regional Spatial Implementation Framework (2016);

The GCMRSIF identified the following structural deficiencies which is applicable to most of the settlements in the CWDM, these structural deficiencies include;

- Pervasiveness of socio-spatial segregation,
- Sprawling and low-density multi-nodal network of settlements,
- Mismatches between where people live and work,
- Isolated concentrations of poverty severed from economic opportunities, and
- Underinvestment in public transport and freight infrastructure, making the region inaccessible to most residents and inefficient for business to operate in.

The Integrated Urban Development Framework (2016);

The Integrated Urban Development Framework (IUDF) provides Government's policy framework for transforming and restructuring South Africa's urban spaces. It is guided by the vision of creating 'liveable, safe resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life'.

In order to address the overall outcome of spatial transformation of the IUDF, the IUDF proposes an urban growth and management model premised on **compact, connected and coordinated cities and towns**. Yet it recognizes that the country has different types of cities and towns which have different roles and responsibilities. As such, the vision has to be interpreted and pursued in differentiated and locally relevant ways.

Strategic Goals:

1. **Spatial integration:** To forge new spatial forms in settlement, transport, social and economic areas
2. **Inclusion and access:** To ensure people have access to social and economic services, opportunities and choices

3. **Growth:** to harness urban dynamism for inclusive, sustainable economic growth and development

4. **Governance:** to enhance the capacity of the state and its citizens to work together to achieve spatial and social integration

The Strategic Goals inform the priority objectives of the nine policy levels, which are premised on the understanding that (1) integrated urban planning informs the basis of achieving integrated urban development, which follows a specific sequence of urban policy actions: (2) integrated transport that informs (3) targeted investments into integrated human settlements, underpinned by (4) integrated infrastructure network systems and (5) efficient land governance, which all together can trigger (6) economic diversification and inclusion, and (7) empowered communities; all of the above will demand effective (8) governance and (9) financial reform to enable and sustain these policy actions. The levers thus seek to address in combination the structural drivers that maintain the status quo.

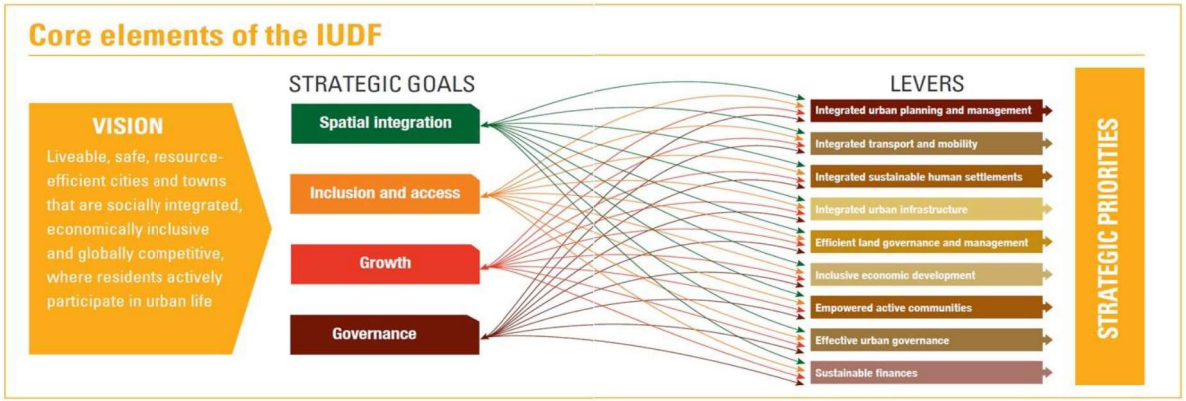
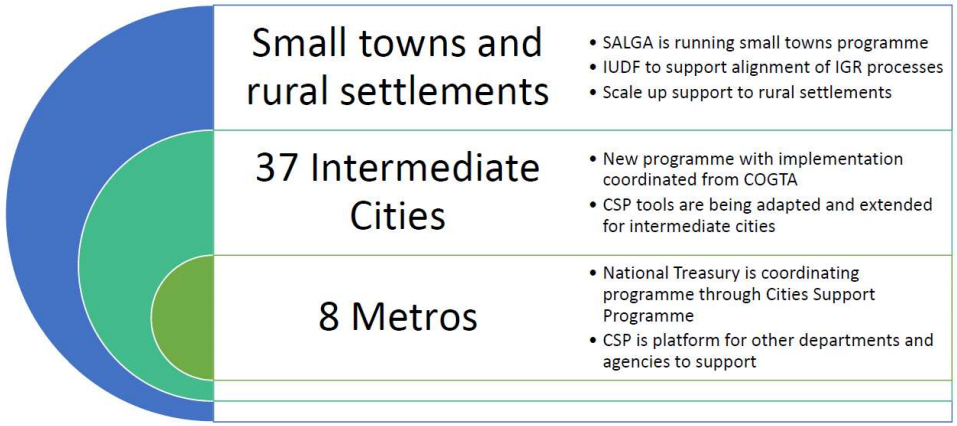


Figure 1: IUDF core elements.

In a letter addressed to the Director-General, Western Cape Provincial Government, 25 October 2016, from the National Department of Cooperative Governance (DCOG) notes that Cabinet resolved to implement the IUDF in a phased manner. During the Western Cape IUDF Forum meeting on 17 October 2017 it was noted that a differentiated implementation approach is required. The 8 Metros are already receiving support through National Treasury led City Support Programme (CSP) and SALGA is running with the Small Towns Regeneration Programme. The next phase will focus on providing support to 39, and not 37 as indicated in the figure 2 below, "Intermediate Cities" as they are expected to play a major role in the Country's approach to dealing with urbanisation.



Source: Extract from Presentation: Implementing the IUDF
Presented to: Western Cape IUDF Forum on 17 October 2017

Three Western Cape municipalities, namely Stellenbosch, George and Drakenstein, have been selected for the Intermediate Cities Municipalities programme. It needs to be noted that the selection of these intermediate cities will only be finalised once the selected municipalities have submitted their applications for the Integrated Urban Development Grant (IUDG) to DCOG and meet the minimum conditions of approval (i.e. top management stability, audit finding, capital expenditure of at least 70% of budget on average over the past two years, etc.). The benefits of the IUDG are:

- It offers municipalities flexibility to prioritise their local needs.
- Municipalities will no longer be required to submit business plans for projects on an annual basis but select projects from their 3-year Capital Programme derived from the 10-year Capital Expenditure Framework.
- It introduces a performance-based incentive component which the municipality can use at their discretion.

Irrespective of the outcome, the Cape Winelands District needs to be aware that the approval of the IUDG for the selected municipalities may have a considerable impact on the fiscal management and reporting structures of these municipalities.

The Provincial Spatial Development Framework (2014);

The PSDF (2014) proposes the following 'Settlement Policy Objectives' that must be implemented at municipal level. The 'Provincial Settlement Policy' objectives are to;

- Protect and enhance sense of place and settlement patterns
- Improve accessibility at all scales
- Promote an appropriate land use mix and density in settlements
- Ensure effective and equitable social services and facilities and
- Support inclusive sustainable housing.

2.4.1 THE MUNICIPAL FINANCIAL SERVICES MODEL (MSFM) [Read with Annexure 1]

The intention of the MSFM according to the PSDF (2014) is to investigate the impact of current spatial growth patterns of settlements on sustainability which include quantifiable financial impacts. Provincial spatial policy promotes the principles of urban compaction, integration and densification. Settlements however continue to sprawl peripherally as a result of decisions based on short term gains, be it political, economic or pragmatic.

The Municipal Financial Sustainability of Current Spatial Growth Patters was conducted as an informant into the 2014 PSDF. The objective of the Study was to investigate the impact of current spatial growth patterns on municipal sustainability in concrete and quantifiable terms. Provincial spatial policy has continuously promoted the principles of urban compaction, integration and densification yet our cities and towns continue to sprawl peripherally. Although the reasons for this continuous sprawl are complex, it is often a result of development decisions based on short-term gains. The study counteracts this short-term view with a longer-term perspective on what peripheral development does to the long-term financial sustainability of municipalities, as well as other non-financial impacts. It provides sound economic and financial evidence to support the spatial principles of compaction and densification and provides weight to spatial plans in the decision-making process.

The Study included applying the Municipal Services Financial Model[1] in seven case study municipalities. The model determined the municipal financial sustainability of two alternative spatial growth patterns namely: business-as-usual (BAU) and a compact scenario. The seven case study municipalities "were selected based on geographic spread and the degree to which they can be considered typical of their municipality category" and are included in the table below.

Table 9: Selected Western Cape Municipalities for the Municipal Financial Sustainability Model study.

[1] The Municipal Services Financial Model (MSFM) projects the infrastructure requirements and associated revenue and expenditure over a 10-year timeframe, using a calibrated baseline situation. The baseline position was developed from municipal documents and interviews with officials, while the future projections were based on municipal targets and a number of other growth assumptions. The critical assumptions regarded the form and density of residential development, and changes to capital and operating unit costs under the two spatial growth scenarios.

Selected WC Municipality	Category
City of Cape Town	A
Stellenbosch; George	B1
Saldanha Bay; Overstrand	B2
Theewaterskloof; Beaufort West	B3

A general finding of the Study was that the capital available to fund new infrastructure for growth as well as the rehabilitation of existing infrastructure fall far short of the calculated capital requirements. The current spatial growth patterns (BAU) increase this capital funding gap substantially.

Another key finding was that the case study municipalities are all vulnerable on their operating accounts, and that interventions will have to be undertaken to sustain the financial viability of municipalities, even without further spatial growth. The cumulative net position was shown as negative for all the case study municipalities however this can be improved with compaction and densification.

The implications of continuing urban sprawl in the province is that both capital and operating costs for municipalities will increase. Without an adequate increase in revenues to cover these costs, municipal financial viability will deteriorate at an ever-increasing rate over time. Through the provision of quantitative evidence, the Study concluded that the current spatial patterns are not sustainable for municipalities and are detrimental to the environment and the urban poor.

Table 10: Aggregate financial modelling results for the Western Cape.

Measure	**BAU**	**Compact**	**Difference**	**% Improvement**
Total capital investment required over 10 years (R million)				
City of Cape Town	106,877	88,095	18,782	18%
B1s	8,598	7,281	1,317	15%
B2s	14,824	12,688	2,136	14%
B3s	13,951	11,837	2,115	15%
Total for Western Cape	**144,250**	**119,900**	**24,350**	**17%**
Sum of net operating position over 10 years				

City of Cape Town	-15,556	-12,836	-2,720	17%
B1s	-2,628	-2,017	-611	23%
B2s	-2,372	-1,792	-580	24%
B3s	-3,394	-2,569	-825	24%
Total for Western Cape	**-23,950**	**-19,214**	**-4,737**	**20%**

The results of the Study are presented in Table 12 above. The Study notes that an analysis of the results should focus on the overall provincial picture and not necessarily on the category results.

"The total capital cost premium attributable to the current spatial growth patterns (BAU) over the next 10 years is projected to be R24 billion, or 17%, when compared with an alternative, compact spatial form. The dominance of the City of Cape Town, and hence the significance of spatial form in this municipality, is clear from the results, with 77% of the savings coming from this municipality alone. The percentage savings in capital costs decreases with decreasing municipal size.

On the operating account, the cumulative net position is shown to be negative for all municipal categories, but this can be improved with densification. The improvement in the province as a whole is estimated to be 20%, with the largest possible improvement being seen in the smaller B2 and B3 municipalities, whose operating accounts are highly sensitive to expenditure increases."

Taking the lead from the PSDF, the Cape Winelands District Municipality investigated the possibility of running the Municipal Financial Impact Analysis in the B-Municipalities that make up the Cape Winelands District; namely:

- Stellenbosch Municipality;
- Drakenstein Municipality;
- Breede Valley Municipality;
- Witzenberg Municipality; and
- Langeberg Municipality.

The main purpose of running the Municipal Financial Impact Analysis in the B-Municipalities is to generate baseline information against which decisions on development plans can be assessed. Find the Municipal Financial Impact Analysis attached as Annexure 1.

Stellenbosch Municipality formed part of the original Study thus this municipality has already been baselined. As 4 years have passed since this baseline information was generated, we will be able to determine if the MFSM tool will be able to indicate whether or not the municipality is starting to move towards a more financially sustainable position based on development decisions taken during the last four years.

2.4.1.1 Stellenbosch Case Study (Source: Extract from the Municipal Financial Sustainability of Current Spatial Growth Patterns, 2013):

The Stellenbosch case study shows that compaction has the greatest capital benefit for public services, followed by electricity, while the benefits for the other sectors are more marginal (Figure 12,). Again, the impact of opting for a greater proportion of medium density low cost housing solutions manifests as a negative cost difference. The total capital saving for Stellenbosch due to compaction is estimated at R480 Million, or 12% less than the BAU scenario.

The cumulative net operating account for the compact scenarios is 21% better than that of the BAU scenario for Stellenbosch. The breakdown of operating position by services (Figure 13) shows the familiar pattern of maximum difference in sanitation, then solid waste, then water supply. The electricity difference is only slightly negative for Stellenbosch.

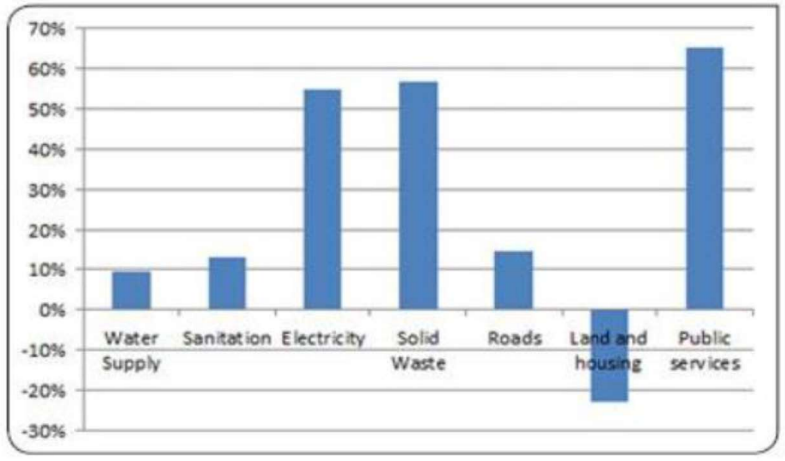


Figure 12: Savings on capital expenditure due to compaction by sector for Stellenbosch

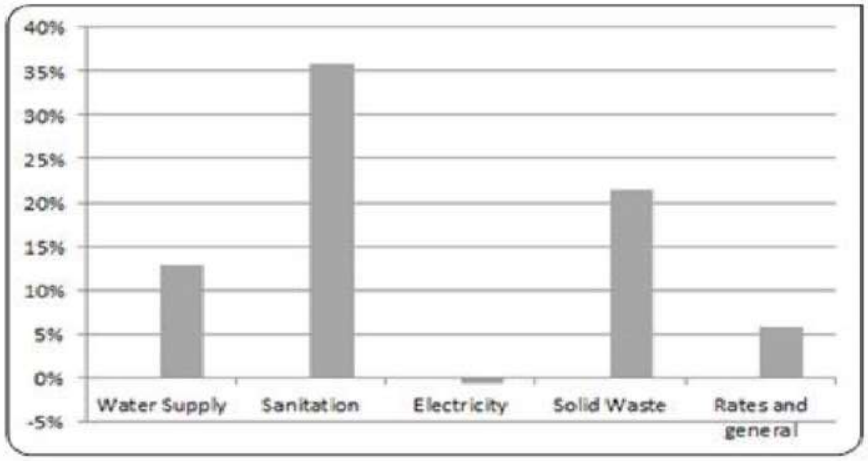


Figure 13: Cumulative improvement in operating account position by sector due to compaction for Stellenbosch

2.4.1.3 Implementation proposals for Annexure 1; Municipal Impact Analysis Cape Winelands, The Financial Impact of Spatial Growth Patterns.

FOCUS AREA:	MUNICIPAL FINANCIAL SERVICES MODEL
	1. Ensure compaction, managing growth and clustering urban functions within the urban footprint; contain existing lower order settlements (including hamlets) within the current urban footprint except if extended or popular ventures can provide sustainable growth opportunities (e.g. Klapmuts); ensure that all new developments include a 'range of elements' that contribute to a more sustainable urban environment.
	2. Focus on improving functioning of settlements and achieving design standards; create and apply urban design guidelines for historic precincts within urban areas.
	3. Create sustainable and liveable urban environments by ensuring access and choice to urban markets, services, amenities and provisions.
	4. Create integration of urban areas through physical (if possible) and socio-economic integration.
	5. Create a functional and sustainable urban open space network.
	6. Integrate the disadvantaged communities into the urban fabric through infill development on strategically located vacant land and corridor development along the main linkages between these communities and the major concentrations of job opportunities (where possible).
	7. Consider the significance of infrastructure investment programmes on urban form and structure (developers of all types of property prefer locations where bulk services are available).
	8. Locate high density residential accommodation and business opportunities, from informal street trading to formal shops, offices and factories at the appropriate scale, around clusters of community facilities grouped at the appropriate scale
	9. Buildings that accommodate community activities, as well as education, health and entrepreneurial development and business and skills training, should be located at points of highest access in urban settlements.
	10. 50% of the five major urban activities (public transport access points, residence, recreation, shopping and employment) should be accessible within walking distance (1000m) of residential dwellings
	11. Compile neighbourhood plans for the higher-order towns in the district (to also consider the structure, function and purpose of neighbourhoods); complete community-based planning as a prerequisite for sustainable development.
	12. Promote the establishment of integrated development zones.
PRIORITY:	HIGH.

2.4.2 INTEGRATED DISTRICT PUBLIC TRANSPORT NETWORK:

The **bulk of the population** of the CWDM lives in and around the more urban local municipalities of Drakenstein and Stellenbosch. There are also a large number of people living on farms and in the rural hinterlands of the CWDM. The largest concentration of people is found in the main urban hubs of Stellenbosch, Paarl/Wellington, Worcester, Ceres, Robertson and Ashton. Most of the CWDM has very low-density levels of persons per km². Distances between towns are also quite far which further increases the reliance on motorised modes.

The **public transport services** in the CWDM allow people to access destinations in their local area or other settlements to which they regularly travel, but which cannot be reached on foot or by other means of Non-Motorised Transport (NMT) modes. These destinations include essential services or activities accessed on a frequent basis, such as places of employment, shops, government services and schools. Public transport holds approximately 14% of the transport modal share, NMT 48% while 26% of people use private vehicles to reach their destinations in the CWDM.

Table 11: Public Transport Services by Mode

Mode	Type of Service
Train	Commuter service.
Bus	Mainly for the transportation of learners in terms of scholar bus contracts administered by the Department of Education.
Minibus-taxis	Commuter, scholar services and off-peak weekday services to shopping and hospitals/clinics.
Other Transport provided by farmers	Transport of farm workers over weekend to shops.
Department of Health fleet of vehicles	Serves various hospitals and clinics but mainly for own staff and transporting of medicine and medical equipment.

Currently the **Minibus-Taxi (MBT)** is the dominant public transport mode providing both commuter and long-distance services. MBT services operate predominantly out of the urban centres located within each municipality. Generally, it is these urban centres which are responsible for the majority of MBT passenger movements throughout the week. The Breede Valley and Drakenstein municipalities account for over 75% of total passenger demand in the CWDM.

Rail services within the CWDM are available in 4 local municipalities, namely Drakenstein, Witzenberg, Breede Valley and Stellenbosch municipality, and stop at 24 stations serving the CWDM. The CWDM have a train freight rail system which accommodates passenger transport. Commercial long-distance bus services that operate through the CWDM are those of InterCape, Greyhound, SA Road Link, and TransLux.

Public transport infrastructure in the CWDM consists of 42 formal and 21 informal MBT and bus facilities and 3 formal air strips. Roughly half of the formal MBT rank facilities are off-street facilities, designed for MBT operations, with demarcated lanes and bays according to destinations. There are shelters and mostly some amenity facilities for passengers, but there is a need for both the construction of additional facilities as well as for the upgrade of the inadequate facilities in the CWDM.

The **N1 rail and road corridor** and the **Breede River Valley corridor** are two major strategic corridors in the CWDM and they are major distributors of people, goods and services from the CWDM to other municipalities within the Western Cape, to other provinces. These major corridors are supported by other major roads **(R44, R45, R46, R318, R303, R60, and R6**2) which distribute goods and services to the people within the DM (refer to Map 6 below, Major Transport routes).

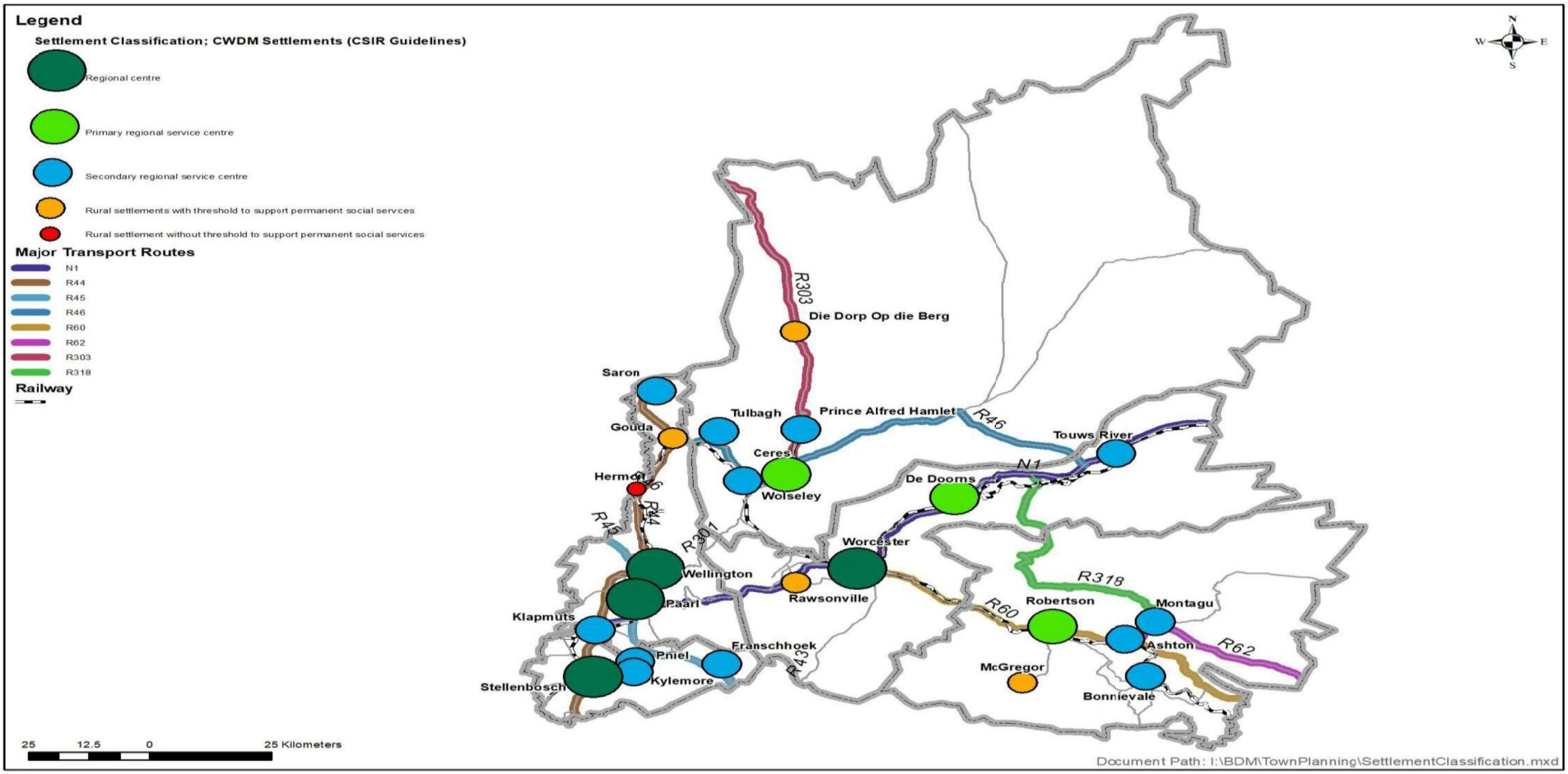


Table 12: Key Spatial Challenges per Local Municipality.

Local Municipality	Key Spatial Challenges
Drakenstein	• Lack of available land for transport and related infrastructure (Huguenot Station Precinct). • No park-and-ride facility at Huguenot Station. • Poorly defined transport and public spaces in Paarl Central Business District (CBD). • Key nodes (Wellington and Paarl) do not support NMT. • Poor transport-land use integration in Paarl CBD.
Stellenbosch	• Lack of integrated settlements within Municipality. • Dispersed rural settlements. • Derelict and unutilized rail infrastructure (Franschhoek rail connection). • Inter-city bus facilities are poorly located.
Breede Valley	• Poor transport-land use integration in Worcester CBD. • Worcester CBD does not support NMT. • Dispersed and non-integrated public transport facilities or ranks within • Worcester CBD (i.e. rail, long-distance bus, taxi). • Public transport services and facilities are non-existent or limited in rural areas.
Witzenberg	• Lack of integrated settlements, particularly at Ceres. • Dispersed public transport facilities within Ceres CBD. • Poorly located public transport facilities at Ceres and the underutilization thereof.
Langeberg	• Dispersed public transport facilities or ranks at Robertson CBD no integration. • Dispersed rural settlements with vast distances between them. • Poor NMT infrastructure. • Public transport facilities are limited within the rural settlements (McGregor, Montagu).

2.4.2.1Key findings: Integrated District Public Transport Network

2.4.2.1.1 Refer to table 12 (Key spatial challenges per local municipality)

2.4.2.1.2 The CWDM Integrated Public Transport Network Framework (2012) indicated that there is no integration between Spatial Planning/ Land Use Management and Integrated Transport Planning. The leads to the following challenges;

- General lack of transport and land use integration particularly in respect to nodes and corridors.
- Urban nodes are not dense enough to create the thresholds that can sustain affordable and convenient public transport services in the continued low-density urban sprawl pattern of development.
- Owing to the dispersed population distribution in the rural areas, public transport systems are not viable, and taxi-operations are relatively expensive over long distances.
- A large portion of the population still walks significant distances owing to low income levels and/or poor public transport service provision.
- The unavailability of land for transport and related infrastructure.
- The lack of integrated settlements.

2.4.2.2 Implementation proposals:

FOCUS AREA:	INTEGRATED DISTRICT PUBLIC TRANSPORT NETWORK
STRATEGIES:	1. Strengthen the transport and other communication networks that link the better located areas with those with less potential; Increase the ability to commute between higher order and lower order towns (refer to settlement classifications) by managing the operating environment, transport system and decision-making mechanisms relevant to transport planning; improve rural transport opportunities.
	2. Ensure mobility through affordable, reliable and time-starved transport opportunities, even if it means providing subsidised public transport where marginalised communities require government intervention (mainly rural areas) as a principle-led response; enhance mobility by locating residential areas close(r) to trip destinations.
	3. Apply the principles of densification and diversification along (selected) transport routes; Public transport services for special needs passengers; provide and ensure universal access to public transport facilities for persons with physical disabilities.
	4. Transport for learners: facilitate provision of improved public transport services for learners in rural areas; identify candidate pilot projects for specialized services.
	5. Non-motorized transport and road safety: improve the level of provision for pedestrians and cyclists.
	6. Institutional structures: establish institutional structures for the management of public transport at municipal level; increase capacity and resources for public transport planning and management; set up co-coordinating structures between municipalities.
PRIORITY:	HIGH

2.4.2.3 CWDM Implementation Plan: Integrated District Public Transport Network

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Road Safety Education	R1 148 000, 00	Public Transport Regulation	Annually
Sidewalks and Embayments	R3 980 000, 00	Public Transport Regulation	Annually
Integrated Public transport	R2 024 000, 00	Public Transport Regulation	2018/2019
CBD Public Transport Plans	R250 000, 00	Public Transport Regulation	2018/2019
Regional Taxi Council	R10 000, 00	Public Transport Regulation	Annually

2.4.3 CULTURAL LAND SCAPE: SENSE OF PLACE

The Cape Winelands is one of the few areas in the country where a specific regional character has established itself over the past three centuries. This regional character is of immense value and must be conserved and recognized as the guiding tenet for planning and development.

To achieve this, it is suggested that the principles pertaining to the protection, enhancement and integration of regional attributes, be recognized in development planning within the district. In this regard, "critical regionalism" which recognizes the quality and attributes of regional characteristics and builds upon the development of regional idiosyncrasies and variations, must be considered with regard to spatial planning and design decisions. The principles of "critical regionalism" specifically 'Sense of Place 'is described as the 'degree to which a place can be clearly perceived and mentally differentiated and structured in time and space by its residents, and the degree to which that mental structure connects with their values and concepts' (Lynch, 1998).

In evaluating a sense of place, one needs to recognise that there are various 'components of sense' that, together, provide a particular environmental quality for the observer. 'Sense of place' is based upon the sensed quality of the unique 'components of sense' of a particular place, including its identity, character, structure, local climate, topography, vegetation, building materials, building practices, and local authenticity.

In practice, in the preparation and consideration of development applications (including architecture and placement of new infrastructure), it is important to ensure that the above 'components of sense' are incorporated into the planning and design. For example, this implies that any development within the natural environment should inter alia reflect elements of the traditional vernacular of the area, make use of local natural building materials, and reflect a strong sense of local authenticity.

Protection of (parts of) the Cape Winelands Cultural Landscape is accomplished through an incremental approach and includes the following areas:

- Idas Valley, Dwars River Valley, Groot Drakenstein/Simondium and Simonsberg State Forest as provisionally protected areas, and
- The "listing" of the Cape Winelands Cultural Landscape as a World Heritage Site (WHS) at UNESCO.

The listing of the WHS does not represent a specific conservation area but merits further investigation to, inter alia, consolidate planning policy, map and layer the WHS and identify and "lift out" cultural landscapes. Cultural landscapes are highly sensitive to impacts that change the character and public memory of a place and include a landscape of high rarity value and scientific significance. Already in 2005, the areas of Stellenbosch, Franschhoek and Paarl were considered as National heritage sites in terms of Section 27 of the National Heritage Resources Act (25 of 1999). Other areas that might be considered as provincial heritage sites include the towns of Tulbagh, Robertson, McGregor and Montagu.

The provisionally protected areas of Idas Valley, Dwars River Valley, Groot Drakenstein/Simondium and Simonsberg State Forest are managed according to a formal Conservation Management Plan that operates under the auspices of a local Heritage Committee. Ten of these committees exist in the Stellenbosch/Drakenstein municipal areas with a dire need to sensitize communities regarding the existence and value of cultural landscapes.

Heritage Western Cape (HWC) is responsible for the management and protection of all provincial heritage sites, generally protected heritage and structures in the Cape Winelands district. Based on discussions with SAHRA, the following steps will advance the recognition and protection of the cultural landscape,

- Photographic/historic surveys (to include a fundamental shift in focus from surveying monuments to rural landscapes)
- To determine sensitivities
- To update existing surveys
- To include the cultural (rural) landscape in existing surveys
- To determine grading of sites
- Compile Conservation Management Plans, and
- Complete Heritage Impact Assessments (only when development applications are submitted to relevant decision-making authorities).

Within the interdependencies of sustainable development, the protection of cultural landscapes should feature in the ability of communities to impact on decision-making, the sharing of the burden and societies' caring and protection of a system of values.

The PSDF (2014) proposes the following 'Policy Objectives' to protect, manage and enhance critical regionalism specifically 'sense of place'

- Prevent settlement encroachment into agricultural areas, scenic landscapes and biodiversity priority areas, especially between settlements, and river corridors.
- Promote smart growth ensuring the efficient use of land and infrastructure by containing urban sprawl and prioritising infill, intensification and redevelopment within settlements.
- Respond to and enhance an economically, socially and spatially meaningful settlement hierarchy that considers the role, character and location of settlements in relation to one another while preserving the structural hierarchy of towns, villages, hamlets and farmsteads in relation to historical settlement patterns.
- Use heritage resources, such as the adaptive use of historic buildings, to enhance the character of an area, stimulate urban regeneration, encourage investment and create tourism opportunities, while ensuring that interventions in these heritage contexts are consistent with local building and landscape typologies, scale, massing, form and architectural idiom.
- Conservation strategies, detailed place-specific guidelines and explicit development parameters must supplement urban edges to ensure the effective management of settlement and landscape quality and form.

2.4.3.1 Key findings: Cultural Land Scape, Sense of Place

2.4.3.1.1 Heritage surveys with determined sensitivities that includes rural cultural landscapes, conservation management plans and Heritage Impact Assessments is not prioritised by the relevant role players.

2.4.3.2 Implementation proposals:

FOCUS AREA:	CULTURAL LANDSCAPE, SENSE OF PLACE
STRATEGIES:	1. Recognise the principles pertaining to the protection, enhancement and integration of regional attributes in development planning. 2. Consider "*critical regionalism*" which recognizes the quality and attributes of regional characteristics and builds upon the development of regional idiosyncrasies and variations with regard to spatial planning and design decisions. 3. Changes proposed to landscapes and urban settlements whether they be for agricultural or urban and rural development purposes, should consider any heritage resource policy that may be relevant including those which might be proposed, e.g. Proclaimed Urban Conservation Areas, SAHRA Regulations, World Heritage Site applications etc. 4. Foreign or unsympathetic styles of site layout and buildings should be discouraged in urban settlements and rural areas so as to strengthen the local sense of place and minimise visual impact. 5. Urban design and architectural guidelines should be prepared to control the function and appearance of the main street or streets and squares in all of the urban settlements. These should control, among other things, building styles and heights, materials and colours, advertising, roadways and pavements, encourage colonnades and other devices to shelter pedestrians and landscaping and tree planting, and respect historic buildings and precincts. 6. Tree planting, including appropriate indigenous, ornamental and fruit trees, urban greening (landscaping) and food gardens should be encouraged along streets and in open spaces as part of urban restructuring programmes in villages and towns. 7. Conduct a systematic process, starting at the scale reminiscent of the proposed WHS (or Cape Winelands Biosphere Reserve), to identify and grade sites (and routes) and classify landscapes to protect the cultural landscape; use these findings for the compilation of an inventory of the heritage resources by the planning authority and submission of such inventory to the relevant provincial heritage resources authority. 8. Conduct the necessary steps to give effect to the registration of the WHS. 9. Responsible heritage resource authorities and local authorities to establish partnerships between themselves and with nongovernmental organisations, business, farmer unions, etc to effectively manage national heritage resources. 10. Compile a visual resource management plan for the N1 route between the Hugenote Tunnel and Cape Town. 11. Include design and architectural guidelines (including reference to choice of building material) as a key component of localised planning (and SDFs of B Municipalities 12. Ensure sufficient resources (personnel and funds) within SAHRA and HWC to perform legislative mandates
PRIORITY:	HIGH

2.4.4 WATER INFRASTRUCTURE

In the CWDM area, 86.9% of households have access to flushing toilets and 97.7% of households have access to piped water. One of the most critical issues impacting on the economic-development process in the district is the water supply in the region and in each of the different towns and settlements, taking into account concerns about long-term water supply trends and climate-change processes.

For the Langeberg and Witzenberg municipalities, small local supply schemes meet almost all the urban water requirements. Augmentation of current urban supply schemes may be required in the future, depending on growth in requirements. However, all local authorities must first undertake and implement more efficient water use and water re-use from their existing resources, before consideration will be given to the development of new schemes. Invasive alien vegetation management remains as crucial as water infrastructure maintenance. Municipalities were tasked by National/Provincial government to development Invasive Alien Vegetation Management Plans. It is the intention of these plans to identify government/municipal land that needs to be cleared of invasive vegetation.

Table 13: Dams for domestic supply in the CWDM area.

Local Municipalities	Capacity (million m3)	Domestic use	Other use
WITZENBERG			
Koekedouw	22.5	Ceres, Prince Alfred Hamlet	
Lakenvlei	10.3	Roode Elsberg Dam for De Doorns.	Irrigation/Domestic As per Roode Elsberg
Tulbach Town Dam		Tulbagh	
LANGEBERG			
Poortjieskloof	9.2		irrigation
Klipberg	2.0		Irrigation
Pietersfontein	2.0		Irrigation
Moordkuil/Draaivlei	1.07		Irrigation
Grootvlei	1.6		Irrigation
BREEDE VALLEY			
Keerom,	10.4		Irrigation
Stettynskloof	15.5	Worcester, Rawsonville	Irrigation
Greater Brandvlei	319.3	Robertson, Ashton, Montagu, Bonnievale	
Elands Kloof	11.4	Touwsriver	Irrigation
Fairy Glen	0.5		Irrigation
Buffelsjag	5.2		
Roode Elsberg	7.7	De Doorns	Irrigation
DRAKENSTEIN			
Wemmershoek	58.8	CoCT, Paarl	
Voelvlei	164.1	CoCT, Cape West Coast	
Paarl Mountain		Paarl	
STELLENBOSCH			
Idas Valley 1	0.50	Stellenbosch	
Idas Valley 2	1.54	Stellenbosch	
Bergriver	130	CoCT, Franschhoek, Stellenbosch	

2.4.4.1 Potential risks associated with water infrastructure:

Dam failures and disruptions to basic services i.e. water supply is highlighted in the CWDM Risk Assessment (2014) as potential risks.

Dam failures; There were two dam failures reported since 2008, in Vlottenburg during 2012 (Stellenbosch Municipal area) and Tulbagh in 2016 (Witzenberg Municipal area). To date there was an extreme increase in rainfall with major floods causing damage of approximately R 1.6 billion.

Areas, communities or households most at risk;

- Communities, towns and property owners living downstream of a dam.
- Farming communities, under the category of agriculture, are the second biggest sector of water users after the City of Cape Town. Their dependency on water increases their vulnerability, should a dam break occur.
- Roads and other critical infrastructure situated close to the dam e.g. water purification systems and sewage treatment plants.

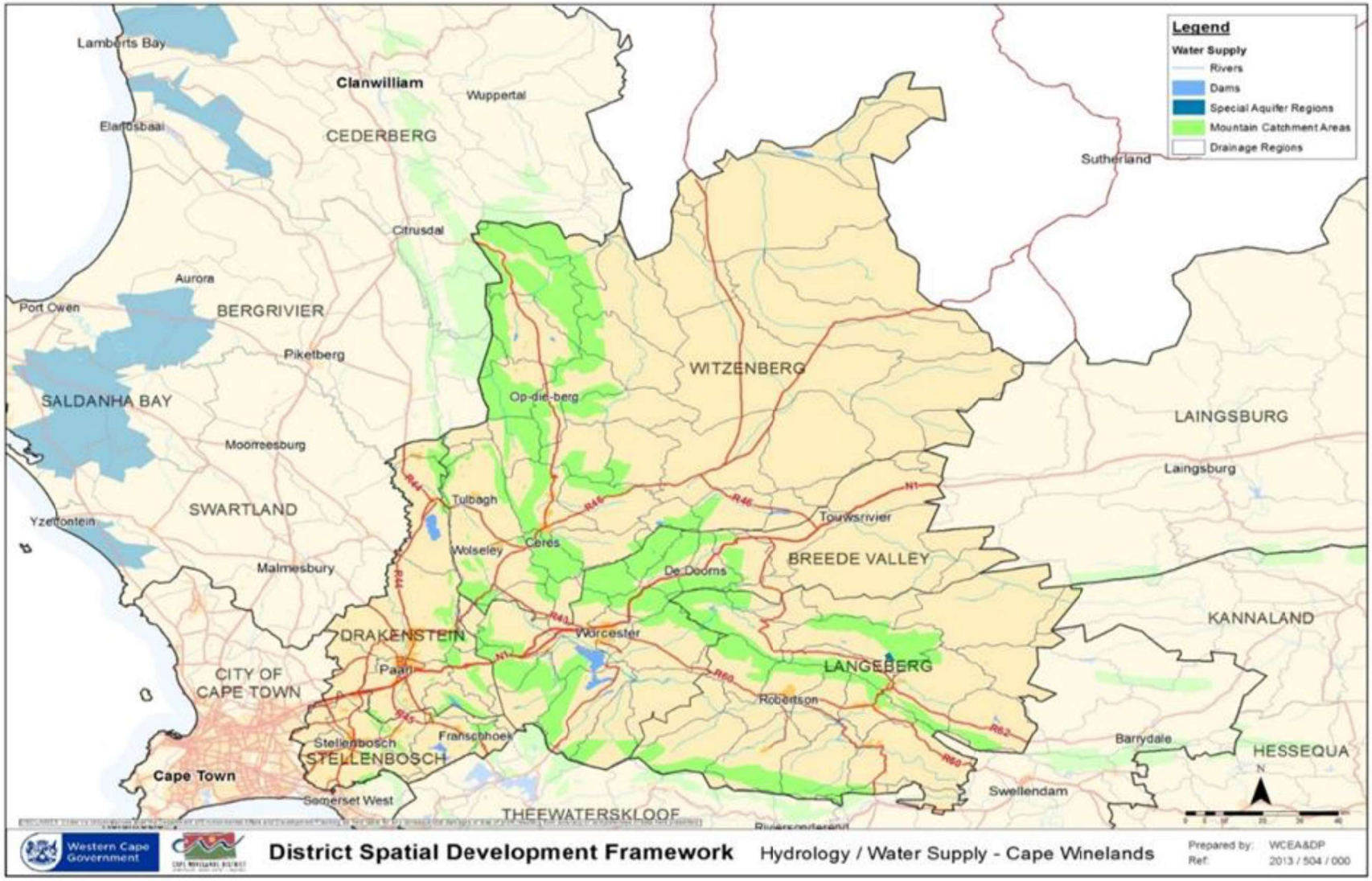
Disruption of Basic Services: Water Supply;

Water supply disruptions occur during maintenance or repair work. The CWDM area has many indigent households, the latter might have an impact on municipal maintenance budgets. It may be necessary for municipalities to develop significant indigent policies that does not add to the poverty trap. Likely impacts of disruptions could result in;

- Health and sanitation problems if prolonged interruptions occur
- Economic impact to businesses and industries due to a lack of production
- Discomfort to households

Conditions that increases the severity of water supply disruptions are;

- As a result of decreased rainfall (climate change), all resources, especially surface water resources, will be under pressure and will have lower safe yields
- Due to increased heat units, water demand from agriculture, as well as from towns will rise sharply even in the event that average rainfall would not
- reduce much, it is anticipated that much greater variability of rainfall will occur within a year and also between years due to more extreme climatic conditions.
- From a water service perspective, the most significant challenges are the augmentation of existing water sources, the replacement and upgrading of old infrastructure to accommodate development, the provision of sustainable basic services to informal settlements and to ensure the provision of basic services to rural communities located on private farms
- The elevated concentrations of dissolved salts from the naturally saline soils and groundwater are aggravated by intensive agricultural land use
- Effluents can be washed into rivers during high rainfall events increasing the organic loads to the receiving rivers influencing water quality.



Map 7: Hydrology and water supply.

2.4.4.2 Key findings: Water Infrastructure

2.4.4.2.1 Refer to disruption of basic services- water, specifically conditions that increases the severity of water supply disruption.

2.4.4.2.2 Municipalities must develop indigent policies, indigent household figures are as follow; Breede Valley 7315, Drakenstein 12429, Langeberg 7413, Stellenbosch 4217, Witzenberg 4572 (CWDM IWMP, 2015).

2.4.4.2.3 Catchments of the bulk of dams within the CWDM is infested with invasive alien plant species. The invasive plant species pose a major threat to water conservation.

2.4.4.2.4 Municipalities must complete their Invasive Alien Vegetation Management Plans. Implementing these plans through active alien clearing is as important as water infrastructure maintenance.

2.4.4.2.5 Increased risk of drought due to climate change will add extra pressure on water infrastructure. Municipalities should seek and employ alternative methods to augment water supply as well reduce the demand.

2.4.4.3 Implementation proposals:

FOCUS AREA:	WATER INFRASTRUCTURE
STRATEGIES:	1. Municipalities must complete their Alien Vegetation Management Plans for municipal properties; Increase alien clearing in catchments located throughout the entire District and B municipalities in partnership with Department of Water and Sanitation and LandCare Programme.
	2. Ensure that the municipal infrastructure to provide basic services to communities is in place, effective and maintained; for this to be achieved within a common understanding in enough detail of the long-term objectives and direction of our society and a common vision.
	3. Determine the impact of long-term water supply trends and climate-change processes on growth and development.
	4. Invest in technologies and systems that decouple economic growth from rising raw water consumption 5. Where urban development proposals will exceed infrastructure capacity, applications should be refused until provision is made to deal with the additional loads
	6. Local authorities to undertake and implement more efficient water use and water re-use from existing resources; management of infrastructure and optimizing operation of the works will ensure minimum water losses at all water works and pipelines; training of process controllers to increase awareness of the importance of operating and maintenance in the works.
	7. Water augmentation possibilities that can be investigated and implemented by municipalities include: Aquifer recharge, subsidising grey water systems and rain tanks, making greywater systems compulsory for new developments, treating and storing storm water, treating sewerage for water use, small catchment management levies, rehabilitation of wetlands and riparian areas, alien clearing, gamifying water targets to increase participation/adherence by communities.

	8. Manage decreased water quality in ecosystem; Invasive aquatic weeds removal and management in Berg and Breede Rivers by the Cape Winelands District Municipality, B municipalities, DOWA, property/landowners and water user associations. Continuous clearing should be done annually between September and April. The specific area to be targeted is between the R45 and Hermon.
	9. Manage the quantity of water available for irrigation and drinking; Cape Winelands District Municipality to facilitate research into the re-use of wastewater within the District Municipality, with B-municipalities indicating which towns should be included in the research. The economic viability and quantities are important selection criteria. The replenishment of aquifers by infusion of purified waste water should form part of the research. Implementation by relevant Engineering Departments of B-municipalities. Cape Winelands District Municipality to facilitate the assessment of existing infrastructure for water storage. Implementation by Engineering Departments of B-municipalities.
PRIORITY:	HIGH

2.4.4.4 CWDM Implementation Plan: Water Infrastructure

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
EPWP Invasive Alien Vegetation Management	R 2 030 000, 00	Land Use and Spatial Planning Section	Annually
River Rehabilitation	R 360 000, 00	Land Use and Spatial Planning Section	Annually
Service Delivery Agreement with Cape Winelands Biosphere Reserve-Water Augmentation Programme; Aquatron Toilet System	R150 000, 00	Land Use and Spatial Planning Section	Annually
Subsidy: Water/Sanitation Rural areas/Farms	R1 000 000, 00	Municipal Health Services	Annually
Provision of Water to Schools	R500 000, 00	Projects and Housing	Annually

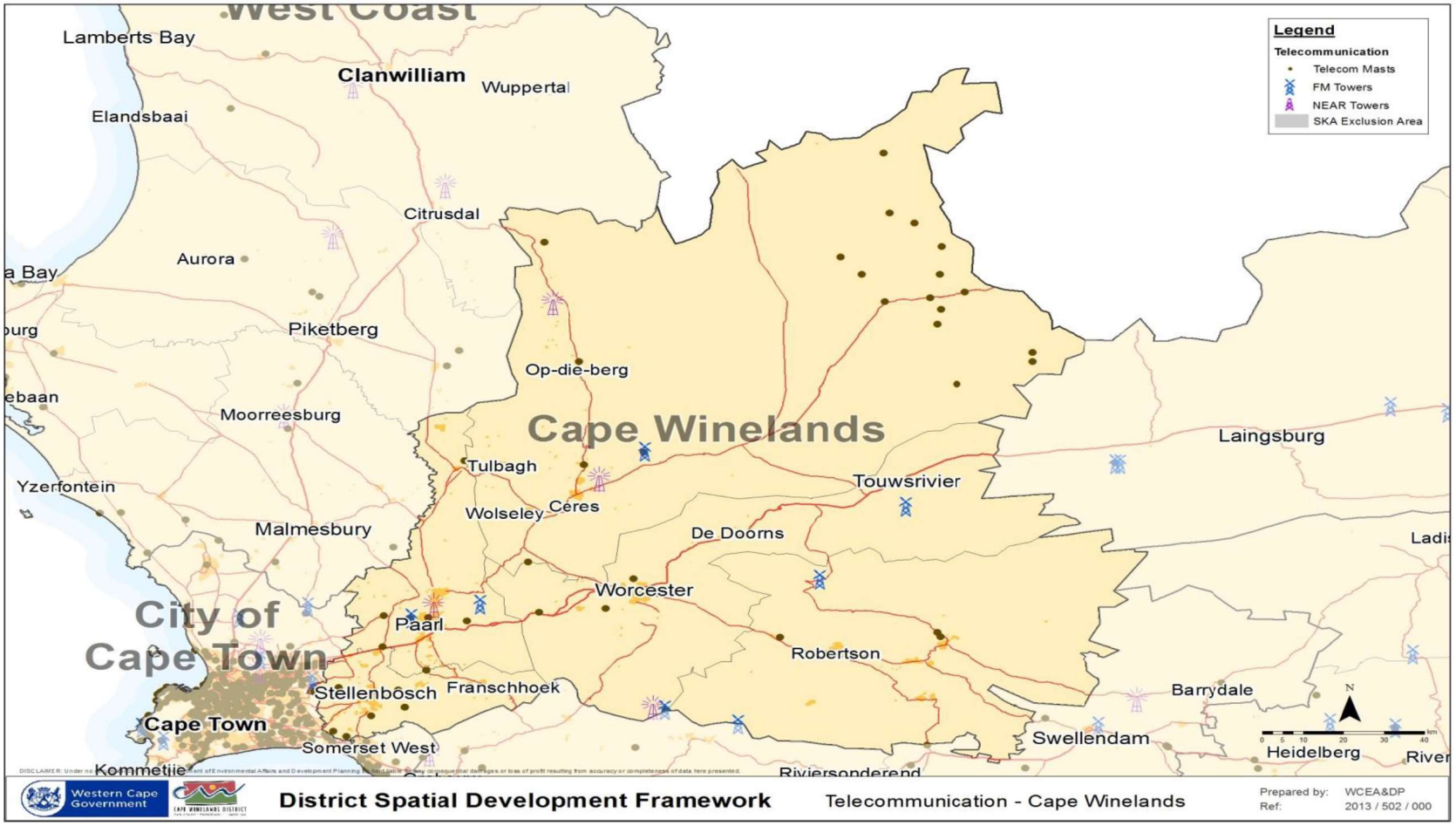
2.4.5 ENERGY & TELECOMMUNICATION INFRASTRUCTURE

According to the PSDF (2014) the built environment sector (i.e. households, commerce and services) only consumes 13% of total energy. Electrical distribution infrastructure is well established, has good coverage, and is in a reasonable condition. Current deficits and uncertainties lie in the generation and sourcing of electricity capacity. The provincial energy focus is on lowering carbon emissions and local generation (e.g. renewable and greater use of gas).



Map 8: below illustrates Eskom lines and substations and Wind Farm Applications.

Whilst access to mobile communication has increased rapidly, internet access has been stagnant. It is the strategy of Provincial Government that every citizen in the Western Cape has access to affordable high-speed broadband, has the necessary skills to use it, and uses it in their daily lives. Map 9 below illustrates telecommunication within the CWDM.



Map 9: Telecommunications Infrastructure

2.4.5.1 Implementation proposals:

FOCUS AREA:	ENERGY AND TELECOMMUNICATION INFRASTRUCTURE
STRATEGIES:	1. Provide low-cost high-speed network services in the main centres.
	2. Pipelines, transmission lines and telecommunications masts should be aligned along existing and proposed transport corridors rather than along point to point cross-country routes.
	3. As a principle-led (and policy) response, authorities to consider and promote the development of renewable energy power generation capacity subject to appropriate scale, form and location.
PRIORITY:	HIGH

2.4.6 SOLID WASTE DISPOSAL

According to the White Paper: Policy on Pollution, Waste Minimisation, Impact Management and Remediation (2000), municipalities are responsible for providing waste management services, and managing waste disposal facilities. Specific functions to be carried out by municipalities include;

- Compiling and implementing general waste management plans, with assistance from provincial government
- Implementation of public awareness campaigns
- Collecting data for the waste information system
- Providing general waste collection services and managing waste disposal facilities within their areas of jurisdiction
- Implementing and enforcing appropriate waste minimisation and recycling initiatives, such as promoting the development of voluntary partnerships with industry, including the introduction of waste minimisation and recycling initiatives, such as promoting the development of voluntary partnerships with waste minimisation clubs.

The CWDM's function is limited to the development of a District Integrated Waste Management Plan and the regionalisation of landfill, both investigation and possible management of a regional facility which will pose operational and financial challenges. The CWDM initiated the investigation of two regional landfill sites, a site for the eastern and western portion of the district. The investigation into a regional landfill site for the eastern portion of the CWDM was successful. The proposed site will service Langeberg, Witzenberg and Drakenstein municipalities. However, the outcome of the investigation for the western portion of the district which consist of Stellenbosch and Drakenstein municipalities indicated that there is no suitable space for a regional landfill site.

Currently a licence was issued for the regional landfill site in the eastern portion of the district. An appeal was lodged against the issuing of the mentioned licence due to the minister rejecting objections on the application for the licencing of the mentioned regional landfill site. Whilst the regional landfill site has not been constructed the local municipalities are managing waste disposal sites in their relevant municipal areas. These local waste disposal sites are going to be closed upon the construction and opening of the regional land fill site in the eastern portion of the CWDM. Waste disposal issues relating to a lack of a regional landfill

site for the western portion of the district (Stellenbosch & Drakenstein municipalities) could be solved by Drakenstein municipality's Waste to Energy programme. The CWDM will encourage possible negotiations between the two local municipalities.

2.4.6.1 Status Quo: Local Municipal Waste Management (CWDM IWMP, 2015)

Waste management in local municipalities resides under three municipal functions, i.e. waste collection, waste disposal and waste reduction.

Waste Collection; Where collection of domestic municipal waste is concerned, the majority of urban residents within the CWDM area are receiving a municipal collection service.

- Breede Valley Municipality; there is currently no collection service to farmers and rural households' due to the problem of transport distances and accessibility. Farmers offload their waste at the disposal sites free of charge. The unserviced areas in the municipality are the rural areas and farms. Received figures indicates that 7190 out of the 7315 indigent households receive free basic refuse removal, which is 98%.
- Drakenstein Municipality; in the rural areas and farms there are three scenarios: If the farm is on a collection route, the farm waste is placed by the owner outside his property boundary from where it is collected by the Municipality. Farmers also transport and offload their waste themselves to the Paarl Transfer Station or the Wellington Landfill and they make use of the coupon system. Farmers can also apply for the use and service of a waste skip that is placed on his property. He pays a monthly fee and the Municipality collects the filled skip when they are notified. Received figures indicate that 12 429 out of the 12 429 indigent households receive free basic refuse removal, which is 100%.
- Langeberg Municipality; the farming community delivers their own waste to landfill, as it is not economically feasible for the Municipality to collect waste at these remote locations. Received figures indicate that 6 932 out of the 7 413 indigent households receive free basic refuse removal, which is 94%.
- In Stellenbosch Municipality figures indicate that 4 217 out of the 4 217 indigent households receive free basic refuse removal, which is 100%.
- Witzenberg Municipality; the municipality does not collect waste at the remote farming communities, as this would be economically unsustainable. Farming communities deliver their own waste. Received figures indicate that 4 572 out of the 4 572 indigent households receive free basic refuse removal, which is 100%.

Waste Reduction; recovery for recycling is done by Material Recovery Facilities (MRFs) in the following towns/settlements;

- Breede Valley Municipality- Touws River Transfer Station and MRF.
- Drakenstein Municipality-Paarl MRF and Wellington Landfill Site.
- Langeberg Municipality-Robertson Composting Facility and Ashton, Montagu and Bonnievle MRFs.
- Stellenbosch Municipality- Source separated waste is collected in Stellenbosch with recycling taking place at the Kraaifontein Waste Facility in the City of Cape Town Metro.

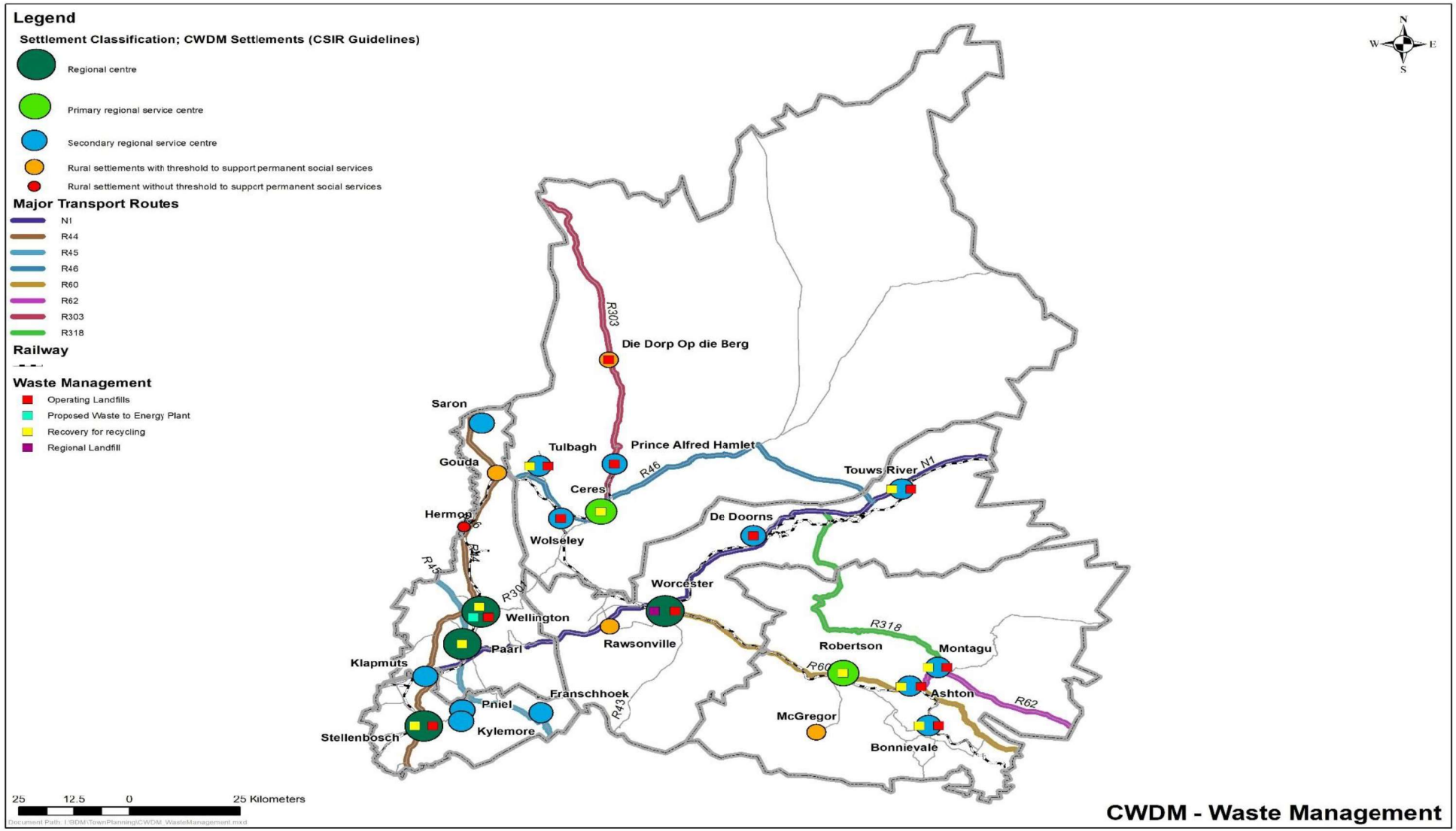
- Witzenberg Municipality-Tulbagh Landfill and Ceres, waste is separated outside Ceres and transported to Cape Town.

Waste Disposal; Operating landfills are located at the following locations (refer to map#;

- Breede Valley Municipality; Worcester, De Doorns and Touws River.
- Drakentein Municipality; Wellington.
- Langeberg Municipality; Ashton, Bonnievale and Montagu.
- Stellenbosch Municipality; Stellenbosch.
- Witzenberg Municipality; Wolseley, Tulbagh, Prince Alfred Hamlet, Op -Die-Berg.

Table 14: Cost of additional infrastructure to remain compliant up to 2030 (CWDM IWMP, Final report 2016)

Municipality	Facility	Establishment Costs
Drakenstein Municipality	Back up Transfer Station / MRF	R 17 928 000
	Closure and Rehabilitation of Wellington Landfill	R 46 707 700
Stellenbosch Municipality	Closure and Rehabilitation of Stellenbosch Landfill Cell 3	R 16 757 200
Witzenberg Municipality	Transfer Station / MRF in Wolseley	R 15 901 000
	Public Drop-off in Op-die Berg	R 2 680 300
	Closure and Rehabilitation of Op-die-Berg Landfill	R 4 635 200
Breede Valley Municipality	Public Drop-off in De Doorns	R 11 758 000
	Closure and Rehabilitation of Worcester Landfill	R 60 067 900
Langeberg Municipality	Public Drop-off in Bonnievale	R 2 680 300
	Closure and Rehabilitation of Ashton Landfill	R 17 993 300
	Closure and Rehabilitation of Bonnievale Landfill	R 12 459 400
Cape Winelands District Municipality	Establish new Regional Landfill	R 49 941 000
	Extension of landfill Phase 2	R 51 016 000
Total		**R310 525 300**



Map 10: Waste Management; Operating Landfills, Recovery and Recycling facilities and proposed Regional Landfill Site.

2.4.6.2 Key findings: Solid Waste Disposal

2.4.6.2.1 The strategic objectives of the CWDM relating to Waste Management places an emphasis on waste avoidance, waste reduction and waste disposal. Waste avoidance refers to avoiding materials of entering the waste stream e.g. by re-use, composting etc. Waste reduction refer to reducing the quantity of waste e.g. by doing recycling and waste disposal is defined as the storage, treatment or disposal of waste at licensed facilities. The CWDM IWMP highlights the fact that over the year's municipalities placed a greater emphasis on waste collection and disposal. The more sustainable approach of waste minimisation and reduction has been adopted recently. Municipalities will however have to shift to avoidance and reduction of waste rather than the disposal thereof.

2.4.6.2.2 Public awareness and education remain an issue, in order to move towards waste avoidance and greater reduction, public awareness and education must be prioritised.

2.4.6.2.3 According to the May 2016 Assessment of Municipal Integrated Waste Management Infrastructure, Phase 2 Draft Report of May 2016, the regional landfill site for the eastern side of the Cape Winelands district will cost R56 447 000 excluding VAT. Financing of the regional landfill site in terms of construction and management could be problematic since the CWDM does not receive MIG funding. Depending on how funding is sourced, the regionalisation of landfill could impose an extra financial burden on the relevant local municipalities.

2.4.6.2.4 The absence of a regional land fill site for the western portion of the CWDM will have implications for waste disposal in the Stellenbosch municipal area since local waste disposal sites are close to reaching their life span. Drakenstein municipality's Waste to Energy programme might present opportunities for Stellenbosch municipality to dispose their waste.

2.4.6.2.5 Municipalities must develop indigent policies. As indicated, indigent household figures are as follow; Breede Valley 7315, Drakenstein 12429, Stellenbosch 5757, Langeberg 7413, Witzenberg 4572.

2.4.6.3 Implementation proposals:

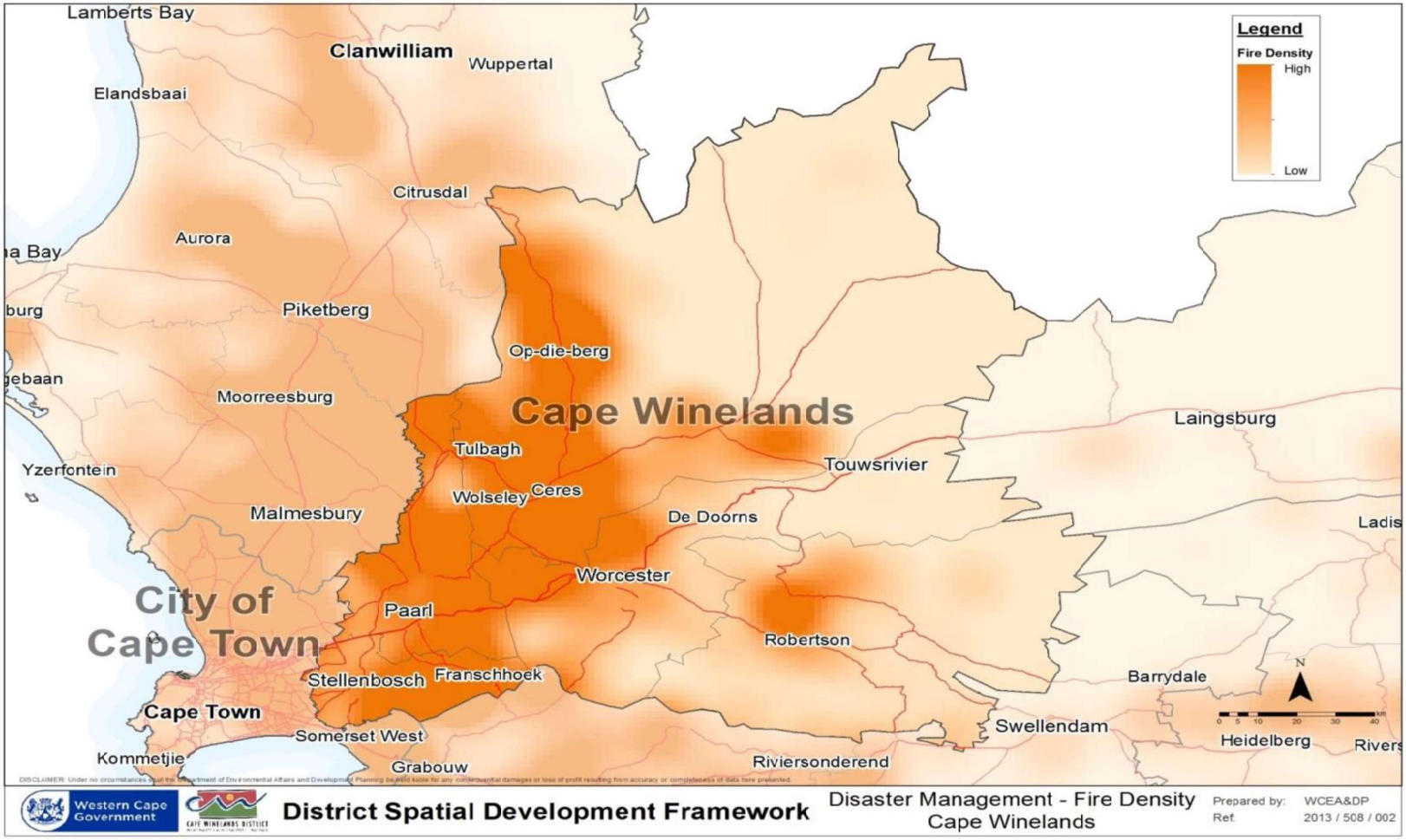
FOCUS AREA:	SOLID WASTE DISPOSAL
STRATEGIES:	1. Develop waste reduction strategies. 2. Prioritize public awareness in terms of waste reduction and avoidance. 3. Develop a Regional Landfill site for the Western and Eastern portion of the CWDM area. If a Regional Landfill site for the Western Portion of the CWDM is not practical, then the stalled Drakenstein Municipal Waste to Energy Program must be continued. The mentioned program must absorb the waste generated on the Western portion of the CWDM. 4. Investigate alternative technologies that can assist with the disposal of waste.
PRIORITY:	HIGH

2.4.6.4 CWDM Implementation Plan: Solid Waste Disposal

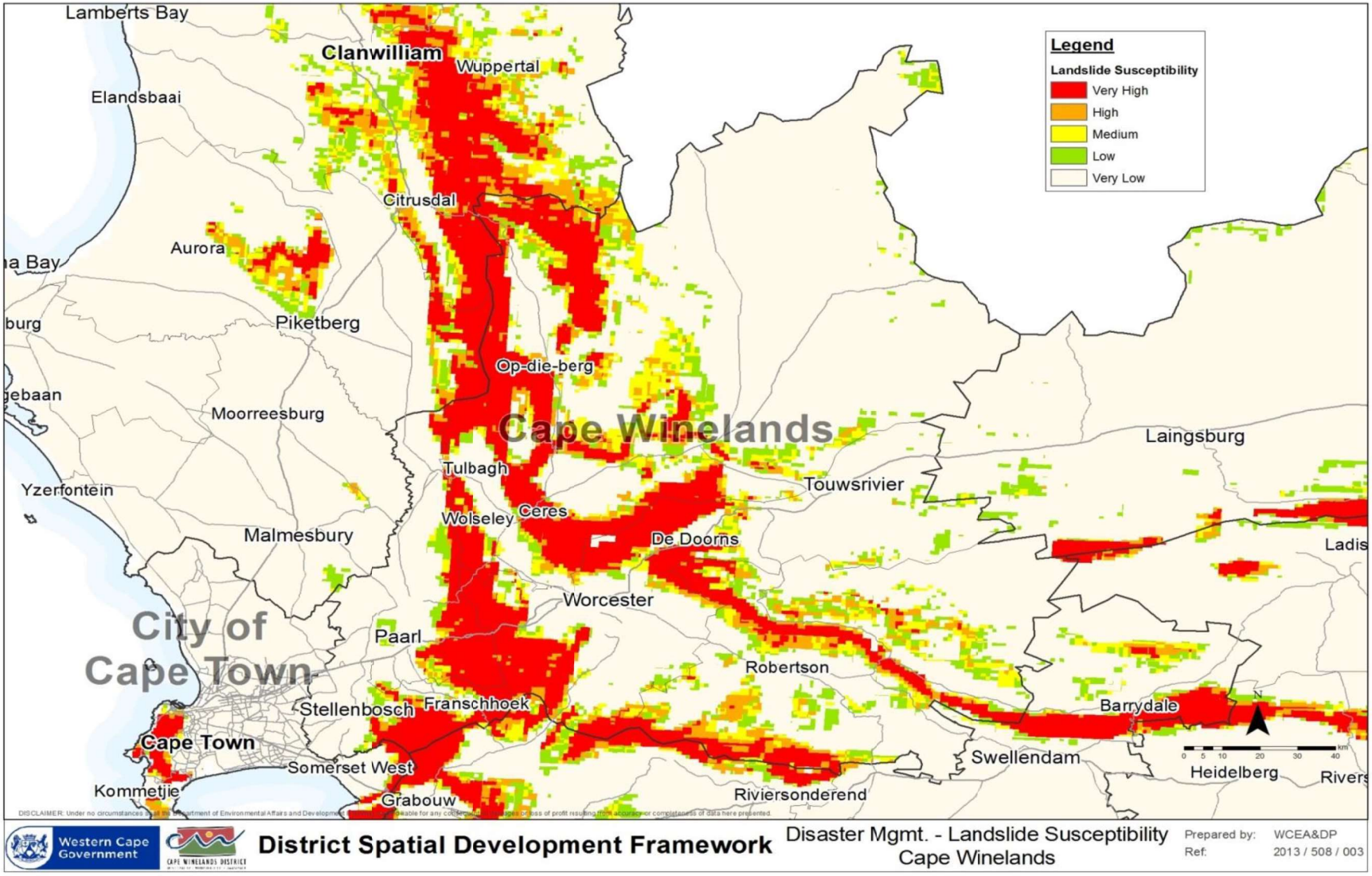
PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Regional Landfill Site Planning	R403 000, 00	Technical Services	2018/2019

2.4.7 DISASTER MANAGEMENT: GEOGRAPHIC RISK AREAS

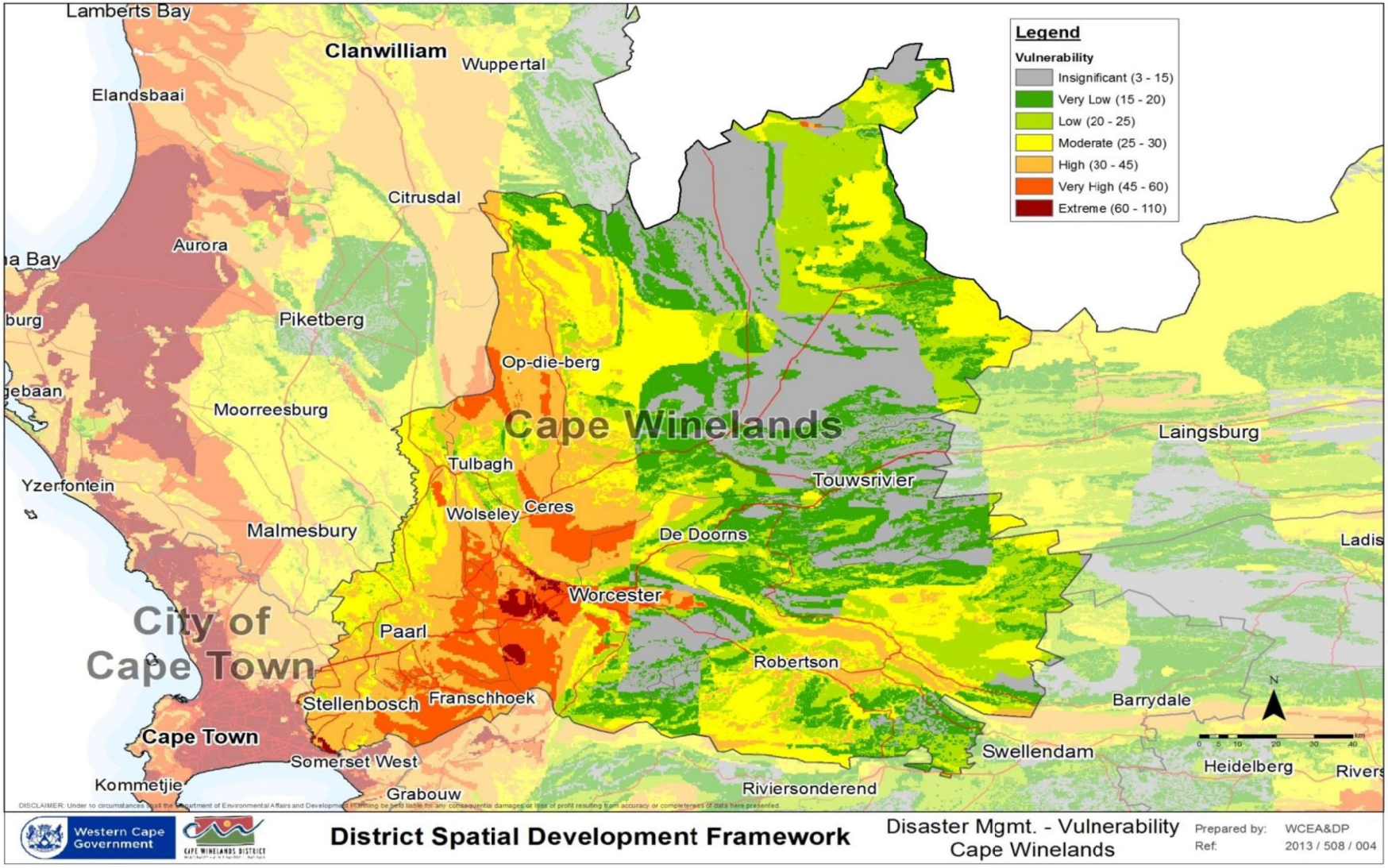
The PSDF (2014) identified the following high-risk areas pertaining to fire, landslides and overall vulnerability: refer to Map 13, 14 and 15.



Map 11: CWDM high risk fire areas.



Map 12: CWDM Landslide Susceptibility.



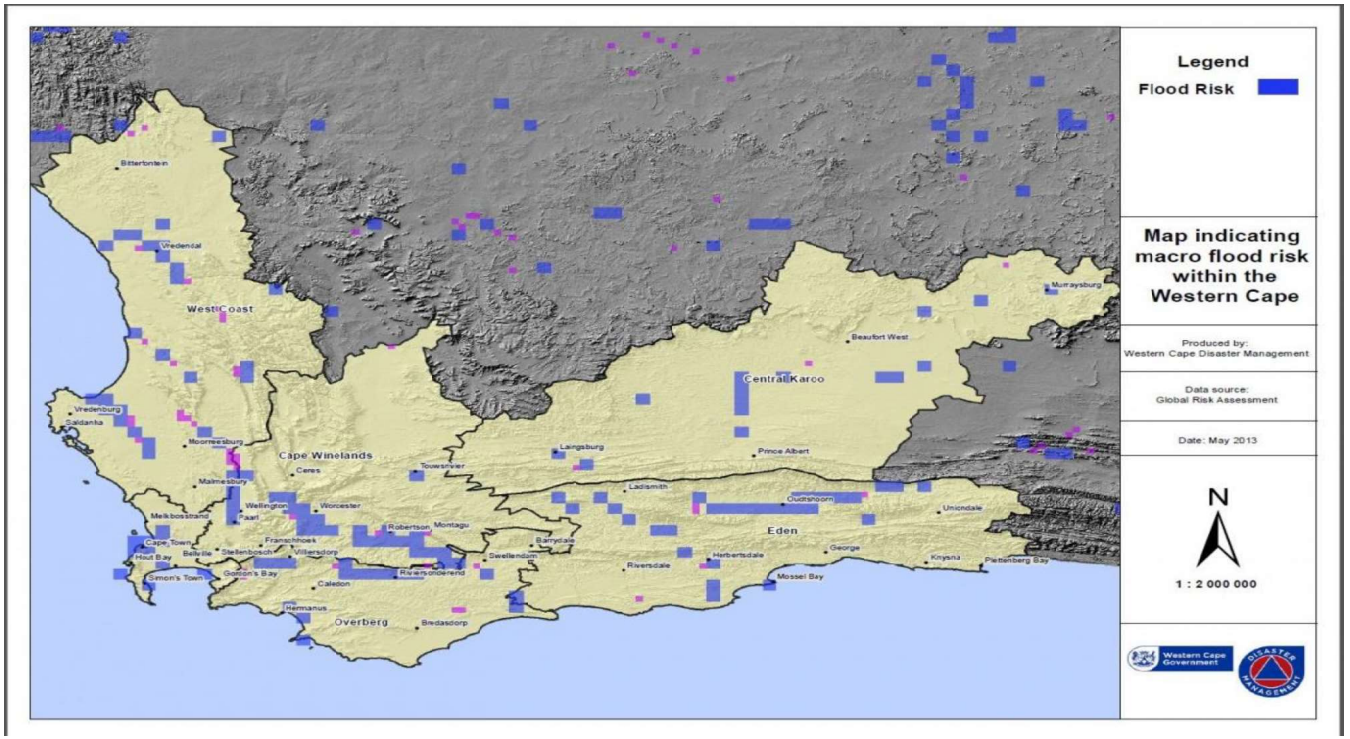
Map 13: Disaster vulnerability in the CWDM.

2.4.7.1 Potential risks associated with vulnerability spatial depiction (refer to map 13)

Flooding:

Flooding occurs at least once a year within the CWDM area. The largest and most important rivers in the area are the;

- Breede River
- Olifants River (of which only the headwaters lie within the study area)
- Doring River (the only large river that is still in a natural condition)
- Touws River (which is significantly modified)



Map 14: Flood risk areas

Table 15: Likely impacts of flooding

Economic:	Environmental:	Social:
• Extensive damage to both property and infrastructure • Large damage costs • Disruption in influx of tourists • Overflowing of dams and potential dam failure • Road closures • Disruption of services i.e. electricity, water, public transport and emergency services such as ambulances, hospitals etc. • Significant economic losses for businesses and farms	• Rivers spilling their banks resulting in flash floods • High run-off, severe erosion that leads to instability of steep catchments • Displacement of large amounts of sediment downstream • Slope failure, rock falls and mudslides on steep slopes or mountainous areas	• Low cost housing most affected • Injury and loss of lives to people and animals • Displacement of households and communities • Increase in the number of people with water borne diseases

Conditions that increase the severity of flooding;

- Irregular maintenance of storm water systems. For instance, litter, rubble and other dumped objects blocking storm water drains and streams, worsening the impact of the floods
- Debris-loading from soil erosion due to exposure of large tracts of land, along with vegetative debris loading associated with vegetation clearance can be washed into watercourses and swept downstream, where they obstruct culverts, channels and bridges.
- Increase and encroachment of low-cost housing or informal settlements in areas prone to flooding placing large numbers of people at risk.
- Rapid urban growth in floodplains that has hardened river catchments, increasing surface run-off.
- Under-investment in municipal maintenance and roads and protective stormwater systems.
- The risk of damage also increases when natural flood-paths of rivers are altered, and wetlands degraded in severe weather-exposed areas.
- Lack of household insurance.

Veld Fires:

The Western Cape 's fire season is generally from November to April, when temperatures are highest. During these months, there is greater use of natural recreational areas and the indigenous fynbos is also more likely to burn. Fires should generally not occur more than once every seven years, to avoid a loss of species that have not matured and produced seeds. The Western Cape 's fire season officially ends at the end of April.

Areas, communities or households most at risk;

- The whole district is fire prone with less frequent fires occurring towards the north of Ceres.
- Mostly in urban rural edge - informal settlements located at the urban edge where these fires usually start, which spreads to the veld and forests.
- Houses located at the urban edge with limited access.
- Mountainous areas are at high risk in the CWDM area.
- Areas with a high presence of alien plants.
- Commercial or small farms in isolation. Recreational areas i.e. picnic and hiking trails where many fires tend to start.
- Three major fires occurred in the Franschhoek area since 1999, i.e. February 1999, December 2005 (6-year gap) and January 2013 (7-year gap).

Table 16: Likely impact of veld fires

Economic:	Environmental:	Social:
• Damage and loss of property and infrastructure • Loss of farming lands, forestry and plantations • Claims against municipalities	Positive impacts: • Control of invasive alien plants • Promotion of desirable plants Negative impacts: • Loss of biodiversity (if fynbos burns too frequently or direct animal mortality • Loss of vegetation cover and increased erosion • Increased alien infestation (in disturbed areas where alien plants are often pioneer species) • Habitat fragmentation • Loss of ecosystem services, i.e. water production.	• Evacuation of people from homes • Reduction in potable water • Injury and loss of lives • Loss of employment / reduction in hours worked which affect livelihoods • Loss of personal items and special memorabilia.

2.4.7.2 Key findings: Disaster Management, Geographic Risk Areas

2.4.7.2.1 Refer to conditions that increase the severity of flooding.

2.4.7.2.2 Veld fires are exacerbated by warm, dry and windy conditions. The recent El Nino worsened the severity of veld fires in the Western Cape province.

2.4.7.3 Implementation proposals

FOCUS AREA:	DISASTER MANAGEMENT, GEOGRAPHIC RISK AREAS
STRATEGIES:	1. Plan and provide access roads for fire trucks in informal settlements; provide suitable roads as evacuation routes in informal settlements; provide informal areas with fire-resistant materials; provide fire hydrants in informal settlements 2. Plan fire services in line with new development needs 3. Apply an acceptable housing density (relevant to the specific housing development) that would limit the spread of fire 4. Ensure that development of residential dwellings only takes place after adequate bulk services are provided 5. Provide additional fire hydrants in all areas 6. Install watch towers, fire breaks, fire extinguishers in forestry areas 7. Ensure that fire hydrant water supply is sufficient in higher lying areas 8. Ensure the enforcement of an Environmental Impact Assessment (EIA) with all development projects (according to the NEMA guidelines) 9. Plan for the upgrading of existing infrastructure to cope with new developments 10. Identification and plotting of vacant high-risk flood areas for future reference and avoid human settlements in such areas 11. Avoid development and settling of communities along rivers and within the flood line 12. Apply and update zoning regulations regularly in response to changed disaster management requirements; develop zoning codes for high risk areas 13. Identify alternate suitable venues/facilities for emergency services 14. Apply low intensity land use in 1:100 flood line areas 15. Study and understand the impact of climate change on development 16. Ensure proper and appropriate signage regarding flood risk especially in low-lying areas 17. Plan and build retention dams to reduce risk of flooding 18. Restore and maintain water catchment areas 19. Build retaining walls to protect buildings from stormwater 20. Improve and upgrade stormwater reticulation systems regularly 21. Develop and maintain sustained cleaning programmes for rivers and dams 22. Plan and construct dams with larger capacity to regulate flow of water 23. Identify earthquake prone areas / geological faults 24. Development of suitable building codes (enforcement thereof) 25. Limit development in high risk areas 26. Approval of only single-storey buildings in disaster prone areas and at appropriate densities 27. Enforce area-specific building material/methods/codes

	28. Design strong earthquake resistant infrastructure services 29. Create a zoning for major hazardous installations (MHI) 30. Proper planning be done regarding the placement of factories and plants 31. Limit population figures around MHIs 32. Enforcement and evaluation of risk assessment for major hazardous installations 33. Monitoring, restricting and managing of routes for hazardous materials (hazmat) in transit (railways/roads) 34. Provide specific parking areas along the roadside for vehicles transporting hazardous material 35. Increase hazmat capabilities on main routes where hazmat freight vehicle parking areas are to be found Identification of containment sites and measures
PRIORITY:	HIGH

2.4.7.4 CWDM Implementation Plan: Disaster Management, Geographic Risk Areas

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Annual Environmental Health Education Programme	R445 537, 00	Municipal Health Services	Annually
Food-Water Samples and Testing	Operational Budget	Municipal Health Services	Annually
Disaster Management	Operational Budget	Disaster Management Section	Annually
Revision of Risk Assessment	R243 500, 00	Disaster Management Section	2018/2019
Fire Services	Operational Budget	Fire Services Section	Annually

3. DISTRICT SPACE ECONOMY

3.1 ECONOMIC GROWTH SECTORS

The spatial logic as per the Provincial Space Economy is to;

1. **Capitalise** on the Knowledge Economy

2. **Consolidate** investment in economically vibrant areas

3. **Connect** regional economic infrastructure

4. **Cluster** investment of economic infrastructure.

The above spatial logic can be applied within the growth potential forecast of the CWDM towns with the five (5) regional centres (Stellenbosch, Paarl-Wellington, Worcester, Ceres and Robertson) being the main growth centres. According to the MERO (2017), the CWDM GDP experienced an average growth rate of 2.9% per annum since 2010. However, growth rates are declining, with an estimated growth rate of 0.5 per cent for 2016.

In the case of the CWDM area the Cape Winelands GDP contribution per sector in 2015 was:

- **Agriculture, forestry & fishing**; 9,3%, **Mining & quarrying**; 0,2%, **Manufacturing**; 15,7%, **Electricity, gas & water**; 2,2%, **Construction**; 6,9%, **Wholesale & retail trade, catering & accommodation**; 18,4%, **Transport, storage & communication**; 9,8% **Finance, insurance, real estate & business services**; 19,8%, **Community, social & personal services**; 7,5%, **General government**; 10,2%

Table 17: Cape Winelands District GDPR contribution per sector (%), MERO, 2017.

Sector	Cape Winelands	Witzenberg	Drakenstein	Stellenbosch	Breede Valley	Langeberg
Primary Sector	**9.3**	**17.4**	**6.6**	**5.7**	**10.6**	**12.9**
Agriculture, forestry and fishing	9.1	17.3	6.4	5.5	10.4	12.8
Mining and quarrying	0.2	0.0	0.2	0.2	0.2	0.1
Secondary Sector	**24.9**	**26.1**	**26.6**	**24.1**	**21.4**	**25.9**
Manufacturing	15.7	14.2	16.0	17.0	13.4	18.2
Electricity, gas and water	2.2	3.3	2.6	1.4	2.0	1.8
Construction	6.9	8.5	8.0	5.6	5.9	5.9
Tertiary Sector	**65.9**	**56.5**	**66.8**	**70.3**	**68.0**	**61.2**
Wholesale and retail trade, catering and accommodation	18.4	16.9	17.7	20.2	18.3	19.2
Transport, storage and communication	9.8	7.0	8.9	11.0	11.0	11.1
Finance, insurance, real estate and business services	19.8	15.4	21.2	21.6	20.4	16.2
General government	10.2	10.4	10.6	10.6	10.2	8.0
Community, social and personal services	7.5	6.9	8.4	6.8	8.0	6.6

A similar trend follows with the urban-based economic growth sectors (i.e. manufacturing 15.7 %, wholesale & retail trade, catering & accommodation 18.4% and finance, insurance, real estate and business services 19.8%) being the leading drivers of growth within the Cape Winelands district this however does not detract from the importance of the agricultural sector and its linkage with urban economies within the district.

Declining Economy

A cause for concern is that after 2014, the economy of the Cape Winelands District grew at a slower rate each year, with 2016 experiencing the lowest growth rates since the recession in 2009. Reasons as put forward by the MERO (2017) are due to national and international developments affecting the economy. This can be broken down to;

- General increases in food prices due to the drought
- Rising national unemployment and increasing interest rates having a negative impact on investment while volatility in the Rand against currencies such as the US Dollar, Pound Sterling and Euro are contributing to rising inflation as South Africa is generally a net importer of goods.
- Other factors are, declining business confidence, political instability and the sub investment credit rating by agencies are all contributing to the deteriorating economic conditions.

Table 18: Municipal GDPR Growth trends (MERO, 2017).

Municipality	Contribution to GDPR (%) 2015	Trend 2005-2015	2010-2015	Real GDPR Growth (%) 2011	2012	2013	2014	2015	2016
Witzenberg	13.9	5.0	4.4	4.9	4.6	4.8	5.7	2.1	0.9
Drakenstein	32.8	2.8	2.5	3.2	2.8	2.6	2.6	1.3	0.4
Stellenbosch	24.0	2.8	2.6	3.2	3.0	2.5	2.5	1.6	0.5
Breede Valley	19.1	3.4	3.0	3.7	3.3	3.2	3.4	1.5	0.4
Langeberg	10.2	3.6	3.2	3.5	3.5	3.2	3.9	1.9	0.1
Total CWDM:	**100**	**3.3**	**2.9**	**3.5**	**3.2**	**3.1**	**3.3**	**1.6**	**0.5**
WC Province:		**3.0**	**2.6**	**3.8**	**2.9**	**2.6**	**2.2**	**1.5**	**0.7**

The following sectors are regarded as key in driving growth, job creation and poverty reduction in the Cape Winelands:

Agriculture: significant for its forward linkages within the economy; direct contribution to turnover and employment; robustness and resilience; and potential for new activities and markets.

As noted, agriculture remains the backbone of the provincial economy despite the importance of secondary and tertiary economic activities. This is especially the case in the Cape Winelands District which is home to a third of the province's agricultural

sector employing 21% of the District's workforce (CWD Socio-economic Profile 2014:10). In the Cape Winelands, around 90 per cent of goods exports are from the agri-processing value chain (PERO 2016: 47). This sector, together with tourism, and oil and gas, were selected as strategic priority areas for provincial focus due to their conduciveness to inclusive growth.

Wholesale and retail trade, catering and accommodation: key sector owing to established foreign markets and networks; potential for expansion in the domestic market; generation of foreign currency; backward linkages to agricultural sector; lateral linkages to services sector; and the existing built and natural capital within the region.

Financial/ Real Estate/ Insurance and Business Services Sector: leading growth sector currently; potential to attract the 'Call Centre' and Business Processes

Outsourcing industry into the region, in particular the Dutch industry; and the region's ability to attract Johannesburg and Cape Town based firms' headquarters the Cape Winelands is definitely the 'place to be'.

Manufacturing: established sector with strong backward linkages to agriculture; potential for SMME development; and an important job generator.

3.1.1 Other sectoral opportunities:

The Green Economy

It is essential that in applying the spatial logic (Capitalise, Consolidate, Connect and Cluster), the transitioning to a green economy is prioritised. A green economy is defined as an economy that aims at reducing environmental risks and ecological scarcities that aims for sustainable development without degrading the environment.

The Western Cape Government has realised the potential of benefits of a green economy and started an initiative called "Green is Smart" (Western Cape Government, 2013a). This is a green economy strategy framework and aims to optimise green economic opportunities and enhancing environmental performance in the Western Cape. The framework aims for the Western Cape to become the lowest carbon intensive province and a leading green economic hub of the African continent, through the following five drivers: "smart living and working", "smart mobility", "smart eco-systems", "smart agri-production", and "smart enterprise" (Western Cape Government, 2013a) (Van Niekerk, Brent and Musango 2013).

The green economy prospects will carve a pathway in the Cape Winelands District since the agricultural industry continues to play a big part in the economy of the district and province. The region's agricultural contribution (11 per cent) is smaller than that of the West Coast (14.6 per cent); however, it is the largest in the Western Cape Province accounting for more than a third of the Province's agricultural real value add. The agriculture and agro-processing industries are also responsible for the bulk of the region's exports (Cape Winelands Regional Development Profile 2013:50).

Further, the PERO 2014 identifies agriculture and tourism as sectors in which the Western Cape has comparative advantage. Both sectors have been highlighted in the Green is Smart strategy as priorities for support and intervention. The vibrant agricultural and tourism sectors of the province make it particularly sensitive to environmental risks. Over and above biophysical risk, agriculture is also exposed to indirect regulatory and market-related risk through carbon taxes, increasing energy prices and related changing preferences in the main export markets.

The Knowledge Economy

Given the many challenges currently facing developed and developing countries, the demands made on skills training, applied as well as fundamental research and the utilisation of research are huge. This also applies to South Africa which faces the challenges of both, developed and developing societies. The Western Cape is currently still relatively better placed (in terms of most knowledge-generation indicators) to tackle these challenges. This is relevant for Stellenbosch and the Stellenbosch-Paarl axis, but also for some of the other places in the district.

The knowledge economy must be viewed as both an input into and an output of economic growth. The type of sectors and niches which characterize the Cape Winelands economy demand fairly sophisticated skills and technology inputs (even the agricultural niches!). On the other hand, many new or growing enterprises are directly engaged in the research, development and training fields (e.g. alternative energy, organic food and environmental care). Thus, "knowledge generation" can be viewed as a growth sector in the Cape Winelands economy.

Fourth Industrial Revolution

The Fourth Industrial Revolution (4IR) builds on the Third Industrial Revolution, or digital revolution. It is characterised by the increased complexity, development and use of artificial intelligence, robotics, blockchain, nanotechnology, quantum computing, biotechnology, The Internet of Things, 3D printing and autonomous vehicles. The resulting effects cause and increased integration or 'blurring of lines' between the technology, biology and physical spheres. This revolution is having and will have serious effects on many areas of the economy, leading potentially to increased efficiency, sustainability and the creation or requirement of new types of skills, jobs or careers. However, this will likely lead to the loss of jobs in some areas, especially the unskilled labour areas.

The Fourth Industrial Revolution has already been identified as a serious impactor on the future agricultural sector of the Western Cape. Water saving technology, drones, robotics, farm-management software, precision agriculture, predictive analytics and genetic developments can have positive effects on the sustainability of the sector and food security into the future.

3.1.2 Key findings: Economic Growth Sectors

3.1.2.1 Due to various reasons (national and international), there is a decline in the economy of the Cape Winelands District. The sectors that performed the strongest is sectors located within the urban space economy therefor Public-Sector investment remains crucial. Spatial targeting as coordinated by the Western Cape Provincial Government and pursued by various other government departments could assist in guiding public-sector investment. The latter however does not detract from the importance of the agricultural sector and its economic linkages to the urban economies within the district.

3.1.2.2 Opportunities exist in the green and knowledge economy (refer to 3.1.1), municipalities/government must investigate these sectors and capitalise on it.

3.1.3 Implementation proposals:

FOCUS AREA:	ECONOMIC GROWTH SECTORS
STRATEGIES:	1. B-municipal Spatial Development Frameworks must facilitate spatial targeting processes, coordinating and identifying government infrastructure/capital investment locations within the urban settlements. 2. Seek partnerships with industries, local businesses, academic institutions, NGO's and other civil society stakeholders to promote interventions in skills trainings as well as research and the utilization of research. 3. Prioritise the implementation of the following drivers: "smart living and working", "smart mobility", "smart eco-systems", "smart agri-production", and "smart enterprise" (Western Cape Government, 2013a) (Van Niekerk, Brent and Musango 2013). 4. Strengthen rural support programmes for commercial and small-scale farming and develop the potential of the agricultural value chain. 5. Attract outside investors or entrepreneurs and encourage further diversification of local business.
PRIORITY:	HIGH

3.1.4 CWDM Implementation Plan: Economic Growth Sectors

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Investment Programme	R550 000, 00	Local Economic Development & Tourism Section	Annually
Mentorship Programme	R611 000, 00	Local Economic Development & Tourism Section	Annually
Business retention expansion	R700 000, 00	Local Economic Development & Tourism Section	Annually
Skills Development	R200 000, 00	Rural and Social Development Section	Annually

3.2 MUNICIPAL SPACE ECONOMY

Within the district, Stellenbosch is the largest and fastest growing regional economy (R17 Billion of the District's GDPR of R50 billion in 2013), this is followed by Drakenstein (R15.5 billion), Breede Valley (R7.5 billion), Langeberg (R5.5 billion) and Witzenberg (R4.5 billion) (Stellenbosch Draft IDP Bureau for Economic Research Report 2014: 42).

3.2.1 Drakenstein and Stellenbosch Municipal area:

Over the past decade(s), Stellenbosch and Paarl/Wellington has seen growth in each of the following sectors:

- Higher education and research (Paarl/Wellington to a lesser extent)
- Agriculture and agri-processing
- Tourism
- Corporate headquarters and business services
- Retirement settlements, and
- Other sectors that include a resilient retail sector and diverse (small and medium-sized) industrial enterprises. These could be related to agriculture, forestry, furniture making, publishing or the craft sector.

Drakenstein and Stellenbosch municipality falling within the functional region of the metro economy has seen significant growth in manufacturing, wholesale

& retail trade, catering & accommodation and finance, insurance, real estate & business services (refer to table). Paarl/Wellington has higher education facilities which gives this area a strong base in education, though in no ways comparable to Stellenbosch with its university-dominance. The research and innovation at Stellenbosch Technopark and its close relationship with the Stellenbosch University has made Stellenbosch the most important contributor to the science and technology sector in the District. Similar to Stellenbosch, Paarl also has corporate headquarters and, due to its slightly stronger manufacturing base, seems well placed to attract others.

Being the largest town in the Drakenstein municipal area, Paarl/ Wellington have attracted all the major retail chains, making retailing a further growth sector. The nearby N1 has been a strong drawcard for retail expansion. To some extent, this as well as the broad sector base has also stimulated financial, property and business services.

In 2015 Drakenstein Municipality (29.33 per cent) and Stellenbosch Municipality (20.32 per cent) collectively employed 50% per cent of individuals in Cape Winelands District. The population of both municipalities is likely to increase further, the sector base of both is broad and the different growth sectors complement each other well. Both Stellenbosch and Drakenstein Municipalities have identified Klapmuts as a prospective sub-regional urban node along the N1. Residential and industrial development opportunities have been identified north and south of the N1, and the area has also been identified as having potential to serve as a regional freight logistics hub.

The following key infrastructure projects have been identified for Paarl;

- *Paarl CBD Upgrade*: Paarl is the economic centre of the Drakenstein municipality and is home to at least four major international companies namely Pioneer Foods, Nampak, Imperial Logistics and Distell. As a result, the relocation of businesses to the CBD and upgrade of the central town have been identified as an important project and economic opportunity. The Municipality entered into a Public Private Partnership Agreement with a consortium of property owners in the Paarl CBD in 2010. The first phase of the Agreement included upgrades to parking facilities and pavements in the area. The second phase of the Paarl CBD regeneration includes upgrades to Wamakers Square which currently house Pick 'n Pay and Woolworths as anchor tenants. Structural changes are planned with landscaping and beautification in the surrounding areas. The CAPEX R-Value is estimated at R100 million.

- *Paarl Waterfront Development*: Identified as a key catalytic project which will boost the tourism sector. The project consists of mixed use developments (including a hotel, restaurants, office blocks, sport science institute, etc.) located on the Berg River. This project is in the form of a PPP and the proposed use of the land has been as a luxury mixed use waterfront lifestyle development. This project has been put on hold. The Land Use Rights are in place and the ROD was transferred back to the Municipality. The Municipality envisages issuing a tender for development proposals with all of the rights in place. Total capex for the project will be approximately between 40 and 60 million rand for the sale of the land. This excludes any other infrastructural services. The anticipated total capex investment could be between R500 million and R1 billion rand.

3.2.2 Breede Valley Municipal area:

The area covered by Breede Valley Municipality consists basically of the N1-transport corridor between the entrance to the Karoo and Du Toitskloof Pass, together with the Wemmershoek mountain in the south west of the area. Worcester fulfils a multiple role in this area with the smaller places along the N1 corridor either directly linked to the transport sector or agricultural activities in the more immediate vicinity. Thus, Touws River derived its significance from the station and its role as transfer from steam to electricity – a role that has been lost and which caused the shrinking of the town's economic base. De Doorns has been linked to agriculture, with special focus on export grapes, where increased global competition has caused local stagnation. Rawsonville is agri-processing based, with additional activities due to its location at the inland edge of Du Toitskloof Pass. Smaller places to the north of the N1 are mostly linked to tourism (like Goudini and Matroosberg) and dispersed agricultural activities.

Worcester is the commercial, industrial, services and administrative hub of Breede Valley municipality, for development purposes the town has spare capacity i.e. sanitation, water and vacant developable land-industrial and residential. Through the N1 corridor and railway connections the town has optimal access to

the markets of the Cape Town metropolitan area. On a macro (district) scale it is believed that Worcester should be subject to an investment focus as a 'major service centre' due to being the largest town in the Northern Boland region with the broadest economic base. Worcester is also easy accessible from surrounding towns/towns located in the Langeberg & Witzenberg municipal areas. Breede Valley Municipality through Worcester as its economic hub contributed 18.9% towards the Cape Winelands district GDP, the highest after Drakenstein 33.3% and Stellenbosch 23.9%.

3.2.3 Witzenberg Municipal area:

In the Witzenberg municipal area the activities around towns are essentially agriculture based, with the towns being "agricultural service centres", with some agri-processing as well, related to wine, fruit, vegetable and other niche products. The proposed Agri Parks development and potential expansion of the agricultural sector will further stimulate economic growth in this municipal area.

Some places are well-known for their niche-products, like Ceres for its nearby cherry orchards in the mountainous hinterland. Parallel to agriculture, this municipal area is also strong in the tourism field, catering for Cape Town and other Western Cape day- and weekend tourists as well as up-country seasonal tourists. Once again, the continuation of diversified agriculture, some forestry and river fishing strengthen the attractiveness of the area for outside visitors. In addition, the diversity of small towns interspaced with farms and other rural sights (like snow-capped mountains) make the area particularly attractive for short-term visitors. The fact that these destinations are just a short distance from the N1 (and a mere 150-200 km from Inner-Cape Town) further adds to the comparative strength of the area for tourists.

3.2.4 Langeberg Municipal area:

Although the Langeberg municipal area has certain parallels with the Witzenberg area, there are also distinct differences, such as a relatively lower population growth.

The Langeberg area is far more strategically located, with the R60- south, linking with the N1, the R317 with the Overberg and the R60-north with Worcester as well as the N1 and the northern cluster of the District. In addition, Montagu provides the links to the R62, which is the main tourism route through the Klein Karoo, including Oudtshoorn and other Eden destinations.

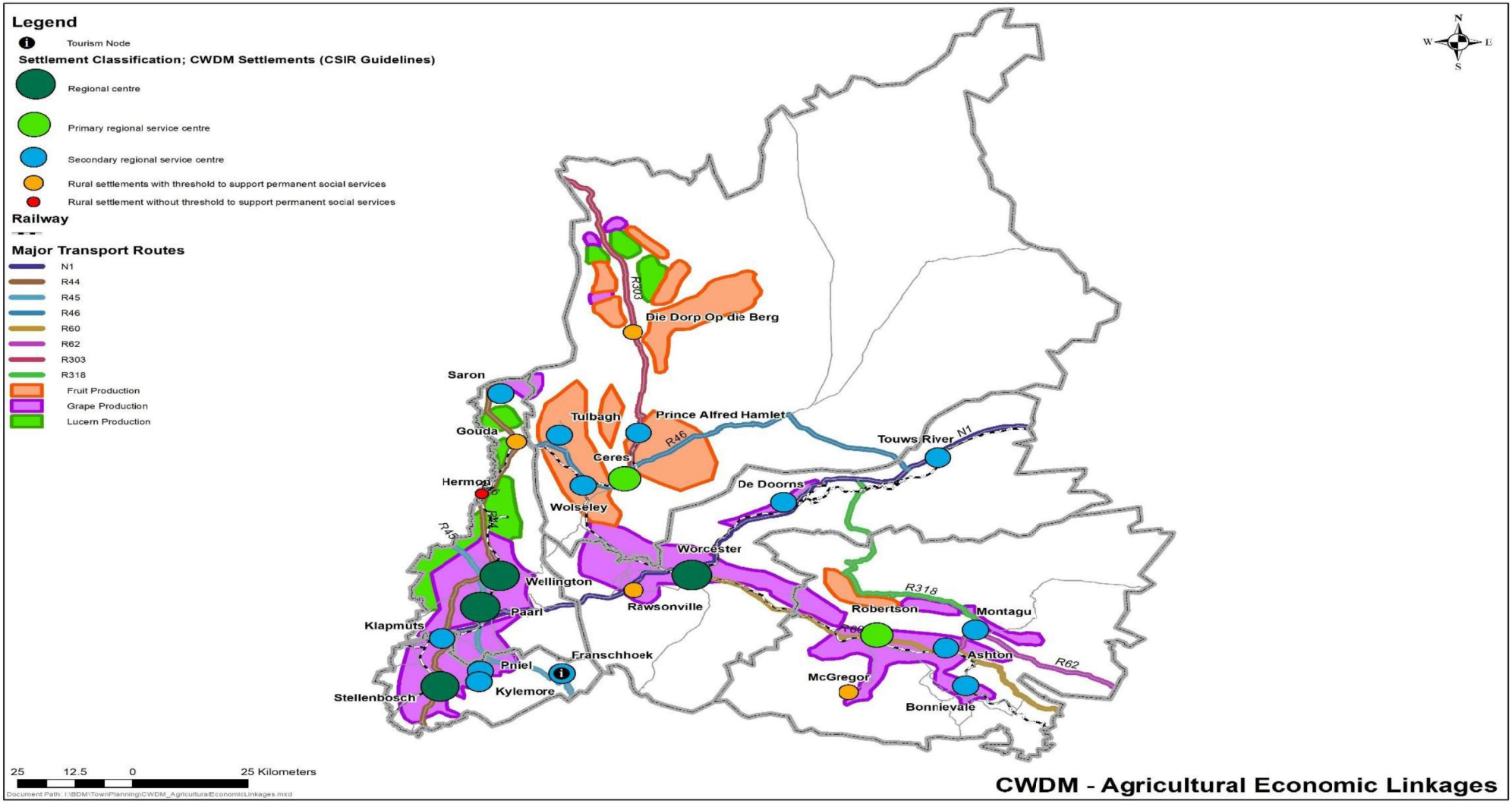
While Ashton is the industrial centre of the cluster, Robertson is the largest town and has the broadest economic base. This is further enhanced by its closeness to Worcester and its central location vis-à-vis the other places in the cluster.

Local economic development in this area is based on:

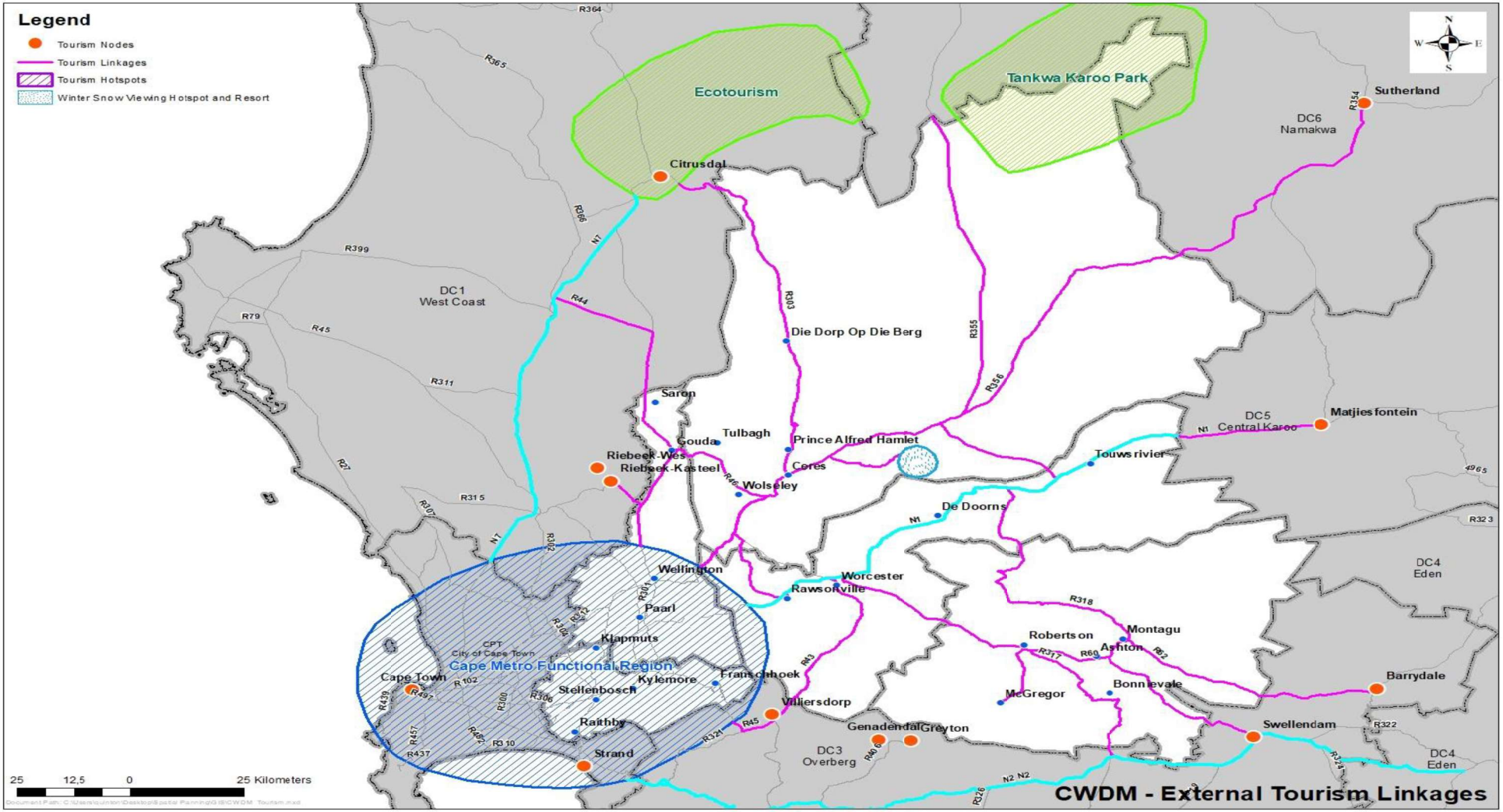
- diversified agriculture (including wine/grapes)
- tourism (catering for day, weekend, event, 'route', adventure/sport, health and cultural tourists)

- agri-processing
- retirement settlement
- other small-town functions

It is important to be aware of the opportunities arising out of the complementarity of these growth sectors. If anything, the diversity factor is even stronger here than in the Witzenberg area, although the respective towns are relatively small, so that economics of scale are not easily achieved. The proximity to both the N2 and the N1 is, however, a further advantage.



Map 15: CWDM Economic linkages, connecting routes, Settlements Classifications and tourism corridors (MERO, 2017).



Map 16: External tourism linkages

3.2.5 Implementation proposals

FOCUS AREA:	MUNICIPAL SPACE ECONOMY
STRATEGIES:	1. Stellenbosch Municipality: to watch carefully how growth impacts on the environment, on its "urban edge" and on the competition between different land uses; create a conducive policy environment to facilitate land use that strengthen sustainable economic growth sectors. 2. Drakenstein Municipality: view the current sector structure of this urban area in a positive light (sector base is broad and the different growth sectors complement each other well); create a conducive policy environment to facilitate land use that strengthen sustainable economic growth sectors 3. Breede Valley Municipality: improvement of service delivery to existing enterprises and households to prevent them from moving elsewhere or getting into profitability crises; ensure the closest possible interaction and co-operation between the public and the private sector; as far as poverty and unemployment pockets are concerned to facilitate the movement of households to larger urban areas may be as relevant as ad hoc social support and improvements in the most basic infrastructure services. 4. Witzenberg Municipality: be aware of the need to increase revenue base to ensure service delivery and maintenance of municipal services. 5. Langeberg Municipality: encourage the rationalization of agriculture and industry 6. Ensure that planning and implementation correspond with growth and development objectives of the private sector; promote pragmatism, flexibility and the closest possible interaction and cooperation between the public and the private sector; identifying which roles are best fulfilled by the state, and which should be left to the private sector and civil society - achieving most things in partnerships with other key stakeholders; government to facilitate on a joint basis efforts and assure that public programmes interact with private initiatives on a partnership basis; higher profiles are needed than what exist at present, together with proactive Public Private Partnership initiatives, possibly with stronger support from local universities. 7. Consider the most prominent factors influencing the agricultural economy to include land reform, land and water use, loss of natural habitat and urban expansion. 8. Counter the limited local development base of most towns with progressive strategies to optimize the use of available resources and infrastructure to, inter alia, give effect to a transformation agenda. 9. Strengthen the linkages between nodes/settlements to improve access for households from the areas with less economic potential to areas with greater potential to access employment and social opportunities. 10. For the 'small' towns like Hermon, Gouda, Saron, Prince Alfred Hamlet and Op-die-Berg where diseconomies of small scale will make it almost impossible to maintain personal services it seems as if it will be left to local community, corporate or small enterprise initiatives – encouraged, facilitated and monitored by municipalities and other public support agents – to address the needs. 11. Consider tourism nodes outside municipal boundaries that attracts traversing traffic; these tourism routes must be considered as potential development corridors (promoting land uses that comply with relevant Integrated Zoning Schemes and Municipal Bylaws).

	12. Optimize tourism potential of prominent tourist attractions/destinations.
PRIORITY:	HIGH

3.2.6 CWDM Implementation Plan: Municipal Space Economy

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Tourism training	R850 000, 00	Local Economic Development & Tourism Section	Annually
Tourism month	R27 350, 00	Local Economic Development & Tourism Section	Annually
Mayoral Tourism Awards	R122 000, 00	Local Economic Development & Tourism Section	Annually
Mayoral Tourism Awards Media Launch	R28 570, 00	Local Economic Development & Tourism Section	2018/2019
Educationals	R150 000, 00	Local Economic Development & Tourism Section	Annually
LTA Projects	R300 000, 00	Local Economic Development & Tourism Section	2018/2019
Tourism Campaign	R109 000, 00	Local Economic Development & Tourism Section	Annually
Tourism Events	R700 000, 00	Local Economic Development & Tourism Section	Annually
Township Tourism	R400 000, 00	Local Economic Development & Tourism Section	Annually

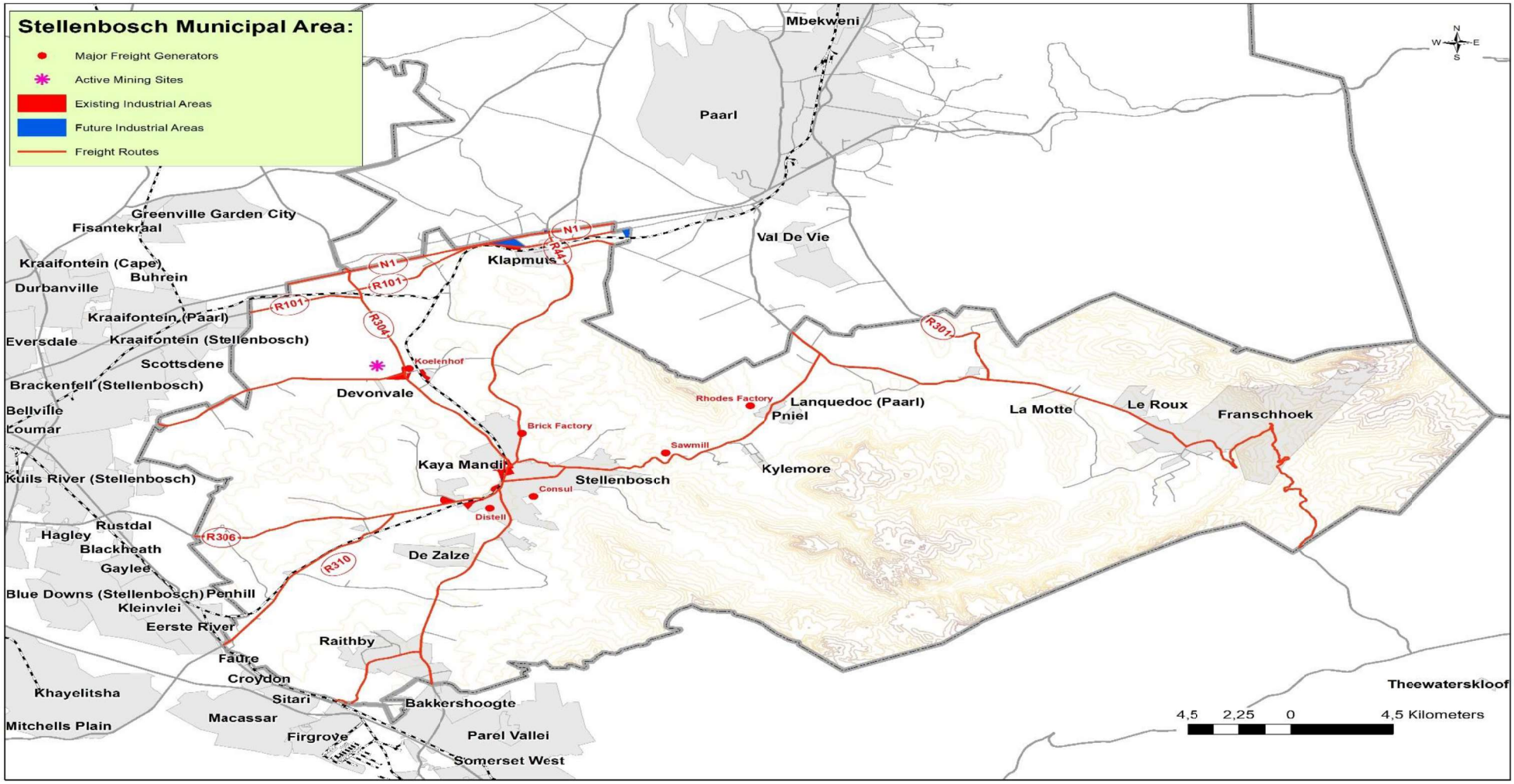
3.3 FREIGHT TRANSPORT AND ROUTES

According to the Cape Winelands Freight Transport Strategy (2013) the total freight volumes by surface transport (road and rail), as well as the volumes by rail analysis show that road freight is the most dominant freight mode currently in the CWDM and is likely to continue in the near future. Currently more than 95% of all freight will continue to be moved via road. Consultations with the Transnet Freight Rail (TRF) whom developed a Transnet Transport and Demand Model (2007) confirmed that the TRF does not foresee any rail network improvements in the next 20 years to accommodate freight movement. The existing rail network is deemed adequate to accommodate the expected increase in rail freight in the next 20 years.

Land use that have an impact on freight within the CWDM area is;

- Mining
- Industry-this refers mostly to industrial areas in towns
- Agriculture and agri-processing. Agri-processing refers specifically to processing that takes place outside of the established industrial areas in the towns of the Cape Winelands Impacted Freight Routes per B-municipal area;

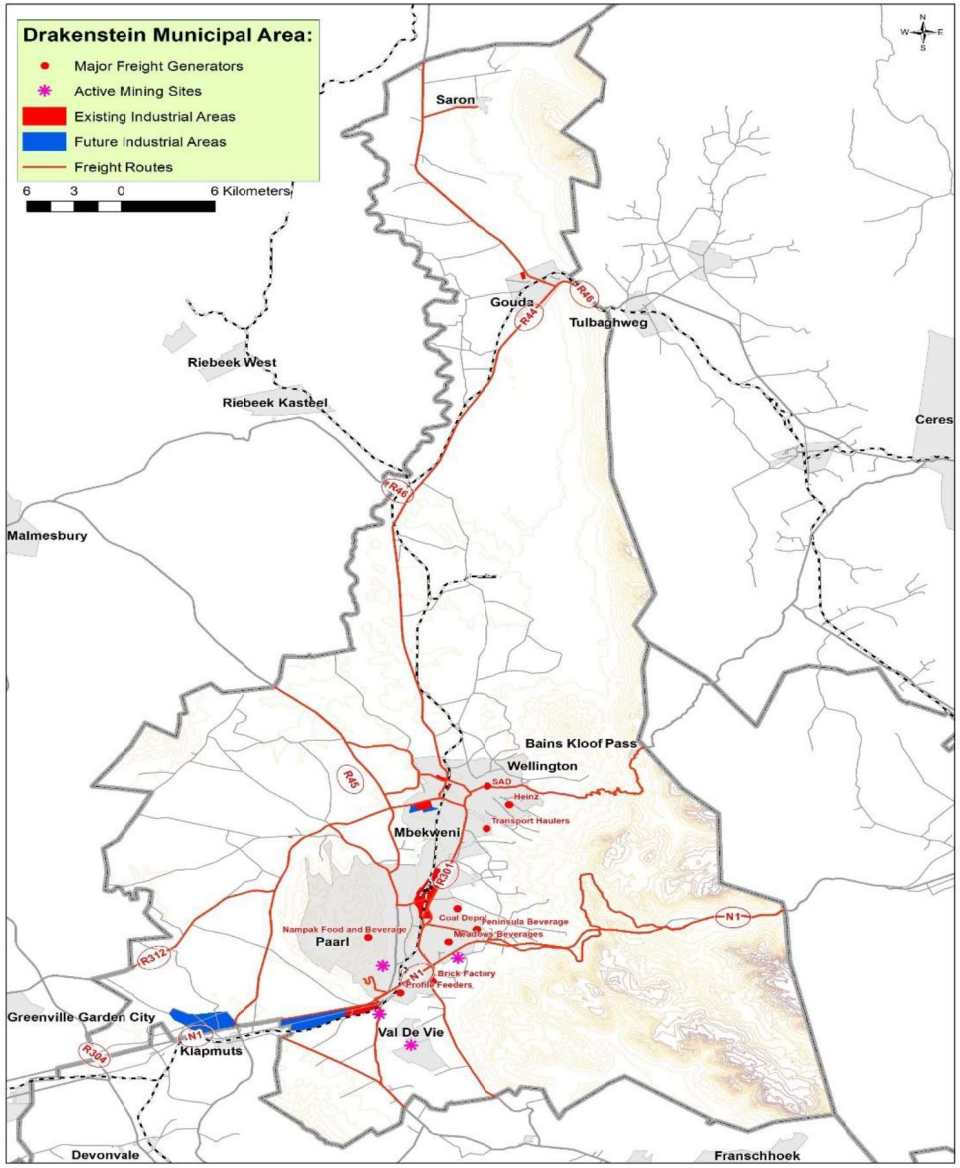
3.3.1. Stellenbosch Municipality/follows:



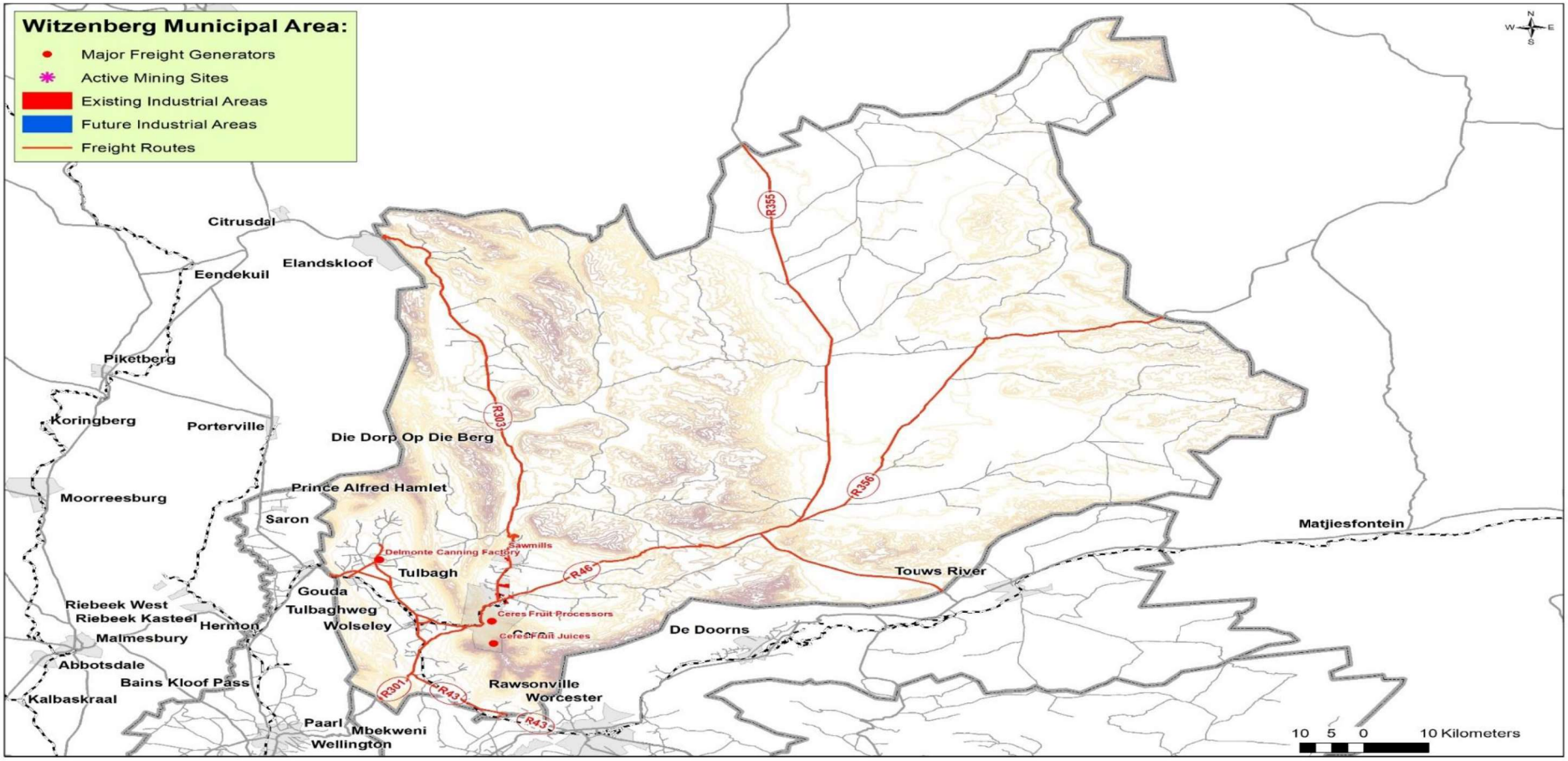
Map 17; the distribution of wine cellars and the agri-processing plants (major freight generators), as well as the location of industry in the Stellenbosch area illustrates that the main routes that connect Stellenbosch to Somerset West (the R44), Kuils River (R310), Klapmuts (R44), Brackenfell (R304) and Franschhoek (R310), as well as the R45 between Franschhoek and Paarl, carry significant amount of freight. In addition, secondary routes that provide access to farming areas off these routes also carry freight in the form of inputs into agri-processing (e.g. delivery of bottles) and distribution of the finished product (e.g. delivery of wine to the Cape Town Harbour for export).

3.3.2 Drakenstein Municipality

Map 18 (opposite); the R44 between Wellington and the N1, the R45 which connects Wellington to Gouda, Tulbagh and beyond and the R101 (Old Paarl Road) running parallel to the N1, Jan van Riebeeck Drive between Wellington and Paarl which connects to the N1 further south, and the R301 and R45 serving the Simondium Groot Drakenstein area, are important freight routes in the municipal area. The large number of freight companies situated in the area adds to the burden of heavy vehicles on these roads. Take out towns and blow up-check routes)



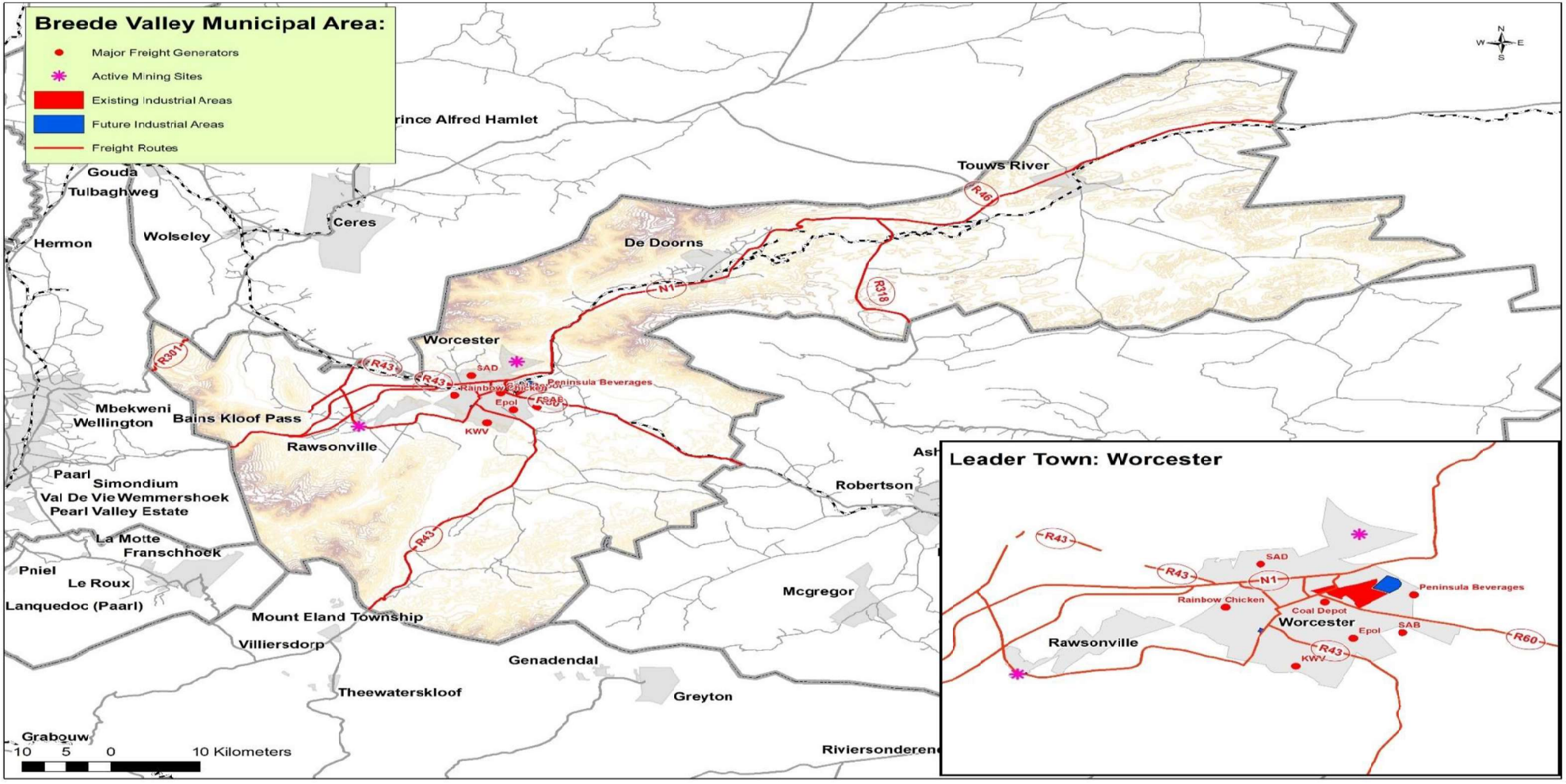
3.3.3 Witzenberg Municipality



Map 19; The transportation of high-quality fresh fruit and vegetables for export purposes is critical to the economy of the Witzenberg local municipality. Roads that are in a poor condition causes damage to the fruit which impacts negatively on grading and the selling price of the fruit. Important freight routes in this area includes the R301 to Op -die Berg and beyond, the R46 between Ceres and Gouda and the R44 from Gouda which then connects to the N1, and the R46 between Ceres and Touws River. The R43 between Ceres and Worcester are also important, it is used to transport packaging material for agri-processing in Witzenberg.

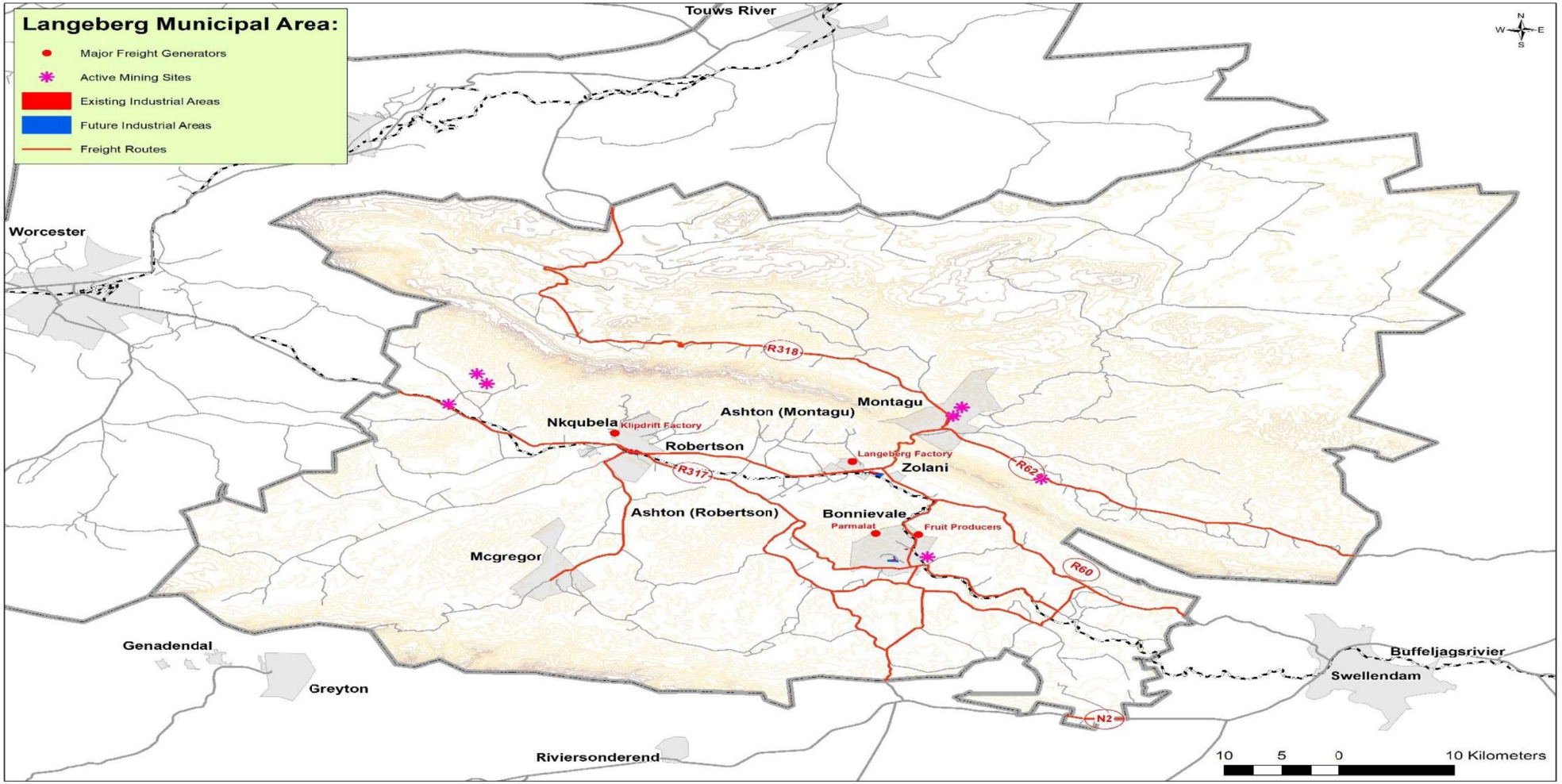
In addition to the quality of roads used to transport fresh produce, the fact that heavy vehicles en route between the N1 and the West Coast and other parts of the Western Cape pass through the town of Ceres (on Main Road) has been noted as a concern. The introduction of a weighbridge in the area has been put forward as a solution to at least discourage heavy vehicles who try to avoid weighbridges on the N1 to use this route.

3.3.4 Breede Valley Municipality/ follows



Map 20; freight generators in the Breede Valley are generally located close to major routes such as the N1 and the R60(to Robertson) and the R43(to Ceres), such as the high valuable table grapes crops of the Hex River Valley. Local officials noted the problem with heavy vehicles passing through the centre of Worcester en route to and from the R60 as an issue. The planned eastern bypass to the town, that will also provide additional access to its industrial area will solve this problem once implemented.

3.3.5 Langeberg Municipality



Map 21; the R62 and the R60 (from Ashton to Swellendam) are the most important freight routes in the Langeberg Municipal area, as they are used to distribute the produce of the region to the market. In addition, all roads that carry fruit to Ashton for processing is of vital importance to the local economy, including the route between Montagu and Ashton which is in the process of being upgraded. The historical and scenic value of the route will however possibly not result in increased carrying capacity. The R317 between Bonnievale and Robertson is also important as it provides access for local wine cellars and the Parmalat plat in Bonnievale.

3.3.6 Key findings: Freight Transport and Routes

3.3.6.1 Many of the Issues (Table 20) indicated by the CWDM Public Transport Regulation Section relate to locational inefficiencies of logistical distribution facilities. Products from the CWD is transported to Epping, Bellville etc. and then redistributed back to the CWD towns. i.e. fruit being transported to the Drydock in Bellville, Wine, dairy products being distributed to facilities in Epping and then transported back. Further logistical distribution inefficiencies are due Company procurement policies and internal economy stimulation e.g. Ceres Fruit Juice/Pioneer purchasing their packaging material at a "sister" company in Durban as opposed to purchasing the material at a company in Worcester.

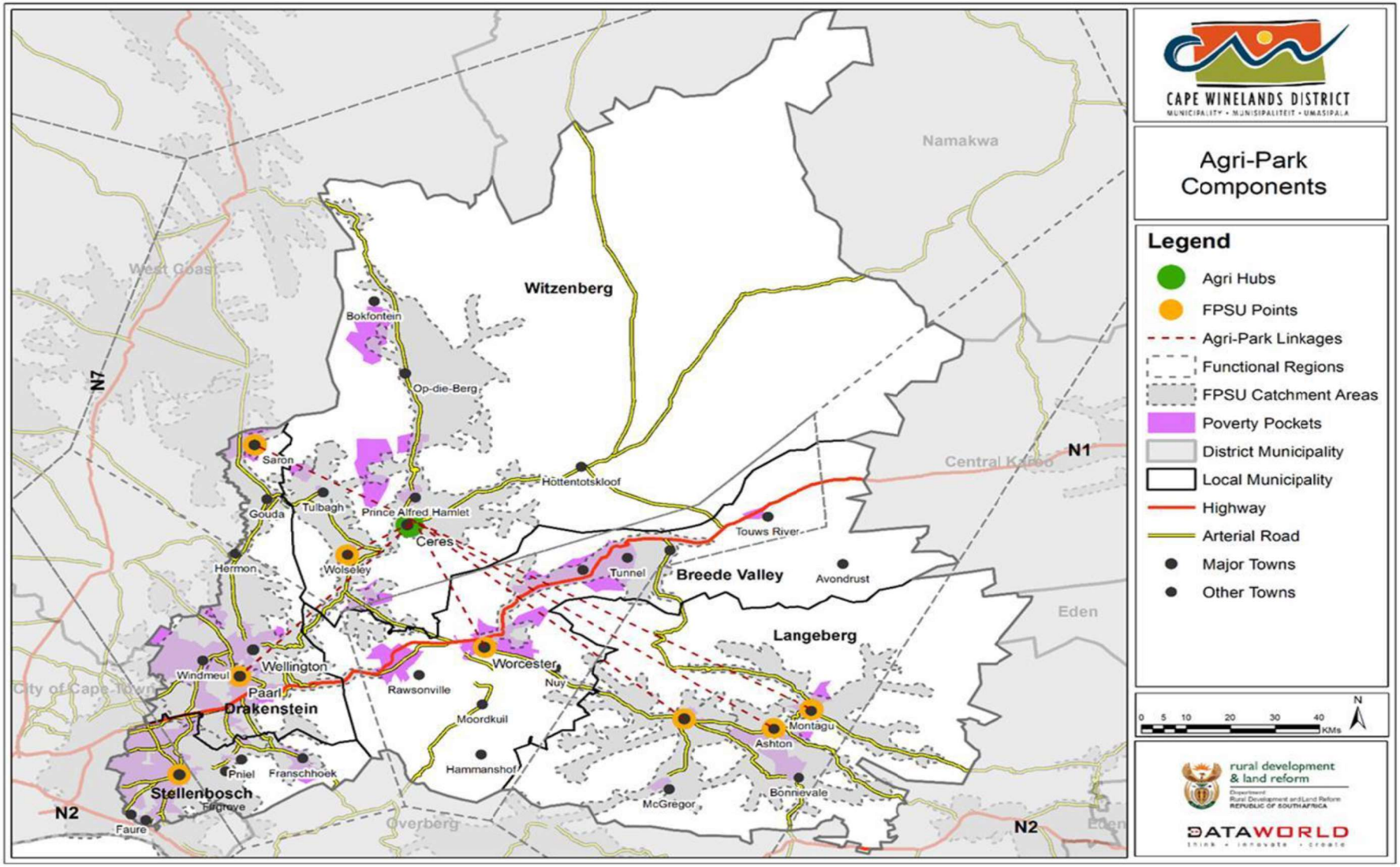
Table 19: Key issues and suggestions for freight and related routes.

Organisation	Issues	Suggestions
Imperial Cargo	• Vehicle movement through Paarl CBD area towards N1	• Upgrading of the Bo-dal Road to be able to accommodate heavy vehicles
Parmalat	• The R60 between Bonnievale and the N2 is closed to traffic after a large section collapsed • Operational efficiency at overloading control points	• Upgrade and maintenance of the R317 through Bonnievale to the N2 • Improve operational efficiency
APL Cartons	• Location of the weighbridge • Unreliability of rail service is main reason for not using it	• Truck stop facility (100 - 150 trucks) needed in Worcester • Improve rail service as it is ideally suited for inbound freight
Ceres Beverage Company	• Operational efficiency at overloading control points • Will make use of rail if there could be a siding at CBC	• Improve operational efficiency • Improve rail service and it could be used by many in Ceres • CWDM could assist in driver training and education
KWV	• Operational efficiency at Port in Cape Town • Lack of rail service to transport bulk wine	• Improve rail service and it could be used by many in Wellington
Unitrans	• Conditions of the rural roads • Impact of roadwork on cost (summer) • Access to the area north of the N1 in Worcester as trucks may not use N1/R60 IC	• Knowledge and communication around road works and condition of the roads • The Worcester bypass, with the inclusion of a link between the R60 and the R40 • Improve truck stops

	• Heavy vehicle traffic in the main road of Worcester • Truck stops; drivers avoid stopping at the truck stops	
Windmeul Eggs	• Traffic congestion on the roads towards Cape Town • The condition of the roads has a negative impact on costs. • Operational efficiency at overloading control points	• Improve operational efficiency at overloading control points
Distell	• Lack of rail service to transport bulk wine • Operational efficiency at Port in Cape Town • Operational efficiency at overloading control points	• Improve rail service • Improve operational efficiency • Improve operational efficiency
Hortgro	• Minutes	• Congestion at the entrance of the port in Cape Town. • Bypass opportunities on the R45 between Gouda and Wellington • Heavy vehicles with fruit greatly affect Ceres and Paarl.

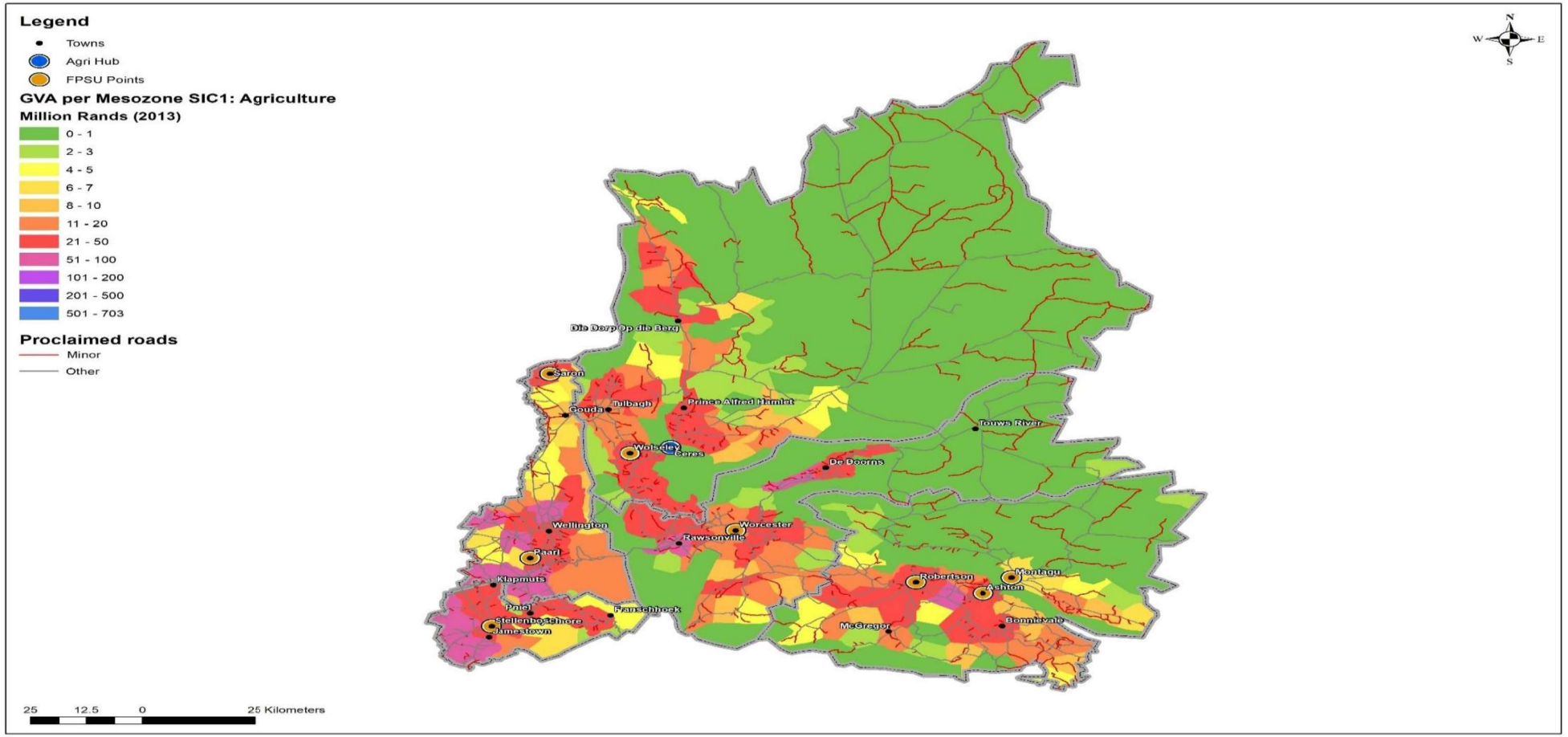
3.4 AGRI PARKS DISTRICT LEVEL IMPLEMENTATION: SPACE ECONOMY LINKAGES

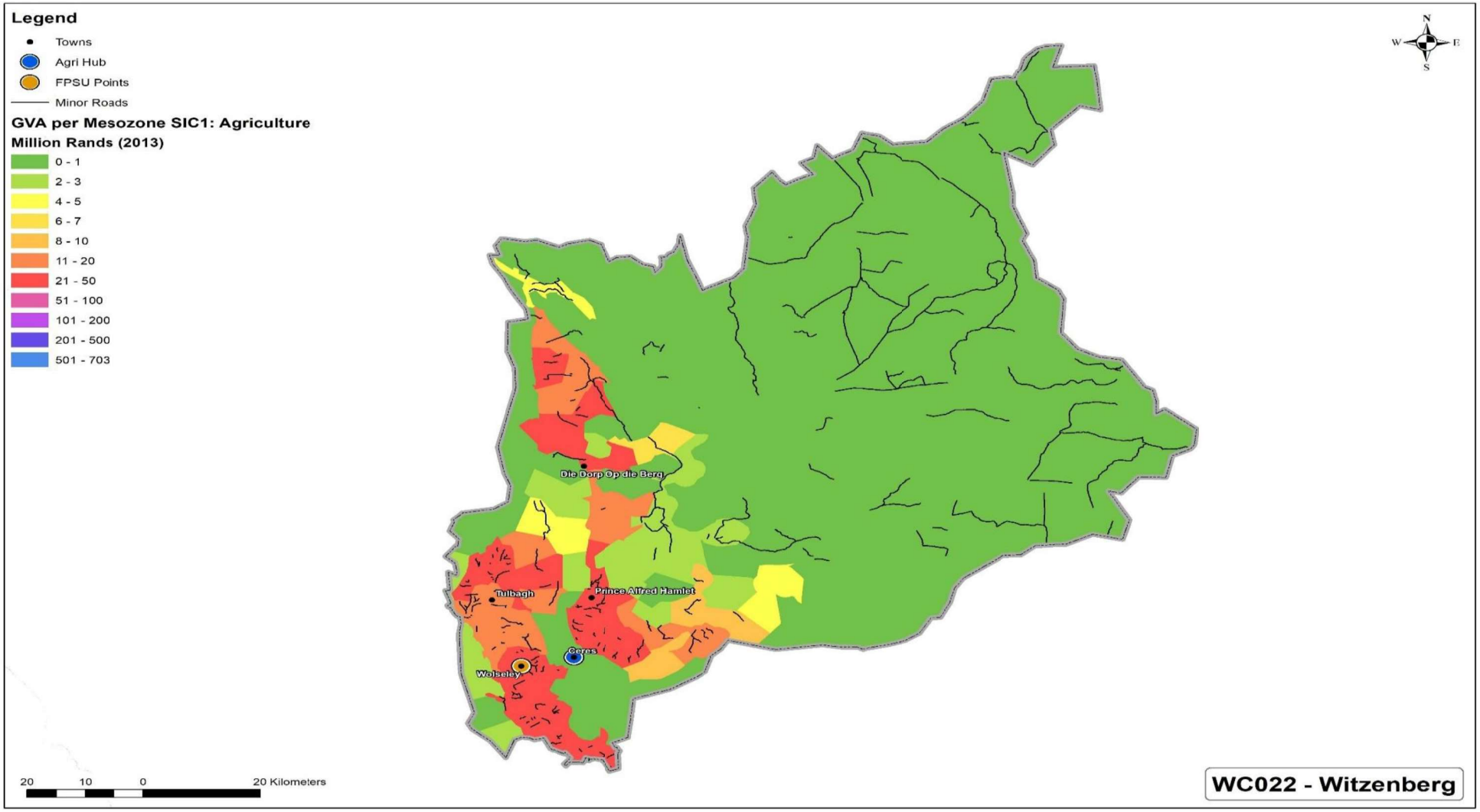
The Department of Rural Development and Land Reform (DRDLR) will be focussing resources and budgets on the various catchments surrounding the identified Farmer Production Support Units (FPSU's). These catchments have been identified based on a 30km distance along the existing road network and will enable various role players to target suitable strategic land for production support as well as land reform purposes. The DRDLR has prioritised Agri-park implementation in Saron, Stellenbosch, Ceres for the 2017/18 financial year and Paarl, Robertson, Montagu, Ashton and Worcester for the years thereafter. Here the focus will be on the establishment of the necessary Farmer Production Support (FPSU) Infrastructure as well as support to emerging farmers and the local community within the FPSU catchments (refer to Map 23 below).



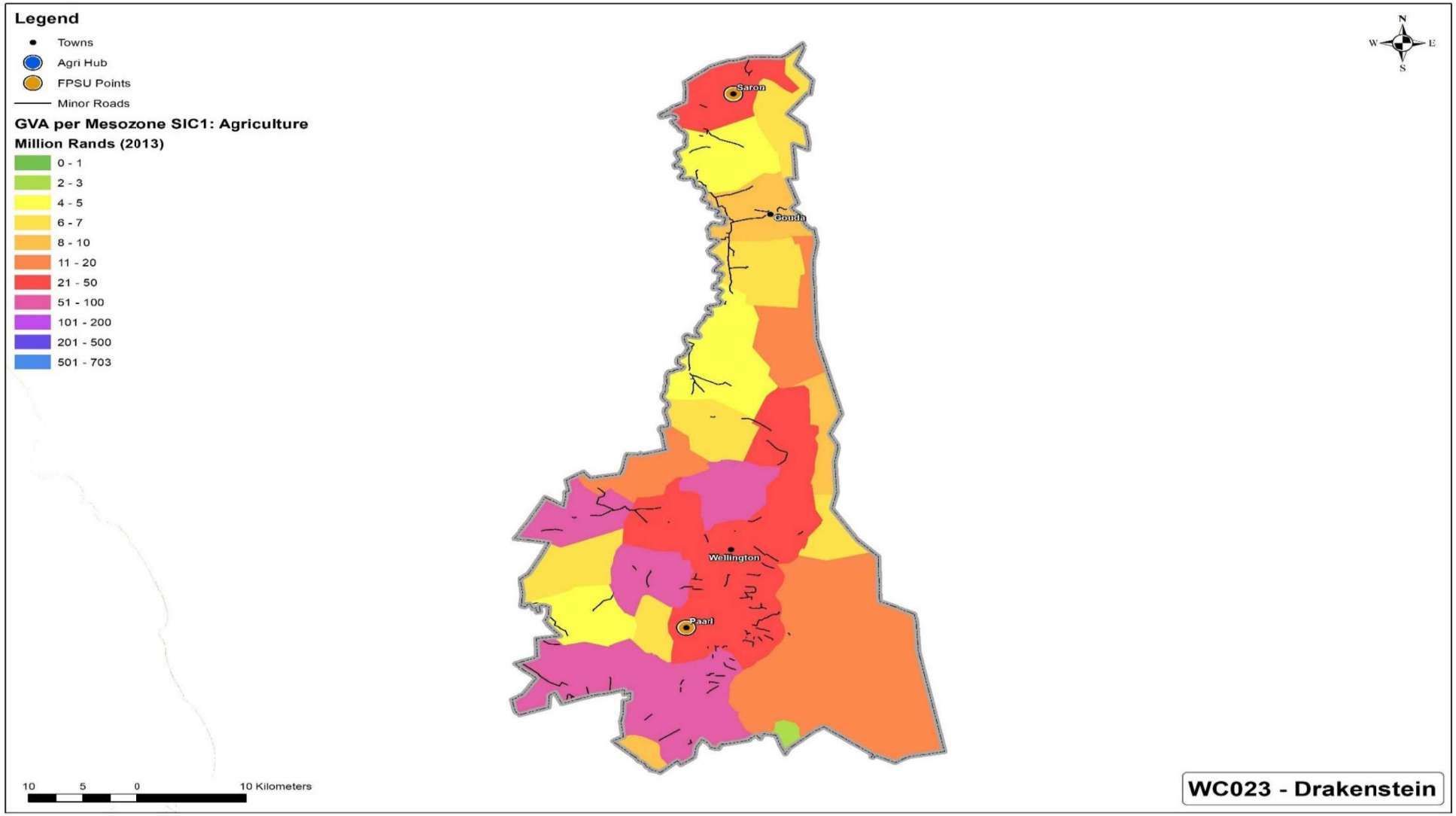
Map 22: Agri-Park components.

Map 23 illustrates the proposed Agri Park Components and Gross Value Added per Mesozone in terms of Agricultural production and important minor and primary routes. The CWDM fulfil a Roads agency function on behalf of the Western Cape Provincial Government. This function entails maintaining provincial roads but does not include important minor roads that are used by the agricultural sector due to insufficient funding that is provided by the Western Cape provincial government. It is crucial that these minor roads that at least fall within the middle to high end mesozones must be maintained due to regular use for transporting goods from these areas.

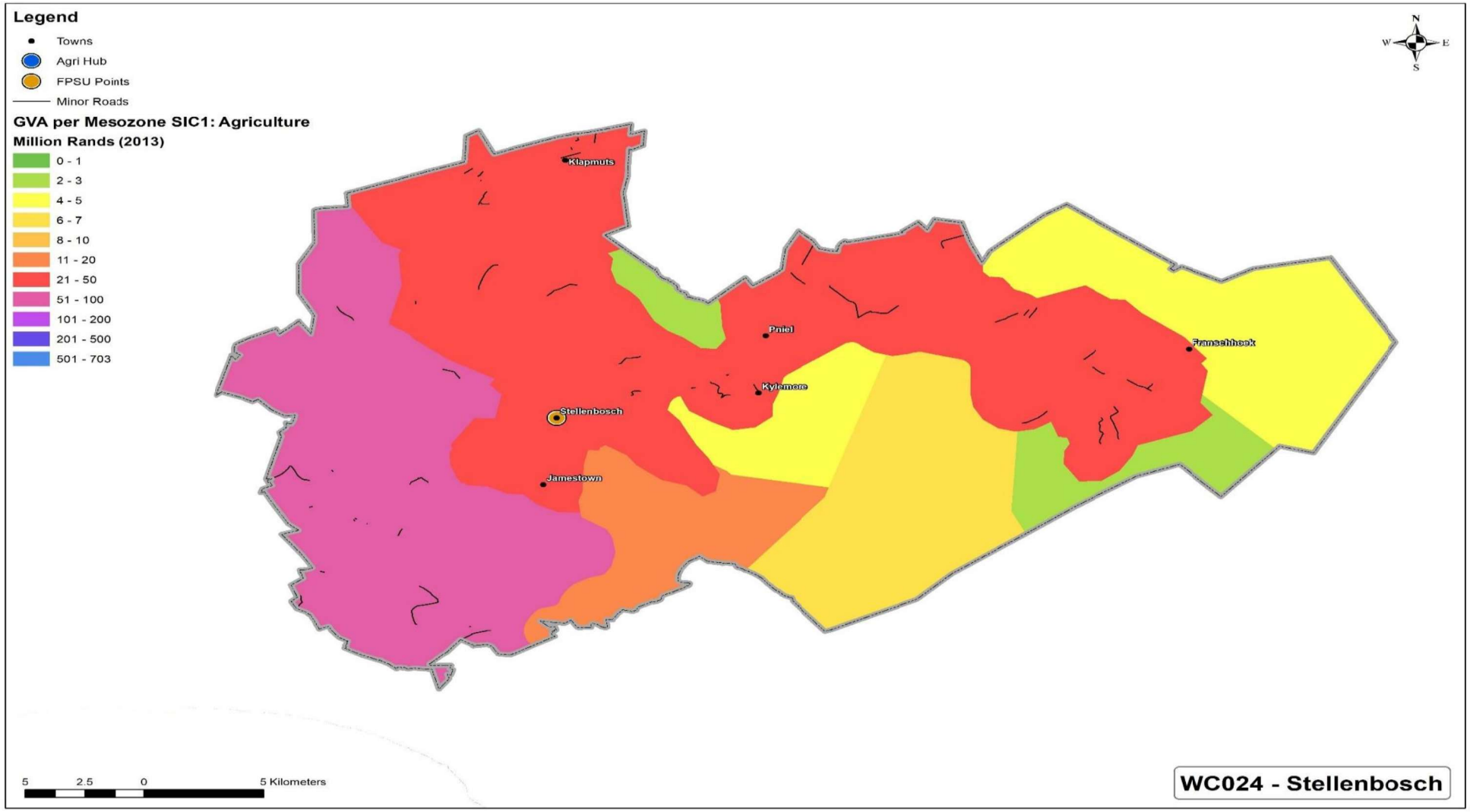




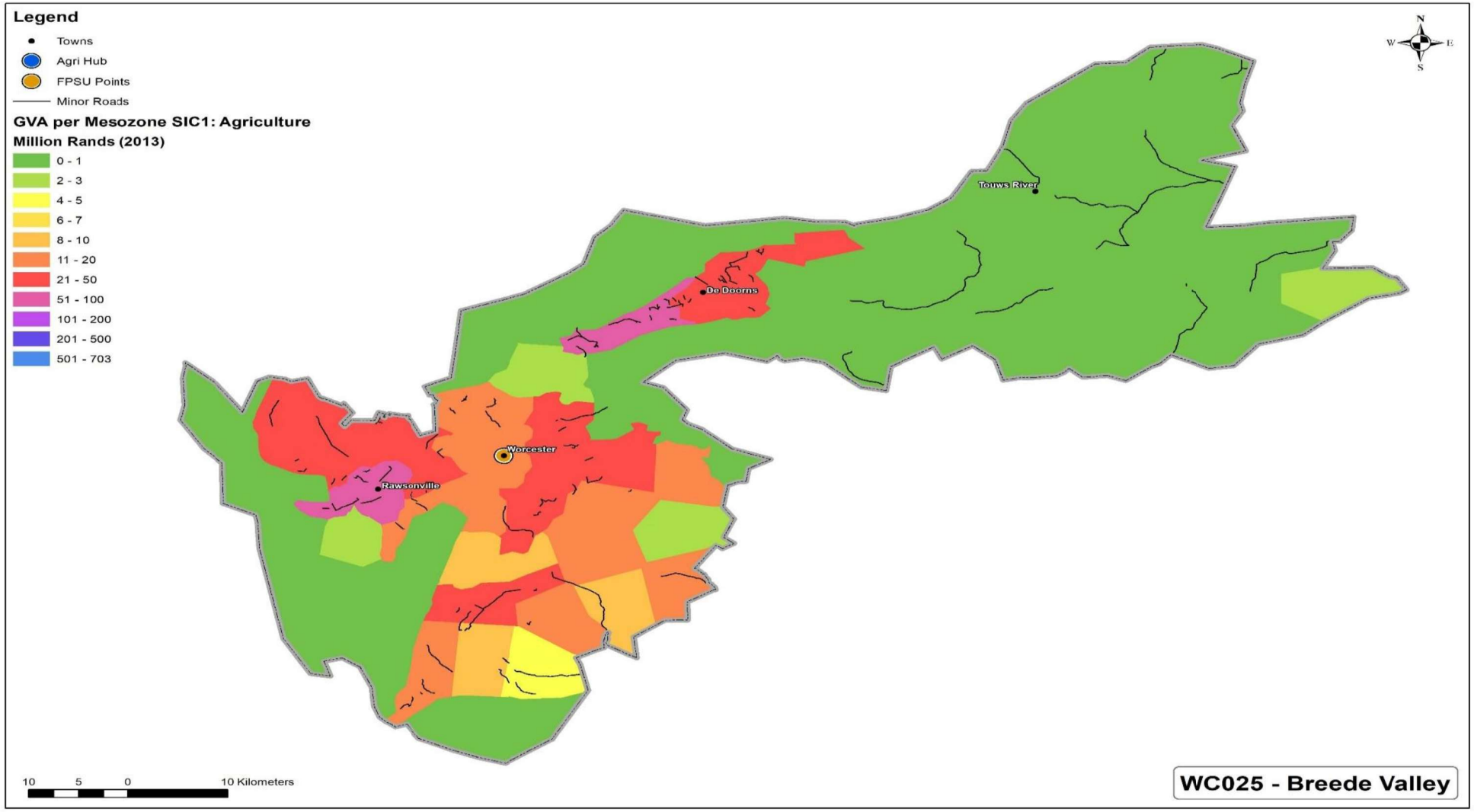
Map 24: Witzenberg agricultural mesozones and minor roads.



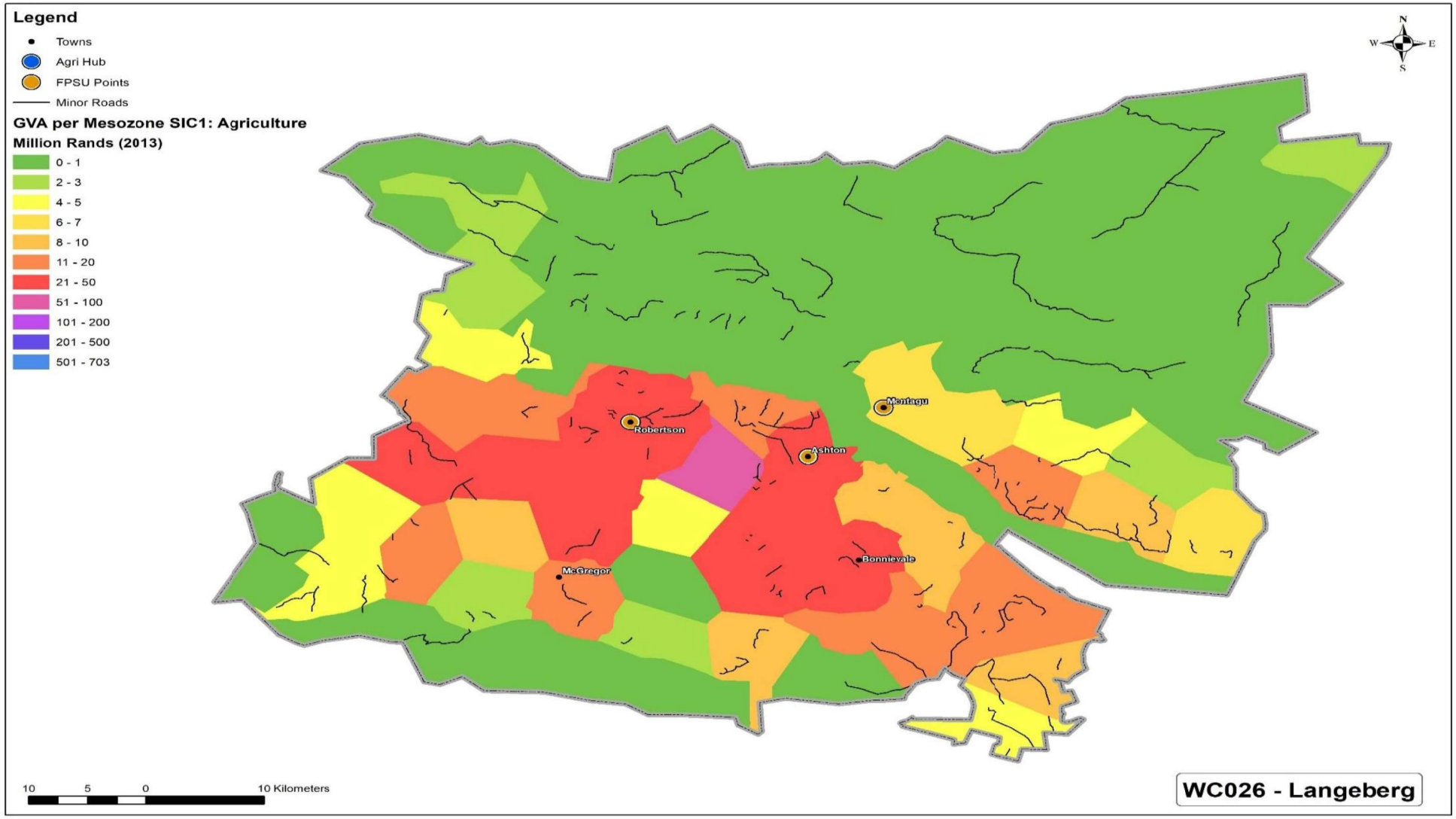
Map 25: Drakenstein agricultural mesozones and minor roads.



Map 26: Stellenbosch agricultural mesozones and minor roads.



Map 27: Breede Valley agricultural mesozones and minor roads.



Map 28: Langeberg agricultural mesozones and minor roads.

3.4.1 Key findings: Agri Parks District Level Implementation: Space Economy Linkages

3.4.1.1 Support is needed from all relevant stakeholders (National, Provincial, Local Government, NGO's and private sector) to ensure that the Agri Parks proposal is implemented successfully.

3.4.1.2 The CWDM fulfil a Roads agency function on behalf of the Western Cape Provincial Government. This function entails maintaining provincial roads but does not include important minor roads that are used by the agricultural sector due to insufficient funding that is provided by the Western Cape provincial government. It is crucial that these minor roads that at least fall within the middle to high end mesozones must be maintained due to regular use for transporting goods from these areas (refer to map 21).

3.4.1.3 The Department of Rural Development and Land Reform proposes the following agriculture related projects [Draft Rural Development Plan for the CWDM, 19 December 2016]; Table 20 (below): Agriculture projects; Livestock

Project Name	Project Description	Project Driver
Small scale farming on municipal commonage	This project entails the establishment of farming opportunities for existing small scale livestock farmers.	Witzenberg LM
Increasing the size of the communal in De Doorns	Communal land in De Doorns is being used for the grazing of livestock in the area. The demand for this land is exceeding supply, it is therefore proposed to make more land available.	To be determined (possibly Breede Valley LM)
The use of grey water for the irrigation of communal pasture	There is currently not enough water to irrigate the communal pasture in Worcester. It is therefore proposed that grey water/treated waste water be used for irrigation.	To be determined (possibly Breede Valley LM)
Agrarian reform program (Klapmuts)	This project entails the facilitation of grazing opportunities for small scale farmers on vacant land (portions of Erf 736 Klapmuts) and to support the local food chain	Drakenstein LM, CWDM
Commonage livestock pen in Ashton	Overcrowding of livestock and inappropriate housing of livestock has led to the realisation of the need for a livestock enclosure in the town of Ashton.	To be Determined
Osdam abattoir	This is an agri parks project aimed at increasing the meat processing capacity in Ceres (Skoonvlei industrial park). The abattoir will process sheep and cattle to produce red meat.	DRDLR
Local mobile egg farming operation	This is a mobile egg farming business. The owner of this business has been in operation for the past 43 weeks. He is currently seeking funding from DRDLR to expand his business as he believes there is considerable scope for demand for his product in the area.	To be determined

Table 21: Agriculture projects; Crops

Project Name	Project Description	Project Driver
Small farmers support program	This program supports small scale farmers in the district with the objectives of: • Promoting BBBEE • Creation of alternative income for seasonal and unemployed workers • Address issues of poverty and social development The program provides direct assistance such as the purchasing of equipment, provision of grants etc.to small scale farmers in various locations in the CWDM.	CWDM
Bella fruit cold storage	The BA Kamer company is seeking to build a controlled atmospheric complex (cold storage unit) for pears and apples in Bella Vista in Witzenberg LM. This will create the necessary capacity to meet the high demand for cold fruit storage in the area.	BA Kamer company /DRDLR
Agri life fruit project	This is a 65% black owned agricultural business focusing on agri processing and is situated in the town of Wolseley. The project aims to provide post-harvest services to fruit farmers in the Witzenberg area (mainly around the Ceres-Tulbagh area).	To be determined
CCS cold storage	This project entails the construction of a cold storage unit consisting/making use of 'dynamic control atmosphere' technology to increase the lifespan of fruits in storage. The project will be located in Ceres.	To be determined
Mentoring & training: Nduli	This project focuses on mentoring & training of a vegetable production enterprise which is a supplier to Freshmarkets and Ceres Spar.	DRDLR: REID

Table 22: Agriculture projects; Agri processing/

Project Name	Project Description	Project Driver
Cape Winelands District Municipality Skills Development	This project forms part of the Agri Parks Initiative and entails the skills development of the small holder farmers and farm workers in small scale agriculture, the fostering of business partnerships between private and public sector and the promotion of agricultural value chain linkages in the CWDM.	DRDLR
Agri processing hub (Saron)	Consolidate industrial requirements for surrounding farmers and local agriculture at central processing hub for small scale production and packaging. Identify and secure municipal land	Drakenstein LM
Upgrading of infrastructure to connect underutilised land in Worcester	Utilities infrastructure such as electricity cables and water pipes are needed to connect underutilised land in Worcester. It is envisioned that this land can serve the agricultural industry through creating new producers (small holder farmers on lease.)	To be determined (possibly Breede Valley LM)
Provision of an irrigation dam in the Touwsrivier area	It is proposed that an investigation into the provision of an irrigation dam is conducted, this dam is to supplement the available water for small holder farmers in the Breede Valley area.	To be determined (possibly Breede Valley LM)
Increasing the wall of the Brandvlei Dam	The aim of this project is to increase the water storage capacity of the Brandvlei dam. This may create further opportunities for increased agricultural activity.	Breede Valley LM
Agricultural Graduates (2015/16): Skills Development	This is the recruitment and placement of unemployed agricultural graduates on DRDLR: REID land reform projects. Graduates in the Cape Winelands specialise (as interns) in: Animal Production, Hydroponics, Plant Production, Agricultural Economics.	DRDLR: REID
Halaal Industrial park (possibly in Cape Winelands	Establishment of an industrial park dedicated to agri-processing of halaal food products for export and local consumption has been proposed. Cape Town and Stellenbosch has been proposed as possible sites for this project.	To be determined
Selfsorg centre – food garden in Prince Alfred Hamlet	The aim of this project is to enable the community to produce their own food and to beautify the town of Prince Alfred Hamlet. This will contribute to tourist activities as well as promote food security in the town.	WCDoA
Bella Vista food gardens	The aim of this project is to enable the community to produce their own food and to beautify the town of Bella Vista.	WCDoA
Bella Vista bakery	This project entails the funding of the construction of a bakery in Bela Vista which will focus on the processing of agricultural produce and the production of confectionary and pastry foods.	WCDoA/Casidra
Nduli food laboratory	This project will entail the establishment of a food lab in which the quality of food and agricultural products will be tested and graded before distribution.	WCDoA/Casidra
Agri processing plant in Ceres	The market for agri processing is not yet saturated. It has therefore been proposed that a new agri processing plant be developed focusing on the processing of crops such as deciduous and stone fruits.	To be determined
Ceres fruit growers' cold storage	Development of a fruit cold storage unit in the town of Ceres in order to overcome the seasonality of supply (especially of fruit).	Ceres Fruit Gowers Pty (Ltd) & DRDLR: REID

3.4.2 Implementation proposals:

FOCUS AREA:	AgriParks District Level Implementation: Space Economy Linkages
STRATEGIES	1. Strengthen rural support programmes for commercial and small-scale farming and develop the potential of the agricultural value chain. 2. Prioritize maintenance of minor roads in higher value mesozones.
PRIORITY:	HIGH

3.4.3 CWDM Implementation Plan: Agri Parks District Level Implementation: Space Economy Linkages

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Road Maintenance	R128 173 608, 00	Technical Services	2018/2019
Agri Parks Coordination	R47 500 & operational budget	Local Economic Development & Tourism Section	2018/2019
Infrastructure Rural Area Farmers	R1000 000, 00	Projects and Housing Section	Annually
Clearing of Road Reserves	R1 075 000, 00	Projects and Housing Section	Annually

4. BIODIVERSITY AND ECOSYSTEM SERVICES

4.1 BIODIVERSITY

The Cape Winelands District Municipality (CWDM) lies within one of the world's greatest biodiversity hotspots, the Cape Floristic Region (CFR) now known as the Core Cape Sub-Region (CCR), and includes parts of the Fynbos, Succulent Karoo, Albany Thicket and Afro-temperate Forest biomes[1]. The Fynbos and Succulent Karoo biomes have exceptionally high levels of plant diversity and endemism (species that occur only in a specific area and nowhere else). The CCR contains around 9383 vascular plant species with an endemism rate of just over 68%[1].

The high species diversity along with the range restriction of many species makes the CCR especially vulnerable. Of the 2577 taxa threatened nationally, 71% are located in the Western Cape[1]. They are predominantly from low-lying areas where agriculture and urbanisation has had the biggest Impact. Fynbos habitat loss is rated to be just over 30%. In the Fynbos biome 3087 taxa are of conservation concern with 1736 in danger of extinction[1]. 34% of taxa of conservation concern are due agricultural crops and 27% due to urbanisation and infrastructure developments. A further 20% of taxa are affected by invasive alien species. *Pinus* and *Hakea* species are affecting many mountain flora, a particularly important aspect for the CWDM which contains many mountainous areas.

Fire plays an important role in the health and maintenance of biodiversity in Fynbos. Many flower species have evolved to appear after fires and are then succeeded over the years by longer lived shrubs[1]. The composition of species is thus affected by the fire interval and the season in which a fire occurs. Increased fire frequency poses an especially big risk to slow growing alpine species and serotinous taxa. Those areas close to human settlements and roads are most at risk.

The Succulent Karoo boasts more than 5000 species with more than 50% of plant species endemic to the biome[2]. However, only around 5,8% of the biome is formally protected[3].

Being situated in such a unique area, the CWDM and local municipalities have a responsibility to aid in the protection of the CCR for present and future generations both locally and from around the world as it has such great value.

Development decisions should consider the Western Cape Biodiversity Spatial Plan and its accompanying handbook. Developments should especially avoid impacting on Critical Biodiversity Areas and Ecological Support Areas:

Critical Biodiversity Areas (CBAs): Areas that are required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure. These include:

- All areas required to meet biodiversity pattern (e.g. species, ecosystems) targets;
- Critically Endangered (CR) ecosystems (terrestrial, wetland and river types);

• All areas required to meet ecological infrastructure targets, which are aimed at ensuring the continued existence and functioning of ecosystems and delivery of essential ecosystem services; and

• Critical corridors to maintain landscape connectivity.

CBAs are areas of high biodiversity and ecological value and need to be kept in a natural or near-natural state, with no further loss of habitat or species. Degraded areas should be rehabilitated to natural or near-natural condition. Only low-impact, biodiversity-sensitive land uses are appropriate. In the maps, a distinction is made between CBAs that are likely to be in a natural condition (CBA 1) and those that are potentially degraded or represent secondary vegetation (CBA 2). This distinction is based on best available land cover data, but may not be an accurate or current reflection of condition.

Ecological Support Areas (ESAs): Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services. They support landscape connectivity, encompass the ecological infrastructure from which ecosystem goods and services flow, and strengthen resilience to climate change. They include features such as regional climate adaptation corridors, water source and recharge areas, riparian habitat surrounding rivers or wetlands, and Endangered vegetation.

ESAs need to be maintained in at least a functional and often natural state, in order to support the purpose for which they were identified, but some limited habitat loss may be acceptable. A greater range of land uses over wider areas is appropriate, subject to an authorisation process that ensures the underlying biodiversity objectives and ecological functioning are not compromised. Cumulative impacts should also be explicitly considered.

In the maps, a distinction is made between ESAs that are still likely to be functional (i.e. in a natural, near-natural or moderately degraded condition; ESA 1), and Ecological Support Areas that are severely degraded or have no natural cover remaining and therefore require restoration (ESA 2).

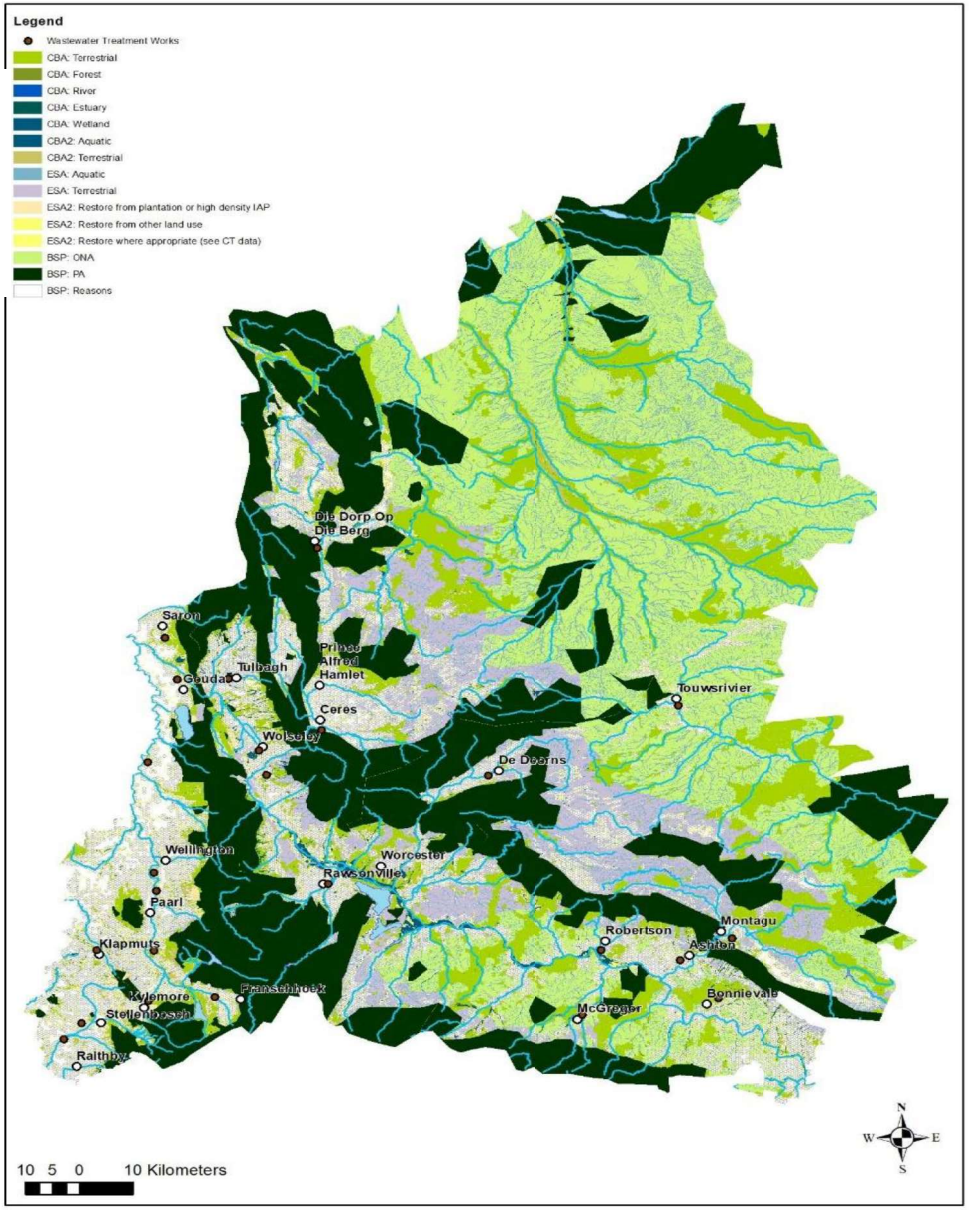
Other Natural Areas (ONAs): Areas that have not been identified as a priority in the current biodiversity spatial plan but retain most of their natural character and perform a range of biodiversity and ecological infrastructure functions. Although they have not been prioritised for meeting biodiversity targets, they are still an important part of the natural ecosystem.

ONAs should be managed or utilised in a manner that minimises habitat and species loss and ensures ecosystem functionality through strategic landscape planning. These 'other natural areas' offer considerable flexibility in terms of management objectives and permissible land uses, but some authorisation may still be required for high impact land uses.

Severely Modified to No Natural Remaining (NNR): Areas that have been modified by human activity to the extent that they are no longer natural, and do not contribute to biodiversity targets. These areas may still provide

limited biodiversity and ecological infrastructure functions, even if they are never prioritised for conservation action. These areas offer the most flexibility for land use, but these should be managed in a biodiversity-sensitive manner, aiming to maximise ecological functionality. Authorisation is still required for high-impact land uses.

Map 29 indicates areas important for the protection of biodiversity and ecosystem services (WCBSP 2017).



4.2 ECOSYSTEM SERVICES

Ecosystem services are the benefits humans get from ecosystems. These are grouped into four main categories: Provisioning (e.g. production of food and water), regulating (e.g. Control of climate and disease), supporting (e.g. Nutrient cycling and crop pollination) and cultural (e.g. Spiritual and recreational activities).

Sustainable cities are only possible through healthy ecosystems and incorporating ecosystem services into planning and development can lead to significant municipal savings, boost local economy and improve the quality of life for residents[4]. Maintaining ecosystem services is the most affordable approach to meeting people's needs[4].

The lack of understanding by policy makers of the economic value of fynbos ecosystems is often what leads to a lack of funding for environmental management[5]. This clearly demonstrates the need for local municipalities to evaluate the economic value of the ecosystems services in their area to facilitate funding. A 1997 study, taking into account water production, wildflower harvesting, hiker visitation, ecotourism visitation, endemic species and genetic storage, estimated the value of a 4km^2 area fynbos between R19 mil and R300 mil depending on the valuation and management methods (1USD = 4.50ZAR)[5].

The ICLEI TEEB Manual for Cities suggest the following steps to incorporate ecosystem services into urban management:

1. Specify and agree on the problem or policy issue with stakeholders
2. Identify which ecosystem services are most relevant
3. Determine what information is needed and select assessment methods
4. Assess (future changes in) ecosystem services
5. Identify and assess management/policy options
6. Assess the impact of the policy options on the range of stakeholders

Steps should be taken to ensure the protection of freshwater ecosystems due to the arid nature of the CWD and the Western Cape in general. Initiatives should be undertaken to clear alien species, restore/protect riparian zones and wetlands, and implement farming best practices, to maximise the amount of available water, its quality and maintain the flood regulating benefits gained from healthy freshwater ecosystems.

4.3 INVASIVE ALIEN SPECIES

Invasive alien plants are having a serious impact, not only on our biodiversity, but also on the ecosystem services provided by fynbos, especially relating to water provisioning. Invasive plants significantly increase the biomass and transpiration in water catchment areas reducing runoff and streamflow, meaning less water for the population. Reductions between 30 and 100 percent have been estimated for downstream yield due to alien species[5,6]. Furthermore, the increased fuel load created by alien plant infestations has increased fire frequency, a subsequent rise in surface water runoff and top soil erosion[6].

Invasive species are likely to have significant impacts on pollination, water purification, pest control, natural hazards and climate mitigation services obtained from ecosystems. They can narrow waterways and decrease water retaining capacity, thereby increasing flood risk[6].

Furthermore, invasive species can have detrimental effects on human wellbeing[7]. However, conflict can arise between those aiming to remove the invasive species and rural/poor communities who rely on the invasive populations for fuel and building material.

It has been demonstrated that invasive species can reduce the value of fynbos ecosystems by over US$11,75 million[7].

4.4 CAPE WINELANDS BIOSPHERE RESERVE

The Cape Winelands Biosphere Reserve (CWBR) was designated by UNESCO in accordance with the Man and the Biosphere (MAB) Programme

in September 2007. It covers an area of 322 030 ha. It is stated the CWBR would support the development of the Cape Winelands as "an area of excellence and good practice for people, culture and nature". The main purpose of the CWBR therefore is to promote biodiversity, sustainable development and education. It shares a border with the Kogelberg Biosphere Reserve in the south and covers an area northward along the Cape Fold Mountains and valleys of the Cape Winelands. It covers the Stellenbosch local Municipality and parts of the Breede Valley, Witzenberg and Theewaterskloof local municipalities (Map 30). It consists of three regions: the core (pristine area where no intrusive development is allowed), buffer zone (protects the core) and transition zone (sustainable land use practices are supported). Core areas are made up of wilderness areas, statutory protected areas, Critical Biodiversity Areas (CBA), Ecological Support Areas (ESAs), rivers and ecological corridors. Sections of the core area also form part of the extensive Cape Floral Region Protected Areas World Heritage Site. This was a serial nomination and the site was inscribed on the World Heritage List in 2004. It is made up of eight protected areas of which the Boland Mountain Complex includes, inter alia, the Hottentots Holland, Jonkershoek and Limietberg Nature Reserves, all of which form part of the CWBR core areas. The buffer areas are found next to core areas and are intended to reduce the impact of human activities on core areas as well as link core areas by creating biodiversity corridors. They mostly consist of natural and near-natural land which is not formally conserved in accordance with the Protected Areas Act, and could include private nature reserves and other conservation areas. Transitional areas allow for a variety of land uses, including intensive agriculture as well as urbanisation.

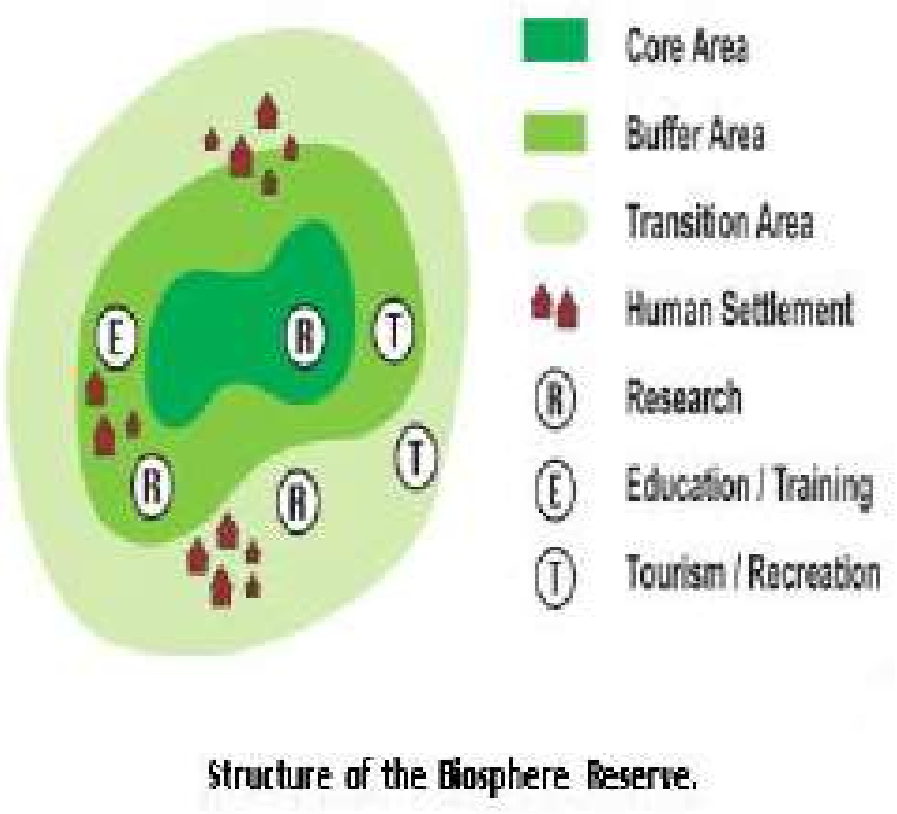
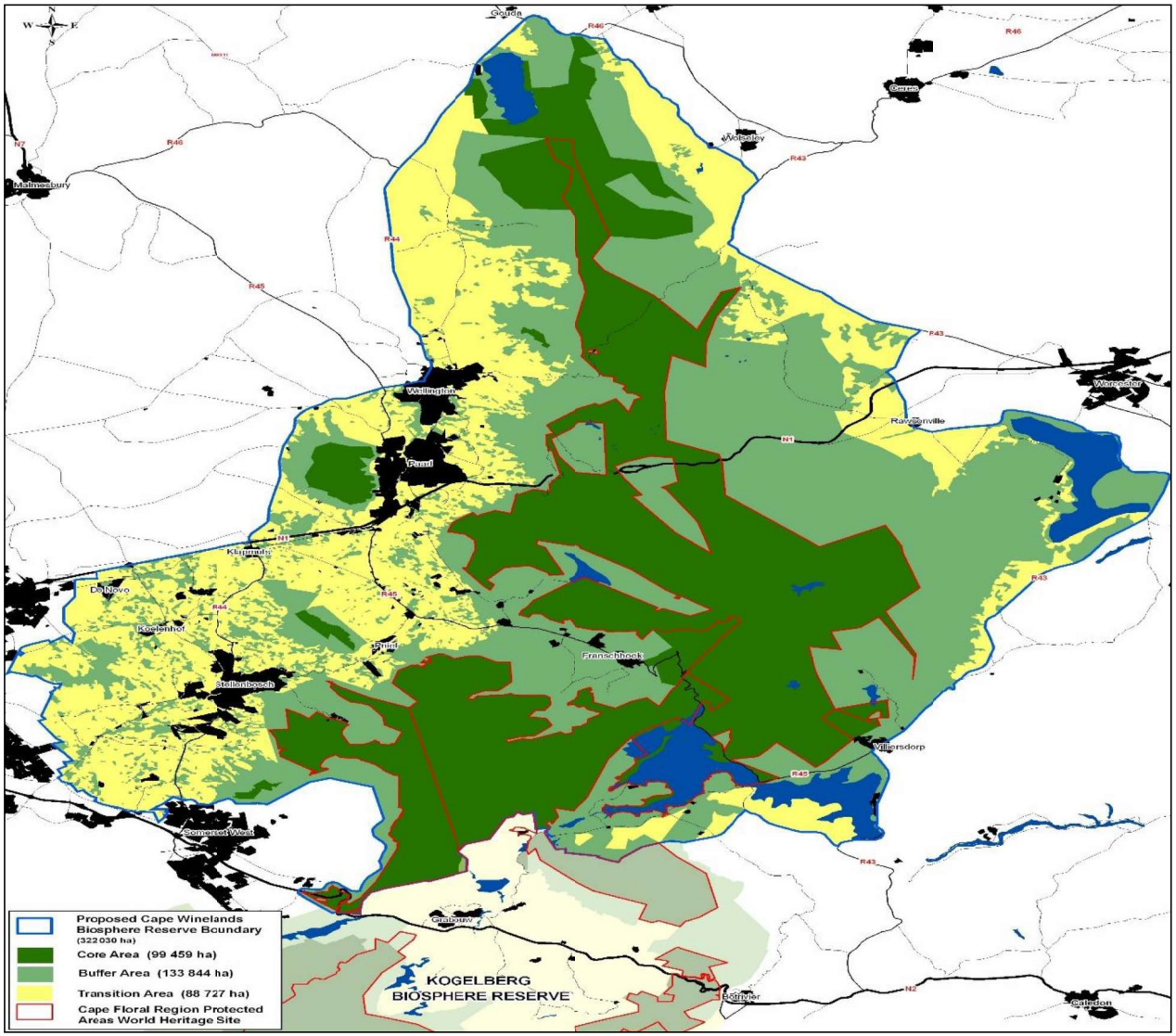


Figure 3; Structure of a Biosphere Reserve.



Map 30: Cape Winelands Biosphere Reserve

4.5 Key findings: Biodiversity and Ecosystem Services

4.5.1 Habitat loss.
4.5.2 Change in fire regime.
4.5.3 Invasive Alien Species.
4.5.4 Urban and agricultural development.
4.5.5 Over extraction of water sources.
4.5.6 Loss of ecosystem services.
4.5.7 River health/Lack of protection of freshwater ecosystems.
4.5.8 Integrate ecosystem services into planning and development.
4.5.9 Degradation of wetlands.
4.5.10 Stake holder disagreements relating to alien clearing.
4.5.11 Largely unknown economic value of ecosystem services.

4.6 Implementation proposals:

FOCUS AREA:	BIODIVERSITY AND ECOSYSTEM SERVICES
STRATEGIES:	1. Prevent the loss and degradation of Critical Biodiversity Areas (CBAs) and Ecosystem Support Areas (ESAs); incorporate CBAs into protected area networks. 2. Restore CBAs and ESAs where appropriate to maintain ecosystem services and protect biodiversity. 3. No further loss of wetlands; increase protection of freshwater ecosystems. 4. Ensure adequate buffer areas around wetlands and Core Areas. 5. Remove invasive alien species. 6. Maintain buffer areas of the Cape Winelands Biosphere Reserve to protect Core Areas and maintain the integrity of the reserve. 7. Ensure developments follow required processes and assessments and adhere to requirements of this document, the Western Cape Biodiversity Spatial Plan, the Cape Winelands Biosphere Reserve and other relevant SDFs and documents. 8. Promote conservation agriculture. 9. Improve and maintain ecological corridors across farms to facilitate the migration of flora and fauna. 10. Discourage the introduction of exotic species as outlined in the Biodiversity Act. 11. Minimise factors that impact on pattern and process integrity in Core Areas, CBAs and ESAs. 12. Encourage environmental education and non-consumptive low impact eco-tourism. 13. Harvest natural resources sustainably. 14. River bank development should be set back behind the ecological setback lines including flood and storm surge lines (1:50 year flood line: property boundaries; 1:100 years flood line: building platform).

TOOLS AND RESOURCES:	15. Cape Farm mapper: https://gis.elsenburg.com/apps/cfm/ 16. Western Cape Biodiversity Spatial Plan 2017: http://bgis.sanbi.org/Projects/Detail/194 17. Cape Winelands Biosphere Reserve: http://capewinelandsbiosphere.co.za/
PRIORITY:	High

4.7 CWDM Implementation Plan: Biodiversity Conservation

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
EPWP Invasive Alien Vegetation Management	R 2 030 000, 00	Land Use and Spatial Planning Section	Annually
River Rehabilitation	R 360 000, 00	Land Use and Spatial Planning Section	Annually
Service Delivery Agreement with Cape Winelands Biosphere Reserve	R150 000, 00	Land Use and Spatial Planning Section	Annually

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5. CLIMATE CHANGE

5.1 RAIN AND TEMPERATURE

Although there are variations between models, some predictions of future climate patterns are more certain. Climate models indicate hotter and dryer conditions in the Western Cape in the mid future (2046 to 2065)[1–5]. In the CWDM we can expect a decrease in mean annual rainfall and the number of days with a rainfall above 5mm,10mm and 20mm[1]. Furthermore, there is a chance of a slight increase in the number of days with no rain in the CWDM[1]. Even though, the mean annual rainfall will likely decrease, it is possible that we may experience an increase in rainfall intensity. This would increase flooding risks.

Despite evidence of a drier future for the WC and CWDM, there are also predictions of increased rain over the mountains, and so in spite of predictions of a drier future it is important that planning takes into account the possibility of a wetter future[6]. However, since a drier future is of higher concern planning should prioritize preparing for it. There are also possibilities of rainfall shifting into autumn and spring[6].

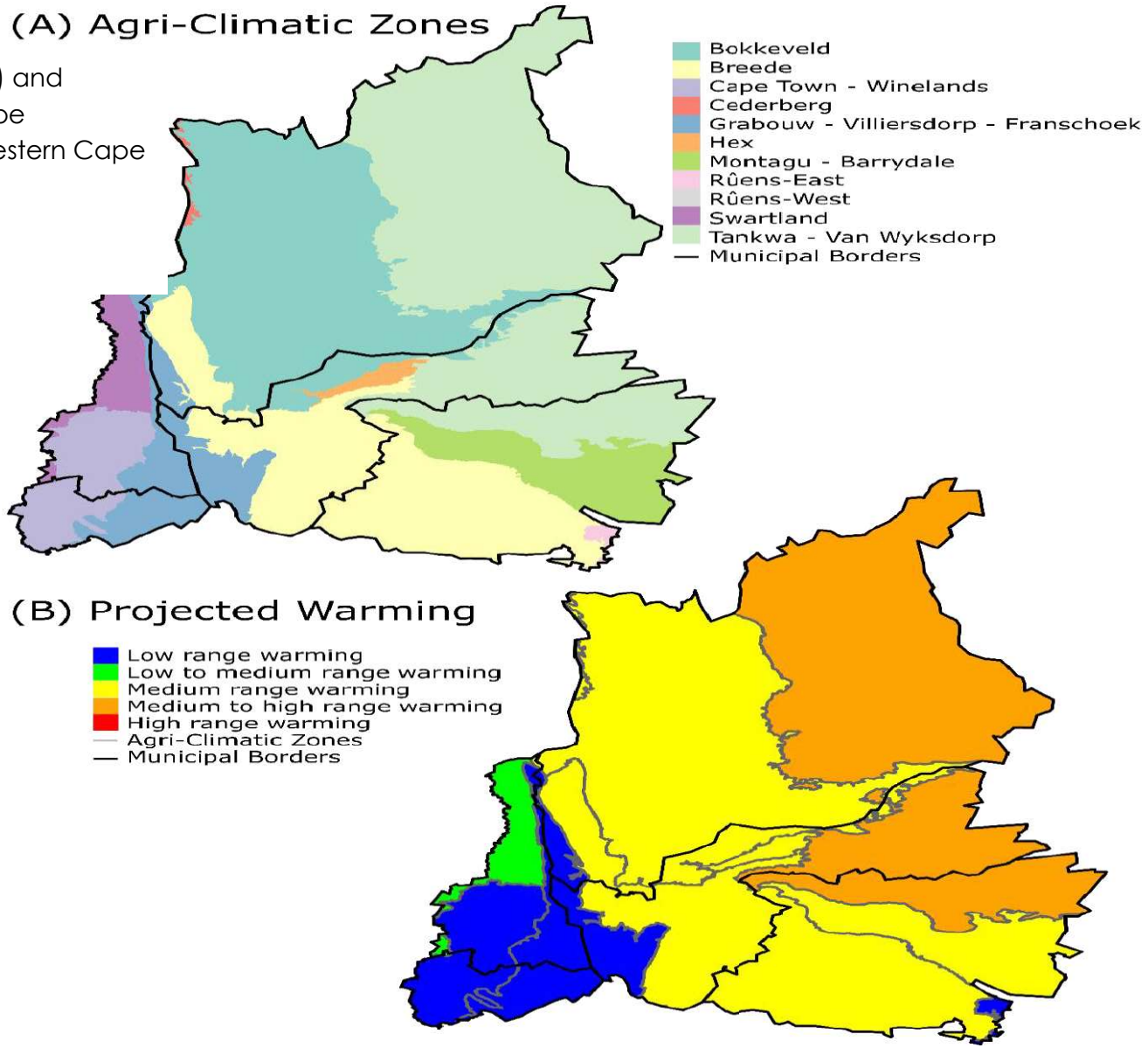
Streamflow is predicted to decrease in the future, with future demand for water to exceed the supply due to climate change[7,8]. A reduction in streamflow is predicted for the Breede River, to the point where it may drop below the ecological requirement[8]. The Breede River is an important water source during the summer months, and so a reduction in streamflow is of great concern.

Temperatures are predicted to increase by 1.5˚C to 3˚C across the Western Cape[9]. In the CWDM, local municipalities covering, and to the south west of the Boland Mountains, will experience low levels of warming (Fig). This includes Stellenbosch and Drakenstein municipalities as well as small parts of the Witzenberg and Breede Valley municipalities (Fig 4.1). However, the Langeberg Municipality and the majority of the Witzenberg and Breede Valley municipalities will experience medium to high warming (Map 32 (B)).

5.1.1 Agriculture

Due to the combination of decreased rainfall and increased temperatures, agricultural crops and livestock will experience increased heat and water stress. Increased evapotranspiration could lead to crops experiencing drought conditions even when rains have been good[5].

The total agricultural potential of the CWDM remains high as long as dams fill up in the future [6]. To the Southwest of the CWDM irrigation is extensive and due to the existing infrastructure, these producers are well positioned to deal with lower rainfall. However, the Tankwa-van Wyksdorp agro climatic region to the Northeast of the CWDM will experience a slow decline in productivity due to increased temperatures and decreased water availability[6].



Map 31: Agri-climatic zones (A) and projected warming for the Cape Winelands District (B). Data: Western Cape Department of Agriculture.

Increased reliance on irrigation would place even further stress on our water resources. Although, planting drought resistant crops or varieties could mitigate the reliance on irrigation.

Additionally, warming will have a significant impact on Daily Positive Chill Units (DPCU). In warmer areas, an increase in as little as 1˚C will severely affect apples, while an increase of 2˚C will cause all years to not reach the required 800DPCU target for current cultivars[10]. Cooler areas (Koue bokkeveld) will be able to absorb an increase of up to 2˚C, and still exceed 800DPCU.

Similarly, wine vineyards in the hotter areas are most at risk while those in cooler areas such as southern mountain slopes will have some buffering. Cultivars that are most at risk include Shiraz, Merlot, Sauvignon Blanc and Chardonnay[11]. Although there is differing views of the total impact on wine grape production, there is concern that vineyards may move higher up mountains into cooler regions causing conflict with conservation goals[11].

Of great concern is the water quality in the Lower Berg River. Irrigation water not complying with standards for export, could lead to serious economic impacts. Further impacts from climate change could include smaller fruit, changes in pest and disease levels, fruit colour, seasonal shifts and insufficient ground water recharge among others[10,12]. Because the relationship between climate change and agriculture is so complex, it's important that decision makers and planners make use of the resources provided by the SmartAgri project and consult experts since each crop and cultivar may require a different response.

Export markets are changing in response to climate change, with importers aiming to become carbon neutral by reducing "food miles". Most of the pressure to reduce their footprint is put on suppliers[6]. However, the main driver for this change is still profit. Local producers and suppliers can take advantage of this "green" market by supplying and producing "green" products.

Conservation agriculture (CA) has great potential to reduce greenhouse gas emissions (GHG) emissions from the agricultural sector and to improve food security. Reports of improved soil fertility, yields, water retention and a decrease in water and wind erosion have emanated from the practice of CA. A look into the effect of CA on wheat production showed that a no-till approach reduced diesel consumption by at least 60% compared to traditional methods.

The major sources of GHG emissions in the agricultural sector are electricity, due to the large-scale use of coal power stations, and diesel consumption. It is estimated that at a farming level, 70% of GHG emissions are from electricity consumption and 13% from diesel consumption for fruit and wine farms.

Table 23: Impact of climate change on agro-climatic zones of the CWDM (Source: Midgeley et al, 2016)

Agro-climatic zone	Municipalities	Crops	Agricultural Potential (2040-2060)
Cape Town- Winelands	Stellenbosch, Drakenstein Municipalities	Wine and table grapes, wheat, stone fruit, vegetables, olives, canola, berries, Broilers, egg layers, pigs	Remains high as long as dams fill up
Swartland	Stellenbosch, Drakenstein Municipalities	Wheat, wine and table grapes, canola, lovies, dairy, pigs, sheep, cattle	Remains high for small grains but with increasing yield variability
Grabouw-Villiersdorp-Franschhoek	Stellenbosch, Drakenstein, Breede Valley and Witzenberg Municipalities	Pome fruit, wine grapes, wheat, barley, stone fruit, berries	Remains high as long as dams fill up
Breede	Langeberg, Breede Valley and Witzenberg Municipalities	Wine grapes, wheat, stone fruit, pome fruit, olives, Broilers, egg layers	Remains high as long as dams fill up
Hex	Breede Valley Municipality	Table grapes, citrus	Remains high as long as dams fill up
Montagu-Barrydale	Langeberg Municipality	Stone fruit, wheat, barley, wine grapes, pome fruit, citrus, olives, sheep	Remains high as long as dams fill up
Tankwa-Van Wyksdorp	Langeberg, Breede Valley, Witzenberg Municipalities	Wheat, stone fruit, wine grapes, sheep, goats, pigs, cattle, game, ostrich, dairy	Slowly declining productivity constrained by heat and water availability
Bokkeveld	Breede Valley, Witzenberg Municipalities	Pome fruit, wheat, stone fruit, onions, potatoes, cattle	Remains high as long as dams fill up
Ruens-east	Langeberg Municipality	Wheat, barley, canola, sheep, cattle, dairy, pigs, ostrich	Currently becoming marginal for small grains but could improve given possible increases in rainfall

5.1.2 Biodiversity and Ecosystem Services

Biodiversity and intact ecosystem services will be vitally important for adaptation to climate change. "Soft" approaches, such as using intact wetlands for flood control, may be more effective and cost less than "hard", engineered approaches, such as building dams[13]. Linking biodiversity, development and social goals are thus important to adapting to climate change and building a sustainable future.

It has been estimated that climate change may lead to the extinction of 21% to40% of Protea species[14]. This is largely driven by the loss of suitable habitat range, especially the loss of suitable ranges within protected areas as ranges shift due to climate change[15]. It follows that corridors should be created to facilitate the movement of species in response to climate change. It is furthermore paramount that critical biodiversity and ecological support areas are conserved.

Fire will play a significant role in shaping biodiversity in the future. They are likely to increase in both frequency and intensity. Shorter fire intervals will decrease population viability compared to longer fire intervals[16]. Hence, fire management will play an important role in mitigating the impact on biodiversity.

Hannah et al. (2007) found that taking into account both current and future conservation goals simultaneously, can significantly reduce the area needed to attain conservation goals and so in turn the costs[17]. Consequently, it is recommended that environmental/conservation planners consider not only current conservation goals but also those of the future simultaneously.

*This does not account for land use change in the future, which will also be strongly affected by climate change

5.1.3 Infrastructure

Changes in temperature and precipitation will also affect the speed at which infrastructure decays and the amount of maintenance required to keep buildings and roads up to standard.

Higher temperatures will increase the rate at which new cracks form and reduce the expected lifetime of paved roads[18]. Increased bleeding, flushing and rutting may be expected on older or poorly constructed roads[18]. Increased rain intensity could cause erosion damage, especially to dirt roads, even though overall rainfall may decrease.

Costs incurred due to buildings is predicted to be of a much greater concern[19]. Most of the costs will be due to school buildings as they form the largest number of public buildings. However, of concern are the costs from hospitals, since this can be directly linked to health risks. Chinowsky et al (2012)[19] assumed in their analysis that costs due to damage to cladding and roofing would be minimal; thus costs are mainly attributed to heating, ventilation and air conditioning (HVAC) systems.

Early adaptation by upgrading roads and buildings may reduce the costs incurred by climate change in the long term. However, in some cases opportunity costs can be higher for the adaptation scenario than for the no adaptation scenario. Since data is lacking, especially at a district and local scale, it is important that studies are done to assess the impact for local municipalities to inform decision making.

5.1.4 Socio-economic

The poor and disadvantaged will be the most affected by climate change as they lack the resources to deal with the impacts. In the agricultural sector these include smallholder farmers, peri-urban farmers, new farmers and farm workers (especially seasonal and ad-hoc labourers)[6]. Attention should be given to women in these groups. They regularly face more obstacles as they are often the caretakers of the families and so are choice limited.

Climate extremes pose a significant threat to farm workers. Threats include among others heat stress, water borne diseases due to poor water quality, vector borne diseases and risks from fires[6]. Workers may also experience decreased productivity due to warming, worsened by food insecurity, hunger and malnutrition[6]. Climate change may also worsen existing health challenges related to HIV and TB.

Decreased agricultural production would lead to decreased employment.

It is predicted that urban-rural migration will form a large part of future urbanisation and suspected to be greatest in countries and regions most affected by climate change[20]. Increased urbanisation will place extra stress on cities to supply basic services to the increasing population. As subsistence farmers and small scale are likely to be hardest hit from climate change, and so migrate to cities, it will be important to introduce measures to help them adapt and allow them to continue to rely on natural resources for their livelihoods. However, curbing urbanisation is rarely successful and local governments should be prepared. Buhaug and Urdal(2013)[20] found that economic shock was one of the best predictors for social disorder and so local governments should likely focus more on mitigating the economic impacts of climate change than fight increased urbanisation due to climate change.

Adger et al. (2008)[21] argues that there are social limits to adaptation. These limits are affected by ethics (how and what we value), knowledge (how and what we know), risk (how and what we perceive) and culture (how and why we live). Social limits, however, are not constant and may be changed. Society's ability to adapt in a timely fashion is severely hampered by the interaction between individual and societal characteristics, and underlying values which form subjective yet changeable limits. Risk perceptions is a highly important characteristic, since individual adaptation affected by whether impacts, past or future, are perceived as a risk and should or could be acted on.

Nonetheless, community-based initiatives and activities can help individuals feel enabled and implement behavioural alternatives[21]. This suggests the importance for the continuation and implementation of education and community-based initiatives to be able to successfully adapt to climate change in the present and future. However, there is currently little indication of larger scale initiatives with equivalent outcomes.

5.2 Key findings: Climate Change

5.2.1 Increased dependence on irrigation due to warming and reduced rainfall.
5.2.2 Increased heat and water stress for citizens, animals and crops.
5.2.3 Increased flooding risk due to increased rainfall intensity.
5.2.4 Higher incidence of heat waves.
5.2.5 Increased fire risk – impacts agriculture, biodiversity and health.

5.2.6 Possible increase in prices of agricultural products due to reduced yields and/or increased farming costs.
5.2.7 Increased strain on ecosystem services.
5.2.8 Possible job losses due to impact on agriculture.
5.2.9 Potential reduction in agricultural exports due to decreased quality.
5.2.10 Loss of ecotourism due to biodiversity loss and degradation of natural environment.
5.2.11 Loss of biodiversity.
5.2.12 Loss of ecosystem services.
5.2.13 Increased food prices.
5.2.14 Loss of international export standards due to poor water quality in the Berg river.
5.2.15 Increased heat-island effect.
5.2.16 Social limits to adaptation.

5.3 Implementation proposals:

FOCUS AREA:	CLIMATE CHANGE
STRATEGIES:	1. Find ways to reduce water demand and investigate water efficient ways of expanding the agricultural economy 2. Clear alien invasive species 3. Protect riparian zones a. Allow for a buffer along river banks to protect the banks from flood damage b. No further development may be permitted on river banks that are prone to flooding and below the 1:50 year flood lines (erven) and the 1:100 year flood lines (building platforms) 4. Prevent the loss and degradation of Critical Biodiversity Areas (CBAs) and Ecosystem Support Areas (ESAs) 5. Restore CBAs and ESAs where appropriate to maintain ecosystem services and protect biodiversity 6. Prevent further loss and degradation of wetlands 7. Reduce greenhouse gas emissions 8. Ensure new developments to adhere to standards of high energy efficiency, low embedded carbon and good accessibility to public transport 9. Promote changes to existing developments that will increase the efficiency of energy use in power, heating and transport (e.g. insulation) 10. Promote land uses that serve as carbon sinks (e.g. community woodlands) 11. Encourage the development and use of renewable resources of energy, preferably local (e.g. solar, wind power, biomass etc.) 12. Reduce the amount of waste (particularly biodegradable waste), the volume sent to landfill and maximise capture and use of greenhouse gasses, particularly methane (e.g. waste minimisation, composting)

	13. Guide new development to locations that best offer protection from likely impacts – including flooding and drought, sea level rise, storminess, soil subsidence and heave and implications for supply and demand of essential services (e.g. preference to locations that have sustainable existing water supply rather than those that require long distance supply) 14. Ensure that the design and layout of new developments (including buildings, open spaces and infrastructure) will be resilient or adaptable to the likely impacts during the development's lifetime (e.g. designing in flood protection and water saving features; orientation to take advantage of solar gain for PVs etc.) 15. Promote changes to existing development that will enhance its resilience or adaptability to likely impacts during its lifetime (e.g. improving site drainage; introducing grey water recycling etc.) 16. Increase in the length and width of ecological corridors in altitudinal, North-South and East-West directions 17. The current area of each of the natural areas should not be reduced or fragmented 18. Institute measurable outcomes to track successes and failures (Area covered by invasive plants, carbon emissions etc.)
TOOLS AND RESOURCES:	19. Cape Farm mapper: https://gis.elsenburg.com/apps/cfm/ 20. Western Cape Biodiversity Spatial Plan 2017: http://bgis.sanbi.org/Projects/Detail/194 21. Cape Winelands Biosphere Reserve: http://capewinelandsbiosphere.co.za/
PRIORITY:	High

5.4 CWDM Implementation Plan: Climate Change

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
EPWP Invasive Alien Vegetation Management	R 2 030 000, 00	Land Use and Spatial Planning Section	Annually
River Rehabilitation	R 360 000, 00	Land Use and Spatial Planning Section	Annually
Service Delivery Agreement with Cape Winelands Biosphere Reserve	R150 000, 00	Land Use and Spatial Planning Section	Annually
Provision of Water to Schools (Water Tanks)	R500 000, 00	Projects and Housing	Annually
Infrastructure Rural Area Farmers (Renewable energy)	R1000 000, 00	Projects and Housing Section	Annually
Subsidy: Water/sanitation-Farms	R1000 000, 00	Municipal Health Services	
Revision of Risk Assessment	R243 500, 00	Disaster Management Section	2018/2019

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CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

CORPORATE DISASTER MANAGEMENT

PLAN

DISASTER MANAGEMENT · CAPE WINELANDS ·

Version 4: March 2019

DOCUMENT VERSION CONTROL

This Document:	Current Revision	Current Date:
Disaster Management	Rev 1	April 2008
Disaster Management	Rev 2	December 2016
Disaster Management	Rev 3	February 2018
Disaster Management	Rev 4	March 2019

DOCUMENT REVIEW AND ACCEPTANCE

Approved By:
Head: Disaster Management Centre
DATE

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LIST OF ACRONYMS

CBO	Community Based Organisation
DMC	Disaster Management Centre
DCT	Disaster Co-ordination Team
FBO	Faith Based Organisation
IDDMC	Interdepartmental Disaster Management Committee
IDP	Integrated Development Plan
No.	Number

1. INTRODUCTION

This plan serves to confirm the organisational and institutional arrangements within the area of the Cape Winelands District Municipality to effectively promote disaster prevention, mitigation, risk reduction and to lessen the impact of those hazards that cannot be avoided.

Disaster Management is a continuous and integrated multi-sectoral and multi-disciplinary process of planning and implementation of measures aimed at disaster prevention, -mitigation, -preparedness, -response, -recovery and –rehabilitation (Section 1, Disaster Management Act, No. 57 of 2002).

The preventative elements of this plan must be implemented and maintained on a continuous basis. The emergency or reactive elements of this plan will be implemented in the district whenever a significant event or disaster occurs or is threatening to occur in its area of jurisdiction.

The responsibility for the implementation of the plan is that of the Municipal Manager in co-operation with all internal functionaries.

The Disaster Management Act, No. 57 of 2002 (Section 53) requires, amongst others, of the Municipality to take the following actions:

(a) prepare a disaster management plan for its area, which includes departmental plans, according to the circumstances prevailing in its area;
(b) the regular review and update of the plan taking into consideration new developments or circumstances that may arise.

The plan and the supportive plans that form part thereof should comply with the following principles and will address the following issues:

1. form an integral part of the Integrated Development Plan as prescribed by the Municipal Systems Act, No. 32 of 2000 (Section 26 (g));
2. anticipate the likely types of disasters that might occur in the district and their possible effects;
3. provide for appropriate prevention and mitigation strategies;
4. identify and address weaknesses in capacity to deal with possible disasters;
5. facilitate maximum emergency preparedness;
6. establishment of an emergency management organization that will be utilized to mitigate any significant emergency or disaster affecting the district; and
7. contain contingency plans and emergency procedures in the event of a disaster, providing for the allocation of responsibilities to the various role players and co-ordination in the carrying out of those responsibilities.

The District Municipality must submit a copy of its disaster management plan, including the above-mentioned requirements, and of any amendment to the plan, to the National Disaster Management Centre and the Western Cape Provincial Disaster Management Centre.

2. DEFINITIONS AND PURPOSE

2.1 DISASTER MANAGEMENT DEFINITIONS

For the sake of clarity, the following disaster management definitions are listed:

"**the Act**" means the Disaster Management Act, No. 57 of 2002,

"**disaster**" means a progressive or sudden, widespread or localized, natural or human-caused occurrence which –

(a) causes or threatens to cause-
  (i) death, injury or disease,
  (ii) damage to property, infrastructure or the environment; or
  (iii) disruption of the life of a community; and

(b) is of such a magnitude that it exceeds the ability of those affected by the disaster using only their own resources (Sec. 1 Disaster Management Act, No. 57 of 2002).

The Council of the District Municipality must declare a disaster in terms of Section 55 of the Disaster Management Act, No. 57 of 2002.

"**disaster management**" means a continuous and integrated multi-sectoral, multidisciplinary process of planning and implementing of measures aimed at-

(a) preventing or reducing the risk of disasters;
(b) mitigating the severity of or consequences of disasters;
(c) emergency preparedness;
(d) rapid and effective response to disasters; and
(e) post-disaster recovery and rehabilitation (Sec. 1 Disaster Management Act, No. 57 of 2002)

2.2 PURPOSE OF THE CORPORATE DISASTER MANGEMENT PLAN

The purpose of this plan is to determine general principles to direct the provision of essential services during an emergency or anticipated emergency. Furthermore, the procedures and the coordination of responses are outlined. The obligations, duties and responsibilities of all departments and agencies will be defined. This plan addresses the planned response to extraordinary emergencies associated with natural disasters, technological incidents and national security emergencies in or affecting the district.

3. CAPE WINELANDS DISTRICT MUNICIPALITY DISASTER MANAGEMENT POLICY FRAMEWORK (SECTION 42)

The District Municipality envisages the establishment of an internal Interdepartmental Disaster Management Committee in order to align disaster management activities with the National-, Provincial- and District Disaster Management Policy Frameworks.

The Disaster Management Centre as envisaged in the Disaster Management Act, No. 57 of 2002, will be the custodian of the corporate or district-wide Disaster Management Plan. Individual district departments/sections will be responsible for the compilation and maintenance of their own departmental disaster management plans and for submitting such plans to the District Disaster Management Centre. The processes involved in Disaster Management can best be explained through the following Disaster Management Continuum:

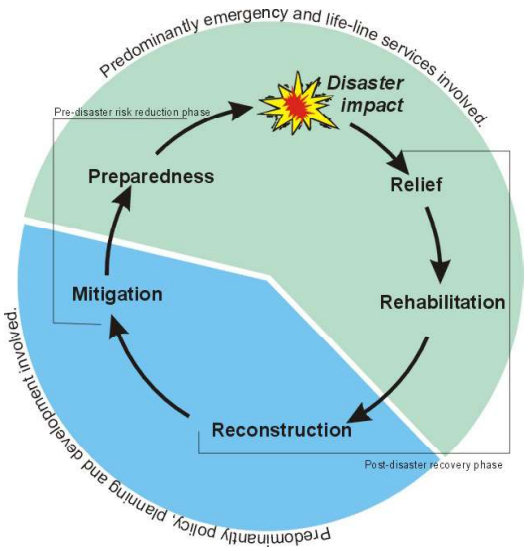


Figure 1: Disaster Management Continuum

Figure 1 illustrates the continuum – it should be noted that Disaster Management is not only reactive, but also involves actions aimed at preventing disasters, or mitigating the impact of disasters. Departmental plans should be compiled with due consideration of the needs of other departments during disasters. The needs identified by the various departments in the corporate disaster management planning framework will indicate where line functions of other departments must contribute. **These contributions will then be included in line function- and departmental disaster management plans**.

Departmental disaster management plans should cover the whole disaster management continuum, and must address actions before, during and after disasters. Disaster management plans are compiled on the basis of a generic plan including standard operating procedures. It should be complemented with risk-specific plans that address disaster management for special circumstances.

4. RISK PROFILE

Risk and vulnerabilities will determine the priorities for Disaster Management programs and projects. The amount of possible benefit to be derived from a project in terms of lives protected, livelihoods secured and property or natural resources defended, will be the criteria that determine priorities.

Two risk assessments have been completed in the District, namely, 2005 Hazard Identification, Vulnerability Assessment and Risk Prioritisation conducted by Africon and a 2008 Community Based Risk Assessment conducted by Cape Peninsula University of Technology. The table below indicates the risks identified during these two risk assessments:

2005: Hazard Identification, Vulnerability Assessment and Risk Prioritisation	2008: Community Based Risk Assessment
• Floods • Rail derailment • Fires • Severe storms • Dam failures • Aircraft accidents • Bus accidents	• Spread of disease, • Blocked drains • Non-removal of solid waste • Uncontrolled fires • Environmental pollution • Grey/waste water • Problems with toilet facilities • Lack of facility maintenance

Table 1: Hazards identified in the Cape Winelands District Municipality

Communities in informal settlements are the most vulnerable to many of these physical risks, but proximity to certain installations or hazards also exposes other communities to risks. In terms of capacity to address and therefore reduce risks, there currently is a strong emphasis on preparedness and response planning. This means that capacity in terms of mitigation and prevention should be strengthened.

The following have been identified as critical Disaster Management issues and should receive priority attention in the IDP;

a) Integrating risk management programs within the **IDP**;
b) To develop and maintain risk specific safety infrastructure and plans for high risk installations, infrastructure, industries etc.;
c) To establish disaster prevention programmes that focus on the most vulnerable areas and communities, with special emphasis on women and children, disabled persons and the elderly, and aim to support sustainable livelihoods;
d) To refine disaster loss tracking and assessment and establish a culture of ongoing scientific risk analysis; and
e) To establish pro-active measures, including media liaison and rapid response to media inquiries.

Risk reduction should be a priority during all activities performed by the various departments in the municipality. This will include line function risk assessment, assessing internal capacity to deal with identified risks and the formulation of risk reduction plans.

5. MANAGEMENT STRUCTURE

The principle to function within the established structure of the Cape Winelands hierarchy must be maintained as far as possible.

The management will plan and implement measures to deal with the changed circumstances during significant events or disasters in order to maintain and ensure continuation of existing services. The planning, prevention and response management structure for the Cape Winelands District Municipality is as follows:

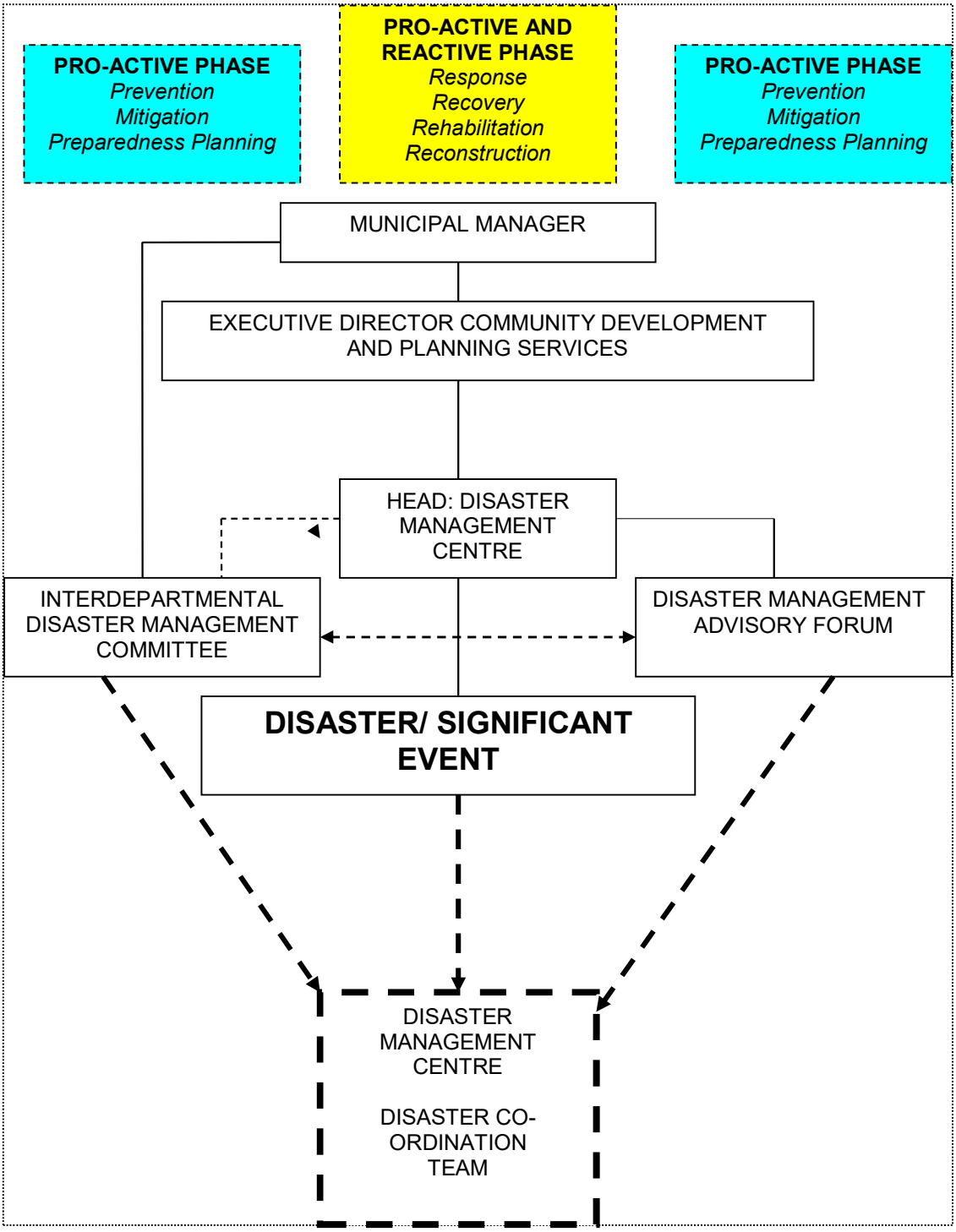


Figure 2: Cape Winelands District Municipality's Management Structure

5.1 INTERDEPARTMENTAL DISASTER MANAGEMENT COMMITTEE (IDDMC)

The IDDMC is made up of the Executive Management Team along with the Head: Disaster Management Centre and relevant Directors and Deputy Directors.

The Interdepartmental Disaster Management Committee has, amongst others, the following functions:

a) **Pro-active activities** which include, but is not limited to the following:
   - Convene quarterly meetings;
   - Update corporate plan regularly;
   - Consider conditions, trends, current and future developments in the area internally and externally;
   - Identify and consider new hazards in the area; and
   - Assign teams to investigate possible risk and related issues.

b) **Reactive activities**: refer to duties of the Disaster Co-ordination Team (see 5.5 below)

5.2 DISTRICT DISASTER MANAGEMENT ADVISORY FORUM

A disaster management advisory forum, in terms of Section 51 of the Act, is a consultative body in which a municipality and relevant disaster management role-players within the municipal area consult with one another and co-ordinate their actions on matters relating to disaster management in the municipality

In the event of a disaster, the nature of the event will determine which representatives of the Advisory Forum or other experts will be co-opted to participate in the management thereof. Under normal circumstances the Forum meets once per semester.

The District Municipality's Disaster Management Advisory Forum will in terms of Section 51 of the Act, consist of the following:

a) INTERNAL TO THE DISTRICT MUNICIPALITY:

Municipal Manager
Executive Director: Financial and Strategic Support Services
Executive Director: Technical Services
Executive Director: Community Development and Planning Services
Head: Disaster Management Centre
Director: IDP, Performance and Risk Management
Chief Fire Officer
Any other departmental representatives as nominated by the Municipal Manager

b) EXTERNAL BODIES:

Municipal Managers and/or Disaster Management Functionaries of the five local municipalities in the district;
Representatives from all national and provincial departments functioning in the district such as, but not limited to, the following:

Provincial Government: Western Cape Disaster Management Centre
SA Police Services, Western Cape Province
SA National Defence Force, Western Cape
Western Cape Emergency Medical Services
Department of Social Development
Department of Education
Department of Environmental Affairs and Development Planning
Department of Correctional Services
Department of Water and Sanitation
Department of Transport and Public Works
Department of Community Safety (Provincial Traffic Department)
Department of Health
Department of Agriculture
Department of Home Affairs
Cape Nature
External Organisations (NGO's, CBO's and FBO's)

Other representatives or disaster management experts may be co-opted to participate in the normal proceedings of the Advisory Forum as the need arises.

The Disaster Management Division will be responsible for rendering secretarial services during functional activities of the respective established disaster management structures.

5.3 LINES OF COMMUNICATION AND INTERGOVERNMENTAL RELATIONS

In terms of Section 43 (2) of the Disaster Management Act, No. 57 of 2002, the CWDM must establish a Disaster Management Centre for its municipal area. The relationship between the different spheres of government and the lines of communication between these spheres are illustrated below.

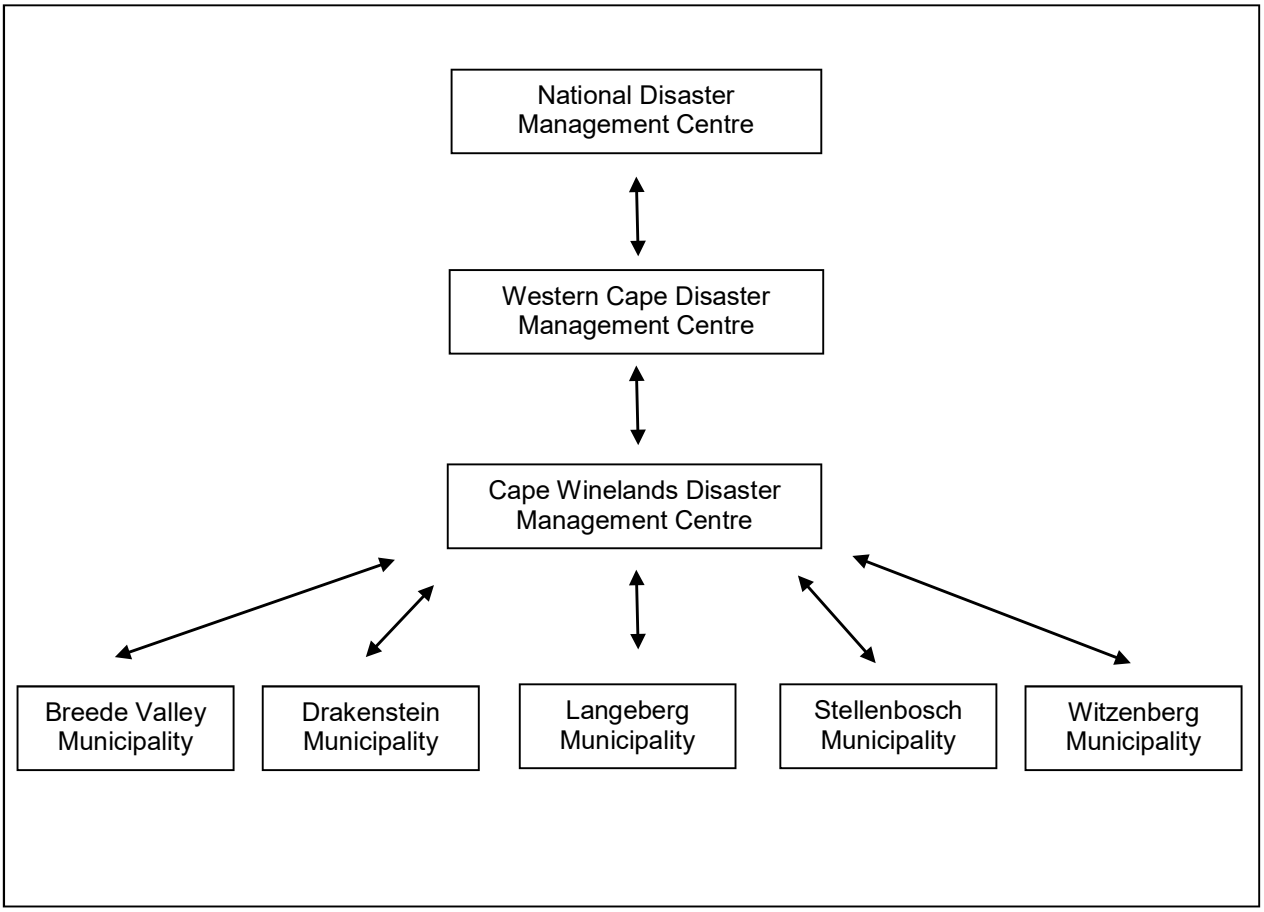


Figure 3: Lines of Communication

5.4 DISASTER MANAGEMENT CENTRE (DMC*)*

In terms of Section 44 of the Act, amongst others, the Disaster Management Centre (DMC) must also specialize in issues concerning disasters and disaster management within the District Municipality. In this regard it must promote an integrated and co-ordinated approach to the function with special emphasis on prevention and mitigation.

The Disaster Management Centre was established at the Worcester Emergency Medical Services Centre, Murray Street, Worcester on 6 June 2014.

5.4.1 FUNCTIONS AND POWERS

The Cape Winelands District Municipality's Disaster Management Centre will, amongst others, act as a repository and conduit for information concerning disasters, impending disasters and disaster management in the municipal area.

It will also promote the recruitment, training and utilisation of volunteers to participate in disaster management in the municipal area.

The Disaster Management Centre will perform its functions –
(a) within the national, provincial and district disaster management frameworks;
(b) subject to the District IDP and other directions of the Council; and
(c) in accordance with the administrative instructions of the Municipal Manager.

The Disaster Management Centre will liaise with and co-ordinate its activities with those of the National Disaster Management Centre and the Western Cape Disaster Management Centre.

Irrespective of whether a local state of disaster has been declared or not, the Municipal Council is primarily responsible for the co-ordination and management of local disasters that occur in its area.

5.5 DISASTER CO-ORDINATION TEAM (DCT)

The Disaster Co-ordination Team consists of the following:

Municipal Manager
Executive Director: Community Development and Planning Services
Head: Disaster Management Centre
Executive Director: Financial and Strategic Support Services
Executive Director: Technical Services
Deputy Director: Communication Services
Relevant Directors, Deputy Directors and Managers per department
Relevant Disaster Management Advisory Forum Members

The team will be responsible to assess, evaluate and co-ordinate all actions in all the phases of a significant occurrence or incident. Each line function will be responsible for the implementation of its own departmental disaster plan but, they will ensure co-ordination and support between departments and external bodies. The Disaster Co-ordination Team may appoint a risk mitigation project team to address specific pre- or post-disaster risk elimination or reduction projects.

The Disaster Co-ordination Team, under the direction of the Municipal Manager/ Executive Director must, when activated, and during any response and relief operations perform the following functions in terms of and in addition to Section 49 of the Act, which will include:

a) Maintaining records of communications, decisions, actions and expenditures;
b) Determining of emergency area(s) and sites;
c) Decide on emergency measures and priorities;
d) Co-ordinate incident or disaster assessments (combine);

e) Requesting emergency assistance of any kind;
f) Closing public buildings when necessary;
g) Depending on circumstances, issue public warning orders and instructions;
h) Protecting the health and safety of emergency responders;
i) Ensuring that an acceptable level of service is rendered for the district outside emergency area(s);
j) Preparing lists of fatalities, casualties and missing persons;
k) Preparing lists of destroyed and/or damaged properties;
l) Co-ordinate response with provincial ministries through the Provincial Government: Western Cape Disaster Management Centre;
m) Co-ordinate response with non-governmental disaster relief organisations, neighbourhood- and community based organizations;
n) Provide and co-ordinate critical emergency information to the media for dissemination to the affected population(s) and the general public at the prerogative of the Executive Mayor or Municipal Manager who have delegated authority;
o) Co-ordinate information for public release with emergency partners' communications staff;
p) Respond to enquiries from the media or public in accordance with official policy;
q) Identify target audiences for post-emergency communications; and
r) Identify persons/organizations to contribute to post-emergency reports/debriefings.

5.6 ROLES AND RESPONSIBILITIES

5.6.1 EXECUTIVE MAYOR

In the event of a local disaster the Executive Mayor, in consultation with his/her Executive Mayoral Committee, may by notice in the Provincial Gazette declare a local state of disaster if existing legislation and contingency arrangements do not adequately provide for the municipality to deal effectively with the event or special circumstances warrant the declaration of a local state of disaster (Section 55 of the Act).

Responsibilities of the Executive Mayor in a disaster situation:

1. Authorize unforeseen and unavoidable expenditure in terms of section 29 and 32 of the Municipal Finance Management Act, No. 56 of 2003 in consultation with the Municipal Manager;
2. In terms of section 55 (2) the Executive Mayor and his/her Council may make by-laws to the extent that it is necessary to assist and protect the public as well as to combat and/or deal with the effects of the disaster;
3. The Executive Mayor and his/her Council may terminate or extend a declared disaster by notice in the Provincial Gazette before the term of the declared disaster lapses (after three months);
4. Notify next of kin in the event when a community member is injured, missing or killed;
5. Initiate the establishment of a disaster relief fund in terms of Section 12 read with Section 7 of the Municipal Finance Management Act, No. 56 of 2003;
6. Release media statements; and

7. Report on the emergency impact and response to the Council or its committees responsible for the emergency area(s), as well as to the mayors of local- and district municipalities and councillors of the area.

5.6.2 MUNICIPAL MANAGER

During disasters, the Municipal Manager or his designate will be responsible to report, liaise and consult with the Executive Mayor and Mayoral Committee and external Provincial and National Government Departments. He/she will, furthermore be responsible to:

Proactive Phase:

1. Constitute the IDDMC;
2. Convene quarterly IDDMC meetings; and
3. Co-opt specialized role-players to the IDDMC and DCT.

Reactive Phase:

1. When notified of a disaster or significant event by the Executive Director or delegate, the Municipal Manager will activate and chair the Disaster Co-ordination Team;
2. Report on the emergency impact and response to the Executive Mayor;
3. Notify next of kin in the event when a municipal employee is injured, missing or killed;
4. Identify staff/persons/organizations to receive recognition for contributions to emergency response;
5. Forward media statements to the Executive Mayor for release;
6. When notified of a disaster or significant event by the Executive Director or delegate, the Municipal Manager will, activate the disaster response plan;
7. The Municipal Manager must ensure that all departmental disaster management plans are included in the Integrated Development Plan of the Council; and
8. He/she must also ensure that the employment and performance contracts of all newly appointed Section 57 employees should include disaster management responsibilities.

5.6.3 HEAD: DISASTER MANAGEMENT CENTRE

The Head: Disaster Management Centre is responsible for the strategy and management of the Disaster Management Centre, focussing especially on the planning and functioning throughout all the phases of the Disaster Management continuum. The Head: Disaster Management Centre is also responsible for the compilation and maintenance of the District's Corporate Disaster Management Planning Framework. The Head: Disaster Management Centre is responsible for consultation with the Executive Director: Community Development and Planning Services who is primarily responsible for disaster management.

The Head: Disaster Management Centre is also responsible for the performance by the Centre of its disaster management functions (Section 44 of the Act) and to co-ordinate the implementation of the District's Corporate Disaster Management Planning Framework and:

Proactive Phase:

1. Establish and maintaining of the District's Disaster Management Centre
2. Establish a District Disaster Management Advisory Forum
3. Initiate and facilitate efforts to make funds available for disaster management in the municipal area;
4. Assist municipal departments and municipal organs of state other than municipalities with the compilation of their disaster management plans;
5. Obtain and record departmental disaster management plans;
6. Co-ordinate the updating, maintenance and evaluation of departmental plans;
7. To make provision in own departmental budget for significant events which requires immediate response and relief actions;
8. The Head: Disaster Management Centre must ensure that the contents of this corporate planning framework are communicated to staff members at all levels within the department;
9. Report on issues regarding the Corporate Disaster Management Plan within the Annual Disaster Management Report which is to be submitted to the Provincial- and National disaster management centres as well as all municipal councils within the district;
10. Recommend to the Municipal Manager or relevant Executive Director to enter into service delivery agreements with individuals, CBO'S and NGO'S with relation to relief actions during disasters and significant events.

Reactive Phase:

1. In case of a disaster or significant event, the Head: Disaster Management Centre shall notify the Municipal Manager and Executive Director: Community Development and Planning Services and will request the Municipal Manager to activate the disaster response plan;
2. When deemed necessary, make recommendations to the Municipal Manager for the declaration of a disaster by the Council of the District Municipality as defined in the Act;
3. To initiate steps to deal with a significant event, which requires multi-disciplinary and multi-sectoral actions;
4. Liaise with municipal, provincial and national officials within the district;
5. Recommend to the Municipal Manager to request for provincial and/or national assistance;
6. Provide situational reports to all internal and external role-players on a regular basis;
7. Co-ordinate disaster response and relief by individuals, CBO'S and NGO'S;
8. Recommend to the Municipal Manager to request voluntary donations during a disaster or significant event;
9. Make arrangements for the request for, receipt and administration of donations;
10. Identification of available resources to be utilised for disaster risk management purposes;
11. Authorize areas to be evacuated or re-entered;
12. Identify and recommend persons/organizations to receive recognition for contributions to the emergency response;

13. Establish and maintain the required telecommunications links; and
14. Recommend to the Municipal Manager that Executive Directors should release departmental resources including personnel, equipment or vehicles for utilisation during disasters and significant events.

The Head of the Disaster Management Centre shall be responsible for the distribution of the updated disaster management plan in terms of Section 43 of the Act.

The Head of the Disaster Management Centre will make recommendations to the Municipal Manager who will officially activate and announce the duration and termination of the disaster or significant event to all relevant parties. Special or extraordinary delegations will apply during such periods.

In the recovery and rehabilitation phase, a project team under a line function can be convened to take responsibility for further activities that address the causal factors of the disaster/incident. This team will receive a brief from and report to the Disaster Management Advisory Forum as well as senior management.

5.6.4 EXECUTIVE DIRECTOR: COMMUNITY DEVELOPMENT AND PLANNING SERVICES

In terms of Section 52 of the Act compile a departmental disaster management plan in relation to the identified hazards and risk assessments applicable to the functional activities of the department. Such plans are to be submitted to the Disaster Management Centre.

The Executive Director should ensure that his/her department/divisions pay particular attention to preventative, mitigating, response and recovery activities by the compilation of relevant contingency plans. The implementation of the plan will include the following:

1. To make provision in own departmental budget for significant events which requires immediate response and relief actions, including impact assessments;
2. Plan and ensure that risk reduction and disaster prevention/mitigation principles are adhered to in the recovery and redevelopment phases;
3. Ensure that risk reduction and mitigation principles are applied in all developmental projects;
4. The contents of this corporate planning framework must be communicated to staff members at all levels within the department; and
5. Execute all other, tasks, duties or functions assigned by the Municipal Manager
6. The department should assign dedicated officials with extended delegated authority for the duration of the disaster or significant event to approve the acquisition of goods and services needed;
7. Upon request of the Municipal Manager, release resources including personnel, equipment or vehicles for utilisation during disasters and significant events. Personnel shall be deemed to be on official duty; and
8. Execute all other, tasks, duties or functions assigned by the Municipal Manager.

5.6.5 EXECUTIVE DIRECTOR: FINANCIAL AND STRATEGIC SUPPORT SERVICES

In terms of Section 52 of the Act compile a departmental disaster management plan in relation to the identified hazards and risk assessments applicable to the functional activities of the department. Such plans to be submitted to the Disaster Management Centre.

The Executive Director should ensure that his/her department/divisions pay particular attention to preventative, mitigating, response and recovery activities by the compilation of relevant contingency plans. The implementation of the plan will include the following:

1. Compilation of re-active departmental procedures to ensure service continuation
2. Plan for the continuation of operational activities during a disaster e.g. reserve personnel and resources;
3. Draft and get the approval for an emergency procurement policy
4. Facilitation emergency procurement
5. Initiating and facilitating efforts to make funds available for proactive and re-active disaster management within the municipal area
6. Management and administration of a disaster relief fund, if established;
7. The department should assign dedicated officials with extended delegated authority for the duration of the disaster or significant event to approve the acquisition of goods and services to be used to redress the impact of the event;
8. Upon request of the Municipal Manager, release resources including personnel, equipment or vehicles for utilisation during disasters and significant events. Personnel shall be deemed to be on official duty during such redeployment; and
9. Responsible for the legal process to promulgate a declared disaster in the Provincial Gazette;
10. Monitoring compliance with relevant legislation and regulations during abnormal circumstances;
11. Ensuring that Council's administrative support services, including human resources management, are maintained under abnormal circumstances;
12. Providing disaster related information to municipal employees and their families;
13. Documenting and safeguarding of information for potential municipal insurance claims and legal actions;
14. Documenting information for remuneration of municipal employees during disasters or significant events;
15. Documenting potential occupational health and safety issues;
16. Protect the health and safety of emergency responders;
17. Documenting information for potential municipal labour relations issues;
18. The contents of this corporate planning framework must be communicated to staff members at all levels within the department; and
19. Execute all other, tasks, duties or functions assigned by the Municipal Manager.

5.6.6 EXECUTIVE DIRECTOR: TECHNICAL SERVICES

In terms of Section 52 of the Act compile a departmental disaster management plan in relation to the identified hazards and risk assessment applicable to the functional activities of the department. Such plans to be submitted to the Disaster Management Centre.

The Executive Director should ensure that his/her department/divisions pay particular attention to preventative, mitigating, response and recovery activities by the compilation of relevant contingency plans. The implementation of the plan will include the following:

1. Compilation of pro-active departmental disaster management programmes to support risk reduction or elimination;
2. Providing technical advice in preventing or reducing the effects of flooding;
3. Confining and containing flood water where possible;
4. Removal of debris from transportation routes and other sites as required;
5. Rendering of emergency repairs to damaged road infrastructure;
6. Identifying and prioritising of essential services that may require restoration as a result of an emergency or a disaster;
7. To make provision in own departmental budget for significant events which requires immediate response and relief actions;
8. Plan for the continuation of operational activities during a disaster e.g. reserve personnel and resources;
9. Upon request of the Municipal Manager, release resources including personnel, equipment or vehicles for utilisation during disasters and significant events;
10. The contents of this corporate plan must be communicated to staff members at all levels within the department;
11. Execute all other tasks, duties or functions assigned by the Municipal Manager.

5.6.7 CHIEF FIRE OFFICER

The Chief Fire Officer must ensure that a Disaster Management Plan is compiled and maintained for the Fire Service with specific reference to:

1. Compilation of pro-active departmental Disaster Management programmes to support disaster risk reduction and preparedness
2. Compilation of disaster management plan to ensure service continuation during disaster situations
3. Supplying resources for Disaster Management purposes as requested by the Disaster Co-ordination Team

5.6.8 DEPUTY DIRECTORS: MUNICIPAL HEALTH SERVICES

The Deputy Directors: Municipal Health Services must ensure that a Disaster Management Plan is compiled and maintained for the Municipal Health Services with specific reference to:

1. Compilation of pro-active departmental Disaster Management programmes to support disaster risk reduction and preparedness
2. Initiate steps to eliminate risks presented by communicable diseases;
3. Isolate person(s) in order to decrease or eliminate risks presented by a communicable disease;
4. Identify persons/organizations to contribute to post-emergency reports/debriefings;
5. Monitor large groups of people for contamination and/or health effects;
6. Monitor the environment for contamination;
7. Co-ordinate the immunization of large groups of people;
8. Seize and dispose of food that poses a health hazard;
9. Monitor the environment (air, water, and ecosystem) for contamination;
10. Identify persons/organizations to contribute to post-emergency reports/debriefings,

5.6.9 DEPUTY DIRECTOR: COMMUNICATIONS SERVICES

The Deputy Director: Communication must ensure that a Disaster Management Plan is compiled and maintained for the Communications Directorate with specific reference to:

1. Compilation and distribution of press releases
2. Updating of social media
3. Communication of public safety messages
4. Designing of risk-reducing public education and awareness materials
5. Liaising with media representatives
6. Arranging of media briefings
7. On instruction of the Municipal Manager, release media statements or general information on significant events and/or disasters in terms of Section 44 (1)(c);

6. DEPARTMENTAL DISASTER MANAGEMENT PLANS (ANNEXURE A)

Typical aspects addressed in a disaster management plans are the following:

1. Planning Framework/Introduction
2. Risk and Vulnerability Assessment leading to a needs analysis
3. Evaluation and description of Infrastructure / Organisation available
4. Prevention through risk elimination.
5. Mitigation through risk reduction
6. Preparedness planning for risks that cannot be eliminated
7. Lines of communication (Protocols) and liaison
8. Awareness and Education
9. Evaluation and Maintenance

7. SIGNIFICANT EVENTS AND DISASTER DECLARATIONS

Based on the information available, the Head of the Disaster Management Centre will inform the Municipal Manager, who shall inform and recommend to Council whether or not the circumstances warrant a disaster declaration in terms of Section 55 of the Act.

Significant event declaration

Guided by assessment reports from disaster management role-players within the District, the Head: Disaster Management Centre may initiate steps to counter the effects and impact of a significant event in accordance with existing contingency plans and notify the Municipal Manager and/or the Mayoral Committee of the Council accordingly. (Sections 44 and 54 of the Act)

Disaster Declaration

In the event of a local disaster the Council may by notice in the Provincial Gazette declare a local state of disaster if existing legislation and contingency arrangements do not adequately provide for the municipality to deal effectively with the event or special circumstances warrant the declaration of a local state of disaster (Section 55 of the Act). The stipulations of Sections 23(2) and 49 regarding the recording and classification of disasters should be adhered to.

The Municipal Manager may request assistance and resources from another level of government and that request shall not be deemed to be a request for implementation of the emergency plans of that jurisdiction.

8. POST DISASTER RECOVERY AND REHABILITATION OPERATIONS

Post-disaster recovery and rehabilitation operations will be dealt with in terms of the activities of the IDDMC and Disaster Management Advisory Forum members.

9. REVIEW AND UPDATE OF THE CORPORATE DISASTER MANAGEMENT

The Cape Winelands Disaster Management Centre will regularly review and update the Corporate Disaster Management Plan as required by Section 53 of the Disaster Management Act, 57 of 2002

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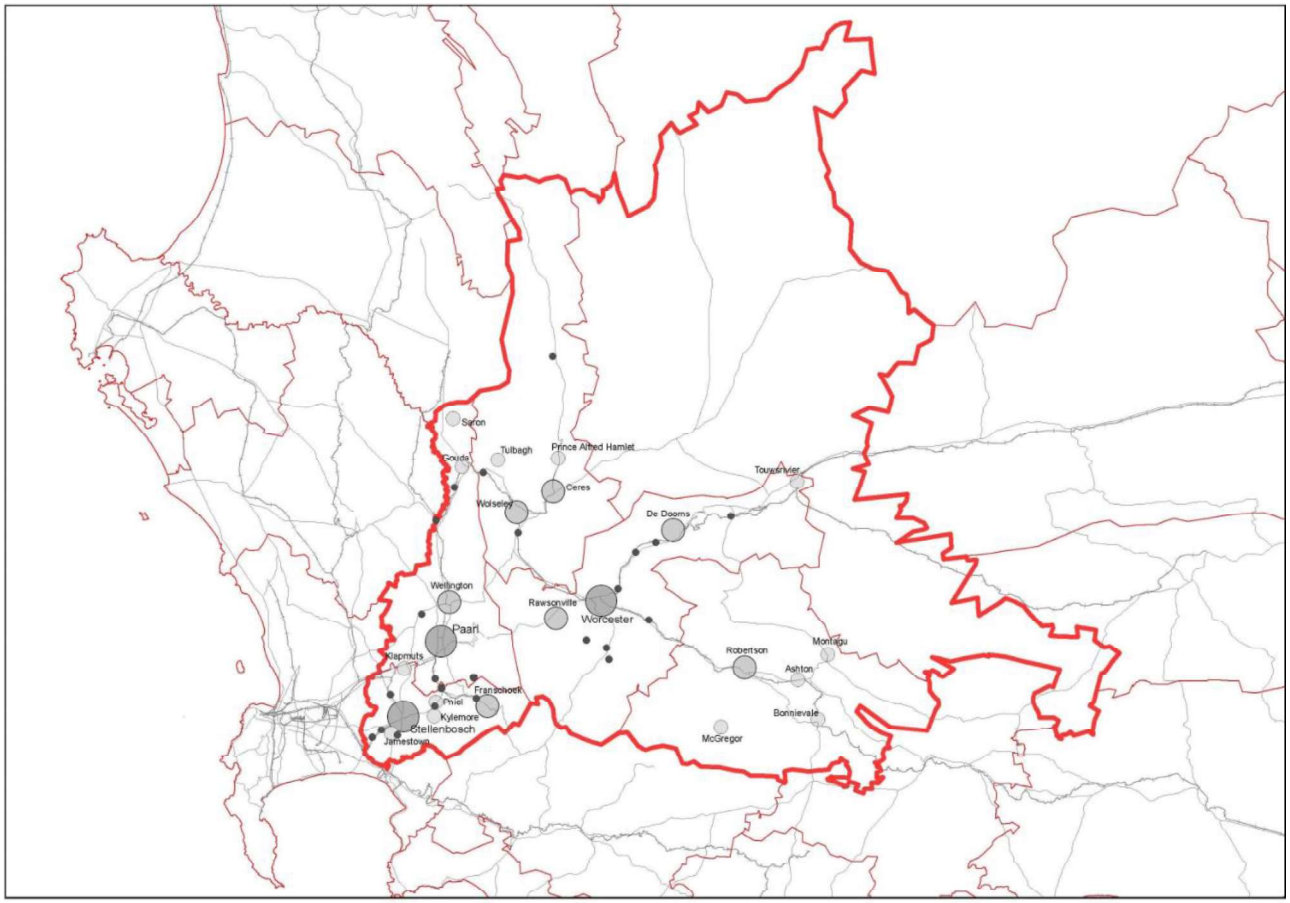
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ANNEXURE A: DEPARTMENTAL DISASTER MANAGEMENT PLAN

CAPE WINELANDS DISTRICT MUNICIPALITY
DISASTER MANAGEMENT PLANNING TEMPLATE FOR MUNICIPAL DEPARTMENTS

(INSERT NAME OF DEPARTMENT)

DIRECTORATES/ DIVISIONS	PRIMARY MUNICIPAL FUNCTIONS	INSTITUTIONAL CAPACITY	HAZARD ANALYSIS	DISASTER RISK ASSESSMENT	DISASTER RISK REDUCTION MEASURES (PREVENTION & MITIGATION)	DISASTER RESPONSE AND RECOVERY
Name	Describe each directorate, division and section's core municipal functions in detail with reference to clients, area of jurisdiction etc.	Describe personnel structure, legal framework for function. Identify capabilities and shortfalls.	1. Identify possible hazards, i.e natural, technological etc. 2. Profile hazards by means of risk assessment 3. Determine risk to communities, structures etc. 4. Determine vulnerability in relation to communities, infrastructure, environment 5. Determine consequences, loss of life, injury, economic etc.	Determine the following: • Frequency of occurrence • Magnitude & potential intensity • Likely locations • Duration • Seasonal pattern • Speed of onset • Early warning	Identify operational aspects for example programmes and projects in terms of IDP and other needs to address risk factors. Examples: job creation to reduce vulnerability, strengthening of physical structures, compliance to building regulations, awareness programmes etc.	Describe the measures planned by all disciplines to respond to disastrous events. Elaborate on recovery and redevelopment measures in the post disaster scenario within the constraints of budget etc.



Cape Winelands
District Integrated Transport Plan
2016 -2021

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

May 2016

Document title:	Cape Winelands District Integrated Transport Plan
Status:	Final Report
Date:	May 2016
Project name:	Review of the District Integrated Transport Plan for the Cape Winelands
Project number:	T01.CPT.000287
Client:	Cape Winelands District Municipality
Client contact:	Bevan Kurtz/ Chwayita Nkasela
Reference:	16/2/2
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Royal HaskoningDHV
Enhancing Society Together

Executive Summary

Introduction

This document constitutes the Integrated Transport Plan for the Cape Winelands District Municipality for the five year period from July 2016 to June 2021. This District Integrated Transport Plan (DITP) has been prepared in accordance with the requirements of the National Land Transport Act (NLTA) 2009, and as a designated Planning Authority it is the Cape Winelands District Municipality's responsibility to administer this plan. The DITP contains the the district and local municipalities vision for transport, describes the existing roads and public transport infrastructure and operations, proposes a revised strategy for managing bus and taxi operating licences, discusses the transport needs of the district, and indicates the funding required to address the transport needs.

Local Integrated Transport Plans (LITPs) have also been prepared for four local municipalities in the district, namely Breede Valley, Drakenstein, Langeberg and Witzenberg, as well as, although by a separate process, a Comprehensive Integrated Transport Plan for the Stellenbosch local municipality. The district and local municipalities' Integrated Transport Plans have all been prepared in accordance with the Department of Transport guidelines and minimum requirements for the preparation of Integrated Transport Plans.

Transport Vision and Objectives

Continuity of a vision is necessary to ensure the continued pursuit thereof and for this reason the Transport Vision as stated in the previous Cape Winelands District Integrated Transport Plan (2011-2016) has remained the same, namely "Innovative Mobility". This vision is supported by a mission statement: "A sustainable transport system which provides access for social and economic opportunity". Sustainability should be seen as operations which do not exceed the capacities and capabilities of the natural environment, but which satisfy basic human needs at the same time. This suggests that sustainable transport is a system with low negative environmental impacts yet high positive social value, and which supports efficient economic development. The Cape Winelands District Integrated Transport Plan proposes how to translate these principles into practical applications.

Transport Register

The main factors which influence the demand for transport are population distribution, social needs and economic activity. In the Cape Winelands District, apart from Stellenbosch, Drakenstein municipality has the highest population and Witzenberg municipality has the highest economic growth rate. Population distribution and economic activity are focused around a number of urban centres in each local municipality, namely Paarl and Wellington in Drakenstein, Worcester in Breede Valley, Robertson in Langeberg and Ceres in Witzenberg. There are however a number of smaller towns and settlements within each of these municipal areas, as can be seen in the map on the cover of this report.

The agricultural sector is the dominant economic driver in the Cape Winelands district, and more specifically the horticultural and wine industries. The Western Cape Government has identified the main agricultural produce within the district as wine grapes, with high density concentration along major transport corridors. There are also areas of high agricultural activity such as Witzenberg, with the other areas within the district having moderate activity density. These areas with moderate and high activity densities are along routes connecting main highways.

The public transport modes operating in the Cape Winelands district are minibus taxis and the rail passenger service, while there are some long distance bus services that have stops within the district. These modes are present in all local municipalities, with the exception of Langeberg which does not currently have a rail service. The public transport infrastructure is limited, with a few formal minibus taxi ranks in existence in each local municipality. However, it was also observed in Nduli and Prince Alfred Hamlet (in Witzenberg) and Zolani (in Langeberg), that there are formal minibus taxi ranks which are not being utilised. There are a number of minibus taxi associations in the Cape Winelands district who were consulted with regard to the transport needs of the operators and the passengers.

The non-motorised transport (NMT) infrastructure in the district primarily consists of sidewalks, but a lack of continuity of sidewalks has been identified as a concern. Formal NMT facilities occur sporadically in towns, occasionally linking public

transport embayments. Attention has been given to these concerns in the preparation of a NMT infrastructure framework plan for the district. Implementation of NMT facilties in Ashbury has taken place recently.

Freight transport plays an important role in the movement of agricultural products in the district, but the increasing volumes of long distance heavy vehicles passing through towns situated on main routes, such as Worcester, Robertson and Ashton present problems of traffic congestion, pedestrian safety, noise and air pollution, as well as causing damage to the road surface, requiring more frequent maintenance.

Operating Licence Strategy

The Operating Licence Strategy (OLS) is intended to guide the adjudication of Operating Licence applications within the Cape Winelands area and provide clear guidance to the District Municipality as to which Operating Licence applications should be approved or rejected, and if approved, what conditions should be attached to the approval. It is recommended that the Cape Winelands District Municipality convene an “Operating Licence Recommendations Committee” to evaluate and comment on Operating Licence applications received from the Provincial Regulatory Entity and to co-ordinate responses to the Provincial Regulatory Entity for the local municipalities in its area of jurisdiction.

Transport Needs Assessment

A number of transport needs have been identified within each local municipality through an understanding of the existing situation as well as from consultation with municipal officials and transport operators, and from the public meetings which took place in each local municipality. These needs are aimed at addressing various aspects within the transport sector and include public transport operations and facilities, learner transport, freight movement, non-motorised transport, tourism and the road network.

Funding Strategy

All the local municipalities within the Cape Winelands district, with the exception of Langeberg, have prepared budget estimates for transport projects for the next three financial years. The municipal transport budgets indicate various projects, most of which are road infrastructure projects.

Public and Stakeholder Consultation

Throughout the preparation of this District Integrated Transport Plan stakeholder engagement has taken place through the involvement of the district and local municipal transport officials, as well as Western Cape Government officials who attended the steering committee meetings. Meetings were also held with representatives from the minibus taxi associations in eack local municipality. The general public in each local municipality was also consulted through a public participation process which took place in October/November 2015 and their comments are included in this District Integrated Transport Plan.

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List of Abbreviations

AADT	Average Annual Daily Traffic
CBD	Central Business District
CCT	City of Cape Town
CWDM	Cape Winelands District Municipality
CITP	Comprehensive Integrated Transport Plan
CPTR	Current Public Transport Record
DITP	District Integrated Transport Plan
DTPW	Department of Transport and Public Works
DoT	Department of Transport
EMS	Emergency Medical Services
GIS	Geographic Information System
IATA	International Aviation Transport Association
IDP	Integrated Development Plan
IPTN	Integrated Public Transport Network
IPTNF	Integrated Public Transport Framework
ITP	Integrated Transport Plan
LITP	Local Integrated Transport Plan
LM	Local Municipality
NDP	National Development Plan
NLTA	National Land Transport Act, 2009
NMT	Non-motorised Transport
NPTR	National Public Transport Regulator
OL	Operating Licence
OLS	Operating Licence Strategy
PAH	Prince Alfred Hamlet
PRE	Provincial Regulatory Entity
RNIS	Road Network Information System
SANRAL	South African Nation Road Agency Pty Ltd
SDF	Spatial Development Framework
WCG	Western Cape Government

1 INTRODUCTION

1.1 Background

This report comprises the 5 year Review of the District Integrated Transport Plan 2015/16 – 2020/21 for the Cape Winelands District.

Section 36 of the National Land Transport Act (Act 5 of 2009) requires that all Planning Authorities prepare an Integrated Transport Plan (ITP) covering a 5 year period and updated annually.

This review therefore includes updating the following elements:

- Vision and Objectives
- Current Public Transport Record
- Operating Licence Strategy
- Transport Needs Assessment
- Summary of the Local Integrated Transport Plans
- Funding Strategy and Summary of Proposals
- Public and Stakeholder Consultation

- Local Integrated Transport Plans
  - Transport Status Quo
  - Transport Needs Assessment
  - Transport Improvements Proposal
  - Implementation Budgets and Programmes

The Cape Winelands District includes Drakenstein, Witzenberg, Breede Valley, Langeberg and Stellenbosch local municipalities. Currently, these local municipalities are classified as type 3 planning authorities, with the exception of Stellenbosch which is classified as a type 1 planning authority. For this reason, the Stellenbosch local municipality is required to prepare a Comprehensive ITP (CITP) and the other local municipalities local ITPs (LITPs). The Cape Winelands district municipality is classified as a type 2 planning authority and is therefore required to prepare a District ITP (DITP).

Due to the Stellenbosch municipality being classified as a type 1 planning authority, it will be excluded from the Cape Winelands DITP update, which will only include the executive summary of the Stellenbosch CITP.

Interrelationship between Transport Plans:

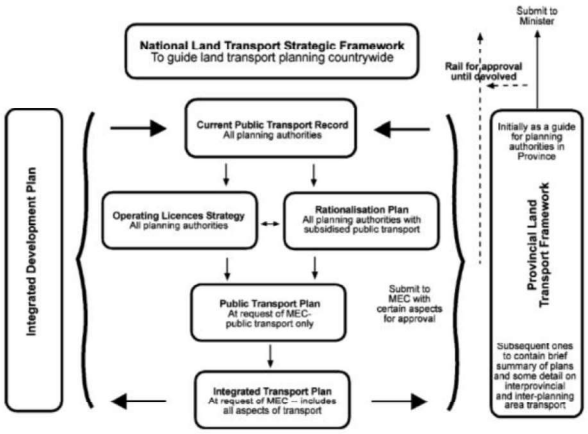


Figure 1-1: Interrelationship between Transport Plans (Source: National Land Transport Transition Act No22 of 2000)

1.1.1 Study Area

As illustrated in Figure 1-2 the Cape Winelands district lies within the Western Cape Province. A full page illustration of the figure can be found in Annexure A.



Figure 1-2 - Western Cape Province

As mentioned previously and illustrated in Figure 1-3 the Cape Winelands district includes the following local municipalities; Drakenstein, Breede Valley, Witzenberg, Langeberg and Stellenbosch.

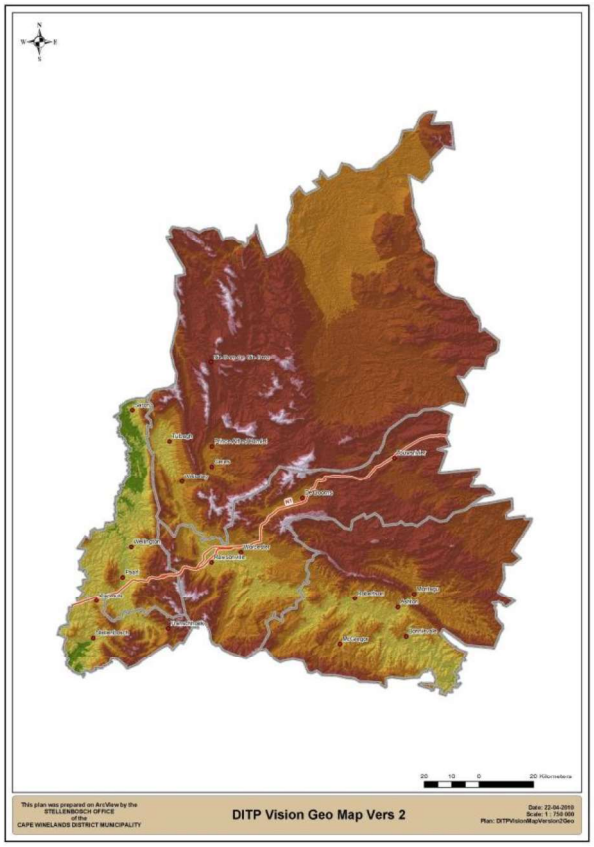


Figure 1-3 - Cape Winelands District Municipality

Drakenstein municipality is considered the most urban of the municipal areas in the study area and this is most likely because it is on the City of Cape Town urban fringe. Witzenberg, Breede Valley and Langeberg are less urban, with the majority of their towns being rural and spatially dispersed within the municipal areas.

1.1.2 Report Layout

This report consists of the following chapters:

- Executive Summary
- Chapter 1: Introduction
- Chapter 2: Vision and Objectives
- Chapter 3: Transport Register
- Chapter 4: Operating Licence Strategy
- Chapter 5: Transport Needs Assessment
- Chapter 5: Summary of the Local Integrated Transport Plans
- Chapter 7: Funding Strategy and Summary of Proposals
- Chapter 8: Public and Stakeholder Consultation

This report consists of the following Annexures containing supporting information:

- Annexure A: Figures
- Annexure B: Tables
- Annexure C: Stakeholder consultation

1.2 Cape Winelands Transport Institutional and Organisational Structure

Figure 1-4 illustrates the organisational structure of the Cape Winelands District Municipality.

The Public Transport Planning and Regulations department in the District consists of a Deputy Director: Public Transport and a transport planner. This unit has been responsible for procuring and managing the DITP review process for the Cape Winelands District Municipality.

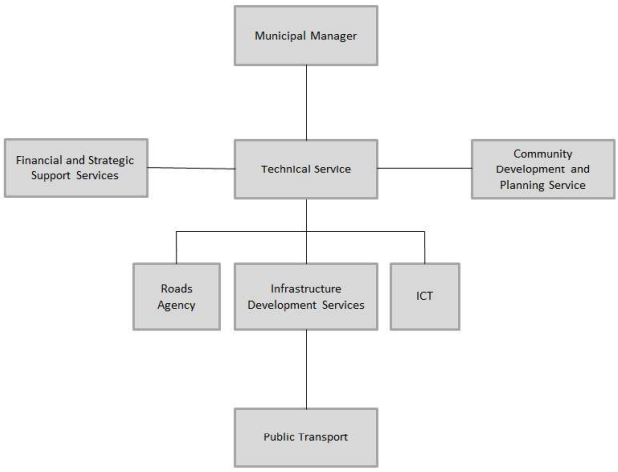


Figure 1-4: Institutional and Organisational Structure

2 VISION, GOALS AND OBJECTIVES

There are a number of overarching policies, visions and strategies within National and Provincial government that are relevant to the Cape Winelands District Municipality and local municipalities. In addition, there are District Municipality documents that inform planning in general and transport planning in particular. Sustainability is also an important component of a transport vision and is addressed below.

2.1 Sustainability in transportation

There are three components to sustainability, namely the natural environment, social activity and economic development. These three components of 'sustainability' should not be seen as being in conflict over the same resources. Instead, the focus should be on the interdependencies between the components (each being dependent on the *full extent and functionality* of the others). The interdependence implies that trade-offs between the components will result in compromised functionality, with subsequent detrimental knock-on effects in the other components.

Accordingly, sustainability should be seen as an operational space which does not exceed the capacities and capabilities of the natural environment, but which fully satisfies basic human needs at the same time. This suggests that sustainable transportation is a system with low negative environmental costs yet high positive social value, and which supports resource efficient economic development.

These principles, translated for practical application in the Cape Winelands District, require the following:

Lowering the carbon intensity of transport, especially freight transport

One of the fundamental concerns relating to transportation is its reliance on transport modes and infrastructure with large greenhouse gas footprints. A path towards more sustainable transportation therefore has to include efforts at reducing the relative carbon intensity of both the infrastructure and operational activities of transportation systems. In the Cape Winelands, the focus will be on finding innovative carbon-efficient ways of providing mass public transport to dispersed rural communities and low density urban settlements, as well as ways to reduce the reliance on road-based freight. Additionally, the District needs to participate in regional and national debates regarding the interprovincial movement of freight and people along the main national corridors.

Improvement in the rural coverage of public transport networks

Access to transport networks is a crucial determinant of human welfare as it represents a crucial connection between people and employment opportunities, social services, recreational facilities etc. With its extensive rural hinterland, the Cape Winelands District is faced with a massive challenge to provide public transport at affordable rates to dispersed and often poor communities. This calls for innovative combinations of old (e.g. non-motorised) and new (e.g. renewable energy, on-demand services, mobile communications) technology and highly efficient network operations.

Integrated public transport systems within towns

As important as connecting rural communities with employment opportunities and social services, is the need to elevate the level of public transport within towns. Towns in South Africa clearly evidence the legacy of segregation planning of the apartheid era. As a result, the circulation of people between active business and social activities, and between places of residence and employment, is inefficient and places a particular strain on the lives and finances of the poor or disadvantaged social groups. To counteract this, an affordable public transport system with adequate schedules and levels of service needs to be instituted in each town. As with the rural systems, it will need to bring an innovative mix of new and existing technologies together.

The internalisation of social, economic and environmental costs into the design and construction of transportation infrastructure

Approaching the development of transportation systems with a cradle-to-grave perspective will ensure that previously overlooked or externalised impacts on people, the economy and the environment are reduced. For example, achieving an extended life-span that reduces the long term maintenance or replacement cost might cost more initially, but brings about long term economic sustainability. As a matter of fact, a new perspective could even result in initial cost savings as more integrated solutions are found that utilise renewable energy, recycle water and materials, and reduce the amount of waste being disposed of. Looking after the

natural environment, people and the local economy will, over time, ensure greater resilience in the face of adverse conditions.

Realisation of local benefits

An integrated transportation system should be about more than just providing people with a means to move people and goods from point A to point B. Investment in transport infrastructure and transportation systems should bring about lasting local benefits that stimulate the local economy and improve the overall welfare of communities. This can be realised by involving local communities in transportation development projects through sourcing of local labour, labour intensive construction methods, social outreach, skills transfer and project detail that provide local scale transportation benefits such as improved pedestrian movement as a spin-off from infrastructure aimed at higher order transport modes.

2.2 National and Provincial Guiding Visions and Strategic Goals

National

Poor access to transport in the rural areas of developing countries constrains economic and social development and contributes to poverty.

According to the Constitution of South Africa, local government has been mandated to "carry out a number of developmental duties" and expresses this mandate as follows:

- Provide democratic and accountable government for local communities
- Provide services in a sustainable manner
- Promote social and economic development
- Promote a safe and healthy environment
- Encourage participation in government

National Development Plan (2011)

The National Development Plan (NDP) provides a vision of South Africa that is without poverty and without inequality by 2030. The NDP proposes working towards this vision by including all members of society to actively contribute to achieving this vision. The objectives of the NDP are:

- Strengthening the links between the economic and social strategies
- An effective and capable government
- Redressing the injustice of the past effectively
- Faster economic growth and increased investment and employment
- Rising standards of education, a healthy population and effective social protection
- Leadership from all sectors in society
- Collaboration between private and public sectors
- An effective and capable government

Provincial

Western Cape Government Strategic Goals

The Provincial Strategic Goals (2015) indicate that the Western Cape Government aims to

> "*provide you, your loved ones and communities with opportunities for jobs, education, growth and development*". Over the next five years the Western Cape Government is committed to:

- Create opportunities for growth and jobs - create an enabling environment to attract investment, grow the economy and create jobs by supporting high growth economic sectors.
- Improve education outcomes and opportunities for youth development - expand quality education across the province and provide opportunities for youth to realise their full potential.
- Increase wellness and safety, and tackle social ills – address health, safety and social ills by supporting healthy communities, a healthy workforce, and healthy families, youth and children.
- Enable a resilient, sustainable, quality and inclusive living environment - improve urban and rural areas through enhanced management of land, an enhanced climate change plan, and better living conditions for all.
- Embed good governance and integrated service delivery through partnerships and spatial alignment - deliver good governance and an inclusive society that increases access to information, in partnership with active citizens, business and institutions.

Department of Transport and Public Works Strategic Plan

The Western Cape Government, Department of Roads and Public Works published its Strategic Pan for 2015/15 – 20119/20 in February 2015. The vision of the Department is:

> "To lead in the delivery of government infrastructure and related services"
>
> The vision is supported by the following strategic goals:

- Maximise empowerment and job creation in the Western Cape
- Manage provincial infrastructure and immovable assets in the Western Cape
- Deliver safe, efficient, integrated transport systems in the Western Cape
- Promote good governance, effectiveness, and efficiency throughout the DTPW

2.3 Cape Winelands District Municipal Vision

A number of informants have previously been used to develop a vision and mission for the Cape Winelands District Municipality, including a range of policy documents. For the full vision as stated in the IDP, refer to Figure 2-1. A summary vision is stated as "A unified Cape Winelands of excellence". The CWDM mission reads, "All structures of the Cape Winelands co-operate together towards effective, efficient and economically sustainable development".

The Cape Winelands mission focuses on a collaborative effort to work towards a more sustainable district.



Figure 2-1: Cape Winelands District Municipality Vision, Mission and Core Values (*Source: IDP 2014 – 2015*)

The strategic objectives of the IDP can be summarised as follows:

- To maintain health and safety of communities
- To facilitate sustainable economic empowerment of all communities
- To support and ensure the development and implementation of infrastructural services
- To provide effective and efficient support services
- To ensure financial sustainability

2.4 Cape Winelands Transport Vision 2011-2016

The previous Cape Winelands DITP stated the vision for transport as:

"Innovative Mobility"

And the Cape Winelands transport vision was further supported by the following mission statement:

"A sustainable transport system which supports the needs of social and economic opportunity"

The findings of the current DITP suggest no reason to amend the vision and mission, and it is noted that these should not be changed frequently without evidence-based reasoning. The vision of the Cape Winelands needs to be informed by the context and how people move.

For a detailed interpretation of the vision for transport, refer to the DITP 2011-2016, section 2.3, which provides analysis of what was working and what was not working in the district as an informant to the vision.

Since the previous vision statement a number of projects have been conducted with the intention of moving towards this vision.

This includes:

- Drafting the Cape Winelands Integrated Public Transport Network Framework
- Updating the Non-motorised Transport Masterplan Framework
- Updating the Safer Journeys to Schools report; and
- Constructing a number of projects to improve transport within the district.

2.5 Strategic Framework

A number of studies have been carried out to inform planning by different transport modes, as summarised below. Some of these are covered in more detail elsewhere in this report, but brief summaries are provided here as informants to the vision for the district.

Safer Journeys to Schools

Owing to increased non-motorised transport (NMT) and learner travel awareness generated by the National Land Transport Transition Act (NLTTA) and the development of the provincial NMT Strategy for the Western Cape Province, the Cape Winelands District Municipality (Cape Winelands) realised the need for a comprehensive policy framework that would address the travel needs of learners. Pendulum Consulting was subsequently appointed by Cape Winelands to develop a policy framework for learner travel in the Cape Winelands.

The primary objective of this policy document is to develop a framework referred to as the Safer Journeys to Schools in the Cape Winelands, to facilitate the implementation of learner travel improvement projects at schools in the Cape Winelands.

ision:

The vision developed for this policy is to **"improve and create access to opportunities through education".**

Mission:

This can be accomplished through improving the journey to school by providing a safe and comfortable link or connection between home and school.

Objectives:

Objectives in support of the vision and the mission are as follows:

- Improve the level of service (including transport operational level of service, as well as the coordination of transport services) learners and parents are currently experiencing.
- Improve the environment that learners move within between home and school
- Improve comfort and convenience experienced by learners while undertaking the journey between home and school.
- Improve road safety conditions along the route

Areas of Interventions and Strategies

Areas of intervention as listed below and supportive strategies were identified. Actions or programmes in support of the strategies would assist in realising the objectives.

- Engineering/ environmental
- Education, communication and awareness
- Transport service delivery
- Institutional integration
- Traffic law enforcement
- Evaluation and Monitoring

NMT Masterplan Framework

A key transport challenge in most rural districts of SA, including Cape Winelands, is not only the widely distributed nature of towns and the opportunities they provide, but also the low intensity of land uses within towns. These two factors negatively impact on both public transport and NMT (as a mode in its own right and as a feeder to public transport).

IPTN Framework

Currently there is no comprehensive IPTN for the district, but a framework has been prepared in response to needs identified in the previous DITP.

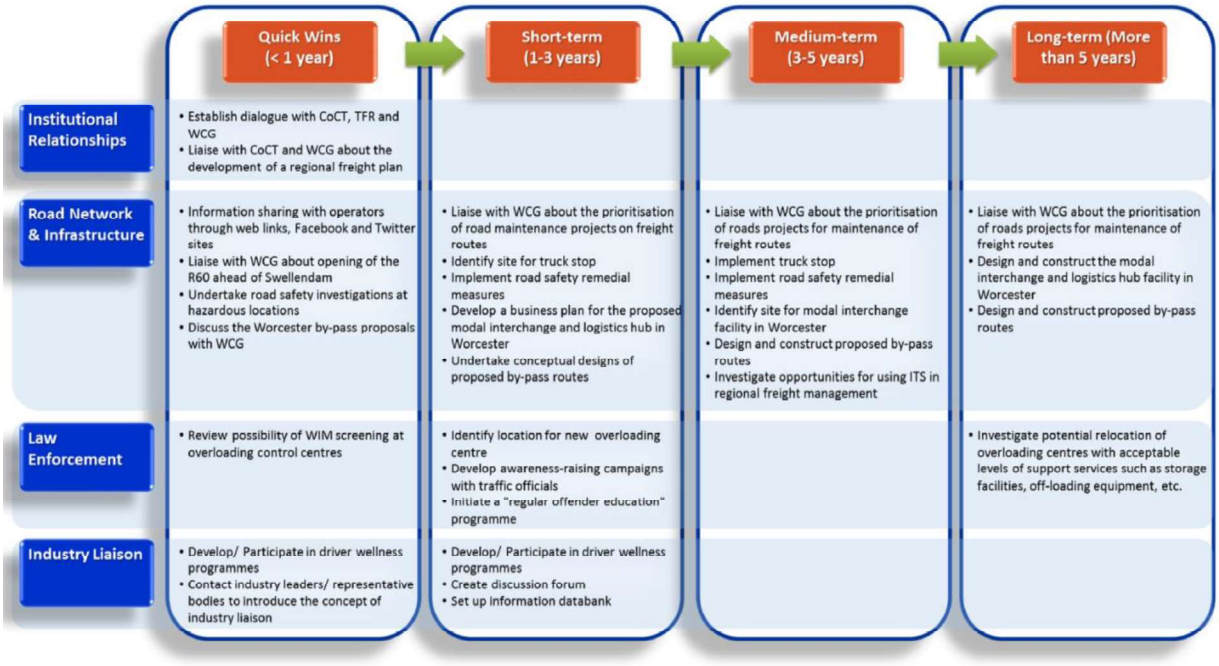


Figure 2-2: Freight Strategy Proposed Transport Improvements

Freight Strategy

The freight strategy as identified in the previous CWDM ITP (2010 - 2015) was prepared in 2011. This freight strategy was a desktop study which indicated that engagement with the stakeholders was required. These engagements took place and transport improvements proposed. These transport improvements are on various institutional levels and over short to long term timeframes.

As indicated the long term improvements include engagement with WCG regarding prioritisation of roads projects for maintenance of freight routes, design and construction of the modal interchange and logistics hub facility in Worcester, and design and construction of proposed by-pass routes. The engagement also included investigation of the relocation of overloading centres with acceptable levels of support services such as storage facilities, off-loading equipment etc.

3 TRANSPORT REGISTER

3.1 Introduction

This chapter illustrates the current status quo of transport within the Cape Winelands District Municipality. This chapter will summarise the Current Public Transport Record that was prepared for the CWDM DITP update, and illustrate information about public transport and general traffic volumes.

3.2 Spatial Development Framework

The Cape Winelands District Municipality is primarily rural with its main economic driver being the agricultural industry and specifically the horticultural industry (including fruits, vegetables, livestock and dairy products). The main towns within the district, such as Paarl, Wellington, Robertson, Worcester and Ceres, have arisen in support of the rural economy. Due to the geographic and demographic makeup of the district, the transport system plays an important role in overcoming the spatial and income divide. The NMT Masterplan Framework (2010) identified a number of functional clusters primarily based on the geographic layout of the district and where the main towns are located. The updated NMT Masterplan Framework (2015) refined these functional clusters by understanding the functional relationship between the towns and grouping the towns accordingly. The improvement of transport within these functional clusters is important to minimise the impact of the spatial structure on daily travel, to allow for better access to opportunities.

The proximity to the City of Cape Town (CCT) also allows for economic interaction to take place between the district and the CCT. There is currently a strong functional (economic) relationship between the Cape Winelands and the CCT.

The CWDM IPTN Framework (2013) illustrates a number of key spatial challenges for each of the local municipalities. (see Table 3-1)

Table 3-1: Key Spatial Challenges

Local Municipality	Key Spatial Challenges
DRAKENSTEIN	Lack of available land for transport and related infrastructure (Huguenot Station Precinct).
	No park-and-ride facility at Huguenot Station.
	Poorly defined transport and public spaces in Paarl Central Business District
	Key nodes (Wellington and Paarl) do not adequately support NMT.
	Poor transport-land use integration in Paarl CBD.
STELLENBOSCH	Lack of integrated settlements within municipality.
	Dispersed rural settlements.
	Derelict and unutilized rail infrastructure (Franschhoek rail connection).
	Inter-city bus facilities are poorly located.
BREEDE VALLEY	Poor transport-land use integration in Worcester CBD.
	Worcester CBD does not adequately support NMT.
	Dispersed and non-integrated public transport facilities or ranks within Worcester CBD (i.e. rail, long-distance bus, taxi).
	Public transport services and facilities are non-existent or limited in rural areas
WIT ENBERG	Lack of integrated settlements, particularly at Ceres.
	Dispersed public transport facilities within Ceres CBD.
	Poorly located and underutilized public transport facilities at Ceres.
LANGEBERG	Dispersed public transport facilities or ranks at Robertson CBD – no integration
	Dispersed rural settlements with vast distances between them.
	Poor NMT infrastructure.
	Public transport facilities are limited within the rural settlements (McGregor, and Montagu)

The key findings of the Cape Winelands SDF (2009/10) suggest that the current development path is not sustainable and that spatial restructuring is only possible through investment in infrastructure.

The SDF indicates that each local municipality's growth is different in terms of population and in the economic and revenue generating sectors. This creates different challenges amongst the municipalities. The SDF suggests 30 key spatial proposals which may address these challenges. Of these, two have been identified as key to transport. One is that transport corridors containing both road and rail routes should be developed as primary freight and passenger routes and the other are to increase the ability to commute between higher order and lower order towns.

The SDF findings and key challenges identified in the IPTN framework suggest that different considerations are necessary to plan for each of these local municipalities as the challenges may be similar but the context within which they occur is somewhat different.

3.2.1 Population density and distribution

According to the National Census 2011, as illustrated in Table 3-2, the total population of the Cape Winelands district is approximately 787 490 persons, the majority of which reside in the Drakenstein local municipality. Drakenstein also has the highest population density of the towns in the study area, with the majority of the LM residents residing in Paarl and Wellington.

Table 3-2 - Population within the Cape Winelands District

Local Municipality	Area (km2)	Total Pop.	Pop. density [1]	No of Households
Drakenstein	1538	251262	163	59774
Witzenberg	10753	115946	11	27419
Breede Valley	3833	166825	44	42527
Langeberg	4518	97724	22	25125
Stellenbosch	831	155733	187	43 420
Total	21473	787490	427	198265

[1] Density: number of persons per square km

3.2.2 Employment levels and economic activity

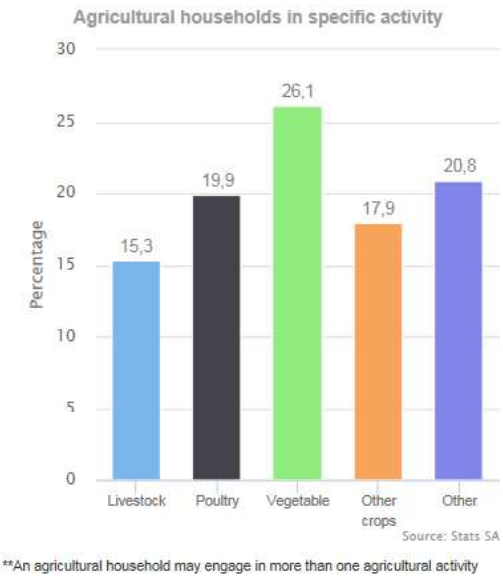
Table 3-3 illustrates the percentage of persons unemployed within each local municipality. It is evident that the local municipality with the lowest growth rate also has the second highest unemployment rate. Conversely, the local municipality with the lowest unemployment rate has the highest growth rate. It is also evident that there is a high youth unemployment rate within the district.

The Western Cape provincial unemployment rate is 24.5% (fourth quarter of 2014) and was the lowest unemployment rate amongst the provinces. Within the provincial context the local municipalities appear to have an unemployment rate lower than that of the province.

Table 3-3: Unemployment rates within the Cape Winelands District

Local Municipality	Unemployment rate	Youth unemployment	Growth rate
Drakenstein	17.6%	24.6%	2.56%
Witzenberg	7.6%	9.9%	2.64%
Breede Valley	14.4%	20.2%	1.31%
Langeberg	11.3%	15.1%	1.79%

The information illustrated in the figures[2] below indicates that the main driver of the Cape Winelands economy is the agricultural sector, specifically in vegetable crops.



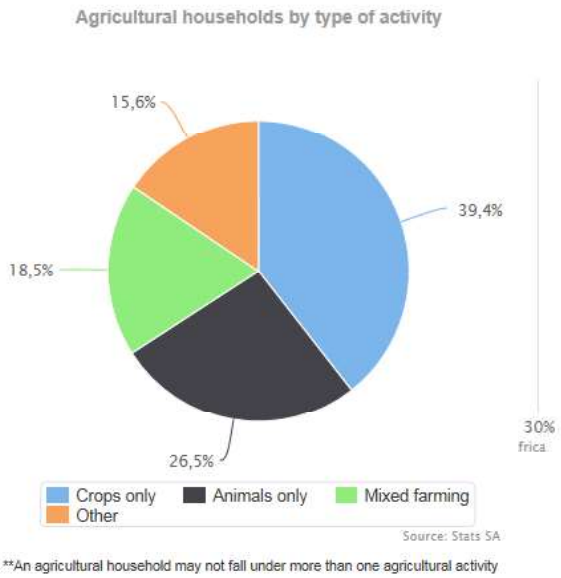


Figure 3-1: Agricultural Statistics - Breede Valley

Figure 3-2: Employment and Household Income - Breede Valley

Figure 3-1 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that a large portion of the activities is in crops. This form of agriculture is the most labour intensive and is a source of employment to the low skilled labour pool.

Figure 3-2 illustrates the number of employed persons as well as the household income. It is evident from these figures that nearly a quarter (22.2%) of households averages an income between R19 601 and R38 200. It is also evident that 12% of households have no income.

[2] Figure 3-1 to Figure 3-8 has been sourced from Statistics South Africa

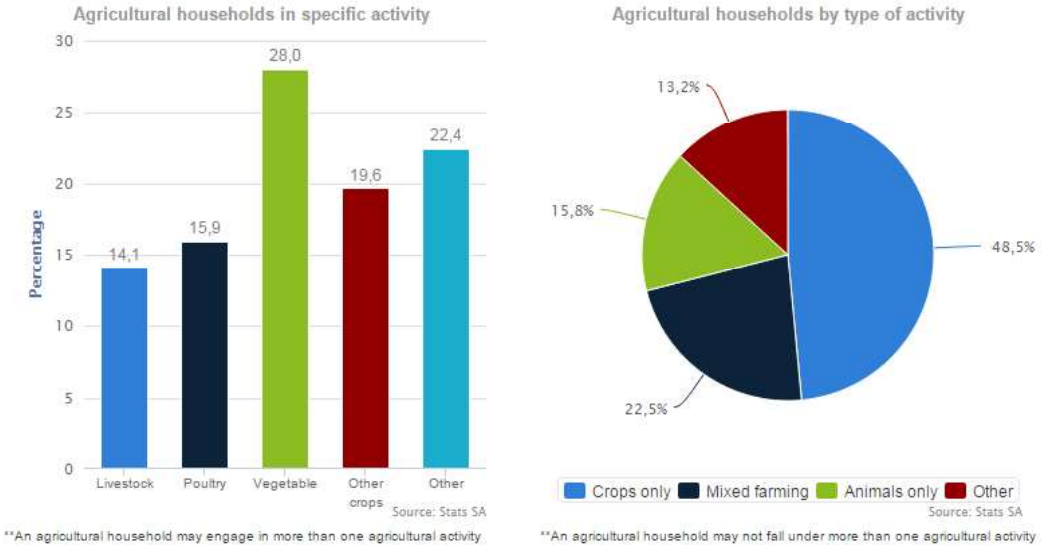


Figure 3-3: Agricultural Statistics – Drakenstein



Figure 3-4: Employment and Household Income – Drakenstein

Figure 3-3 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that just under 50% of activity is in crops only.

Figure 3-4 illustrates the number of employed persons as well as the household income. It is evident from these figures that 18.4% of households average an income of between R38 201 and R76 400 per annum. It is also evident that 13% of households have no income which is the highest amongst the local municipalities within the Cape Winelands district.

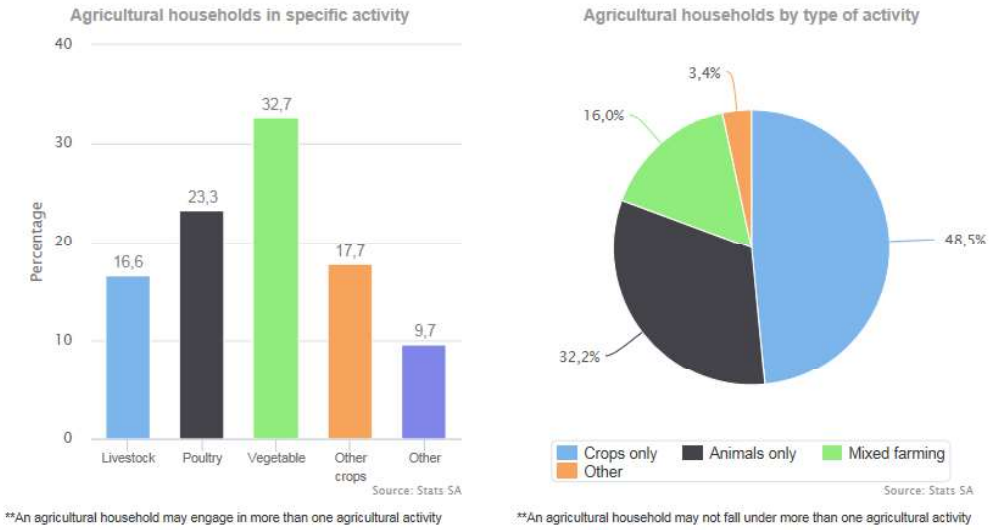


Figure 3-5: Agricultural Statistics – Langeberg



Figure 3-6: Employment and Household Income – Langeberg

Figure 3-5 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that just under 50% of activity is in crops only.

Figure 3-6 illustrates the number of employed persons as well as the household income. It is evident from these figures that nearly a quarter (24.9%) of households average household income of between R19 601 and R38 200. It is also evident that 9.7% of households have no income.

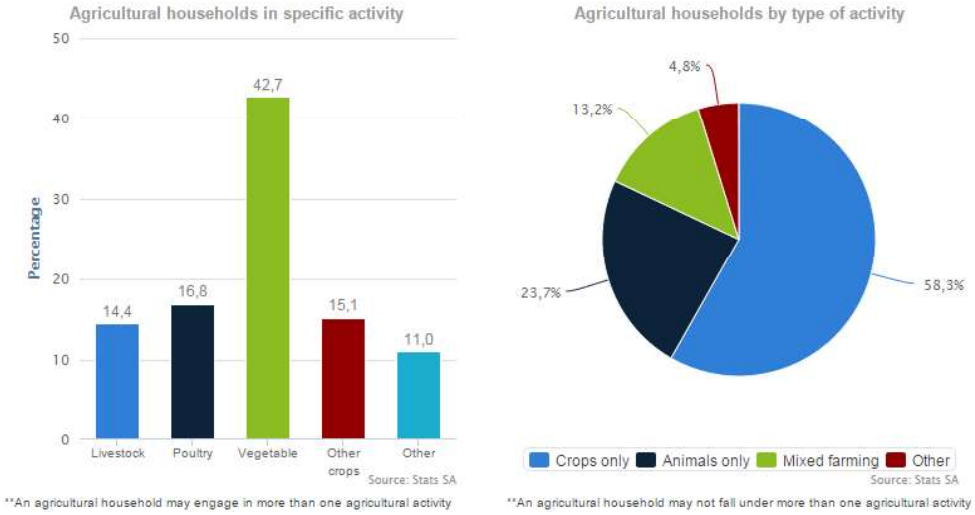


Figure 3-7: Agricultural Statistics – Witzenberg

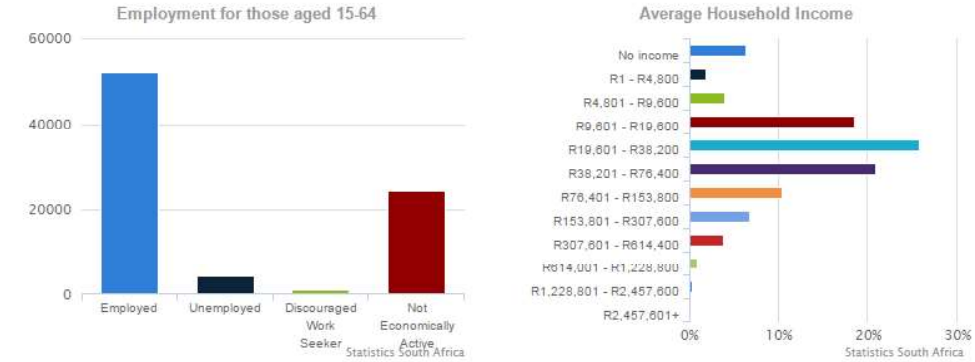


Figure 3-8: Employment and Household Income – Witzenberg

Figure 3-7Figure 3-1 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that the majority of activity is in crops only.

Figure 3-8 illustrates the number of employed persons as well as the household income. It is evident from these figures that the majority (25.8%) of households average an income of between R19 601 and R38 200. It is also evident that 6.4% of households have no income.

The figures above indicate that the majority of produce is from the agricultural sector, which is primarily transported on the road network due to the lack of alternative transport options.

The income levels of the households within the municipality suggest that their affordability is limited and would therefore make use of either NMT or public transport.

3.3 Strategic Transport Corridor

3.3.1 Regional Development Corridors

According to the Western Cape SDF 2014, the rural economy is undergoing transformation as a result of both financial / economic factors, and a policy thrust to diversify rural activity. Government support of rural entrepreneurs can be expected to increase travel on the existing links between the Cape Winelands and Cape Town, and between the Cape Winelands and inland destinations. A rural development corridor is identified linking Ceres, Worcester, Robertson and Swellendam, which has the potential to increase road-based transport in and out of the Cape Winelands. In the long term this has the potential to alter public transport patterns, but this has not been observed yet.

3.3.2 Transport, Activity development and Agricultural corridors

According to the Western Cape Provincial Spatial Development Framework[3] agriculture is the most space extensive economic activity and underpins the economies of all districts outside of Cape Town (within the Western Cape).

It is evident from Figure 3-10 and Figure 3-11 that the Cape Winelands district economy is focussed on the agricultural sector. These figures illustrate that the main agricultural areas are situated along and between the main transport corridors i.e. the N1 and N2.

The main agricultural produce within the district is wine grapes, with medium to low density wine cellars within the district with areas of high density concentration along major transport corridors. There are also areas of high activity density such as Witzenberg, with the other areas within the district having moderate to high and moderate activity density

These areas with moderate and high activity densities are along routes connecting main highways. This suggests that a large number of vehicles transport agricultural input and output between the N1 and N2 via the R60, R62, R43 and R45. The agricultural inputs are therefore also transported along these corridors. Rail freight movement also takes place within the district. Agricultural produce is transported via rail between CCT and Ceres and areas east of CCT.

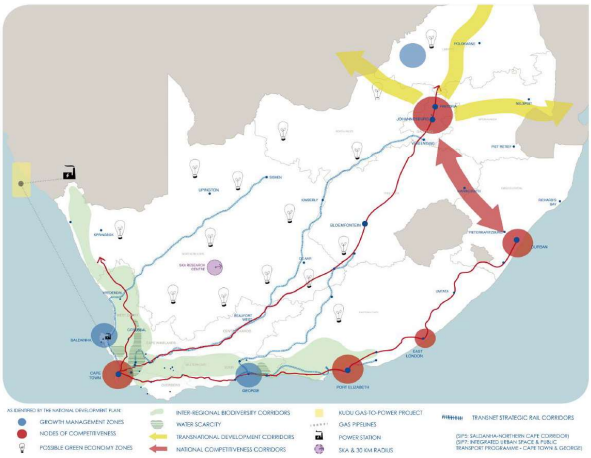


Figure 3-9: Inter- and Intra- Provincial Spatial Initiatives based on NDP and other National Strategies

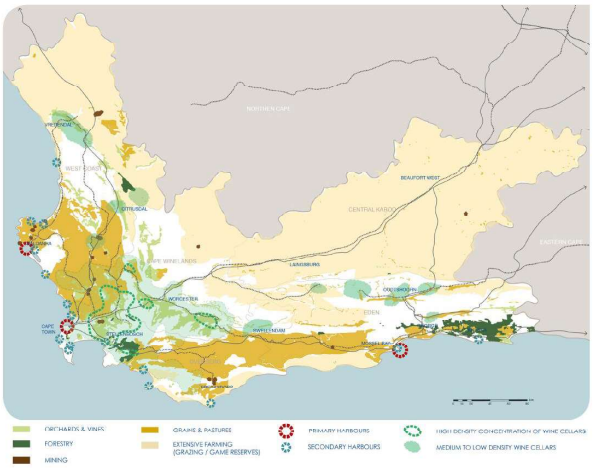


Figure 3-10: Western Cape Province - Primary Sectors (Agriculture, Fishing, Forestry and Mining)

[3] Draft for Public Comment, October 2013

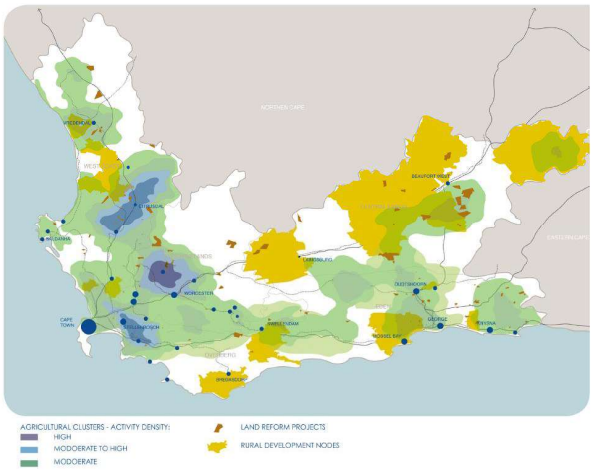


Figure 3-11: Western Cape Province - Locality of Agricultural clusters, Land reform projects and CRDP nodes

3.4 Public Transport Services

3.4.1 Overview of the Public Transport Operations

Within the district are a number of public transport operations, facilities and operators. The primary mode of public transport is minibus taxi as well as limited rail and long distance bus services. The majority of public transport infrastructure provided is for the minibus taxi in the form of formal ranks and can be seen in the four local municipal areas. In towns where there is limited public transport infrastructure, the minibus taxi operators make use of shopping centres/ stores parking areas.

Public transport operations are also concentrated at peak times, with the majority of public transport trips taking place in the morning.

In the main towns of each local municipality there are operations that take place within the town and between neighbouring towns. In the more isolated towns the public transport operations are less frequent and may operate once a week only.

It was also found that in Nduli, Zolani and Prince Alfred Hamlet the existing public transport facilities are not being utilised during the peak, and that operators are more prone to providing a door-to-door service. This may be a result of competition amongst operators, whereby operators are not willing to wait at the public transport facilities for commuters but rather pick them up in order to avoid loss of potential income.

Modal Split

As discussed in the Cape Winelands CPTR, the inbound modal split for road based transport is indicated in a number of tables below. These tables illustrate that the main mode of inbound transport is light vehicles. In some instances the public transport modal share is relatively high as in the case of Montagu, Ceres and Robertson.

Breede Valley Local Municipality

Table 3-4 - Touwsriver inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
88.2%	1.8%	10.0%

Table 3-5 - De Doorns inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
80.9%	3.7%	15.3%

Drakenstein Local Municipality

Table 3-6 Paarl inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
86.5%	1.3%	12.2%

Langeberg Local Municipality

Table 3-7 - Robertson inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
60.9%	8.4%	30.7%

Table 3-8 - Montagu inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
47.2%	3.9%	48.9%

Table 3-9 - Ashton inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
84.6%	2.7%	12.6%

Witzenberg Local Municipality

Table 3-10 - Ceres inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
37.8%	3.8%	58.4%

Table 3-11 - Tulbagh inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT Bus)
74.0%	4.2%	21.8%

Regional Modal Splits

The road based modal share for the Cape Winelands district is illustrated in Table 3-12.

Table 3-12 - Regional Modal Share (Weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public Transport (MBT Bus)
60.4%	2.8%	36.8%

3.4.2 Minibus taxi operations

Routes and ranks

With the exception of Drakenstein, the majority of minibus taxi operations are inter-town i.e. most trips are between towns and not within towns. This is mainly due to the spatial layout of the local municipalities, with towns being divided such that NMT is not a viable option for commuting between towns, and the size of towns being such that they do not provide enough opportunities for them to be self-contained. For this reason most trips cover long (>5km) distances. It also suggests that commuters do not reside close to their places of employment opportunities.

A large number of the legally operating routes in Drakenstein are internal, with most taking place in Paarl and Wellington.

3.4.3 Rail

The rail operations in the district are both passenger and freight operations. The passenger rail services are operated by Metrorail and Shosholoza Meyl, whereas the freight operations are operated by Transnet Freight Rail.

In terms of passenger operations, a number of services operate in Drakenstein and there is a daily service from the CCT to parts of Witzenberg and Breede Valley. Langeberg however is the only local municipality which does not have a passenger rail service operating.

The Shosholoza Meyl, a long distance rail operator, provides a rail service between CCT CBD and Johannesburg. This long distance service departs from CCT on specific days in the week. The service operates in Drakenstein and Breede Valley, and continues further north-east to Johannesburg.

The freight rail operations take place on a daily basis with freight trains operating on the same railway lines as the passenger operations with the exception of a freight only line extending east of Worcester through the Langeberg municipal area.

More detailed information of the passenger rail services and timetables can be found in the Current Public Transport Record for the Cape Winelands District.

3.4.4 Minibus Taxi Associations consulted

As discussed in the CPTR the minibus taxi association as indicated in Table 3-13 were consulted and provided input into the data collection process.

Table 3-13 Minibus taxi associations consulted

Local Municipality	Stakeholders engaged
Witzenberg	Ceres Taxi Association
	Nduli Taxi Association
Drakenstein	Huguenot Taxi Association
	U.T.A
	Paarl United Taxi Association
	Wellington Taxi Union
	CATA
	CATA Boland
	Franschhoek Taxi Association
	Paarl Alliance Taxi Association
Langeberg	Robertson Taxi association
	Montagu Taxi Association
Breede Valley	Worcester United Taxi Association
	De Doorns Taxi Association

3.5 Public Transport Infrastructure

3.5.1 MBT Transport Facilities

There are a number of formal and informal minibus taxi facilities within the district, some of which are well utilised and others which are not currently being utilised.

More detail on the public transport infrastructure can be found in the CPTR document.

The following formal ranks within the CWDM are not being utilised:

- Prince Alfred Hamlet formal minibus taxi rank
- Nduli formal minibus taxi rank
- Zolani formal minibus taxi rank

The condition and type of facilities available at the formal and informal minibus taxi ranks differ significantly. Some formal facilities have a paved surface, shelter for vehicles and passengers, seating and ablution facilities, whereas other facilities have a paved surface and shelter for vehicles only.

Most of the ranks rely on street lighting to provide the light while in other areas minibus taxis make use of designated parking space at shopping centres (such as Shoprite and Pick n Pay parking in Robertson and the Worcester Mall parking facility in Worcester). .

3.5.2 Bus Transport Facilities

There are currently three long distance commercial bus services that operate through the Cape Winelands district, namely:

- Greyhound
- Translux Bus
- Intercape

All three of these operators primarily travel on the national routes (the N1 and N2) between major city such as Cape Town, Johannesburg, Pretoria and Durban. These operators also offer variations of trip chains, for example from Cape Town via Bloemfontein to Durban, or from Cape Town via Port Elizabeth to Durban.

Greyhound operates between Cape Town and Durban and Pretoria. The bus therefore operates in Paarl, Worcester, Touwsriver and Stellenbosch. The pick-up/ drop-off locations in these areas are:

Paarl Pick-up point:	Monument Shell, Cnr Main and South Street
Worcester Pick-up Point:	Breede Valley City
Touwsriver Pick-up Point:	Loganga Karoo Lodge, C/o Jane and Volschenk Streets
Stellenbosch Pick-up point	Merriman Avenue (opposite Neelsie)

TransLux Bus operates between Cape Town and Durban, East London and Pretoria. The bus therefore operates in Stellenbosch, Paarl, Worcester, Ashton and Robertson. The pick-up/ drop-off locations in these areas are:

Paarl Pick-up point:	Shell Garage, c/o Main and South
Worcester Pick-up Point:	Shell Ultra City
Touwsriver Pick-up Point:	Kom Kyk Motors
Stellenbosch Pick-up point	Stellenbosch Station

Figure 3-12 illustrates the routes on which the Translux Bus operates.

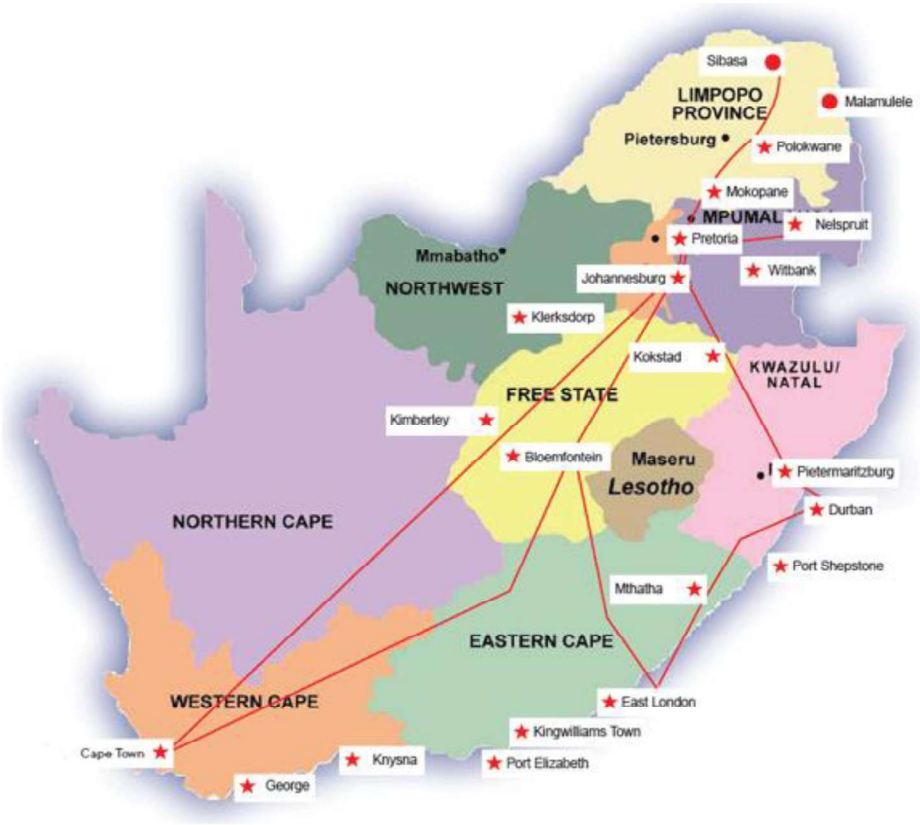


Figure 3-12: Translux Bus Route Map

Intercape operates between Cape Town and Port Elizabeth, Umtata, Durban and Pretoria. The bus therefore operates in Stellenbosch, Paarl, and Worcester. The pick-up/ drop-off locations in these areas are:

Paarl Pick-up point	Monument Motors, C/o Suid Street and Main Street (Shell Garage)
Stellenbosch Pick- up Point	Merriman Ave bus stop under foot bridge (Taxi drop off near Neelsie)
Worcester Pick-up point	Shell Ultra City

Figure 3-13 illustrates the routes on which Intercape currently operates.

The timetable with relevant information for the various routes served by each of the long distance bus operators can be found in the CPTR report.



Figure 3-13: Intercape Bus route map

3.5.3 Rail Transport Infrastructure

It has been noted that the Gouda railway station has been upgraded recently.

The table below summarises the information pertaining to the active railway stations within the district.

Table 3-14: Passenger Railway information

Town	Public Transport facility type	Location
Goudini	Railway Station	Latitude 33°36'28.00"S Longitude: 19°19'0.07"E
Channoves	Railway Station (not currently being used)	Latitude 33°37'32.08"S Longitude: 19°22'32.19"E
Worcester	Railway Station	Baring St, Worcester
Paarl	Paarl Rail Station	C/o Railway and Station St
Paarl	Huguenot Rail Station	C/o Huguenot and Klein Drakenstein Rd
Paarl	Dal Josafat Rail Station	Dommedaris St
Paarl	Mbekweni Rail Station	Dommedaris St (Mbekweni)
Wellington	Wellington Rail Station	Stasie Rd
Malan	Malan Rail Station	Latitude: 33°34'44.00"S Longitude: 18°58'59.08"E
Soetendal	Soetendal Rail Station	Latitude: 33°30'33.22"S Longitude: 18°58'54.17"E
Hermon	Hermon Rail Station	Latitude: 33°26'18.82"S Longitude: 18°58'3.96"E
Voelvlei	Voelvlei Rail Station	Latitude: 33°21'49.11"S Longitude: 19° 1'0.13"E
Gouda	Gouda Station	Stasie St
Tulbagh	Tulbagh Railway Station	Latitude: 33°19'14.19"S Longitude: 19° 5'59.95"E
Artois	Artois Railway Station	Latitude: 33°22'8.87"S Longitude: 19° 9'53.56"E
Wolseley	Wolseley Railway Station	Piet Retief St, Wolseley
Romans River	Romans River Railway Station	Latitude: 33°28'25.58"S Longitude: 19°12'6.68"E
Bree River	Bree River Railway Station	Latitude: 33°31'30.00"S Longitude: 19°12'29.77"E
Botha	Botha Railway Station	Latitude: 33°34'1.33"S Longitude: 19°15'21.70"E

3.6 Roads and Traffic

3.6.1 Major Road Network and condition

Provincial Roads

The condition of the provincial roads was obtained from the Western Cape Government and is illustrated in figure Figure 3-14 and Figure 3-15 below – a larger figure can be found in Appendix A.

It appears that the paved road network is primarily in good – very good condition, however the majority of the gravel road network appears to be fair to poor condition.

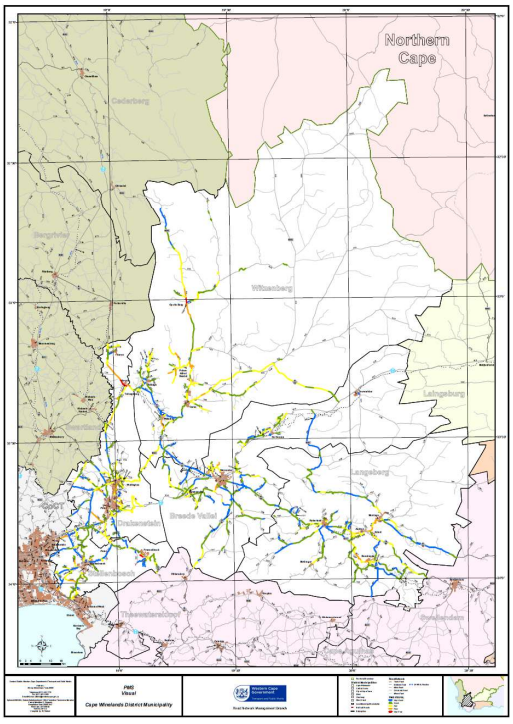


Figure 3-14 Paved Road Condition of Provincial Roads

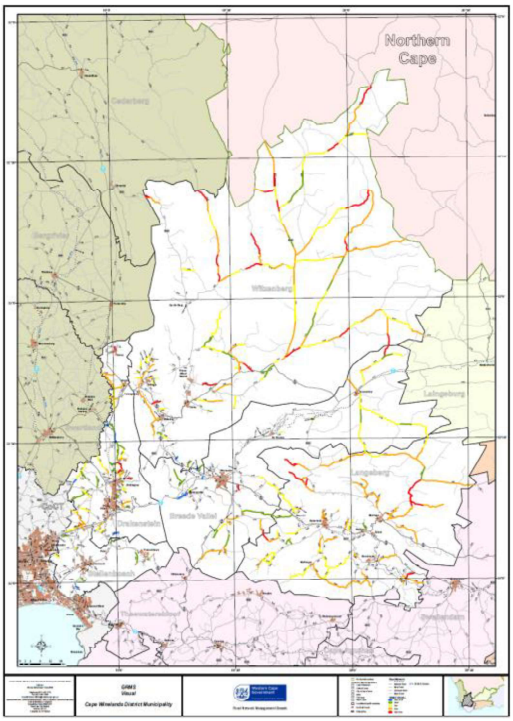


Figure 3-15 Gravel Road Condition of Provincial Roads

The Table 3-15 indicate that total distance of provincial owned road network within the CWDM and 1Table 3-16 indicates the total assets value of provincial owned road network in the district.

Within the district, Witzenberg has the highest distance of provincial owned roads with a total distance of 2167km followed by Langeberg, Breede Valley and Drakenstein.

[4]Table 3-15: WCG Road Network distance

Local Municipality	National Roads	Trunk Road	Main Roads	Divisional Roads	Minor Roads
Drakenstein	72.78	236.24	329.57	309.37	145.93
Breede Valley	184.65	218.38	228.62	369.7	331.65
Langeberg	57.16	180.55	323.44	470.06	484.61
Witzenberg		108.86	417.64	596.19	1045.28

In terms of asset value, Langeberg has the highest asset value with the WCG owned roads totalling approximately R4billion, followed by Witzenberg, Breede Valley and Drakenstein.

[1]Table 3-16: WCG Road Asset value

	Trunk	Main		Divisional		Minor		Totals	
	Surfaced	Surfaced	Gravel	Surfaced	Gravel	Surfaced	Gravel	Surfaced	Gravel
Drakenstein	R 774 576 000	R 1 680 709 000		R 875 500 000	R 5 321 000	R 103 375 000	R 83 000	R 3 434 161 000	R 5 404 000
Breede Valley	R 1 342 094 000	R 700 589 000	R -	R 1 376 510 000	R 10 681 000	R 347 956 000	R 2 364 000	R 3 767 150 000	R 13 045 000
Langeberg	R 1 659 872 000	R 1 649 569 000	R 908 000	R 664 747 000	R 7 851 000	R 40 198 000	R 1 176 000	R 4 014 386 000	R 9 934 000
Witzenberg	R 1 045 187 000	R 1 367 618 000	R 17 291 000	R 1 245 610 000	R 12 024 000	R 123 380 000	R 2 573 000	R 3 781 795 000	R 31 888 000

[4]Information as at 3 August 2015

3.6.2 Traffic Volumes

National Roads

The Average Annual Daily Traffic (AADT) and Average Daily Truck Traffic volumes for the National Route 1 (N1) and National Route 2 (N2) were obtained from the South African National Road Agency Limited through their Comprehensive Traffic Observations (CTO).

The ADT volume of the N1 within the district varies between Touwsriver and Paarl. However, the percentage of truck traffic remains constant at approximately 20% of the ADT.

Provincial Roads

According to the Road Network Information System of the Western Cape Government, the AADT for the provincial roads can be broken up into AADT of 100 vehicles and less, between 101 – 300, 301 – 500, 501 – 1500, 1501 – 4500, 4501 – 13500 and 13501 – 40000.

According to the RNIS database, the following major roads in the CWDM accommodate in excess of 13500 AADT;

- R44 in Wellington (Drakenstein LM)
- Champagne St and Piet Retief, (Drakenstein LM)
- Jan Van Riebeek Dr (Drakenstein LM)
- R303 between Ceres and Bella Vista (Witzenberg LM).

Other provincial roads experiencing AADT of between 4501 – 13500 vehicles are:

- R303 between Bella Vista and Prince Alfred Hamlet, sections of the R46 (Witzenberg LM)
- R60 from Ashton in Langeberg to Worcester in Breede Valley
- sections of Van Riebeeck St between Rawsonville and Worcester (Witzenberg LM)
- R45 between Wellington and Hermon.

3.6.3 Road Safety

The road accident information provided by the Western Cape Government indicates the number of injuries and fatalities over the last decade. What is evident from Table 3-17 is that there has been a general decrease from 2009 in the total number of injuries in road related accidents. There is no clear trend in fatalities.

The Drakenstein local municipality experienced the highest number of injuries and is most likely attributed to the high volume of traffic experienced in this municipality (relative to the other municipalities).

Table 3-17: Cape Winelands District Accident Information

Year	Fatalities	Serious Injury	Slight Injury	No Injury	Total
2000	39	156	865	6573	7633
2001	43	189	819	6068	7119
2002	42	171	1074	6944	8231
2003	47	149	903	6310	7409
2004	61	198	962	6775	7996
2005	32	122	878	6752	7784
2006	39	205	904	7792	8940
2007	43	195	942	7606	8786
2008	40	243	946	7953	9182
2009	41	237	996	8650	9924
2010	41	267	962	8471	9741
2011	45	193	1001	7647	8886
2012	50	155	872	7894	8971
2013	39	199	935	8659	9832
2014	45	210	932	9041	10228

3.7 Non-Motorised Transport

A key transport challenge in most rural districts of SA, including Cape Winelands, is not only the widely distributed nature of towns and the opportunities they provide, but also the low intensity of land uses within towns. These two factors negatively impact on both public transport and NMT (as a mode in its own right and as a feeder to public transport).

In many of the district's towns, the challenges for NMT can be summarised as follows:

- Low population densities increasing the need to travel farther than acceptable walking distances, while undermining the financial viability of public transport;
- Low incomes of residents (high levels of unemployment and seasonal work), making public transport unaffordable;
- Settlements structured with low income residents on the periphery, away from travel destinations;
- Lack of continuous pedestrian routes that are both safe and comfortable (often lack of paving forces pedestrians onto road surfaces);
- Poor maintenance of travelled surfaces;

The Cape Winelands NMT Masterplan Framework (2016) sets out a set of guiding principles to address this, and identifies a number of high priority projects. The principles are about both physical connectivity and creating the conditions needed to make walking and cycling more viable as transport options, covering the following areas:

- Accessibility of services and destinations for users of all abilities;
- Connections that are direct and continuous;
- Convenience with appropriate standards, maintenance and lighting;
- Convivial – a network and surrounding properties that is attractive, safe and secure;
- Comfortable and easy to use, with appropriate facilities for rest and shelter; and
- Contextual – a positive character that is clear to use and consistent with neighbourhood character

The recommended improvements take into account the general profile of each town (size, land uses, types of NMT users and the need for travel internally and externally) in order to identify appropriate NMT improvements. Depending on the character of the town and the population's travel requirements, solutions may focus on walking, cycling, public transport or some combination of these. There are some general low-cost measures that are recommended, as well as other more costly capital projects. In some towns there is a need for more extensive area-wide planning. The NMT Conceptual Framework also identifies clusters of towns that are functionally linked as a result of where people live, work, shop and receive social and educational services.

3.8 Learner Transport

In the rural context learner transport is very important because of the spatial divide between residential areas and commercial, academic and social facilities, lack of infrastructure and limited disposable income of the residents. Learner or scholar transport bridges this gap by moving scholars who travel more than 5km.

Table 3-18 indicates the total number of approved learners being transported per local municipality. Table 3-19 indicates the number of benefitting schools in each local municipality.

Breede Valley has the highest number of learners being transported as well as the highest number of schools benefitting. This suggests that the spatial gap between the residents and the schools are significant, considering that Breede Valley only has the 3rd largest population and 2nd largest land area in the district (as indicated in section 3.2).

The school bus routes can be found in Annexure B: School Bus Routes .

Table 3-18: Approved Mainstream Learner Numbers

All learners	Total Approved Mainstream Learner Numbers
Breede Valley Local Municipality	4908
Drakenstein Local Municipality	2413
Langeberg Local Municipality	1976
Witzenberg Local Municipality	3263
Total	12560

Table 3-19: Number of Benefitting schools

All Learner Routes	Total no. of Benefiting Schools
Breede Valley Local Municipality	94
Drakenstein Local Municipality	49
Langeberg Local Municipality	33
Witzenberg Local Municipality	61
Total number of benefiting schools	251

3.9 Freight Transport

The freight system in South Africa is integral to the transport network and operations. Within the CWDM, freight is transported by road based modes as well as rail. Road based freight affects the road condition, road safety and traffic volumes. The road infrastructure is deteriorating rapidly due to overloading coupled with a lack of weighbridge facilities, lack of infrastructure routine maintenance and inadequate law enforcement.

As illustrated in Chapter 1, the Cape Winelands District consists of 5 local municipalities i.e. Stellenbosch, Drakenstein, Witzenberg, Breede Valley and Langeberg. As indicated in Chapter 1, the freight needs of the district are aligned with the Vision, Goals and Objectives. The

primary economic driver in the Cape Winelands district is the agricultural sector. This sector requires seasonal inputs for production and distribution of its produce, transported mainly by road.

The main source of freight information for the Cape Winelands District was extracted from the Cape Winelands Freight Strategy which made use of the Freight Transport Data Bank which was compiled for the Western Cape Department of Transport Roads and Public Works (2006). According to this, the dominant type of road freight moved through the district was agricultural produce, chemicals and perishables.

The Cape Winelands has an extensive road network, including national routes that connect the Western, Northern and Eastern Cape and arterials that connect the district internally and externally with other districts. The Cape Winelands District is situated such that freight movement to the Port of Cape Town from the hinterland would travel through the district.

In Paarl (in Drakenstein), there is a large existing industrial area at Dal Josefat, as well as a newly built Imperial Logistics warehouse which will increase the heavy haul traffic experience in the town. The town also has existing long haul service providers which may add to the heavy haul traffic. Wellington also currently has an industrial area.

Both Paarl and Wellington also have an agri-processing industry with various agricultural farms producing a variety of foods. These goods may be considered input produce or can be transported as end products.

Within the Witzenberg area, the main freight being transported is fresh fruit and vegetables for export. The implication of poorly maintained roads is that it may damage the produce to such an extent that the grading of the produce may be impacted negatively, affecting the selling price. An important route for the transport of freight from Witzenberg to the Port of Cape Town is via the R44, and R46 and connecting with the N1. It has been noted that Ceres has experienced a growth in through traffic of heavy haul vehicles mainly travelling within the Western Cape.

Breede Valley has some of the major freight generators located close to the major road network, such as the Hex River Valley farms. Worcester industrial area also generates freight movement. It has been noted that the heavy haul vehicles often travel through the centre of Worcester. A bypass connecting the R60 to the N1 and connecting the Worcester industrial area has been proposed (eastern bypass).

In the Langeberg area, Ashton, Montagu and Bonnievale all have industrial areas which generate freight that needs to be transported. The main freight movement however, is found on the R62 and R60 from Ashton to Swellendam.

The Cape Winelands Freight Strategy (2012) concludes by stating that the N1 is considered a main freight route, linking the hinterland to the Port of Cape Town for export. There are a number of heavy haul routes currently being used within the Cape Winelands District.

The primary general freight network, based on largest freight volumes within the district, is comprised of the following:

- N1 through route via Worcester
- R44/R46 Somerset West – Stellenbosch – Klapmuts – Wellington – Gouda – Ceres – Touwsriver (N1)
- R60: Worcester- Swellendam
- R43: Wolseley – Worcester
- R45: Franschhoek – Klapmuts
- R304: N1 – Stellenbosch
- R44 Gouda – Piketberg (secondary network)
- R303 Ceres – Prince Alfred Hamlet/ Op-die-Berg/ Citrusdal (secondary network)
- R43 Worcester – Villersdorp – N2 (secondary network)

The main goods being transported are general goods, with abnormal and hazardous goods being transported occasionally.

The quality of the road infrastructure impacts the quality of the fresh produce being transported and can increase vehicle maintenance costs, and therefore has an economic impact.

An update of the Freight Strategy suggests that the strategic freight network should include the R315 (between Robertson via Bonnievale toward the N2), M2 (Polkadraai Rd from Stellenbosch toward Parow in CCT), R310 (Baden Powel Drive between Stellenbosch Arterial and the N2), Annandale Rd and the M23 (Bottelary Rd).

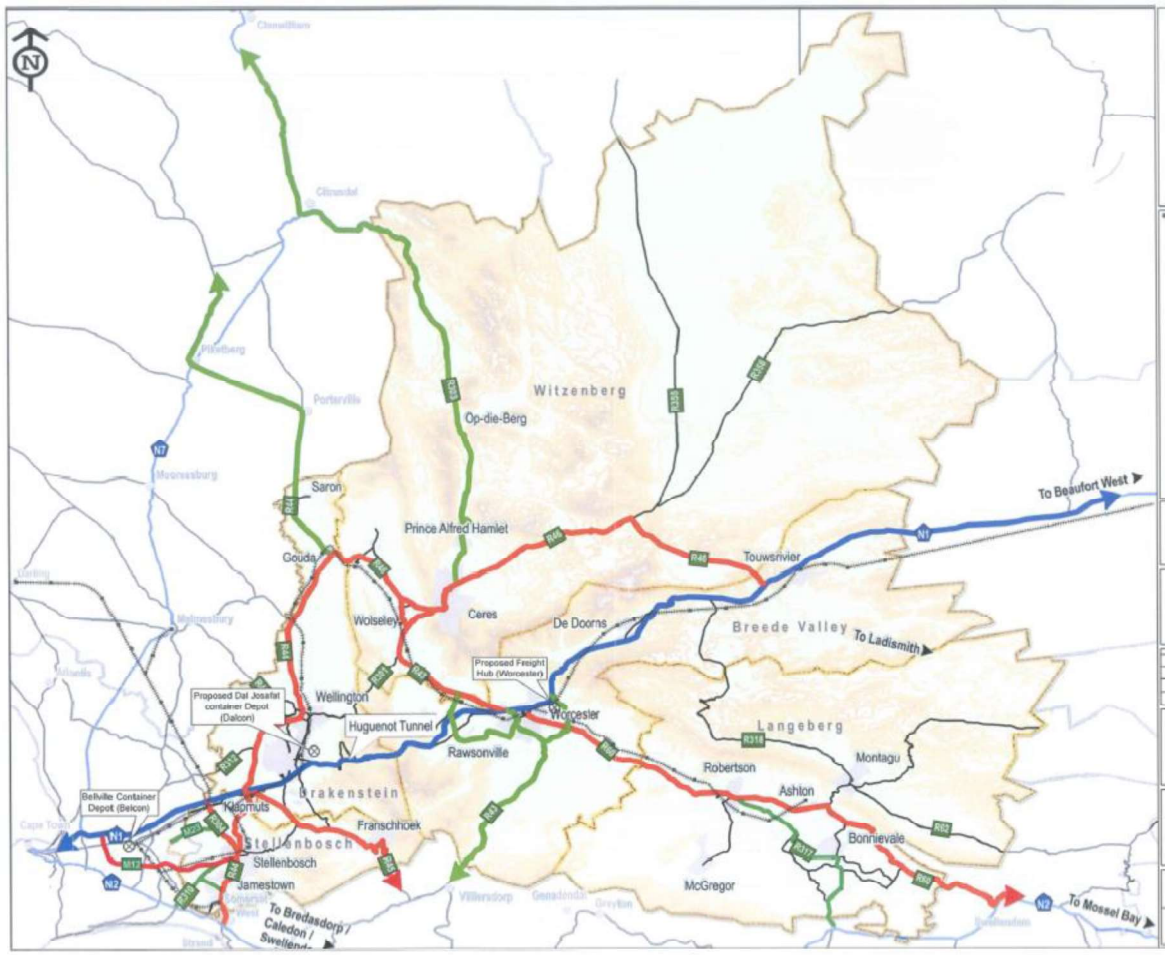


Figure 3-16: Updated Freight Network

As indicated in the Review of the Cape Winelands Freight Transport Strategy (2013), the long term improvements include engagement with WCG regarding prioritisation of roads projects for maintenance of freight routes, design and construction of the modal interchange and logistics hub facility in Worcester, and design and construction of proposed by-pass routes. The engagement also included investigation of the relocation of overloading centres with acceptable levels of support services such as storage facilities, off-loading equipment etc.

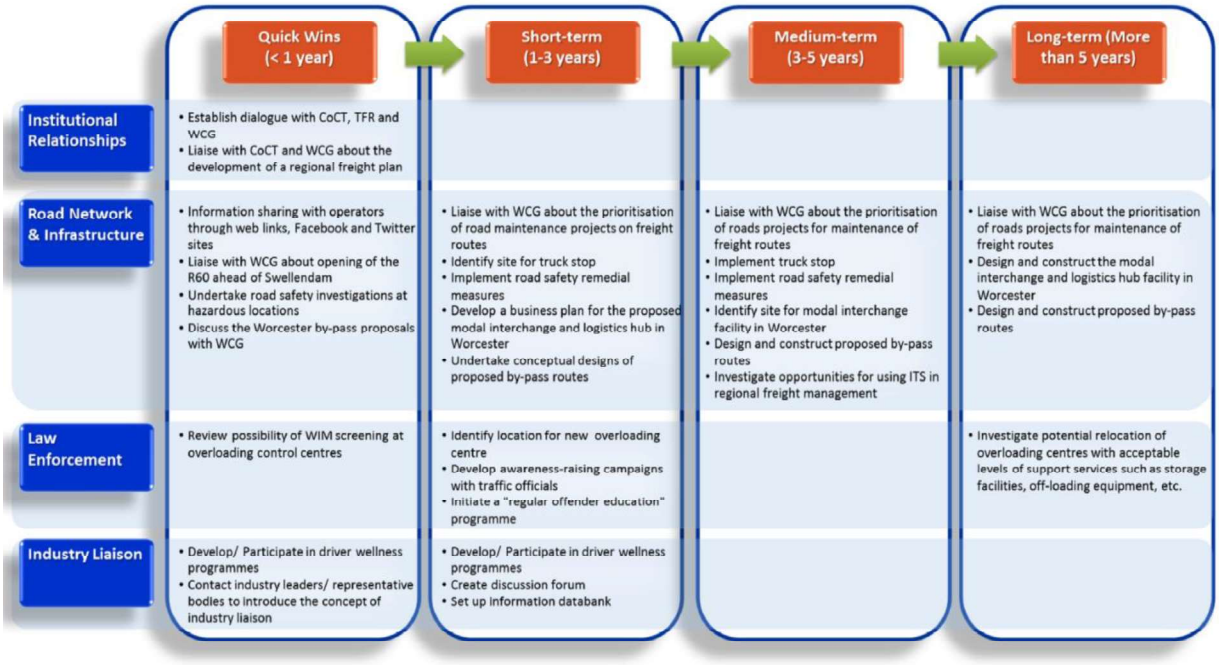


Figure 3-17: Freight Strategy Proposed Transport Improvements

3.10 Air Transport

Currently within the Cape Winelands District, there are three operational airfields, which are located in Robertson, Stellenbosch and Worcester. These facilities are used for civilian and private air travel and have paved and unpaved runways.

The airport in Robertson is located east of the town next to the R60 and is the only registered runway in the Langeberg local municipality.

Table 3-20 illustrates some information regarding the Robertson airport.

Table 3-20: Robertson Airfield details

Item	Description
IATA[5] code	ROD
Latitude	-33.8113
Longitude	19.9067
City	Robertson
Airfield length	1.5 km (paved)
Owner	Langeberg Municipality

The Robertson airfield surface is suitable to accommodate light aircraft such as those used for medical emergencies and law enforcement as well as smaller passenger charter aircraft. The facility is generally used by the flying clubs, emergency services and charter services.

The airfield in Worcester is currently being used for sports flying and private use. One of the main constraints with this airfield is that a portion of the airstrip is gravel and therefore cannot accommodate a variety of air transport services, such as medical services (although there is a helipad at the hospital in Worcester). Currently the airfield is being used by flying clubs and some charter services.

[5] International Air Transport Association

Table 3-21: Worcester airfield

Item	Description
IATA code	No code
Latitude	S 033 deg 40.0'
Longitude	E 019 deg 25.1'
City	Worcester
Airfield length	1.6km (of which 600 m is gravel – 300m at each end of the landing strip)
Owner	Worcester Municipality

3.11 Transport Planning for Tourism

The Cape Winelands district offers a range of tourist attractions and activities. The numerous wine farms and wine tasting events held in the district contribute towards economic development. A number of animal attractions can also be found within the district. The district is also known for its mountain ranges, mountain biking and hiking trails.

Within the district there are private operators which provide transport services as part of tour packages. At this stage no public transport operators provide tourist travel packages. This is an opportunity for the public transport operators to provide services, during the off-peak, to tourists who may want to travel between attractions. However, in order for tourist transport service to take place, an increase in the signage (of tourist activities) and improvement of NMT facilities need to take place.

3.12 Health[6]

The information pertaining to health services transport was obtained from the previous (2013) update of the CPTR reports for the local municipalities within the Cape Winelands district.

The Emergency Medical Service (EMS) is a subsidiary of the Department of Health and is divided into emergency and Healthnet services. Healthnet is not an emergency service, but it provides transport services for patients going to health facilities for medical treatment or to collect medication.

Services provided by the EMS

There are 10 Patient Transport Vehicles (PTVs) servicing health patients in the Cape Winelands district. Table 3-22 lists the locations of sub-stations in the local municipalities and the number of PTVs per sub-station.

Table 3-22 Healthnet sub-stations and PTV s

LMs	Towns (sub-stations)	No of PTV's
Breede Valley	Worcester	3
	Touwsriver	1
Drakenstein	Paarl	1
Langeberg	Robertson	1
	Montagu	2
Witzenberg	Ceres	2

The service is pre-booked by the hospital or the clinic and the patients are notified of the dates when the service will be available and the location of the collection points within their towns. Table 3-23,

Table 3-24, Table 3-25 and Table 3-26 outlines the collection points for Healthnet services in various towns within Breede Valley, Drakenstein, Langeberg and Witzenberg respectively. Special arrangements, such as collection from home, are made for patients who cannot get to the designated collection point.

Table 3-23 Collection points for Healthnet Services in Breede Valley LM

Collection points	Address
Hexpark Superrette	Hexpark
Maria Pieterse Clinic	Riverview
WPH	WPH
BKH	Brewerskloof Hospital

[6] The section on Health should be considered as part of the next update of the Cape Winelands DITP.

Collection points	Address
Zwelethemba SAPD	Zwelethemba
Rawsonville SAPD	Rawsonville
Avianpark Superette	Avianpark
Maranata Church	Johnsonpark
Mini Mall / Checkers	Avianpark
Worcester Base	Worcester
De Novo	Rawsonville
Nuwerus OAH	Worcester

Table 3-24 Collection points for Healthnet Services in Drakenstein LM

Collection points	Address
Saron Clinic	Hoof Street, Saron
Gouda Clinic	Roos Street, Gouda

Table 3-25 Collection points for Healthnet Services in Langeberg LM

Collection points	Address
Ashbury	Bus stop Ashbury
Montagu	Primary Health Clinic Montagu
Montagu Provincial Hospital	c/o Hospital & Church Street
Zolani Clinic	Zolani
Cogmanskloof Clinic	Ashton
Happy Valley Clinic	Bonnievale
Bonnievale Municipal offices	Bonnievale
Bergsig Clinic	Robertson
Robertson Clinic	Robertson
Nkqubela Clinic	Robertson
Ashbury Bus stop	Ashbury
Montagu Primary Health Clinic	Montagu

Table 3-26 Collection points for Healthnet Services in Witzenberg LM

Collection points	Address
HM Beets Crèche	Lyell Street, Ceres
Ceres Hospital	Rivierkant Street, Ceres
Ceres Base	Voortrekker Road, Ceres
Bella Vista shop	c/o Magnolia & Jacaranda Street
Kruger Shop	Tulp Street, Bella Vista
St Matthews Church	c/o Delta & Mimosa Street, Bella Vista
Tulbagh	
Tulbagh Base Plein Street	Tulbagh
Tulbagh PGS	Steynthal Avenue
Tulbagh Shop	First Avenue, Tulbagh
Wolseley	
Montana Clinic	Church Street, Wolseley
Breerivier Clinic	Wagenboom Kelder
Saron Clinic	Hoof Street, Saron
Gouda Clinic	Roos Street, Gouda

4 OPERATING LICENCE STRATEGY

4.1 Introduction[7]

The National Land Transport Act (NLTA) No 5 of 2009 (the Act) provides for the process of transformation and restructuring of the national land transport system and includes the regulation of road based public transport. Sections 20 and 23 of the Act provide for the establishment of a National Public Transport Regulator (NPTR) and a Provincial Regulatory Entity (PRE) to consider applications regarding Operating Licences for inter-provincial and intra-provincial transport respectively, subject to the procedures set out in Chapter 6 of the Act.

In the Western Cape Province, the Operating Licence function has been assigned to the Western Cape Government which has established a PRE as required by the Act. Applications for Operating Licences received by the PRE (or by the NPTR) must be referred to the relevant Planning Authority (Municipality) which must then indicate if there is a need for the service in terms of its Integrated Transport Plan. Planning Authorities may recommend that the application be accepted or rejected or may attach conditions to the approval.

If the Operating Licence function has been assigned to a Municipality (Section 11 of the Act), then the Municipality is responsible for deciding on applications for Operating Licences for public transport services in its area of jurisdiction. At this stage the Operating Licence function has not been assigned to the Cape Winelands District Municipality or the Local Municipalities (Breede Valley, Drakenstein, Langeberg, Witzenberg and Stellenbosch) that fall under its jurisdiction and these Municipalities must thus respond and comment on Operating Licence applications referred to it by the PRE.

The purpose and objective of the Operating Licence Strategy (OLS) is to enable the Cape Winelands District Municipality to make recommendations to the PRE based on the policies and strategies contained in its DITP including strategies pertaining to the role of each public transport mode, supply and demand for public transport, the use and capacity of public transport facilities and any plans for the rationalization of the public transport system (e.g. the establishment of an Integrated Public Transport Network).

4.2 The Public Transport System

Route descriptions and route maps showing a number of routes are contained in the Current Public Transport Record that was updated for the Cape Winelands District ITP (2016-2021).

During surveys carried out to determine the utilisation of the routes, it was ascertained that many of the routes were not being operated at the time of the survey and that the routes actually operated did not rigidly follow the official route descriptions contained in the PRE database. Several routes were also surveyed that did not appear to be official routes for which Operating Licences had been issued. Extensions to these routes or other unlicensed routes that may be in operation require consideration for new Operating Licences.

4.3 Policy Framework

The National and Provincial legislation that controls the disposal of Operating Licences for public transport services in the Western Cape is the following:

- National Land Transport Act (No. 5 of 2009)
- Western Cape Road Transportation Amendment Act (No. 8 of 1996)
- Western Cape Road Transportation Amendment Act (No. 7 of 2000)
- Western Cape Regulations on Operating Licences. 2002

The National Land Transport Act (NLTA) lists the responsibilities of Planning Authorities including the preparation of an ITP, which must be made available to the NPTR and PRE, and the making of recommendations in respect of the applications for new Operating Licences. In terms of the Minimum Requirements for the preparation of Integrated Transport Plans (Government Notice R954, 28 November 2014), Integrated Transport Plans must include a Public Transport Plan that focuses on the integration of the public transport network, services and modes and provides the basis for the rationalization and

[7] For more detail on the Cape Winelands District Operating Licence Strategy consult with the Operating Licence Strategy report

restructuring of the public transport system. The ITP must also include an Operating Licence Plan, or Strategy (OLS) that provides clear guidance as to which operating licence applications should be recommended or rejected as well as the conditions that should be imposed in the approval of an Operating Licence by the PRE.

Chapter 6 of the NLTA deals with the process for the application for Operating Licences for new services, contracted services, non-contracted services, renewal, amendment or transfer of Operating Licences.

Section 55 (2) of the NLTA provides that a Planning Authority must indicated if there is a need for public transport service on a route in terms of its ITP, any conditions to be attached to the application and must submit the response to the NPTR or the PRE.

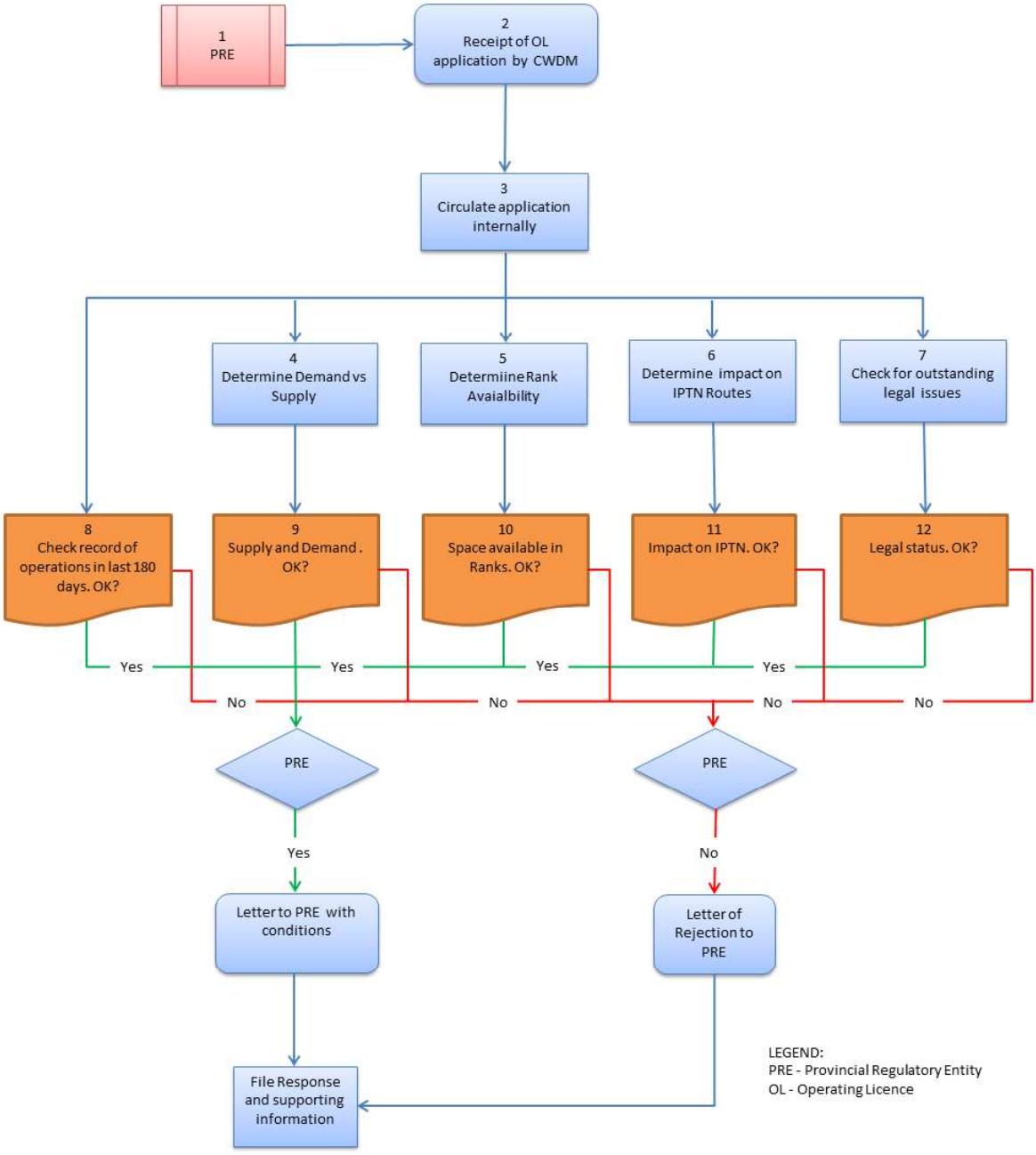
The Western Cape Regulations on Operating Licences, 2002 deals with the procedure, form and content of applications for Operating Licences. The regulations also deal with the submission of Operating Licence applications to Planning Authorities for comment. The Regulations provide that:

- An application must be submitted in writing to the Planning Authority within 30 days of receipt
- The PRE must dispose of the application within 90 days of receipt
- The Planning Authority must:
    - Verify the route details claimed by the applicant
    - In the case of the conversion of a permit to an Operating Licence for a bigger vehicle; submit recommendations, amongst others, on the availability of ranks or terminals or other facilities or spaces for boarding or alighting from, or holding or parking the larger vehicle concerned,
    - Submit any other recommendations or representations it may have in relation to the application
- If the Planning Authority fails to respond within 30 days, the PRE may itself consider the application without the input from the Planning Authority
- In the process of the conversion of radius or area based permits the Board must adhere to the route descriptions, identifications and numbers shown in the ITP. The Planning Authority or the PRE must provide Associations operating along the route or routes in question with adequate information to allow them to give input regarding route descriptions.

4.4 Evaluation Process

When a new application for an Operating Licence is received by the Planning Authority a process should be followed to evaluate the application. The proposed process is shown in Figure 4-1 and is described in more detail in Table 4-1 below

Figure 4-1: Operating Licence Evaluation Process



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The proposed Operating Licence evaluation procedure is described in Table 4-1.

Table 4-1: Operating Licence Evaluation Procedure

Item	Title	Procedure	Responsible Department
1.	NPTR / PRE	Application for an OL is submitted in the required format (form 2B) to the NPTR or PRE. The application is submitted to the Planning Authority (Municipality) (PA) within 30 days.	NPTR or PRE
2.	Receipt of OL application by PA	The OL application is received by the PA and is recorded in the appropriate manner for record purposes. The application is sent to the appropriate Department within the PA dealing with Transport Planning and Public Transport to be checked for completeness.	PA Department (Transport Planning and Public Transport)
3.	Circulate application internally	The OL is circulated to the appropriate persons / Departments internally within the PA for comment in respect of : Transport Planning and Public Transport Traffic Services	PA Department (Transport Planning and Public Transport)
4.	Demand and Supply	The OL application is checked against the available survey data of passenger demand on the applicable routes using the procedure detailed in Section 4.3 of the OLS report.	PA Operating Licence Recommendations Committee
5.	Determine Rank Availability	The OL application is checked against the available survey data of rank, terminal or stops capacity serving the applicable routes using the procedure detailed in Section 4.3 of the OLS.	PA Operating Licence Recommendations Committee
6.	Determine impact on IPTN routes	The OL application is assessed as to its impact on the conceptual IPTN routes that are identified in the ITP, or will operate in parallel to or in conflict with any commuter rail services or bus services.	PA Operating Licence Recommendations Committee
7.	Check for outstanding legal issues	The OL is checked against the record of outstanding warrants or convictions, previous convictions relating to the operation of public transport services and the ability of the applicant to operate the service in a manner satisfactory to the public.	PA Traffic Services – in respect of Traffic Offences; Provincial Regulatory Entity – in respect of criminal offences.
8.	Check record of operations in last 180 days	In terms of section 78 of the NLTA, if a licence has not been in use for more than 180 days, the licence can be cancelled. The licence holder must be asked to furnish, in writing, satisfactory reasons why the service has not been operated, after which the licence can be extended for a further 180 days or cancelled.	PA (Traffic Services).
9.	Letter of Approval or Rejection	If all the responses to the evaluation support the approval of the application, a letter of approval is then issued to the NPTR or the PRE with any conditions attached. If the responses do not support the application, a letter of rejection is then issued.	PA Department (Transport Planning and Public Transport)
10.	Letter of Approval or Rejection	A letter of approval or rejection is issued to the applicant and a copy is sent to the PA	Provincial Regulatory Entity

4.5 Summary of Route Assessments

Information on vehicle supply and passenger demand from surveys has been used to evaluate the capacity of the current public transport services and the possible need for additional services according to the demand. The information has been summarised in the following tables:

- Table 4-2: Breede Valley: Operating Licence Requirements and Route Capacities
- Table 4-3: Drakenstein: Operating Licence Requirements and Route Capacities
- Table 4-4: Langeberg: Operating Licence Requirements and Route Capacities
- Table 4-5: Witzenberg: Operating Licence Requirements and Route Capacities

The tables show the following information, based on the surveys:

- The number of vehicle trips (departures) per route
- The size (passenger capacity) of the vehicle
- The number of peak hour passengers per route
- The number of vehicles operating (from the number plate surveys) with Operating Licences
- The registration number of the vehicles operating has been compared to the list of vehicles having current Operating Licences and the number of vehicles without Operating Licences was identified and indicated in the tables.

From the above information, the following has been determined:

- The current service capacity: Number of vehicle trips from number plate survey multiplied by the vehicle capacity (15 for a standard minibus)
- Percentage utilisation: Peak hour passenger volume from surveys divided by the service capacity
- Vehicles operating with Operating Licences: Comparison of the vehicle registration numbers from surveys with data from the PRE

To simplify the calculations, all routes serving common destinations have been clustered. The average route distance has been determined in order to calculate the return journey time. The required number of vehicles to serve the demand based on the return journey time and the peak hour demand from the surveys can be estimated.

The required number of vehicles can be compared to the actual number of vehicles (with Operating Licences) in operation from the surveys to determine the over or under supply of vehicles on the routes. Note that the vehicles without Operating Licences are excluded. An under supply indicates that certain of these vehicles could be eligible for new Operating Licences.

A comparison has also been done to determine the over or under supply of vehicles by comparing the required vehicles to serve a route to the number of vehicles that have been issued with Operating Licences on the PRE database, as well as the over and under supply including the vehicles without Operating Licences.

Note that in several cases the surveys at public transport facilities did not register any trips on certain routes and hence the table indicates “no data”. This may be due to the fact that some routes and facilities are only operated during the fruit harvesting season.

Table 4-2: Breede Valley: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=FxI)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Worcester	764, H77, H78, N33	U Save	De Doorns - Worcester	37	09:30 - 10:30 (Saturday)	7	69	7	15	67	105	66%	6	1	-5	37	31	6	1
Worcester	834	Spar	Touwsriver - Worcester	78	09:30 - 10:30 (Saturday)	1	12	1	15	119	15	80%	2	0	-2	5	3	1	-1

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Table 4-3: Drakenstein: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=F x I)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Paarl	786, 899	Amstelhof	Shoprite A	4	11:00 - 12:00 (Saturday)	13	169	12	15	21	195	87%	4	4	0	26	22	8	8
Paarl	B23, B25, B26, 963, 641	Chicago	Shoprite A	13	16:30 - 17:30	5	56	5	15	15	75	75%	1	2	1	34	33	3	4
Paarl	786, 899	Huguenot	Amstelhof	3	16:30 - 17:30	2	28	2	15	6	30	93%	1	2	1	26	25	0	1
Paarl	B23, B25, B26, 963, 641	Huguenot	Nederberg via Chicago	5	16:30 - 17:30	3	42	3	15	14	45	93%	1	1	0	34	33	2	2
Paarl	803,767, H93, H94, H95, 993, B98, B99	Shoprite B	Mbekweni	14	16:30 - 17:30	24	371	24	15	12	360	103%	5	0	-5	158	153	24	19
Paarl	943, 970	Shoprite B	Wellington	15	16:30 - 17:30	19	277	19	15	35	285	97%	11	15	4	141	130	4	8
Wellington	943, 970	Wellington	Paarl	12	16:15 - 17:15	32	480	31	15	24	480	100%	13	26	13	141	128	5	18
Paarl	803,767, H93, H94, H95, 993,	Huguenot	Mbekweni	7	16:30 - 17:30	1	14	1	15	12	15	93%	1	0	-1	158	157	1	0

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A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=F x I)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
	B98, B99																		
Paarl	803,767, H93, H94, H95, 993, B98, B99	Huguenot	Paarl	7	16:30 - 17:30	5	84	5	15	12	75	112%	2	1	-1	158	156	4	3
Paarl	B23, B25, B26, 963, 641	Huguenot	Chicago	4	16:30 - 17:30	2	28	2	15	14	30	93%	1	1	0	34	33	1	1
Paarl	803,767, H93, H94, H95, 993, B98, B99	Shoprite A	Mbekweni	11	11:00 - 12:00 (Saturday)	9	143	9	15	23	135	106%	4	0	-4	158	154	9	5
Paarl	958, B12	Shoprite A	Nederburg	6	16:30 - 17:30	9	132	9	15	15	135	98%	3	3	0	11	8	6	6

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Table 4-4: Langeberg: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=FxI)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Robertson	686	Shoprite	Robertson - Robertson	8	16:30 - 17:30	4	53	3	15	6	60	88%	1	3	2	35	34	0	2
Bonnievale	N37	Bonnievale: Multisave	Robertson - Bonnievale	21	11:00 - 12:00	1	1	1	15	202	15	7%	1	0	-1	15	14	1	0
Robertson	N34	SAPS	Robertson - Bellville	136					15	1306	0	0	0		0	4	4	0	0
Robertson	N35	Pick n Pay	Robertson - Ashton	16	11:00 - 12:00	7	53	7	15	33	105	50%	2	0	-2	18	16	7	5
Ashton	968	Multisave	Ashton Multisave	16	07:00 - 08:00	2	17	2	15	14	30	57%	1	0	-1		-1	2	1
Montagu	725	Montagu Bad St	Montagu - Ashbury	9	16:30 - 17:30	7	96	7	15	11	105	91%	2	4	2	15	13	3	5
Robertson	686	Pick n Pay Nqubela	Robertson - Robertson	4	10:00 - 11:00	9	20	9	15	20	135	15%	1		-1	35	34	9	8

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Table 4-5: Witzenberg: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=FxI)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Wolseley	G47	Wolseley	Wolseley - ceres	16	06:00 - 07:00	1	15	1	15	154	15	100%	3	0	-3	8	5	1	-2
Ceres	898	Bella Vista	Ceres - bella vista	4	16:30 - 17:30	21	294	17	15	38	315	93%	13	15	2	36	23	2	4
Ceres	822, 823, H16	Ceres/ Nduli Rank	Nduli - ceres	7	16:30 - 17:30	22	208	19	15	67	330	63%	16	0	-16	54	38	19	3
Ceres	D66	Vos Street Rank	Prince alfred hamlet - ceres	9	16:30 - 17:30	3	40	3	15	78	45	89%	4	3	-1	9	5	0	-1
Ceres	No route code in PRE database	Vos Street Rank	Ceres - Bokkeveld		16:30 - 17:30	2	14	2	15	116	30	47%	2	0	-2		-2	2	0
Tulbagh	877	Tulbagh (van der Stel)	Tulbagh - Tulbagh Farms	20	16:30 - 17:30	1	16	1	15	192	15	107%	4	0	-4	9	5	1	-3
Tulbagh	875, 878	Tulbagh (van der Stel)	Tulbagh - Tulbagh	8	16:30 - 17:30	3	47	3	15	77	No Data	No Data	No Data	2	No Data	17	No Data	No Data	No Data

4.6 Proposals for Implementation

The Cape Winelands District Municipality has adopted a policy to improve public transport services and the DITP contains a framework strategy for the planning and phased implementation of an Integrated Public Transport Network. The introduction of an IPTN may affect existing bus and minibus taxi services. The proposed preliminary IPTN routes are indicated in the OLS report. Consideration should be give to the phasing out of existing affected Operating Licences and the placing of a moratorium on the approval of new Operating Licences that impact on these routes.

The CWDM is to consider a Chapter 8 investigation as determined by the Municipal Systems Act in order to determine the institutional arrangements for the rendering of the public transport function within its area of juristriction.

A strategy should be developed to rationalise all existing Operating Licences and manage the approval of new Operating Licences to reduce the over supply of services where this may exist. This will assist in reducing congestion at existing ranks and facilities, as well as reducing traffic congestion on routes used by public transport.

Law enforcement is critical to the successful implementation of the OLS and a dedicated team of Inspectors and Law Enforcement Officers is necessary to deal with public transport law enforcement. This will assist to improve the quality of the service and safety on public transport services.

An electronic database should be established and updated regularly to provide easy access to Operating Licence information and route descriptions. This will greatly assist the law enforcement function.

A communication Forum should be established with existing operators to meet regularly on matters concerning the public transport industry including issues and concerns, public transport facilities and law enforcement.

4.7 Financial Implications

The implementation of the proposals set out above will have financial implications for the CWDM. A broad cost estimate of the proposals is contained in Table 4-6.

Table 4-6: Financial Implications

No.	Item	Estimated Annual Cost – Rands				
		2015/16	2016/17	2017/18	2018/19	2019/20
1	Assessment of Operating Licences impacting on future IPTN routes	0	300 000			
2	Chapter 8 Investigation	0	2 500 000	2 500 000		
3	Investigation of the Improvement of Transport Facilities	0	1 000 000	0	0	0
4	Establish Operating Licence Inspectorate	500 000	2 500 000	3 000 000	3 000 000	3 000 000
5	Establish and maintain electronic database of Operating Licences	100 000	50 000	50 000	50 000	50 000
6	Establish a Public Transport Forum including Public Transport Operators	50 000	50 000	50 000	50 000	50 000
	TOTAL	650 000	6 400 000	5 600 000	3 100 000	3 100 000

5 RATIONALISATION PLAN

5.1 Introduction

Although there is no subsidised public transport, apart from the PRASA metro rail system operating in the CWDM, this chapter will summarise the Integrated Public Transport Network (IPTN) Framework that was previously prepared for the Cape Winelands District Municipality, excluding Stellenbosch.

An IPTN Framework was prepared for the Cape Winelands district in 2012 within the current planning and legal context of the district. The intention of the IPTN report is to provide a guiding framework for the alignment of all spheres of government within the district when planning and implementing public transport services.

The Stellenbosch Local Municipality intends to prepare an IPTN for its area during 2016.

5.2 The Cape Winelands IPTN Framework Plan

It is the intention of the CWDM to establish an efficiently operated and integrated public transport system within its jurisdiction. The first step towards this was the development of an IPTN framework for the district. This framework would then provide guidance for the LM within the Cape Winelands district in designing, implementing and managing their local public transport operations.

The framework focussed on various elements which include:

- institutional,
- network and system design,
- vehicle specifications,
- infrastructure and modal integration,
- safety and security,
- intelligent transport system,
- operation contracts and monitoring,
- communication and branding,
- environmental,
- procurement,
- financial,
- and implementation.

Some of the key issues are the following:

Institutional

An effective institutional structure is necessary to manage, administer and operate the Integrated Public Transport Network, with a focus on the role and function of key stakeholders, institutional structure and transition strategy.

Financial

A financial model was developed with the aim of indicating the financial feasibility and affordability of the proposed IPTN. This model consisted of

Implementation

The implementation of the IPTN will be subject to various planning phases of the proposed network. These planning phases are:

Phase 1: Initial detailed planning activities

Phase 2: Industry negotiations and Business Plan

Phase 3: Detail design and development of specifications and tender documentation

Phase 4: Implementation and procurement

A Summary of the IPTN Goals, Objectives and Design Principles are indicated in the table below:

Table 5-1: IPTN Goals, Objectives and Design Principles

IPTN Framework Element	IPTN Objectives	IPTN Feature
Broad Network System Design in terms of routes, infrastructure and operations	To develop an integrated public transport system that will be affordable (less than 10% of personal income spent on transport) and accessible (90% of all passenger groups within 1km of public transport service)	• The IPTN shall consist of a system of road-based regional (trunk) and local (feeder) services to ensure maximum geographic and network coverage. • The IPTN shall cater for the travel needs of commuters within the urban areas, social travel needs between towns, travel needs of learners and the travel needs of farm workers and other rural people over weekends. • Peak and off-peak services between major origins and destinations on the IPTN shall be frequent and shall be provided by the appropriate mode for the corridor demand. • Services shall be available over extended periods including after hours and over weekends. • All services shall be operated according to a fixed timetable. Customer service shall be of a high quality.
Consider and recommend an appropriate Institutional and Organizational Model	To establish an appropriate institutional and organizational structure/model that will allow the IPTN to be effectively controlled by the authorities in terms of quality of services and budgets.	• Public transport quality control oversight shall be done by an independent public transport agency appointed by the relevant municipality/ies. • The system shall be managed by the independent agency through a centralized control centre using Intelligent Transport Systems (ITS) applications. • The Automated Fare Collection system (AFC) and Advanced Public Transport Management System (APTMS) will be managed by an independent operator appointed by the public transport agency.
Develop a model Operational Contract between authorities and operating entities	To control the quality of the IPTN services through the contracting of the private sector for the rendering of the services, including mechanisms to penalize service providers for poor performance.	• Public transport services shall be provided by a contracted entity which shall be appointed through a formal tender process. The operational contract will be for a period of seven to 12 years.
Specify different Vehicle Types appropriate for different services required	To ensure that all vehicles used for both trunk and feeder services are of high quality, well-maintained and safe.	• Sufficient vehicle capacity shall be available to prevent overloading and long queues. • Buses should be equipped with low emission and low-noise vehicle technologies. • Minibus-taxi vehicles should comply with the national specification for recap vehicles.

IPTN Framework Element	IPTN Objectives	IPTN Feature
Positioning, size, geometric layout and key features of IPTN Infrastructure	To develop and implement quality infrastructure that will allow for the effective and smooth operation of IPTN services. This will include measures to give priority to public transport in traffic, facilities required for the maintenance of vehicles as well as facilities that will provide safe and convenient access to the system for the users.	• Road IPTN regional (trunk) and local (feeder) services shall operate mainly in mixed traffic. However, the feasibility of segregated trunk routes along the R44 between Somerset West and Stellenbosch, and along the R301between Wellington and Paarl shall be considered. • Specific arrangements to give priority to IPTN vehicles at congested signalized intersections in Stellenbosch, Paarl, Worcester and Wellington shall be considered where warranted. • Public transport facilities, i.e. termini and stops, shall be convenient, comfortable, accessible, secure and weather protected, and shall facilitate integration between public transport modes and services. • All facilities will be well-maintained and cleaned on a daily basis. • Clear route maps, signage and/or real time information displays shall be available at facilities. • Service providers will be contracted by the public transport agency for security services and facility cleansing services.
ITS and AFC System in terms of functions, technology, equipment, control rooms and personnel	To implement new technologies, such as APTMS and AFC, that will allow for the effective monitoring and control of the system and which will provide the passenger with a cost effective, practical and simple tool to pay for fares.	• Payment of fares shall be made through the use of smart card technology. Fare collection and verification will be done by means of a device installed at the entrance(s) of vehicles. • Fare integration between trunk and feeder services, and between routes, corridors and modes, shall be achieved through automatic fare collection and verification technology.
Marketing initiatives, common marketing material and marketing brand	To improve the image of public transport and to increase user information/knowledge of public transport services.	• The IPTN shall have a distinctive identity or brand.
Integration with other transport modes and integration of network and services across municipal boundaries	To ensure that public transport services, information systems and fare systems of all modes are interconnected as far as is technologically achievable.	• The rail system shall form an integral part of the IPTN. • Public transport facilities, i.e. termini and stops, shall be convenient, comfortable, accessible, secure and weather protected, and shall facilitate integration between public transport modes and services. • Convenient and secure parking facilities for the parking of private cars at termini and stations shall be provided where appropriate to encourage the move to public transport by private transport users.

IPTN Framework Element	IPTN Objectives	IPTN Feature
Enhance NMT Linkages to and around termini, stations and stops	To enhance accessibility and to improve the safety to public transport termini, stations and stops by pedestrians and other types of NMT.	• Improvements shall be made to nearby public space, pedestrian and cycle facilities to support non-motorised access to public transport. • Provision shall be made for special needs passengers such as the disabled, children and the elderly.
Improving Safety and Security of users of facilities and services	To improve safety and security on transport networks and services.	• Security at termini and modal integration stations shall be of a high standard and shall be monitored by means of a system of CCTV cameras. • Service providers will be contracted by the public transport agency for security services and facility cleansing services.
Maximise the positive and minimise the negative Environmental and Socio- Economic implications of the proposed system	To reduce the negative environmental and socioeconomic impact of the IPTN.	N/A
Provide guidance on Tender Options and Structure as part of the implementation process	To provide a legal framework for the delivery of accessible, integrated and competitive public transport services that represent value for money, meet the requirements of users in a growing and complex market, as well as providing a level playing field for all service providers.	N/A
Unpacking the costs of IPTN components and possible funding sources of proposed systems	To provide a stable, sustainable, predictable, reliable and (in particular) appropriate funding sources for the IPTN network and system requirements that are relatively easy to administrate.	N/A
Implementation Strategy	To provide a well thought through and practical phased implementation strategy to be executed over the short, medium and long term in order to meet the above objectives.	N/A

The Drakenstein local municipality is considered the first local municipality within the district to commence with an IPTN process in the manner prescribed in the CW IPTN Framework.

5.3 Stellenbosch IPTN Framework

The Stellenbosch Municipality, as a Planning Authority, is responsible for transport functions in terms of the National Land Transport Act (5 of 2009) including the planning and implementation of an efficient and affordable public transport service network and travel corridors.

There are several implications stemming from this responsibility that the Stellenbosch Municipality must consider. These are:

- Financial implications: The cost of planning, infrastructure provision, purchase of vehicles, operation and maintenance
- The necessity for consultations and negotiations with role-players on issues such as empowerment, training, compensation for loss of jobs or profits, negotiation of operating contracts
- Municipal capacity to plan and monitor the system
- The need for a clear procurement strategy

The elements of an upgraded public transport service network are:

- An integrated route network of short and long distance routes
- New universally accessible vehicles (initially using existing vehicles)
- Integration of rail, bus and minibus services on fixed timetables
- A new ticketing system
- Contracted operators (negotiated contract with existing operators)
- New transport infrastructure : terminals, shelters

Guiding principles for the proposed Stellenbosch public transport service network are:

- Compliance with the Department of Transport guidelines for a Public Transport Network Grant
- Transformation and upliftment of the public transport industry
- To improve public transport services and quality of life of residents
- Phased development of the public transport system
- Financial sustainability

5.4 Provincial Public Transport Institutional Framework

5.4.1 PPTIF Overview

The Western Cape Government has initiated the development of a Provincial Public Transport Institutional Framework (PPTIF) with the primary aim of addressing the key constraints to improving both public and non-motorised transport in the non-Metro areas of the Western Cape, through the development of a refined strategic approach for achieving progress.

This refined approach aims to incorporate lessons learnt through the implementation of public transport improvement initiatives in South Africa, particularly in George and Cape Town.

The PPTIF sought to answer the following core questions:

Table 1: PPTIF Core Questions

Core Questions	PPTIF Response
What technical interventions should be implemented to improve public transport and non-motorised transport in the province?	• Develop a flexible and context specific approach to public and non-motorised transport improvement.
What institutional and organisational structures need to be implemented to drive and manage these improvements?	• Develop enhanced institutional and organisational models.
What will these interventions cost, and how could they be funded?	• Develop a cost model and funding strategy.

5.4.2 Constraints to progress

This section provides an overview of the key constraints to progress that the PPTIF aims to address, including:

- ***Capacity at the municipal level***: Outside of Cape Town and George, municipalities in the Western Cape have limited capacity to perform municipal land transport functions (NLTA s11(c)), including the planning, implementation and management of integrated public transport networks. In addition, national legislation fails to take into account the difference in capacity and resources between metropolitan, local and district municipalities.

- ***A lack of dedicated funding streams for local public and non-motorised transport improvement:*** There are limited funding streams available for public and non-motorised transport improvement and transformation in non-metropolitan areas. National funding is currently directed toward 13 priority cities. This includes both funding for execution of the new transport functions required of local government by the NLTA, and funding to put in place the requisite infrastructure and systems for improved public transport systems. Due to the spatial and economic dynamics of South African settlements, significant operational shortfalls are experienced in public transport improvement initiatives. The ability of local government, and of Provincial Government, to fund these operational shortfalls is very limited to non-existent.

- ***The lack of well-defined or developed approaches to public and non-motorised transport in non-metropolitan contexts:*** National legislation and policy has focussed on the development and implementation of urban Integrated (Rapid) Public Transport Networks in 13 cities. The model which has emerged incorporates high-specification technology, large-scale infrastructure development and full-scale formalisation of the minibus taxi (MBT) industry. An appropriate public transport response for non-metropolitan areas, such as emerging cities, towns, villages and rural areas, has not reached a similar stage of development, with limited clarity on the appropriate way forward in these contexts. The George Integrated Public Transport Network (GIPTN) has been promoted as an example of public transport improvement outside the major urban centres in South Africa. However, the costs of the GIPTN and the implementation and transformation challenges the project has faced suggest that, while this is a useful model in certain locations, it is not viable to roll-out similar initiatives across the country.

- ***The complexity of industry transition:*** The implementation of IPTNs in South Africa has involved a significant transformation of the taxi industry business model. Under the IPTN model, new services are operated by Vehicle Operating Companies (VOCs) made up of former bus and taxi operators. These companies are contracted to Government to provide new services to a higher standard. The legislation limits the duration of these operating contracts to a maximum of twelve years. This transition process is fraught with risk for existing operators and significant resistance has been experienced from the industry. The current taxi industry business model is a reliable way of earning an income for operators, albeit fraught with sustainability challenges for the operators. As a result, it takes a lot of time to get the existing operators to become comfortable with the risks of the new system. It also requires the introduction of significant financial incentives through high compensation packages.

The PPTIF aims to address these constraints to progress through the development of appropriate technical, institutional, organisational and financial models.

5.4.3 Legislative mandate

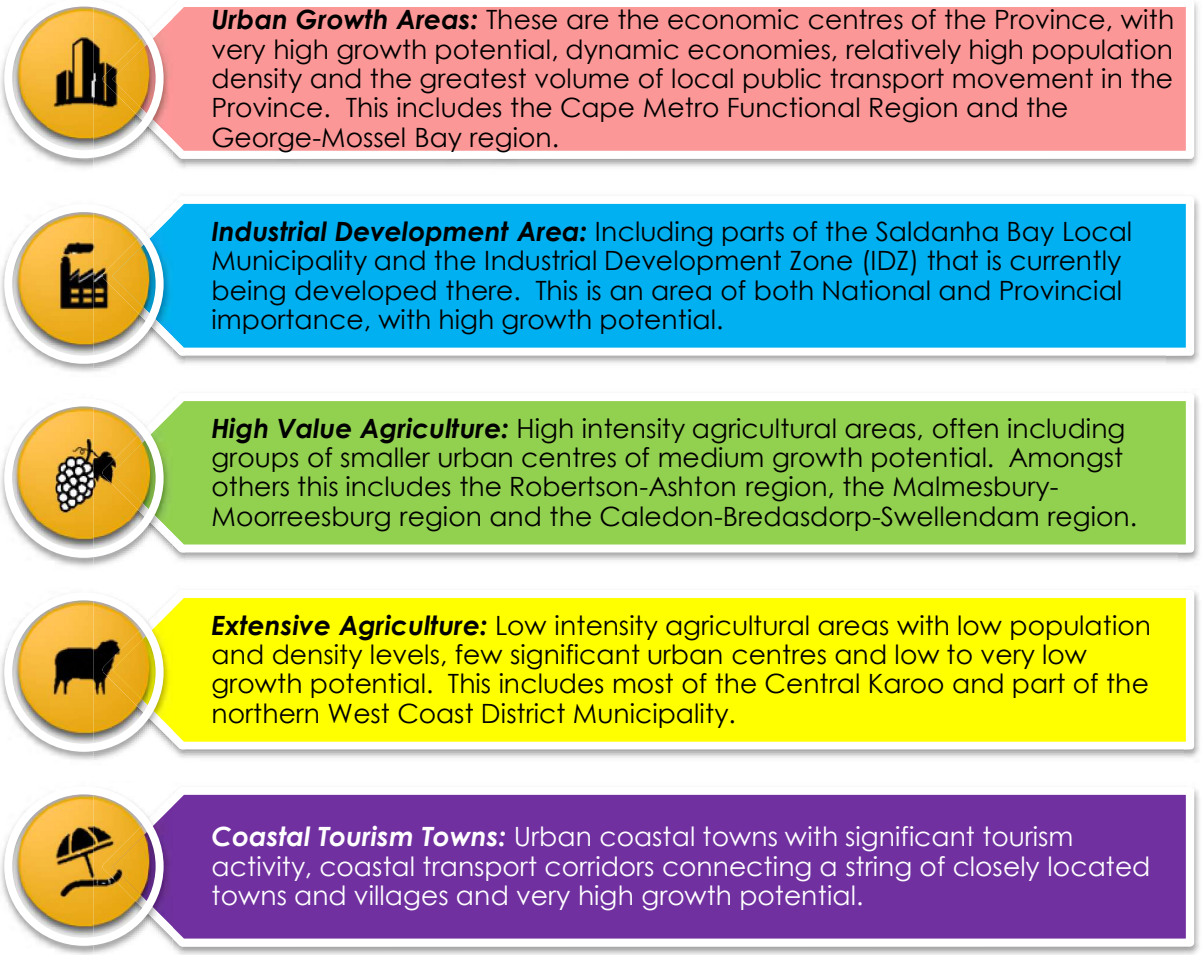
The proposals of the PPTIF are supported by the legal mandate extended to the Western Cape Government through the National Land Transport Act (NLTA, No. 5 of 2009).

The NLTA devolved the majority of land transport functions to local government (see Section 11(c)), including responsibility for planning, managing and implementing local integrated public transport networks.

However, the provincial sphere of government has a mandate to support under-capacitated municipalities (NLTA s11(b)(v); IRFA s35(2)(d)) to perform their land transport functions and is permitted to jointly exercise or perform any municipal land transport function (NLTA s12(1)). Given the lack of capacity of non-Metro municipalities to perform their land transport functions, the Western Cape Government has a legal mandate to support local governments in the implementation of their public transport functions and the rollout of improved public transport initiatives.

5.4.4 PPTIF Categorisation

The PPTIF is built on a thorough understanding of the status quo, issues and needs for public and non-motorised transport in the Western Cape, which vary across the province based on socio-economic and spatial dynamics. Through an extensive status quo analysis five categories were developed to describe the differing contextual dynamics in the Western Cape. The five categories are:



These categories can be used to understand the different types of interventions required to address the specific issues and competencies of different areas of the Western Cape. The Incremental Approach, described below, is a core facet of the PPTIF and can be adapted to different contexts.

5.4.5 The Incremental Approach

The Incremental Approach to public and non-motorised transport improvement was developed in response to the key constraints described above. The approach proposes the staged implementation of improvement initiatives which result in real improvements to the user experience, but in a fashion that reduces the capacity burden on government, lowers the cost of improvement and reduces the risk of transformation to the public transport industry. The manner in which this is achieved is described in the table below.

Table 2: The Incremental Approach

Impact	Description
Demonstrable improvement to public transport user experience	The Incremental Approach focusses on the "low hanging fruit" first in achieving rapid and demonstrable improvement in the transport experience of public transport users. Thus real improvements are achieved in the short term, whilst moving towards a broader, fully integrated network solution over the longer term.
Limits the capacity burden on government	Incremental implementation of improvement initiatives over time provides government with the time to progressively increase capacity and learn through experience, rather than being required to take on full responsibility for managing an IPTN all at once.
Lowers the cost of improvement	The Incremental Approach does not advocate for the rapid and full scale formalisation of public transport. Rather, the focus is on improving the condition for NMT, limited formalization on priority public transport routes, with the network being built up over time as and when the necessary resources become available. In addition, the phased approach aims to limit the need for costly compensation of public transport operators, contributing toward an overall reduction in the cost of system improvement.
Reduces the risk of transformation to the public transport industry	The Incremental Approach lowers the risk to the public transport industry by reducing the risk of each step in the process. The industry's business model is gradually adjusted over time, rather than being fully subsumed. This process inherently lowers risk and enhances the potential of successful engagement and transformation.

The Incremental Approach includes three stages. It is important to note that this approach is not prescriptive. It provides a framework which can be applied to different contexts (different PPTIF categories described above) and adapted accordingly and it provides strategic guidance on what aspects of the transport system should be addressed or improved at what stage.

Stage 1: The aim of Stage 1 is to begin to address some of the critical public and non-motorised transport issues in Western Cape municipalities. To an extent, this approach builds on existing expertise and capacity within local government and begins a process of enhanced capacity development to manage increasingly complex transport networks. At the same time, Stage 1 does not impose a dramatic change to the business model of existing public transport operators and, overall, it allows for shorter term, lower impact, affordable responses which are suited to the specific local areas being addressed.

More specifically, Stage 1 includes a strong focus on non-motorised transport, basic infrastructure improvements and the regulation and enforcement of existing public transport operators, in conjunction with strengthened industry engagement. The aim here is to 'get the basics rights' before moving toward the implementation of expensive and complex integrated public transport networks.

Stage 2: In Stage 2, government begins to introduce small subsidised service contracts with existing

operators for the provision of higher quality public transport services. Through the use of contracting, government begins to incentivise self-organisation and consolidation within the industry. In Stage 2, the work streams established in Stage 1 are continued. Additional areas of focus include introducing and managing subsidised contracts for public transport operators, small-scale ITS and AFC systems and managing data from these systems. Monitoring public transport operators becomes a priority.

Stage 3: In Stage 3, the public transport priorities established in the previous two stages are consolidated and extended. Where appropriate and financially viable, the municipality moves towards progressively implementing a context-appropriate IPTN network with gross contracts between government and private operators. The nature of this network will differ markedly by context and area typology.

5.4.6 Proposed institutional arrangements for public transport improvement

Outside of the City of Cape Town and the Municipality of George, there is very little capacity to pursue public and non-motorised transport improvement at the municipal level within the Western Cape. Therefore, in order to make progress, it is proposed that the Western Cape Government execute its NLTA s12(1) mandate to work with municipalities to jointly perform or execute municipal land transport functions, while progressively building municipal capacity. In order to limit the burden of this arrangement on the Western Cape Government, only a limited number of targeted municipalities will be actively supported at any given time.

In the longer term, capacity will be developed at the local level so that municipalities can perform their land transport functions either independently or jointly with adjacent municipalities, potentially through the establishment of municipal entities.

Support from the Western Cape Government (the Department of Transport and Public Works) will be split into two overarching functions with different purposes:

The Western Cape Government will act as an incubator: A newly established provincial incubation unit will work to establish and develop local transport units in priority areas of implementation. Together, these provincial units will plan, implement and manage local public and non-motorised transport improvement, working jointly with municipalities. Once sufficiently developed, the units will be transferred to municipal ownership. The incubator role in support of a particular municipality will initially be intensive as capacity is being developed, and will taper off and cease over time once the municipality has sufficient capacity internally.

The Western Cape Government will perform platform functions: Those functions that can sensibly be performed indefinitely on a province-wide basis. This includes developing centralised technology platforms and systems which will support province-wide public and non-motorised transport improvement, such as intelligent transport systems, integrated fare management and a call centre. The Western Cape Government will perform these functions indefinitely on behalf of LMs to leverage economies of scale and the concentration of specific expertise. Platform functions also allow for the strategic management of data that has significance for province-wide analysis of progress and trends, and for the specific management of operational contracts that the Western Cape Government has a direct financial responsibility for.

These arrangements are illustrated in the diagram below.

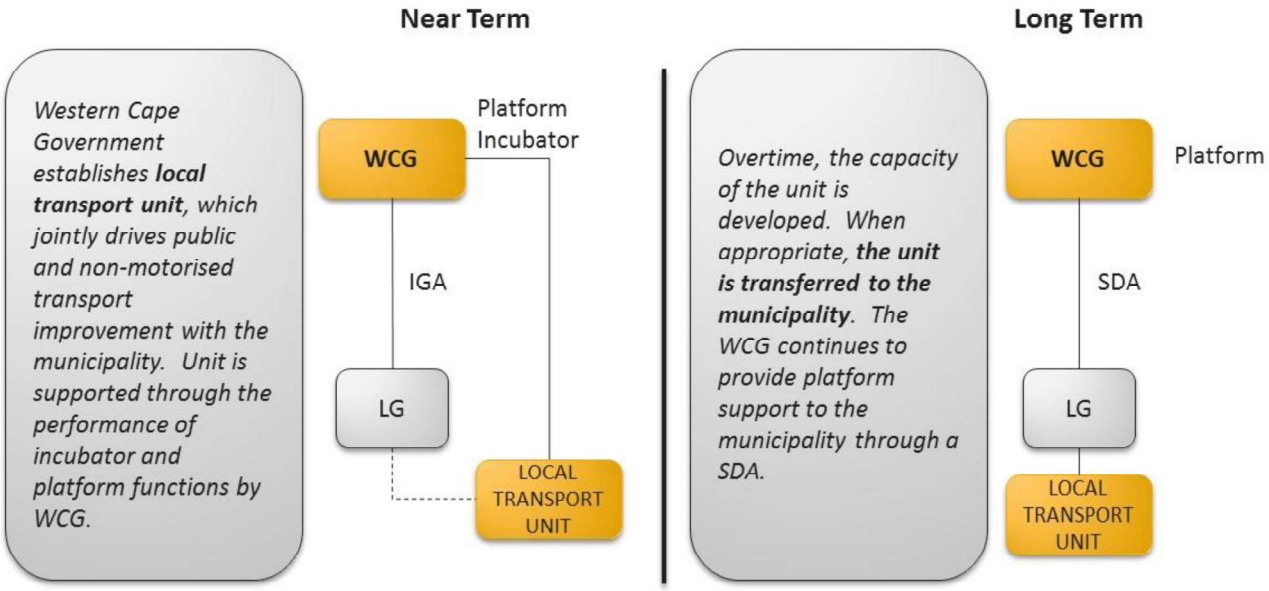


Figure 5-1: Proposed Institutional Arrangements

The Intergovernmental relationship between the Western Cape Government and targeted municipalities will be supported by the establishment of Joint Planning and Implementation Committees/Forums, to guide improvement initiatives.

It is also important to note that although it is proposed that the Western Cape Government play a central role in the performance/support of functions and flow of funds, a local municipality can take on these roles at any point according to current legislation.

5.4.7 Funding

The Western Cape Government will drive an effort to source the necessary funding for the proposed improvements, both from internal sources and from other sources such as National Government and international donors.

5.4.8 Implementation Plan

The implementation plan covers 5 years and includes the necessary steps in the implementation process, including the technical, institutional, organisational and funding components.

The basis of the implementation plan is the piloting of the PPTIF in 3 priority municipalities over a 5 year period. After the 5 year period, the pilot projects will be reviewed and successful elements will be rolled out to other municipalities in the Western Cape.

The high level implementation plan is summarised in the figure below. The proposed detailed planning and local establishment processes are for targeted or priority municipalities only.

Through the PPTIF, a prioritisation mechanism was developed to support the Department's decision-making process. This mechanism incorporated four criteria including population, size of economy, growth potential and public transport mode share. The use of this mechanism in conjunction with strategic considerations has resulted in the emergence of the following priority areas. These areas will be the focus of investment and activity over the next five years:

- Saldanha Bay Municipality
- Overstrand Municipality
- The municipalities of the Cape Metropolitan Functional Region including Stellenbosch, Drakenstein, Swartland and Theewaterskloof.

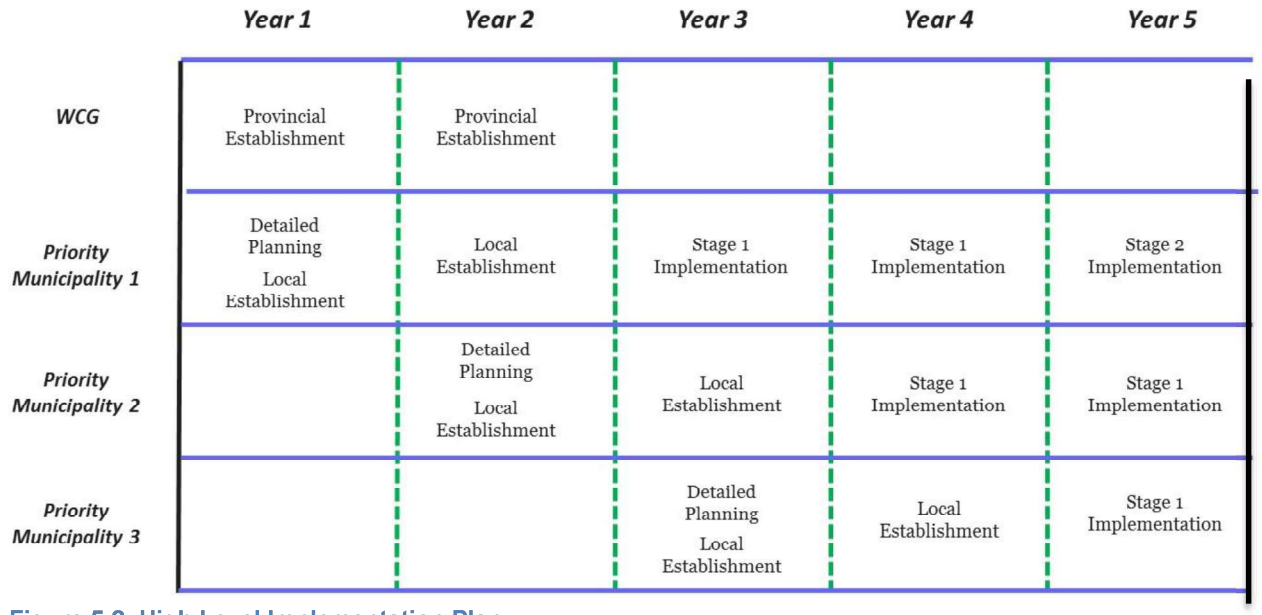


Figure 5-2: High Level Implementation Plan

6 TRANSPORT NEEDS ASSESSMENT

6.1 Introduction

This chapter considers the information collected and discussed in Chapter 3: Transport Register. This chapter identifies transport needs based on this information, including data that has not yet been confirmed by the local municipalities. There are a number of needs which are not unique to only one local municipality. The main needs within the district can be summarised as follows:

- A lack of internal integration with parallel processes such as the Integrated Development Plan, Local Economic Development plan, Spatial Development Framework etc.
- Inadequate budget for public transport infrastructure and facilities, road maintenance
- Limited capacity at a district and local municipal level to fulfil municipal transport planning function.
- Time constraint for implementation of proposed/ planned projects.
- Growth in road freight transport rather than rail, resulting in trucks affecting maintenance requirements and impacting on the quality of life in towns on freight routes.
- Poor connectivity of NMT routes, with varying standards and lack of universal accessibility, which not only reduces mobility but impacts on public transport accessibility.
- Funding infrastructure is a challenge, particularly since the need is widely distributed – people travelling far, to destinations that generate few trips, and from areas of low density.
- Lack of public transport service during the off-peak periods
- Lack of public transport services connecting main town centres with outlying rural areas.

Based on an understanding of the transport needs within each local municipality the following SWOT analysis was prepared. This analysis was done for the follow categories:

- Public Transport
- Public Transport Infrastructure
- Learner Transport
- Freight
- Non-motorised Transport
- Transport for Tourism
- Road Network

6.2 Transport Needs Assessment

Breede Valley

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
Existing rail service at Worcester	No service linking other towns within Breede Valley. Currently only a morning and afternoon/evening service being operated
Opportunity	**Threat**
create universally accessible facilities	commuters limited purchase power, affordability of public transport
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
Rail infrastructure not currently being utilised for passenger movement	underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
Provision of shelter at existing facilities	Obsolescence
utilising the existing rail infrastructure for passenger movement	Capital infrastructure funding
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
Opportunity	**Threat**
A formalised transport system for learners	Unaffordable or unavailable services for certain categories of learner
Freight	
Strength	**Weakness**
current freight route Worcester	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
create formal overnight facilities for truck traffic passing through Worcester	high maintenance cost associated with truck traffic
create an alternative route for freight movement	

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure in CBD	NMT infrastructure is not continuous
existing NMT link from CBD to Zwelethemba	Spatial divide discourages the use of NMT
Opportunity	**Threat**
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	Crime
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	Majority of traffic is through traffic travelling on the R60 between the N1 and N2 and on the N1.
	poses safety concerns where schools are located close to high order roads
Opportunity	**Threat**
new roads are not required	Pedestrian and Vehicle Accidents

Drakenstein

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
Existing rail service at all towns in the municipal area	only two rail services being rendered on this line, one outbound in the morning and inbound in the afternoon/ evening
long distance bus service operating through Paarl	inadequate long distance facilities
Opportunity	**Threat**
create universally accessible facilities	Over supply of minibus taxi services, commuters have limited purchase power, affordability of public transport.
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
	underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
Provision of shelter at existing highly utilised public transport facilities	high maintenance cost
Rail infrastructure not currently being utilised for passenger movement	Capital infrastructure funding
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
Opportunity	**Threat**
A formalised transport system for learners	potential resistance from existing operators, conditions attached to qualify learner transport subsidy
Freight	
Strength	**Weakness**
current freight route through Ceres and Tulbagh	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
create formal overnight facilities for truck traffic passing through the town of Ceres	high maintenance cost associated with truck traffic

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure in urban areas	NMT infrastructure is not continuous and not universally accessible
	Limited NMT infrastructure in rural areas, and poor support of public transport
	Safety and Security
Opportunity	**Threat**
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	majority of traffic is through traffic
Opportunity	**Threat**
new roads are not required	

Langeberg

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
	Commuter affordability
Opportunity	**Threat**
create universally accessible facilities	commuters limited purchase power, affordability of public transport
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
Rail infrastructure not currently being utilised for passenger movement	existing formal facility in Zolani not currently being utilised, and underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
revitalisation of existing formal facility in Zolani	Obsolescence
provision of rail passenger service	Capital infrastructure funding
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
Opportunity	**Threat**
A formalised transport system for learners	potential resistance from existing operators, conditions attached to qualify learner transport subsidy
Freight	
Strength	**Weakness**
current freight route through Langeberg (R60/2)	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
If warranted create formal overnight facilities for truck traffic passing through the town Robertson	high maintenance cost and increased congestion associated with truck traffic

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure	NMT infrastructure is not continuous, and distance between neighbouring towns too great
	safety and security
Opportunity	**Threat**
delineation of NMT space on existing road network	Crime
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	
NMT Education such as safety	
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	majority of traffic is through traffic
	poses safety concerns for pedestrian and scholars where schools are located close to high order roads
Opportunity	**Threat**
new roads are not required	deterioration of road network

Witzenberg

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
Existing rail service at Tulbagh and Wolseley	no passenger rail service linking Ceres, Prince Alfred Hamlet and Wolseley
	Lack of connectivity between Tulbagh and Op-die-berg to Ceres
Opportunity	**Threat**
create universally accessible facilities	commuters limited purchase power, affordability of public transport
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
Rail infrastructure between Ceres, Prince Alfred Hamlet and Wolseley not currently being utilised for passenger movement	existing formal facility in Prince Alfred Hamlet not being utilised & underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
Provision of shelter at existing facilities	Obsolescence
utilising the existing rail infrastructure for passenger movement	Capital infrastructure funding
revitalisation of formal facility in Prince Alfred Hamlet	
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
	Lack of pedestrian facilities (such as pedestrian crossings or pick-up/drop-off points) for scholars at schools
Opportunity	**Threat**
A formalised transport system for learners	
Freight	
Strength	**Weakness**
current freight route through Ceres and Tulbagh	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
create formal overnight facilities for truck traffic passing through the town	high maintenance cost associated with truck traffic

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure	NMT infrastructure is not continuous or consistent
Opportunity	**Threat**
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	Crime
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions makes it difficult to have a scheduled service
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	majority of traffic is through traffic
	poses safety concerns where schools are located close to high order roads
	heavy vehicle traffic travelling through Ceres
Opportunity	**Threat**
new roads are not required	deterioration of road network

7 SUMMARY OF LITPs

7.1 Introduction

As mentioned in Chapter 1, part of the DITP review includes updating the local municipality ITPs. This chapter serves to summarise the main elements from each of the local municipalities including Stellenbosch.

7.2 Breede Valley local municipality

The Breede Valley local municipality lies south of the Witzenberg local municipality and north of the Langeberg municipality.

The Breede Valley local municipality includes a number of towns:

- Worcester
- Rawsonville
- De Doorns
- Touws River

Within the Breede Valley area, there are rural and informal areas such as De Wet, Stofland and Zwelethemba.

The primary source of public transport for commuters is minibus taxis with two associations operating in the municipal area. A rail service is currently operating each day of the week which serves travellers between Worcester and Cape Town. The taxi operations are influenced by the agricultural sector seasonality, which suggests that there are annual peak periods for public transport in the municipality.

The National Route N1 is located within this local municipality and accommodates large volumes of traffic through the area. Due to the location of the N1 it is noted that there is significant freight traffic moving through the town of Worcester to get access to the N1.

A number of issues as identified during the stakeholder engagement meetings include, high public transport fares, NMT is not safe due to the limited existing facilities, high freight volumes and unsafe scholar transport.

The transport needs of the municipality can be summarised as follows: improve pedestrian facilities and improve learner transport facilities at and around schools.

7.3 Drakenstein local municipality

The Drakenstein local municipality lies north of the Stellenbosch local municipality and west of the Witzenberg municipality.

The Drakenstein local municipality includes a number of towns:

- Paarl
- Wellington
- Hermon
- Gouda
- Saron

The Drakenstein municipality has a number of rural villages (such as Hermon and Simondium) but has a significant proportion of its population in the larger towns of Paarl and Wellington. Due to the bulk of the population residing in Paarl and Wellington and the spatial gap between these two towns and the others, it is noted that there is a stronger functional relationship between Hermon, Gouda and Saron with towns outside the municipal area such as Wolseley and Tulbagh.

Similarly to the other municipalities, the main source of public transport is minibus taxis and the rail service. The minibus taxis primarily operate within the municipal area, with few services extending beyond Stellenbosch local municipality. Metrorail provides a number of daily services between Wellington, Paarl and Cape Town. A number of long distance bus operators pick up passengers within Paarl.

The public has indicated a number of problems and issues within the district, such as the lack of safety, long waiting times, better integration needed between modes, illegal operators and lack of law enforcement.

In recent years Drakenstein has also experienced an increase in heavy freight vehicles as Paarl expanded its industrial areas.

In terms of transport needs, it was identified that an improvement of existing public transport infrastructure is required as well as the provision of NMT facilities.

7.4 Langeberg local municipality

The Langeberg local municipality lies east of the Stellenbosch local municipality and south of the Breede Valley municipality.

The Langeberg local municipality includes a number of towns:

- Robertson
- Ashton
- Montagu
- McGregor
- Bonnievale

Langeberg is also comprised of a number of rural settlements:

- Zolani
- Ashbury
- Happyvallei

Within Langeberg, the only public transport services currently operating are minibus taxi services. Although there is an existing railway line, this is only used for freight movement and not for the transport of passengers. Most of the public transport operations take place within the local municipality, with commuters moving between the main towns mentioned above. In Langeberg only one formal public transport facility exists which is in Zolani. However, this taxi rank is not being used.

The R60 and R62 roads carry significant volumes of freight traffic moving between the N2 and N1.

The general public has expressed their main issues as the affordability of public transport fares, a lack of NMT facilities, safety concerns around scholar movement and a lack of public transport infrastructure and facilities.

The main priorities for Langeberg are improving existing NMT infrastructure and improving the safe transport of learners.

7.5 Witzenberg local municipality

The Witzenberg local municipality lies east of the Drakenstein local municipality and north of the Breede Valley municipality.

The Witzenberg local municipality includes a number of towns:

- Ceres
- Wolseley
- Prince Alfred
- Tulbagh
- Op-die-Berg

Witzenberg is also comprised of a number of rural settlements, namely:

- Warm Bokkeveld
- Koue Bokkeveld
- Agter-Witzenberg

Within the Witzenberg municipal area the primary modes of public transport are minibus taxi and rail. Non-motorised transport also plays a significant role within the municipality.

The public transport operations are also impacted by seasonal demand related to the agricultural sector, with an increase in demand taking place during the harvest season. This results in more frequent minibus taxi trips between the main service centres and the farming areas.

The passenger rail service operating within the municipal area is limited to one morning and one afternoon service between Wolseley and Cape Town. Currently a freight rail service is operated between Ceres and Prince Alfred Hamlet. It is envisaged that this will become a passenger service in future.

Witzenberg also has issues related to heavy vehicle movement through the town. The freight traffic experienced within the district is primarily vehicles travelling towards Cape Town or the N7.

The needs assessment identified projects related to NMT and additional public transport services during the fruit harvesting season.

7.6 Stellenbosch Local Municipality

The following has been extracted from the Executive Summary of the Stellenbosch CITP (2016-2021).

1. INTRODUCTION

The Stellenbosch Comprehensive Integrated Transport Plan (CITP) is prepared in compliance with the National Land Transport Act (2009) and relevant Provincial legislation.

The CITP was prepared in accordance with the guidelines and requirements of the Department of

Transport and is a Sector Plan of the Stellenbosch Municipalty's Integrated Development Plan (IDP).

The CITP covers the period 2016 – 2021 and has been approved by Town Council for submission to the MEC responsible for Transport and Public Works.

The CITP has been prepared in consultation with public meetings of interested and affected parties.

2. TRANSPORT VISION AND OBJECTIVES

The transport **VISION** stated in the CITP is:

"A demand-managed, sustainable, balanced and equitable transport system that allows for the basic mobility needs of individuals to be met, is affordable, operates efficiently, offers choice of transport modes, supports a vibrant economy and operates seamlessly within and across the municipal boundaries"

The **VISION** takes into consideration relevant national and provincial policies and legislation, the Western Cape Government's strategic goals and the five strategic focus areas of the Integrated Development Plan of the Stellenbosch Local Municipality.

The **OBJECTIVES** of the CITP are represented by the principles of:

- Investment
- Sustainability
- Safety
- Integrated Planning

3. TRANSPORT REGISTER

The Transport Register of the CITP provides an overview of the status of the transport system and identifies trends and changes in the demographics of the area to which the transport system must adapt.

The Transport Register assists in identifying shortcomings in the transport system and areas where improvement is needed.

Information on the following aspects of the transport system is provided:

- Utilisation of public transport services and facilities
- The status and condition of public transport facilities and infrastructure
- The percentage utilisation of the various modes of transport
- The status and condition of the road network
- Freight transport information
- Financial information

4. SPATIAL DEVELOPMENT FRAMEWORK

The SDF provides a clear direction of the land development strategies of the Stellenbosch Municipality and identifies focus areas of the CITP including:

- transport corridors and nodes
- areas identified for mixed use and densification in support of public transport
- measures to discourage urban sprawl

The vision of the Provincial Land Transport Framework provides a framework for a transport system built on the pillars of sustainability, equity, access to opportunity in an economically efficient manner and safety that are taken into account to ensure cohesive planning with surrounding areas

The following focus areas are identified:

- The need to increase road corridor capacities and public transport linkages to support the development of increased land development densities
- The adoption of the principles of Transit Oriented Development (TOD) and Transport Demand Management (TDM) to reduce congestion of the road network as this negatively impacts economic growth and the "greenness" of the Municipality.
- The continued development of Non Motorised Transport (NMT) infrastructure and networks to reduce the demand for private car travel and improve the liveability of neighbourhoods and communities within the area.
- The rail system should remain the backbone of the transport system in the functional region, therefore rail capacity and infrastructure maintenance should receive attention in the Integrated Transport Plan.

5. TRANSPORT NEEDS ASSESSMENT

The Transport Needs Assessment provides a summary of the needs for new or improved transport services or infrastructure identified through an analysis of information collected, strategies for the development of Stellenbosch and through the consultation process.

The following key needs were identified for inclusion in the CITP strategies:

- The need for a high quality, sustainable public transport system
- The need to improve accessibility to transport for learners and persons with disabilities
- The need to improve facilities for pedestrians and non-motorised transport in Stellenbosch as well as the surrounding, smaller settlements and rural areas
- The need to improve mobility on the major road network by reducing congestion and the provision of alternative routes and corridors
- The need to identify and source additional funding to implement plans included in the CITP

The needs of the community were identified through a public consultation process. This information was used to identify projects that can be prioritized for inclusion in the CITP budget.

6. PUBLIC TRANSPORT OPERATIONAL STRATEGY

The Stellenbosch Municipality, *as a Planning Authority*, is responsible for transport functions in terms of the National Land Transport Act (5 of 2009) including the planning and implementation of an efficient and affordable public transport service network and travel corridors

There are several implications stemming from this responsibility that the Stellenbosch Municipality must consider. These are:

- Financial implications: The cost of planning, infrastructure provision, purchase of vehicles, operation and maintenance
- The necessity for consultation with role-players on issues such as empowerment, training, compensation for loss of jobs or profits, negotiation of operating contracts
- Municipal capacity to plan and monitor the public transport system
- The need for a clear procurement strategy

The elements of an upgraded public transport service network are:

- An integrated route network of short and long distance routes
- New universally accessible vehicles (initially using existing vehicles)
- Integration of rail, bus and minibus services with fixed timetables
- A new ticketing system
- Contracted operators (negotiated contract with existing operators)
- New transport infrastructure : terminals, shelters

Guiding principles for the proposed Stellenbosch public transport service network are:

- Compliance with the Department of Transport guidelines for a Public Transport Network Grant
- Transformation and upliftment of the public transport industry
- To improve public transport services and quality of life of residents
- Phased development of the public transport system
- Financial sustainability

7. OPERATING LICENCE STRATEGY

The purpose and objective of the Operating License Strategy (OLS) is to enable the Stellenbosch Municipality to make recommendations to the Provincial Regulatory Entity (PRE) based on the policies and strategies contained in the Comprehensive Integrated Transport Plan .

The evaluation of Operating License (OL) applications follows the following procedure:

- An application for an OL is submitted to the PRE and is referred to the Municipality.

- The OL application is circulated to the appropriate Departments internally within the Municipality.
- Evaluation of Supply and Demand: The OL application is checked against the available survey data of passenger demand on the applicable routes.
- The OL application is checked against the available survey data of rank, terminal or stops capacity serving the applicable routes
- The OL application is assessed as to its impact on the conceptual Public Transport Network Routes that are identified in the ITP, or will operate in parallel to or in conflict with any commuter rail services or bus services.
- The OL is checked against the record of outstanding warrants or convictions, previous convictions relating to the operation of public transport services and the ability of the applicant to operate the service in a manner satisfactory to the public.
- In terms of section 78 of the NLTA, if a licence has not been in use for more than 180 days, the licence can be cancelled. The licence holder must be asked to furnish, in writing, satisfactory reasons why the service has not been operated, after which the licence can be extended for a further 180 days or cancelled.
- If all the responses to the evaluation support the approval of the application, a letter of approval is then issued to the NPTR or the PRE with any conditions attached. If the responses do not support the application, a letter of rejection is then issued.

8. TRANSPORT INFRASTRUCTURE STRATEGY

The Transport Infrastructure Strategy deals with the maintenance and provision of all types of transport infrastructure including infrastructure for non-motorised modes, road based modes and rail infrastructure. The following types of infrastructure projects are included:

- Infrastructure Maintenance: Maintenance and rehabilitation of roads, public transport facilities and traffic control equipment.
- Road Infrastructure: The construction of all classes of roads, bridges and associated stormwater, non-motorised infrastructure such as sidewalks and cycle tracks and traffic control equipment.
- Public Transport: Passenger facilities, dedicated rights of way and off-street facilities such as terminals and depots.

A strategy is proposed to improve transport mobility on major roads linking Klapmuts and Somerset West and passing through Stellenbosch. Several alternatives have been identified for further investigation and consultation:

- Construction of a by-pass road to the west of Stellenbosch. This is a long term solution that has advantages and disadvantages.
- Travel Demand Management to reduce the reliance on cars and encourage the use of public transport
- Increase the capacity of existing roads for all users

9. TRAVEL DEMAND MANAGEMENT

The objectives of Travel Demand Management (TDM) are far reaching and may include reducing traffic congestion by reducing the demand for car use, lifestyles, using infrastructure efficiently, reducing the environmental impacts of private transport, and supporting investments in public transport and non-motorised transport.

Several interventions, requiring further study, are proposed to achieve the above objectives:

- Studies:
    - Investigate and prioritise congestion bottlenecks to make more efficient use of road infrastructure
    - Improve road safety
    - Promoting NMT
    - Promoting public transport
- Programmes and Policy:
    - Enforce traffic laws that impact NMT activity, and by-laws governing use of public space

- Review building design regulations and street design standards that impact on walkability
- Develop campaigns to raise awareness of travel options, and to encourage a shift in behavior
- Pursue possibility of establishing a car-share service

- Infrastructure:
  - Plan in more detail improved public transport services and develop an implementation plan
  - Develop shared parking structures to reduce impact of traffic on the historic town core
  - Undertake localised improvements for pedestrians, such as pedestrian-only signals, bulb-outs and street lighting along key routes

10. FREIGHT TRANSPORT STRATEGY

The freight system forms an integral part of the transport network. Freight is moved by means of the road network which is managed by South African National Roads Agency Ltd as well as provincial and local government and the rail network, pipelines and ports which are managed and operated for the most part by Transnet

The Western Cape Government is mandated with the control of overloading of freight vehicles. There are currently 9 weighbridges within the Province, of which one is within the Stellenbosch municipal boundary.

Overloading is not adequately controlled and there is inadequate legal support for enforcement.

In Stellenbosch, the inbound heavy vehicle traffic volume accounts for 1% of the morning peak period inbound traffic volume which does not significantly affect the road system capacity.

In Franschhoek, approximately 29% of heavy vehicles are through traffic on the main road. Although an alternative heavy vehicle route may alleviate some pressure on the Franschhoek main road, the majority of heavy vehicle traffic is generated in the town and the surrounding farms and will continue to make use of the main road.

Proposed Interventions:

- Development of an infrastructure improvement programme
- Improve law enforcement and overload control
- Development of a strategic freight network
- Promoting and endorsing a self-regulatory entity such as the Road Transport Management System (RTMS)
- Investigation of the feasibility of installing an additional weighbridge within Stellenbosch
- Detailed freight surveys are required
- Investigate the use of alternative / preventative measures to deter heavy haul vehicles from using the Franschhoek pass as an alternative to the current Huguenot Tunnel and potentially the N1 Winelands.

11.1 NON-MOTORISED TRANSPORT

Non-Motorised Transport (NMT) can be described as all means of transport that are human powered such as the modes of walking, cycling, animal-powered vehicles including variants such as small wheeled transport (skateboards, roller blades, push scooters and hand carts) and wheelchair travel.

Non-motorised transport is available to everyone as a mode of travel and is the cheapest and healthiest mode of travel for the individual and the environment. The promotion of NMT is therefore critical to encourage economic development and dignified living in both rural and urban environments.

The Stellenbosch Municipality prepared a NMT Policy in 2015 which defines the vision and objectives for NMT implementation in the area that strives to “facilitate a mobility environment where all transport modes are of equal importance.”

A market survey on cycling was conducted during the development of the Draft Stellenbosch Cycle Plan (2015). The results of this survey indicated that the main deterrents to cycling are traffic safety, the lack of cycling infrastructure and personal safety concerns.

A NMT network plan for Stellenbosch was prepared in 2015 as well as a bicycle masterplan. These plans provide for the development of a network of sidewalks and cycle tracks.

In terms of the above plans, a number of NMT interventions and projects have been identified for inclusion in the CITP.

11.2 TRANSPORT SAFETY AND SECURITY

Safety and security concerns are one of the main deterrents for potential public transport users. A strategy has been developed to address these concerns in an effective manner.

The following strategy is proposed:

- The maintenance and improvement of lighting at all the public transport facilities to improve the safety of commenters at night.
- The establishment of a data base of crime incidences at public transport facilities and on-board vehicles.
- A study be done to establish the levels and type of protection services available in rural and urban public transport systems to effectively tailor a strategy to the various communities.
- The auditing of public transport infrastructure design projects against security criteria developed by the CSIR.
- The cleaning of public transport facilities of litter and graffiti so as to create a sense of safety amongst commuters who use the facility.

12 FUNDING STRATEGY AND SUMMARY OF PROPOSALS AND PROGRAMMES

The key focus of projects, proposals and budgets of the CITP is to enable and contribute to economic growth, improved accessibility, equitable transport for all and a safe environment while ensuring environmental sustainability and good governance.

The projects and proposals contained in this CITP comprise the following project types:

- **Roads and Stormwater**: Maintenance, road construction and upgrading, street lighting and construction projects such as parking areas.
- **Traffic Engineering**: Traffic calming, signage, traffic signals, intersection improvements, road marking, road safety improvements.
- **Non-motorised Transport**: Sidewalks, lock-up facilities for bicycles, pedestrianisation projects
- **Public Transport**: Public transport facilities (ranks, shelters)
- **Support Infrastructure and Vehicles**: Upgrading of municipal facilities and the purchasing of vehicles.
- **Planning**: Preparation of integrated transport plans and strategies, feasibility studies, masterplans.

The proposed Stellenbosch Municipality CITP Five Year Budget comprises an average spend over the first three years (2016/17 – 2020/21) of R 277 000 000, including major new projects that could be implemented in stages.

The primary sources of funds are the Stellenbosch Municipality and the Western Cape Government. It is proposed that the Public Transport Service Network be funded from the Public Transport Network Grant (PTNG).

It is recommended that to ensure that additional funding is provided to implement high priority transport projects in the Stellenbosch Municipal Area:

- A Committee be appointed by the Stellenbosch Municipality with representation from the relevant Municipal Departments, the Western Cape Government and other relevant agencies to formulate firm proposals for the funding of the projects listed in the CITP Five Year budget.
- The Stellenbosch Municipality establish a Municipal Land Transport Fund into which the funds must be paid for use in implementing the CITP.

13 STAKEHOLDER CONSULTATION

Stakeholder consultation was conducted by means of:

- A survey questionnaire
- A public meeting held in Stellenbosch

The priority issues from the survey questionnaire and the public meeting were:

- The lack of a regular and reliable public bus service in Stellenbosch and to surrounding

areas is the highest priority and the main focus in the next five years.

- The second priority is the need to build new roads to provide alternative routes and relieve congestion in and around Stellenbosch.
- The creation of more parking in the Stellenbosch CBD.
- The improvement of cycling and pedestrian routes and safety in Stellenbosch.

8 FUNDING STRATEGY AND SUMMARY OF PROJECT BUDGETS

8.1 Introduction

This chapter serves to illustrate the proposed funding strategy which looks at the current funding sources for transport related improvements. This chapter will also summarise the 5 year annual municipal transport budget and programme for each local municipality. These summaries will include prioritisation of projects based on the municipal transport needs and the available budgets.

Some of the key focus areas that require funding are in terms of basic needs, such as maintenance of roads and provision of roads and related infrastructure, implementation of a safe, affordable and convenient public transport system and the provision of a safe environment for motorised transport and NMT.

Municipalities have various potential sources of funding available to them. These funding sources can be either public funding through internally generated funding (such as property rates and taxes) or national/ provincial government allocations or private funding through value capturing, public private partnerships or loans.

8.2 Summary of Project Proposals

The tables that follow are transport-related budgets provided by the local municipalities. Priorities are implied in the year(s) for which budget has been allocated. The sources of funding beyond municipal budgets are essentially the same as recorded in the previous DITP (2011-2016).

It should be noted that the Langeberg municipality has allocated no funding to transport related services for the 2015/16 financial year with a strong likelihood that no budget will be allocate to transport for the subsequent 3 year period. The Langeberg municipality has allocated funding to services which are a much higher priority.

The transport budgets of the local municipalities indicate that large portions of funding have been planned for road infrastructure improvements.

Breede Valley has budgeted, amongst others, for road network improvements and a bus route. Breede Valley budget also suggests that many of the transport projects which appear on the budget do not have funding for the 2015/16 financial year or subsequent years.

Witzenberg has budgeted primarily for road network improvements.

Drakenstein has budgeted, amongst others, for road network improvements and upgrading of existing sidewalks.

8.2.1 Breede Valley

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
1	De Doorns: Rehabilitation of Municipal Roads (MIG 210857)	National Government: MIG (DORA)	181 950		
2	De Doorns: Rehabilitation of Municipal Roads (Counter Funding)	Projects (MIG Counter Funding)	1 888 832		
3	Rawsonville: Rehabilitation of Municipal Roads (MIG 212168)	National Government: MIG (DORA)	100 350		
4	Rawsonville: Rehabilitation of Municipal Roads (Counter Funding)	Projects (MIG Counter Funding)	702 554		
5	Worcester: Rehabilitation of Municipal Roads (MIG 212170)	National Government: MIG (DORA)	1 811 708		
6	Worcester: Rehabilitation of Municipal Roads (Counter Funding)	Projects (MIG Counter Funding)	2 000 000		
7	Avian Park Roads	Projects New	2 000 000		
8	Zwelethemba IDT Roads	Projects New	2 000 000		
9	Hex Industria Roads	Projects New	1 250 000		
10	HOP Land Roads - Touws River	Projects New	1 250 000		
11	De Doorns East Roads	Projects New	1 250 000		
12	Truck with tipper load body (4 Ton, Diesel)	Furniture and Equipment	616 025		
13	Roads & Stormwater	Projects New	144 000		
14	Roads	Projects New	156 000		
15	Touws River: Rehabilitation of Municipal Roads (MIG 212170)	National Government: MIG (DORA)	1 971 992		
16	Bus route	Projects New	3 072 849		
17	Embayment busses: Noble Street	Projects New	300 000		
18	Computers (Replacement of 2 computers)	UNFUNDED NEW REQUESTS		0	0
19	Traffic Circle (High and Louis Lange Streets)	UNFUNDED NEW REQUESTS			

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
20	Equipment	UNFUNDED NEW REQUESTS		0	0
21	Resealing of Municipal Roads (MIG) - Rawsonville	National Government: MIG (DORA)		0	0
22	Resealing of Municipal Roads (Counter Funding to MIG) - Rawsonville	Projects (MIG Counter Funding)		0	0
23	Resealing of Municipal Roads (MIG) - Worcester	National Government: MIG (DORA)			
24	Resealing of Municipal Roads (Counter Funding to MIG) - Worcester	Projects (MIG Counter Funding)		0	0
25	Resealing of Municipal Roads (MIG) - De Doorns	National Government: MIG (DORA)		0	0
26	Resealing of Municipal Roads (Counter Funding to MIG) - De Doorns	Projects (MIG Counter Funding)		0	0
27	Resealing of Municipal Roads (MIG) - Touws River	National Government: MIG (DORA)		0	0
28	Resealing of Municipal Roads (Counter Funding to MIG) - Touws River	Projects (MIG Counter Funding)		0	0
29	Avian Park Roads	UNFUNDED NEW REQUESTS		0	0
30	Zwelethemba IDT Roads	UNFUNDED NEW REQUESTS		0	0
31	Hex Industria Roads	UNFUNDED NEW REQUESTS			
32	Parking Bays at VGK Church (Fisher & Van Huysteenlaan)	UNFUNDED NEW REQUESTS		0	0
33	HOP Land Roads - Touws River	UNFUNDED NEW REQUESTS		0	0
34	De Doorns East Roads	UNFUNDED NEW REQUESTS			
35	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS			

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
36	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS		0	0
37	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS			
38	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS		0	0
39	Bus Route (MIG 201624 - Counter funding)	Projects (MIG Counter Funding)			
40	Fairway Heights Access Road (Trim Park)	UNFUNDED NEW REQUESTS		250 000	0
41	Rehabilitation of Leipoldt Avenue from Robertson Road to Fisher Street	UNFUNDED NEW REQUESTS		0	0
42	Rehabilitation of Leipoldt Avenue from Fairbairn to Grey Street	UNFUNDED NEW REQUESTS		0	1 000 000
43	Rehabilitation of Leipoldt Avenue from Fisher to Fairbairn Street	UNFUNDED NEW REQUESTS		300 000	0
44	Rehabilitation of Leipoldt Avenue from Grey to Le Seuer Street	UNFUNDED NEW REQUESTS			
45	Roads	UNFUNDED NEW REQUESTS		0	65027138
46	Embayment - 4 busses at Breerivier Senior Secondary School, Noble Street	UNFUNDED NEW REQUESTS			
47	Roads	UNFUNDED NEW REQUESTS			
48	Worcester Eastern Bypass (Roberson Road to N1)	UNFUNDED NEW REQUESTS		250 000	250 000
49	Providing pedestrian and cycle path shelters in Worcester	UNFUNDED NEW REQUESTS		5 000	5 000
50	Re-align pedestrian crossing over railway line in De Doorns	UNFUNDED NEW REQUESTS			

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
51	Implement pedestrian sidewalk in De Doorns	UNFUNDED NEW REQUESTS			
52	Provision of Pedestrian Walkway between Le Sueur and Ranier Streets	UNFUNDED NEW REQUESTS			
53	Building of three raised pedestrian crossings across High Street, Worcester CBD	UNFUNDED NEW REQUESTS		5 200 000	5 400 000
54	Building of a raised pedestrian crossing across Stockenstroom Street, Worcester CBD	UNFUNDED NEW REQUESTS		50 000	50 000
55	Grader, Replacement of BVM 449	UNFUNDED NEW REQUESTS			
56	Digger Loader	UNFUNDED NEW REQUESTS			
57	Equipment: Roads and Storm Water	UNFUNDED NEW REQUESTS			
58	EQUIPMENT: DE DOORNS	UNFUNDED NEW REQUESTS		5 928 720	5 928 720
59	EQUIPMENT: TOUWS RIVER	UNFUNDED NEW REQUESTS			
60	Truck with tipper load body (4 Ton, Diesel)	UNFUNDED NEW REQUESTS			
61	Light Delivery Vehicle (1 Ton, LDV, 2000 Petrol) with canopy and accessories	UNFUNDED NEW REQUESTS		8 250 000	8 250 000
62	Truck with tipper load body (4 Ton, Diesel)	UNFUNDED NEW REQUESTS		0	0
63	Light Delivery Vehicle (1 Ton LDV) 2000 Petrol	UNFUNDED NEW REQUESTS		1 250 000	0

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
64	Light Delivery Vehicle (1 Ton LDV) 2000 Petrol, Replacement of Nissan 1800 LWB_BVM 193	UNFUNDED NEW REQUESTS		0	0
65	Truck with tipper load body (4 Ton, Diesel), Replacement of Toyota Dyna Wipbak 4ton(kappie97/8)_BVM 207	UNFUNDED NEW REQUESTS		15 943 466	0
66	Truck with tipper load body (4 Ton, Diesel), Replacement of Toyota Dyna Tipbak_BVM 488	UNFUNDED NEW REQUESTS			
67	Tractor, Replacement of International Trekker_BVM 820	UNFUNDED NEW REQUESTS		0	0
68	Truck with tipper load body and hydraulic lift (Dounle Cab, 4 Ton, Diesel), Replacement of Isuzu vragmotor_BVM 901	UNFUNDED NEW REQUESTS			
Total			20 696 260	37 427 186	85 910 858

8.2.2 Drakenstein

New / Replacement of Assets	Capital Item Description	2015/2016 Revised Capital Budget	2016/2017 Revised Capital Budget	2017/2018 Revised Capital Budget	2018/2019 Revised Capital Budget	2019/2020 Revised Capital Budget
New	STREET LIGHTING: HERMON	-	185 349	-	-	-
New	STREET LIGHTING: GOUDA	-	447 957	-	-	-
New	BUILDINGS: OFFICE ALTERATIONS: MARKET STREET	100 000	150 000	200 000	-	-
New	BUILDINGS: OFFICE ACCOMMODATION (BLAKE STREET)	-	-	-	-	360 000
New	DETAILED DESIGN- BRB & OOSBOSCH	1 491 228	-	-	-	-
New	DETAILED DESIGN- BRB & OOSBOSCH	3 508 772	-	-	-	-
Replacement	UPGRADE EXISTING SIDEWALKS (DRAKENSTEIN)	7 500 000	600 000	600 000	850 000	1 000 000
Replacement	UPGRADE SIDE WALKS (WARD PROJECT)	2 500 000	2 500 000	2 700 000	2 800 000	3 000 000
New	FENCING: HUGENOTE PARKING AREA	130 000	-	-	-	-
Replacement	PROCLAIMED AND MAIN ROADS UPGRADES	9 376 409	10 488 068	7 605 944	7 636 932	8 345 984
New	VERSAILLES STREET WELLINGTON CHANNEL	-	1 000 000	-	-	-
Replacement	REPAIR SLIP JAN PHILIPS	1 500 000	3 000 000	3 000 000	3 000 000	3 000 000
Replacement	UPGRADING OF GRAVEL TO PAVED ROADS (SARON / GOUDA)	4 000 000	5 000 000	5 000 000	5 000 000	6 000 000
Replacement	UPGRADING GENL HERTZOG-WELLINGTON	1 000 000	-	-	-	-
Replacement	RECONSTRUCTION OF DROMMEDARIS STR	4 000 000	4 000 000	5 000 000	-	-

New / Replacement of Assets	Capital Item Description	2015/2016 Revised Capital Budget	2016/2017 Revised Capital Budget	2017/2018 Revised Capital Budget	2018/2019 Revised Capital Budget	2019/2020 Revised Capital Budget
Replacement	RECONSTRUCTION OF CECILIA STREET	-	-	5 000 000	8 000 000	-
Replacement	REFURBISHMENT OF STREETS & STORMWATER DEPOT	2 000 000	5 000 000	4 000 000	4 000 000	4 000 000
Replacement	RECONSTRUCTION OF STREETS	2 000 000	4 000 000	6 000 000	6 000 000	4 500 000
New	TRAFFIC CALMING MAIN STREET PAARL & WELLINGTON	350 000	240 000	-	-	-
New	TRAFFIC CALMING (DRAKENSTEIN)	1 400 000	400 000	400 000	500 000	800 000
New	UPGRADE JAN PHILLIPS MOUNTAIN DRIVE (GEOTECHNICAL REPORT INCLUDED)	1 500 000	-	-	-	-
Replacement	REFURBISH STORM WATER SYSTEMS (DRAKENSTEIN)	6 000 000	7 500 000	7 500 000	7 500 000	8 000 000
New	CONSTRUCT VAN DER STEL STREET (BETWEEN ABBATOIR AND KLEIN DRAKENSTEIN)	-	-	-	4 000 000	12 000 000
New	PAVING OF PARKING AREAS (DRAKENSTEIN)	-	1 000 000	500 000	500 000	500 000
New	PAARL GATEWAY PROJECT (MAIN ENTRANCES)	2 500 000	2 500 000	-	-	-
New	RAMPS FOR DISABLED (SIDEWALKS)	98 656	15 000	15 000	15 000	15 000
New	STREET NAME SIGNS (DRAKENSTEIN)	140 000	45 000	50 000	50 000	50 000
Replacement	CONSTRUCTION OF STOKERY ROAD, WELLINGTON (Transport)	8 070 175	-	-	-	-
New	TRAFFIC LIGHTS (DRAKENSTEIN)	1 600 000	1 600 000	2 880 607	2 000 000	2 000 000
Total		60 765 240	49 671 374	50 451 551	51 851 932	53 570 984

8.2.3 Langeberg

No municipal budget allocated to transport infrastructure or services.

8.2.4 Witzenberg

Directorate	Department	Project Description	Funding Source	Budget 20115/16	Budget 2016/2017	Budget 2017/2018
Community	Traffic	Fire Arms	CRR	R 100 000.00	R -	R -
Community	Traffic	Vehicle replacement programme	External Loans	R 420 000.00	R -	R -
Technical	Stormwater	Vredebes Housing Stormwater	HOUSE	R -	R 12 000 000.00	R 9 500 000.00
Technical	Stormwater	Network - Stormwater upgrading	CRR	R 150 000.00	R 200 000.00	R 220 000.00
Technical	Stormwater	Professional Fees for Rural Development Projects	CRR	R 200 000.00	R -	R -
Technical	Roads	Traffic Calming	CRR	R 200 000.00	R 220 000.00	R 250 000.00
Technical	Roads	Vredebes Housing Roads	HOUSE	R -	R 12 000 000.00	R 9 500 000.00
Technical	Roads	Skoonvlei Upgrading of Roads	CRR	R 3 800 000.00	R -	R -
Technical	Roads	Vehicle replacement programme	External Loans	R 230 000.00	R -	R -
Technical	Roads	Jackhammers	CRR	R 80 000.00	R -	R -
Technical	Roads	Vehicle replacement programme	CRR	R -	R 800 000.00	R -
Technical	Roads	Upgrading Roads - Vredebes	MIG	R -	R -	R 5 000 000.00
Technical	Roads	Bella Vista Housing Bulk Roads	MIG	R -	R -	R -

Directorate	Department	Project Description	Funding Source	Budget 20115/16	Budget 2016/2017	Budget 2017/2018
Technical	Roads	Network - Street	CRR	R 3 000 000.00	R 3 000 000.00	R 3 000 000.00
Technical	Roads	Equipment	CRR	R -	R 600 000.00	R -
Technical	Roads	Professional Fees for Rural Development Projects	CRR	R 500 000.00	R 600 000.00	R -

Annexure A: Enlarged Maps

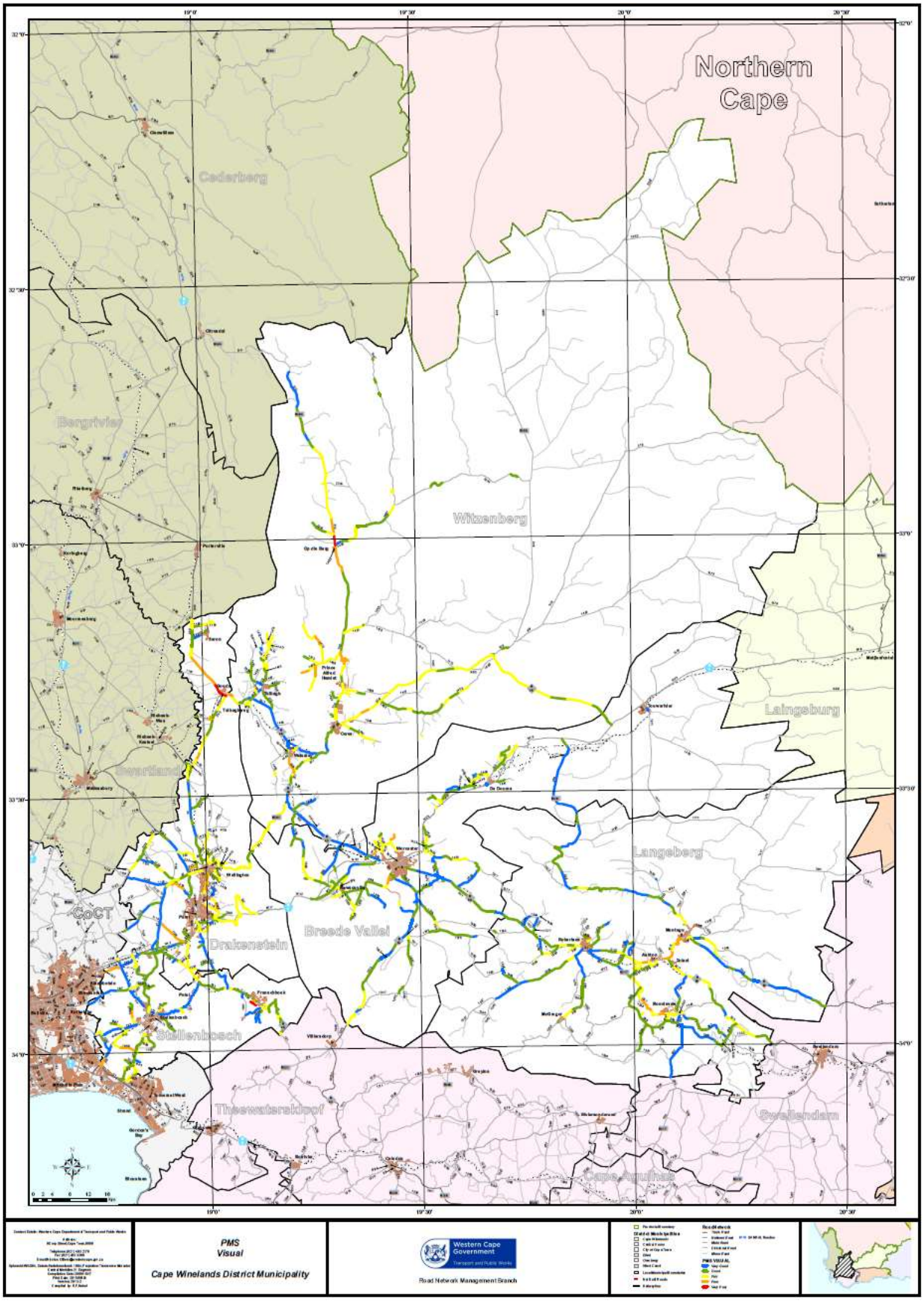


Figure Annexure A-1 Paved Road Condition of Provincial Roads (Enlarged)

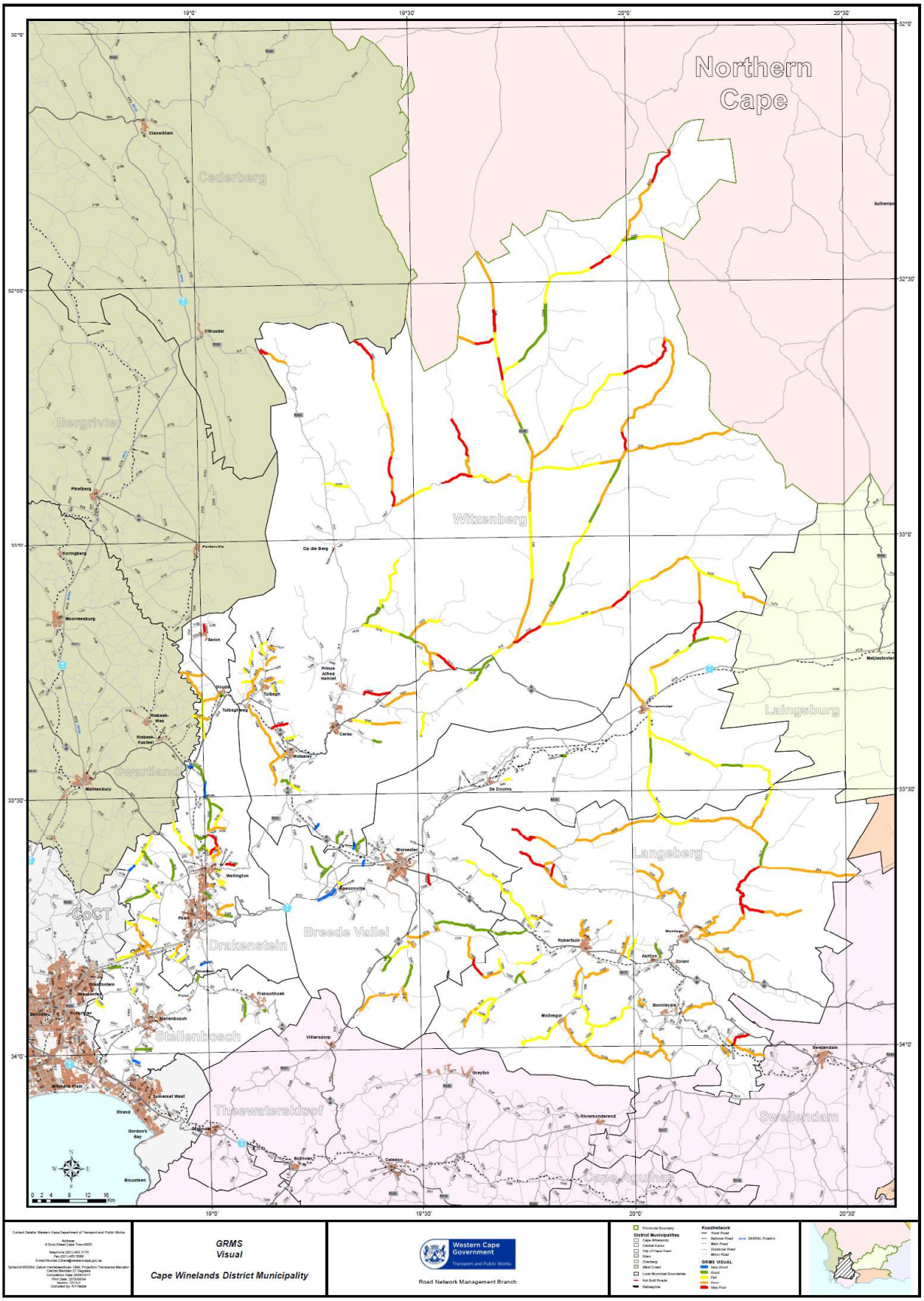


Figure Annexure A -2 Gravel Road Condition of Provincial Roads (Enlarged)

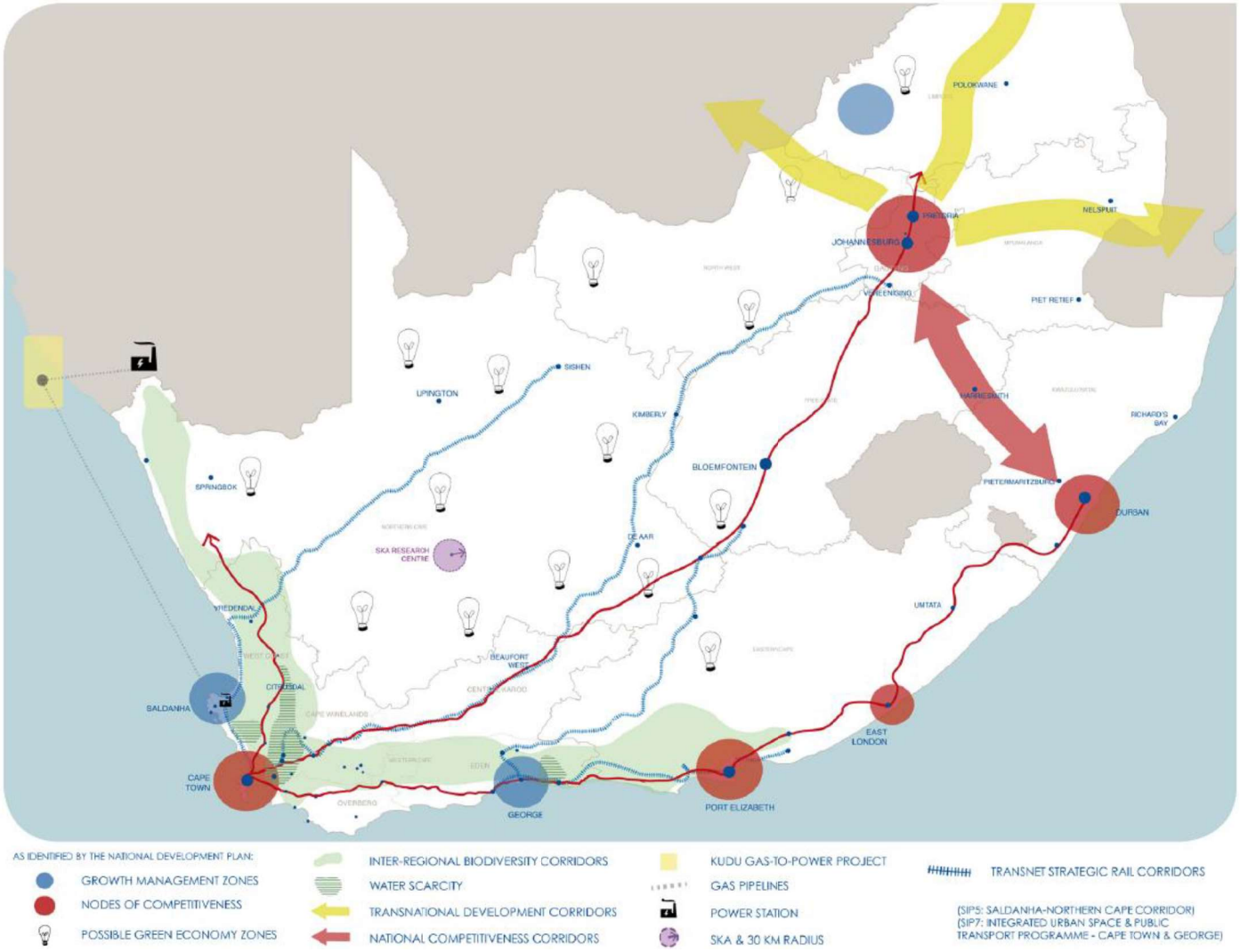


Figure Annexure A -3 Inter- and Intra- Provincial Spatial Initiatives based on NDP and other National Strategies (Enlarged)

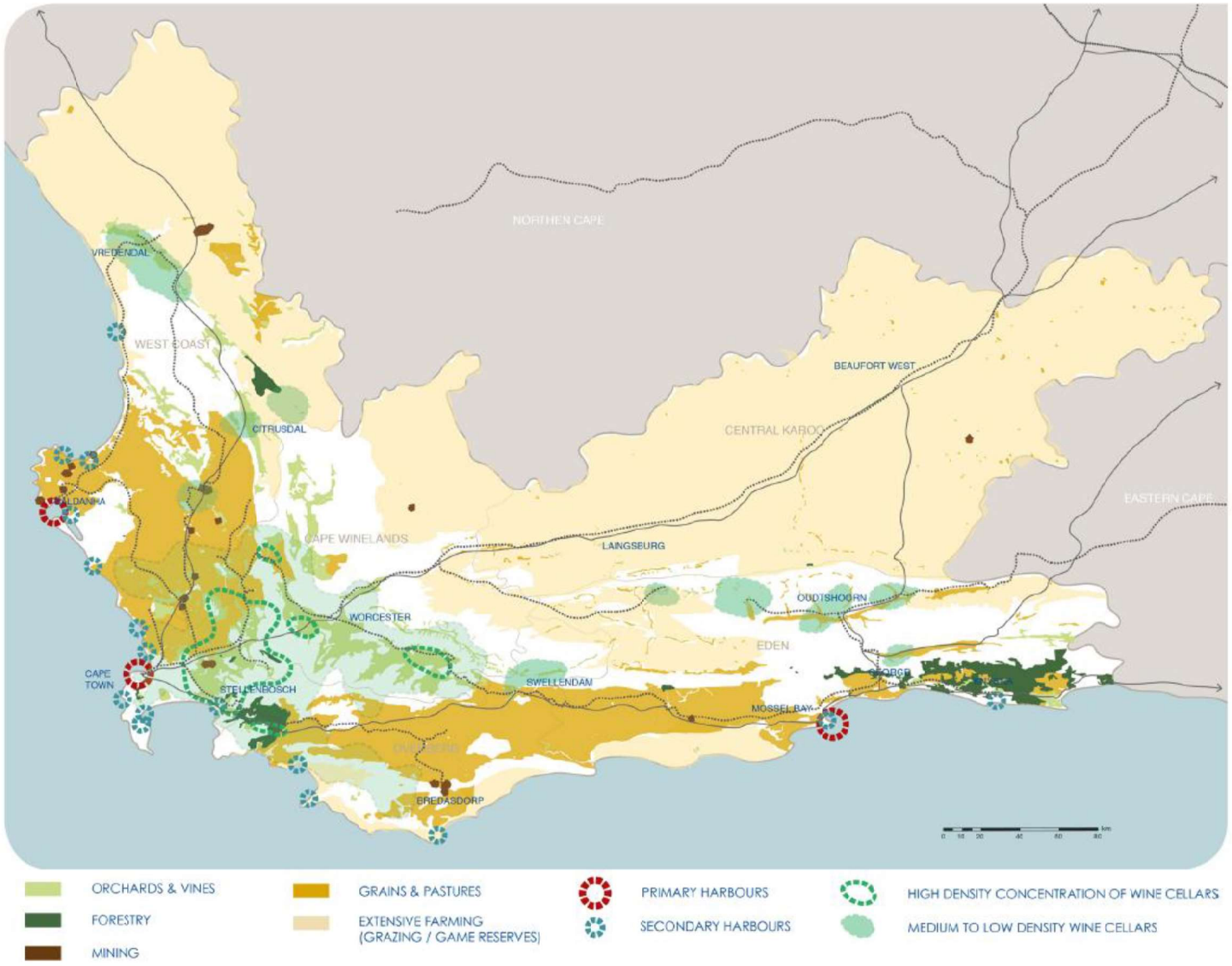


Figure Annexure A -4 Western Cape Province - Primary Sectors (Agriculture, Fishing, Forestry and Mining) (Enlarged)

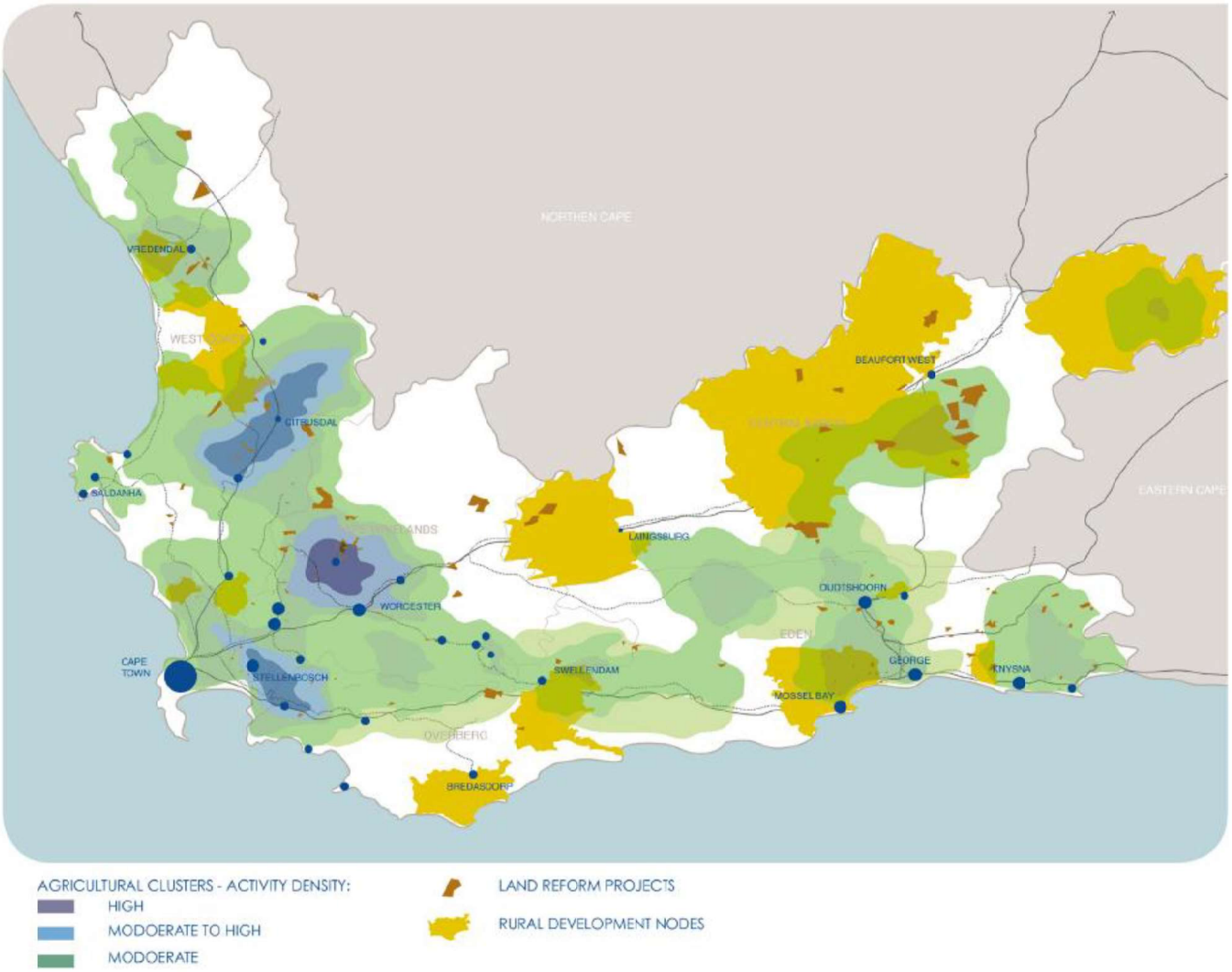


Figure Annexure A -5 Western Cape Province - Primary Sectors (Agriculture, Fishing, Forestry and Mining) (Enlarged)

Annexure B: School Bus Routes

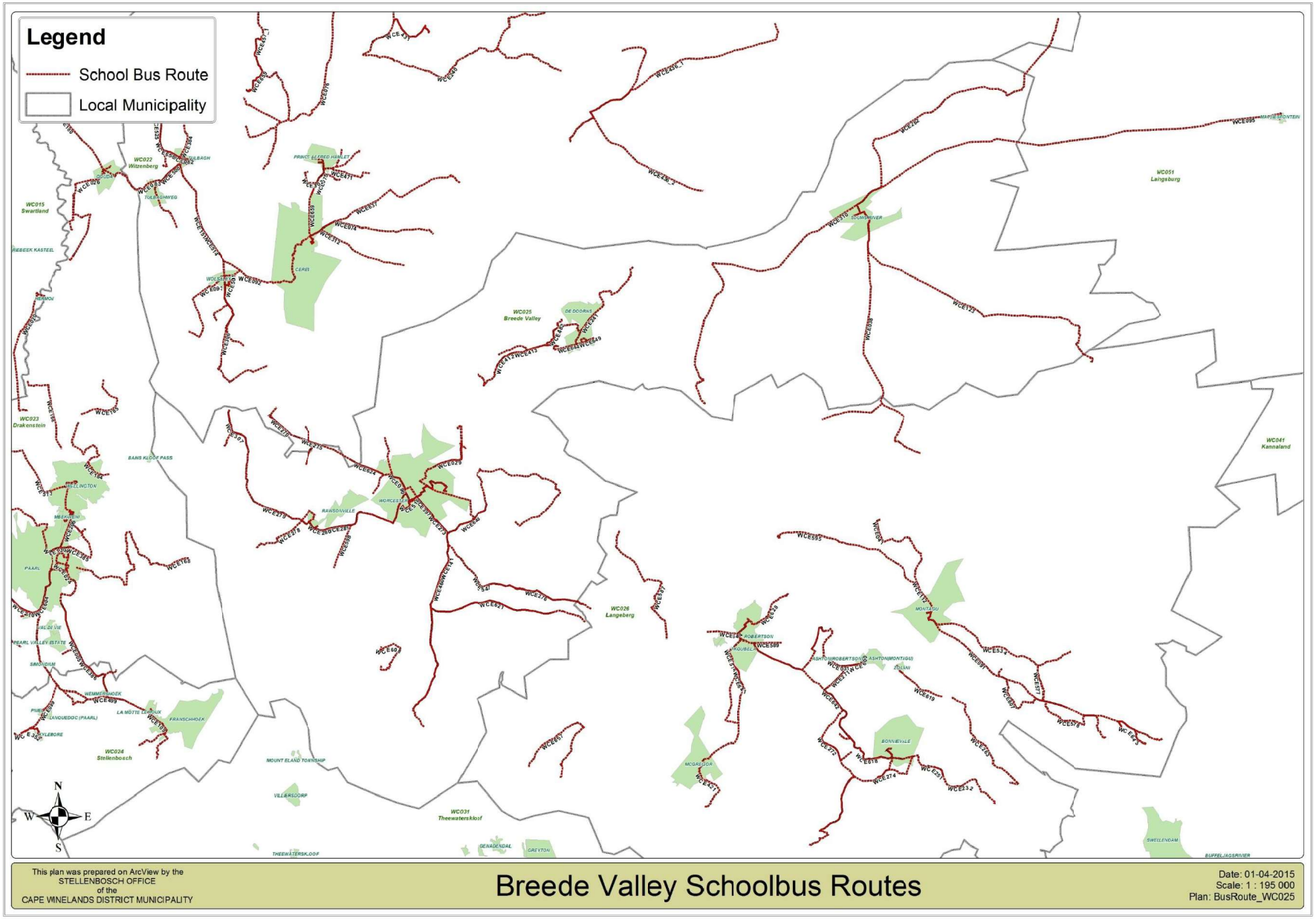


Figure Annexure B-1 Breede Valley School Bus Routes

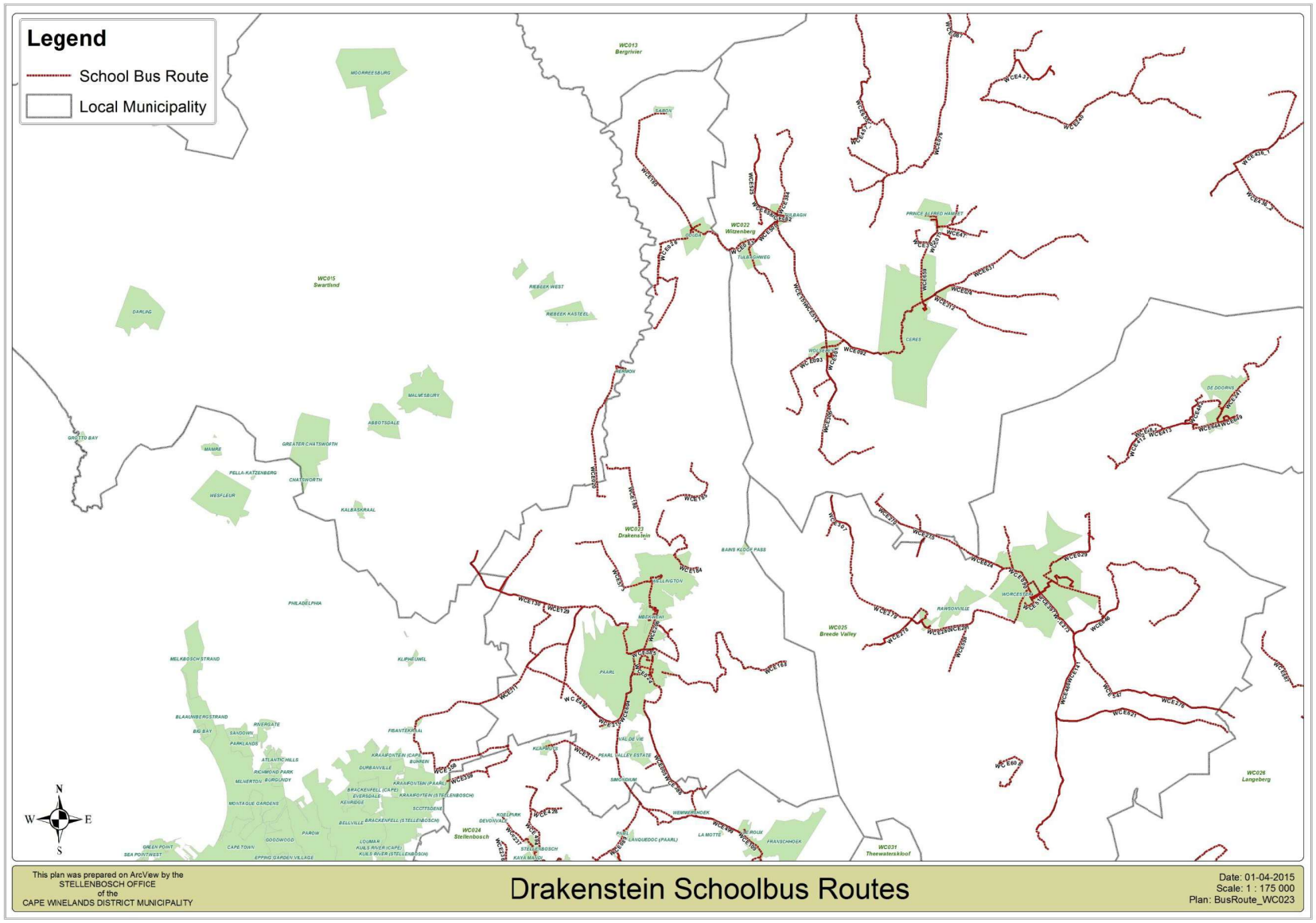


Figure Annexure B -2 Drakenstein School Bus Routes

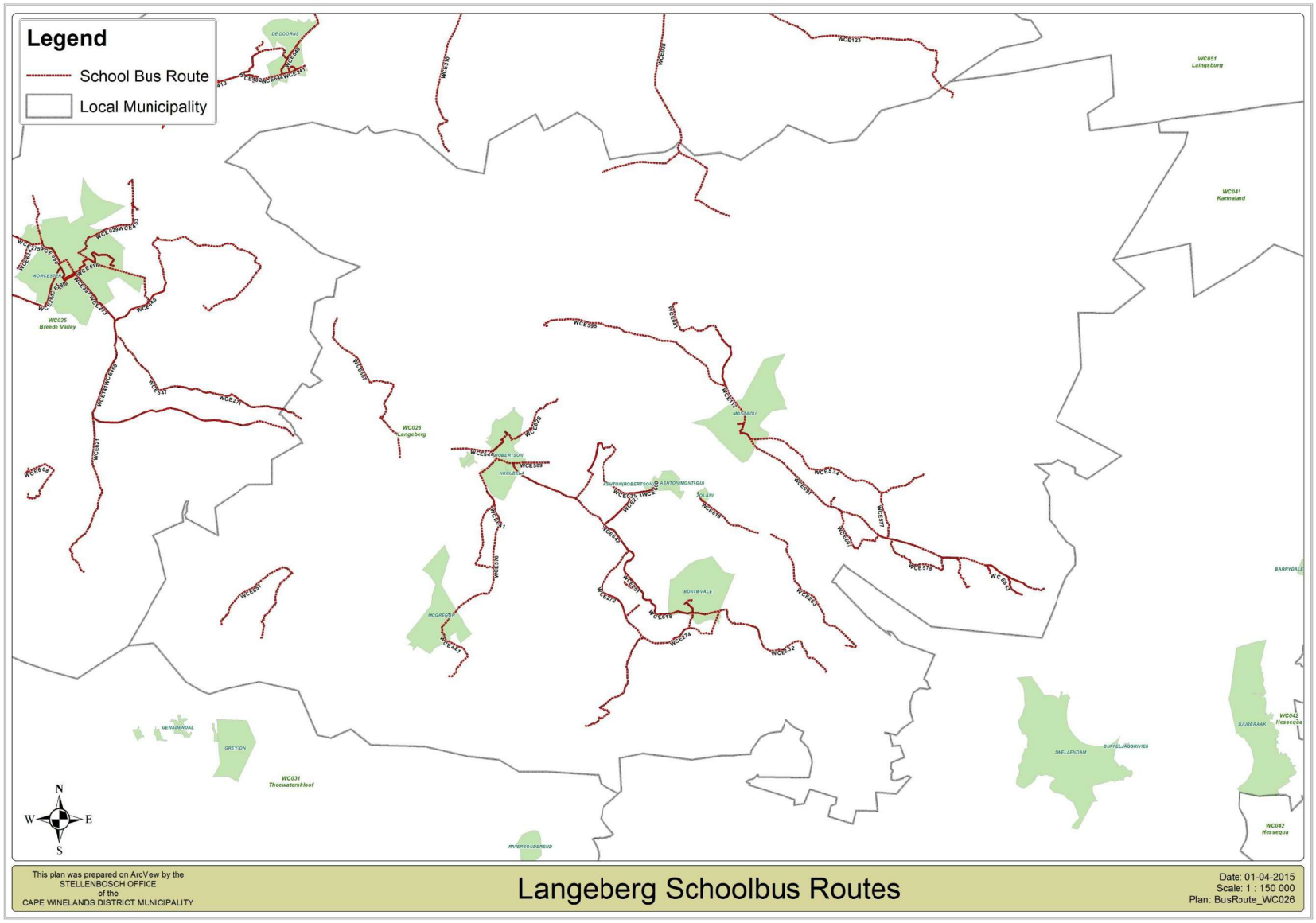


Figure Annexure B -3 Langeberg School Bus Routes

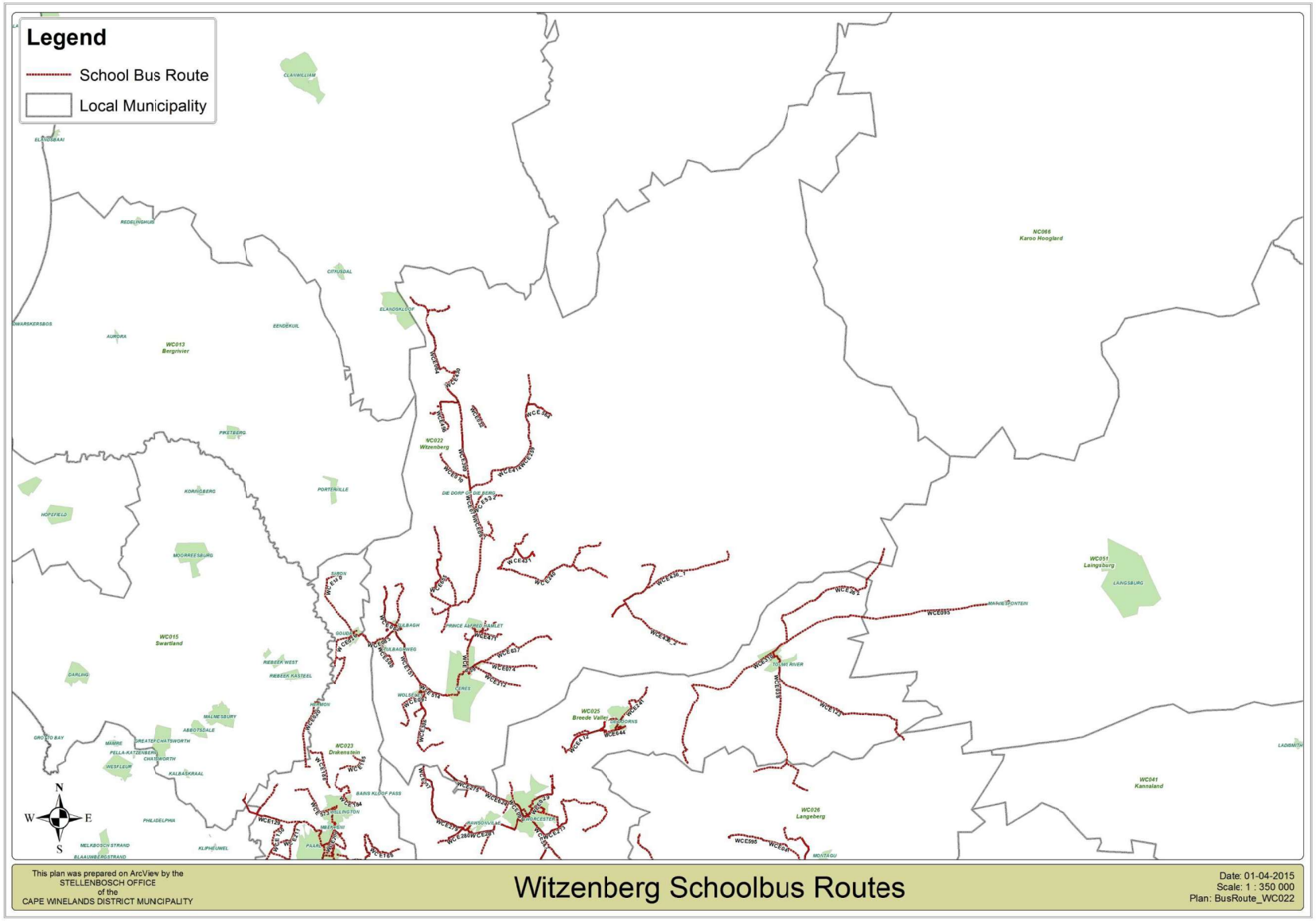


Figure Annexure B -4 Witzenberg School Bus Routes

Annexure C: Key Outcomes of Public Participation

Annexure D: Stakeholder Engagement Notes

Annexure E: Project Management Team Meeting Notes

Annexure F: Provincial Road Infrastructure MTEF Budget

Table Annexure F-1 WCG MTEF Budget for Rehabilitation/ Reconstruction: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch **Rehabilitation / Reconstruction programme**

Road	Dir	From km	To km	From	To	AADT	SNC	Rough IRI	Condition %	RCI %	Cracks % All/Wide	Commit	NPV Benefit	Rehabilitation/Reconstruction Cost (R'000) 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DR01050	P	0.00	6.00	Jct MR168 Lynedoch	Groene Rivier	6236	3.0	5.0	60	28	4 / 4		20 206 985		25 885								
DR01050	P	6.00	7.34	Jct MR168 Lynedoch	Groene Rivier	1168	2.7	5.6	65	38	0 / 0		3 210 449					4 330					
DR01053	P	7.60	7.68	Jct MR27 Welgegund	Jct MR27 Audacia	123	2.4	6.2	75	55	1 / 1		432 979	258									
DR01064	P	1.72	5.86	Jct V Riebeeck St Stellenbosch	Jonkershoek Forestry Reserve	1401	2.5	5.1	62	25	5 / 4		3 232 301			12 718							
DR01067	P	0.00	3.25	Jct. MR177 near Longlands	Stellenboschkloof	662	2.7	5.1	73	55	0 / 0		1 651 420				8 066						
DR01069	P	0.84	4.00	Jct Mun MR177 Stellenbosch	Bertram's Winery	2003	3.3	4.8	61	30	4 / 4		5 719 425				13 820						
DR01078	P	0.76	2.20	Jct Mun MR172 Stellenbosch	Rustenburg Bdy Cranford	2008	2.9	4.7	73	35	1 / 1		3 205 145					6 466					
DR01079	P	0.00	0.24	Jct MR172 Silvermyn	Jct DR1079 Kylemore	3387	3.9	4.1	91	87	0 / 0		4 646 458						1 453				
DR01085	P	0.00	3.47	Jct MR174 Koelenhof	Jct MR27 Kromme Rhee	3273	2.9	3.9	60	29	4 / 4		6 375 536					13 456					
DR01102	P	14.00	15.15	Jct MR217 near Oortmanspost	Jct Vissershok and Main Road	818	2.9	4.2	51	26	7 / 7		5 553 021			4 815							
DR01102	P	6.00	14.00	Jct MR217 near Oortmanspost	Jct Vissershok and Main Road	818	2.4	4.6	45	25	7 / 7		5 003 433					34 890					
DR01103	P	1.65	1.86	Jct. MR205 near Simonsvlei	Jct. MR189 Van Wyks River	604	3.3	3.8	38	25	7 / 7		1 232 916					727					
DR01108	P	2.00	6.82	Jct MR189 Van Wyks River	Jct MR27 Ruite Valley	1108	2.6	4.7	35	23	7 / 7		3 588 746				18 692						
DR01130	P	0.00	0.03	Jct DR1125 Schoone Oord	Jct DR1123 Vondeling	117	3.3	7.1	91	87	0 / 0		694 281				174						
DR01151	P	0.12	0.35	Jct TR23/2 Hermon	Hermon Railway Station	264	3.3	7.2	33	22	11 / 11		1 837 335									999	
DR01152	P	22.00	23.87	Jct TR23/2 Hermon	Wellington Municipal Boundary	1709	2.8	4.1	50	25	2 / 2		2 849 520					8 460					
DR01343	P	0.44	3.10	Jct Mun MR191 Franschhoek	Jct OP05621 Farm La Dauphine	1738	2.0	3.9	70	30	1 / 1		2 770 289								18 206		
DR01351	P	0.00	1.13	Jct MR191 Lamotte	Jct DR1343 Franschhoek	1558	2.9	4.7	49	25	7 / 7		2 585 842							6 828			
DR01437	P	0.00	0.10	Jct DR1435 Hex River	Access Hex River Station	529	3.3	5.9	88	89	0 / 0		2 482 087		387								
DR01486	P	0.00	0.45	Jct MR310 Wagen Drift	Jct De Keur St Op-Die-Berg	1571	2.1	3.9	68	30	2 / 2		2 006 519										4 344
MR00025	P	3.67	3.98	Jct Lady Grey St Paarl	Jct MR218 Noorder Paar	14066	2.9	3.3	89	71	0 / 0		23 748 464				1 991						
MR00166	P	0.11	2.00	Jct MR165 Firgrove Stn	Jct MR27 near Zandberg	2295	2.7	5.5	42	23	7 / 7		8 052 963		7 329								
MR00166	P	2.00	4.71	Jct MR165 Firgrove Stn	Jct MR27 near Zandberg	2331	3.3	4.0	72	36	1 / 1		4 148 282				17 402						
MR00172	P	0.05	1.25	Jct Mun MR27 Stellenbosch	Jct MR191 Groot Drakenstein	12797	4.5	1.8	51	25	11 / 11		3 096 445		13 332								
MR00189	P	22.00	24.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	1963	3.2	4.3	91	90	0 / 0		6 001 230			8 192							
MR00189	P	12.34	16.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	1174	2.4	5.5	30	20	11 / 11		6 697 650			19 144							

MR00189	P	24.00	26.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	2914	3.0	3.0	91	90	0 / 0		4 658 037				10 341						
MR00189	N	31.48	32.84	(31.48)...	...(32.84)	4383	2.6	9.9	92	90	0 / 0		31 513 359				11 647						
MR00189	P	26.00	32.84	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	3340	3.1	3.4	91	90	0 / 0		5 669 758					34 617					
MR00191	P	0.00	2.00	Jct MR189 Paarl	Jct MR279 Rust River	5535	3.5	3.6	52	23	7 / 7		9 635 656		12 247								
MR00191	P	2.00	10.00	Jct MR189 Paarl	Jct MR279 Rust River	6361	3.0	3.7	48	23	7 / 7		53 773 800		52 515								
MR00201	P	12.00	14.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	3720	2.7	7.2	46	22	4 / 4		33 686 649		9 048								
MR00201	P	6.00	12.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	3568	3.7	6.1	53	23	7 / 7		20 978 119		37 487								
MR00201	P	36.00	40.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	1328	2.7	3.0	53	26	4 / 4		1 188 422			17 306							
MR00201	P	14.00	20.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	875	2.7	8.4	67	61	0 / 0		4 381 744				19 390						
MR00201	P	46.10	50.23	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	8381	3.2	3.6	43	21	11 / 11		27 252 668					35 863					
MR00201	P	56.92	74.59	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	3666	3.3	3.2	86	87	0 / 0		4 935 199					115 321					
MR00210	P	0.00	0.87	Jct Langenhoven Rd & TR9/2	Entrance to Hugenot Stn	5175	3.2	3.1	92	90	0 / 0		5 574 187					8 303					
MR00218	P	0.00	4.00	Jct MR25 Noorder Paarl	Jct MR27 Bordjie Outspan	3670	3.3	4.1	34	23	12 / 11	Yes	49 406 483		32 000								
MR00218	P	4.00	5.56	Jct MR25 Noorder Paarl	Jct MR27 Bordjie Outspan	2647	3.0	4.7	42	24	7 / 7	Yes	18 712 944			10 000							
MR00220	P	2.00	4.00	Jct TR25/1 Paarlse Pont	Jct TR25/1 Good Hope	1164	2.6	4.0	48	23	4 / 4		2 710 102			7 168							
MR00220	P	0.00	2.00	Jct TR25/1 Paarlse Pont	Jct TR25/1 Good Hope	1003	2.4	4.5	46	23	4 / 4		2 640 153					7 168					
MR00222	P	1.41	1.58	Jct Mun MR23 Wellington	Jct MR220 Zanddrift	2340	3.3	6.8	77	55	0 / 0		10 413 057			659							
MR00282	P	18.00	19.03	Jct NR2/4 Stormsvlei	Jct MR287 Bonnievale	1743	3.2	2.9	62	24	4 / 4	Yes	3 431 429		1 600								
MR00287	P	30.71	32.00	Jct MR31 Robertson	Jct MR288 Drew	1778	4.4	5.0	49	26	4 / 4		4 866 951		4 623								
MR00287	P	26.00	30.03	Jct MR31 Robertson	Jct MR288 Drew	2360	4.2	5.2	48	25	4 / 4		6 979 025			20 897							
MR00287	P	16.00	18.00	Jct MR31 Robertson	Jct MR288 Drew	2064	2.2	4.9	62	24	5 / 4		7 818 069					8 192					
MR00287	P	14.00	16.00	Jct MR31 Robertson	Jct MR288 Drew	2683	2.7	4.2	57	25	4 / 4		7 860 350					9 216					
MR00287	P	18.00	22.00	Jct MR31 Robertson	Jct MR288 Drew	1237	2.5	4.9	58	25	4 / 4		3 970 867					14 336					
MR00287	P	22.00	26.00	Jct MR31 Robertson	Jct MR288 Drew	1366	2.9	4.9	50	23	11 / 11		4 269 554					18 097					
MR00291	P	6.00	8.99	Jct TR32/1 Stockwell Stn	Jct Mun MR287 Bonnievale	1293	3.0	4.5	48	24	7 / 7		3 440 589				13 527						
MR00298	P	0.00	2.00	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	5148	3.0	4.2	52	23	4 / 4		12 178 924		9 149								
MR00298	P	2.00	4.00	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	5208	3.2	4.8	55	25	4 / 4		14 800 031		11 978								

MR00302	P	0.00	24.59	Jct NR1/2 Hartebeest River	Jct MR201 Kleine Berg	3908	3.7	3.1	52	23	4 / 4	Yes	61 622 473	52 000									
MR00303	P	0.00	0.34	Jct NR1/3 De Doorns	Jct NR1/3 Buffelskraal	4408	4.5	3.7	91	87	0 / 0		7 998 442					2 637					
MR00305	P	3.53	6.96	Jct TR22/1 Goedgevonden	Jct MR201 La Plaisante	2472	4.6	3.6	51	22	7 / 7		5 368 156			27 648							
MR00306	P	0.36	0.72	Jct Mun MR305 Wolseley	Jct Mun MR307 Wolseley	1954	3.6	4.2	80	65	0 / 0		3 695 707					1 475					
MR00310	P	12.00	20.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	3145	2.7	3.2	51	33	4 / 4		5 910 303			66 328							
MR00310	P	38.00	44.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	1234	2.0	4.0	28	21	11 / 11		4 621 573				26 011						
MR00310	P	44.00	50.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	939	2.0	5.3	19	20	11 / 11		4 131 543					27 109					
MR00310	P	10.00	12.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	5151	2.6	2.5	92	93	0 / 0		6 676 419						12 178				
OP04232	P	0.00	0.55	Jct MR166 near Normandie	Jct OP4233 at Property 123/259	629	3.3	4.8	66	31	0 / 0		1 070 749				1 216						
OP04236	P	0.00	2.67	Jct MR27 Klein Heldeberg	Jct DR1021 Eendrag	2066	3.6	4.8	73	47	0 / 0		3 822 586					8 202					
OP05247	P	0.00	0.94	Jct MR205 near Babylonstoren	Boundary at Backsberg	840	3.3	7.2	64	28	1 / 1		6 458 150				2 427						
Total														**52258**	**217580**	**194874**	**144704**	**199380**	**160940**	**19006**	**18206**	**999**	**4344**

Table Annexue F -1 WCG MTEF Budget for Reseal: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch
Reseal
programme

Road	Dir	From km	To km	From	To	AADT	SNC	Rough IRI	Condition %	RCI %	Cracks % All/Wide	Commit	NPV Benefit	Reseal Cost (R'000)									
														2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DR01123	P	8.00	10.00	Jct TR25/1 Botter River Vallei	Jct MR174 Klipheuwel	564	3.0	2.8	68	46	1 / 1		244 794						3 438				
DR01154	P	3.85	3.91	Jct TR23/2 Sonquasdrift	Jct MR226 Riebeek Kasteel	284	3.3	3.4	73	68	0 / 0		515 839		57								
MR00023	P	1.64	4.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	6096	5.1	1.8	76	36	0 / 0		2 370 006		5 409							5 409	
MR00023	P	4.00	6.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	5701	5.0	1.8	84	38	1 / 0		2 235 742			4 202							4 202
MR00023	P	6.00	18.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	5024	4.7	1.8	84	53	0 / 0		1 626 943					26 358					
MR00023	P	18.00	20.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	3973	4.0	1.8	86	47	1 / 0		1 850 430			4 202							4 202
MR00023	P	20.00	22.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	3973	4.1	2.1	73	25	1 / 0		2 261 383		4 202							4 202	
MR00023	P	22.00	23.09	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	3973	4.6	2.1	83	63	0 / 0		1 482 339					2 498					
MR00165	P	8.47	8.99	Jct MR116 Faure I/C	Jct MR166 Firgrove	12819	3.9	2.7	71	39	0 / 0		12 879 494	993									
MR00172	P	2.49	8.00	Jct Mun MR27 Stellenbosch	Jct MR191 Groot Drakenstein	8590	4.2	1.9	86	73	0 / 0		1 356 719						17 509				
MR00172	P	8.00	15.76	Jct Mun MR27 Stellenbosch	Jct MR191 Groot Drakenstein	8137	4.2	2.3	89	80	0 / 0		7 917 162						16 350				
MR00187	P	4.72	8.00	Jct Mun MR179 Bellville	Jct MR174 Koelenhof	13105	4.8	1.0	91	82	0 / 0		972 831							7 518			
MR00187	P	8.00	12.00	Jct Mun MR179 Bellville	Jct MR174 Koelenhof	9756	4.8	1.1	92	86	0 / 0		758 473							9 168			
MR00187	P	12.00	14.71	Jct Mun MR179 Bellville	Jct MR174 Koelenhof	9703	4.8	1.3	91	78	0 / 0		1 035 343						6 211				
MR00189	P	16.00	18.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	1794	2.8	3.6	58	36	4 / 4		1 174 128		3 438							3 438	
MR00191	P	10.00	21.88	Jct MR189 Paarl	Jct MR279 Rust River	8847	3.9	1.3	82	49	0 / 0		2 339 188			25 724							25 724
MR00191	P	22.69	23.71	Jct MR189 Paarl	Jct MR279 Rust River	13476	3.2	1.3	61	31	4 / 4		3 762 372	2 143							2 143		
MR00191	P	26.02	28.00	Jct MR189 Paarl	Jct MR279 Rust River	2547	3.3	2.1	61	28	4 / 4		943 151		3 025							3 025	
MR00191	P	28.00	38.00	Jct MR189 Paarl	Jct MR279 Rust River	2252	2.9	1.7	78	54	0 / 0		565 896				13 370						
MR00191	P	38.00	41.95	Jct MR189 Paarl	Jct MR279 Rust River	1562	2.3	1.7	83	84	0 / 0		282 700							5 281			
MR00201	N	46.10	50.23	(46.10)... [56.92]...	...(50.23) ...[59.02]	8381	3.5	2.7	54	24	7 / 7		7 900 741	7 888									
MR00201	N	56.92	59.02	(46.10)... [56.92]...	...(50.23) ...[59.02]	8027	5.0	2.7	66	27	2 / 1		6 437 108		4 412								

MR00201	P	0.00	2.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	2208	4.8	2.9	71	24	2 / 1		1 003 057			3 820						3 820
MR00201	P	2.00	6.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	2208	4.4	2.8	72	25	2 / 2		895 708				7 640					
MR00201	P	40.00	42.70	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	1702	3.5	1.3	54	29	4 / 4		362 818	3 610							3 610	
MR00205	P	0.00	6.00	Jct MR27 Klapmuts	Jct MR191 Simondium	3675	2.9	3.0	83	59	0 / 0		5 559 129				8 022					
MR00205	P	6.00	8.62	Jct MR27 Klapmuts	Jct MR191 Simondium	3946	2.9	3.5	68	25	1 / 1		8 158 339		3 503							
MR00207	P	1.40	2.70	Jct Mun MR208 Paarl	Jct MR201 Vendome Firs	9654	3.7	3.3	65	25	2 / 2		12 087 774		2 235							
MR00213	P	10.79	20.88	Jct MR188 Lichtenburg	Jct MR27 Bellview	2659	3.4	2.3	89	88	0 / 0		582 102							19 272		
MR00287	P	2.69	4.00	Jct MR31 Robertson	Jct MR288 Drew	3047	3.6	2.8	86	84	0 / 0		746 596							2 252		
MR00287	P	4.00	6.00	Jct MR31 Robertson	Jct MR288 Drew	3047	3.2	2.3	86	63	0 / 0		958 157					3 820				
MR00287	P	6.00	14.00	Jct MR31 Robertson	Jct MR288 Drew	2826	3.7	2.6	85	69	0 / 0		975 310					15 280				
MR00288	P	14.00	16.34	Jct TR32/1 Jan Harmansgat	Jct MR282 Bonnievale	550	2.9	2.4	71	30	1 / 1		127 187						3 129			
MR00289	P	16.00	18.54	Jct MR287 Goudmyn	Jct MR282 Bonnievale	800	3.2	3.0	80	42	1 / 1		269 811					2 911				
MR00290	P	0.25	4.00	Jct Mun MR31 Robertson	Jct Smit St & DR1334 McGregor	1828	3.5	3.5	69	26	0 / 0		999 243			4 632						4 632
MR00290	P	4.00	6.00	Jct Mun MR31 Robertson	Jct Smit St & DR1334 McGregor	1126	3.4	3.4	60	25	4 / 4		592 508		2 292						2 292	
MR00290	P	16.00	18.50	Jct Mun MR31 Robertson	Jct Smit St & DR1334 McGregor	1014	3.1	3.7	78	34	1 / 1		491 416		2 865						2 865	
MR00298	P	4.00	14.50	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	4824	3.6	2.5	79	47	0 / 0		1 692 947			23 684						23 684
MR00298	P	20.45	20.70	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	713	2.9	2.7	65	25	1 / 1		251 606		334							
MR00299	P	0.00	4.00	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	749	3.7	2.5	83	45	1 / 0		164 292							6 112		
MR00299	P	4.00	5.13	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	652	3.2	3.5	77	30	1 / 1		397 981			1 511						1 511
MR00299	P	8.45	9.85	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	423	3.3	2.8	64	24	3 / 3		119 962				1 872					
MR00307	P	0.00	1.23	Jct TR22/1 Waverley	Jct Mun MR305 Wolseley	1874	3.4	3.5	56	24	1 / 1		1 037 419		1 645						1 645	
MR00310	P	1.91	6.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	8274	2.2	2.6	58	23	4 / 4		19 356 894	9 374								
MR00310	P	6.00	8.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	5969	2.4	3.0	69	24	0 / 0		10 799 693		4 584							
MR00310	P	8.00	10.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	5466	2.4	3.2	54	21	5 / 4		11 247 869	4 202								
DR01168	P	0.00	4.86	Jct TR23/3 Halfmanshof	De Hoek Estates	357	3.9	3.3	56	27	5 / 4		173 658				6 498					
MR00310	P	52.00	58.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	800	2.0	2.6	56	29	1 / 1		456 202		8 022							
MR00310	P	66.00	68.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	266	3.1	2.2	70	35	1 / 1		54 002							3 438		
MR00312	P	0.00	4.70	Jct TR22/1 Leeuw River	Jct DR1471 Oude Drostdy	1432	3.9	3.2	59	29	1 / 1		881 803		6 284						6 284	

MR00313	P	0.40	4.89	Jct Mun MR312 Tulbagh	Tulbagh Weg Rly Stn	1574	4.4	2.7	84	56	1 / 0		348 163							10 291			
OP04234	P	0.00	1.16	Jct DR1039 & OP4233 Raithby	Bdy of Pty 502 near Tertia	673	3.3	2.0	80	69	0 / 0		71 093					1 108					
OP05226	P	0.00	0.22	Jct MR172 near Walcarmas	On Property 116/1 Glen Arum	65	3.3	2.3	69	30	1 / 1		12 677							252			
OP05255	P	0.00	1.41	Jct MR201 Loewenstein	De Hoop 838 Bdy Iolille	1303	3.7	2.1	85	81	0 / 0		194 103							2 424			
OP05620	P	0.00	1.94	Jct DR1343 near Bourgogne	Farm Boundary near Hillside	499	2.2	3.8	55	24	4 / 4		260 685		2 594							2 594	
OP05729	P	0.00	0.23	Jct OP5728 Carpe Diem	Protea	97	3.3	2.3	56	25	5 / 4		27 175				264						
OP05883	P	5.25	5.56	Jct DR1452 on Klipfontein	Pty 393 & 426 Welvaart Bdy	147	3.3	2.9	69	37	1 / 1		64 869						296				
DR01021	P	1.55	3.55	Jct Old Stellenbosch Rd S/West	Jct MR166 Firgrove Stn	4254	3.3	3.0	76	50	0 / 0		3 304 365		2 292								
DR01052	P	0.00	4.44	Jct MR168 Welmoed Estate	Jct OP05208 Veelverjaagt	1853	2.8	3.4	56	27	1 / 1		955 718		6 784							6 784	
DR01053	P	0.81	4.20	Jct MR27 Welgegund	Jct MR27 Audacia	2718	3.0	2.0	85	84	0 / 0		387 837							5 827			
DR01056	P	0.00	1.32	Jct MR27 Jamestown	Boundary of Jamestown	3251	3.7	3.8	76	41	4 / 4		1 761 237		3 278							3 278	
DR01069	P	4.00	5.76	Jct Mun MR177 Stellenbosch	Bertram's Winery	1022	3.7	3.7	73	39	1 / 1		646 430		2 017							2 017	
DR01334	P	0.00	0.19	Jct Smit St & MR290 McGregor	Rietvallei Boundary	365	3.3	3.3	79	73	1 / 1		212 143				254						
DR01358	P	0.00	4.05	Jct TR31/2 Kraalbosch Vlakte	Jct MR287 Spes Bona	676	3.4	3.4	75	37	1 / 1		320 207				4 641						
DR01359	P	0.00	3.00	Jct DR1358 Rouxvale	Jct DR1365 Sandvliet	284	2.7	2.6	72	31	1 / 1		47 799							4 011			
DR01363	P	0.00	2.84	Jct TR31/2 Riet Valley	Jct MR287 Goedemoed	464	4.2	2.8	84	74	0 / 0		89 781							3 255			
DR01379	P	8.26	8.59	Jct TR30/2 Reiersrus	Jct DR1375 Scherpenheuwel	374	2.6	3.8	69	35	4 / 4		298 061		378							378	
DR01380	P	7.11	7.79	Jct TR31/1 De Norree	Jct DR1379 Moordkuil	177	3.3	2.6	77	53	1 / 1		33 723								909		
DR01385	P	0.88	2.44	Jct DR1118 & MR210 Drakenstein	Jct OP05631 Lot C Keerweder	870	3.0	2.8	78	68	0 / 0		166 695							1 788			
DR01388	P	0.00	3.12	Jct DR1118 Rem Languedoc	Jct DR1119 Eikerus	1411	2.9	3.5	48	26	8 / 7		958 841	4 171							4 171		
DR01389	P	0.00	2.00	Jct MR298 Boontjies River	Jct DR1386 Daschbosch River	522	2.8	2.6	75	32	1 / 1		119 418						2 674				
DR01090	P	4.00	6.73	Jct MR27 Klapmuts	Jct DR1098 Hoopenberg	943	2.5	3.2	61	23	1 / 1		313 283			4 171							
DR01389	P	2.00	4.03	Jct MR298 Boontjies River	Jct DR1386 Daschbosch River	403	2.6	2.5	78	33	1 / 0		66 680							2 714			
DR01390	P	4.00	6.93	Jct MR298 Pokkraal	Brandvlei Prison	703	5.0	2.1	81	46	1 / 1		107 230						5 037				
DR01394	P	10.00	11.37	Jct TR30/2 Aan de Doorns	Jct DR1400 Efatta	470	2.7	2.7	79	31	0 / 0		178 063						1 570				
DR01398	P	0.00	4.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	2516	3.7	2.6	66	33	4 / 4		1 125 186		7 640							7 640	
DR01398	P	4.00	8.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	1046	3.0	2.7	64	29	0 / 0		289 506			5 348							

DR01398	P	8.00	12.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	845	3.1	3.5	52	21	5 / 5		387 973		4 966								
DR01398	P	12.00	14.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	845	3.8	2.3	71	30	1 / 1		169 899					3 438					
DR01399	P	0.97	1.67	Jct MR298 Klipdrift	Jct V.Riebeeck St Rawsonville	475	3.0	2.9	76	36	1 / 0		104 708						802				
DR01400	P	18.00	20.00	Jct TR31/1 Nuy Station	Jct NR1/3 De Wet Station	504	2.8	3.1	68	28	1 / 1		202 659			2 292							
DR01409	P	0.00	0.49	Jct MR201 Mount Breeze	Jct DR1413 Groenfontein	575	3.6	3.0	76	27	2 / 2		170 861					655					
DR01416	P	1.80	5.63	Jct NR1/2 Worcester	Jct OP05706 Hartebeest River	467	3.1	3.3	65	42	1 / 1		131 172				4 701						
DR01426	P	2.00	4.33	Jct NR1/3 Glen Heatlie	Jct DR1400 De Wet	330	3.8	2.8	75	76	1 / 1		63 401						4 005				
DR01440	P	0.00	0.26	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	1898	3.3	3.7	71	38	0 / 0		2 989 815		397								
DR01447	P	0.00	7.85		Jct OP05848 Ezelsfontein	906	2.6	2.6	74	36	0 / 0		294 246					11 259					
DR01452	P	4.00	10.00	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	432	3.5	2.8	77	64	0 / 0		109 382						8 022				
DR01458	P	6.00	8.00	Jct TR22/2 Rhodona	Jct MR310 Prince Alfred Hamlet	508	3.3	2.5	81	52	1 / 1		109 995						2 674				
DR01458	P	8.00	10.92	Jct TR22/2 Rhodona	Jct MR310 Prince Alfred Hamlet	652	2.7	2.5	63	25	3 / 2		172 008			3 904							
DR01468	P	0.00	4.00	Jct MR310 Koelefontein	Jct OP05873 Doornkraal Rd	581	2.7	2.6	65	31	0 / 0		177 615				4 584						
DR01468	P	4.00	6.00	Jct MR310 Koelefontein	Jct OP05873 Doornkraal Rd	546	2.8	2.8	61	38	1 / 1		246 899				2 292						
DR01471	P	0.00	5.43	Jct DR1459 Die Heuwel	Jct DR1477 Bloubank	529	3.1	2.9	71	40	0 / 0		146 315						6 605				
DR01108	P	0.00	2.00	Jct MR189 Van Wyks River	Jct MR27 Ruite Valley	1541	3.5	3.1	49	25	4 / 4		863 107		2 674							2 674	
DR01110	P	0.78	4.80	Jct Mun MR209 Paarl	MR201 Wateruintjies Vlei	1258	3.7	2.9	79	40	1 / 1		480 326					7 678					
DR01114	P	0.00	1.70	Jct. MR201 near Paris Oaks	Jct. DR1110 Paarl	2801	3.9	2.8	68	37	0 / 0		1 147 763		2 273							2 273	
DR01118	P	1.05	4.00	Jct Mun MR201 Daljosafat	Jct MR210 Palmietvlei	1876	3.6	3.4	71	34	1 / 0		893 288			3 944							3 944
DR01118	P	4.00	6.31	Jct Mun MR201 Daljosafat	Jct MR210 Palmietvlei	2990	3.6	3.5	60	26	4 / 4		2 427 196	3 088							3 088		
		Total												**35471**	**87600**	**87434**	**54137**	**75006**	**66294**	**95630**	**13922**	**56798**	**71719**

Table Annexue F -2 WCG MTEF Budget for Upgrade to Paved Standard: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch

Upgrade to paved standards

Road	Dir	From km	To km	From	To	District	AADT	Gravel mm	Commit	NPV Benefit	Upgrade to pave standards: Cost (R'000) 2014	2015	2016	2017	2018
DR01374	P	0.47	1.32	Keerom St Robertson	Willemnels Riv CW Lange Valley	DM : Cape Winelands	569	15		######	5 865				
DR01440	P	0.26	2.09	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	DM : Cape Winelands	1024	15		######	12 627				
DR01090	P	6.73	6.78	Jct MR27 Klapmuts	Jct DR1098 Hoopenberg	DM : Cape Winelands	424	20		7 943 182		345			
DR01053	P	4.20	7.60	Jct MR27 Welgegund	Jct MR27 Audacia	DM : Cape Winelands	1004	90		######		23 460			
DR01385	P	2.44	3.80	Jct DR1118 & MR210 Drakenstein	Jct OP05631 Lot C Keerweder	DM : Cape Winelands	529	0		8 185 567			9 384		
DR01129	P	2.82	4.76	Jct MR23 Olyvenhout	Jct DR1152 Groenberg	DM : Cape Winelands	513	0		7 728 898			13 386		
DR01351	P	1.13	5.26	Jct MR191 Lamotte	Jct DR1343 Franschhoek	DM : Cape Winelands	723	75		7 426 054			28 497		
DR01413	P	6.59	8.39	Jct DR1152 Olifantskop	Jct OP05643 West Bdy Welvanpas	DM : Cape Winelands	508	7		5 380 917				12 420	
DR01094	P	0.00	1.92	Jct MR174 Cross Roads	Jct DR1097 Kraaifontein	DM : Cape Winelands	484	33		######				13 248	
DR01449	P	0.78	11.12	Jct TR22/2 eNduli	Jct OP5854 & OP5855 Swaarmoed	DM : Cape Winelands	537	12		######				71 346	
DR01104	P	0.00	1.72	Jct MR189 Klapmuts	Jct OP5241 Klapmuts Outspan	DM : Cape Winelands	432	50		7 133 779					11 868
DR01124	P	0.17	1.95	Jct MR201 Vlakplaas	Jct DR1119 Eikerus	DM : Cape Winelands	457	35		5 208 442					12 282
DR01123	P	12.28	22.00	Jct TR25/1 Botter River Vallei	Jct MR174 Klipheuwel	DM : Cape Winelands	517	24		######					67 068
										TOTALS	**18 492**	**25 820**	**53 283**	**99 031**	**93 236**

Table Annexue F -3 WCG MTEF Budget for Regravel: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch
Regravel
programme

Road	Dir	From km	To km	From	To	AADT	GravelThckness mm	Surface Type	Commit	NPV Benefit	Regravel Cost (R'000)									
											2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DR01121	P	0.00	5.00	Jct DR1126 Bordje Outspan	Jct OP05244 Middelburg	154	12	Gravel		3 894 251		1 650							1 650	
DR01122	P	0.47	4.84	Jct MR27 Hoogstede	Jct DR1126 Langerug	184	17	Gravel		9 312 488		1 442					1 442			
DR01128	P	0.00	2.00	Jct. DR1125 Paarl	Klip Valley	122	0	Gravel		2 539 523			660							660
DR01128	P	2.00	3.00	Jct. DR1125 Paarl	Klip Valley	72	16	Gravel		1 171 639									330	
DR01130	P	0.03	3.23	Jct DR1125 Schoone Oord	Jct DR1123 Vondeling	117	14	Gravel		3 357 401				1 056						
DR01133	P	0.11	1.70	Jct MR23 Soetendal	Jct DR1152 Olifantskop	178	0	Gravel		3 811 809				525				525		
DR01135	P	0.00	3.20	Jct MR23 Malan Stn	Jct DR1152 Driefontein	256	0	Gravel		6 187 945	1 056						1 056			
DR01151	P	0.00	0.12	Jct TR23/2 Hermon	Hermon Railway Station	264	0	Gravel		12 649 077	40						40			
DR01151	P	0.35	0.54	Jct TR23/2 Hermon	Hermon Railway Station	264	0	Gravel		12 649 077	63						63			
DR01152	P	0.02	5.00	Jct TR23/2 Hermon	Wellington Municipal Boundary	147	0	Gravel		3 956 943		1 643							1 643	
DR01152	P	5.00	8.58	Jct TR23/2 Hermon	Wellington Municipal Boundary	80	0	Gravel		1 463 176									1 181	
DR02244	P	25.68	35.37	Jct MR316 Beukes Fontein	Jct DR1487 Houd Den Bek	72	0	Gravel		1 458 432						3 198				
DR02245	P	0.00	4.00	Jct MR310 Dissel Fontein	Jct OP08001 Tweefontein	140	19	Gravel		3 571 241			1 320							1 320
DR02245	P	4.00	5.54	Jct MR310 Dissel Fontein	Jct OP08001 Tweefontein	82	29	Gravel		1 878 248							508			
DR01154	P	0.79	3.85	Jct TR23/2 Sonquasdrift	Jct MR226 Riebeek Kasteel	284	0	Gravel		7 000 997	1 010						1 010			
DR01154	P	3.91	4.32	Jct TR23/2 Sonquasdrift	Jct MR226 Riebeek Kasteel	284	0	Gravel		7 000 997	135						135			
DR01161	P	33.26	38.40	Jct NR 7/3 Moorreesburg	Jct TR23/3 Skoenmakersfontein	179	0	Gravel		5 857 740				1 696				1 696		
MR00294	P	1.59	25.00	Jct TR31/3 Montagu	Jct MR315 Witvlakte	89	0	Gravel		1 342 813								7 725		
MR00299	P	5.13	8.45	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	243	64	Gravel		5 789 028			1 096						1 096	
MR00310	P	84.45	94.57	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	102	17	Gravel		2 634 941					3 340					
MR00316	P	0.26	2.50	Jct TR22/2 Riet Valley	Northern Cape Boundary	199	0	Gravel		6 149 192		739				739				
MR00316	P	3.95	5.86	Jct TR22/2 Riet Valley	Northern Cape Boundary	150	0	Gravel		4 729 210				630						630
MR00316	P	5.86	45.00	Jct TR22/2 Riet Valley	Northern Cape Boundary	64	9	Gravel		1 527 474						12 916				

MR00316	P	45.00	93.51	Jct TR22/2 Riet Valley	Northern Cape Boundary	41	35	Gravel		-						16 008				
MR00319	P	100.00	107.00	Northern Cape Boundary	Jct MR316 Karoo Poort	66	50	Gravel		3 162 008							2 310			
OP05618	P	0.98	1.11	Jct DR1343 Hugenote Monument	Boundary of Farm near Kismet	34	0	Gravel		-					43					
OP05643	P	0.00	0.68	Jct DR1413 at Western Boundary	Ptn Boundary on Welvanpas	90	0	Earth		1 729 693					224					
OP05653	P	0.00	3.82	Jct OP5648 near Frisgewaagd	Road over Railway Line	75	0	Earth		1 740 949								1 261		
OP05691	P	0.00	6.25	Jct MR299 at Wyzersdrift Bdy	Boundary of Farm 390/3 & 390/4	79	37	Gravel		1 224 492										2 063
OP05696	P	1.07	2.24	Jct TR9/2 on Die Mond van Hart	Jct MR302 near Chavonnes	185	61	Gravel		4 894 689				386						386
OP05839	P	0.00	1.10	Jct DR1462 near Kruisvallei	Meulstroom & Dennelaan Boundar	75	0	Gravel		1 683 778				363						
OP05883	P	0.00	4.96	Jct DR1452 on Klipfontein	Pty 393 & 426 Welvaart Bdy	66	0	Gravel		1 081 224								1 637		
OP05883	P	5.03	5.25	Jct DR1452 on Klipfontein	Pty 393 & 426 Welvaart Bdy	66	0	Gravel		1 213 955					73					
DR01043	P	0.00	1.35	Jct. MR27 nr Mietjiesvlei	Eikendal	347	78	Gravel		8 141 839				446						446
DR01325	P	20.38	22.31	Jct TR32/1 Swellendam	Jct MR288 & MR287 Drew	74	0	Gravel		1 608 296							637			
DR01330	P	0.00	2.52	Jct MR288 Drew	Jct OP06009 Wagenboomsheuwel	255	0	Gravel		5 672 869		832					832			
DR01333	P	0.00	4.54	Jct TR32/1 Joubertsdal	Jct DR1325 Bruintjies River	73	0	Gravel		1 254 174						1 498				
DR01334	P	0.19	11.20	Jct Smit St & MR290 McGregor	Rietvallei Boundary	365	0	Gravel		6 458 185	3 633				3 633					
DR01337	P	0.00	7.00	Jct DR1342 Wandsbeck	Poesjenels River Farm	145	0	Gravel		2 498 291				2 310						2 310
DR01337	P	7.00	9.88	Jct DR1342 Wandsbeck	Poesjenels River Farm	71	0	Gravel		979 035									950	
DR01339	P	6.63	25.00	Jct MR289 Langverwacht	Jct MR290 McGregor	112	0	Gravel		1 940 193					6 062					
DR01339	P	25.00	28.99	Jct MR289 Langverwacht	Jct MR290 McGregor	160	0	Gravel		2 195 286				1 317						1 317
DR01340	P	0.00	5.00	Jct MR289 Wakkerstroom	Jct DR1332 Steenboks Vlakte	76	0	Gravel		1 634 792								1 650		
DR01342	P	20.15	25.62	Jct MR290 Victoria Bridge	Rietvlei Boundary	100	0	Gravel		1 795 128				1 805						
DR01346	P	0.00	5.00	Jct TR32/1 Boesmanspad	Jct MR287 Bonnievale	108	0	Gravel		2 652 966			1 650							
DR01346	P	5.00	8.02	Jct TR32/1 Boesmanspad	Jct MR287 Bonnievale	197	0	Gravel		4 345 695		997					997			
DR01347	P	1.23	5.00	Jct TR30/2 Ratelfontein	Jct TR30/2 Moordkuil	129	0	Gravel		2 769 938				1 244						1 244
DR01347	P	13.18	13.21	Jct TR30/2 Ratelfontein	Jct TR30/2 Moordkuil	60	48	Gravel		1 331 586			10							10
DR01347	P	13.21	18.51	Jct TR30/2 Ratelfontein	Jct TR30/2 Moordkuil	162	45	Gravel		3 568 770				1 749						1 749
DR01080	P	0.00	1.76	Jct MR187 Bottelary	Eikenhof	278	34	Gravel		5 294 908		581						581		
DR01348	P	0.00	2.22	Jct MR287 Wolvendrift	Jct MR287 Concordia	81	0	Gravel		1 815 875							733			

DR01353	P	0.00	5.00	Jct MR290 Rem Uitnood	Jct MR290 Almond Grove	101	0	Gravel		2 315 114					1 650					
DR01080	P	1.76	2.64	Jct MR187 Bottelary	Eikenhof	166	33	Gravel		3 351 085			290						290	
DR01355	P	5.11	6.20	Jct DR1342 Le Chasseur	Le Chasseur Boundary	70	0	Gravel		1 268 621								360		
DR01356	P	0.00	5.00	Jct TR31/3 Locarno	Jct MR294 Montagu	83	2	Gravel		1 333 067								1 650		
DR01356	P	5.00	13.06	Jct TR31/3 Locarno	Jct MR294 Montagu	142	0	Gravel		2 848 354				2 660						2 660
DR01080	P	2.64	3.33	Jct MR187 Bottelary	Eikenhof	90	56	Gravel		1 769 930					228					
DR01360	P	0.00	14.75	Jct DR1355 La Chasseur	Jct DR1375 Roode Kleygat	82	0	Gravel		2 046 937									4 868	
DR01364	P	4.33	6.03	Jct TR31/1 Goree's Hoogte	Jct OP5919 & OP5917 Riverside	231	0	Gravel		5 695 255	561					561				
DR01364	P	6.24	10.44	Jct TR31/1 Goree's Hoogte	Jct OP5919 & OP5917 Riverside	139	0	Gravel		3 452 184				1 386						1 386
DR01366	P	0.00	3.35	Jct TR31/2 Riet Valley	Jct OP6034 Klein Klaasvoogdsri	305	0	Gravel		6 915 109	1 106				1 106					
DR01366	P	3.35	4.66	Jct TR31/2 Riet Valley	Jct OP6034 Klein Klaasvoogdsri	115	0	Gravel		4 594 944			432							432
DR01369	P	0.00	0.98	Jct TR31/2 Riet Valley	Jct OP05945 Klaasvoogdsriver	308	0	Gravel		5 490 272	323				323					
DR01369	P	1.03	3.07	Jct TR31/2 Riet Valley	Jct OP05945 Klaasvoogdsriver	308	0	Gravel		5 490 272	673				673					
DR01369	P	3.07	4.26	Jct TR31/2 Riet Valley	Jct OP05945 Klaasvoogdsriver	90	0	Gravel		1 303 698				393						
DR01083	P	0.59	1.40	Jct MR174 Koelenhof Prison	Jct DR1085 Koelenhof Farm	300	61	Gravel		6 305 934			267							267
DR01372	P	7.33	8.10	Jct Unknown St Robertson	Orange Grove	98	0	Gravel		1 513 641					254					
DR01374	P	1.32	4.00	Keerom St Robertson	Willemnels Riv CW Lange Valley	95	0	Gravel		1 621 661					884					
DR01375	P	0.00	4.96	Jct DR1347 Moordkuil	Jct OP05676 Roode Kleygat	246	15	Gravel		5 962 099		1 637					1 637			
DR01376	P	0.00	1.94	Jct MR294 Helpmekaar	Jct DR1382 Knipe's Hope	64	6	Gravel		1 846 238							640			
DR01377	P	1.68	4.02	Jct TR31/1 De Noree	Jct DR1400 Klopperbosch	63	2	Gravel		1 268 560								772		
DR01377	P	4.02	20.18	Jct TR31/1 De Noree	Jct DR1400 Klopperbosch	133	0	Gravel		3 321 162				5 333						5 333
DR01378	P	0.00	2.39	Jct DR1374 Lange Valley	Jct OP05940 Farm Keur Kloof	102	0	Gravel		2 915 828					789					
DR01379	P	7.41	8.26	Jct TR30/2 Reiersrus	Jct DR1375 Scherpenheuwel	374	0	Gravel		6 997 702	281				281					
DR01380	P	0.00	7.11	Jct TR31/1 De Norree	Jct DR1379 Moordkuil	177	36	Gravel		4 696 545			2 346					2 346		
DR01380	P	7.79	21.03	Jct TR31/1 De Norree	Jct DR1379 Moordkuil	177	41	Gravel		4 696 545			4 369					4 369		
DR01382	P	2.55	8.71	Jct Mun MR295 Montagu	Jct OP6106 & OP6107 Rietvlei 2	134	0	Gravel		3 640 047				2 033						2 033
DR01383	P	2.07	3.32	Jct DR1377 De Norree	Jct OP5929 SW Bdy Farm Norree	128	0	Gravel		2 224 517				413						413
DR01384	P	2.83	3.80	Jct TR31/1 Langvlei Stn	Jct DR1383 Kruispad	101	0	Gravel		7 309 546					320					
DR01384	P	3.80	4.58	Jct TR31/1 Langvlei Stn	Jct DR1383 Kruispad	55	6	Gravel		3 119 839									257	

DR01387	P	0.00	4.08	Jct MR295 Het Kruis	Old Baden Private Hotel	147	0	Gravel		2 216 565				1 346						1 346
DR01387	P	4.08	5.10	Jct MR295 Het Kruis	Old Baden Private Hotel	87	0	Gravel		1 125 986							337			
DR01392	P	0.00	4.60	Jct MR295 Keisiedorings	Jct OP06041 Pietersfontein	146	0	Gravel		2 967 764				1 518						1 518
DR01392	P	4.80	9.57	Jct MR295 Keisiedorings	Jct OP06041 Pietersfontein	66	1	Gravel		1 157 248							1 574			
DR01396	P	0.00	0.90	Jct DR1119 Uitkyk	Jct OP05639 Eastern Bdy Uitkyk	169	0	Gravel		4 013 827		297					297			
DR01397	P	0.00	4.75	Jct DR1398 Rawsonville	Jct OP5681 Westrn Bdy Gevonden	128	72	Gravel		3 456 550					1 568					
DR01399	P	0.23	0.97	Jct MR298 Klipdrift	Jct V.Riebeeck St Rawsonville	257	0	Gravel		4 466 201	244					244				
DR01400	P	8.23	10.21	Jct TR31/1 Nuy Station	Jct NR1/3 De Wet Station	216	0	Gravel		3 811 539		653					653			
DR01402	P	6.98	8.00	Jct MR295 Moerasvlei River	Jct MR295 De Koo	98	0	Gravel		1 508 558					337					
DR01402	P	8.00	9.31	Jct MR295 Moerasvlei River	Jct MR295 De Koo	169	0	Gravel		3 182 735		432					432			
DR01403	P	0.09	1.50	Jct DR1408 Welbedacht	Adjoining Olive Annex	234	0	Gravel		3 452 120	465							465		
DR01404	P	0.00	2.24	Jct TR31/1 Alma	Jct DR1394 Solitaire	151	0	Gravel		3 733 495				739						739
DR01094	P	1.92	2.57	Jct MR174 Cross Roads	Jct DR1097 Kraaifontein	167	23	Gravel		4 989 333			215						215	
DR01407	P	1.49	2.44	Jct Mun MR201 Wellington	Access Leeuwe Valley	379	0	Gravel		5 005 632	314						314			
DR01095	P	0.00	1.95	Schuurmansfontein	Western Bdy of Watervliet	323	76	Gravel		8 646 163				644						644
DR01413	P	1.68	3.79	Jct DR1152 Olifantskop	Jct OP05643 West Bdy Welvanpas	98	14	Gravel		2 033 484					696					
DR01417	P	0.85	4.29	Jct DR1412 Hexberg	Jct DR1129 Cordies Rus	235	0	Gravel		5 065 946	1 135							1 135		
DR01421	P	0.00	1.45	Jct MR302 De Breede Rivier	Jct OP05752 Olifantsberg	107	71	Gravel		1 763 914					479					
DR01424	P	0.00	1.30	Jct MR302 Jan du Toits River	Jct OP05753 Oliphantsberg	112	70	Gravel		2 318 714					429					
DR01427	P	0.00	1.32	Jct MR302 Waaihoek	Waaihoek on Eendracht Farm	145	69	Gravel		3 086 122				436						
DR01427	P	1.32	3.12	Jct MR302 Waaihoek	Waaihoek on Eendracht Farm	68	78	Gravel		1 315 634										594
DR01429	P	0.25	1.75	Jct DR1152 Burgersfontein	Jct OP05645 Kruishof	375	13	Gravel		8 212 033	495					495				
DR01429	P	1.75	3.88	Jct DR1152 Burgersfontein	Jct OP05645 Kruishof	140	39	Gravel		3 401 852			703							703
DR01431	P	0.00	1.31	Jct MR302 Botha Station	Jct OP05759 Boesmansvlei	187	57	Gravel		3 821 006				432						432
DR01436	P	1.44	3.00	Jct MR201 Romansrivier Cellars	Jct OP05772 De Liefde	191	0	Gravel		3 534 183		515					515			
DR01436	P	3.00	4.22	Jct MR201 Romansrivier Cellars	Jct OP05772 De Liefde	96	0	Gravel		1 283 977								403		
DR01440	P	2.09	6.98	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	167	0	Gravel		4 367 654		1 614					1 614			
DR01099	P	0.00	2.28	Jct. MR205 Babylons Toren	Jct. MR191 near Cillie	325	19	Gravel		6 592 361		752					752			

DR01440	P	7.10	9.48	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	80	0	Gravel		1 462 127									785	
DR01441	P	1.93	2.00	Jct NR1/3 De Doorns	Jct OP05737 Keurbosch Kloof	229	0	Gravel		7 832 830	23						23			
DR01441	P	2.00	3.20	Jct NR1/3 De Doorns	Jct OP05737 Keurbosch Kloof	108	0	Gravel		3 716 479					396					
DR01444	P	0.09	13.76	Jct MR323 Tulbagh Rd Stn	Jct DR1440 Kluitjieskraal	228	0	Gravel		4 934 708	4 511					4 511				
DR01446	P	0.00	1.00	Jct TR22/1 Goedgevonden	Jct OP5800&OP5798 Boontjiesriv	155	0	Gravel		2 561 704			330						330	
DR01446	P	1.00	2.37	Jct TR22/1 Goedgevonden	Jct OP5800&OP5798 Boontjiesriv	86	0	Gravel		1 205 010					452					
DR01447	P	7.85	9.48	Jct TR22/2 Ceres	Jct OP05848 Ezelsfontein	190	0	Gravel		5 096 381		538					538			
DR01451	P	0.00	7.12	Jct DR1452 Schapenrivier	Jct OP5882 & OP5881 Leeuwenftn	99	0	Gravel		1 561 908								2 350		
DR01452	P	22.90	27.72	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	225	0	Gravel		6 205 616		1 591					1 591			
DR01452	P	27.72	30.00	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	115	0	Gravel		4 578 827			752							752
DR01452	P	30.00	30.49	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	46	0	Gravel		-							162			
DR01455	P	0.00	0.78	Jct TR23/3 Gouda	Gouda Railway Station	70	0	Gravel		1 829 369									257	
DR01458	P	0.00	6.00	Jct TR22/2 Rhodona	Jct MR310 Prince Alfred Hamlet	276	0	Gravel		4 919 984	1 980				1 980					
DR01459	P	1.18	2.92	Jct MR313 Bellevue	Jct DR1465 De Oude Drosdy	253	0	Gravel		5 121 700	574					574				
DR01459	P	2.92	6.72	Jct MR313 Bellevue	Jct DR1465 De Oude Drosdy	87	0	Gravel		1 922 689									1 254	
DR01460	P	3.95	4.88	Jct Mun MR312 Tulbagh	Jct OP05837&OP05838 Witzenberg	78	0	Gravel		1 153 115				307						
DR01461	P	6.42	8.98	Jct Mun MR312 Tulbagh	Jct DR1471 Vrolikheid	115	0	Gravel		3 663 657			845							845
DR01461	P	11.66	12.83	Jct Mun MR312 Tulbagh	Jct DR1471 Vrolikheid	75	0	Gravel		1 315 835									386	
DR01462	P	0.31	1.38	Jct MR312 Kruis Valley	Jct OP5839 Dennelaan	122	0	Gravel		1 847 765			353							353
DR01464	P	0.95	1.92	Jct DR1461 La Rhone	Jct OP05819 & OP05820 Eureka	182	0	Gravel		4 992 606		320					320			
DR01467	P	0.00	3.82	Jct TR22/2 Vogelgesang	Jct DR1470 Olckersia	77	0	Gravel		2 097 943						1 261				
DR01104	P	1.72	2.95	Jct MR189 Klapmuts	Jct OP5241 Klapmuts Outspan	241	35	Gravel		8 967 684		406						406		
DR01474	P	0.00	1.37	Jct DR1471 Bloubank	Jct OP05828 Weltevrede	72	0	Earth		2 199 576								452		
DR01478	P	0.00	1.00	Jct DR1476 Opstal	Jct OP05826 Winterhoek	174	0	Gravel		3 903 797		330					330			
DR01478	P	1.00	2.00	Jct DR1476 Opstal	Jct OP05826 Winterhoek	99	0	Gravel		1 805 374					330					
DR01480	P	0.85	2.30	Jct MR229 Saron	Jct DR1168 Lushof	234	0	Gravel		4 756 835		479				479				
DR01109	P	0.00	6.30	Jct MR213 Eenzaamheid	Jct DR1098 Groenefontein	131	0	Gravel		3 304 301				2 079						2 079

DR01487	P	66.02	72.02	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	78	0	Gravel		1 906 151							1 980			
DR01487	P	72.39	76.69	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	78	12	Gravel		2 134 671							1 419			
DR01487	P	77.63	80.21	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	78	0	Gravel		1 988 083						851				
DR01487	P	80.64	90.00	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	77	0	Gravel		2 018 668						3 089				
DR01487	P	90.00	100.00	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	82	16	Gravel		2 009 678							3 300			
DR01487	P	100.00	102.53	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	115	0	Gravel		3 398 052			835							
DR01487	P	102.83	105.93	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	115	7	Gravel		3 471 693			1 023							
DR01115	P	0.26	4.50	Jct MR27 Ruite Valley	Jct MR213 Kuilenburg	152	13	Gravel		4 761 680				1 399						1 399
Total											**18622**	**17447**	**17497**	**34643**	**26549**	**46424**	**28189**	**29783**	**15494**	**36062**

Table Annexue F-4 WCG MTEF Budget: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch

Totals for analysis based on 2013 visual assessments, compiled April 2014 - May 2014

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Reseal	35471	87600	87434	54137	75006	66294	95630	13922	56798	71719
Rehabilitation	52258	217580	194874	144704	199380	160940	19006	18206	999	4344
Upgrade to Pave	18492	25820	53283	99031	93236	0	0	0	0	0
Regravel	18622	17447	17497	34643	26549	46424	28189	29783	15494	36062
Total (R'000)	**124843**	**348448**	**353088**	**332515**	**394171**	**273659**	**142824**	**61911**	**73290**	**112125**

CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN
(3rd Generation)

(*Final Report*)

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JULY 2015

CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN

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ABBREVIATIONS

DEA	Department of Environment Affairs
D:EA&DP	Department of Environmental Affairs and Development Planning
DWA	Department of Water Affairs
EIA	Environmental Impact Assessment
Haz	Hazardous
HCGW	Health Care General Waste
HCRW	Health Care Risk Waste
HCW	Health Care Waste
HDPE	High Density Polyethylene
kg	kilogram
kℓ	kilolitre
ℓ	litre
m^3pa	cubic meter per annum
t/a	ton per annum
VWMF	Vissershok Waste Management Facility
CNC	Cape Nature Conservation
IWMP	Integrated Waste Management Plan
JPCE	Jan Palm Consulting Engineers
IPWIS	Integrated Pollutant and Waste Information System
NWMS	National Waste Management Strategy
WCIWMP	Western Cape Integrated Waste Management Plan
IDP	Integrated Development Plan
SDF	Spatial Development Framework
CWDM	Cape Winelands District Municipality

CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN

EXECUTIVE SUMMARY

INTRODUCTION AND GENERAL DESCRIPTION

The third generation of this Integrated Waste Management Plan (IWMP) has been formulated by Jan Palm Consulting Engineers (JPCE) on behalf of the Cape Winelands District. The second generation IWMP was developed in 2011 and was subsequently commented on and evaluated by the Department: Environmental Affairs and Development Planning (D:EA&DP). This update incorporates the comments and recommendations made on the 2011 IWMP as well as the latest checklist for IWMPs by the D:EA&DP.

The IWMP is a statutory requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) that has been promulgated and came into effect on 1 July 2009 and that has as its goal the transformation of the current methodology of waste management, i.e. collection and disposal, to a sustainable practice focussing on waste avoidance and environmental sustainability. Implementation of this IWMP will be through municipal by-laws and in accordance with an implementation schedule. The IWMP must be incorporated as part of each Municipality's Integrated Development Plan (IDP), but is submitted as a separate document. The IWMP also shows alignment of its goals with the Western Cape IWMP and the National Waste Management Strategy (NWMS 2011).

The primary objective of integrated waste management (IWM) planning is to integrate and optimise waste management, in order to maximise efficiency and minimise the associated environmental impacts and financial costs, and to improve the quality of life of all residents within the Cape Winelands District.

The Plan takes particular note of importance of local authority waste management planning. This document underlines the following 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

The general topography, geology and hydrogeology of the area is discussed in section 1.3 and the demographic details in section 1.4. The current population estimate of the Cape Winelands is 860 671 people, based on the Census 2011 population of each local Municipality and each respective annual growth rate.

POLICY AND LEGISLATION

All applicable waste management legislation is listed and discussed under section 2 of the IWMP. The latest published legislation have been added in the IWMP update, which mainly consists of Norms & Standards published under the Waste Act since the 2011 IWMP.

EXISTING WASTE MANAGEMENT

Awareness and Education

Apart from each local Municipality's awareness and education initiatives, the District Municipality has ongoing annual awareness and education projects in the form of theatre performances, greening projects, river rehabilitation and EPWP cleaning projects.

Waste uantities and Types

Where available, weighbridge data from the local Municipalities were included in calculating the total waste generated in the District. From areas where this information is not available, the totals were estimated from using waste generation rates per capita and applied to current and future estimated population figures.

The total waste for the District for 2015 was estimated at 317 639 tonnes with a future estimated total of 348972 tonnes for 2019. This equates to an average waste generation factor of 1.1kg/person/day.

Waste characterisation was based on the 2007 study by the D:EA&DP and the 2012 study by the Stellenbosch Municipality. The percentages and estimated total recyclables are shown below:

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	36%	9%	9%	6%
Drakenstein	34%	22%	11%	5%
Langeberg	33%	16%	8%	6%
Stellenbosch	16%	15%	8%	2%
Witzenberg	26%	27%	6%	7%

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	14995	3749	3749	2499
Drakenstein	26092	16883	8442	3837
Langeberg	10483	5082	2541	1906
Stellenbosch	17979	16856	8990	2247
Witzenberg	10707	11119	2471	2883
CWDM	80256	53688	26192	13372

The above theoretical figures give a total of approximately 173 509 tonnes per annum, which is 55% of the generated waste stream. It should be noted that this reflects the recyclable portion of the waste stream only as the mathematical representation. The full 58% cannot be seen as recoverable in the practical sense at this stage.

Waste Collection

The District does not render waste collection services as this is a function of the Local Municipalities. The IWMP gives a summary of each Local Municipal solid waste collection service and the level of free basic services rendered.

Waste Management Facilities

The District does not operate any waste management facilities at this stage. All identified waste management facilities such as transfer stations, disposal facilities and recycling facilities are discussed for each Local Municipality.

Identified Gaps

The following gaps were identified in the District

- Public Awareness and Education
- Recycling and waste minimisation
- Area cleaning
- Lack of information regarding waste generation types and volumes
- Aging collection fleet
- Law enforcement
- Disposal sites (condition and operation) and lack of disposal airspace
- Vacant positions in waste management departments

Strategic Objectives

Being a District Municipality and not “owning” any waste, these strategies are more focussed on supporting the local municipalities with their individual strategies and in the event of developing a district landfill, to develop action plans to ensure safe disposal. The District Municipality does not collect waste with the result that strategies for waste avoidance and waste reduction are not really applicable.

The Waste Management Strategic Objectives for Cape Winelands District Municipality on which this Plan is based, commits the municipality to:

- Create an atmosphere in which the environment and natural resources of the region are conserved and protected.

- Develop a communication/information/education strategy to help ensure acceptance of 'ownership' of the strategic objectives among members of the public and industry throughout the municipality and to promote co-operative community action.

- Provide solutions for the three main objectives:
  - The avoidance of waste generation
  - The reduction of waste volumes
  - The safe disposal of waste

IMPLEMENTATION

The IWMP has an implementation plan which is part of 7 main goals. These goals have each been divided into actions and years of implementation with estimated costs in order to achieve the main goals. These goals are:

Goal 1: Awareness and Education

Goal 2: Improve Waste Information Management

Goal 3: Effective Solid Waste Service Delivery

Goal 4: Promote and Ensure Waste Minimisation

Goal 5: Improve Regulatory Compliance

Goal 6: Ensure Safe and Integrated Management of Hazardous Waste

Goal 7: Ensure Sound Budgeting For Integrated Waste Management

MONITORING AND REVIEW

The IWMP acts as a planning guide and requires regular updates and reviews in order to stay relevant, especially the projects for implementation. Each project must be reviewed to measure its success, shortcomings or reasons for failure. The IWMP must be updated to reflect the progress of projects or to adapt strategies. The review will also assist in budgeting for upcoming waste management projects.

As the IWMP is a sectoral plan of the IDP, the following projects are recommended to be included in the IDP:

All implementation actions requiring Capital Expenditure not already contained in the IDP:
- The establishment of the regional integrated waste management facility following the issuing of the license

CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN

1. PREFACE

1.1 INTRODUCTION

The third generation of this Integrated Waste Management Plan (IWMP) has been formulated by Jan Palm Consulting Engineers (JPCE) on behalf of the Cape Winelands District Municipality to address the challenge of waste management in the District, home to some 860 660 people (Estimated 2015 population, refer to Section 1.4). The second generation IWMP was developed in 2011 and was subsequently commented on and evaluated by the Department: Environmental Affairs and Development Planning (D:EA&DP). JPCE was appointed by the Cape Winelands District Municipality to develop the third generation IWMP for 2015.

The November 2012 assessment report of the 2nd generation, 2011 IWMP is summarised as follows, which identified topics which should be addressed with the new IWMP revision:

- The Introduction and general description requires reference to recommendations made in the assessment report.
- In terms of strategic linkages, the IWMP must make reference to the municipal SDF.
- The plan must show the link with the IDP and what will be incorporated into the IDP.
- The IWMP must be aligned to the Western Cape IWMP and the National Waste Management Strategy of 2011.
- Public participation: The IWMP must follow a public participation process.
- The latest solid waste legislation must be included in the IWMP.
- The latest demographic information must be used from Census 2011.
- The IWMP must indicate the level of free basic services in the District.
- The District needs to ensure that the local Municipalities conduct waste characterisation studies.
- The organisational structure needs to be included in the IWMP.
- The IWMP must indicate how the Municipality intend to implement waste awareness and education with cost implications.
- The District must monitor the local Municipalities and ensure that they register their waste facilities and report to IPWIS.
- Gaps and needs related to solid waste management in the District must be identified.
- The implementation of the plan must show budget and human resources.
- The IWMP should include a monitoring and review programme.

The terms of reference for the development of the Cape Winelands third generation IWMP include a status quo analysis, strategic objectives and an implementation plan.

The IWMP is a statutory requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) that has been promulgated and came into effect on 1 July 2009 and that has as its goal the transformation of the current methodology of waste management, i.e. collection and disposal, to a sustainable practice focussing on waste avoidance and environmental sustainability. Implementation of this IWMP will be through municipal by-laws and in accordance with an implementation schedule.

The development of the IWMP is necessary as it is an integral tool to identify current needs and act as a guide towards sustainable waste management. With regular updates of this document the changing needs as well as progress in the waste management field can be tracked and strategies adapted accordingly. It also provides a framework for budgeting purposes. The IWMP must be incorporated as part of each Municipality's Integrated Development Plan (IDP), but is submitted as a separate document. The IWMP also shows alignment of its goals with the Western Cape IWMP and the National Waste Management Strategy (NWMS 2011).

The primary objective of integrated waste management (IWM) planning is to integrate and optimise waste management, in order to maximise efficiency and minimise the associated environmental impacts and financial costs, and to improve the quality of life of all residents within the Cape Winelands District.

The Plan takes particular note of importance of local authority waste management planning. This document underlines the following 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

1.2 IWMP DEVELOPMENT

The planning phase of the third generation IWMP included the following:

A project meeting was held at the District offices in Worcester on 17 March 2015, which was attended by the consultant and Mr F. van Eck of Cape Winelands District Municipality. The purpose of the meeting was to discuss the scope of the project and the updating of the IWMP to the 3rd generation and to acquire the necessary information in order to update the IWMP. The scope of the IWMP will follow the D:EA&DP's checklist for Integrated Waste Management Planning. The checklist is attached as **Annexure 1**.

The public participation phase of the development of the IWMP was in the form of advertisements in the local newspapers and Die Burger. The draft document was available at the public libraries and at www.jpce.co.za for the public to view and comment on. The draft IWMP served as base on which to provide comment and input. See **Annexure 3** for the advertisements that were placed. Comment was received from Green Cape after the closure date for comments. However, comments applicable to a District IWMP will be addressed during and as part of the annual IWMP review report.

The participants in the Cape Winelands District IWMP third generation process are Mr F van Eck (Executive Director: Technical Services, Cape Winelands District Municipality), Solid Waste Managers and Waste Management Officers of the local municipalities and Jan Palm Consulting Engineers (Consulting Civil Engineers specializing in Solid Waste Management). During the public comment phase, other participants have the opportunity to contribute to the IWMP development before the release of the final document, e.g. NGO's. The IWMP will form part of the Integrated Development Plan of the Municipality and will have to be approved by Council.

The waste streams and quantities discussed in this IWMP include household waste, garden (green) waste, commercial and industrial waste and builder's rubble. Medical waste and hazardous wastes are also discussed, but quantities are unknown.

1.3 GENERAL DESCRIPTION

Cape Winelands District Municipality is the eastern neighbour of the City of Cape Town and the West Coast District Municipality. It is an area noted for its vineyards, veld flowers, fruit farming and sheep farming.

The Cape Winelands area hosts many industries, but the agriculture and agriculture related industries are the main streams. Tourism is also a fast growing industry in the Cape Winelands.

The Cape Winelands District Municipality was established in December 2000 and includes the local municipalities of Stellenbosch, Drakenstein, Breede Valley, Langeberg and Witzenberg.

Refer to Figure 1-1 for a Plan of the Study Area.

1.3.1 Topography and Climate

The municipal area consists of mountainous topography in the central and eastern regions.

The area falls within the Western Cape Mediterranean climate zone and is known for its hot and dry summer days. Average annual rainfall, mainly during the winter months, is approximately 500 mm.

Winds are seasonal and generally North-west or South-east.

1.3.2 Geology and Hydrogeology

1.3.2.1 Geology

(Refer Figure 1-2)

Figure 1-1 shows the extent of the above area, major towns, roads and surface water features. Paarl and Worcester are the main towns and the Berg and Breede Rivers and Brandvlei Dam are the main surface water features in the area.

Figure 1-2 is a simplified geological map adapted from the 1:500 000 scale hydrogeological map Cape Town (Department of Water Affairs and Forestry). There are seven geological formations present in the area. From oldest to youngest in age these are the Malmesbury Group, intruded by the Cape Granite Suite, Table Mountain, Bokkeveld and Witteberg Groups, Karoo Supergroup and superficial alluvial deposits.

The Malmesbury Group rocks are very old (>600 million years) and have been extensively deformed and reconstituted (metamorphosed). They comprise shale, phyllite and impure sandstones. Some minor dolerite and granitic intrusions (dykes) are present. These rocks give rise to low, undulating topography. Granites of the Cape Granite Suite have intruded into these rocks and form elevated topography such as Paarl Mountain, for example.

The Table Mountain Group (TMG) rocks consist predominantly of resistant quartzitic sandstones and form the characteristic grey, craggy mountains of the Western Cape. Two main formations are present, the upper Nardouw Subgroup and the lower Peninsula Sandstone Formation. These are separated by the Cedarberg Formation, a shaley more easily weathered horizon that forms a prominent green to brown (seasonal) marker band between the grey sandstones. These rocks form the mountainous areas in the central and eastern parts of the study area.

The Bokkeveld and Witteberg Groups comprise alternating shale and sandstone horizons, with shale being more dominant in the former and the latter being generally more quartzitic.

The lower formations of the Karoo Supergroup occur in the north-northwest of the area and comprise rocks of Ecca and Dwyka age. These are mainly shaley and also comprise tillite in the case of the latter.

Alluvial deposits occur mainly along the course of the Berg River from Franschhoek to Hermon and Breede River from south of Ceres to east of Robertson. These reach up to 30 m in thickness and comprise clay, silty sand, sand and boulders.

The study area straddles the western N-S trending and eastern, E-W trending limbs of the Cape Fold Belt. The convergence zone or syntaxis of these two limbs is in the Ceres area. A series of sub-parallel faults trending NW-SE cut across the western part of the area, some of which extend >100 km into the Saldanha and Piketberg areas. In the eastern areas, faulting is predominantly E-W, with the regionally important Worcester Fault bisecting the area.

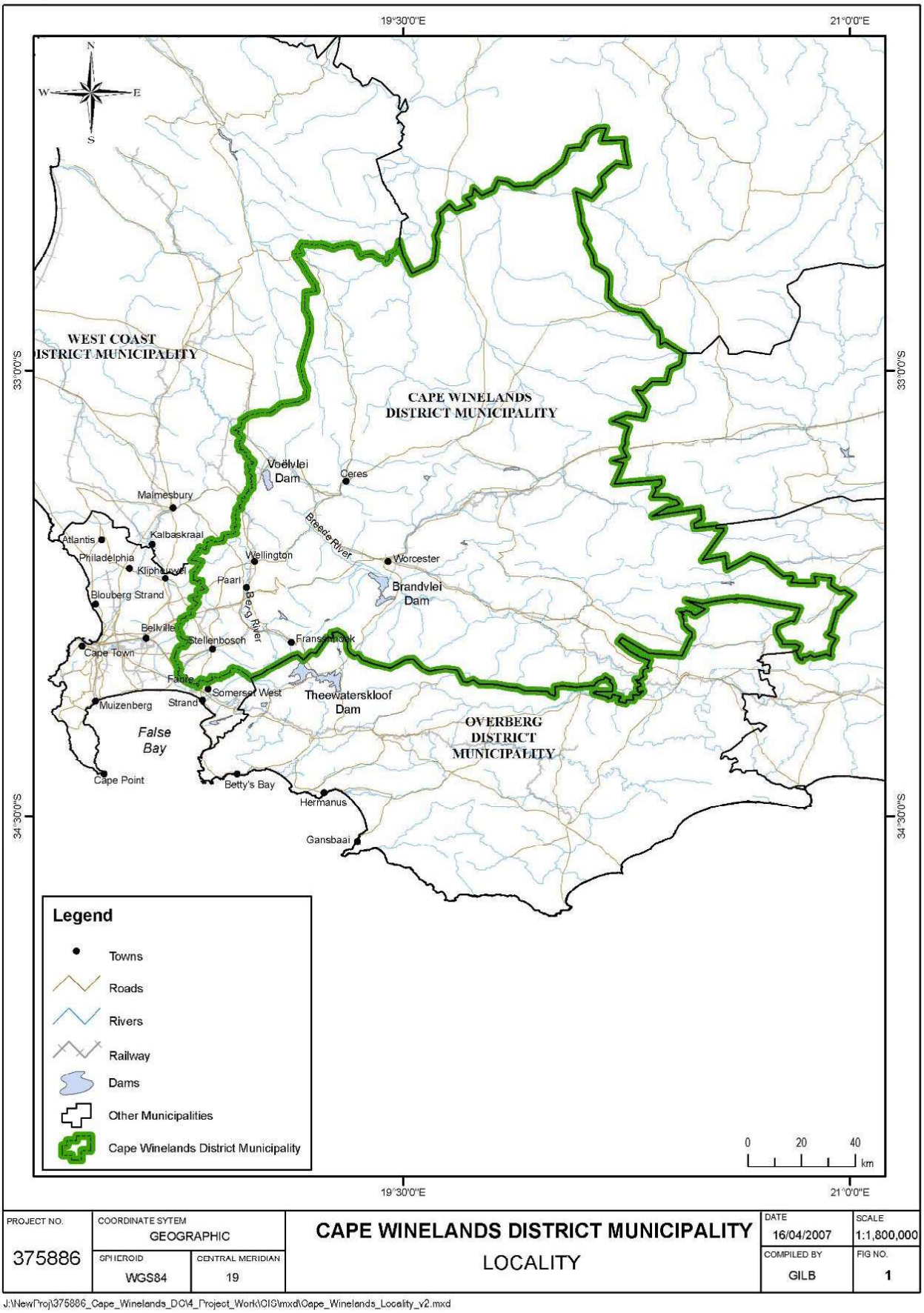
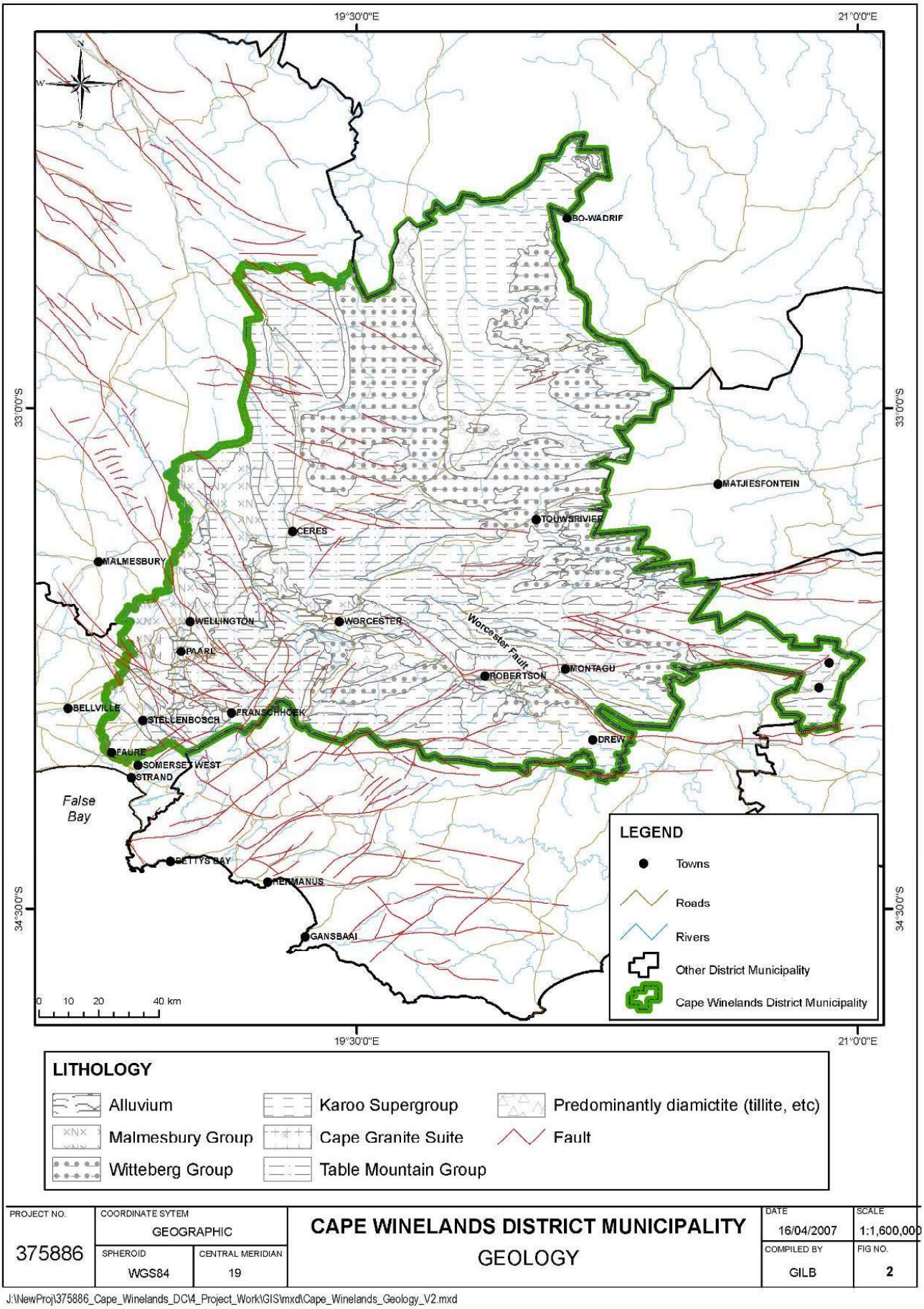


Figure 1-1: Study Area Cape Winelands District Municipal Area

SRK Consulting
Engineers and Scientists



PROJECT NO.	COORDINATE SYTEM		CAPE WINELANDS DISTRICT MUNICIPALITY	DATE	SCALE
375886	GEOGRAPHIC		GEOLOGY	16/04/2007	1:1,600,000
	SPHEROID	CENTRAL MERIDIAN		COMPILED BY	FIG NO.
	WGS84	19		GILB	2

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Figure 1-2: Geology of Cape Winelands District Municipal Area

1.3.2.2 Groundwater

(Refer to Figure 1-3 and Figure 1-4)

Figures 1-3 and 1-4 are adapted from the Cape Town hydrogeological map referred to above.

In broad terms, any aquifers developed in rocks of the Malmesbury, Table Mountain, Bokkeveld, Witteberg and Karoo rocks will be of the fractured or secondary type. These are shown as shades of green on Figure 1-3. Aquifers developed in the alluvium will be of the intergranular or primary type. These are shown as shades of violet on Figure 1-3. Aquifers developed in the Cape Granite Suite are a combination of fractured and weathered (intergranular) zones and are coloured yellow on Figure 1-3.

The Malmesbury, Karoo and Cape Granite Suite rocks generally have the lowest potential, generally being classified as B2 and D2, respectively, which implies a median borehole yield of 0.1 to 0.5 ℓ/s. However, some very high yielding boreholes have been established in the Malmesbury Aquifer at the Pearl Valley and Val de Vie developments between Paarl and Franschhoek. Sustainable yields of up to 15 ℓ/s have been obtained here.

The Table Mountain Group (TMG) is usually regarded as the major regional aquifer of the Western Cape. In the study area it is uniformly classified as B4, i.e. a median borehole yield of 2.0 to 5.0 ℓ/s. However, much of this aquifer is inaccessible for drilling and exploitation. One of the strongest flowing (125 l/s) and hottest (62^0C) springs emerges from a fault zone in this aquifer at Brandvlei.

The TMG Aquifer of the Wemmershoek area is being investigated by the City of Cape Town to augment water supply to Cape Town. This is designated as Target Area W7. Yields of 100 ℓ/s per borehole have been put forward as being feasible, but it is unlikely that such yields would be sustainable or not cause unacceptable environmental impacts.

The Bokkeveld Group forms locally important aquifers in the Hex, Ceres and Agter Witzenberg Valleys but is a poor aquifer elsewhere. Approximately 20 million m^3/a are abstracted in the Hex Valley. The Witteberg Group generally forms a moderate to poor aquifer.

The alluvial aquifer is well developed in the Rawsonville area to the west of Worcester and ~20 million m^3/a is abstracted from this aquifer. On a local scale the very shallow water table causes problems of waterlogging, e.g. on the east bank of the Berg River between Paarl and Franschhoek. Subsurface drainage systems have had to be installed at developments in this area such as Pearl Valley and Val de Vie.

Groundwater quality is mostly good on account of the relatively high rainfall and therefore recharge and the influence of the TMG Aquifer. Consisting mostly of silica, these rocks contain very pure groundwater with electrical conductivity (EC) mostly <10 mS/m. The drawback with such unbuffered groundwater is that it has a low pH, usually <6, which is aggressive and corrosive. High iron content is also a characteristic aesthetic problem. Over most of the area EC is <70 mS/m, increasing above this in the Malmesbury and Granite Aquifers to the west, i.e. away from the TMG, and also to the east as rainfall and recharge decrease and under the influence of more shaley lithologies.

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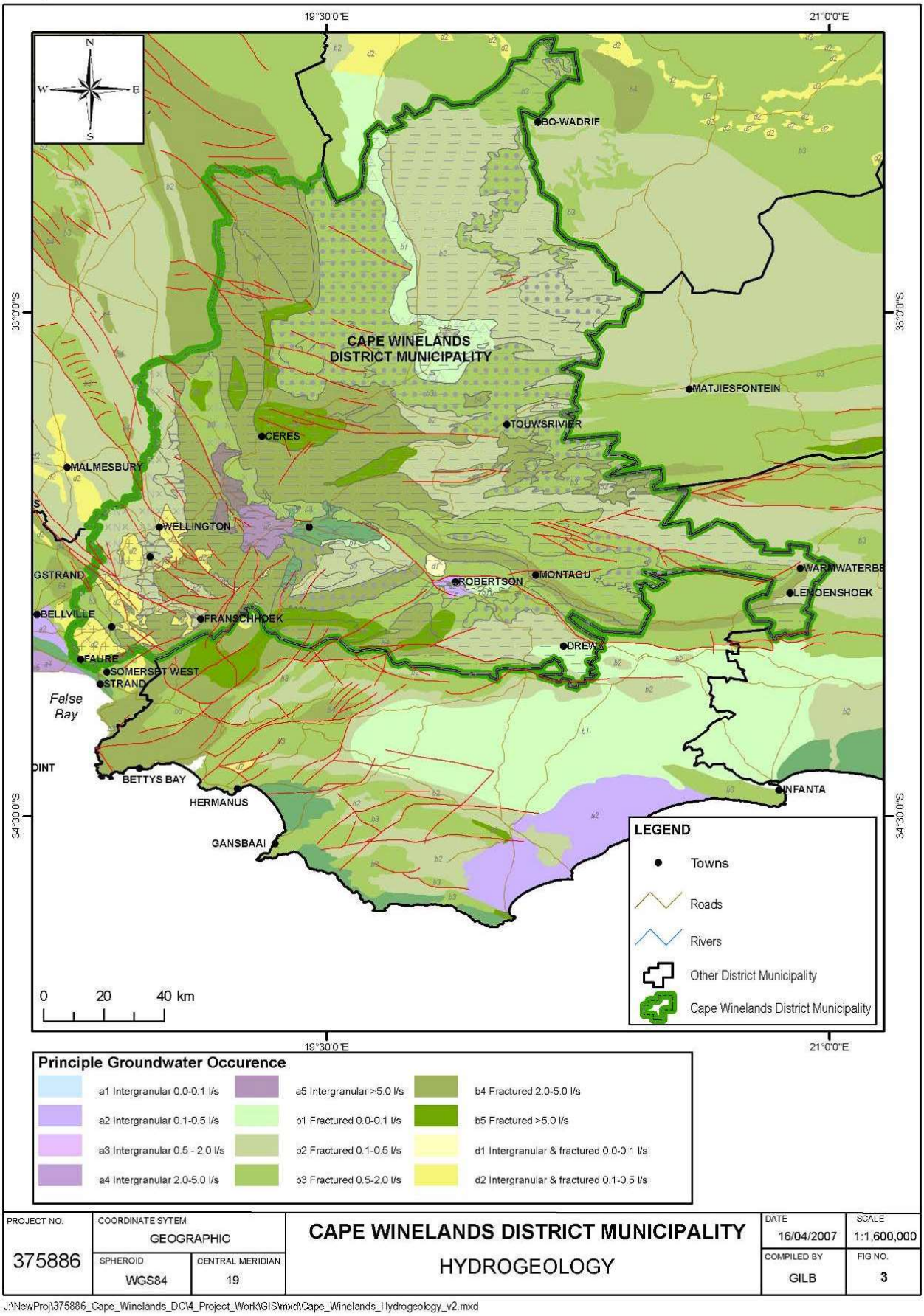


Figure 1-3: Hydrogeology of Cape Winelands District Municipal Area

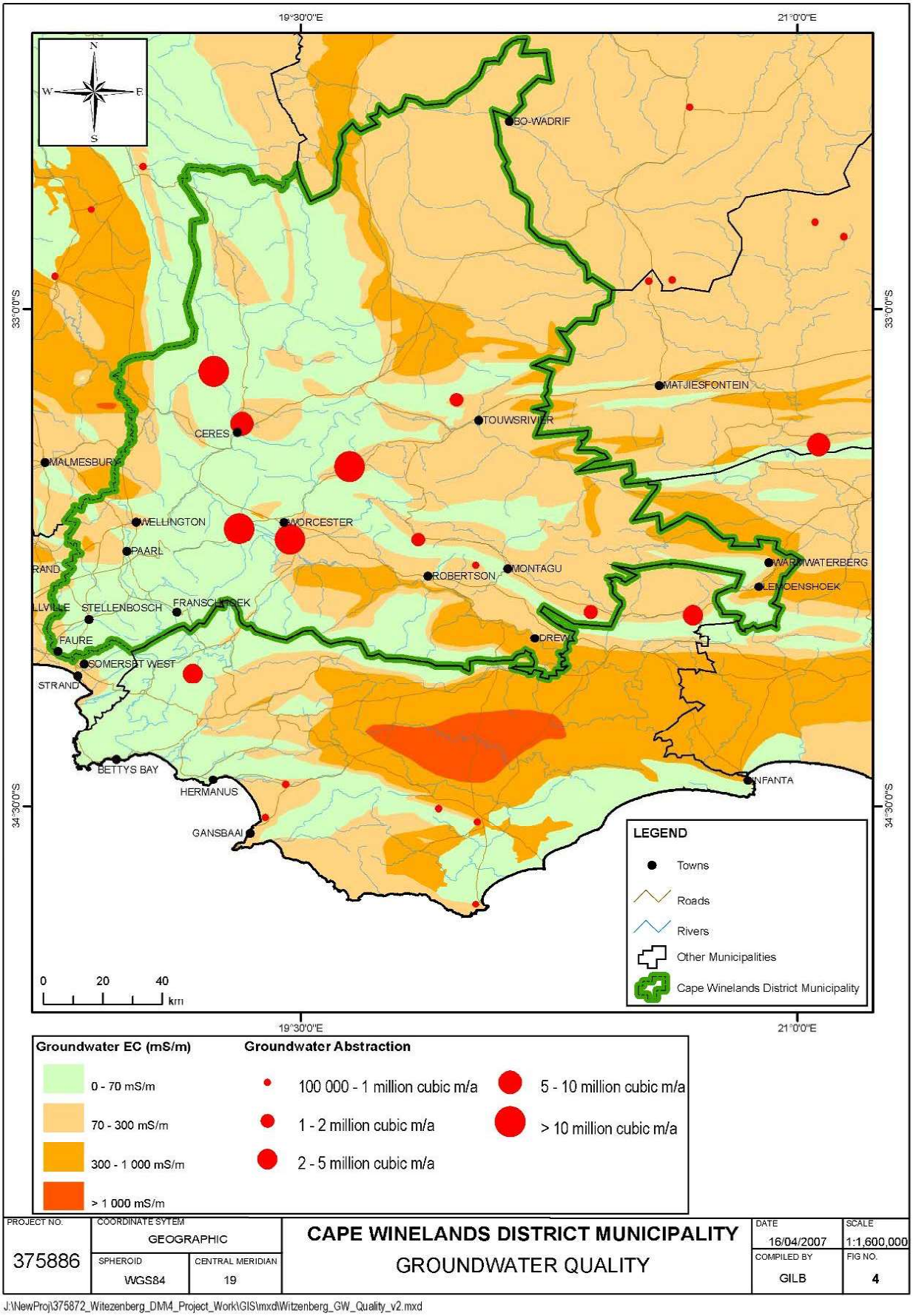


Figure 1-4: Groundwater uality of the Cape Winelands District Municipal Area

1.4 DEMOGRAPHICS

The statistics relating to population were taken from Statistics SA. The latest 2011 Census population figures were used. The total population of each local municipality with its respective annual growth rate since 2001 is shown in Table 1-1 below. The growth rates were applied to each total to estimate the current and future population of each municipality and the total population for the District.

Table 1-1: Population Figures

Municipality	Growth rate ( )	2011	2015	2020
Breede Valley	1.31%	166836	175751	187569
Drakenstein	2.56%	251268	278003	315456
Langeberg	1.79%	97728	104915	114648
Stellenbosch	2.71%	155733	173313	198105
Witzenberg	2.64%	115950	128688	146595
CWDM		**787506**	**860661**	**962362**

The 2015 number of households in Table 1-2 were estimated from the 2011 figures, with the assumption that the average household size per sub-area would remain constant.

Table 1-2: Population Profile according to Household Income

Municipality	No of Households (2015)	Population (2015)	Average Persons per Household	Very Low and Low Income	Middle Income	High and Very High Income
Breede Valley	44 839	175 751	3.9	53.81%	18.96%	27.23%
Drakenstein	66 046	278 003	4.2	45.70%	18.39%	35.91%
Langeberg	26 995	104 915	3.9	56.86%	19.97%	23.18%
Stellenbosch	48 269	173 313	3.6	52.89%	15.55%	31.56%
Witzenberg	30 444	128 688	4.2	56.65%	20.86%	22.49%
CWDM	**216 593**	**860 671**	**4.0**	**53.18**	**18.74**	**28.07**

From the graph below it can be seen that the population is divided 52% in the Cape Winelands West (Stellenbosch & Drakenstein) and 48% in the Cape Winelands East (Breede Valley, Witzenberg & Langeberg)

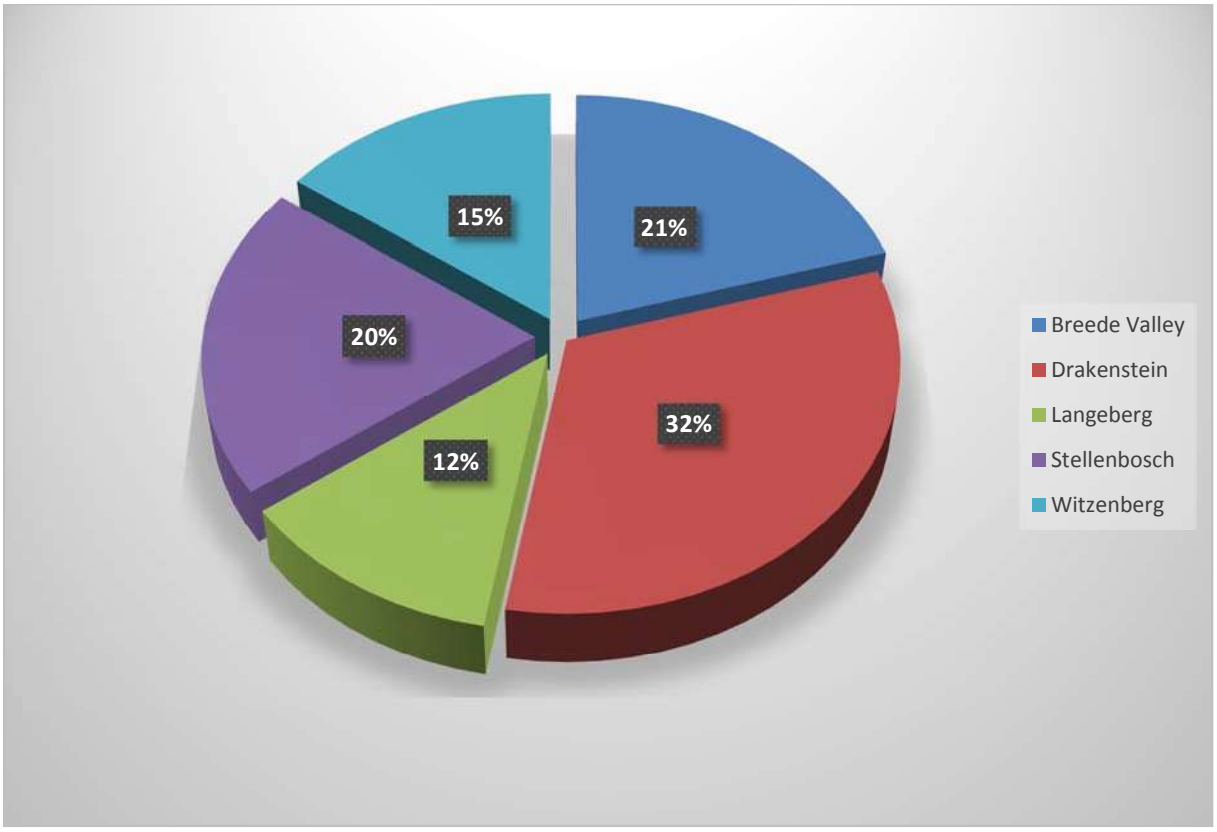


Figure 1-5: Graphical Display of Population Distribution

The Human Development Index for the Cape Winelands District compared to that of the Western Cape and the whole of South Africa is shown in Table 1-3 below.

Table 1-3: Human Development Index

Population Group	Cape Winelands	Western Cape	RSA
Black	0.52	0.58	0.50
White	0.86	0.87	0.88
Coloured	0.66	0.66	0.66
Asian	0.76	0.79	0.76
Total	0.65	0.71	0.59

Source: Cape Winelands District IDP 2014-2015; HIS Global Insight Regional Explorer, 2013

1.5 TRANSPORT INFRASTRUCTURE

The major routes in the Cape Winelands District are the N1, R44, R46 and R60. The R44 connects Stellenbosch with Drakenstein. The N1 connects Drakenstein with Breede Valley. The R60 connects Breede Valley and Langeberg and the R43 connects Breede Valley with Witzenberg. All waste is transported by road.

1.6 STRATEGIC LINKAGES

Western Cape IWMP	NWMS (2011)	CWDM IWMP	CWDM SDF	CWDM IDP
Goal 1: Educate, strengthen capacity and raise awareness in integrated waste management	Goal 4: Ensure that people are aware of the impact of waste on their health, well-being and the environment	Goal 1: Public Awareness & Education	To promote sustainable resource use and responsible rural development	SO1: 1.1.4: A well informed local government that will be able to make evidenced-based decision-making with regard to sectoral interventions
Goal 2: Improve waste information management	Goal 5: Achieve integrated waste management planning	Goal 2: Waste Quantification & Information		
Goal 3: Promote sound, adequate and equitable waste management	Goal 2: Ensure the effective and efficient delivery of waste services	Goal 3: Effective Solid Waste Service Delivery		SO2: Promoting sustainable infrastructure services and transport system which fosters social and economic opportunities
				2.2.1.3: Investigate and planning of regional solid waste disposal sites
				2.2.1.4: Developing/maintain of regional solid waste disposal sites
Goal 4: Mainstream Integrated Waste Management Planning in municipalities and industry	Goal 5: Achieve integrated waste management planning	Goal 4: Promote and Ensure Waste Minimisation	To promote sustainable resource use and responsible rural development	
	Goal 1: Promote waste minimisation, re-use, recycling and recovery of waste	Goal 1: Public Awareness & Education		

Western Cape IWMP	NWMS (2011)	CWDM IWMP	CWDM SDF	CWDM IDP
Goal 5: Mainstream sustainable waste management practices	Goal 1: Promote waste minimisation, re-use, recycling and recovery of waste	Goal 4: Promote and Ensure Waste Minimisation		
	Goal 3: Grow the contribution of the waste sector to the green economy	Goal 3: Effective Solid Waste Service Delivery		
Goal 6: Strengthen the waste regulatory system/framework	Goal 8: Establish effective compliance with and enforcement of the Waste Act	Goal 5: Improve Regulatory Compliance	To improve and conserve the district's natural environment	SO1: 1.1.2 To ensure effective environmental pollution control via the identification, evaluation, monitoring and prevention of the pollution of soil, water and air, in as far as it relates to health; and to institute remedial action accordance with Regulation 37 of the CWDM Municipal Health By-Law.
	Goal 2: Ensure the effective and efficient delivery of waste services			
	Goal 7: Provide measures to remediate contaminated land			
Goal 7: Ensure the safe and integrated management of hazardous waste	Goal 7: Provide measures to remediate contaminated land	Goal 6: Ensure the safe and integrated management of hazardous waste	To improve and conserve the district's natural environment	SO1: 1.1.2 To ensure effective environmental pollution control via the identification, evaluation, monitoring and prevention of the pollution of soil, water and air, in as far as it relates to health; and to institute remedial action accordance with Regulation 37 of the CWDM Municipal Health By-Law.
		Goal 5: Improve Regulatory Compliance		
		Goal 1: Public Awareness & Education		
Goal 8: Facilitate access to funds to implement Integrated Waste Management	Goal 6: Ensure sound budgeting and financial management for waste services	Goal 7: Ensure sound budgeting for integrated waste management	To foster the inclusion of an economic perspective in land use management and land development	SO3: To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality

2. BACKGROUND POLICY AND LEGISLATION

The fragmented and uncoordinated way pollution and waste has been dealt with, as well as insufficient resources to implement and monitor existing legislation, contributes largely to the unacceptably high levels of pollution and waste in South Africa. Through the promulgation and implementation of various pieces of policies, legislation, standards and guidelines as well as the implementation of co-operative governance as envisaged in the Constitution this situation will be improved. The current fragmentation, duplication and lack of co-ordination will be eliminated.

Pollution and waste management is not the exclusive preserve of government. The private sector and civil society have crucial roles to play. The fostering of partnerships between government and the private sector is a prerequisite for sustainable and effective pollution and waste management to take place. Similarly, the spirit of partnerships and co-operative governance between organs of state is equally important due to the crosscutting nature of pollution and waste management.

2.1 CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA

In 1996 the new Constitution created the right to the environment as a fundamental right. This fundamental right to the environment ensures everyone's right to an environment that is not harmful to their health or well-being. South African law, the environment and all South Africans have a constitutional right to have the environment protected for present and future generations.

This means that there must be reasonable legal and other measures to prevent ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

All legislation has to fall within the stipulations of the Constitution. The following sections are of particular relevance where waste is concerned:

- **Section 24(a)**

  Provides everyone the right to an environment that is not harmful to a person's health and well-being.

- **Section 24(b)**

  Provides everyone the right to have the environment protected through reasonable legislative and other measures. The implementation of section 21, 22 and 26 of the Environment Conservation Act, 1989 is such a legislative measure to protect the environment.

- **Section 25**

  Provides for property rights. The Constitution makes provision for both property rights and the right to a healthy environment. A situation may arise in extreme cases where there is a conflict due to rejecting an application for a listed activity from taking place. In such cases it will be up to the court to decide whether the interest of the community (right to a healthy environment) weights heavier than the right of the individual.

- **Section 32**

  Provides the right to access to information. The lack of information is one of the major obstacles in environmental impact management. Provision has been made in the regulations in terms of section 26 of the Environment Conservation Act, 1989, that any report submitted becomes a public document.

- **Section 38**

  Provides *locus standi* or the 'right to get involved" to any member of the public. This means that any member of the public has the right to take appropriate action to prevent environmental damage. This may include taking action against the relevant authority for failing to perform its duties in preventing environmental damage or an individual or authority who is in the process of undertaking listed activities in terms of section 21 of the Environment Conservation Act, 1989, without the necessary authorisation to undertake such activities.

- **Section 41**

  Provides principles for co-operative governance and intergovernmental relations. The Constitution allocates legislative authority as well as executive and administrative powers to all three levels of government. Schedules 4 and 5 determine the functional areas of government. The environment is a cross-sectoral matter and it is therefore important that co-operation between government on all levels is necessary. Furthermore, Chapter 7 of the Constitution of South Africa (Act 108 of 1996) describes the role and responsibilities of Local Government, which include the objectives in Section 152:

"The objects of local government are:

- to promote social and economic development.
- to promote a safe and healthy environment...".

These principles are further developed in the National Environmental Management Act 1998 (Act 107 of 1998).

The Constitution (Act No. 108 of 1996) is relevant to pollution and waste management for two reasons. Firstly, the Bill of Rights (Chapter Two of the Constitution) contains a number of rights relevant to integrated pollution and waste management, to the extent that an Act or particular statutory provision that does not uphold these rights, is unconstitutional. Secondly, the Constitution provides the legal basis for allocating powers to different spheres of government, and is thus relevant to the institutional regulation of integrated pollution and waste management.

Sovereign

The Constitution states that South Africa is a sovereign, democratic State. In terms of environmental management, it is important to recognize that sovereignty includes the ability to limit sovereign powers by entering into international agreements where the need arises.

The Bill of Rights

The most pertinent fundamental right in the context of integrated pollution and waste Management is the Environmental Right (Section 24), which provides that:

"Everyone has the right

(a) to an environment that is not harmful to their health or well-being; and
(b) to have the environment protected, for the benefit of present and future generation through reasonable legislative and other measures that –

(i) prevent pollution and ecological degradation;
(ii) promote conservation; and
(iii) secure ecologically sustainable development and the use of natural resources while promoting sustainable economic and social development. "

This section of the Bill of Rights specifically imposes a duty on the State to promulgate legislation and take other steps to ensure that the right is upheld and that, among other things, pollution and ecological degradation are prevented.

2.2 NATIONAL ENVIRONMENTAL MANAGEMENT ACT

The NEMA provides for co-operative environmental governance by establishing principles for decision making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state; and to provide for matters connected therewith.

As the principal framework act for environmental issues, it has direct relevance to the implementation of the National Waste Management Strategy, one of the key implications being the designation of the DEAT as lead agent for the environment. Chapter 7 of NEMA has important direct implications for the achievement of the NWMS initiative.

The environment as defined in NEMA is the natural environment along with its physical chemical, aesthetic and cultural properties that influence human health and well-being.

NEMA contains the following environmental principles:

- Environmental management must put people and their needs at the forefront, and must serve their interest fairly.

- Development must be socially, environmentally and economically sustainable. This means that the following things must be considered before there is development:

  a) Disturbance of ecosystems and loss of biodiversity
  b) Pollution and degradation of the environment
  c) Disturbance of landscapes and sites where the nation's cultural heritage is found
  d) Non-renewable resources must be used responsibly
  e) The precautionary principle must be applied
  f) Negative impacts must be anticipated and prevented and if they can't be prevented they must be minimized or remedied.

- Environmental management must be integrated. The best practical environmental option must be pursued.
- Environmental justice must be pursued so that there is not unfair discrimination in the way that negative environmental impacts are distributed
- There should be equitable access to environmental resources, benefits and services to meet basic human needs. Special measures may be taken to ensure access for persons disadvantaged by unfair discrimination.
- Responsibility for environmental health and safety of any policy, programme or project must continue throughout the life cycle of a project
- Public participation in environmental decision-making must be promoted. The participation of vulnerable and disadvantaged groups must be ensured
- Decisions must take into account the interests, needs and values of all interested and affected parties. This includes recognizing all forms of knowledge including traditional and ordinary knowledge
- Community well-being and empowerment must be promoted through environmental education
- The social, economic and environmental impacts of the activities must be assessed
- The rights of workers to refuse to do work that is harmful to human health or the environment and to be informed of dangers must be respected
- Decisions must be taken in an open and transparent manner and access to information provided in accordance with the law
- There must be inter government co-ordination and harmonization of policies and laws
- Actual or potential conflicts of interest between organs of state must be resolved through conflict resolution procedures
- Global and international responsibilities relating to the environment must be discharged in the national interest
- The environment is held in a public trust for the people and the use of environmental resources must serve the public interest, and be protected as the people's common heritage
- The polluter must pay for the costs of remedying pollution, environmental degradation and adverse health impacts
- The vital role of youth and women in environmental management must be recognized and their full participation promoted
- Sensitive or stressed ecosystems must receive special attention in planning which might affect them especially when they are subject to significant resource usage and development pressure.

NEMA also stipulates in Section 24 that there must be an environmental impact assessment before any activity or development that needs permission by law and which may significantly affect the environment.

Section 28 places a specific duty of care on every person to prevent, or mitigate and remediate, environmental damage and pollution. Any person, who was responsible for, or directly or indirectly contributed to the pollution, can be held liable. This includes the owner of the land at the time the pollution occurred or their successor in title, a person in control of the land at that time, or any person who negligently failed to prevent the situation.

The public can use NEMA to exercise their rights when they believe that the right procedures were not followed. Therefore it is extremely important to make sure that when there is a proposed development where the municipality is involved e.g. change of land-use – to make sure that the consultant and/or developers follow the right procedures.

The NEMA Environmental Impact Assessment Regulations

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities that may not commence without environmental authorisation or existing activities in respect of which an application for environmental authorisation is required. In this context, EIA Regulations contained in three General Notices in terms of NEMA (GN R385, 386 and 387) (came into force on 3 July 2006.)

The 2006 Regulations were repealed by the June 2010 EIA Regulations (GN R543). The purpose of the Regulations is to regulate the procedure and criteria as contemplated in Chapter 5 of the Act relating to the submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of activities in order to avoid detrimental impacts on the environment, or where it can con be avoided, ensure mitigation and management of impacts to acceptable levels, and to optimise positive environmental impacts, and for matters pertaining thereto.

2.3 NATIONAL ENVIRONMENTAL MANAGEMENT ACT: FEES FOR CONSIDERATION AND PROCESSING OF APPLICATIONS FOR ENVIRONMENTAL AUTHORISATIONS AND AMENDMENTS THERETO (GOVERNMENT NOTICE 28 FEBRUARY 2014)

These regulations apply to the above applications excluding community based projects funded by government grants or applications made by organs of state. The commencement date is 1 April 2014. Payment details are discussed regarding the different applicable fees which are listed as follows:

Application	Fee
Application for an environmental authorisation for which basic assessment is required in terms of the Environmental Impact Assessment Regulations	R2000.00
Application for an environmental authorisation, for which a S&EIR is required in terms of the Environmental Impact Assessment Regulations	R10000.00
Application dealt with in terms of section 24L of the Act	(a) 100% of the most expensive application, namely, R10 000 (Ten Thousand Rand) if S&EIR is triggered and R2000 (Two Thousand Rand) if the basic assessment is triggered;
	(b) 50% of the other application, namely, R5000 (Five Thousand Rand) if the S&EIR is triggered or R1000 (One Thousand Rand) if the basic assessment is triggered)
Amendment of an environmental authorisation on application by the holder of an environmental authorisation.	R2000.00

2.4 ENVIRONMENT CONSERVATION ACT, 1989 (ACT NO. 73 OF 1989)

On 1 July 2009 the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("the Waste Act") came into effect. The Waste Act repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) ("ECA") and introduces new provisions regarding the licensing of waste management activities.

The Environment Conservation Act, 1989 Waste Tyre Regulations (2009) which were published on 13 February 2009 came into effect on 30 June 2009, and makes provision for effective and integrated management of waste tyres in the country. It provides regulations for tyre producers, tyre dealers and waste tyre stockpile owners.

The regulations furthermore require the compilation of industry waste tyre management plans and waste tyre stockpile abatement plans and details the requirements for waste tyre storage areas.

2.5 THE WESTERN CAPE HEALTH CARE WASTE MANAGEMENT AMENDMENT ACT, 2007 (NO 6 OF 2010)

Act 7 of 2007 was amended in 2010 so as to align the terminology with that used in the National Environmental Management: Waste Act, 2008; to define or redefine certain expressions; to delete certain unnecessary definitions; to provide for the issuing of compliance notices; to amend the provisions relating to offences and penalties; to make further provision regarding regulations; to effect certain textual changes; and to provide for matters incidental thereto. The Health Care Management Bill provides for the effective handling, storage, collection, transportation, treatment and disposal of health care waste by all persons in the Province of the Western Cape; and provides for matters incidental thereto.

The object of this Act is to promote integrated health care waste management and thereby—

(a) reduce the risks of health care waste to human health;
(b) prevent the degradation of the environment;
(c) prevent the illegal dumping of health care waste;
(d) promote sustainable development, and
(e) ensure responsible management of health care waste within the Province.

Under this Act a Municipality must:

(a) enforce the relevant provisions of this Act within its area of jurisdiction;
(b) perform audits of generators, transporters, treaters or disposers of health care waste within its area of jurisdiction to ensure compliance with the provisions of this Act;
(c) report annually to the Provincial Minister on the number of incidents of illegal dumping of health care risk waste within its area of jurisdiction, the number of incidents of illegal dumping of health care risk waste pursued in a court of law, and the number of incidents of illegal dumping of health care risk waste successfully convicted in a court of law.

Health Care Waste is produced by hospitals, clinics, physicians, offices, dentists, funeral homes, veterinary clinics and medical- and research laboratories.

Currently only 10-15% of medical waste is considered infectious. The enormous volumes of health care waste requiring special handling and disposal for all infectious and pathological waste are responsible for the current re-evaluation of the terminology for health care waste.

The modern trend in infection control is dictated by the risk posed by the procedure and not by the diagnoses. Thus health care waste is divided into Health Care General Waste (HCGW) and Health Care Risk Waste (HEALTH CARE RISK WASTE). Health Care Risk Waste generally indicates infectious waste, pathological waste, sharps, chemical and pharmaceutical waste, radioactive and cytotoxic waste.

2.6 THE WESTERN CAPE HEALTH CARE WASTE MANAGEMENT AMENDMENT ACT, 2007: WESTERN CAPE HEALTH CARE RISK WASTE MANAGEMENT REGULATIONS, 2013

These regulations were published in the Western Cape: Provincial Gazette Extraordinary 15 March 2013. These are the regulations set out in the Schedule under section 14 of the Western Cape Health Care Waste Management Act, 2007.

The regulations address the requirements for packaging, storage, internal transport, external transport, vehicles, drivers, treatment and disposal of health care risk waste. Furthermore the required training, registration of health care risk waste generators, transporters, treaters and disposers, reporting, auditing and record keeping is discussed. Health care waste management plans must be prepared by those who meet the criteria listed. The required actions regarding compliance notices are also listed.

All addressed forms in the regulations are given in the Annexures:
Annexure 1: Minimum Requirements for health care risk waste containers
Annexure 2: Minimum Requirements for storage of health care risk waste in terms of regulation 3
Annexure 3: Form 1, Minimum Requirements for a tracking document
Annexure 4: Minimum Requirements for information to be contained in a Health Care Waste Management Plan
Annexure 5: Form 2.1, IPWIS registration form for health care risk waste generators, transporters, treaters and disposers

Annexure 6: Form 2.2, Registration Certificate; Form 3.1, Monthly record keeping form for generators; Form 3.2 Monthly record keeping form for transporters, treaters and disposers
Annexure 7: Form 4.1, Compliance Notice; Form 4.2, Compliance certificate

2.7 NATIONAL WATER ACT (ACT NO. 36 OF 1998)

The purpose of the Act is to ensure that the Municipality's water resources are protected, used, developed and conserved in ways which take into account the protection of aquatic and associated ecosystems; that addresses basic human needs; that ensures the reduction and prevention of pollution; and that meets international obligations.

Section 19 of the NWA deals with landowners and users involved in any activity or process which causes, has caused or is likely to cause pollution of water resources. Such landowners and users are obliged to take all reasonable measures to prevent any such pollution from occurring, continuing or recurring. This includes measures to comply with any prescribed waste standard or management practice.

Furthermore, the NWA requires anyone who intends undertaking a water use, as defined, to obtain a licence. The water uses that may be relevant to waste management activities are:

- discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit; and
- disposing of waste in a manner which may detrimentally impact on a water resource.

The applications for permits, licenses and exemptions made before the promulgation of this Act could still be dealt with in terms of the Water Act 1956 (Act No. 54 of 1956).

2.8 NATIONAL ENVIRONMENT MANAGEMENT: AIR UALITY ACT 2004 (ACT NO. 39 OF 2004)

This Act has been promulgated in order to reform the law regulating air quality in order to protect the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development while promoting justifiable economic and social development. It also provides for national norms and standards regulating air quality monitoring, management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.

The object of this Act is:

a) to protect the environment by providing reasonable measures for-

   (i) the protection and enhancement of the quality of air in the Republic;
   (ii) the prevention of air pollution and ecological degradation; and
   (iii) securing ecologically sustainable development while promoting justifiable economic and social development; and

b) generally to give effect to section 24(b) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.

2.9 NATIONAL WASTE MANAGEMENT STRATEGY

The National Waste Management Strategy (2011) presents Government's strategy for integrated waste management for South Africa and is a legislative requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) The purpose of the Strategy is to achieve the objectives of the Waste Act.

The National Waste Management Strategy presents a long-term plan (up to the year 2016) for addressing key issues, needs and problems experienced with waste management in South Africa. The strategy gives effect to the Bill of Rights, Constitution of South Africa, Act 107 of 1998, on the basis of which the people of South Africa have the right to an environment that is not detrimental to their health. Furthermore, the strategy translates into action Government's policy on waste as set out in the Draft White Paper on Integrated Pollution and Waste Management for South Africa (published in 1998).

The objective of integrated pollution and waste management is to move away from fragmented and uncoordinated waste management to integrated waste management. Such a holistic and integrated management approach extends over the entire waste cycle from cradle to grave, and covers the prevention, minimisation, generation, collection, transportation, treatment and final disposal of waste. Integrated waste management thus represents a paradigm shift in South Africa's approach to waste management, by moving away from waste management through impact management and remediation and establishing instead a waste management system which focuses on waste prevention and waste minimisation.

The Strategy is built around a framework of eight goals, as listed below, along with specific goals that must be reached by 2016. All listed targets must be reached by 2016:

Goal 1: Promote waste minimisation, reuse, recycling and recovery of waste.
- 25% of recyclables diverted from landfill sites for re-use, recycling or recovery.
- All Metropolitan Municipalities, secondary cities and large towns have initiated separation at source programmes.

Goal 2: Ensure the effective and efficient delivery of waste services.
- 95% of urban households and 75% of rural households have access to adequate levels of waste collection services.
- 80% of waste disposal sites have permits.

Goal 3: Grow the contribution of the waste sector to the green economy.
- 69 000 new jobs created in the waste sector.

Goal 4: Ensure that people are aware of the impact of waste on their health, well-being and the environment.
- 80% of municipalities running local awareness campaigns.
- 80% of schools implementing waste awareness programmes.

Goal 5: Achieve integrated waste management planning.
- All Municipalities have integrated their IWMPs with their IDPs and have met the targets set in the IWMPs.
- All waste management facilities required to report to SAWIS have waste quantification systems that report information to WIS.

Goal 6: Ensure sound budgeting and financial management for waste services.
- All municipalities that provide waste services have conducted full-cost accounting for waste services and have implemented cost reflective tariffs.

Goal 7: Provide measures to remediate contaminated land.
- Assessment complete for 80% of sites reported to the contaminated land register.
- Remediation plans approved for 50% of confirmed contaminated sites.

Goal 8: Establish effective compliance with and enforcement of the Waste Act.
- 50% increase in the number of successful enforcement actions against non-compliant activities.
- 800 EMIs appointed in the three spheres of government to enforce the Waste Act.

The strategy aims to reduce both the generation and the environmental impact of waste. It presents a plan for ensuring that the socio-economic development of South Africa, the health of its people and the quality of its environmental resources are no longer adversely affected by uncontrolled and uncoordinated waste management. It establishes a waste management system that concentrates on avoiding, preventing and minimising waste and makes provision for waste management services for all by extending an acceptable standard of waste collection, as well as transportation, treatment and disposal services to all communities.

While the long-term objective of the strategy is waste prevention and minimisation, a number of remedial actions such as improved waste collection and waste treatment are required in the shorter term due to prevailing inadequate waste management practices.

The Strategy is an institutionally inclusive strategy because its achievement relies on participation by numerous role-players in the public sector, private sector and civil society.

To implement the Waste Act, government must:
- Draft legislation, regulations, standards and Integrated Waste Management Plans.
- Regulate waste management activities through licenses and enforce their conditions.
- Implement the South African Waste Information System (SAWIS)
- Coordinate waste management activities using a system of Waste Management Officers.
- Give effect to multilateral agreements and ensure proper import and export controls.
- Progressively expand access to at least a basic level of waste services and plan for future needs.
- Facilitate the establishment of a national recycling infrastructure.
- Provide the framework for the remediation of contaminated land.
- Work in partnership with the private sector and civil society.

2.10 WHITE PAPER ON EDUCATION AND TRAINING (1995)

The 1995 *White Paper on Education and Training* states that "environmental education, involving an interdisciplinary, integrated and active approach to learning, must be a vital element of **all levels and programmes of the education and training system**, in order to create environmentally literate and active citizens and ensure that all South Africans, present and future, enjoy a decent quality of life through the sustainable use of resources".

The White Paper advocates environmental education and training **at all levels**. This would include the local government sphere, particularly when it comes to the environmental education & training of government officials and workers.

The education of the youth is the responsibility of national and provincial government. However, the Constitution does state that where the capacity exists, functions can be delegated to local government, and that the spheres of government, while distinctive, are interdependent and interrelated. Local government should support the other spheres of government (such as the national Department of Education, DoE) in areas of its own focus, such as environmental management and sustainable development.

2.11 THE MUNICIPAL SYSTEMS ACT (ACT 32 OF 2000)

This policy outlines the role and responsibilities of local governments as to:

- Provide democratic and **accountable** government for local communities;
- Ensure the provision of services to communities in a **sustainable** manner;
- Promote **social** and economic development;
- Promote a safe and healthy **environment**;
- Encourage the **involvement** of communities and community organisations in the matters of local government, and
- Strive, within its financial and administrative capacity, to achieve the objectives above.

These responsibilities indicate a need for an environmentally educated work force (accountable) as well as an environmentally educated public (involvement). The Municipal Systems Act (32 of 2000) requires municipalities to promote public participation and to build the capacity of residents, councillors and municipal officials to engage in participatory processes. As a means of tracking progress in this area, the executive of a municipality is obliged to report annually on the level of public participation in municipal matters.

Each Municipality must include in its integrated development plan contemplated in Chapter 5 of the Municipal Systems Act, an integrated waste management plan that is consistent with the relevant provincial integrated waste management plan. The annual performance report which must be prepared in terms of section 46 of the Municipal Systems Act must contain information on the implementation of the municipal integrated waste management plan.

2.12 THE MUNICIPAL STRUCTURES ACT, 1998 (ACT NO. 117 OF 1998)

This Act makes provision for the establishment of municipalities in accordance with the requirements relating to categories and types of municipality. It establishes criteria for determining the category of municipality to be established in an area and defines the types of municipality that may be established within each category.

The Act furthermore provides for an appropriate division of functions and powers between categories of Municipality and regulates the internal systems, structures and office-bearers of the municipalities. It also provides for appropriate electoral systems for matters in connection therewith.

2.13 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008) ("THE WASTE ACT")

On 1 July 2009 the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("the Waste Act") came into effect. The Waste Act repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) ("ECA") and introduces new provisions regarding the licensing of waste management activities.

Provision has been made in the form of legislative and regulatory tools to facilitate and ensure implementation of the Act by all spheres of government.

The Waste Act was published to reform the law regulating waste management in order to protect the health of the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.

The purpose of this Act is to protect health, well-being and the environment by providing reasonable measures for –

- the minimisation of the consumption of natural resources;
- the avoidance and minimisation of the generation of waste;
- the recovery, re-use and recycling of waste;
- the treatment and safe disposal of waste as a last resort;
- the prevention of pollution and ecological degradation;
- securing ecologically sustainable development while promoting justifiable economic and social development;
- promoting and ensuring the effective delivery of waste services;
- remediating land where contamination presents, or may present, a significant risk of harm;
- achieving integrated waste management reporting and planning;
- to ensure that people are aware of the impacts of waste on health and the environment;
- to provide for compliance and generally to give effect to section 24 of the Constitution in order to secure an environment that is not harmful to the health and well-being of people.

The interpretation and application of this Act must be guided by the national environmental management principles set out in section 2 of the National Environmental Management Act.

The Waste Act allows for the compilation of a Waste Management Strategy, national, provincial and local standards.

Municipalities must in terms of their by-laws:

- establish service standards and levels of service for the collection of waste;
- may identify requirements in respect of the separation, compacting and storage of waste;
- may identify requirements for the management of waste, including requirements in respect of the avoidance of the generation of waste and the recovery, reuse and recycling of waste;
- the requirements in respect of the directing of waste to specific treatment and disposal facilities.

Each Municipality must include in its integrated development plan contemplated in Chapter 5 of the Municipal Systems Act, an integrated waste management plan that is consistent with the relevant provincial integrated waste management plan.

The annual performance report which must be prepared in terms of section 46 of the Municipal Systems Act must contain information on the implementation of the municipal integrated waste management plan.

Municipalities must also in terms of the Act:

- conduct municipal activities in accordance with the National Waste Management Strategy and any national or provincial norms and standards;
- compile an integrated waste management plan;
- ensure that waste management services are provided within the municipality in a manner which prioritises the recovery, re-use or recycling of waste and provides for the treatment and safe disposal of waste as a last resort;
- designate a waste management officer;
- ensure that provision is made for the management and collection of litter;
- secure compliance with the objects of this Act that are in the domain of the municipality; and
- implement any other measures that are necessary for securing the objects of this Act that are within the domain of the municipality.

Duty to provide collection services - Every municipality has an obligation to progressively ensure that efficient, effective and affordable waste collection services are provided in its area.

A municipality may, by notice, require any person making use of the municipal collection service to separate specified types of waste from the general waste for the purposes of recovery, re-use or recycling.

In terms of Section 19(1) of the Waste Act, the Minister may publish a list of waste management activities that have, or are likely to have, a detrimental effect on the environment. In terms of Section 20 of the Waste Act no person may commence, undertake or conduct a waste management activity except in accordance with the following:

- the requirements or standards determined in terms of Section 19(3) of the Waste Act for that activity; or
- a waste management license issued in respect of that activity, if a license is required.

On 3 July 2009 a list of waste management activities were published. These activities were published in Government Notice 178 in Government Gazette No. 32368 of 3 July 2009. No person may commence with, undertake or conduct these activities unless a waste management license is issued in respect of the activity.

A person who wishes to commence, undertake or conduct an activity listed under Category A must conduct a Basic Assessment process whilst activities listed under Category B requires a Scoping and EIA process to be undertaken.

In terms of Section 49(2) of the Waste Act a decision to grant a waste management license in respect of a waste disposal facility is subject to the concurrence of the Minister responsible for Water Affairs. The Waste Act further specifies that the issuing of a waste management license for a waste disposal facility is subject of the inclusion in the license of any conditions contained in a Record of Decision issued by the Minister responsible for Water Affairs regarding any measures that the Minister responsible for Water Affairs considers necessary to protect a water resource as defined in the National Water Act, 1998 (Act No. 36 of 1998).

2.14 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): LIST OF WASTE MANAGEMENT ACTIVITIES THAT HAS, OR IS LIKELY TO HAVE A DETRIMENTAL EFFECT ON THE ENVIRONMENT. GOVERNMENT NOTICE 37083, 29 NOVEMBER 2013

This notice replaces the 3 July 2009 list of activities that trigger a waste license requirement and because of its impact on financial budgets and budget scheduling, all the activities, quoted verbatim (except where grammatically corrected) from the notice, are listed below:

"GENERAL

No person may commence, undertake or conduct a waste management activity listed in this schedule unless a licence is issued in respect of that activity.

CATEGORY A

3. A person who wishes to commence, undertake or conduct an activity listed under this Category, must conduct a basic assessment process, as stipulated in the environmental impact assessment regulations made under section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as part of a waste management licence application.

Storage of waste

(1) The storage of general waste in lagoons.

Recycling or recovery of waste

(2) The sorting, shredding, grinding, crushing, screening or baling of general waste at a facility that has an operational area in excess of 1000m^2.

(3) The recycling of general waste at a facility that has an operation area in excess of 500m^2, excluding recycling that takes place as an integral part of an internal manufacturing process within the same premises.

(4) The recycling of hazardous waste in excess of 500kg but less than 1 tonne per day calculated as a monthly average, excluding recycling that takes place as an integral part of an internal manufacturing process within the same premises.

(5) The recovery of waste including the refining, utilisation, or co-processing of the waste in excess of 10 tonnes but less than 100 tonnes of general waste per day or in excess of 500kg but less than 1 tonne of hazardous waste per day, excluding recovery that takes place as an integral part of an internal manufacturing process with in the same premises.

Treatment of waste

(6) The treatment of general waste using any form of treatment at a facility that has the capacity to process in excess of 10 tonnes but less than 100 tonnes.

(7) The treatment of hazardous waste using any form of treatment at a facility that has the capacity to process in excess of 500kg but less than 1 tonne per day excluding the treatment of effluent, wastewater or sewage.

(8) The remediation of contaminated land.

Disposal of waste

(9) The disposal of inert waste in excess of 25 tonnes and with a total capacity of 25 000 tonnes, excluding the disposal of such waste for the purposes of levelling and building which has been authorised by or under other legislation.

(10) The disposal of general waste lo land covering an area of more than 50m^2 but less than 200m^2 and with a total capacity not exceeding 25 000 tonnes.

(11) The disposal of domestic waste generated on premises in areas not serviced by the municipal service where the waste disposed exceeds 500kg per month.

Construction, expansion or decommissioning of facilities and associated structures and infrastructure

(12) The construction of facilities for waste management schedule activity listed in Category A of this Schedule (not in isolation to associated activity).

(13) The expansion of waste management activity listed in Category A or B of this Schedule which does not trigger an additional waste management activity of this Schedule

(14) The decommissioning of facility for a waste management activity listed in Category A or B of this Schedule.

CATEGORY B

4. A person who wishes to commence, undertake or conduct a waste management activity listed under this Category, must conduct a scoping and environmental impact reporting process, set out in the Environmental Impact Assessment Regulations made under section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as part of a waste management licence application contemplated in section 45 read with section 20(b) of this Act.

Storage of hazardous waste

(1) The storage of hazardous waste in lagoons excluding storage of effluent, wastewater or sewage.

Reuse, recycling and recovery of waste

(2) The reuse and recycling of hazardous waste in excess of 1 tonne per day, excluding reuse or. Recycling that takes place as an integral part of an internal manufacturing process within the same premises.

(3) The recovery of waste including the refining, utilisation or co-processing of waste at a facility with a facility that processes in excess of 100 tonnes of general waste per day or in excess of 1 tonne of hazardous waste per day, excluding recovery that takes place as an integral part of an internal manufacturing process within the same premises.

Treatment of waste

(4) The treatment of hazardous waste in excess of 1 tonne per day calculated as a monthly average; using any form of treatment excluding the treatment of effluent, wastewater or sewage.

(5) The treatment of hazardous waste in lagoons, excluding the treatment of effluent, wastewater or sewage.

(6) The treatment of general waste in excess of 100 tonnes per day calculated as a monthly average, using any form of treatment.

Disposal of waste on land

(7) The disposal of any quantity of hazardous waste to land.

(8) The disposal of general waste to land covering an area in excess of 200m^2 and with a total capacity exceeding 25 000 tonnes.

(9) The disposal of inert waste to land in excess of 25 000 tonnes, excluding the disposal of such waste for the purposes of levelling and building which has been authorised by or under other legislation.

Construction of facilities and associated structures and infrastructure

(10) The construction of facilities for a waste management activity listed in Category B of this this Schedule (not in isolation to associated waste management activity).

CATEGORY C

5. A person who wishes to commence, under take or conduct a waste management activity listed under this Category, must comply with the relevant requirements or standards determined by the Minister listed below-

(a) Norms and Standards for Storage of Waste, 2013 or

(b) Standards for Extraction, Flaring or recovery of Landfill Gas, 2013; or

(c) Standards for Scrapping or Recovery of Motor Vehicles, 2013.

Storage of waste

(1) The storage of general waste at a facility that has the capacity to store in excess of 100m^3 of general waste at any one time, excluding the storage of waste in lagoons or temporary storage of such waste.

(2) The storage of hazardous waste at a facility that has the capacity to store in excess of 80m^3 of hazardous waste at any one time, excluding the storage of hazardous waste in lagoons or temporary storage of such waste.

(3) The storage of waste tyres in a storage area exceeding 500m^2.

Recycling or recovery of waste

(4) The scrapping or recovery of motor vehicles at a facility that has an operational area in excess of 500m^2.

(5) The extraction, recovery or flaring of landfill gas."

2.15 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL DOMESTIC WASTE COLLECTION STANDARDS, GOVERNMENT NOTICE 33935, 21 JANUARY 2011

The purpose of this publication is to redress past imbalances in the provision of waste collection services. The provision of waste collection services improves the quality of life of the entire community and ensures a clean and more acceptable place to live and work in. The lack of or poor quality waste collection services can however result in a number of environmental and human health problems.

It is recognised that South Africa is a developing country and the purpose of the setting of standards is to ensure a service to all while complying with health and safety regulations without unnecessarily changing current creative collection processes as long as they function well and deliver a service of acceptable standard to all households. These National Domestic Waste Collection Standards are therefore applicable to all domestic waste collection services throughout the country.

This notice distinguishes between the levels of service relating to waste collection. It further states that equitable waste collection services must be provided to all households within the jurisdiction of the municipality. In areas where travelling distances and the resulting costs may render regular waste collection services impractical, the municipality, through by-laws, must allow for more feasible alternative ways of waste handling, such as on-site disposal.

From here regulations and guidelines on separation at source, collection of recyclable waste, receptacles, bulk containers, communal collection points, frequency of collection, drop-off centres and collection vehicles are given.

Existing Occupational Health and Safety legislation must be adhered to and the general health of waste collection workers must be addressed by ensuring they receive:
(i) regular medical check-ups to ensure their health and well-being;
(ii) appropriate personal protective equipment e.g. gloves, masks, overalls and raincoats, gumboots; and
(iii) on-going training on health and safety issues.

The role of the Waste Management Officer regarding waste awareness and the handling of complaints are prescribed. The municipality must create awareness amongst households about the following:
(i) the types of waste collection services provided;
(ii) separation at source - the removal of recyclables and re-usable waste from the general household waste;
(iii) the potential of composting of some of the household waste and the benefit of such to the household;
(iv) the unacceptability of illegal dumping and littering;
(v) measures to be taken against individuals that litter and dump waste illegally;
(vi) the cost of cleaning up illegal dumping and littering, and the implications on household waste collection rates; and
(vii) the advantages of reporting illegal dumping activities.

The municipality must provide clear guidelines to households about the following:
(i) the different types of waste generated in households;
(ij) separation of non-recyclable and non-reusable household waste from compostable waste and recyclable waste;
(iii) appropriate containers for each type of waste;
(iv) removal schedules for each type of waste; and
(v) what to do with waste other than those waste forming part of the regular schedule of waste collection services.

Awareness raising and guideline communications must be done at regular intervals to ensure that all households are well informed about the issues listed above.

The Waste Collection customer service standards for Kerbside collection are described with respect to collection schedule, interruptions, the replacement of bins, collection during holidays and general points.

2.16 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL WASTE INFORMATION REGULATIONS, GOVERNMENT NOTICE 35583, 13 AUGUST 2012

The purpose of the Regulations is to regulate the collection of data and information to fulfil the objectives of the national waste information system set out in section 61 of the Act.

The Regulations apply uniformly to all persons conducting an activity listed in Annexure 1 of the Regulations. A person who conducts an activity in a province that has an established waste information system in terms of section 62 of the Act and collects the minimum information required by the Regulations must submit the information to the provincial waste information system.

Where a province has developed waste information regulations that are compatible with the Regulations, a person who conducts an activity contemplated in Annexure 1 to the Regulations must comply with the provincial waste information regulations.

2.17 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): WASTE CLASSIFICATION AND MANAGEMENT REGULATIONS, GOVERNMENT NOTICE 36784, 23 AUGUST 2013

The purpose of the Regulations is to regulate the classification and management of waste in a manner which supports and implements the provisions of the Act; to establish a mechanism and procedure for the listing of waste management activities that do not require a Waste Management License; to prescribe requirements for the disposal of waste to landfill; to prescribe requirements and timeframes for the management of certain wastes and to prescribe general duties of waste generators, transporters and managers.

Chapter 2 of the Notice covers Waste Classification and Safety Data Sheets. Chapter 3 covers Waste Management in General, Waste Treatment and Waste Disposal to Landfill. Chapter 4 covers Waste Management Activities that do not require a Waste Management License. Chapter 5 covers the Record Keeping and Waste Manifest System. Chapter 6 covers General Matters which includes Implementation and Transitional Provisions and Offences and Penalties.

Chapter 7 contains the following Annexures:
Annexure 1: Wastes that do not require Classification or Assessment
Annexure 2: Waste Manifest System Information Requirements

2.18 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE ASSESSMENT OF WASTE FOR LANDFILL DISPOSAL, GOVERNMENT NOTICE 36784, 23 AUGUST 2013

The purpose of the Norms and Standards is to prescribe the requirements for the assessment of waste prior to disposal to landfill in terms of Regulation 8(1)(a) of the Regulations.

The Standard Assessment Methodology to assess waste for the purpose of disposal to landfill the following are required:

- Identification of chemical substances present in the waste
- Sampling and analysis to determine the total concentrations (TC) and leachable concentrations (LC) of the elements and chemical substances that have been identified in the waste and that are specified in section 6 of the Norms and Standards.

Within 3 years of the date of commencement of the Regulations, all analyses of the TC and LC must be conducted by labs accredited by SANAS. The TC and LC limits must be compared to the threshold limits specified in section 6 of these Norms and Standards. Based on the TC and LC limits the specific type of waste for disposal to landfill must be determined in terms of section 7.

2.19 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR DISPOSAL OF WASTE TO LANDFILL, GOVERNMENT GA ETTE NO 36784, 23 AUGUST 2013

The purpose of the Norms and Standards are to determine the requirements for the disposal of waste to landfill as contemplated in regulation 8(1)(b) and (c) of the Regulations.

Chapter 2 describes and illustrates the Landfill Classification and corresponding minimum engineering design requirements for the Containment Barriers. These are for Class A to Class D landfills. The requirements that are to be included in an application for a waste management license are stipulated.

The waste acceptance criteria for disposal to landfill are summarised as follows:

Waste assess in terms of the Norms and Standards for Assessment of Waste for Landfill Disposal set in terms of section 7(1) of the Act must be disposed to a licensed landfill as follows:

Waste Type	Landfill Disposal Requirements
Type 0	Disposal to landfill not allowed
Type 1	Disposed at Class A landfill or H:h/H:H landfill as specified
Type 2	Disposed at Class B landfill or G:L:B+ landfill as specified
Type 3	Disposed at Class C landfill or G:L:B+ landfill as specified
Type 4	Disposed at Class D landfill or G:L:B- landfill as specified

Waste listed in section 2(a) of Annexure 1 to the Regulations must be disposed as follows:

Listed Waste	Landfill Disposal Requirements
Domestic waste. Business waste not containing hazardous waste or hazardous chemicals. Non-infectious animal carcasses. Garden waste.	Disposed at Class B landfill or G:L:B+ landfill as specified
Post-consumer packaging. Waste tyres.	Disposed at Class C landfill or G:L:B+ landfill as specified
Building and demolition waste not containing hazardous waste or hazardous chemicals. Excavated earth material not containing hazardous waste or hazardous chemicals.	Disposed at Class D landfill or G:L:B- landfill as specified

Unless assessed in terms of the Norms and Standards for Assessment of Waste for Landfill Disposal set in terms of Section 7(1) of the Act and disposed of in terms of section 4(1) of these Norms and Standards, the following waste included in section 2(b) of Annexure 1 to the Regulations must be disposed as follows:

Listed Waste	Landfill Disposal Requirements
Asbestos waste; Expired, spoilt or unstable hazardous products; PCBs; General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals; Mixed, hazardous chemical wastes from analytical labs and labs from academic institutions in containers less than 100 litres.	Disposed at Class A landfill or H:h/H:H landfill as specified

Waste that has been classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; DWAF) prior to the Regulations coming into operation, may be accepted and disposed of as set out below for a period not exceeding 3 years after the date of coming into operation of the Regulations:

Waste	Landfill Disposal Requirements
Hazardous Waste - Hazard Rating 1 or 2	Disposed at Class A landfill or H:H landfill as specified
Hazardous Waste - Hazard Rating 3 or 4	Disposed at Class A landfill or H:h landfill as specified
Hazardous Waste - Delisted	Disposed at Class B landfill or G:L:B+ landfill as specified
General Waste	Disposed at Class B landfill or G:S/M/L:B-/B+ landfill as specified

The Norms and Standards lists prohibitions and restrictions on the disposal of waste to landfill which comes into effect after the timeframes indicated for each waste and activities from the date of the Regulations coming into operation.

2.20 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): FEE STRUCTURE FOR CONSIDERATION AND PROCESSING OF APPLICATIONS FOR WASTE MANAGEMENT LICENSES, TRANSFER AND RENEWAL THEREOF, GOVERNMENT GA ETTE NO 37383, 28 FEBRUARY 2014

These regulations apply to the above applications excluding community based projects funded by government grants or applications made by organs of state. The commencement date is 1 April 2014. Payment details are discussed regarding the different applicable fees which are listed as follows:

Application	Fee
Application for a waste management license for which basic assessment is required in terms of the Act.	R2000.00
Application for a waste management license for which S&EIR is required in terms of the Act.	R10000.00
Application for a transfer of a waste management license in terms of section 52(2) or for the renewal of a waste management license in terms of section 55(2) of the Act.	R2000.00

2.21 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE EXTRACTION FLARING OR RECOVERY OF LANDFILL GAS, GOVERNMENT GA ETTE NO 37086, 29 NOVEMBER 2013

The purpose of these Norms and Standards is to aim at controlling the flaring, extraction or recovery of landfill gas at facilities in order to prevent or minimise the potential negative impacts on the bio-physical and socio-economic environments. It describes how these facilities must be designed, operated, monitored and decommissioned

2.22 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE SCRAPPING OR RECOVERY OF MOTOR VEHICLES, GOVERNMENT GA ETTE NO 37087, 29 NOVEMBER 2013

These Norms and Standards is applicable to a vehicle scrapping or recovery facility with an operational area exceeding 500m^2 and describes how such a facility must be designed, operated, monitored and decommissioned.

2.23 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE STORAGE OF WASTE, GOVERNMENT GA ETTE NO 37088, 29 NOVEMBER 2013

The purpose of these Norms and Standards is to provide a uniform national approach to the management of waste storage facilities, ensure best practice and to provide minimum standards for the design and operation of new and existing facilities. These Norms and Standards are applicable to waste storage facilities that have the capacity to store in excess of 100m^3 general waste continuously or 80 m^3 of hazardous waste continuously.

2.24 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR ORGANIC WASTE COMPOSTING, GOVERNMENT GA ETTE NO 37300, 7 FEBRUARY 2014

These Norms and Standards is applicable to organic waste composting facilities that have the capacity to process in excess of 10 tonnes but less than 100 tonnes of compostable organic waste per day and describes how such a facility must be designed, operated, monitored and decommissioned.

2.25 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE REMEDIATION OF CONTAMINATED LAND AND SOIL UALITY, GOVERNMENT GA ETTE NO 37603, 2 MAY 2014

The purpose of these Norms and Standards is provide a uniform national approach to determine the contamination status of an area and to limit uncertainties about the most appropriate criteria and method to apply in such an assessment. Also to provide minimum standards for assessing necessary environmental protection measures for remediation activities.

2.26 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): LIST OF WASTE MANAGEMENT ACTIVITIES THAT HAS, OR IS LIKELY TO HAVE A DETRIMENTAL EFFECT ON THE ENVIRONMENT. GOVERNMENT NOTICE 37604, 2 MAY 2014

The Waste Management Activities List under paragraph 2.15 above has been amended by the deletion of Category B activity 3 (8).

2.27 NATIONAL POLICY FOR THE PROVISION OF BASIC REFUSE REMOVAL SERVICES TO INDIGENT HOUSEHOLDS. GOVERNMENT NOTICE 34385, 22 JUNE 2011

The main criterion for determining the qualifying recipients of Basic Refuse Removal (BRR) services is registration on a municipality's indigent register as provided for by the indigent policy of the municipality.

The following criteria can be used in the absence of or in addition to the main criterion to determine the qualifying recipients of the BRR services:

- Level of income: Monthly net household income of members of less than or equal to *two old age pensions (including children/individuals who may get state grants).*
- Residence status: Everybody residing in the municipality provided their indigent status have been verified.
- Special considerations: All child headed households, households headed by pensioners and people with disabilities
- Value of property (need to note that inherited properties might give false income level status).
- Any other criteria as determined by the specific municipality

A municipality may for practical reasons, declare certain areas or clusters as qualifying recipients of BRR. Examples may include low-income areas and high density, urban informal areas.

- Such declarations have added advantages in terms of administrative feasibility (logistics and costs included) especially where rate collection is challenging.
- A municipality may declare certain low density rural areas as areas where on-site disposal is deemed to be an appropriate waste management option.

If the recipient does not fall under a qualifying indigent area, he/she may register as an indigent at his/her municipality. The municipality must set out certain dates/times for these registrations.

2.28 WHITE PAPER: POLICY ON POLLUTION PREVENTION, WASTE MINIMISATION, IMPACT MANAGEMENT AND REMEDIATION (MARCH 2000)

In line with international trends and our national objectives of efficient and effective management of our nation's resources, priority is given to prevention of waste. Unlike previous policies that focused predominantly on so called "end of pipe" treatment, this White Paper underscores the importance of preventing pollution and waste and avoiding environment degradation.

Effective mechanisms to deal with unavoidable waste will remain necessary, but much greater attention must be directed to the introduction of preventative strategies aimed at waste minimisation and pollution prevention. Ever increasing urban and industrial development throughout the world is leading to levels of pollution, which seriously threaten the natural resources upon which humankind depends for its survival.

Although South Africa has extensive environment, pollution and waste management legislation, responsibility for its implementation is scattered over a number of departments and institutions.

The fragmented and uncoordinated way pollution and waste is currently being dealt with, as well as the insufficient resources to implement and monitor existing legislation, contributes largely to the unacceptably high levels of pollution and waste in South Africa.

The White Paper on Integrated Pollution and Waste Management will result in a review of the existing legislation and the preparation of a single piece of legislation dealing with waste and pollution matters.

Pollution and waste management is not the exclusive preserve of government. The private sector and civil society have crucial roles to play. The fostering of partnerships between government and the private sector is a prerequisite for sustainable and effective pollution and waste management to take place. Similarly, the spirit of partnerships and co-operative governance between organs of state is equally important due to the crosscutting nature of pollution and waste management.

Monitoring and collection of information on pollution and waste generation are crucial for the implementation of pollution and waste reduction measures. Moreover, the sharing of such information and creating awareness about the issues will enable all stakeholders, including communities, to gain a better understanding of the relation between pollution, waste management and the quality of life.

The White Paper proposes a number of tools to implement the objectives of the policy it sets out. The most significant of these is a legislative programme that will culminate in new pollution and waste legislation. This proposed legislation, amongst other things, will address current legislative gaps, and clarify and allocate responsibilities within government for pollution and waste management.

The policy presents seven strategic goals, which are as follows:

Goal 1: Effective Institutional Framework and Legislation
Goal 2: Pollution Prevention, Waste Minimisation, Impact Management and Remediation
Goal 3: Holistic and Integrated Planning
Goal 4: Participation and Partnerships Governance in Integrated Pollution and Waste Management
Goal *5:* Empowerment and Education in Integrated Pollution and waste Management
Goal 6: Information Management
Goal 7: International Cooperation

The role of Local Government

Municipalities will be responsible for providing waste management services, and managing waste disposal facilities. Specific functions to be carried out by municipalities will include:

- compiling and implementing general waste management plans, with assistance from provincial government
- implementing public awareness campaigns
- collecting data for the Waste Information System
- providing general waste collection services and managing waste disposal facilities within their areas of jurisdiction
- implementing and enforcing appropriate waste minimisation and recycling initiatives, such as promoting the development of voluntary partnerships with industry, including the introduction of waste minimisation clubs where possible, regional planning, establishment and management of landfill sites, especially for regionally based general waste landfills.

2.29 PLANNING DOCUMENTS

The Provincial Spatial Development Framework (November 2005)

The PSDF states that there is a concern that a number of waste landfill sites are not properly managed. In addition to the challenges of managing increasing waste volumes and decreasing land available for waste disposal, the Western Cape, along with other Provinces, has to deal with waste management problems caused by inequitable development and inadequate service delivery. Waste issues are often closely associated with poverty, environmental health and social justice issues. The following Policies have particular reference:

RC32 All municipalities shall follow an integrated hierarchical approach to waste management consisting of the following, avoidance/reduce, reuse, recycle, composting, treatment and final disposal. The Waste Management System shall consist of a collection service from the source, (domestic, office or factory) transfer stations and waste disposal sites. (M)

RC33 Waste separation at source shall be mandatory in all domestic households and institutions and businesses including high density and multi-storey buildings from a date to be announced. Initially only organic (vegetable and plant matter) and inorganic (usually dry, cardboard, glass, plastics, paper, builders' rubble) waste shall be separated. (M)

RC34 Material Recovery Facilities shall be established at all Transfer Stations. (M)

RC35 Engage with the raw material and packaging industries and reach agreement to ensure demand for recycled products. (G)

RC36 Every urban settlement should have a Transfer Station within a maximum of 5kms from the town centre, inside the Urban Edge. These Transfer Stations shall be properly managed according to best practice so as to minimise nuisance to surrounding neighbours. They should also be open after hours and on the weekends and their locations shall be well publicised so as to ensure that the community uses them. Furthermore, charges should not be levied on loads brought to transfer stations. Micro enterprises wanting to process waste and trade second hand materials on site should be encouraged. (G)

RC37 Every municipality shall have a Waste Disposal facility site located and operated according to DWAF's minimum requirements that will service the Transfer stations in the urban settlements in that municipality. These sites may or may not be located within the Urban Edge of urban settlements. The main criteria for their location will be to meet satisfactory environmental and transport requirements. (M)

It is the intention of the Western Cape Government to make relevant policies contained in the WCPSDF mandatory in terms of legislation and to include these policies in appropriate legislation. These policies are indicated with a 'M' next to the applicable policy in Chapter 8 of this report. The balance of the policies is indicated with a 'G' to indicate that they are guiding principles. The distinction should be understood as follows:

Mandatory (M) measures refer to policies that are regarded as being of sufficient social, economic or environmental importance as to demand that every effort possible should be made to effectively implement that policy.

Guidelines (G) refer to policies that are intended as general developmental goals and whose detailed implementation may vary due to place specific conditions and therefore requiring a certain amount of flexibility in their application.

NOTE THAT THIS SECTION MUST BE UPDATED WHEN THE CURRENT DRAFT PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK (OCT 2013) IS FINALISED

2.30 INTERNATIONAL TREATIES

This section lists the international agreements to which South Africa has acceded. The following is as described in section 4.10 of the National Waste Management Strategy 2011:

Various international agreements to which South Africa has acceded relate to waste management. A number of non-binding conventions and protocols are also relevant to waste management. This section summarises the main actions in the NWMS related to implementing international agreements.

2.30.1 The Basel Convention

The Basel Convention, adopted in 1989, has the greatest bearing on the Waste Act as it addresses the trans-boundary movement of hazardous wastes and their disposal, setting out the categorization of hazardous waste and the policies between member countries.

DEA is developing MOUs with the International Trade Administration Commission (ITAC) and the South African Revenue Service (SARS) that effectively address the provisions of the Basel Convention.

DEA is considering accession to the amendments to the Basel Convention that ban the import and export of hazardous wastes. DEA is also currently developing a policy on imports and exports of waste that will address this.
DEA and DTI are jointly addressing the import and export control aspects of the Basel Convention, together with the chemical conventions. Control will happen through ITAC permits and SARS tariff codes.

2.30.2 The Montreal Protocol

The Montreal Protocol Treaty, revised in 1999, protects the ozone layer by phasing out the production of several substances that contribute to ozone depletion, with the aim of ozone layer recovery by 2050. This has relevance for waste management in instances where such obsolete products enter the waste stream. DEA will finalise and publish the National Implementation Plan for the Montreal Protocol. The plan will include the development on an Ozone Depletion Substance (ODS) strategy and regulations

will provide for the phasing out of specified substances and their safe disposal. These will be gazetted for public comment in 2012.

2.30.3 The Rotterdam Convention

The Rotterdam Convention promotes and enforces transparency in the importation of hazardous chemicals and whilst it explicitly excludes waste, its implementation may lead to bans on listed chemicals. Some of these chemicals may occur in stockpiles of obsolete chemicals such as pesticides that have been identified as a major waste management challenge. Extended producer responsibility schemes will be used to effectively manage obsolete chemicals.

A study to investigate the extent of manufacture, use, import and export of new chemicals listed in the Rotterdam Convention will determine whether South Africa should ratify the newly added chemicals. This document will be finalised in 2012. A process to identify and ban pesticides and industrial chemicals listed in Annex III (that South Africa has not yet banned) has started. Responsible departments will finalise arrangements for banning orders in 2012.

2.30.4 The Stockholm Convention

The Stockholm Convention on Persistent Organic Pollutants (POPs), which entered into force in 2004, requires that member countries phase out POPs and prevent their import or export. Parties to the Convention are also required to undertake the following responsibilities:

- Develop and implement appropriate strategies to identify stockpiles, products and articles in use that contain or are contaminated with POPs.
- Manage stockpiles and wastes in an environmentally sound manner.
- Dispose of waste in a way that destroys or irreversibly transforms POPs content.
- Prohibit recycling, recovery, reclamation, direct re-use or alternative use of POPs.
- Endeavour to develop strategies to identify contaminated sites and perform eventual remediation in an environmentally sound manner.

A National Implementation Plan has been developed and it will be reviewed in light of the Waste Act and finalised in 2012.

Furthermore, a study has been initiated to investigate the extent of manufacture, use, import and export of new POPs listed in this convention. The study will determine if South Africa should ratify the newly added POPs. This document will be finalised in 2012.

2.31 MUNICIPAL BY-LAWS

Breede Valley:

In terms of Section 13 of the Local Government Systems Act 2000, (Act 32 of 2000) Breede Valley Municipality made a solid waste by-law dealing with the containment and disposal of solid waste. The by-law was published in the Provincial Gazette Extraordinary 6560 of Wednesday, 22 October 2008.

This by-law needs to be updated to an integrated waste management by-law. This has been recommended in the Breede Valley 2015 IWMP implementation.

Drakenstein:

The Drakenstein Municipal By-laws relating to solid waste management were reviewed since the previous IWMP generation and replaced with their Integrated Waste Management By-law. The Drakenstein Municipality enacted their Integrated Waste Management By-law which was published in the Provincial Gazette Western Cape: 7184 on 4 October 2013.

No by-law revision for Drakenstein is recommended or necessary.

Langeberg:

The Langeberg Municipality's By-laws for the Prevention and Suppression of Nuisances and the Removal of Refuse and Control of Disposal Site was published in the Provincial Gazette Western Cape on 28 May 2010. It is recommended that the Langeberg develop and publish integrated solid waste by-laws.

Stellenbosch:

The Stellenbosch Municipality needs to compile and publish integrated waste management by-laws.

Witzenberg:

It is recommended that the current solid waste by-law of Witzenberg Municipality should be revised to integrated waste management by-laws.

CWDM:

The Cape Winelands District Municipality does not manage waste collection or disposal; therefore do not have Solid Waste By-laws. However, Chapter 8 of the Municipal Health By-laws of the Cape Winelands District Municipality published in the Government Gazette Extraordinary on Monday 15 February 2010 relates to Waste Management and reads as follows:

"Part 1: General provisions regarding recovery, storage and disposal of waste

25. Recovery, storage and disposal of waste

(1) Waste must be recovered, stored, transported and disposed of –
(a) without endangering human health
(b) without the use of processes or methods likely to harm or pollute the environment; and
(c) in a manner that does not create a health nuisance.

(2) A person who contravenes subsection (1) commits an offence.

Part 2: Hazardous Waste

26. Applicable legislation

The Municipality, taking cognizance of the provisions of the Environment Conservation Act, 1989 (Act No. 73 of 1989) the Hazardous Substances Act, 1973 (Act 15 of 1973), the National Health Act, 61 of 2003, and the regulations made under these Acts, adopts the provisions in this Part.

27. Storage of hazardous waste

(1) An empty container in which hazardous waste such as, but not limited to, pesticides was stored is to be treated as hazardous waste, and –

(a) must be stored in such a manner that –
(i) no pollution of the environment occurs at any time
(ii) no health nuisance is created at any time

(b) while being stored on site, must be clearly marked or labelled with the words "Hazardous Waste";

(c) the owner or occupier of the land must fence off the storage area to prevent unauthorised access; and

(d) shall be dealt with as Class 6 waste as described in the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (Second Edition, 1998) as published by the Department of Water Affairs and Forestry and as amended from time to time.

(2) A person who contravenes a provision of subsection (1)(a) to (d) commits an offence."

It is recommended that the District Municipality oversees the development and revision of the local Municipalities' solid waste by-laws (if outdated) into integrated solid waste management by-laws.

3. EXISTING WASTE MANAGEMENT IN CAPE WINELANDS DISTRICT MUNICIPALITY

3.1 AWARENESS AND EDUCATION

The lack of public awareness of the gravity of the problem of sustainable waste management has a significant impact on the effectiveness of the management of waste.

Our poor history of waste management in South Africa means that we pay little attention to our lifestyle insofar as how it affects the environment. However, when an environmental problem is noted and the public are made aware of the need for action, there is no stronger lobby. This has been evident with the Eskom power crisis in recent years. This situation has caused that people in South Africa have looked to alternative sources of electricity from small- to large scale. It is now an almost every-day sight to see people applying electricity saving practices at home. For example, solar panels are frequently seen on roofs (and these panels are becoming more efficient) and hot water geysers are fitted with timers so as not to consume electricity throughout the whole day or are simply switched on and off as needed. Creating awareness of the issue of sustainable waste management may have a similar outcome. With landfill airspace becoming more and more restricted, alternative options minimising or avoiding the need for disposal becomes necessary.

The successful implementation of the Cape Winelands District IWMP will require that all persons within the Municipal boundaries are aware of waste issues as an integral part of the creation of a healthy environment. They should be empowered to play their specific role in the development and implementation of the waste management initiatives.

Public participation is closely linked with education and public awareness. The significant difference between awareness programmes and public participation is that public awareness focuses on disseminating information, whereas public participation aims at obtaining participation, comment, input and feedback from the public.

3.1.1 Public Awareness and Education in the Cape Winelands District Municipality

Apart from each local Municipality's awareness and education initiatives, the following table illustrates the District's planned projects which will create awareness and educate the public about environmental health. Although some of the projects do not address education directly, the planting of trees and river rehabilitation for example, will create awareness and instil environmental consciousness with the public.

Project name	Budget	Unit of measurement	Baseline	Target 2014/2015	Target 2015/2016	Target 2016/2017
Environmental Health Education	R400 000.00	No. of theatre performances	100	80	80	80
Greening Project	R250 000.00	No. of trees planted	1500	1500	1500	1500
River Rehabilitation	R350 000.00	Hectares cleared	New	50	50	50
EPWP Invasive Alien Management Programme	R1 030 000.00	No. of hectares cleared	600	300	300	300

3.2 WASTE UANTITIES AND TYPES

3.2.1 Methodology for General Waste Survey

The waste quantities in the Cape Winelands District were determined by using weighbridge data (where available) and/or using the latest population statistics with waste generation rates per capita. These factors were applied to the estimated future population figures of each local Municipality to estimate the future waste generation quantities.

3.2.2 Volumes of General Waste generated

Weighbridge data from the Drakenstein, Langeberg and Stellenbosch Municipalities have been used in the waste generation calculations. The Breede Valley and Witzenberg Municipalities will install weighbridges with future developments. Their current waste totals were determined from the population statistics.

The waste generation and quantities in the Cape Winelands District Municipality can then be shown as in **Table 3-1.**

Table 3-1: Waste tonnages calculated for the Cape Winelands District

Municipality	Population (2015)	Waste Gen in Ton/year (2015)	Population (2016)	Waste Gen in Ton/year (2016)	Population (2017)	Waste Gen in Ton/year (2017)	Population (2018)	Waste Gen in Ton/year (2018)	Population (2019)	Waste Gen in Ton/year (2019)	Average Waste Generation Factor for Area in kg/p/d
Breede Valley	175751	42928	178054	43490	180386	44060	182749	44637	185143	45222	0.67
Drakenstein	237150	83950	243221	86100	249448	88304	255834	90564	262383	92883	0.97
Langeberg	73469	33022	74784	33613	76123	34215	77485	34827	78872	35451	1.23
Stellenbosch	173313	115223	178010	118346	182834	121553	187789	124847	192878	128230	1.82
Witzenberg	128688	42516	132085	43638	135572	44790	139151	45973	142825	47186	0.91
CWDM	**788372**	**317639**	**806154**	**325187**	**824363**	**332922**	**843009**	**340849**	**862102**	**348972**	**1.10**

3.2.3 Recoverable Material Volumes

The Department of Environmental Affairs and Development Planning (DEA&DP) commissioned a study in 2007 to determine the characterisation of the disposed waste at various landfills in the Cape Winelands District. From that study, the anticipated average waste composition of each Municipality in the Cape Winelands District can be derived to include the following recyclable materials (by mass):

Table 3-2: Recyclables in waste stream

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	36%	9%	9%	6%
Drakenstein	34%	22%	11%	5%
Langeberg	33%	16%	8%	6%
Stellenbosch	16%	15%	8%	2%
Witzenberg	26%	27%	6%	7%

Note that the Stellenbosch Municipality has conducted a waste characterisation study in 2012 and the results are shown in the table above. It is therefore recommended that the other Municipalities in the District conduct waste characterisation studies, based on the method below, or similar to the Stellenbosch study.

The Sustainable Cities Institute (United States) and California Department of Resources Recycling and Recovery recommend that the ASTM standards are followed when collecting samples for waste characterisation to be statistically representative. Their proposed method was developed to obtain characterisation from the disposed waste stream. For Disposal Facility type sampling, which was the case in the above study, a minimum total of 30 samples of 90kg each for the residential sector or 40 samples of 90kg each for the non-residential sector should be used. Another requirement is that the samples to be taken are spread over at least two seasons.

To align a new waste characterisation study for each Municipality with the above guidelines, the following is recommended:

- 30 samples of 90kg each are to be sampled randomly at a disposal facility spread over the year.
- The following schedule is proposed to obtain representative samples from the waste stream: One sample per day, Monday to Saturday, for one week of every second month, starting in January as the first month and November as the last. This will amount to a total of 36 samples spread over all four seasons and every day of the week.
- The requirement for this exercise per disposal facility will then be 5 workers to take samples and categorise waste, employed for a total of 36 days throughout the year. They can be employed as part of the Extended Public Works Programme or the Youth Jobs in Waste where applicable. Working with an average of R120 per person per day, this totals R21,600.00. The team can be led by the Municipality's waste manager and also be trained by him or someone delegated by him. A total of R5,000.00 is estimated if a consultant then reworks the data and reports on the gathered data. This can also be done in-house to limit additional costs.

The 2007 characterisation report is still the best available representation of the Cape Winelands waste stream (with the exception of Stellenbosch). To conduct a waste characterisation study that meets the above statistical requirements will require data collected over an entire year. Until such a study is commissioned and completed, the existing report is used for the purposes of this IWMP.

From the waste composition as reflected in the 2007 report, it can be calculated that the total volume of recoverable materials that are theoretically available in the waste stream will be as indicated in Table 3-3. These characterisation percentages were applied to the waste stream of the permanent population.

Table 3-3: uantities of Available Recoverable Materials

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	14995	3749	3749	2499
Drakenstein	26092	16883	8442	3837
Langeberg	10483	5082	2541	1906
Stellenbosch	17979	16856	8990	2247
Witzenberg	10707	11119	2471	2883
CWDM	80256	53688	26192	13372

The above theoretical figures give a total of approximately 173 509 tonnes per annum, which is 55% of the generated waste stream. It should be noted that this reflects the recyclable portion of the waste stream only as the mathematical representation. The full 58% cannot be seen as recoverable in the practical sense at this stage.

Due to the methods of collection, i.e. the collection of mixed un-separated household waste, a large amount of deterioration and contamination of potentially recoverable material takes place. Post-collection recovery (as is currently the norm in South Africa) implies that only a part of the above tonnages are available for recovery and recycling, due to contamination. For that reason separation at source is considered to be the preferred methodology to increase the volumes and value of recovered materials. Even with source separation some contamination still takes place, but less than mixed bag waste. The Municipalities in the Cape Winelands District implement source separation and are expanding on this service.

Although experience has shown that participation by the public is largely economy driven, the current trend is that separation at source, which implies that recoverable materials are separated by the home owner and "given" to the municipality (or Service Provider) for free, is mainly supported by the middle and higher income groups, whereas the low and very low income groups support buy-back centres or swop-shops where recoverable materials are bought/traded from the residents.

However, recently acquired data (measured quantities in Drakenstein Municipality over 5 years, Overstrand Municipality over 3 years and Swartland Municipality over 10 years) illustrates that the implementation of source separation only leads to a 1% increase in over-all recovered material volume. This small increase may be attributed to the fact that source separation was only implemented in a certain group of neighbourhoods and not throughout the whole of the area where the data was received. If one looks at the statistics per neighbourhood, the increase in material recovery is reportedly 15%. With these relatively small gains in recovery, the Municipality should evaluate the economic feasibility of implementing a source separation system. It is still the preferred collection method, but expensive to implement and would probably receive lower priority as opposed to alternative strategies and action plans that need to be executed by the Municipality in the upcoming years.

Recent statistics obtained from the Drakenstein Municipality show that participation rates are as following: The Middle income group participation rates vary between 12-25% and the High income group participation vary between 35-40%. The low and very low income groups participate at an average of 11-15%.

With the assumed strategy of source separation and "clean" Material Recovery Facilities where the source separated materials are sorted into its various groups and sub-groups, and assuming that middle and high income groups participate at a 45% average and low and very low income groups participate at a 15% average, it can be calculated that the current (2015) recovery volumes will be as indicated in **Table 3-4. Note that these quantities represent what can be expected if only the source separated portion of the waste stream is processed at a "clean" MRF.**

Table 3-4: Calculated Volumes of Recovery of Source Separated Materials

3.2	Participating Waste (t/a)	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	15137	1144	82	599	91
Drakenstein	27047	1931	357	1309	135
Langeberg	18454	1279	177	650	111
Stellenbosch	39057	1312	352	1375	78
Witzenberg	14571	796	236	385	102
CWDM	**114265**	**6462**	**1203**	**4318**	**517**

Assumptions for Source Separation: *45% participation Mid & High Income groups*
15% participation Low & Very Low Income groups

Recovery % actual data from WastePlan: *21% recovery of available Paper and Cardboard*
6% recovery of available Plastics
44% recovery of available Glass
10% recovery of available Metals

3.2.3.1 Paper and Cardboard

Paper and Cardboard form the foundation for any recovery venture, due to the relative stable demand and numerous recycled products made from recovered paper.

Waste paper is transformed from one type to another during the recycling process. The supply and demand for waste paper, although stable, is cyclical in nature, and therefore marketing patterns have to be adapted accordingly.

Some of the factors that contribute to this cyclical demand for recovered paper are:

- difficulty for mills to carry large stock
- periodic mill shut-downs result in fluctuations in demand
- paper stock is considered perishable and thus hazardous to store
- space for storage of stock is limited and costly

Some materials produced with recycled paper pulp include: newspapers, packaging, bags, tissue and towels, corrugated boxes, shoe boxes and files, egg cartons and fruit packing layers.

If paper and cardboard products are clean and separated into different types, significantly higher prices are fetched for the recovered materials.

3.2.3.2 Glass

Glass recovery for recycling has had a very erratic history, due to only one recycler having a monopoly in the market. When the capacity of the kilns is full, the price used to drop dramatically due to an over-supply and no demand. Fortunately this situation has stabilized and a constant market for recovered glass is currently prevailing.

The separation of glass is very successful in separation at source activities since it is easy to identify by the home owners. Recent experience in the City of Cape Town has shown that most home owners whom participate in separation at source also wash their glass products before putting it in the recyclables bag.

3.2.3.3 Plastic

Several types of plastics are typically recycled, i.e. PET (transparent plastic bottles e.g. 2 litre cool drink bottles), HDPE (milk containers), LDPE and mixed plastics. Recycled PET is used in the manufacture of small moulded products, such as handles, sporting goods and furniture. Recycled HDPE is used for producing flowerpots, dustbins and a variety of other containers. Mixed plastics are normally used for the manufacture of outdoor furniture, pallets, and plastic timber.

The recent introduction of a levy on shopping bags has caused the amounts arriving at the landfill to reduce dramatically. Less plastic bags are disposed of, as they are recovered and are now manufactured of better quality and thicker plastic.

In order to recycle plastics using current traditional methodology, it has to be sorted into the various categories, and washed if contaminated by the other wastes. Alternative technologies are currently being evaluated (also in South Africa) that could eliminate the need for sorting of plastics.

3.2.3.4 Metal

Metals are the single most recoverable item in the waste stream. Very little degradation takes place during collection. It follows that a relatively small amount ends up in the waste stream, as all types of metal are removed for re-sale at various stages of the waste handling process.

One of the major components of ferrous wastes is the steel can (95% of all cans in the Metropolitan Areas). Non-ferrous metals such as Aluminium and Copper are very scarce in our waste streams, due to its extremely high salvaging value. These are usually removed at source.

3.2.3.5 Economic Sustainability of Waste Recovery

Although the recovery of materials of value from the waste stream for recycling or re-use is one of the basic operations in future integrated waste management, the question regarding its financial and economical sustainability should always be asked and answered.

Local experience over the last decade has shown that the South African recycling market, or rather the recycled product market, is very small and very susceptible to unforeseen activities, e.g. if one paper mill burns down, the effect on the waste paper market, and the prices, is significant. The South African "market" is simply too small to absorb these types of set-backs.

For this reason it is commendable that D:EA&DP had a study conducted into sustaining the local recycling industry.

But one must consider the economical sustainability and not only the financial sustainability. Economic sustainability considers the whole life-cycle cost and not only the rands and cents of a specific financial year and taking into consideration the avoided costs of airspace saving and also the cost on the environment for the resultant smaller utilisation of virgin resources. An interesting stipulation in the Waste Act, Section 17 (1) (a), is that one may not recover materials from waste if it costs more environmental resources to recover, than it would to dispose of that material – a good example of the total or life-cycle costing principle.

Prices for recovered materials vary greatly from city to city and province to province, from baled to unbaled, from dirty to clean and from material type. External factors also play a significant role such as the oil price, e.g. due to a previous low crude oil price of approximately US$43 per barrel had caused new plastic to be cheaper than recycled plastic – cheaper, not necessarily more economical. The result was that recyclers at that moment (January 2009) could not even give their LDPE plastic away where only a month before it was sold for R1500/tonne.

The above does not imply or insinuate that recovery should not be supported, but that both recovery AND the establishment of a recycled goods market should be supported. This is an aspect that cannot be addressed on a local authority level, but must be addressed on a Provincial and/or National level to optimise economy of scale.

Benefits must also be shared. For example, if a municipality saves airspace and transport cost due to recovery, a portion of that saving (avoided costs) should be passed on to the recovery effort to ensure that it is sustainable. If not, as was proven in SA previously, the recovery effort closes down and the municipality loses its avoided cost saving.

The January 2015 prices for recovered materials delivered in Cape Town are displayed in Table 3-5.

Table 3-5: January 2015 Prices of Recovered Materials in Waste Stream

MATERIAL	PRICE IN RAND/TON FOR BALED MATERIAL
Card board	1000
White Paper	1300
Newsprint	750
Glossy Paper	450
Mixed Paper	580
Metals (Mainly cans)	1300
Glass (All colours, Crushed)	400
Plastic (PET, No 1, White, Blue, Green)	3600
Plastic (PET, No 1, Brown)	1000
Plastic (HDPE, No 2)	3000
Plastic (LDPE, No 4)	2000
Plastic (Polypropylene, No 5)	2500
Plastic (Polystyrene, No 6)	1300

3.3 PRIORITY WASTE STREAMS

3.3.1 Tyres

In accordance with the recently published Norms and Standards of 23 August 2013, no whole waste tyres may be landfilled, effective from the publication date. Tyres that are landfilled, must be quartered. After five years from the publication date no tyres, quartered or otherwise, may be landfilled. The Municipality does not accept waste tyres at the disposal facilities.

3.3.2 Hazardous and Health Care Risk Waste

Little to no recent information on hazardous and health care waste generation, characterisation and disposed/treated quantities are available in the District. It is recommended that in a revision of local by-laws, provision is made for hazardous and health care risk waste generators and transporters to register at the local municipalities and report relevant quantities regularly. Pending the availability of funds, studies need to be conducted to identify hazardous waste generators in the industry in the District to ensure that these types of wastes are correctly handled.

3.4 WASTE AVOIDANCE

3.4.1 Waste Avoidance Background

The following diagram illustrates a simplified version of the well-known waste hierarchy with Avoidance being the most favourable and Disposal the least favourable:

Waste avoidance refers to a pro-active approach by industrial as well as domestic waste producers to minimize the volume of waste, by not creating the waste in the first place.

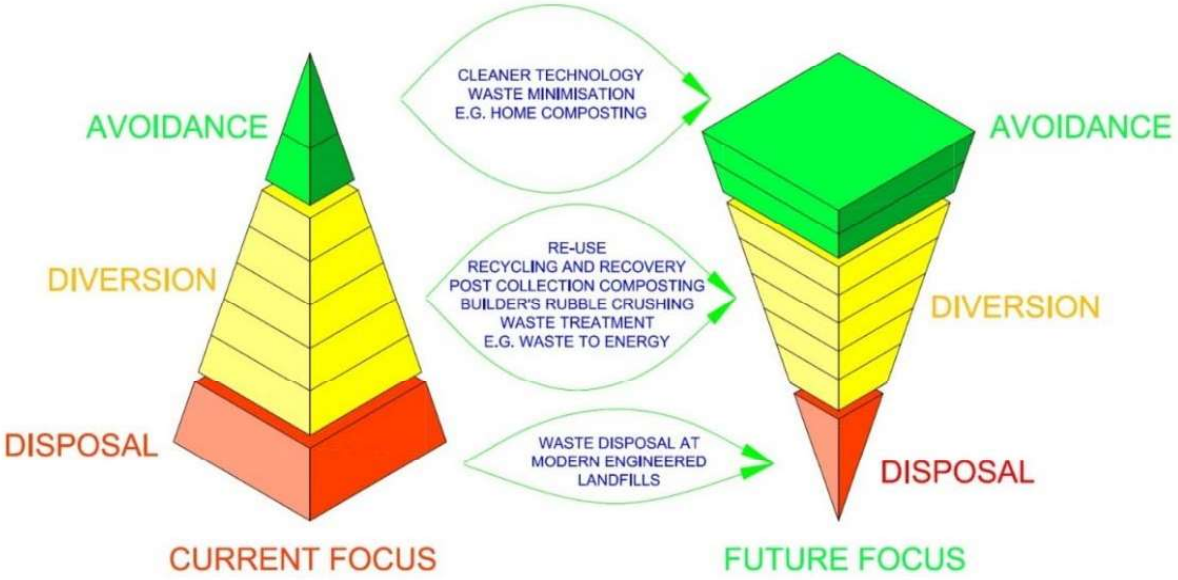


Figure 3-1: Waste Hierarchy

Waste avoidance is a "beginning of the pipe" action that can only work when people understand the full process depicted above.

At the moment waste minimisation through recovery (second tier) is considered a priority in South Africa. Once that can be successfully implemented and the people are educated in the importance of waste reduction, recovery at source (third tier) can be implemented with a reasonable chance of success.

It therefore follows that waste avoidance will be the ultimate and final step in this education process.

On a governmental / legislative level, the introduction of a levy on plastic shopping bags has spurred the production of alternative types of bags, which are re-useable and therefore avoiding the cheap and nasty waste bag that ends up littering our surroundings. However, along with such initiatives must come the required public education surrounding the proper use and impacts of new practices. For example, recent studies have shown that when re-usable bags are used by shoppers, these bags must be regularly washed/cleaned at least once per week. The users of these bags are not in the habit of washing their shopping bags because it was never necessary in the past as the bags were thrown away. Now with the re-usable bags, which are usually left in the car for convenience, that are not cleaned can contain traces of old food and or blood from meat parcels that quickly become breeding grounds for organisms that cause food poisoning. When these unwashed bags are then used to load new groceries into, the food becomes contaminated by the bag and may cause food poisoning in the

persons who eat this food. It is therefore necessary to keep the public aware of such issues to maintain their health while adopting new practices.

In the home, waste avoidance can be practiced by similar efforts where items are used for different purposes than the original intent, possibly suggesting that one purchases alternative products to the norm. Home composting is also considered waste avoidance, as the waste material is converted into a useful gardening resource whilst avoiding the raw product entering the waste stream.

Presently the avoidance of waste in industry has a financial detrimental implication in most cases (e.g. alternative raw products), and only large companies are able to take the leading role through their international experience in this field. Regulatory controls will only be effective if fines result in legal compliance being cheaper than non-compliance. In South Africa, resource and disposal costs are low, providing no financial incentive to reduce consumption or waste in industry. It follows that regulatory instruments are required for implementation on a Municipal level to govern the avoidance of industrial waste in the District.

Regular audits should be conducted by an independent entity on the avoidance practices, to form a basis for applying incentives / penalties.

An important tool for monitoring purposes is a proper Waste Information System (WIS). The District Municipality should ensure that all the local Municipalities report to the IPWIS.

Without a doubt, waste avoidance will become a real and enforced issue in South Africa in the near future, and must be addressed in any Municipal Waste Strategy.

3.4.2 Existing Waste Avoidance in Cape Winelands Municipality

In Cape Winelands, the best place to start implementing waste avoidance would be at the well-established industries on a voluntary basis. A joint venture effort between such industries and the Municipality may be mutually beneficial.

The industry will receive positive advertising of these “green” initiatives through the media, whilst the Municipality will be taking a leading role in South Africa through pro-actively spawning waste avoidance to the benefit of the community and the environment.

The Municipalities can promote waste avoidance by leading by example. Many opportunities exist where small changes can result in waste avoidance. One example is the option to have paperless meetings. If officials have access to laptops or tablets they need not receive the agenda on paper and can keep track and make notes digitally. Wherever it is not necessary to print and use paper, it can be avoided.

Successful waste avoidance will result in further lowering of the demand on the Cape Winelands waste management infrastructure and the functions of collection, recovery and disposal will be done more efficiently by the local municipalities.

Awareness and education plays a crucial role in waste avoidance. Today’s consumerism focussed society causes that waste is created in the home without thinking of the consequences before buying. A very large part of our waste streams can be avoided by an educated and aware public, focussing on the avoidance of waste before minimisation and eventually disposal.

3.5 COLLECTION SYSTEMS

The District Municipality does not render waste collection services to households. An overview of the local Municipalities is given below.

3.5.1 Municipal Waste Collection

It is recommended that all Municipalities in the District review their respective collection fleets regularly so that vehicles that are operating beyond their economic lifetimes can be identified and provision can be made in the budget to replace these vehicles.

The levels of service have been obtained from the Department of Local Government. The latest numbers are currently in draft (December 2014), but will be replaced by the final numbers when they are released. We cannot ascertain the accuracy of the numbers or how they were determined.

3.5.1.1 Breede Valley

The Breede Valley Municipality provides a weekly collection service to its residents in all towns. Waste is collected in black bags and Worcester has started using wheelie bins.

Waste in Touwsrivier is first transported to the MRF and the tailings hauled for disposal to the Worcester landfill on a weekly basis. Waste from De Doorns, Rawsonville and Worcester and its surrounds are transported directly to the Worcester landfill for disposal. Worcester has started practising source separation in one neighbourhood and this is planned to be expanded to more neighbourhoods in 2015.

All formal residential households receive waste collection services. Commercial waste and non-hazardous industrial waste is collected on the same scheduled rounds as above. Household collection is once per week and business waste can be collected more frequently.

Informal housing areas are serviced once per week or more frequently if necessary. The Municipality reports 100% service to these areas. As door-to-door collection is difficult, communal skips are placed at central points from where the private company Mr Skip Hire removes the $3m^3$ skips on a weekly basis. They also provide the $3m^3$ skips. $5m^3$ skips are placed and emptied by Municipal trucks and a tractor.

As a result of the inefficiency of open skips as drop-off points due to their height and being hard to reach for some people to properly dispose their waste into the skip and the problem with wind-blown litter, the Municipality is in the process of replacing the skips with "Mini Drop-offs" that will be enclosed structures built with concrete and polywood. These drop-offs will house skips and bins for waste to be offloaded within easy reach on ground-level and being enclosed, will limit wind-blown litter.

The "Solid Waste and Area Cleaning Block System" is also being planned by the Municipality to implement in the informal settlements. Informal settlements will be divided into different blocks, consisting of 400 to 600 houses each. This system will make use of appointed foremen, via formal quotation or tender, in each block of the settlement. This appointed person will then be responsible for the waste collection and cleansing of the block to which he/she was appointed. The work will include distributing refuse bags, collecting full bags weekly and placing them at the mini drop-offs for collection, cleaning streets, cleaning mini drop-offs and planting trees where requested.

There is currently no collection service to farmers and rural households due to the problem of transport distances and accessibility. Farmers offload their waste at the disposal sites free of charge. In summary, the unserviced areas in the Municipality are the rural areas and farms.

Level of Free Basic Service

Received figures indicate that 7190 out of the 7 315 indigent households receive free basic refuse removal, which is 98%.

3.5.1.2 Drakenstein

Drakenstein has been divided into collection areas that have a fixed day per week when waste is collected. All formal residential households receive waste collection services. Commercial waste is collected on the same scheduled rounds.

At the residences wheelie bins are used with different lid colours to simplify identification of the scheduled collection day. The collection frequency is once per week.

Residences practice source separation. Drakenstein Municipality makes use of a two-bag system and clear bags are used for recyclable waste. The clear bag is filled with mixed recyclables and is collected separately for processing.

Informal housing areas are serviced twice per week. The Municipality reports 100% service to these areas. The refuse bag system is used. Collection of the bags is done as part of EPWP and moved to a central collection point from where it is transported to landfill.

In the rural areas and farms there are three scenarios: If the farm is on a collection route, the farm waste is placed by the owner outside his property boundary from where it is collected by the Municipality. Farmers also transport and offload their waste themselves to the Paarl Transfer Station

or the Wellington Landfill and they make use of the coupon system. Farmers can also apply for the use and service of a waste skip that is placed on his property. He pays a monthly fee and the Municipality collects the filled skip when they are notified.

Level of Free Basic Service

Received figures indicate that 12 429 out of the 12 429 indigent households receive free basic refuse removal, which is 100%.

3.5.1.3 Langeberg

Currently a waste collection service is provided by the municipality for all residents in urban areas. All formal residential erven are receiving a weekly door-to-door collection service. Langeberg practices source separation with the two-bag system. Clear bags are used for recyclables and black bags for general waste.

Residents are required to place their waste in bags or wheelie bins on the sidewalk for weekly collection. The farming community delivers their own waste to landfill, as it is not economically feasible for the Municipality to collect waste at these remote locations.

Level of Free Basic Service

Received figures indicate that 6 932 out of the 7 413 indigent households receive free basic refuse removal, which is 94%.

3.5.1.4 Stellenbosch

All formal residences receive a weekly door-to-door waste collection service. The informal settlements have been provided with mini drop-off facilities to offload their waste and this is collected by the Municipality.

Level of Free Basic Service

Received figures indicate that 4 217 out of the 4 217 indigent households receive free basic refuse removal, which is 100%.

3.5.1.5 Witzenberg

A waste collection service is provided by the municipality for all residents in urban areas. All formal residential erven are receiving a weekly door-to-door collection service.

The Municipality does not collect waste at the remote farming communities, as this would be economically unsustainable. Farming communities deliver their own waste

Level of Free Basic Service

Received figures indicate that 4 572 out of the 4 572 indigent households receive free basic refuse removal, which is 100%.

3.5.2 Public Cleansing

Public Cleansing involves the cleansing of streets (kerbs and gutters), public open spaces (other than parks and storm water ditches) and areas of illegal dumping.

All the local Municipalities in the District provide public cleansing services.

3.5.3 Public Complaints

The contact numbers for complaints for each Municipality are listed below:

Breede Valley: 086 012 1212
Drakenstein: 021 807 4715; 021 807 4751
Langeberg: 023 614 8000
Stellenbosch: 021 808 8111
Witzenberg: 023 316 1854
District Municipality: 086 126 5263

The CWDM records and delegates the incoming complaints to the responsible persons who then report back and this is recorded on the register. The table below provides a summary and translation of the detailed complaints register received at the CWDM for the 2014/2015 financial year. The names of persons involved have not been included in the summary.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/08/06	2014-08-05	2014-08-15	Witzenberg	General Waste	Domestic waste dumping.	Several areas of unsightly conditions within town of Ceres exist. A letter was drafted, accompanied with photos and sent to Witzenberg municipality.
2014/10/20	2014-10-20	2014-10-20	Drakenstein	Illegal Dumping & Littering	Illegal Dumping of Medical waste, household waste and horse manure which are causing bad odours and fly breeding (Health nuisance)	During the investigation the complaint were found to be valid. Photos were taken of the medical waste as well as the improper ways of which they dispose of their household waste and the heaps of straw and manure that were dumped on the fence near Westland farm. The co-owner was present at the time of the investigation and did react to the complaint as follows: (i) Immediately all medical waste was safely collected and removed from the area. (ii) Household waste were picked up (iii) The horse manure with straw to be removed away from the fence and the worker houses and worked into his land. Full co-operation were received from the owner and the area was cleaned within 24 hrs since the complaint was received.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/11/24	2014-11-24	2014-12-05	Witzenberg	General Waste	Homeless persons tearing refuse bags on collection day and leaving the bags open and/or creating littering.	These complaints must be taken up with the Witzenberg Municipality, it is not a District function.
2014/11/27	2014-11-27	2014-11-27	Stellenbosch	General Waste	Waste next to the complainant's property causing odours and flies.	Inspection conducted. Refuse area in a reasonably acceptable condition. Otto refuse containers were too full and refuse in bags were observed on the refuse area floor. Insufficient number of refuse containers contributed to the problem. No perceivable odours were observed during the inspection, but some flies were observed next to the complainant's home. The owner of the property was contacted and he committed to acquiring additional refuse containers to ensure waste was stored in lidded containers at all times.
2014/12/04	2014-10-21	2014-12-17	Breede Valley	General Waste	Complaint regarding refuse not being collected.	The owner was contacted and she assured that the waste will be removed.
2014/08/12	2014-08-11	2014-09-10	Witzenberg	Illegal Dumping & Littering	Heap of rotten potatoes causing odours and flies.	The owner was contacted and agreed to remove the heap before Friday 15 August.
2014/12/08	2014-11-25	2014-12-08	Breede Valley	Building Material	Complaint regarding the backyard of the KFC filled with builder's rubble and black bags.	Complaint was received on 1 Dec 2014. Upon inspection all rubble and refuse was already removed.
2014/08/05	2014-07-31	2014-08-05	Breede Valley	General Waste	Homeless persons sleeping on doorstep of flats, littering and using the area as toilet.	Homeless persons sleep on property of Da Vinci flats and litter on said property. BVM were notified for action on the sidewalks and the owner and body corporate were notified for action on the property.
2014/07/02	2014-07-01	2014-07-02	Witzenberg	Illegal Dumping & Littering	Alleged dumping of sewage from mobile toilets on vacant land on the Farm Klein Pruise.	No dumping of sewage found on the vacant land of the premises.
2014/07/09	2014-06-26	2014-10-06	Stellenbosch	General Waste	Municipal ERF is being used as a dumping site.	Report issued to local municipality.
2014/07/11	2014-05-21	2014-07-11	Breede Valley	Burning waste/Tyres	Complaint regarding thick smoke caused by the burning of tyres.	Two persons were found burning tyres in order to collect the metal contained inside. Persons were informed about the pollution, dangers and unlawfulness of the burning. The firefighters were called to extinguish the fire.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/07/22	2014-07-03	2014-07-22	Drakenstein	Illegal Dumping & Littering	Shop's refuse bins were knocked over by the public, causing nuisance on the neighbour's property.	The shop owners were confronted regarding the situation and instructed to prevent access to the refuse bins by the public and also not to endanger public health in any way.
2014/07/25	2014-07-15	2014-07-25	Drakenstein	Illegal Dumping & Littering	Builder's rubble and other waste being dumped by various persons on open ground.	Builder's rubble was found during inspection. This complaint was given over to the law enforcement official of Drakenstein. The property owner as well as perpetrators were contacted. The CWDM requested the law enforcement official to install "NO DUMPING" signs at the property.
2015/02/09	2015-01-13	2015-02-09	Drakenstein	General Waste	Owner complains that cockroaches are creating a nuisance in front of her property from the drain.	This complaint was forwarded to the Drakenstein Municipality of which the pest control were dispatched to clean the drain.
2014/09/03	2014-09-02	2014-09-17	Stellenbosch	General Waste	Complainant's neighbour's property is overgrown with grass and bushes. Dumping ground for builder's rubble and garden waste. Conditions likely to create nuisances.	Conditions noted as per complaint.
2015/03/06	2015-01-29	2015-03-06	Breede Valley	General Waste	Refuse from the Game Reserve create extremely bad odours and are infected with worms. Removed only once per week.	Meetings with the owners were held and the CWDM and BVM attended meetings. The possible solution to the problem was that the Game Reserve take the waste on Mondays, Wednesdays and Fridays to the transfer station.
2015/03/16	2015-03-13	2015-03-16	Drakenstein	General Waste	The property does not have enough waste containers, causing waste to accumulate outside the containers.	Upon inspection it was confirmed that too little containers were available for the amount of units at the flat complex.
2014/09/10	2014-09-09	2015-02-19	Breede Valley	Illegal Dumping & Littering	That a health nuisance is created on the premises by the occupants. She is the owner of the house. NB. See attached inspection report for the complainant’s attention. No health is constituted.	No health is constituted.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/09/15	2014-09-02	2014-09-15	Langeberg	Illegal Dumping & Littering	A person operates a recycling business from her home within residential area. Neighbours complain that the premise is unsightly and attracts rats to premise and surrounding area.	An inspection was conducted to the premise, accompanied with the councillor on 3 September 2014. The person was informed about the contravention ie. health nuisance. She was given (14) days to minimize the health nuisance by means of the best available method. A follow-up inspection will be conducted on 1 October 2014.

3.6 WASTE REDUCTION

The Polokwane Declaration was formulated in 2001 by members of Government, whereby a commitment to waste reduction, re-use and recycling was made towards achieving the following goals:

- 50% reduction in waste generation and 25% reduction in waste disposal by 2012
- A plan for Zero waste by 2022

In the January 2011 draft Provincial IWMP for the Western Cape it is stated:

"Consequently, since they have the power to adapt the targets in the Western Cape IWMP, DEA&DP has adjusted the unrealistic "25% of waste diverted from landfill sites by 2012", to a more realistic "15% of waste by 2015"."

It is therefore recommended that all Municipalities in the District strives to achieve 15% of waste diversion by 2015.

Waste reduction can be divided into four main categories, i.e.

1) Separation at source
2) Recovery for recycling from post-collected waste
3) Composting of post collected garden waste, and
4) Crushing of builder's rubble

The efficiency of waste minimisation can only be determined through the implementation of a proper WIS as mentioned above. This is necessary to in turn populate the Provincial IPWIS.

This WIS should provide information on an on-going basis regarding the following:

- The quantity, type, quality and sources of materials recovered
- The quantity and quality of compost produced and garden waste processed
- Industrial waste types and volumes, and possible opportunities for waste exchange
- Public education initiatives and data on available literature at public facilities (e.g. libraries, waste minimisation clubs and projects)
- Household awareness campaigns on recycling opportunities
- Waste education (schools level) and training programmes available for the general public, waste workers and officials

3.6.1 Recovery for Recycling

3.6.1.1 Breede Valley

The Breede Valley Municipality operates the Touws River Transfer Station and Material Recovery facility (MRF) in Touws River. The operation of the MRF is done by Beirowplas Recycling CC and they have been awarded the operational contract via a public tender process which expires in 2017.

Beirowplas also collects the source separated recyclables in the Worcester neighbourhood, Paglande, where source separation has been implemented. This service will be expanded to other neighbourhoods from 01/02/2015 when the Beirowplas collection contract has expired. The new service will be rendered by the Municipality.

The clear bags will be provided for free by the Municipality and one clear bag is to be exchanged for a filled clear bag on collection day. The service will initially be expanded to the following neighbourhoods:

- Johnson Park 1, 2
- Worcester West
- Panorama
- Fairway Heights
- Bloekombos
- Van Riebeeck Park
- Hex Park
- Langerug

Residents will each receive a clear bag, pen, fridge magnet and a recycling information pamphlet. Bags will also be available from the solid waste department offices.

After a few months the Municipality will review the service in order to ensure a successful and sustainable implementation process. Based on the review, new neighbourhoods will be identified to where the service can be expanded.

The following is a list of private recyclers in the Breede Valley Municipality:

- Beirowplus Recycling: Petro van Wyk (023) 342 6345
- Mr. Paper: Yolandy Goosen (023) 342 3667
- APD (Association for persons with disabilities): (023) 347 2002

3.6.1.2 Drakenstein

The Drakenstein Municipality operates the Paarl Material Recovery Facility (MRF) adjacent to the Paarl Transfer Station. The Paarl MRF was operated by a private contractor until late in 2013. The Municipality took over the operations since then and plans are in place to appoint a private contractor during 2014/2015. Some recycling also takes place at the Wellington Landfill and is done by the Municipality. The recyclables are sold to various private recyclers. Recycling alone in Drakenstein contributes to 5.6% diversion. This diversion rate excludes garden waste chipping and builder's rubble crushing. Total diversion currently stands at 12% per annum.

The following is a list of private recyclers in the Drakenstein Municipality:

COMPANY	CONTACT PERSON	ADDRESS
Boland Waste	Anelda van Zyl	P O Box 723, Wellington
C.P.Weyers Dienste	Neels	8 Koning Street, Paarl
Cape Waste	Tich Middleton	Donkervliet Street
CL Waste & Scrap Metal	Natasha Parker	5 Planken Street, Plankenburg, Stellenbosch
Enviro Paper & Pulp Suppliers CC	Lee-Ann Ehrenreich	25-27 Alkmaar Street, Dal Josaphat, Paarl
Enviro Smart Waste Management	Sonia Frans	36 Murray Street, Paarl
Green Clean Bin	Pieter De Wit	12 Peter Street, Paarl North
JNA Roofing Boland (Pty)LTD t/a Lucas Thatchers	Janine Thiart	2 Reiger Street, Stellenberg (P O Box 2606)
Len's Metals CC	Michael Rhode	18 EK Green Street, Paarl
Louis	William Louis Deminey	2 Vyfster Hof, Plein Street, Paarl
M Talip	Mogamat Talip	21 Barbarossa Street, Paarl
Ponderosa Pine Trading 34 CC	Dentzel Bocks	
R Chippendal	Riedewaan Chippendale	4 St Omer Street, Charleston Hill, Paarl
Regular Trading 63	Victor Mpela	
Smartwaste	Reg Barichievy	Wegelee Plein
Tanya's Construction and Services	Tanya Tisana	A54 Jabulani Street, Mbekweni, Paarl
Taraka Transport and Recycle	Anzol Pietersen	Drommerdaris Park, Unit 12, Drommedaris Str, Dal Josaphat, Paarl
Thermo Plastics	Frikkie Viviers	Oostbosch Street
Victory Parade Trading (Zeebins)		P O Box 1341, South Paarl
VS Tech CC	Sharline v Schalkwyk Gerhard v Schalkwyk	32 Donkervliet Street
Waste Corp Recycling	Mohammed Fahiem Khan	6 Mont View Avenue, Paarl
Wasteman Holdings (Pty) Ltd	Jeanie Seale	P O Box 219, Eppindust (Wingfield House, Mobile Rd, Airport Industria, CT)
Wasteplan Holdings	-	Sandringham Road, Kraaifontein Industrial Area

COMPANY	CONTACT PERSON	ADDRESS
Wellington Sakekamers	Christine van Wyk	
Xoliswa C Nkala	Xoliswa Nkala	3363 Zingisani Street, Pola Park, Mbekweni, Paarl

3.6.1.3 Langeberg

Recycling is done by the Municipality at the Material Recovery Facilities and through source separation as well as private entities such as Parmalat and Breërivier Recycle. Recycling activities alone currently account for 3% of waste stream diversion. In combination with the composting at the Robertson composting facility, a total of 15% of waste is diverted in Langeberg according to the weighbridge data.

3.6.1.4 Stellenbosch

The Municipality collects source separated waste in Stellenbosch. Recycling is done at the Kraaifontein waste facility and by the private institution for disabled persons Huis Horison. Currently recycling attributes to 1% diversion.

3.6.1.5 Witzenberg

The Witzenberg has no formal waste recovery facilities yet, except the separately fenced recycling area at the Tulbagh landfill. There is however a private company operating a materials recovery facility between Ceres and Prince Alfred Hamlet, sorting source separated wastes and baling it for transport to Cape Town as well as a number of smaller recyclers operating in the Tulbagh area. The private companies in total recover approximately 11% of Witzenberg's waste stream.

3.6.2 Composting

3.6.2.1 Composting Facilities in Cape Winelands

Composting of garden waste at a centralised composting facility requires approximately 350 tons of garden waste per month in order to achieve stand-alone economical sustainability. Composting facilities have been established in Langeberg and Stellenbosch. The other municipalities are currently chipping garden waste.

Organic material that is disposed by landfill and not composted decomposes in the absence of oxygen, that is, anaerobically, and produces methane gas and carbon dioxide while decomposing. These gases are greenhouse gases and must be minimised. Methane is 23 times as effective (bad) as carbon dioxide as a greenhouse gas and all attempts must be made to prevent its generation. During the composting process the decomposition takes place in the presence of oxygen (aerobic) resulting in no methane gas being generated. If the garden waste is simply chipped and used as mulch, it is preferable above disposal by landfill since it will decompose in the presence of oxygen.

3.6.2.2 Home Composting

Home composting in South Africa has traditionally been practiced for the purpose of having an inexpensive and reliable source of compost for the garden. More recently, the realization that composting is a means of conserving resources, saving landfill airspace and the recycling of organic matter, has become the driving force for composting under individuals as well as clubs / associations.

It has been shown that home composting can reduce the waste stream by 20% to 30% if carried out properly. This is a prime example of "reduction at source" or waste avoidance.

This represents probably the only feasible means of composting kitchen waste, as large-scale post-collection composting has proven ineffective on many occasions in South Africa.

Due to a lack of general information conveyed to the private composter in the past, many perceptions of home composting has become that of a stinking pile somewhere in the corner of the garden.

This (and a change in lifestyles) has led to compost becoming a shopping list item to be bought at the supermarket.

Leaflets or other methods of information should be made available to inform the general public of the advantages and "recipe" for making good quality home compost. This should include:

- Bins / container design
- Raw products
- C:N ratio
- Minimum volume
- Preparation
- Moisture content
- Aeration
- Monitoring
- Trouble-shooting

Home composting bins can be bought at selected nurseries throughout the Western Cape. These are normally one of two types. The first type is a moulded plastic bin which comes in two sizes as follows:

- Small – volume approximately 500 litres
- Medium – volume approximately 1000 litres

The second type is one made from chicken wire around a plastic framework. This one is also of approximately 1000 litre capacity. The disadvantage to the chicken wire model is the possibility of leaching, flies and foul odours.

However, it does allow for good aeration, whereas the plastic model may tend to result in anaerobic conditions (rotting) if not manually aerated by turning.

3.6.2.3 Vermicomposting

Vermicomposting refers to the deliberate introduction of earthworms (typically) during early stages of the composting process. These would appear naturally at an advanced stage of natural composting, which would be after stabilization, where macrofauna use some of the microflora as a substrate.

The earthworms have the following beneficial effects on the composting process:

- Reduction of particle size
- Removal of old bacteria, stimulating the growth of new bacteria
- Enriching the compost by excretions high in Nitrogen
- Promotes penetration of oxygen into the compost
- Increases pathogen control
- Produces worm castings, a good soil amendment

Vermicomposting lends itself well to household-sized ventures, as it requires very careful control, but produces very high quality compost in a relative short period of time.

It is a very clean process which does not attract flies.

This type of composting is typically done inside special bins designed for the purpose.

Most kitchen-type wastes can be composted in this manner, although onions, citrus & other acidic foods should be avoided as they can be toxic to the worms.

The worms are also quite sensitive to extreme temperatures, humidity and rain.

Therefore this process does not lend itself to large-scale industrial composting.

Also the ratio of worms: substrate is approximately 1:4; therefore very large amounts of worms are required for the process. The worm mass doubles in approximately 12 weeks.

3.7 WASTE DISPOSAL

3.7.1 Operating Landfills

3.7.1.1 Breede Valley

Breede Valley Municipality currently operate two landfills, the Worcester Landfill (S33°40'49.3'', E19°28'11.0'') south-east of Worcester and the De Doorns Landfill (S33°29'08.0'', E19°41'43.0'') east of De Doorns.

Worcester landfill

The Worcester landfill is permitted in terms of Section 20 of the Environment Conservation Act (Act 73 of 1989) with Permit number B33/2/800/12/P70. The permit states "Class 2" in terms of the Minimum Requirements first edition, but would translate to G:S:B- in terms of the 1998 Minimum Requirements, 2nd Edition or Class B in terms of the Waste Act.

The landfill is operated by the Municipality. No recent audit information about the operation is available, but the Municipality plans to conduct an external audit early in 2015.



Figure 3-2: Google Earth Image of the Worcester Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble. The site does not have a weighbridge at this stage, but the Municipality will start making use of a weigh pad in 2015 to more accurately measure the incoming waste loads for data collection purposes.

The site has many informal salvagers on a daily basis. Efforts to stop this in the past have been problematic. It has since been decided by the Municipality to rather support these individuals. They have been given safety training as well as safety equipment which they must use when they are on site. With the proposed development of a MRF at the landfill, this will be formalised. They are currently managed by:

- Providing them with reflective jackets to be more visible on site
- Providing them with rubber gloves
- Children younger than 18 are not allowed on site
- No dogs, alcohol, etc. are allowed on site
- A register must be signed upon entering the site in the morning

The Municipality plans to erect a boom gate at the site entrance to ensure proper access control. From then on the incoming waste loads will be directed in order to separate garden/green waste, builder's rubble, mixed waste and recyclables into different offloading areas. During September 2014 information letters were distributed to users of the site to inform them of the Municipality's new Integrated Waste Management approach.

Worcester Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	B33/2/800/12/P70
Classification	G:S:B-
Location	S33°40'49.3'', E19°28'11.0''
Estimated Remaining Lifetime	Latest estimate in the 2014 closure provisions report indicate remaining airspace to approximately 2017. This is to be re-evaluated in 2015 with the help of a new topographical survey.
Access Control and signage?	Yes
Externally audited?	No, but planned for 2015
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

De Doorns landfill

The De Doorns landfill has recently received an operating license as part of the D:EA National Outcome to license all unlicensed facilities. The operation of this facility is poor, no on-site cover material is available and must be purchased and imported and informal salvagers set waste alight daily. Therefore the Municipality plans to close and rehabilitate the facility and replace it with a transfer station/material recovery facility.



Figure 3-3: Google Earth Image of the De Doorns Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble. Accurate disposal quantities are not available.

De Doorns Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	19/2/5/1/B2/3/WL0026/14
Classification	Class B
Location	S33°29'08.0'', E19°41'43.0''
Estimated Remaining Lifetime	Estimated 20 years airspace, but marked for closure due to operational issues.
Access Control and signage?	No
Externally audited?	No, but planned for 2015
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

Touws River

During the DEA National Outcome 10 to license all unlicensed facilities, a site not used by the Municipality as a disposal site, located to the south of Touws River has been issued with an operating license and classified as a Class B facility. According to the co-ordinates on the issued license, this site is located within 50 metres of the formal residential area and right next to the informal settlement. The license also states that a buffer zone of 200 metres must be established around the site. It is not certain whether this is a mistake in the license, but for this reason alone the Municipality will not be able to be compliant with the license without moving the residential area. This is also not an operated disposal site by the Municipality, but rather an illegal dumping ground. No plans or funds are in place to operate or further develop this site, therefore the way forward will be discussed with the D:EA&DP in order to close and rehabilitate or clear the area of waste.

3.7.1.2 Drakenstein

Drakenstein Municipality currently operates only one landfill, the Wellington Landfill (S33°39'14.8'' E18°59'02.9'') west of Wellington. This landfill was previously developed and used by the former Wellington Municipality. Cell 6, the current cell, was commenced with in August 2000 under the former Wellington Municipality. A permit amendment has since been approved to increase the maximum height of the site to 12m above ground level.

The height has since been increased, but the final phase has not been reached. It is currently estimated that the site will reach capacity in 2019/2020.

Operation of this landfill, which is operated by the municipality, is generally good. Jan Palm Consulting Engineers conducted an external compliance audit in July 2014 to determine if the facility is in compliance with license conditions. Internal monthly audits are conducted by the Municipality. The external audit identified the following partial and non-compliances:

The Wellington Landfill has an operating permit (no. 16/2/7/G100/D4/Z1/P263) from the Department of Water Affairs and Forestry in accordance with the Environmental Conservation Act and has been classified as a G:S:B^+ waste disposal facility. A Waste Management License in terms of Section 20(b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) for the height extension as well as to operate a drop-off area, builder's rubble area, recycling area and chipping and composting area on the existing facility was issued to the Drakenstein Municipality in 2012. License Number E13/2/10/1-B3/36-WL0045/10.



Figure 3-4: Google Earth Image of the Wellington Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble. There is a weighbridge at the site and the recorded waste quantities were provided by the Municipality (Discussed under section 3.2.2 of this document). The security has also been improved with the recent completion of the new fencing contract which upgraded the fencing for the Wellington landfill, but informal salvagers still gain access by damaging the security fence and gates.

Wellington Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility, Recycling, Crushing, Composting
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/G100/D4/Z1/P263; E13/2/10/1-B3/36-WL0045/10
Classification	G:S:B+
Location	S 33° 39' 14.8'', E 18° 59' 02.9''
Estimated Remaining Lifetime	Until 2019/2020
Access Control and signage?	Yes
Operating Hours	Monday - Thursday: 08:00 - 16:00. Friday - Saturday: 08:00 - 15:30. Sundays and Public Holidays closed
Externally audited?	Yes
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

CONDITION	NON-COMPLIANCE /PARTIAL COMPLIANCE	ACTION	TARGET DATE
1.2	The footprint of the garden waste stockpile is not within the Licensed area.	Reduce the garden waste stockpile and use the chippings for erosion protection on the outer landfill slopes.	a.s.a.p.
3.1	The SOP/EPP is not comprehensive.	Update the SOP/EPP according to the requirements as indicated in the License.	a.s.a.p.
6.1.1 (i)	The license holder has not set recycling recovery targets.	Set recycling targets.	a.s.a.p.
7.1.1	The facility perimeter fence is continuously damaged by informal salvagers thereby gaining access to	Improve the site security by employing dog patrols along the fence.	a.s.a.p.

	the site.		
7.2.10	Informal salvagers are reclaiming disposed waste.	Improve the site security by employing dog patrols along the fence.	a.s.a.p.
7.2.12	The site perimeter road is severely damaged during the rainy season.	Improve surface water drainage on site.	When budget is available.
7.2.13	The composting area has not yet been formalized.	Formalise licensed chipping and composting area.	Next financial year.
7.2.14	Ponding occurs on the composting and builder's rubble areas, because they have not yet been formalised.	Formalise composting and builder's rubble areas.	Next financial year.
7.2.22	Some of the outside slopes of the landfill are experiencing erosion due to the elements and foot traffic.	Cover these slopes with garden waste chippings.	a.s.a.p.
9.1.2 (c)	Air quality is not monitored.	Air quality monitoring will be included in future monitoring sessions.	Next monitoring session.
9.2.3	Ground water levels are not recorded during every sampling session.	Record ground water levels during each sampling session.	Next monitoring session.
9.2.5	Ground water samples are not analysed for all the required variables.	Analyse ground water samples for all the required variables.	Next monitoring session.
9.2.7	Leachate samples are not analysed for all the required variables.	Analyse leachate samples for all the required variables.	Next monitoring session.
11.1.1	Internal audits are not submitted to the Director.	Submit internal audits to the Director.	Next audit.

3.7.1.3 Langeberg

Ashton

Langeberg Municipality's municipal solid waste stream is disposed at the licensed G:S:B^- landfill at Ashton (S33 50 10.4 E20 06 04.9). The Landfill was permitted in 1999. The permit number is 16/2/7/H300/D41/Z1/P332.

The Ashton Landfill does not have sufficient capacity and should reportedly reach capacity in 2015. This is taking into account that Langeberg Municipality is currently providing a separation at source service (2-bag system) in all towns as well as a material recovery facility and composting plant to save as much landfill airspace as possible.

Langeberg Municipality commissioned an investigation into the identification of a new municipal site and environmental authorisation was obtained for a location near Bonnievale (farm Stockwell). However, since the Cape Winelands District Municipality also commissioned an investigation into the identification of a regional landfill to serve Breede Valley, Langeberg and Witzenberg municipalities, Langeberg Municipality decided, based on an economic analysis, to support the regional initiative.



Figure 3-5: Ashton Landfill

Ashton Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility, Recycling
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H300/D41/Z1/P332
Classification	G:S:B-
Location	S33°50'10.4'', E20°06'04.9''
Estimated Remaining Lifetime	Until 2014/2015
Access Control and signage?	Yes, but no signage
Operating Hours	Monday - Fridays: 08:00 - 16:30. Saturdays and Public Holidays: 08:00 – 13:00.
Externally audited?	Yes
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

Bonnievale

The Bonnievale disposal facility is permitted in terms of ECA 1989. The permit number is 16/2/7/H500/D79/Z1/P304 and was issued 31-07-1998. The classification is G:S:B-.



Figure 3-6: Bonnievale Landfill

Bonnievale Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H500/D79/Z1/P304
Classification	G:S:B-
Location	S33°55'33.89'', E20°04'50.58''
Estimated Remaining Lifetime	Unknown
Access Control and signage?	Yes
Operating Hours	Monday - Fridays: 08:00 - 16:30. Saturdays and Public Holidays: 08:00 – 13:00.
Externally audited?	Yes
Waste Types Received	Garden waste, builder's rubble

Montagu (Bessiekop)

The Montagu landfill is permitted in terms of ECA 1989 with permit number B33/2/800/45/S/P169 and classification G:S:B-. The permit was issued 27-03-1995.



Figure 3-7: Montagu Landfill

Montagu Waste Disposal Facility Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	B33/2/800/45/S/P169
Classification	G:S:B-
Location	S33°47'38.42'', E20°08'04.61''
Estimated Remaining Lifetime	Unknown
Access Control and signage?	Yes
Operating Hours	Monday - Thursday: 08:00 - 16:00. Friday - Saturday: 08:00 - 15:30. Sundays and Public Holidays closed
Externally audited?	No
Waste Types Received	Builder's rubble

3.7.1.4 Stellenbosch

The Stellenbosch Municipality operates one licensed landfill with permit number 16/2/7/G203/D16/Z1/P331 and classified as G:M:B+. A height extension was subsequently issued as an amendment to the permit.

Cell 3 was constructed in 2012 and is currently operational with cell 1 and 2 having reached capacity. It is estimated that the landfill will reach capacity in approximately 4 years (from 2015), depending on the waste diversion measures applied. The process of obtaining a closure license for the site is currently under way.

The Stellenbosch Municipality has received a license to establish an integrated waste management facility directly to the south of the landfill. This facility will include a public drop-off, a material recovery facility and transfer station, a garden waste chipping and builder's rubble crushing area and an area for the temporary storage of household hazardous waste.



Figure 3-8: Google Earth Image of the Stellenbosch Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble.

Stellenbosch Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/G203/D16/Z1/P331
Classification	G:M:B+
Location	S33°56'33.38'', E18°49'12.52''
Estimated Remaining Lifetime	Estimated 4 years
Access Control and signage?	Yes
Externally audited?	Yes
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

3.7.1.5 Witzenberg

The Witzenberg Municipality operates four licensed landfills. They are the Wolseley, Tulbagh, Prince Alfred Hamlet and Op-die-berg landfills.

Wolseley

The Wolseley permit expired in June 2013 and an application to extend the permit validity was submitted (license variation). However, the 250m buffer around the site was not maintained, with formal and informal housing established inside the buffer. Subsequently, along with the extended permit validity, the operational footprint of the Wolseley landfill was reduced, also reducing the remaining airspace.

Wolseley landfill has not been operational since 2013 and the site infrastructure (fence, entrance control building, etc.) have been destroyed or removed, possibly by the surrounding community not in favour of the landfill.

It is estimated that the Wolseley landfill will have approximately 2 years of operational life left if operations start again.



Figure 3-9: Google Earth Image of the Wolseley Waste Disposal Facility

The site received general household waste, general commercial and industrial waste, garden waste and builder's rubble.

Wolseley Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H101/D34/Z1/P496
Classification	G:S:B+
Location	S33°24'52.70'', E19°11'02.14''
Estimated Remaining Lifetime	Approximately 2 years from start of operations
Access Control and signage?	When it was operational yes. Requires new fencing and access control.
Externally audited?	When it was operational yes.
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

Tulbagh

The Tulbagh landfill (33°16'30.27''S, 19°07'56.45''E) is permitted in terms of Section 20 of ECA 1989 and is classified as G:S:B+ with permit number 16/2/7/G100/D6/Z1/P305.



Figure 3-10: Google Earth Image of the current Tulbagh Waste Disposal Facility Footprint

The site is externally audited and the non-compliances are being addressed by the municipality. Groundwater monitoring boreholes have been installed and the height of the waste body has been lowered to comply with the permit. A consultant has been appointed to develop a site management and operation plan in 2015.

Tulbagh Disposal Facility Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/G100/D6/Z1/P305
Classification	G:S:B+
Location	33°16'30.27''S, 19°07'56.45''E
Estimated Remaining Lifetime	To be determined
Access Control and signage?	Yes
Externally audited?	Yes
Waste Types Received	General household, garden waste, builder's rubble

Prince Alfred Hamlet

The Prince Alfred Hamlet landfill (33°16'34.82''S, 19°19'29.11''E) is licensed in terms of the Waste Act of 2008 and is classified as G:C:B- with license number 19/2/5/1/B5/11/WL0088/14. The license was issued 02/07/2014.

The license stipulates that garden waste and builder's rubble is allowed to be disposed, recovered or stored at this facility. Skips must be provided at the site where waste that is not allowed to be disposed at the site is to be stored until it is removed and disposed at the appropriate licensed disposal facility.

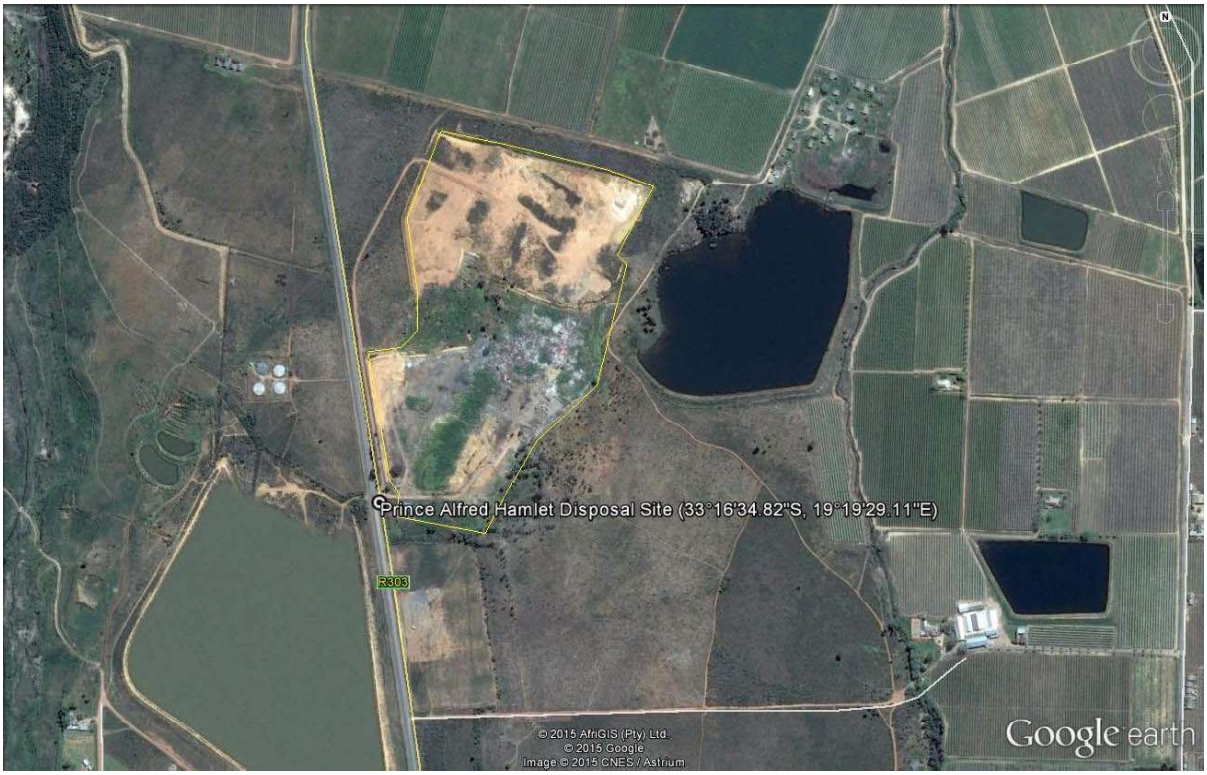


Figure 3-11: Google Earth Image of the Prince Alfred Hamlet disposal facility

Prince Alfred Hamlet Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	19/2/5/1/B5/11/WL0088/14
Classification	G:C:B-
Location	33°16'34.82''S, 19°19'29.11''E
Estimated Remaining Lifetime	To be determined
Access Control and signage?	Yes
Externally audited?	No
Waste Types Received	General household, garden waste, builder's rubble

Op-Die-Berg

The Op-die-berg landfill (33°03'51.3''S, 19°20'00.18''E) is permitted in terms of the ECA 1989 and is classified as G:C:B+ with permit number 16/2/7/H200/D100/Z2/P325.



Figure 3-12: Google Earth Image of the Op-die-berg disposal facility

Op-die-berg Disposal Facility Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H200/D100/Z2/P325
Classification	G:C:B+
Location	33°16'34.82''S, 19°19'29.11''E
Estimated Remaining Lifetime	To be determined
Access Control and signage?	Yes
Externally audited?	Yes
Waste Types Received	General household, garden waste, builder's rubble

3.7.1.6 Cape Winelands District

The Cape Winelands District Municipality is in the process to establish a regional landfill for the eastern portion of the Cape Winelands District. This includes the Municipalities of Breede Valley, Langeberg and Witzenberg. The preferred location for the regional site is adjacent to the Worcester landfill.

The license application has been submitted to D:EA&DP and D:WA has issued a Technical Record of Decision, but the District is awaiting the outcome of the application. It is estimated that if approved, the regional landfill will be operational within the next 5 years. This will be a Class B landfill and no hazardous waste will be accepted for disposal.

It is planned that this facility will have a material recovery facility, garden waste chipping area, builder's rubble crushing area, weighbridges and offices. This facility will be registered on and report to IPWIS.

A location for a similar regional disposal facility that would serve the western portion (Drakenstein and Stellenbosch) was investigated, but all proposed sites were rejected as candidates. A solution for the disposal of these two Municipalities must be sought as the Stellenbosch and Wellington landfills are the only operating landfills in this area and no alternatives are available once capacity is reached. The District can co-ordinate alternative disposal options for this part of the District, for example an agreement with the City of Cape Town.

3.7.2 Closed Landfills

The following closed landfills are located in the Cape Winelands District. Each Municipality in the District must ensure that all sites are issued with closure licenses and that rehabilitation provision is made in their respective budget. The rehabilitation cost estimates must be updated annually by each municipality in order to keep up to date with relevant legislation and rehabilitation requirements.

3.7.2.1 Breede Valley

The old Touws River landfill site has been closed and rehabilitated.

The Worcester and De Doorns disposal facilities are still operational, but will need to be closed and rehabilitated in the future.

3.7.2.2 Drakenstein

The following closed disposal sites are located in the Drakenstein municipality. All sites have been issued with closure licenses, except the Boy Louw closed site of which the closure license application is under way. Each site requires to be rehabilitated except the Klapmuts landfill that was rehabilitated according to its closure license.

Gouda

License number: 19/2/5/1/B3/14/WL0031/14
Location: 33°17'55.6''S, 19°01'32.6''E



Figure 3-13: Gouda Landfill

Saron

License number: 19/2/5/1/B3/32/WL0028/14
Location: 33°12'23.4''S, 19°00'37.4''E



Figure 3-14: Saron Landfill

Hermon

License number: 19/2/5/1/B3/40/WL0030/14
Location: 33°26'03.7''S, 18°57'40.1''E



Figure 3-15: Hermon Landfill

Dal Josafat

License number: 19/2/5/1/B3/7/WL0027/14
Location: 34°42'24.7''S, 18°58'38.9''E

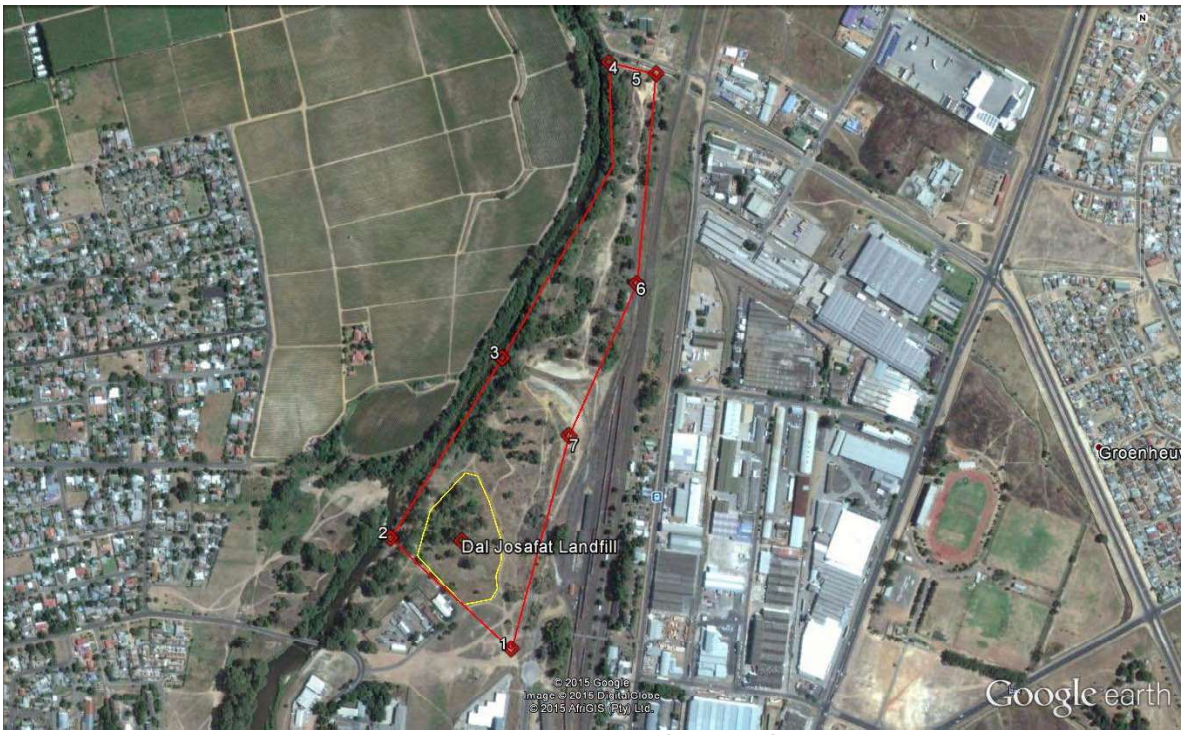


Figure 3-16: Dal Josafat Landfill

Note that the red border is as the site extents are described in the closure license and the yellow border is the actual old waste body.

Orleans

License number: 19/2/5/1/B3/29/WL0029/14
Location: 33°43'13.6''S, 18°59'32.6''E



Figure 3-17: Orleans Landfill

Boy Louw

License number: Application under way (2015)
Location: 33°43'03.8''S, 18°58'19.2''E

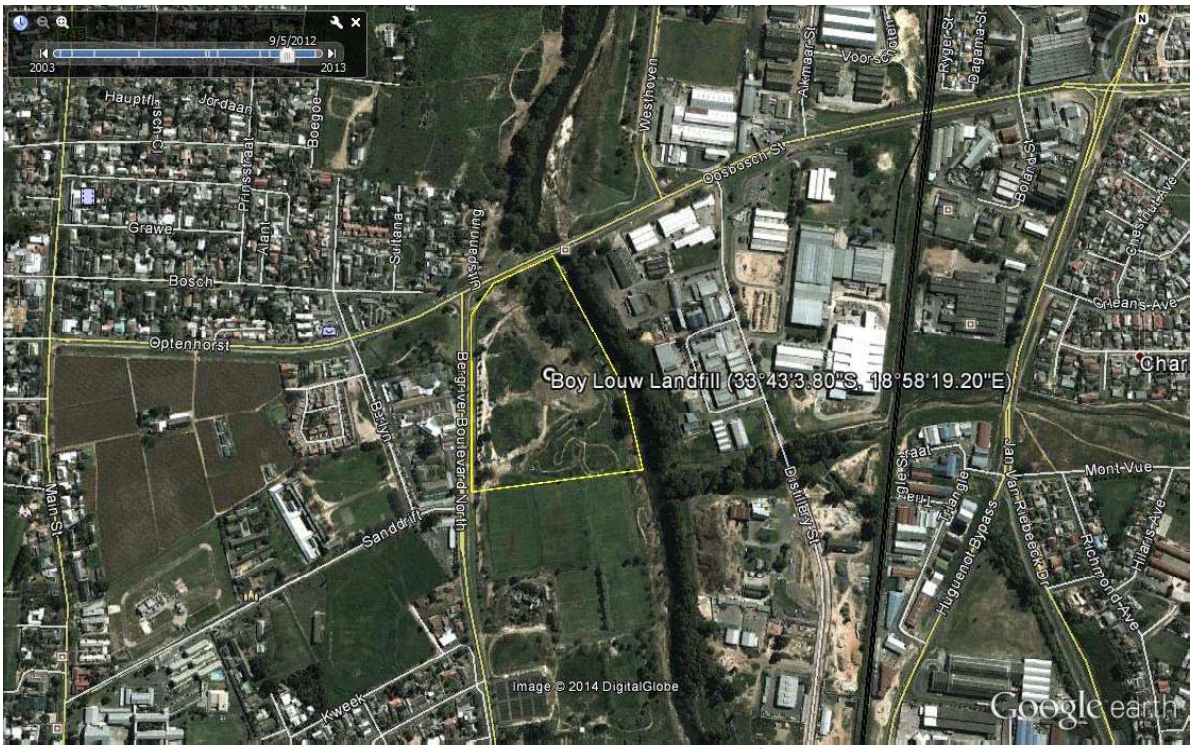


Figure 3-18: Boy Louw Landfill

Klapmuts (Rehabilitation complete)

License number: 16/2/7/W511/B14/Z1/P368
Location: 33°47'15.22''S, 18°50'08.81''E

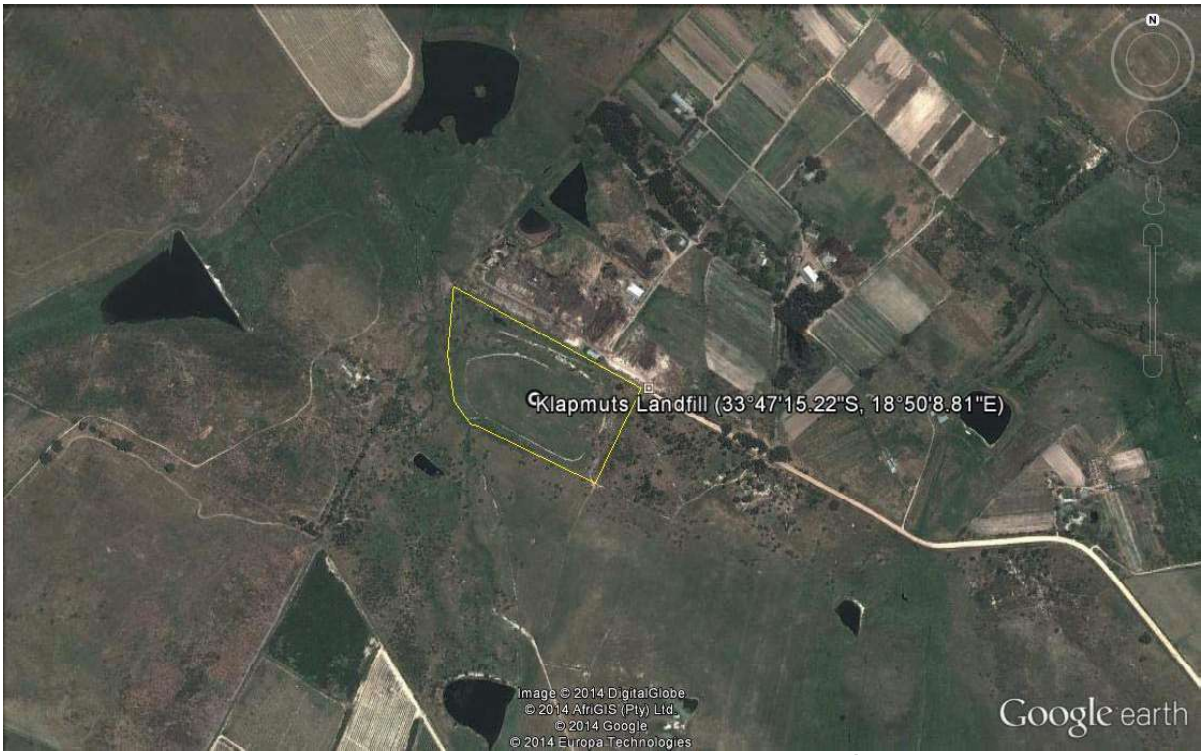


Figure 3-19: Klapmuts Rehabilitated Landfill

3.7.2.3 Langeberg

Robertson (Rehabilitation complete)

The Roberston landfill has been closed and rehabilitated for a number of years.



Figure 3-20: Robertson Rehabilitated Landfill

McGregor

The old closed garden waste site near McGregor (33°57'40.72''S, 19°48'26.7''E) is in the final stage of being issued with a closure license. The license will be issued during 2015 and will provide clarity regarding the rehabilitation requirements. Refer to **Figure 3-28** below.

3.7.2.4 Stellenbosch

The closure license application for the Stellenbosch landfill is currently under way along with the rehabilitation designs. The landfill will then be rehabilitated when the current operational cell has reached capacity, currently estimated at 4 years from 2015.

3.7.2.5 Witzenberg

The closed Ceres disposal site (33°23'16.72''S, 19°19'37.12''E) has been rehabilitated.



Figure 3-21: Ceres Closed Landfill

3.7.3 Waste Transfer Stations and Public Drop-offs

3.7.3.1 Breede Valley

Breede Valley Municipality operates one Solid Waste Transfer Station/Material Recovery Facility (S33°20'30.7''; E 20°01'39.7'') in Touws River. The facility is managed by the private company Beirowplas, who was appointed via a public tender process. Currently, four labourers pick recyclable materials from a conveyor belt.

Waste collection is done by the Municipality and delivered to the facility. The non-recyclable waste that is stored in 30m^3 containers is hauled by the Municipality to the Worcester landfill on a weekly basis.

On average, 9 021kg of recyclable material is diverted monthly.



Figure 3-22: Touws River Transfer Station/MRF

Touws River Transfer Station
Summary Table

Type of facility	Transfer Station / Material Recovery Facility
Licensed/Permitted?	None required/ Directive issued
License/Permit Number	-
Date of issue	-
Classification	-
Estimated Remaining Lifetime	Indefinite with regular maintenance
Access Control?	Site is fenced and has good access control
Externally audited?	No
Waste Types Received	General waste
Requirements	-

3.7.3.2 Drakenstein

Drakenstein Municipality operates one Solid Waste Transfer Station (S 33°43'11.3''; E 18°58'33.4''). The facility was upgraded in 2010 from operating with open top containers to operating with a static compactor into compaction containers.



Figure 3-23: Paarl Solid Waste Transfer Station

Paarl Transfer Station
Summary Table

Type of facility	Transfer Station
Licensed/Permitted?	None required, has ROD
License/Permit Number	-
Date of issue	-
Classification	-
Estimated Remaining Lifetime	Indefinite with regular maintenance
Access Control?	Site is fenced and has good access control
Externally audited?	No
Waste Types Received	General waste
Requirements	-

Public Drop-off Facilities have been provided in Saron (S33 11 20.9; E19 00 25.9), Hermon (S33 26 03.7; E18 57 38.3) and Gouda (S33 17 56.9; E19 01 34.2). These facilities receive only general waste and do not require licensing since the storage capacity is less than 100m^3. Waste is transported from these facilities to the Wellington Landfill.

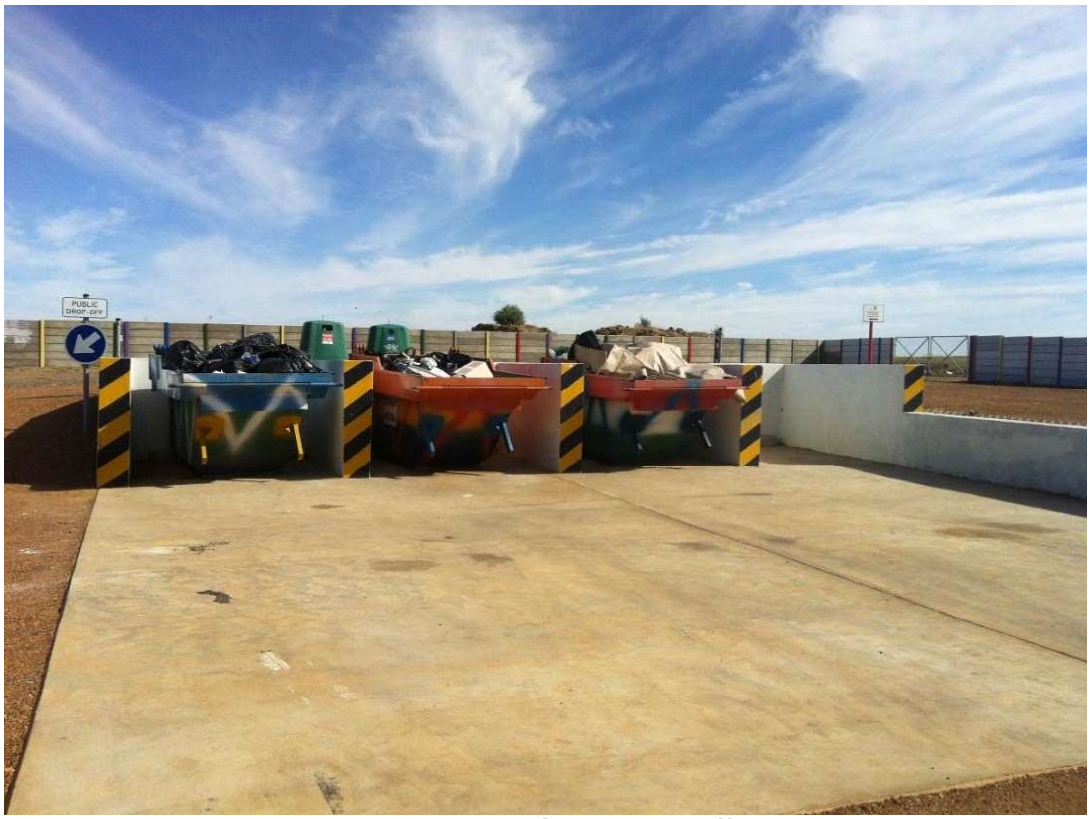


Figure 3-24: Gouda Drop-off



Figure 3-25: Hermon Drop-off



Figure 3-26: Saron Drop-off Google Earth Image

3.7.3.3 Langeberg

In Langeberg public drop-offs have been provided at Montagu (33°47'34.60''S, 20°08'11.93''E) and McGregor (33°57'44.54''S, 19°48'29.69''E) and a transfer station at Robertson (33°49'15.84''S, 19°52'15.21''E).



Figure 3-27: Robertson Transfer Station



Figure 3-28: McGregor Drop-off



Figure 3-29: Montagu Drop-off

3.7.3.4 Stellenbosch

A transfer station has been provided at Klapmuts (33°48'22.15''S, 18°51'19.81''E).



Figure 3-30: Klapmuts Transfer Station

3.7.3.5 Witzenberg

No transfer stations or drop-offs have been provided in the Witzenberg Municipality, but a transfer station is recommended in order to replace the Wolseley landfill when it is no longer in use.

3.7.4 Disposal Facilities used outside the District Municipality Boundaries

The hazardous waste generated in the Cape Winelands District will be transported to the Vissershok Waste Management Facility (VWMF). It has a H:H operating permit from DWAF. The site is situated some 800m west of the N7 at Vissershok and is operated and audited in terms of its permit conditions.

3.7.5 Contaminated Land

Contaminated land includes all sites discussed under "3.7.2 Closed Sites".

3.8 COSTS OF EXISTING WASTE MANAGEMENT SYSTEM

3.8.1 Financial Summary of Waste Management Services of Cape Winelands District Municipality

The tables below show the totals for the Capital Budget and the Operating Budget for the Cape Winelands Municipality.

Table 3-9: Total Cape Winelands District Municipality Actual Budget and Expenditure

	2012/2013	Adjust. Bud. Jan 2014	2014/2015	2015/2016	2016/2017
Operating Expenditure	270 848 600.00	298 274 306.00	324 960 841.00	337 628 770.00	353 937 641.00
Project Expenditure	70 438 500.00	59 183 259.00	40 792 570.00	34 074 120.00	34 886 374.00
Sub Total	**341 287 100.00**	**357 457 565.00**	**365 753 411.00**	**371 702 890.00**	**388 824 015.00**
Capital Expenditure	11 102 020.00	8 295 622.00	12 482 747.00	7 472 050.00	7 048 300.00
Total Budget	**352 389 120.00**	**365 753 187.00**	**378 236 158.00**	**379 174 940.00**	**395 872 315.00**

Table 3-10: Project specific Budget (Solid waste and related projects)

Description	Adjust. Bud. 2014	Budget 2014/2015	Budget 2015/2016	Budget 2016/2017
Land-use and spatial planning				
EPWP invasive alien vegetation management programme	1 000 000.00	1 000 000.00	1 060 900.00	1 092 730.00
River rehabilitation	-	350 000.00	360 500.00	371 320.00
Projects and housing				
Cleaning of cemeteries	200 000.00	-	-	-
Clearing of road reserves	1 600 000.00	850 000.00	2 884 000.00	2 970 520.00
Municipal Health Service				
Clean-up Campaigns	1 000 000.00	-	1 000 000.00	1 000 000.00
Annual Environmental Health Education Programme	289 000.00	400 000.00	412 000.00	424 360.00
Greening	250 000.00	288 430.00	257 500.00	265 230.00
Waste Minimisation	-	-	-	-

Table 3-11: Total Income

	2012/2013	Adjust. Bud. Jan 2014	2014/2015	2015/2016	2016/2017
RSC Replacement Grant	193 926 000.00	199 744 000.00	205 736 000.00	210 834 000.00	217 159 020.00
Equitable Share	6 945 000.00	9 692 000.00	7 892 000.00	6 215 000.00	6 215 000.00
Finance Management Grant	677 431.00	2 043 315.00	1 250 000.00	1 250 000.00	1 250 000.00
EPWP Incentive	1 214 000.00	1 000 000.00	1 030 000.00	1 060 900.00	1 092 730.00
Other National Dora Grants	-	-	5 000 000.00	-	-
Provincial Dora Grants	1 303 094.00	4 991 607.00	9 820 520.00	5 542 970.00	5 682 273.00
Public Contributions	1 989 950.00	2 587 000.00	604 620.00	622 750.00	641 430.00
Other Income	4 183 164.00	7 987 869.00	38 630.00	4 746 800.00	2 280 001.00
Interest Received	R 24 451 381.00	R 26 250 000.00	R 27 500 000.00	R 28 840 000.00	R 29 705 200.00
Agency Services	R 73 799 198.00	R 91 727 298.00	R 99 267 364.00	R 103 447 362.00	R 107 537 135.00
Total budget	**R 308 489 218.00**	**R 346 023 089.00**	**R 358 139 134.00**	**R 362 559 782.00**	**R 371 562 789.00**

3.9 STAFF COMPLIMENT OF EXISTING WASTE MANAGEMENT SYSTEM

As the District Municipality is not responsible for weekly waste collection, there is not a large labour intensive staff compliment as with the local Municipalities. The waste management responsibilities are divided between the Technical Services Department and the Municipal Health Services Department.

Waste Management Officer:

Chapter 3 of the Waste Act states that:

"10.(3) Each municipality authorised to carry out waste management services by the Municipal Structures Act, 1998 (Act No. 117 of 1998), must designate in writing a waste management officer from its administration to be responsible for co-ordinating matter pertaining to waste management in that municipality.

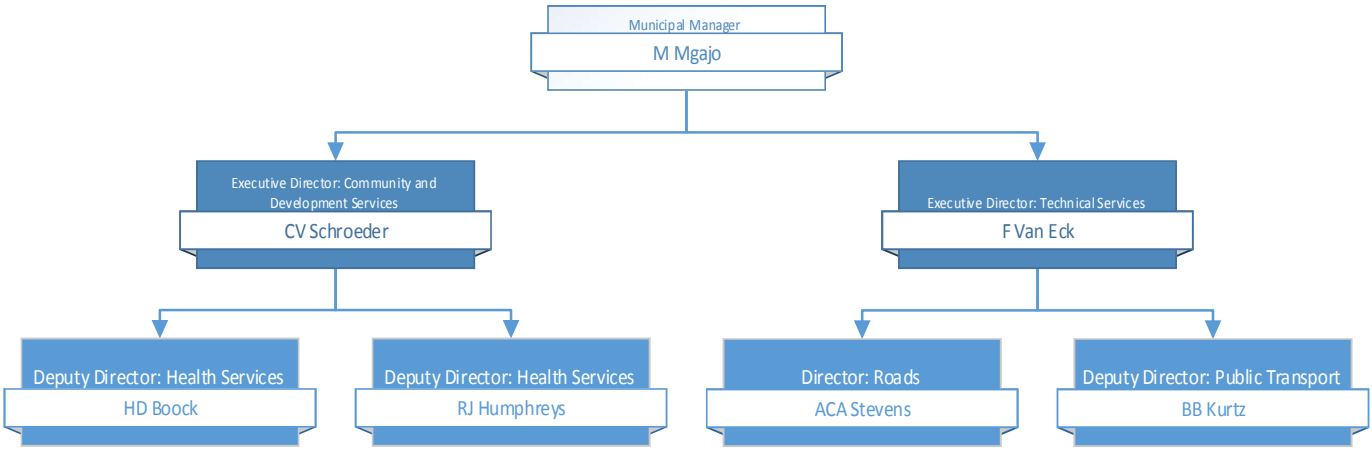
(4) A power delegated or a duty assigned to a waste management officer by virtue of subsection (3) may be sub-delegated of further assigned by that officer to another official in the service of the same administration, subject to such limitations or conditions as may be determined by the municipality.

(5) Waste management officers must co-ordinate their activities with other waste management activities in the manner set out in the national waste management strategy established in terms of section 6 or determined by the Minister by notice in the Gazette."

The designated Waste Management Officer for the Cape Winelands District Municipality is Mr F van Eck who was appointed by Council as required by the Waste Act.

Provision must be made for the continuous training and education of the Cape Winelands waste management employees. Waste management information sharing/capacity-building events such as the Departmental Waste Forum, Waste Khoro and Wastecon should be attended by waste management employees determined by the Municipality.

Only the Macro structure has been included below, as there is no specific solid waste department. The duties are shared between the Technical Services Department and the Municipal Health Services (Under Community Services and Development Planning).



3.10 CURRENT WASTE MANAGEMENT IDENTIFIED GAPS

The following gaps were identified from the status quo of solid waste management in the Cape Winelands District Municipality:

- Public Awareness and Education.

  A large part of the general public appears to be content to put out their waste and then it is somebody else's problem and source separation participation must still be established in all neighbourhoods in the District which prove viable. Concepts such as waste avoidance, waste reduction, etc., are not within their general vocabulary. Public awareness and education must be continued and expanded in all local Municipalities.

- Not all residents are aware of the impacts of waste and the consequences of their littering
- Illegal dumping shows that these offenders are not in sync with the mind-set of sustainable waste management yet

- Recycling and waste minimisation.

  - Recycling initiatives need to be supported in all local Municipalities so that diversion rates in the District can be boosted. Reaching the target of 15% diversion by the end of 2015 will be very hard through recycling alone. Focus must be placed on garden waste chipping/composting as well as builder's rubble crushing. The future implementation of waste to energy in Drakenstein will boost diversion rates significantly.

- Area cleaning.

  - Proper area cleaning has been raised as a concern in some of the local Municipalities and must be brought up to standard.

- Lack of information regarding waste generation types and volumes.

  Accurate information regarding waste quantities are not readily available in all local Municipalities. The lack of weighbridges and waste characterisation are the cause of this.

  - The registration of industry waste generators and health care waste generators and transporters need to be addressed in a revision of the Municipal Integrated Solid Waste By-laws.
  - A new study regarding the waste stream characterisation must be done.
  - Weighbridges need to be installed at the larger waste management facilities.

- Collection Fleet – Age, Condition, Aesthetics, Type.

  Some collection vehicles in the District are likely in service long after the end of their economic lives. Collection vehicles help in creating the public's perception of waste management and need to be aesthetically pleasing.

  - Some vehicles are likely operating beyond their effective lifetimes. These vehicles need to be evaluated to ensure that they are still cost effective and efficient. If not, they need to be replaced. Each local Municipality in the District must ensure that their waste collection fleet is up to standard.

- Law enforcement.

  - The levels of illegal dumping need to be reduced by stricter law enforcement on the perpetrators.
  - The current outdated solid waste by-laws of some local Municipalities need to be updated to Integrated Waste Management By-laws.

- Disposal sites.

  - Some disposal sites in the District require external audits in order to ascertain non-compliances and develop action plans to correct them. Sites that cannot be operated or developed in terms of issued license conditions need to be closed and rehabilitated.
  - Closed disposal sites need to be replaced by solid waste transfer stations.
  - Drop-off and collection points need to be established for the public to deliver their household hazardous waste. The Municipalities must then dispose of this waste at the appropriate licensed facility or use private service providers to do so.
  - Disposal airspace is limited and there is need for the development of a regional disposal site as soon as possible.

- Vacant Positions.

  - Vacant positions in the solid waste management departments need to be filled so that services can be rendered effectively by all municipalities in the District.

Possible negative impacts of identified gaps on health and the environment

- With lack of public awareness and education, the understanding of a sustainable waste management system will be lacking and public littering will increase. With no realisation of the actual impact of waste on the environment, there would be no reason to be environmentally responsible. The environment will be poisoned by uncontrolled waste which will affect the public at large. An uninformed public will also not participate in waste avoidance and recycling efforts, causing pressure on landfill airspace requirements, hence more landfills need to be constructed to the detriment of the environment.
- With lack of information regarding waste generation types and volumes, no control can be exercised over the generators of these wastes and where it is disposed, possibly illegally.
- If the vehicles in the collection fleet are used past their useful lifetimes, they become a financial liability

4. WASTE MANAGEMENT STRATEGIC OBJECTIVES

With the Status Quo of waste management as listed in the previous chapters and the current problems that are experienced by waste management, the way forward is to state the strategic objectives of the District Municipality and then to develop action plans or implementation instruments how to achieve the strategic objectives.

Being a District Municipality and not "owning" any waste, these strategies are more focussed on supporting the local municipalities with their individual strategies and in the event of developing a district landfill, to develop action plans to ensure safe disposal. The District Municipality does not collect waste with the result that strategies for waste avoidance and waste reduction are not really applicable.

The District Municipality is committed to a system of waste management that will see the least possible amount of waste going to modern engineered landfills. This will be achieved through the use of education, law enforcement and material recovery and treatment plants. New and emerging technologies, where applicable and affordable, will also play a part in overall waste management.

The Waste Management Strategic Objectives for Cape Winelands District Municipality on which this Plan is based, commits the municipality to:

- Create an atmosphere in which the environment and natural resources of the region are conserved and protected.

- Develop a communication/information/education strategy to help ensure acceptance of 'ownership' of the strategic objectives among members of the public and industry throughout the municipality and to promote co-operative community action.

- Provide solutions for the three main objectives:
  - The avoidance of waste generation
  - The reduction of waste volumes
  - The safe disposal of waste

4.1 STRATEGIC OBJECTIVES

4.1.1 General

To ensure that Waste Management in the Cape Winelands District complies with South African and International environmental standards so that it is beneficial to industrial and agricultural growth and the public's right to a clean and healthy environment.

4.1.2 Waste Avoidance

To promote the minimisation of the generation of waste.

4.1.3 Waste Reduction

To promote the reduction of all waste so that nothing of neither value, nor anything that can decompose, gets disposed.

4.1.4 Waste Disposal

To store, dispose or treat all waste that cannot be avoided nor reduced at licensed facilities with regular operational and environmental monitoring and in accordance with regulatory requirements.

4.1.5 Definitions

WASTE AVOIDANCE is to avoid material entering the waste stream, e.g. when the generator of the material either re-uses it or gives the material to somebody else as product or raw material. Composting at home is regarded as waste avoidance.

WASTE REDUCTION is to reduce the quantity of waste that has been discarded by its generator, e.g. when recyclable materials are recovered at the sidewalk or at a transfer station, materials recovery facility or landfill. Composting of garden waste at a composting facility is regarded as reduction.

WASTE DISPOSAL is defined as the storage, treatment or disposal of waste at licensed facilities.

4.2 ROLE OF CAPE WINELANDS DISTRICT MUNICIPALITY

The role of the District authority is not easily defined as the collection and disposal of municipal solid waste is a function of the local municipalities. It is only when waste crosses a local municipal boundary that the receiving waste disposal facility or transfer station becomes a District function.

The plans formulated by the Cape Winelands District Municipality are specific to the area and its resources. They reflect the availability of suitable waste management facilities in the region, as well as local market demand for recovered materials. Special care must be taken to cater for the volatility of markets for recovered materials by ensuring that there are other suitable options to fall back on, if required. It is, therefore, highly desirable to be able to switch between waste management methods - further emphasising the hazards of relying too heavily on a single policy option instead of a combination of policies.

The Integrated Waste Management Plan of the Cape Winelands District Municipality is a requirement of the Waste Act and this plan will be carried out through the upcoming years. This plan takes into account the Municipality's legal obligations regarding waste avoidance, recovery, disposal and general management.

The implementation instruments or action plans defined in the following section are laid out in a manner which reflects the waste management hierarchy, putting the emphasis on waste avoidance and minimisation, with specific waste streams looked at in detail.

5. CAPE WINELANDS DISTRICT MUNICIPALITY'S IWMP IMPLEMENTATION ACTIONS, SCHEDULE AND COST ESTIMATES

5.1 IWMP GOAL 1: PUBLIC AWARENESS AND EDUCATION

<table>
<tr><th colspan="7">Goal 1: Awareness & Education</th></tr>
<tr><th rowspan="2">Objectives/Targets</th><th colspan="6">Actions/Cost Estimates</th></tr>
<tr><th>2015/2016</th><th>2016/2017</th><th>2017/2018</th><th>2018/2019</th><th>2019/2020</th><th>2020 AND ON</th></tr>
<tr><td rowspan="6">Educate, strengthen capacity and raise awareness in integrated waste management. The public will be informed and continually made aware of the impacts of waste on the environment. Municipal staff will receive training and attend forums.</td><td colspan="6">Environmental Health Education</td></tr>
<tr><td>400 000.00</td><td>TBD</td><td>TBD</td><td>TBD</td><td>TBD</td><td>TBD</td></tr>
<tr><td colspan="6">Greening Project. Measured by number of trees planted.</td></tr>
<tr><td>250 000.00</td><td>TBD</td><td>TBD</td><td>TBD</td><td>TBD</td><td>TBD</td></tr>
<tr><td colspan="6">Cape Winelands Solid Waste employees to attend education seminars and waste forums. Capacity training and education conducted within the Municipality where needed.</td></tr>
<tr><td colspan="6">Costs dependent on number of forums attended as well as costs related to internal training provided by the CWDM.</td></tr>
</table>

5.2 IWMP GOAL 2: IMPROVE WASTE INFORMATION MANAGEMENT

<table>
<tr><th colspan="7">Goal 2: Improve Waste Information Management</th></tr>
<tr><th rowspan="2">Objectives/Targets</th><th colspan="6">Actions/Cost Estimates</th></tr>
<tr><th>2015/2016</th><th>2016/2017</th><th>2017/2018</th><th>2018/2019</th><th>2019/2020</th><th>2020 AND ON</th></tr>
<tr><td rowspan="5">Ensure the reporting of all waste management facilities to IPWIS. Waste quantification systems to be in place. Registration of hazardous waste generators (industry & medical) and service providers (e.g. transporters).</td><td colspan="3">Ensure that all the local Municipalities conduct waste characterisation studies.</td><td colspan="3"></td></tr>
<tr><td colspan="6">Ensure that all local Municipalities have registered their waste management facilities on and reports to IPWIS.</td></tr>
<tr><td colspan="6">No Cost. The District's Waste Management Officer to oversee in co-operation with the Waste Management Officers/Waste Managers of the Local Municipalities.</td></tr>
<tr><td></td><td colspan="5">The planned new regional landfill will be equipped with weighbridges to record waste loads. This will be reported to IPWIS.</td></tr>
<tr><td></td><td colspan="5">Costs included under Goal 3</td></tr>
</table>

5.3 IWMP GOAL 3: EFFECTIVE SOLID WASTE SERVICE DELIVERY

Goal 3: Effective solid waste service delivery						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Ensure that waste services are provided in an effective and environmentally responsible manner to all residents in the District.	Construct the planned regional Integrated Waste Management Facility. This is to ensure future disposal airspace in the District for use by the local Municipalities.					
	Civil contractor to be appointed via public tender for the construction. External operator to be appointed via public tender for the operation of the MRF, chipping & crushing area and landfilling. Costs will be determined.					
	River Rehabilitation Project. Measured by amount of hectares cleared.					
	350 000.00	TBD	TBD	TBD	TBD	TBD
	EPWP invasive alien plant management programme. Measured by amount of hectare cleared.					
	1 030 000.00	TBD	TBD	TBD	TBD	TBD

5.4 IWMP GOAL 4: PROMOTE AND ENSURE WASTE MINIMISATION

Goal 4: Promote and Ensure Waste Minimisation						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Maximise waste minimisation in the CWDM. Monitor and assist local municipalities to achieve recycling and diversion targets. The aim is to consistently divert high percentages of waste from landfill.	The regional integrated waste management facility will include a Material Recovery Facility, Garden Waste Chipping Area and Builder's Rubble Crushing Area which will ensure that the incoming waste stream is diverted as much as is practicable before disposal.					
	Educate the public regarding waste minimisation as part of Goal 1.					

5.5 IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE

Goal 5: Improve Regulatory Compliance						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Ensure up-keep with latest legislation and the enforcement thereof relating to solid waste management in the District.	Ensure that all local Municipalities' and the CWDM's solid waste management by-laws are relevant and up to date. Provision should be made in the by-laws so that generators and transporters of hazardous wastes register and report to the Municipalities.					
	No additional costs. Can be done in-house					
			Ensure that the regional integrated waste management facility is internally and externally audited as per the frequency required in the license once operational. Further ensure that license conditions and requirements are met. The cost estimate includes an operational audit, water monitoring and topographical survey.			
			60 000.00	63 600.00	67 416.00	71 460.96

5.6 IWMP GOAL 6: ENSURE SAFE AND INTEGRATED MANAGEMENT OF HA ARDOUS WASTE

Goal 6: Ensure safe and integrated management of hazardous waste						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Provide education and management options for hazardous wastes. Ensure legal compliance by hazardous waste generators and transporters. Ensure the monitoring of the incoming waste stream at disposal facilities.	The public must be informed about household hazardous waste and the avoidance, reduction and disposal options available to them regarding these wastes. This forms part of Goal 1 of this plan.					
	As part of Goal 2 of this plan, the registration and reporting of hazardous waste generators at the local Municipalities will allow the Municipalities as the service authorities to ensure that the waste is stored, transported, treated or disposed as is legally required. The District can oversee and review this.					
	Hazardous facilities: With the construction of the regional disposal facility, provision must be made for the temporary storage of household hazardous wastes from where it will be transported and disposed at the appropriate licensed facility.					
	Monitoring of waste: It must be ensured that waste management employees are familiar with the latest legislation regarding hazardous waste, the identification thereof and the disposal options that are legal. Employees at the future regional waste management facility must be able to identify the received waste loads and prohibit the disposal where required. The incoming waste loads at disposal and waste management facilities must be monitored.					

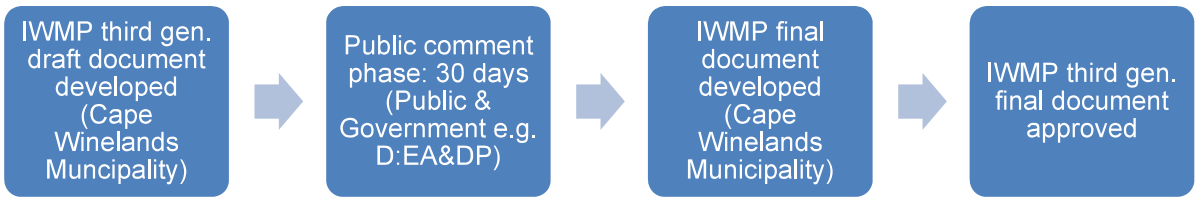
5.7 IWMP GOAL 7: ENSURE SOUND BUDGETING FOR INTEGRATED WASTE MANAGEMENT

Goal 7: Ensure sound budgeting for integrated waste management						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Ensure that upcoming implementation actions are in the budget. Explore sources of funding.	The Municipality will ensure that there is sufficient provision in the budget for upcoming projects and action items. This can be done with the annual IWMP implementation programme review and project evaluation.					
	The Municipality will explore other sources of funding.					
	The Municipality will as part of Goal 3 ensure that the service delivered is cost efficient.					

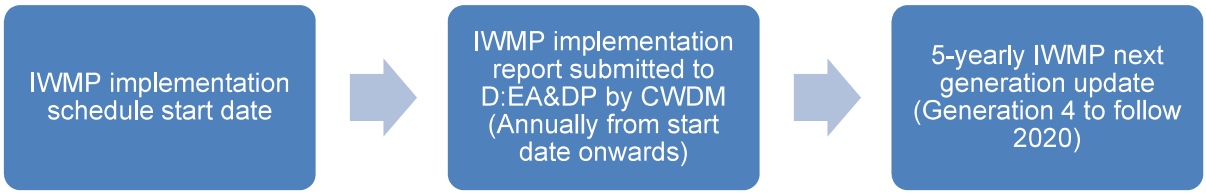
6. IWMP MONITORING AND REVIEW

For the IWMP to be an effective and relevant tool and guide for integrated waste management in the Cape Winelands District Municipality, it will need to be monitored and reviewed. Monitoring relates to the goals and targets set out in the IWMP and whether they are being achieved or pursued. Reviewing relates to the document and the projects themselves which will require regular updates to stay up-to-date, specifically the implementation items of Section 4. The proposed implementation schedule as well as allocated budget may change at any time and these changes, if any, need to be reflected in the reviewed IWMP to avoid confusion.

The following diagram illustrates the initial review cycle when a new IWMP is developed:



The date on which the final IWMP third generation document is approved, must be recorded and will serve as the base date on which further monitoring and review dates are based. This is also the start date of the approved implementation schedule. The following diagram illustrates the review steps that must be followed after the final IWMP is published.



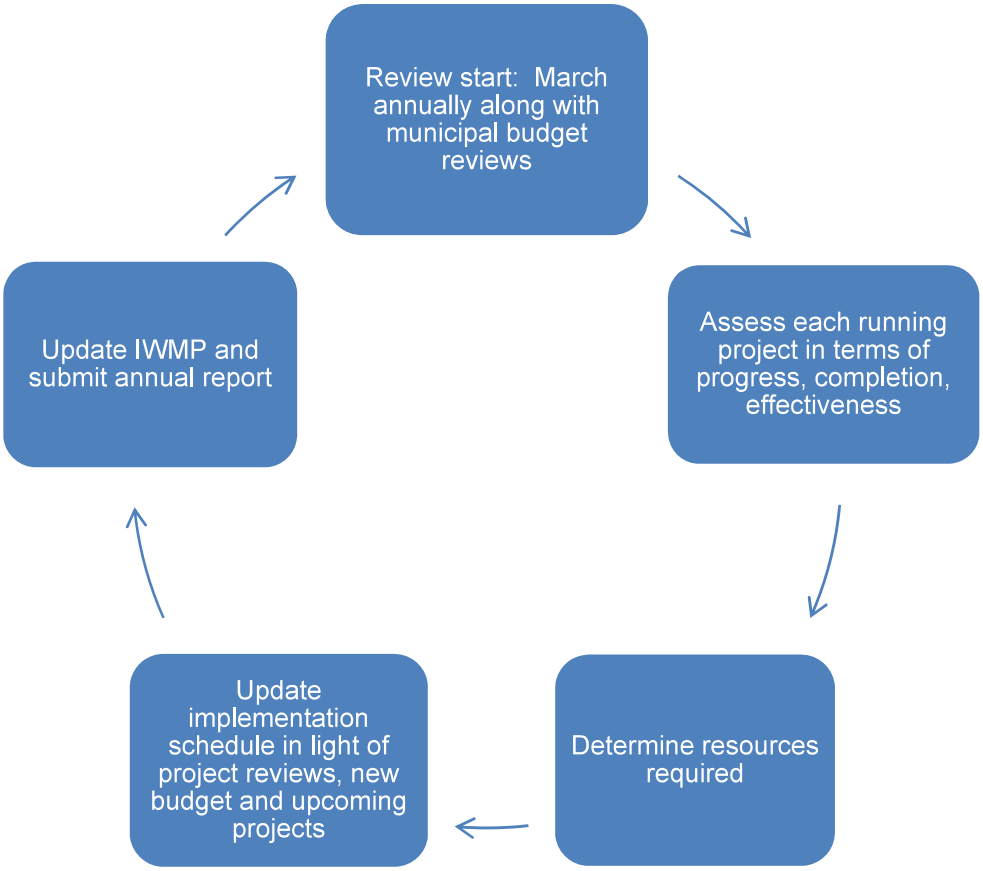
The annual implementation reports will be submitted by the CWDM and will be compiled by Mr van Eck, or to whom the task is delegated by him. The annual report must contain the approved implementation items and dates of the IWMP and the progress thereof of the past year. Based on the progress and possible new budget allocations, the implementation schedule of the IWMP must be updated and included in the annual report. This new implementation schedule must provide for 3 upcoming years from the report date.

The progress of each task on the implementation schedule, if under way according to the schedule for that year, must be summarised and the estimated completion date must be updated. The reasons for the lack of progress or practical difficulties must be stated along with a summarised action plan to adhere to the schedule as close as possible.

The report must further discuss the effectiveness of completed projects. For example, when a new weighbridge has been commissioned, the collected data must be reported on and added to the IPWIS. Also the participation rates of source separation can be monitored along with the public awareness and education campaign. See **Annexure 2** for an example of a project review form which can be used to track the success and effectiveness of the waste management projects and added to the annual report. The projects and progress thereof will be tracked by each project team constantly, meaning that each project is not reviewed only annually, but all progress tracked in order to provide an accurate description in the annual report for submission.

Wherever issues are reported or identified in the projects, these issues must also be evaluated in terms of the relevant legislation and by-laws. It must be stated if there is relevant legislation applicable to the issue and if so, was it the lack of enforcement, for example, that caused the issue. If no relevant legislation exists, it must be noted to adapt the by-laws accordingly in future revisions.

Below is the proposed review cycle of the IWMP and its projects:



7. CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

The Project Team, with the assistance of Municipal Officials, has undertaken an analysis of the current municipal solid waste management activities within Cape Winelands District Municipality.

The analysis has shown that the Municipalities in the District have through the years committed themselves to the delivery of a collection and disposal service for all its residents. In recent years the more sustainable approach with regard to waste minimisation and reduction has been adopted and is to be expanded in the upcoming years.

The chapters of this Integrated Waste Management Plan report describe the way in which the municipalities are currently conducting solid waste management and how to strategically move towards a sustainable waste management system whereby the focus will shift to the avoidance and reduction of waste rather than to the disposal thereof. It also lists the strategies of the municipality in terms of waste avoidance, waste reduction and waste disposal.

During the process of the implementation of the municipality's IWMP, and arising from the public consultation process that is forthcoming, further input and/or corrections to the report may come to light that will then be added as a revision to the report.

The analysis of the current waste management system has shown the following:

- all formal and informal residential erven are receiving a weekly door-to-door waste collection service
- waste collection services are not available to farms, but farmers offload their household waste themselves or can apply for a service in some of the municipalities
- separation of recyclables at source is done in all municipalities in the District and continues to expand to more neighbourhoods
- collected municipal waste are transported to the local disposal sites, with some of these sites becoming restricted in terms of available disposal airspace

- green waste chipping and builder's rubble crushing activities are practiced throughout the District, with composting being done in Langeberg and Stellenbosch
- most healthcare risk wastes are managed by private contractors
- waste recovery is being done, but needs to expand

With the current waste management system focussing on getting the waste into the waste stream and disposing of it in an acceptable manner, and with the future integrated waste management system focussing on waste avoidance and waste reduction, the municipality requires a set of strategic objectives on how to transform from the current management system to the future management system.

The strategic objectives for integrated waste management in Cape Winelands District Municipality can be summarised as follows:

- To ensure that Waste Management in the Cape Winelands District complies with South African and International environmental standards so that it is beneficial to industrial and agricultural growth and the public's right to a clean and healthy environment.
- To promote the minimisation of the entrance of material of value into the waste stream.
- To promote waste reduction so that nothing of value nor anything that can decompose, gets disposed.

For these strategic objectives to be met, a series of implementation instruments (action plans) will need to be implemented. These implementation instruments as well as time framework within which it should be addressed are described in this report but need to be fully detailed at a later stage. The instruments are the following:

- Public Awareness and Education
- Waste Quantification & Information
- Effective Solid Waste Service Delivery
- Promote and Ensure Waste Minimisation
- Improving Regulatory Compliance
- Ensuring the Safe and Integrated Management of Hazardous Waste
- Ensuring Sound Budgeting for Integrated Waste Management

The above instruments, through implementation via their action plans, will ensure that waste management in the Cape Winelands focuses on avoidance and reduction rather than collection and disposal, but simultaneously maintaining the practical balance between the various waste management functions.

Since the highest priority for transforming the current management system is undoubtedly depending on public acceptance and ownership, the Public Awareness and Education instrument will receive preference in the implementing framework.

7.2 RECOMMENDATIONS

A comprehensive analysis and assessment of solid waste management in the Cape Winelands District has been done and key strategies have been determined to aim the municipality towards sustainable and integrated waste management.

It is therefore recommended that the next stage of the process of implementing the Integrated Waste Management Plan be proceeded with, that entails the consultation process with the public and the development of detail action plans and key performance indicators for future monitoring of the municipality's successes in waste management service delivery.

Public Awareness

The first step in educating the public about waste is to make them aware of any new waste management procedures and facilities available to them.

Another reason to focus on educating the public will cause a greater awareness of waste minimisation. This will reduce waste generation rates which will in turn reduce transport volumes and costs. It is important to also provide feedback to the public of the success of their efforts, for example publishing month to month volumes of waste diverted from being landfilled.

To reduce the contamination of recyclables, the current source separation strategy should be expanded in all local municipalities.

Waste reduction

Expanding the separation at source neighbourhoods and continual use of existing and additional MRF's will ensure the reduction of waste to landfill. The establishment of swop shops will also contribute to waste reduction.

Waste Disposal

When the regional site is established, it must be ensured that it is audited in terms of the license. Regular audits will ensure that the facility is operated correctly and efficiently. Ensuring the correct operations will maximise the results of efforts of waste reduction and recovery and therefore the benefits thereof.

A disposal strategy must be co-ordinated for the western portion of the Cape Winelands District. The Waste to Energy strategy of the Drakenstein Municipality will contribute, but disposal airspace will still become a requirements once the current landfills have reached capacity.

The following items must be included in the Cape Winelands Municipality IDP:

All implementation actions requiring Capital Expenditure not already contained in the IDP:

- The establishment of the regional integrated waste management facility following the issuing of the license

ANNEXURE 1
IWMP CHECKLIST

Western Cape Government
Environmental Affairs and Development Planning

1306

INTERGRATED WASTE MANAGEMENT PLANNING

CHECKLIST FOR THE .....LOCAL MUNICIPALITY

FEBRUARY

2014









The Afrikaans or Xhosa version of this document is available on request.

SECTION 1: GENERIC INFORMATION				
Category of the municipality		A	B	C
Date of Submission				
Name of the municipality				
Section or Department within the municipality responsible for drafting the IWMP				
Contact details of "Responsible Person" in the Municipal Department		Contact details of Alternate contact person from Municipality		
Name:		Name:		
Tel:		Tel:		
Fax:		Fax:		
Cell:		Cell:		
Email:		Email:		

Integrated Waste Management Plan Review Form (IWMP) / Checklist

Please answer the following questions by placing a (**X**) in the appropriate block. Only submit your IWMP for approval once you have answered YES to all the questions below.

CHECKLIST QUESTIONS	YES	NO
SECTION 1 INTRODUCTION AND GENERAL DESCRIPTION		
1.1) Does the Intro and general description includes overall aim, strategic goals and scope, of the IWMP?		
1.2) Does the IWMP indicate the geographical coverage of the plan?		
1.3) Does the IWMP indicate the Geo-physical and Geo-hydrological conditions in the municipality?		
SECTION 2 STRATEGIC LINKAGES		
2.1) Does the IWMP show linkages with the WC IWMP?		
2.2) Does the IWMP show linkages with the SDF?		
2.3) Does the IWMP show linkages with the IDP?		
SECTION 3 PUBLIC PARTICIPATION		
3.1) Is there a detailed public participation program included in the IWMP? (i.e. date, location and amount, number of PP session's, type of PP(newspapers, meetings), (participants)		
3.2) Does the IWMP provide proof of PP i.e. attendance registers, comments received and response given?		
SECTION 4 IWMP STATUS QUO OR SITUATION ANALYSIS		
4.1 LEGISLATION		
4.1.1) Does the IWMP identify all existing legislation and policies, which is applicable to integrated waste management including the local municipal by-laws?		

4.1.2) Does the IWMP indicate which existing local government by-laws that influence waste management practices are currently being reviewed or in the process of being reviewed?		
4.1.3) Does the Status Quo identify any international agreements		
4.2 DEMOGRAPHIC PROFILE		
4.2.1) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t total population of the area,		
4.2.2) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t projected population and growth rate of the area,		
4.2.3) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t population distribution		
4.2.4) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t socio-economic categories including income levels		
4.2.5) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t development profiles		
4.3 WASTE MANAGEMENT COST AND FINANCING		
4.3.1) Does the IWMP include a detailed breakdown of current operational and capital budget?		
4.3.2) Does the IWMP include a detailed breakdown of current operational and capital expenditure?		

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4.3.3) Does the IWMP indicate the current breakdown of income (e.g. tariffs, fines for waste management)		
4.4 SERVICES AND SERVICE DELIVERY		
4.4.1) Does the IWMP indicate the level of free basic services		
4.4.2) Does the IWMP indicate the level of services to Formal residential houses		
4.4.3) Does the IWMP indicate the level of services to informal settlements.		
4.4.4) Does the IWMP indicate the level of services to farms		
4.4.5) Does the IWMP indicate unserviced areas		
4.5 COMPLIANCE AND ENFORCEMENT		
4.5.1) Does the Status Quo identify licensed and unlicensed waste management facilities and has provision been made for the licensing, closure and rehabilitation of these facilities in the IWMP.		
4.5.2) Does the IWMP indicate if landfill sites, recycling, drop-off and buy-back centers are in compliance with license conditions?		

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4.5.3) Does the Status Quo provide a summary of waste related complaints (i.e. number and type)		
4.5.4) Does the Status Quo indicate the available annual air space and remaining life expectancy of the waste management facilities.		
4.5.5) Does the Status Quo identify contaminated land (unpermitted landfills prior to ECA) and indicate remediation measures to reduce the risk of harm to health or the environment.		
4.5.6) Does the IWMP address how informal salvaging, if any, on existing landfill facilities are going to be formalized, controlled or eliminated and does the permit/license or environmental authorization make provision for it, or do they indicate if the existing authorizations are to be amended.		
4.6 WASTE CHARACTERISATION		
4.6.1) Does the IWMP include waste generation quantities and types for general and hazardous waste from households		
4.6.2) Does the IWMP include waste generation quantities and types for general and hazardous waste from industry		
4.6.3) Does the IWMP include waste generation quantities and types for general and hazardous waste from business		
4.6.4) Does the IWMP include waste generation quantities and types for general and hazardous waste from Farms		
4.6.5) Does the IWMP include waste generation quantities and types for general and hazardous waste from Other institutions e.g. health care facilities		

The Afrikaans or Xhosa version of this document is available on request.

4.6.6) Does the IWMP include projected waste generation quantities?		
4.7. **WASTE MINIMISATION**		
4.7.1) Does the Status Quo indicate any waste minimisation (reuse, recycling, recovery, treatment) initiatives as mandated in the NEM: WA within your municipal area including private sector initiatives?		
4.7.2) Does the IWMP include waste minimisation quantities and types for general and hazardous waste?		
4.8. **ORGANISATIONAL STRUCTURE AND STAFF CAPACITY**		
4.8.1) In accordance with Chapter 3 of NEMWA has a waste management officer been designated in writing to be responsible for coordinating matters pertaining to waste management in the municipality?		
4.8.2) Does the IWMP indicate the entire waste staff (management, supervisor and labourers) complement including any staff vacancies and plans to fill vacant posts.		
4.9. **WASTE AWARENESS AND EDUCATION**		
4.9.1) Does the IWMP provide information(campaigns) on waste awareness and education		
4.10 WASTE INFORMATION MANAGEMENT		

The Afrikaans or Xhosa version of this document is available on request.

4.10.1) Does the IWMP indicate the Status of registration and reporting of waste management facilities on IPWIS.		
4.10.2) Does the IWMP indicate the use of a waste quantification system?		
5. GAP AND NEED ANALYSIS		
5.1) Does the IWMP indicate a gap analysis (analysis and identification of issues, problems or shortcomings or challenges within the municipality w.r.t waste management.		
6. OBJECTIVES AND TARGETS		
6.1) Does the IWMP set short, medium and long-term objectives and targets? If yes, are these objectives specific/measurable/achievable/realistic/time-based (SMART)?		
7. IWMP IMPLEMENTATION		
7.1) Is there a detailed implementation plan identifying activities together with both human and financial resources and timeframes.		
7.2) Does the Implementation plan address how the IWMP will be integrated with the Integrated Development Plan (IDP)?		
8. MONITORING AND REVIEW		
8.1) Does the IWMP introduce mechanisms to monitor the effectiveness of the implementation of the IWMP and to take corrective actions if the targets are not met?		

Score:

Percentage:

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ANNEXURE 2
PROJECT REVIEW FORM

CAPE WINELANDS DISTRICT MUNICIPALITY IWMP IMPLEMENTATION PROJECT REVIEW FORM

PROJECT NAME AND DESCRIPTION: ……

……

……

PROJECT COMMENCEMENT DATE: ……

PROJECT COMPLETION DATE: ……

RATE PROJECT OVERALL SUCCESS IN TERMS OF INTENDED PURPOSE: 1 2 3 4 5

REASON(S) FOR SCORE: ……

……

……

IF SCORE = 1-3, LIST THE ACTIONS THAT ARE TO BE TAKEN ALONG WITH TARGET DATES TO IMPROVE SCORE: ……

……

……

……

LIST ALL PUBLIC COMMENTS/COMPLAINTS RECEIVED RE THIS PARTICULAR PROJECT: ……

……

……

HAVE THESE BEEN ADDRESSED: ……

……

ANNEXURE 3
ADVERTISEMENTS

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

DRAFT INTEGRATED WASTE MANAGEMENT PLAN (3rd GENERATION)

Notice is herewith given in terms of section 21 of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000) that the Draft Integrated Waste Management Plan (IWMP) Third Generation of the Municipality has been developed.

The local community is invited to submit comments in connection with the Draft Plan to the Municipality by submitting such comments on or before 4 June 2015 to the Municipal Manager (For attention Mr F van Eck) at the following address, fax number or e-mail:

JPCE, PO Box 931, BRACKENFELL, 7561, Fax number: (021) 981 0868, info@jpce.co.za

The Council will consider the Draft Plan together with all the comments and representations received. The Draft Plan will be available for perusal during office hours at the offices of the Breede Valley, Drakenstein, Langeberg, Stellenbosch and Witzenberg local municipal offices, at libraries throughout the District and can be downloaded at www.jpce.co.za.

M Mgajo
MUNICIPAL MANAGER

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

KONSEP GEINTEGREERDE VASTE AFVAL BESTUURPLAN (3de GENERASIE)

Kennis geskied hiermee ingevolge artikel 21 van die Wet op Plaaslike Regering: Munisipale Stelsels, 2000 (Wet 32 van 2000) dat die Munisipaliteit se Konsep Geintegreerde Vaste Afval Bestuurplan, 3de Generasie saamgestel is.

Die plaaslike gemeenskap word uitgenooi om vertoë met betrekking tot die Konsepplan aan die munisipaliteit voor te lê deur hul vertoë voor of op 4 Junie 2015 te rig aan die Munisipale Bestuurder (vir aandag Mnr F. Van Eck) by die volgende adres of faksnommer:

JPCE, Posbus 931, BRACKENFELL, 7561, Faksnommer: (021) 981 0868, info@jpce.co.za

Die Raad sal die Konsepplan tesame met alle kommentaar of vertoë wat ontvang is oorweeg. Die Konsepplan is gedurende kantoorure ter insae by die kantore van die Breede Vallei, Drakenstein, Langeberg, Stellenbosch en Witzenberg munisipale kantore, openbare biblioteke in die Distrik en op die volgende webwerf: www.jpce.co.za.

M Mgajo
MUNISIPALE BESTUURDER

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

Human Resource Management Strategy & Plans

Main Interpretive

and

Reference Document

29 June 2017

This Report, or information obtained from it, may not be made available or copied, in whole or in part to any other person without our prior written permission which may, at the discretion of the Manager: Human Resources of the Cape Winelands District Municipality, grant, withhold or grant subject to conditions (including conditions as to legal responsibility or absence thereof).

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1. THE CONTEXT OF HR STRATEGY

1.1 Introduction

Human Resource (HR) strategies are essentially the enablers for effective Human Resource Management (HRM) practises as well as transformation. It provides a means of communicating to all concerned the intentions of the organisation about how its human resources will be managed. It provides the basis for strategic plans and enable the organisation to measure progress and evaluate outcomes against objectives. HR strategies encapsulates visions for the future and they define the actions required and how the vision should be realized.

HRM transformation in basic terms is the process of ***firstly*** identifying what the HR function does now, what it should be doing in future (the HR transformation goals) and defining objectives for realising defined goals. HRM transformation ***secondly*** deals with implementing and sustaining the delivery of that objectives (the strategies). Technology, outsourcing and other means of delivery of the HR function may be part of the solution as strategic means of achieving HR transformation, but are not HR transformation itself. HR transformation is in the ***third*** instance related to sustainable organisational performance, and hence deals with monitoring and evaluation to review current and identify new courses of action to enabling comprehensive mission critical capabilities.

Organisations in the public sector, such as municipalities, consider HR strategies for transformation purposes because of an impetus arriving from existing problems related to performance of the HR function across the organisation. These problems can arise from a lack of capability and skills within the HR function and team to meet its strategic objectives or to comply with statutory requirements. Problems can also originate from weak or inappropriate human resource management practices by managers and supervisors. Each organisation must decide on its objectives for HRM transformation.

1.2 Strategic Human Resource Management and Human Capital Management

Strategic human resource management (strategic HRM or SHRM) is an approach to managing human resources that supports long-term organisational goals and outcomes within a strategic framework. The approach focuses on longer-term people issues, matching resources to future needs, and concerns about structure, quality, culture, values and commitment. It speaks to strategy alignment and implementation.

Human capital can be defined as people at work and their collective knowledge, skills, abilities and capacity to develop and innovate. Human capital management (HCM) assumes that people are treated as assets rather than costs. It focuses on the importance of adopting an integrated and strategic approach to managing people, which is the concern of all stakeholders in an organisation, not just the people management function.

HCM can complement and strengthen strategic HRM by:

- Drawing attention to the significance of ‘management through measurement’ - the aim being to establish a clear line of sight between HR interventions and organisational success;
- Providing guidance on what to measure, how to measure and how to report on the outcomes of measurement;

- Underlining the importance of using the measurements to prove that superior people management is delivering superior results and to indicate the direction that HR strategy should follow;
- Reinforcing attention on the need to base HRM strategies and processes on the requirement to create value through people and thus further the achievement of organisational goals;
- Defining the link between HRM and corporate strategy;
- Strengthening the HRM belief that people are assets rather than costs; and
- Emphasising the role of HR specialists as corporate partners.

Strategic HRM can be perceived as the essential means through which human capital is converted into organisational value. Human capital evaluation is useful in that it provides information about the current and potential capabilities of human capital to inform the development of strategy. Organisational success will be achieved if it is successful in managing its human capital to achieve this potential and embed it in services that have customer value. Once again, it speaks to strategy alignment and implementation.

a)

1.3 Diagnosing Human Resource transformation priorities

Deeper knowledge and understanding of an organisation's corporate goals and its operating model can identify potential threats and opportunities in the quantity and quality of human resource required by the organisation. This in turn helps identify the key components of an HR strategy and the virtuous circle of providing whatever your organisation needs for success.

It is critical that the HR team has a high level of expertise in aligning major HR interventions and their relevance to organisational performance. This calls for expert HR thinking and identifies the requisite interventions and, equally important, how they fit together to leverage organisation performance.

b)

1.4 Human Resource strategy development process

There is no universal prescription for an HR strategy. Its purpose should be to provide a framework for applying people management practices to accomplish and sustain corporate outcomes. Therefore, each strategy will be unique and dependent on the operating environment and corporate goals of the organisation to which it applies.

HR strategy is concerned both with the delivery of effective people management services and innovating new policies and practices. It is about making decisions around what needs to change, managing those changes and establishing what needs to stay the same. This apply to the staff of the HR function, all managers as well as supervisory staff whom engage with staff and being responsible for any aspect of people management practices.

Strategy formulation of any kind follows a process. The following sub-sections describes the process basics to follow, and highlights the specific roles the HR function should perform (and be allowed), to realise well informed HR strategies.

1.4.1 Defining corporate strategy - IDP

Municipalities have a long-term strategic plan - it's IDP, which requires to be aligned with various other strategies, but also with its own long-term HR strategy. When HR people are active strategy partners they are more likely to have been involved in the formulation of corporate strategy. They would therefore already have had the opportunity to ensure that the people issues are addressed during this process, making the HR strategy an integral part of the corporate strategy.

Whatever the positioning of HR responsibility within the organisation it is important that HR strategy is aligned to organisational needs. This requires HR professionals not just be able to understand the corporate strategy, but also to be able to articulate its implications for human resource management and the consequences for HR strategy.

1.4.2 Analyse the context

HR people must understand, not only the requirements of the corporate strategy, but also the context in which it is prepared and implemented. This means appreciating the strengths and weaknesses of the organisation and the threats and opportunities it faces. It also means analysing the core mandates of the organisation - what it's good at doing and what it has to continue to be good at doing - and identifying its critical success factors, especially those concerned with people.

1.4.3 Identify organisational needs

This is a crucial stage. The task is to identify the organisational issues that should be addressed by a HR strategy. It is necessary to be as precise as possible. For example, the IDP might include plans for new service delivery approaches. In this situation, you need to determine what the resourcing implications are in terms of numbers and skills to devise plans to address these. Whether or not the HR function have been involved at this stage, they (the HR function) will need to develop a strategy for dealing with the human resource implications of the changed service delivery mechanisms, such as structure changes, job profiling and remuneration.

Furthermore, in some circumstances there may only be some very broad-brush strategic intentions expressed by top management, like improving performance, productivity, quality or levels of customer service. The HR function will have to be prepared to take apart this 'strategic intent' and assess how HR practices can make a specified and added-value contribution to achieving these broad goals.

1.4.4 Identify key HR issues

Key HR issues are those that directly affect the achievement of corporate goals. They may be arranged under general headings such as organisation structure or development, or they may be more specific such as the need to develop intellectual capital or to improve communication and reporting relationships.

1.4.5 Develop the strategic framework

The strategic framework defines the main strategic goals, their interconnectedness and their priorities. Possible links between them need to be identified so that mutually supporting processes can be developed, for example, performance management processes or human resource development programmes. This will enable priorities to be established. In some cases, the strategies will be ***bundled*** together. In other cases, they might be implemented in sequence on the grounds that there is only so much innovation and change that an organisation can cope with at any one time.

However, the evidence suggests that a piecemeal approach to change is not as effective. It is important that interrelationships and sequencing are considered with care and nothing should be done without assessing its consequences for the corporate or HR strategy.

1.4.6 Define specific HR strategies

This step is embarked upon to amplify the strategic framework by statements of the organisational needs the various individual HR strategies are designed to satisfy. You must explain how they will meet the needs, the resources required, the programme for implementation (this will involve prioritisation) and their benefits in terms of added value. The strategy may be set out in summarised form with supporting material providing more detail.

1.4.7 Assess HR capability and resources required

The next step is to assess the capacity of the HR function to do what has to be done. This means looking at two things:

(a) Diligently scrutinise current general human resource management practices to assess strengths and weaknesses in relation to the demands made on it. The weaknesses may include inadequate processes or gaps in HR activities that will inhibit the ability to meet strategic goals.

(b) Assess the extent to which the HR function itself (how it is structured and the skills of its members) is capable of responding to new demands. If additions have to be made, then a cost-benefit analysis must be carried out to answer the question 'What added value will be gained by this addition to HR resources?'

1.4.8 Prepare action plans

The formulation of strategic plans with specific actions of which the processes, outputs and outcomes should be measured and reviewed provides the ultimate expression of attending to HR effectiveness towards achieving corporate objectives.

1.5 Purpose of this Human Resource Strategy

The purpose of this Human Resource Strategy and Plans are to enable the Cape Winelands District Municipality's (CWDM) Council and Senior Management Team (SMT) to align HRM practices with the strategic objectives of the municipality and to enhance the capability of the HR function to maintain effective corporate HRM services and support to line function departments.

The strategy intends to guide municipal stakeholders on human resource management (HRM) functions and practices, and in so doing enhancing an organisational culture of excellence (continuous improvement). The CWDM Council and SMT are responsible for engaging its employees, and its HRM functions ought to perform recognised processes in implementing its HRM Strategy. It is also important that HRM strategies are regularly reviewed and amended to align with the Council's vision and mission, strategic goals, its organisational structure, and local circumstances.

This HRM strategy is further based on the assumption that a rigorous and long-term approach to attract, retain and develop a skilled, committed and inclusive workforce will enable the CWDM to be a sustainable and capable partner of National and Provincial governments in advancing the quality of life of the communities it serves.

The strategy ought to establish "live" organisational processes and activities. Appropriate and readily available information should on a regular basis be distributed to the SMT and Council to analyse and review effective implementation of these strategies.

The HRM strategy is intended to build on and reinforce existing good practices in HRM and to facilitate improvements. It embraces the principles of workplace diversity and equity as essential elements in the creation of a flexible and multi-skilled labour force at the CWDM.

2. IDP AND HUMAN RESOURCE MANAGEMENT AT THE CWDM

2.1 Municipal mandates

As a provider of statutory and strategic mandated services, and with the sector's significant responsibility for administrative and governance functions that ought to enable service delivery, municipalities are significant stakeholders within communities and the broader service delivery environment in South Africa.

Consequently, municipalities are significant local employers and require diverse workforces that comprises a wide range of jobs and professions for specified competencies. Municipalities are also obliged to collaborate with a range of local, district, provincial and national governmental stakeholders to address place-based workforce challenges.

In addition, as the service delivery demands increase and expand, workforce capacity, capability and innovation become even more critical.

2.2 Role of municipalities relating to the local workforce

Municipalities are primary economic drivers in many communities. Without effective municipal governance, local economies and communities will struggle to progress. In local communities, municipalities influence the local workforce in the following ways:

(a) Direct employment - as a major employer, municipalities plays a significant role by employing local people and influencing local workforce participation;

(b) ***Indirect employment -*** as a major role-player, municipalities are responsible for procurement of goods and services which influence the local economy and local job creation; and

(c) As the third sphere of government, municipalities are responsible for implementing policies, regulations and incentives to ***stimulate local economic development*** and local job creation and should increasingly taking on this role to benefit their communities.

2.3 IDP and HRM at CWDM

Captured in the CWDM 4th Generation IDP (2017 - 2022) foremost strategic goals and performance objectives are defined that relate to this HRM Strategy. Indicated in the following sub-sections are extracts from the aforementioned IDP document that describes the context and connotation with this HRM Strategy.

2.3.1 Statutory obligations

The CWDM has a statutory obligation to prepare an Integrated Development Plan every five years. This plan, together with all other sector plans, must be reviewed on an annual basis and the multi-year budget is likewise amended in accordance with the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000). Chapter 5, Section 25 (1) of the Act indicates that:

"Each municipal council must, within a prescribed period after the start of its elected term, adopt a single, all-inclusive and strategic plan for the development of the municipality, which:

(a) Align, integrate and coordinate plans and take into account proposals for the development of the municipality;

(b) Align the resources and capacity of the municipality with the implementation of the plan;

(c) Complies with the provisions of this Chapter; and

(d) Is compatible with national and provincial development plans and planning requirements binding on the municipality in terms of legislation."

2.3.2 CWDM Corporate Strategic Objectives

Stated in the 4th Generation IDP (2017-2022) is the CWDM's Mission which read as follows:

"All structures of the Cape Winelands co-operate together towards effective, efficient and economically sustainable development.

To stay Mission effective the Council of the CWDM set itself the following Strategic Objectives:

(a) Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District;

(b) Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities;

(c) Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality.

2.3.3 CWDM: Strategic Objective 3 and its HR related PDO's

Strategic Objective 3 contains the following Pre-Determined Objectives (PDO'S), which indicators and measurements have a direct bearing on this HRM Strategy:

(a) PDO 3.2 - Participative and accountable governance: To provide an effective and efficient support services to the CWDM's departments so that the organisational objectives can be achieved through the provision of Human Resources and Administrative Support Services.

Bringing the aforementioned to affect the Human Resources Function which should aspire to ensure that the CWDM employs the best and suitable qualified employees to serve its communities, within the context of relevant legislative arrangements, policies and collective agreements, and taking into account the CWDM defined values.

(b) CWDM PDO 3.3 - A skilled and competent workforce: CWDM will ensure the development of its workforce in order to improve productivity in the workplace and the competitiveness of employees. The CWDM, Council and employees are fully committed to educating, training and developing all employees with the financial resources available.

2.3.4 CWDM Corporate Indicators relating to HRM

Also indicated in the 4th Generation IDP (2017-2022) are the following corporate Key Result Areas relating to HRM:

(a) Effective HR support services

(b) Skilled and competent workforce

(c) Sound labour relations

(d) An informed workforce

2.3.5 Organisational development for continuous improvement

Organisational development within the CWDM continuously focus on the increase of the municipality's effectiveness and efficiency in order to develop to its full potential and seeking to increase effectiveness in terms of the strategic objectives as defined in the Integrated Development Plan.

The objective of organisational development is to improve the CWDM's capacity to handle its internal and external functioning and relationships, inclusive of more effective communication, enhanced ability to cope with organisational challenges, more effective decision-making processes, more appropriate leadership styles, improved skills and higher levels of trust and cooperation among employees.

Organisational development further focuses on improving performance at individual and organisational level and improving the ability to effectively respond to changes in its external environment, increasing internal capabilities by ensuring the organisational structures, human resources systems, communication systems, and leadership/managerial processes that fully harness human motivation and help employees to function to their full potential.

2.4 Determined organisational development needs for HR Strategy

The content of this HR Strategy is mainly informed by staff (culture) and climate surveys and the analysis of current policies, procedures and practices during September - December 2016.

The outcomes of these assessment activities were validated during a series of focus sessions with specified stakeholder groups and individuals. Structured interview sessions with the HR unit were conducted to establish applicably required information regarding the current HR service delivery model. Based on the aforementioned assessment process a suitable framework for HR Strategy and related HR Plans were formulated. The HR Strategy and Plan enables strategic direction, measures for innovation and sustainable people practices, as well as performance measures to monitor the development of the human resources competence to deliver on strategic HRM objectives, ultimately effecting HR transformation. ***Figure 1*** depicts the essence of the assessment and development elements for the HR strategy.

These processes enabled the CWDM HR Unit and the SMT to determine strengths, limitations and developmental needs of existing HRM practices, which serve as basis for the strategies and plan in this HR Strategy document.

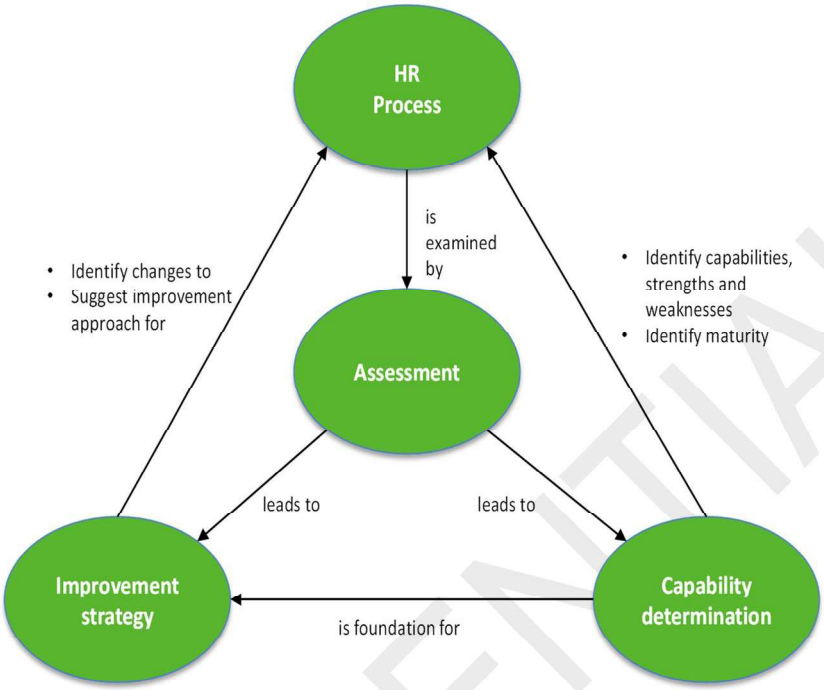


Figure 1: Assessment methodology process framework

3. CWDM: HRM STRATEGY FRAMEWORK

This section and its sub-elements contains the official perspectives and commitments of the Council and Senior Management Team with regard to Human Resource Management at the CWDM.

3.1 Broad HR Statement of Intent

CWDM commits to:

(a) Trust and respect individuals.

(b) Develop a strong focus on overall effectiveness of the organisation, its direction and how it's performing.

(c) The organisation be a place where the best people do their best work.

(d) Have staff who are enjoying themselves, are being supported and developed, and who feel fulfilled at work and will provide the best service to customers.

(e) Encourage a positive employee relations climate.

3.2 HR Value statement

CWDM's HR strategy are shaped by the following set of core values:

(a) Reach out - develop the commitment to respect all staff.

(b) Involve and listen - recognise the contributions of individuals.

(c) Overcome injustice - encourage fair and just processes.
(d) Recognise and foster - provide opportunities for development.

3.3 Strategic Themes and Goals

3.3.1 Theme 1: Strategy Alignment

Goal 1: Achieve strategic integration: Align HR strategies, policies and practices to organisational strategy		
Performance Objectives: HR strategies, policies and resource plans aligned to organisational strategy		
Goal Measure: HR strategies and policies documented, agreed and communicated		
Strategies	So that…	Future Implications
▪ SHRM	▪ HR strategy is aligned to the organisation's objectives	▪ A systematic approach exists to develop and implement long-term HRM strategies, policies and plans enabling the organisation to achieve its objectives.
▪ HR Risk Management	▪ A framework for the HR governance, risk and compliance exist.	▪ Appropriate risk assessment practices and procedures relating to human factors are embedded within the organisation
▪ Workforce Planning	▪ Systematic identification and analysis of organisational workforce needs ensure sustainable organisational HR capability.	▪ A strategic workforce plan meeting the needs of the organisation exist.
▪ Organisational development	▪ So that planned and systematic practices enable sustained organisation performance through the involvement of its people.	▪ HR professionals take up the mantle as strategic change leaders

3.3.2 Theme 2: High performance management

Goal 2: High-performance culture embedded in the organisation		
Performance Objectives: HR strategies, policies and plans aligned to organisational strategy		
Goal Measure: Strategies for high performance success factors in place, agreed and communicated		
Strategies	So that…	Future Implications
▪ Individual PM	▪ A framework and processes exist to translate and cascade broad organisational performance drivers into team and individual performance targets.	▪ Progress measurement against agreed individual and team objectives enable attainment of organisational objectives.
▪ HR Technology	▪ Effective utilisation of relevant technological applications and platforms are used to provide accessible and accurate data, information, knowledge and intelligence.	▪ An ability to consolidate and rapidly extract relevant data in real time that empowers more effective HR decision making. ▪ Capacity existing within HR structures to deliver value-adding activities.
▪ HR measurement	▪ Appropriate measures and metrics exist from which organisational insights can be drawn	▪ Measurement approaches, methodologies and metrics applied to assess the effectiveness and efficiency of HR practices.
▪ HR service delivery	▪ HR's critical contribution to the creation of an innovative culture is both recognised, developed and supported by management and staff.	▪ Areas are identified where HR can make a strategic impact and the contribution of HR could solve problems or deliver improvements.

3.3.3 Theme 3: High-commitment management

Goal 3: An engaged, informed, committed and competent workforce		
Performance Objectives: Constantly enrich and improve the organisations knowledge and capacities		
Goal Measure: Staff knowledge and commitment to the organisation		
Strategies	So that…	Future Implications
▪ Knowledge Management	▪ Knowledge management exist as an explicit and systematic management of vital organisational knowledge and its associated processes of finding, creating, storing, organising, sharing; and applying.	▪ KM embedded as a core behaviour of the organisational culture through the key enabling business elements of people, process and technology.
▪ Talent Management	▪ Mission critical positions and leadership roles in the organisation in the future are identified from the Workforce Plan	▪ The talent needs of the organisation is effectively analysed.
▪ Wellness	▪ A safe and healthy work environment is created and maintained, together with individual wellness commitment that enables employees to perform optimally.	▪ Meeting all health and safety legislative requirements and other relevant wellness good practices in support of the achievement of organisational objectives.
▪ ERM	▪ Good employment relations practices enable the achievement of organisational objectives, compliant with the legislative frameworks and appropriate to socio-economic conditions.	▪ A climate of trust, cooperation and stability exist in the organisation.
▪ Compensation & Benefits	▪ An employment value proposition exists to employees in accordance with fair and appropriate levels of reward and recognition for their contribution to the achievement of agreed deliverables.	▪ Compliance with organisational governance principles and practices aligned to national governance codes of practice and relevant legislation.
▪ Learning and development	▪ Occupationally directed and other learning activities enable and enhance the knowledge, practical skills and work place experience and behaviour of individuals and teams based on current and future occupational requirements for optimal organisational performance and sustainability.	▪ Aligned learning and development strategy with organisational goals and culture.

4. CWDM: SPECIFIC HR PLANS

4.1 Strategic Plan 1: Strategic Human Resource Management

Strategic HRM is an approach to make decisions on the intentions and plans of the municipality in the shape of policies, programmes and practices concerning all HR matters. It adds to that the key concepts of strategy, namely, strategic intent, resource-based strategies, competitive advantage, strategic capability and strategic fit.

Priority level: A & B = Priority 2					
Goals/Objectives	SHRM done through integrated HR strategies, policies and practices, aligned with corporate objectives.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Implement HR strategy	×				
b) Market HR strategy	×				
Related Legislation	Local Government: Municipal Systems Act and Regulations (Act No. 32 of 2000)				
Related Policies	CWDM 4th Generation IDP Approved HR Strategy Organisational Management Policy				
Standards	▪ Endorsed HR strategy aligned to the organisation's objectives. ▪ Endorsed employment value proposition of the organisation. ▪ Endorsed framework for the HR element of the organisation's governance, risk and compliance policies, practices and procedures which balance the needs of all stakeholders. ▪ Endorsed strategies and measurements for strategic innovation and sustainable people practices. ▪ Internal and external socio-economic environment analysed for proactive people-related business solutions.				
Key activities related to KRA	▪ Translate the overall strategic intent of the organisation into HR strategy. ▪ Position the strategic HR agenda as an integral part of strategic decision making and operational plans. ▪ Allocate HR resources and build capability to implement the HR mandate. ▪ Ensure the development and revision of HR policies, plans, practices and procedures. ▪ Ensure accountability and responsibility for the execution of HR strategy. ▪ Drive continuous implementation and improvement of the HR strategy through planned reviews and reporting.				
Performance Measures	▪ % Employee satisfaction ▪ % of strategic plans successfully implemented ▪ # Top leadership communication sessions				

4.2 Strategic Plan 2: HR risk management

Managing risk is a process of Council, supported by the Municipal Manager and the SMT, to decide which risks to eliminate, accept, reduce or transfer. An HR risk is any people, culture or governance factor that causes uncertainty in the organisational environment that could adversely affect the organisation's operations.

Priority level: A = Priority 5					
Goals/Objectives	CWDM ensures HR Risk management through coordinated activities and methods applied identify and address risks that can affect the achievement of organisational objectives.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Implement HR risk management plan	×				
Related Legislation	Local Government: Municipal Systems Act and Regulations (Act No. 32 of 2000) Local Government: Municipal Finance Management Act 2003 (Act No. 56 of 2003)				
Related Policies	CWDM Enterprise Risk Management Policy Individual Performance Management Policy				
Standards	▪ Increase the probability and impact of positive events and decrease the probability and impact of negative events caused by human factors on the achievement of organisational objectives. ▪ Endorsed alignment framework for HR and people management practices within the governance, risk and compliance framework and integrated reporting model of the organisation. ▪ Endorsement of appropriate risk assessment practices and procedures relating to human factors are embedded within the organisation. ▪ Endorsement of appropriate risk controls designed and applied to HR activities and interventions.				
Key activities related to KRA	▪ Position the role of HR in influencing and communicating HR related organisational risks. ▪ Assess potential positive and negative human factor risks to achieving organisational objectives. ▪ Identify and evaluate the potential risk impacts with regard to strategic and operational HR activities. ▪ Decide on appropriate risk appetites for the different components of the HR function. ▪ Design and implement appropriate people-based risk management systems and risk controls. ▪ Ensure all HR risk practices conform to the organisational governance, risk and compliance strategies and policies.				
Performance Measures	▪ % Staff turnover ▪ % Vacancies unfilled for 6 months plus ▪ Absence rate ▪ % Employee satisfaction				

4.3 Strategic Plan 3: Talent management

Talent management describes an organisation's commitment to employ, manage and retain talented staff. It comprises all of the work processes and systems that are related to retaining and developing a superior workforce. Talent management gives managers a significant role and responsibility in the recruitment process and in the ongoing development of and retention of high-performing employees.

Priority level: A = Priority 3					
Goals/Objectives	CWDM attracts, retain, motivates and develops the talented people it needs now and in the future.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Talent needs index			×		
Related Legislation	Skills Development Act and Regulations (Act No. 97 of 1998)				
Related Policies	Individual Performance Management Policy Mentoring and Coaching Policy Succession Planning and Career Pathing Policy Education, Training and Development Policy Recruitment and Selection Policy Employee Study Aid and Leave Policy Internship Policy Learnership Policy Experiential Training Policy				
Standards	▪ Future critical positions and leadership roles identified from the Workforce Plan. ▪ Endorsed processes and systems which will: – Attract a sustainable pool of talent for current objectives and future organisation needs. – Manage the retention of talent. – Link high potential employees with key future roles in the organisation. – Identify through assessment the optimal development opportunities for talent. ▪ Achievement of consistent high levels of performance from employees. ▪ Appropriate roles for all stakeholders in the development and management of talent. ▪ Monitor and report on talent management key results areas and indicators.				
Key activities related to KRA	▪ Analyse the talent needs of the organisation. ▪ Conduct a workforce and labour market trend analysis based on internal and external requirements and realities. ▪ Create a talent management system focusing on current and future needs. ▪ Engage line management regarding talent requirements. ▪ Decide on interventions to support effective talent management in the organisation. ▪ Conduct a talent review linked to organisational objectives.				
Performance Measures	▪ Skills gap index ▪ % Internal promotion rate ▪ % Internally promotions per occupational level ▪ % Employees certified for their job functions (Professional Membership) ▪ % Professionally qualified employees (Statutory Requirements)				

4.4 Strategic Plan 4: Individual Performance Management

Individual performance management is a holistic process that ensures employees' performance contributes to organisational objectives. It brings together elements of good people management practice, including training and development, measurement of performance, and organisational development.

Priority level: Priority 1					
Goals/Objectives	Individual goals aligned to organisational goals aiding individual performance plans for review, progress assessment and development of capabilities.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Implement IPM	×	×	×	×	×
Related Legislation	Local Government: Municipal Systems Act and Regulations (Act No. 32 of 2000) Skills Development Act and Regulations (Act No. 97 of 1998)				
Related Policies	CWDM Performance Management Policy and Framework Individual Performance Management Policy				
Standards	▪ Endorsed framework to translate and cascade broad organisational performance drivers into individual performance targets. ▪ Endorsed processes to establish and maintain an appropriate performance management process, methodology and system relevant to the needs, size, scope and complexity of the organisation. ▪ Endorsed framework providing for appropriate performance consequences (recognition and development opportunities) that attract, retain and motivate employees. ▪ Endorsed framework and policies for fair, ethical and organisation cultural practices focusing on the achievement of performance targets. ▪ Create and maintain a high performance organisation culture driving sustainable performance. ▪ Endorsed system and processes to measure progress against agreed individual objectives that enable attainment of organisational objectives.				
Key activities related to KRA	▪ Planning: concluding a performance and development agreement/plan. ▪ Acting: carry out role and implement performance plan throughout the year. ▪ Monitoring: monitor performance and provide regular feedback. ▪ Reviewing: assessing progress and achievements so that action plans can be prepared and agreed and performance can be rated.				
Performance Measures	▪ % Employees with increased performance rating ▪ % Performance appraisals completed on time				

4.5 Strategic Plan 5: HR technology

A Human Resource Information System (HRIS) is a software or online solution for the data entry, data tracking, and data information needs of the Human Resources, payroll, management, and accounting functions within an organisation.

Priority level: Priority 2					
Goals/Objectives	Utilisation of effective technology applications providing accurate data and information enabling performance measurement and decision-making.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Improved utilisation of current HR IT system			×		
Related Legislation	Local Government: Municipal Finance Management Act and Regulations (Act No. 56 of 2003)				
Related Policies	HR Records Systems Policy				
Standards	▪ Timeousness, consistency and quality in the delivery of HR services ▪ Sustainability of HR practices within the organisation. ▪ Endorsed framework to support the effective management of the human element in an organisation. ▪ Endorsed framework to provide effective professional advice and guidance to managers and employees regarding the correct implementation of labour laws, HR policies, practices and procedures. ▪ Endorsed functional standards for HR record-keeping and administration. ▪ Endorsed framework to measure employee engagement and satisfaction with the delivery of HR services. ▪ Endorsed framework and processes provide management and the Council with appropriate HR data and statistics.				
Key activities related to KRA	▪ Analyse and prioritise all the relevant HR categories of data and information. ▪ Upload and configure data to the system. ▪ Test the effectiveness of the system. ▪ Forecast future system needs. ▪ Build capacity of relevant staff members to access and use the system. ▪ Implement continuous improvement process. ▪ Ensure HR-IT requirements, practices and procedures are aligned with organisational IT governance. ▪ Monitor and evaluate the effectiveness of the system.				
Performance Measures	▪ Number of HR Functions part of HRIS				

4.6 Strategic Plan 6: Knowledge management

Knowledge management is any process or practice of creating, acquiring, capturing, sharing and using knowledge, wherever it resides, to enhance learning and performance in. HRM aims to support the development of organisation-specific knowledge and skills that are the result of organisational learning processes. Knowledge management promotes the sharing of knowledge by linking people with people, and by linking them to information so that they learn from documented experiences.

Priority level: Priority 3					
Goals/Objectives	Explicit and systematic management of vital organisational knowledge and its associated processes of finding, creating, storing, organising, sharing and applying.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Implement KM programme		×			
Related Legislation	Skills Development Act and Regulations (Act No. 97 of 1998)				
Related Policies	Mentoring and Coaching Policy Succession Planning and Career Pathing Policy Education, Training and Development Policy				
Standards	▪ Endorsed framework to capture the organisations collective expertise, transform knowledge resources within the organisation by identifying relevant information to be disseminated so that learning can take place. ▪ Endorsed framework to transfer knowledge from those who have it to those who need it in order to improve organisational effectiveness. ▪ Endorsed Standard Operation Procedures.				
Key activities related to KRA	▪ KM embedded in technologies, rules and organisational procedures. ▪ KM encultured as collective understandings, values and beliefs. ▪ KM embodied into the practical activity-based competencies and skills of key members of the organisation (practical knowledge or 'know-how'). ▪ KM embraced as the conceptual understanding and cognitive skills of key members (conceptual knowledge or 'know-how'). ▪ Knowledge is codified and stored in databases where it can be accessed and used easily by anyone in the organisation. ▪ Knowledge is closely tied (personalised) to the person who has developed it and is shared mainly through direct person-to-person contacts.				
Performance Measures	▪ # of KM platforms created ▪ % of staff contributing documents ▪ % of staff accessing documents				

4.7 Strategic Plan 7: Workforce planning

Workforce planning is the process to ensure the right number of people, with the right skills, are employed in the right place at the right time to deliver an organisation's short- and long-term objectives. It embraces a diverse and extensive range of activities which will vary between organisations and situations.

Priority level: A & B = Priority 1; C = Priority 3					
Goals/Objectives	A strategic workforce plan exists meeting the needs of the organisation.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Skills audit	×				
b) Skills gap analysis	×				
c) Career planning		×			
Related Legislation	Local Government: Municipal Systems Act and Regulations (Act No. 32 of 2000) Skills Development Act and Regulations (Act No. 97 of 1998)				
Related Policies	Organisational Management Policy Individual Performance Management Policy Mentoring and Coaching Policy Succession Planning and Career Pathing Policy Education, Training and Development Policy Recruitment and Selection Policy				
Standards	▪ Endorsed organisational structure meeting the needs of the organisation. ▪ Approved alignment of workforce planning cycle with the strategic planning cycle of the organisation. ▪ Evaluation and review of workforce and labour market trends in relation to the local government sector. ▪ Endorsed salary budget to give effect to the organisational structure. ▪ Endorsed HR management processes for the supply of appropriately qualified people.				
Key activities related to KRA	▪ Conduct skills gap analysis in conjunction with the development of organisational objectives. ▪ Align organisational structure with employment value proposition. ▪ Translate the strategic organisational structure into operational capability. ▪ Plan and implement enabling interventions to achieve your organisational structure (e.g. recruitment and selection, succession planning). ▪ Develop career planning processes and programmes. ▪ Assess the impact of workforce strategy and planning on achieving organisational objectives.				
Performance Measures	▪ Age staffing breakdown ▪ % Staffing rate ▪ % Employee turnover				

4.8 Strategic Plan 8: Wellness

Employee wellness promotes and supports the health, safety, and well-being of its employees.

<table>
<tr><td colspan="6">Priority level: A= Priority 3; B = Priority 2</td></tr>
<tr><td>Goals/Objectives</td><td colspan="5">All health and safety legislative requirements and other relevant wellness good practices exist.</td></tr>
<tr><td rowspan="2">Action Plans</td><td colspan="5">Evidence of activities that support Goal Attainment</td></tr>
<tr><td>2017-18</td><td>2018-19</td><td>2019-20</td><td>2021-22</td><td>2022-23</td></tr>
<tr><td>a) Implement EWP</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td></tr>
<tr><td>b) Promote awareness of the wellness policy</td><td>×</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Related Legislation</td><td colspan="5">Occupational Health and Safety Act (Act No. 85 of 1993)
Labour Relations Act (Act No. 66 of 1995)</td></tr>
<tr><td>Related Policies</td><td colspan="3">Employee Assistance Policy
Occupational Health and Safety Policy
Sexual Harassment Policy
Incapacity Policy
Substance Abuse Policy</td><td colspan="2">Chronic Illness Policy
Smoking Policy
HIV/Aids Policy
Disability Policy</td></tr>
<tr><td>Standards</td><td colspan="5">▪ Endorsed framework to promote opportunities and guidance enabling employees to engage in effective management of their own physical, mental, financial and social well-being.
▪ Endorsed framework to enable the employer to manage all aspects of employee wellness that can have a negative impact on employees' ability to deliver on organisational objectives.
▪ Endorsed framework to promote a safe and healthy working environment in pursuit of optimum productivity and preserve human life and health.
▪ Endorsed framework and policies to reduce employee risk emanating from health and wellness issues.
▪ Contain health and wellness costs.
▪ Enhance the employment value proposition by means of promoting a culture of individual health and overall organisational wellness.</td></tr>
<tr><td>Key activities related to KRA</td><td colspan="5">▪ Evaluate the organisational need and set objectives and boundaries for wellness programmes paying particular attention to high risk groups.
▪ Formulate employee wellness strategy, policies and relevant HR procedures, fair to all employees, to promote and manage wellness programmes and risks.
▪ Promote awareness of the wellness policy, strategy and procedures of the organisation.
▪ Maintain statistical records across the organisation with regard to all aspects of wellness and specific case and incident analysis.
▪ Review the effectiveness of wellness programmes and interventions in support of operational objectives.</td></tr>
<tr><td>Performance Measures</td><td colspan="5">▪ # of Dismissals
▪ Length of service of senior level staff
▪ Harassment complaints received
▪ Staff with more than 48 days accumulated leave
▪ Employee complaints turnover time</td></tr>
</table>

4.9 Strategic Plan 9: Employee relationship management

Employee relationship management aims to create a climate in which productive and harmonious relationships can be maintained through effective collaboration between management and employees and their trade unions.

Priority level: A & B = Priority 2					
Goals/Objectives	A climate of trust, cooperation and stability exist in the organisation.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Communication on ERM		×			
b) Training on ERM		×			
Related Legislation	Labour Relations Act (Act No. 66 of 1995)				
Related Policies	Main Collective Agreement				
Standards	▪ Create a climate of trust, cooperation and stability within the organisation. ▪ Endorsed framework to ensure appropriate and effective conditions of employment and fairness across all levels of employees. ▪ Adopted framework to facilitate a harmonious and productive working environment. ▪ Endorsed framework to meet the employer's duty of care towards its employees and other stakeholders. ▪ Endorsed framework for conflict resolution and collective bargaining, where relevant. ▪ Endorsed framework for capacity building and compliance to relevant labour legislation and codes of good practice (Department of Labour).				
Key activities related to KRA	▪ Formulate appropriate employment relations strategies, structures, policies, practices and procedures. ▪ Implement appropriate dispute resolution mechanisms (mediation, arbitration, conciliation). ▪ Provide appropriate procedures to manage discipline and grievances. ▪ Ensure all employment relations procedures, policies and practices conform to appropriate legislation and codes of good practice. ▪ Create effective communication channels and build relationships between stakeholders. ▪ Evaluate the state of employment relations by conducting appropriate employment relations surveys to establish current climate. ▪ Enhance the established practices and procedures by innovative interventions that foster sound relationships. ▪ Leverage employment relations to promote diversity and prevent unfair discrimination.				
Performance Measures	▪ # of grievances submitted ▪ % of grievances resolved ▪ # Harassment and discrimination complaints received ▪ # of formal union disputes				

4.10 Strategic Plan 10: Compensation and benefits

Compensation and benefits includes not only salary, but also the direct and indirect rewards and benefits the employee is provided with in return for their contribution to the organisation.

Priority level: A = Priority 2; B = Priority 4					
Goals/Objectives	An accord exists in accordance with fair and appropriate levels of reward and recognition.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Payroll information updating	×	×	×	×	×
b) Communicate remuneration policy		×			
Related Legislation	Basic Conditions of Employment Act (Act No. 75 of 1997)				
Related Policies	Main Collective Agreement Western Cape Conditions of Service Collective Agreement Remuneration Policy Telecoms & Cellular Phone Allowances Policy Fixed Transport Allowances Policy Essential Transport Allowances Policy Non-pensionable Accommodation Allowances Policy Acting Policy Pension - / Medical Funds Administration Policy				
Standards	▪ Endorse and implement a remuneration policy and framework, aligned with organisation culture and objectives, and achieving a balance between the needs of the employer and employee. ▪ Endorsed and implement fair and equitable remuneration system and processes that is ethical, cost effective and sustainable. ▪ Endorsed framework for compliance with organisational governance principles and practices aligned to national governance codes of practice and relevant legislation. ▪ Endorsed remuneration policy and framework that is in line with current industry and sector norms.				
Key activities related to KRA	▪ Formulate a remuneration policy that attracts, motivates and retains staff. ▪ Ensure the remuneration policy is aligned with appropriate legislative, governance and other directive requirements. ▪ Identify and implement policies, practices and procedures that enable the remuneration system to operate effectively. ▪ Ensure understanding and awareness of the remuneration system. ▪ Review the remuneration policy, process and practices at regular intervals to ensure relevance and impact (e.g. pay scales, benefits, incentives).				
Performance Measures	▪ % Compensation and benefits cost to annual budget				

4.11 Strategic Plan 11: Training & development

Although staff develop their skills 'on the job', organisations provide additional formal learning opportunities. There is a distinction between training and development. With the latter, there is recognition in HRM that staff need to develop new skills and competencies that not only meet their own needs, but those of the organisation.

Priority level: A & B = Priority 2; C = Priority 3					
Goals/Objectives	Training and development aligned with organisational goals and culture.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Implement T&D Plan	×	×	×	×	×
b) Evaluate T&D Impact		×	×	×	×
c) Maintain T&D needs info	×	×	×	×	×
Related Legislation	Skills Development Act and Regulations (Act No. 97 of 1998)				
Related Policies	Mentoring and Coaching Policy Succession Planning and Career Pathing Policy Education, Training and Development Policy Induction Policy Employee Study Aid and Leave Policy Internship Policy Learnership Policy Experiential Training Policy				
Standards	▪ Endorsed framework to enhance human performance in relation to organisational objectives. ▪ Aligned learning and development plans to organisational strategy. ▪ Endorsed framework enabling occupationally competent and engaged workforce which builds organisational capability in line with the objectives of the organisation. ▪ Approved framework for a learning environment that enables optimal learning and growth. ▪ Develop a culture that enables individual and team competency development in achieving organisational objectives. ▪ Position learning and development as a catalyst for continuous improvement, change and innovation. ▪ Evaluate the impact of learning and development interventions at an individual, team and organisational level.				
Key activities related to KRA	▪ Formulate a learning and development policy for the organisation. ▪ Align learning and development policy with organisational goals and culture. ▪ Ensure all learning and development activities conform to appropriate quality and compliance requirements and competency models. ▪ Identify, select and implement the appropriate learning and development interventions according to the identified organisational need. ▪ Ensure the design and provision of learning and development interventions are appropriate and integrated. ▪ Leverage the utilisation of appropriate online technologies to accelerate learning capacity and capability. ▪ Evaluate the impact of learning and development to assess quality, impact and alignment.				
Performance Measures	▪ % Employees that received a minimum accepted level of training ▪ External learning and development cost per full time equivalent (FTE) employee ▪ # New staff who attended an induction program ▪ % Participants in training programs from underrepresented groups				

4.12 Strategic Plan 12: HR service delivery

HR service delivery entails strategic guidance and management of the overall provisioning of human resources services, policies, and programs for the entire organisation.

Priority level: A & C = Priority 2; B = Priority 3					
Goals/Objectives	The HRM function meets the HR strategic and HR support services needs of the organisation and its employees.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Compile HR unit Business Plan	×				
b) Measure HR effectiveness				×	
c) Policy information programme		×			
Related Legislation	Local Government: Municipal Systems Act and Regulations (Act No. 32 of 2000) Skills Development Act and Regulations (Act No. 97 of 1998) Local Government: Municipal Finance Management Act and Regulations (Act No. 56 of 2003) Basic Conditions of Employment Act (Act No. 75 of 1997) Labour Relations Act (Act No. 66 of 1995)				
Related Policies	All HR related policies				
Standards	▪ Timeousness, consistency and quality in the delivery of HR services ▪ Sustainability of HR practices within the organisation. ▪ Endorsed framework to support the effective management of the human element in the organisation. ▪ Endorsed framework to provide effective professional advice and guidance to managers and employees regarding the correct implementation of labour laws, HR policies, practices and procedures. ▪ Endorsed functional standards for HR record-keeping and administration. ▪ Endorsed framework to measure employee engagement and satisfaction with the delivery of HR services. ▪ Endorsed framework and processes to provide management and the Council with appropriate HR data and statistics.				
Key activities related to KRA	▪ Design and implement HR policies, practices and procedures. ▪ Ensure adequate understanding of the role of HR within organisation. ▪ Establish relevant communication channels with both management and employees to address relevant HR matters. ▪ Ensure a user-friendly mechanism for understanding, promoting and ensuring compliance with all appropriate legislation applicable to the organisation. ▪ Determine the methodology and process for establishing HR client satisfaction. ▪ Provide independent professional oversight, guidance and consulting with regard to HR policy, strategy and organisational people practices and ethical values. ▪ Facilitate appropriate interventions building organisational culture and capacity.				
Performance Measures	▪ % of post filled within the target timeframes ▪ % HR outsourcing costs ▪ Satisfaction of employees with HR services				

4.13 Strategic Plan 13: Organisational development

A system-wide process of data collection, diagnosis, action planning, intervention, and evaluation aimed at (1) enhancing congruence among organisational structure, process, strategy, people and culture; (2) developing new and creative organisational solutions; and (3) developing the organisation's self-renewing capacity. It occurs through the collaboration of organisational members working with a change agent using behavioural science theory, research and technology.

Priority level: A = Priority 3					
Goals/Objectives	Adopt a planned and coherent approach to improving organisational effectiveness.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Activate OD function			×		
Related Legislation	Local Government: Municipal Finance Management Act and Regulations (Act No. 56 of 2003)				
Related Policies	Organisational Management Policy				
Standards	▪ Established links across all levels and functions of the organisation. ▪ Organisation design facilitates the purpose of the organisation. ▪ Capabilities of individuals, teams, departments and functions to work co-operatively exist to meet organisation objectives and optimise engagement at work. ▪ Endorsed framework for stakeholder engagement in all OD processes to ensure optimum buy-in. ▪ OD capability to meet organisational needs. ▪ Endorsed framework for compliance with relevant continuous improvement principles and practices.				
Key activities related to KRA	▪ Design, develop and prioritise appropriate responses to systemic OD issues. ▪ Ensure the clarity of OD interventions by identifying the anticipated outcomes of the OD process. ▪ Ensure OD has a clear implementation roadmap that is applicable to the organisation structure, culture and processes. ▪ Facilitate relevant change and improvement activities in line with agreed organisational requirements. ▪ Contribute to creating, building and sustaining the organisational culture needed to optimise the purpose and strategy of the organisation.				
Performance Measures	▪ % Job descriptions reviewed ▪ % Employee satisfaction				

4.14 Strategic Plan 14: HR measurement

HR measurement identifies and focuses on determining the areas where HR can make a strategic impact in the organisational context. It enables the organisation to identify priority areas for measurement which are aligned with organisational goals and strategies and identify capability opportunities or problem areas from an organisational perspective.

Priority level: A = Priority 4; B = Priority 3					
Goals/Objectives	CWDM measures and align the impact of HR practices on organisational objectives, including facilitating internal and external auditing of HR polices, processes, practices and outcomes.				
Action Plans	**Evidence of activities that support Goal Attainment**				
	2017-18	**2018-19**	**2019-20**	**2021-22**	**2022-23**
a) Implement HR measurement programme			×		
b) Staff satisfaction survey			×		
Related Legislation	Local Government: Municipal Systems Act and Regulations (Act No. 32 of 2000)				
Related Policies	CWDM 4th Generation IDP Approved HR Strategy Organisational Management Policy CWDM Performance Management Policy and Framework Individual Performance Management Policy				
Standards	▪ Endorsed measurement frameworks, policies and procedures to assess the effectiveness and efficiency of HR practices. ▪ Endorsed framework for relevant measurement areas for the purpose of integrated reporting. ▪ Endorsed tools and methods to measure the efficiency, effectiveness and consistency of HR practices across the whole organisation. ▪ Endorsed framework for measuring HR impact on the effectiveness of the organisation. ▪ Endorsed performance indicators for HR service delivery and business impact.				
Key activities related to KRA	▪ Develop an integrated HR measurement and systems framework for gathering data and organisational intelligence. ▪ Ensure data accuracy and integrity. ▪ Establish and implement appropriate frameworks, policies and procedures for the organisation. ▪ Develop an HR scorecard and relevant dashboard with key indicators for the organisation. ▪ Create awareness and build organisational capability for utilising and optimising HR measurement and audits. ▪ Conduct an audit of the HR function and people practices of the organisation. ▪ Measure the level of employee engagement and organisation climate and implement appropriate solutions. ▪ Ensure HR reporting is infused in overall organisational governance and integrated reporting. ▪ Monitor the key indicators of the HR dashboard and address all risk areas				
Performance Measures	▪ # of communication actions ▪ % Satisfaction of employees with HR services				

5. CONCLUSION

5.1 Strategy implementation challenges

The following are, amongst others, factors that need to be considered by management and HR practitioners at the CWDM accountable during the executing of HR strategy.

5.1.1 The gap between strategy and implementation

Bridging the gap between strategy and implementation has become such a public allusion that that the inherent meaning thereof may turn into a faded notion. This is seriously unjustifiable where leaders in organisations wish for continuous improvement. It is also vital to tell apart that senior management's attitudes and behaviour will impact on the successful implementation of the HR strategy.

5.1.2 Reasons for the strategy implementation gap

It is important to recognize that basic practise factors impact upon the gap between the current stated HR strategy and what actually is implemented. Based on Gratton et al (1992: 202), factors that might exist and could in future contribute to creating this gap are:

- the tendency of employees in various units only accepting initiatives they perceive to be relevant to their own functional area;
- the tendency of long-serving employees to cling to the status quo;
- complex or ambiguous initiatives that may not be understood by employees or will be perceived differently by them, especially in diverse organisations;
- to gain acceptance of non-routine initiatives;
- employees be hostile to initiatives if they are believed to be in conflict with the organisation's identity;
- initiatives are seen as threats;
- inconsistencies between corporate strategies and values;
- the extent to which senior management is trusted;
- the perceived fairness of initiatives;
- the extent to which existing processes could help to embed the initiative; and
- a bureaucratic culture that leads to inertia.

5.1.3 Bridging the implementation gap: Management and the "new" mandate for HR

The (new) mandate for HR, implicit within the paradigm of SHRM, requires dramatic changes in how HR professionals think and behave. Ulrich (1998) articulates, perhaps more importantly, that it also requires that senior management change what they expect from HR and how they behave toward the HR staff. The following are four ways senior managers can generate a new era in which HR is focused on outcomes instead of activities:

a) ***Communicate to the organisation that the "soft stuff" matters*** - For HR to be taken seriously, senior managers must demonstrate that they consider typical HR concerns - the soft stuff like culture change and intellectual capital - are critical to organisational success. All managers can signal this belief in several ways. They can talk seriously about how organisational capabilities create value for customers and employees. They can include HR professionals in strategy discussions and state explicitly that without

the collaboration of HR, strategies are more hopes than realities, promises than acts, and concepts than results.

b) ***Explicitly define the obligations for HR, and hold HR accountable for results*** - It is one thing to tell HR that it is responsible for employee effectiveness and well-being, and quite another to set a specific goal. And once such specific goals are set, consequences must follow if they are missed. The "new" mandate for HR is like any other organisational initiative in this way. An organisation has a much better chance of achieving its goals if senior managers state specifically what they expect from HR and then monitor, measure and review performance.

c) ***Invest in innovative HR practices*** - Like every other functional area, HR should get its share of new technologies and practices, and senior and line managers should always be on the lookout for such practices. Investing in new HR practices is a way to signal to the organisation that HR is worthy of the organisation's budget funding and attention. It is also a way to make sure that HR has the tools, information, and processes that it needs to execute its mandate.

d) ***Upgrade HR professionals*** - It is most important for senior managers to drive forward the (new) mandate for HR and to improve the quality of the HR staff itself. Too often, HR departments are like computers, made up of used parts. When more is expected of HR, a higher quality of HR professional must be found. Organisations need people who know the industry, understand the theory and practice of HR, can manage culture and make change happen, and have personal credibility. Sometimes, such individuals already exist within the HR function but need additional training. Other times, they have to be brought in from other parts of the organisation. In still other cases, they must be hired from outside.

5.2 HR strategic plans prioritised

This HRM Strategy will be implemented based on the application of a project prioritisation instrument, at least annually but when deemed necessary during the review of organisational strategies to inform the IDP. The prioritised plans for this strategy are indicated below. The priority range 1-5 is indicated in the colour coded column from top to bottom with 1 the highest (red) and 5 the lowest (pink).

Plans/Projects	Priority
Skills gap analysis	8.52
Skills Audit	8.52
Implement IPM	8.16
Market HR Strategy	7.92
Policy information programme	7.92
Evaluate T&D impact	7.8
Communication on ERM	7.8
Improve utilisation of current HR IT system	7.68
Training on ERM	7.68
Implement HR strategy	7.56
Promote awareness of EWP policy	7.44
Compile HR unit business plan	7.44
Payroll information updating	7.08
Implement T&D Plan	7

Plans/Projects	Priority
Measure HR effectiveness	6.96
Maintain T&D needs information	6.96
Implement EWP	6.88
Implement KM programme	6.84
Talent needs index	6.6
Activate OD function	6.6
Career planning	6.6
Staff satisfaction survey	6.36
Communicate remuneration policy	5.76
Implement HR measurement program	5.4
Implement HR risk management plan	4.84

5.3 HR function capability requirements

It is recommended that the following capability requirements and content be considered for inclusion in the HR Function.

Purpose	To implement and maintain Organisational Efficiency Improvement services, norms and standards, services strategies and workforce planning
Functions	▪ Manage all aspects of organisational design and business modelling ▪ Coordinate culture and change management interventions ▪ Determine strategic job pricing and evaluation ▪ Manage and maintain a workforce plan for the organisation

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World Economic Forum (2016c): The 10 skills you need to thrive in the Fourth Industrial Revolution. https://www.weforum.org/agenda/2016/01/the-10-skills-you-need-to-thrive-in-the-fourth-industrial-revolution/.

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7. ANNEXURES

7.1 Annexures A: Analysis of corporate leadership matters on HR

The contents of this table reflect an analysis of the survey conducted as indicated in Annexure G, sub-section 7.7.1.

To what extend does Corporate leadership strategically:		Level 1	Level 2	Level 3	Level 4	Level 5
1.	Develop organisational strategy based on a thorough understanding of internal performance and capabilities					
2.	Develop and share the Mission and Vision of the organisation					
3.	Inspire people and create a culture of excellence					
4.	Widely and regularly communicating corporate strategy to the staff					
5.	Plan for the people needed for the future					
6.	Develop people's knowledge and skills					
7.	Created a culture that develops and rewards people's dedication, skills, talents and creativity					
8.	Communicating internally that is effective in all directions: Top-down, Bottom-up and Lateral					
9.	Ensure that all necessary staff data and information are appropriately shared and understood					
10.	Take care of the health and safety of people and provide good working conditions					
11.	Compare our performance with benchmarks for the indicators concerning our people.					
12.	Apply indicators in a people-survey to monitor the satisfaction of our employees.					
13.	Regularly supports activities that encourage employees' social commitment.					
14.	Measure the adequacy of individual competencies to the needs of the organisation.					
15.	Measure financial health with an appropriate set of indicators					
16.	Set indicators to measure productivity and our overall operational performance.					
17.	Set indicators to measure our innovation performance					
18.	Compare our performance with benchmarks for the indicators measuring our business results					

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7.2 Annexures B: Analysis of Frontline Manager matters impacting on HR

The contents of this table reflect an analysis of the survey conducted as indicated in Annexure G, sub-section 7.7.2.

Perceptions of Frontline Managers on:	Level 1	Level 2	Level 3	Level 4	Level 5
1. How effective do you think senior management is in your organisation?					
2. How effective is front-line management or supervision in your organisation?					
3. How effective is your immediate manager?					
4. How would you rate your immediate manager's performance in providing staff guidance and strategy implementation support?					
5. How would you rate your own performance in in providing staff guidance and strategy implementation support					
6. How well do you think the organisation has prepared you for the responsibilities of your current management role?					
7. How well do you think the organisation supports you in carrying out your current management role?					
8. How much influence do you feel you have over your team's work goals or objectives?					
9. How much influence do you think you have over how your team carries out its work?					
10. How effective do you think the organisation is in providing you with training people management skills?					
11. How effective do you think the organisation is in providing you with training technical management skills (e.g. planning, financial management etc.)?					
12. How effective do you think the organisation is in providing you with support in resolving team performance or other problems?					
13. How effective do you think the organisation is in providing you with support in sufficient staffing to achieve your team's goals and targets?					
14. How useful do you find the organisation's current performance appraisal in helping you to assess and improve your team's performance?					
15. To what extent do you understand organisation's overall strategy and performance goals?					
16. To what extent do you have the time and resources to carry out my management role effectively?					
17. To what extent do you feel well supported by your immediate manager?					
18. To what extent do you receive the support you need from support functions in the organisation?					

7.3 Annexures C: Analysis of Employee issues impacting on HR

The contents of this table reflect an analysis of the survey conducted as indicated in Annexure G, sub-section 7.7.3.

7.3.1 My Job

Perceptions of Employees on "My Job":	Level 1	Level 2	Level 3	Level 4	Level 5
1. Do you have a clear understanding of your job responsibilities					
2. I never seem to have enough time to get my job done					
3. I feel my job is secure					
4. How much influence do you have over your work goals or objectives?					

7.3.2 Training and Development

Perceptions of Employees on "Training and Development":	Level 1	Level 2	Level 3	Level 4	Level 5
1. How good do you think the organisation is at training its employees?					
2. How satisfied are you with the training you have received in the organisation?					
3. How good do you think the organisation is at providing the induction training?					
4. How good do you think the organisation is at providing the personal development?					
5. How good do you think the organisation is at providing the Technical/professional skills training?					
6. How good do you think the organisation is at providing the management development?					
7. How good do you think the organisation is at providing the team development?					

7.3.3 Pay

Perceptions of Employees on "Pay":	Level 1	Level 2	Level 3	Level 4	Level 5
1. How fairly do you think you are paid compared with other employees in the organisation?					
2. How fairly do you think you are paid compared with equivalent employees in other organisations?					
3. In the organisation, do you think that people who do a good job are generally rewarded more than those who don't?					
4. In your own work area, do you think that people who do a good job are generally rewarded more than those who don't?					

7.3.4 Performance Management

Perceptions of Employees on "Performance Management":	Level 1	Level 2	Level 3	Level 4	Level 5
1. Do you clearly understand the basis on which your performance is judged?					
2. Do you have clear goals and objectives?					
3. How often does your team leader/line manager formally discuss your performance with you?					

7.3.5 Team-working

Perceptions of Employees on "Team-working":	Level 1	Level 2	Level 3	Level 4	Level 5
1. How would you rate your team's overall performance in mutual support?					
2. How would you rate your team's overall performance in knowledge sharing?					
3. How would you rate your team's overall performance in achieving team goals or targets?					

7.3.6 Communication

Perceptions of Employees on "Communication":	Level 1	Level 2	Level 3	Level 4	Level 5
1. How good do you think your organisation is at communicating with its employees?					
2. How good do you think the organisation is at listening to its employees?					
3. Do you generally feel you have enough information to do your job well?					
4. How well informed do you feel about the organisation's future plans?					
5. How well informed do you feel about the organisation's financial performance?					
6. How well informed do you feel about your workgroup's plans?					
7. How well informed do you feel about your workgroup's performance?					
8. How well informed do you feel about activities in other parts of the organisation?					

7.3.7 Management

Perceptions of Employees on "Management":	Level 1	Level 2	Level 3	Level 4	Level 5
1. In general, how effective do you think managers/supervisors are in your organisation?					
2. How effective do you think your own manager/team leader is?					
3. In general, how good is your immediate manager/team leader at?					
4. In general, how good is your immediate manager/team leader at telling you about the organisation's plans?					
5. In general, how good is your immediate manager/team leader at encouraging you to express your views?					
6. In general, how good is your immediate manager/team leader at helping you to improve your performance?					
7. In general, how good is your immediate manager/team leader at providing clear direction?					
8. In general, how good is your immediate manager/team leader at representing your interests to other managers?					
9. In general, how good is your immediate manager/team leader at treating people in your team fairly?					

7.3.8 The Organisation

Perceptions of Employees on "The Organisation":	Level 1	Level 2	Level 3	Level 4	Level 5
1. How good is your organisation as a place to work?					
2. To what extent do you feel proud to tell people who I work for CWDM?					
3. To what extent do you feel loyal to the organisation?					
4. To what extent do you believe this organisation has a clear vision and sense of direction?					
5. To what extent do you share the values of the organisation?					

7.4 Annexures D: Analysis of Organisational Climate issues impacting on HR

The contents of this table reflect an analysis of the survey conducted as indicated in Annexure G, sub-section 7.7.4.

7.4.1 Organisation goals and values

Perceptions of employees on Climate: Organisation goals and values	Level 1	Level 2	Level 3	Level 4	Level 5
1. To what extent do you agree that your organisation has a clear sense of direction?					
2. To what extent do you agree that your organisation expects high standards of performance from its employees?					
3. To what extent do you agree that your organisation regularly seeks employee views about its goals?					
4. To what extent do you agree that your organisation has a strong set of values?					

7.4.2 Own role in the organisation

Perceptions of employees on Climate: Own role in the organisation	Level 1	Level 2	Level 3	Level 4	Level 5
1. To what extent do you agree that your organisation has a clear sense of direction?					
2. To what extent do you agree that your organisation expects high standards of performance from its employees?					
3. To what extent do you agree that your organisation regularly seeks employee views about its goals?					
4. To what extent do you agree that your organisation has a strong set of values?					

7.4.3 Your Manager

Perceptions of employees on Climate: Your manager	Level 1	Level 2	Level 3	Level 4	Level 5
1. To what extent do your manager generally set clear performance targets and standards?					
2. To what extent do your manager provide effective leadership to his/her team?					
3. To what extent do your manager generally provide the coaching and support I need to improve my performance?					
4. To what extent do your manager generally set clear performance targets and standards?					

7.4.4 Treatment of employees

Perceptions of employees on Climate: Treatment of employees	Level 1	Level 2	Level 3	Level 4	Level 5
1. To what extent do you agree that your organisation treats its employees fairly?					
2. To what extent do you agree that your organisation recognises good performance?					
3. To what extent do you agree that your organisation is good at communicating with employees?					
4. To what extent do you agree that your organisation provides good career opportunities?					
5. To what extent do you agree that your organisation provides good career opportunities?					
6. To what extent do you agree that your organisation provides a satisfactory level of job security?					
7. To what extent do you agree that your organisation generally promotes the most capable employees?					

7.5 Annexures E: HRM strategic goal assessment - HR department

7.5.1 Overall strategic HR goals

Possible HR Strategic Goals	Importance	Effectiveness
Support the achievement of organisational goals	10	5
Meet needs of employees	8	6
Develop a high-performance culture	10	2
Create a persuasive employee value proposition	10	1
Ensure that the organisation is seen as a 'great place to work'	10	7
Increase engagement	10	4
Recruit and retain talented people	10	8
Provide employees with a voice	10	6
Improve communications	10	4
Provide a good working environment	10	8

*Scale: 10=high; 0= low

7.5.2 High-performance goals

Characteristic of the Culture	Importance	Effectiveness
People know what's expected of them – they understand their goals and accountabilities.	10	5
People feel that their job is worth doing, and there is a strong fit between the job and their capabilities	10	5
Management defines what it requires in the shape of performance improvements, sets goals for success and monitors performance to ensure that the goals are achieved.	10	2
There is strong leadership from the top that engenders a shared belief in the importance of continuing improvement	10	3
There is a focus on promoting positive attitudes that result in an engaged, committed and motivated workforce.	10	2
Performance management processes are aligned to business goals to ensure that people are engaged in achieving agreed objectives and standards.	10	2
Capacities of people are developed through learning at all levels to support performance improvement and are provided with opportunities to make full use of their skills and abilities.	10	7
A pool of talent ensures a continuous supply of high performers in key roles.	10	0
There is a climate of trust and teamwork, aimed at delivering a distinctive service to the customer.	10	3

*Scale: 10=high; 0= low

7.5.3 Employee engagement goals

Engagement Goals – Enhance Engagement by:	Importance	Effectiveness
Providing interesting and challenging work, responsibility (feeling that the work is important and having control over one's own resources), autonomy (freedom to act), scope to use and develop skills and abilities, the availability of the resources required to carry out the work, and opportunities for advancement.	10	6
Establishing an enabling, supportive and inspirational work environment	10	5
Ensuring that leaders increase engagement through the ways in which they design jobs, allocate work, delegate and provide autonomy	10	3
Providing people with opportunities to grow and develop.	10	6
Enabling people to feed their ideas and views upwards and feel they are making a contribution	10	4

* Scale: 10 = high; 0 = low

7.5.4 Resourcing goals

Resourcing Goals	Importance	Effectiveness
Match people resources to business requirements	10	8
Avoid unexpected deficits or surpluses of staff.	8	9
Attract and recruit high-quality candidates.	10	8
Minimize recruitment costs.	5	10
Maximize 'recruitment intensity', ie high numbers of applicants per vacancy.	5	10
Increase predictive validity, ie the extent to which predictions of performance and overall suitability made when recruiting people are achieved.	5	8
Increase retention rates.	5	9
Reduce cost of labour turnover	2	10

* Scale: 10 = high; 0 = low

7.5.5 Talent management goals

Talent Management Goals	Importance	Effectiveness
Define what is meant by talent in terms of competencies and potential	10	1
Ensure that talent is treated as a key corporate resource.	10	2
Develop a pool of talent that will provide a guaranteed supply of high quality people to meet future requirements.	10	2
Provide for management succession	10	2
Rely primarily on growth from within while recognizing the need to bring in fresh blood from time to time.	10	5
Identify those with talent and potential.	10	4
Institute programmes to develop talent.	10	2
Create a compelling 'employee value proposition'.	10	2
Develop the organisation as 'an employer of choice'.	10	6

* Scale: 10 = high; 0 = low

7.5.6 Learning and Development goals

Learning & Development Goals	Importance	Effectiveness
Improve individual, team and organisational performance	10	2
Attract and retain high-quality people by offering them learning and development opportunities.	10	8
Extend the skills base of the organisation.	10	8
Improve organisational flexibility by multiskilling.	7	2
Provide additional non-financial rewards to people in the form of growth and career opportunities.	10	7
Reduce the length of learning curves and thus minimize learning costs.	3	8
Ensure that talented people are developed to achieve their maximum potential.	10	4
Provide line managers with the skills required to lead and develop their people.	10	1

* Scale: 10 = high; 0 = low

7.5.7 Reward management goals

Reward Management Goals	Importance	Effectiveness
Reinforce the achievement of organisational goals.	10	8
Recruit and retain staff of the required calibre.	10	9
Achieve strong relationship between pay and performance.	10	6
Reinforce organisational values.	10	6
Engage and motivate employees.	10	6
Cost-effective.	10	4
Well communicated and understood by employees	10	10
Managed effectively in practice by line managers.	10	6

* Scale: 10 = high; 0 = low

7.5.8 Employee relations goals

Employee Relations Goals	Importance	Effectiveness
Build stable and cooperative relationships with employees and their trade unions.	10	6
Operate on a partnership basis with trade unions.	10	7
Achieve engagement through employee involvement and communication processes.	10	4
Minimize conflict with employees and their unions.	10	8
Maintain consultation structures and negotiating procedures that enable agreements to be reached smoothly.	10	7

* Scale: 10 = high; 0 = low

7.6 Annexures F: Feedback from verification sessions

The following table depicts the foremost issues noted during the interview sessions with specified stakeholder groups with the purpose to verify the outcomes of the surveys referred to in this section.

7.6.1 Middle Managers

Perceptions of employees			
1. Team development – poor team spirit in certain areas			
2. Management development			
3. Feedback from senior management			
4. Communication			
5. Ageing organisation			
6. Generation gap leading to distance staff			
7. Poor discipline in certain areas			
8. Honesty in communication – ‘truth to power not appreciated			
9. Culture of transparency			
10. Past traditions thriving effect younger staff			
11. Monthly meetings unstructured in certain areas			
12. Emotional maturity of leadership			
13. Development/advancement of women			
14. Politics in the workplace			
15. Management focus on wellness of staff – food, coffee, year-end			

7.6.2 Line Managers

Perceptions of employees				
1.	Over compliance drive			
2.	Management don't always understand instructions/directives			
3.	Departmental co-operation			
4.	Unfunded posts on organogram high			
5.	Lack of resources impacts on performance			
6.	Team building not conducive			
7.	Communication weak			
8.	Leadership focus (positive leadership)			
9.	Strategic planning			
10.	Discipline			
11.	Management style and practice (top down)			
12.	Organisational restructuring			

7.6.3 Extended Management Group

Perceptions of employees				
1.	Culture of excellence claim			
2.	Good to be informed on "issues"			
3.	Realism to understanding features of municipal environment			
4.	Location of offices problematic			
5.	Travelling time			
6.	Need to sort out issues through appropriate engagement			
7.	Do not feel that they don't communicate enough			
8.	Research provided lessons for unions as well			
9.	Positive and heartened by outcomes – good for lessons learned			
10.	Improve change management capability			
11.	Good working conditions			
12.	Loyalty to organisation positive			
13.	Role understanding can improve			

7.7 Annexure G: CWDM HR surveys and assessments 2016

7.7.1 Senior Management Team: Excellence model assessment

This Questionnaire was designed to help answer:

(a) How the CWDM's people management policies and processes are contributing to business performance?

(b) How does the relationship between HR and performance work in the organisation?

(c) Identify what the organisation does well or not in increasing the agility of the HR function and of the organisation as a whole.

7.7.1.1 Approach

The EFQM Model in Action (2012) assessment framework was utilised for this assessment. This model has been created to enable organisations to easily assess their overall performance.

The EFQM Excellence Model is based on nine criteria. Five of these are "Enablers" and four are "Results". The "Enabler" criteria cover what an organisation does and how it does it. The "Results" criteria cover what an organisation achieves.

To achieve sustained success, an organisation needs strong leadership and clear strategic direction. They need to develop and improve their people, partnerships and processes to deliver value-adding products and services to their customers. In the EFQM Excellence Model, these are called the Enablers. If the right Enablers are effectively implemented, an organisation will achieve the Results they, and their stakeholders, expect.

To reach a desired level of performance, it is important to know where you are now, so that one will identify the required changes and actions to start the journey towards Excellence. The EFQM Excellence Model allows people to understand the cause and effect relationship between what their organisations ***does*** and the results it ***achieves*** as depicted in the diagram below.

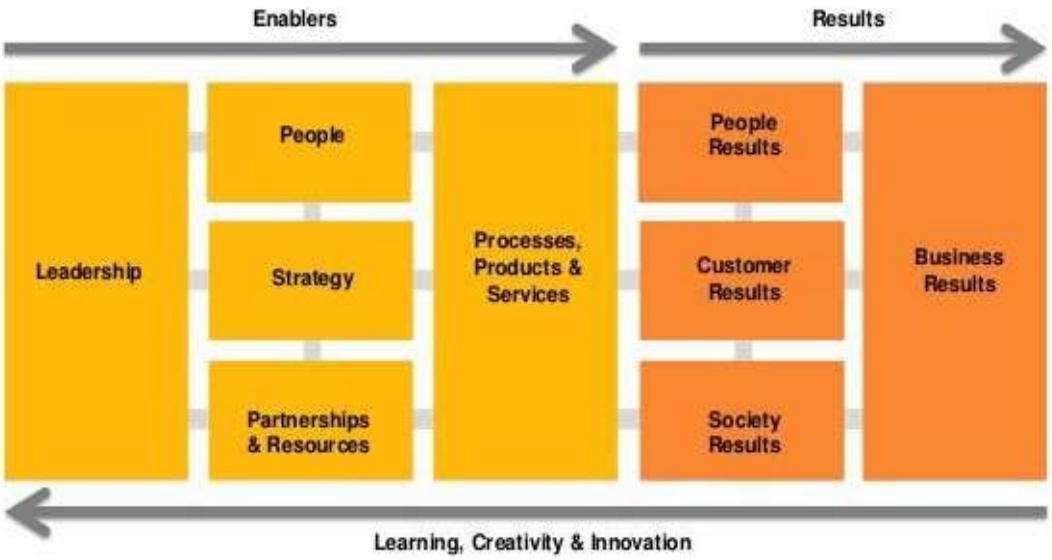


Figure 2: Excellence model elements

As indicated above, the model assesses the performance of the organisation in terms of five enablers and 4 result areas, touching on:

(a) ***Leadership*** - demonstrate how important Leadership is to your organisation and some of the ways in which you can improve your leadership style.

(b) ***Strategy*** - how you might improve the performance of your organisation by determining its future direction and the subsequent deployment of the plans that would take you towards that future.

(c) ***People*** - demonstrate how important People are to your organisation and some of the ways in which you can improve the interaction with your people.

(d) ***Partnerships and resources*** - see how you might improve the performance of your organisation in the area of Managing Partnerships and Resources.

(e) ***Process, product and services*** - see how you might improve the performance of your organisation by taking a Process view of the world rather than the more traditional view.

(f) ***Customer results*** - demonstrate why organisations should examine their current approach to build and presenting Customer Results.

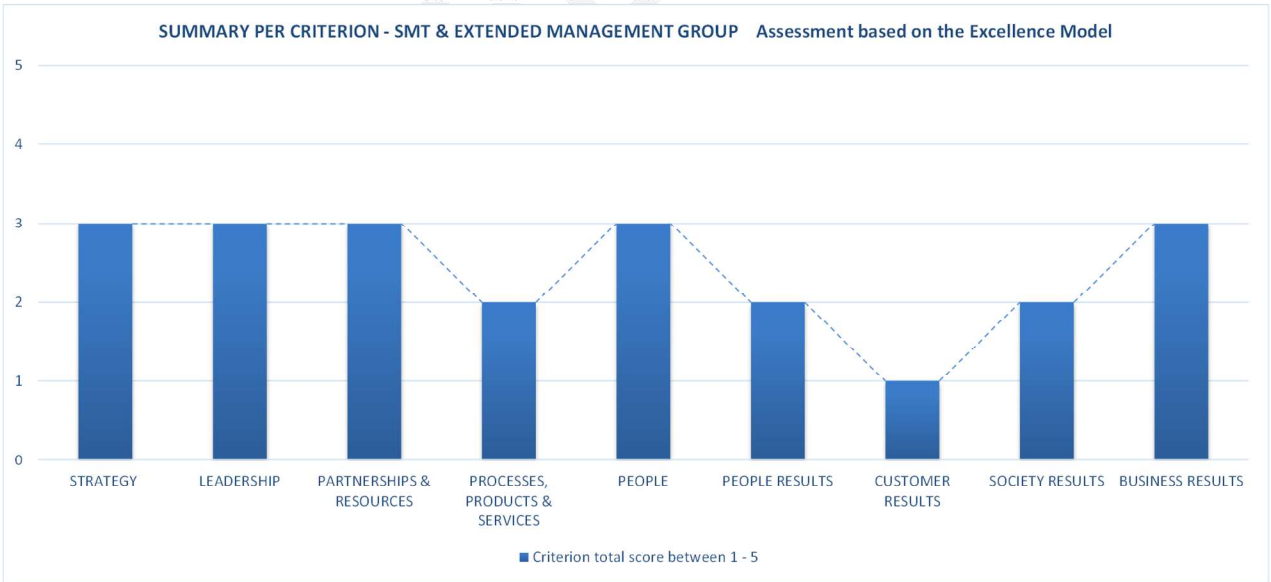
(g) ***People results*** - see how important People Results are in helping you manage your organisation and specifically in ensuring that your practices of Leadership and managing and motivating your People are having the desired outcomes.

(h) ***Society results*** - demonstrate why organisations should examine their current approach to building and presenting Society Results.

(i) ***Business results*** - demonstrate why organisations should examine their current approach to building and presenting Key Business Performance Results.

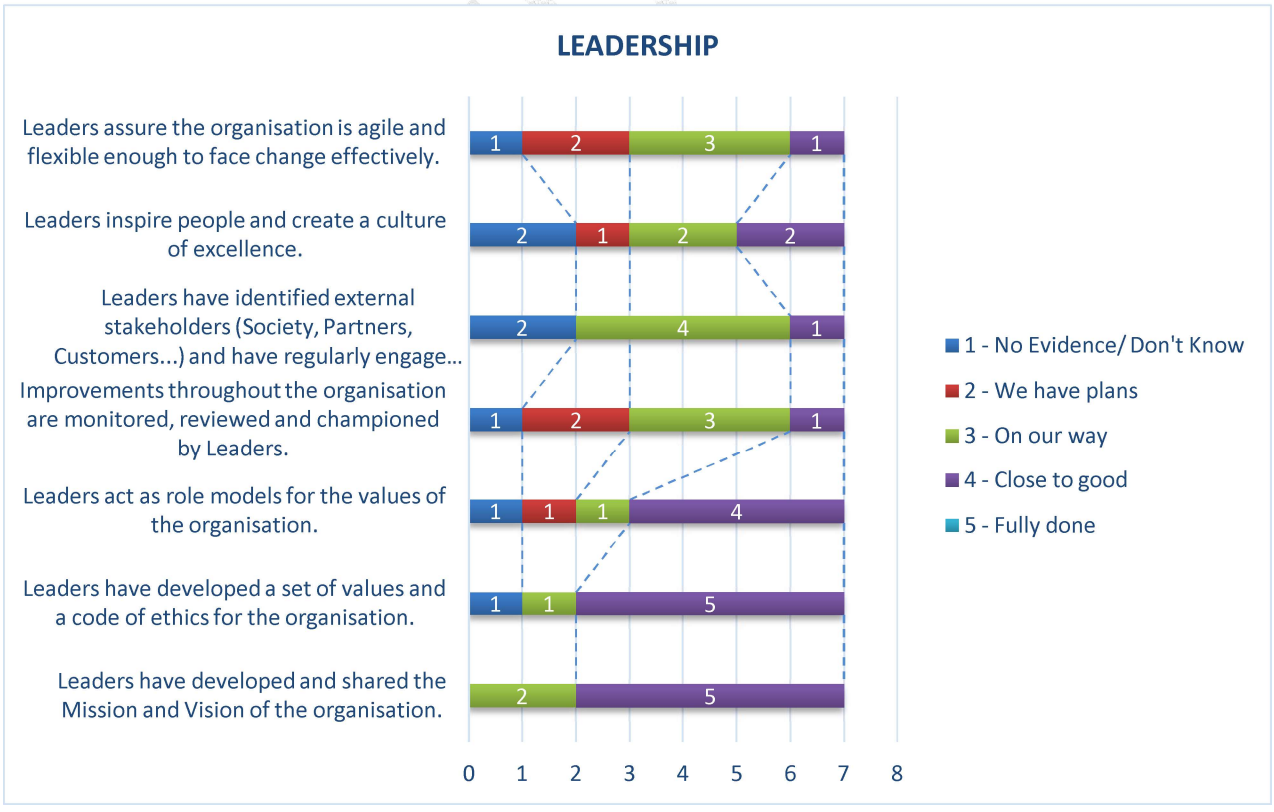
7.7.1.2 Survey results

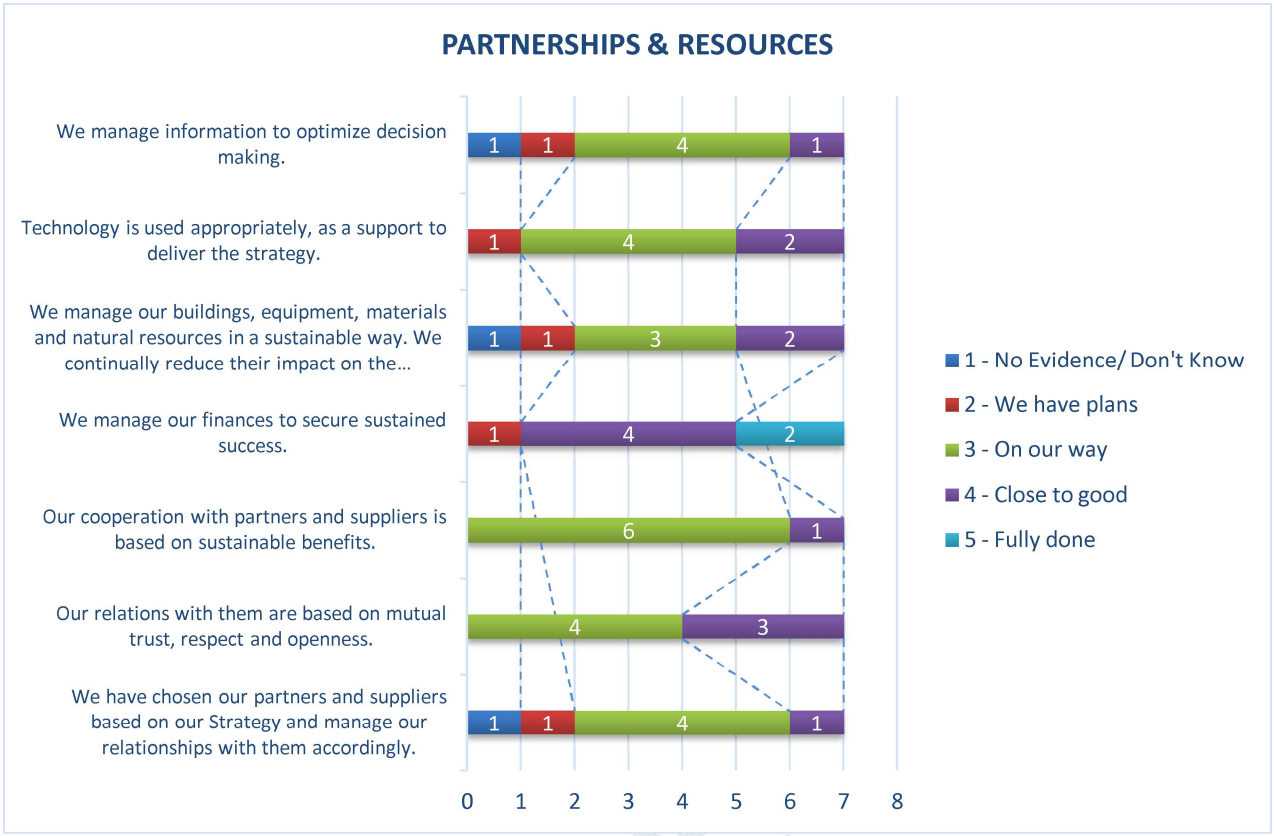
The table below depicts a summary of the current state of performance per criterion. The full assessment results are following the tables following in this section.

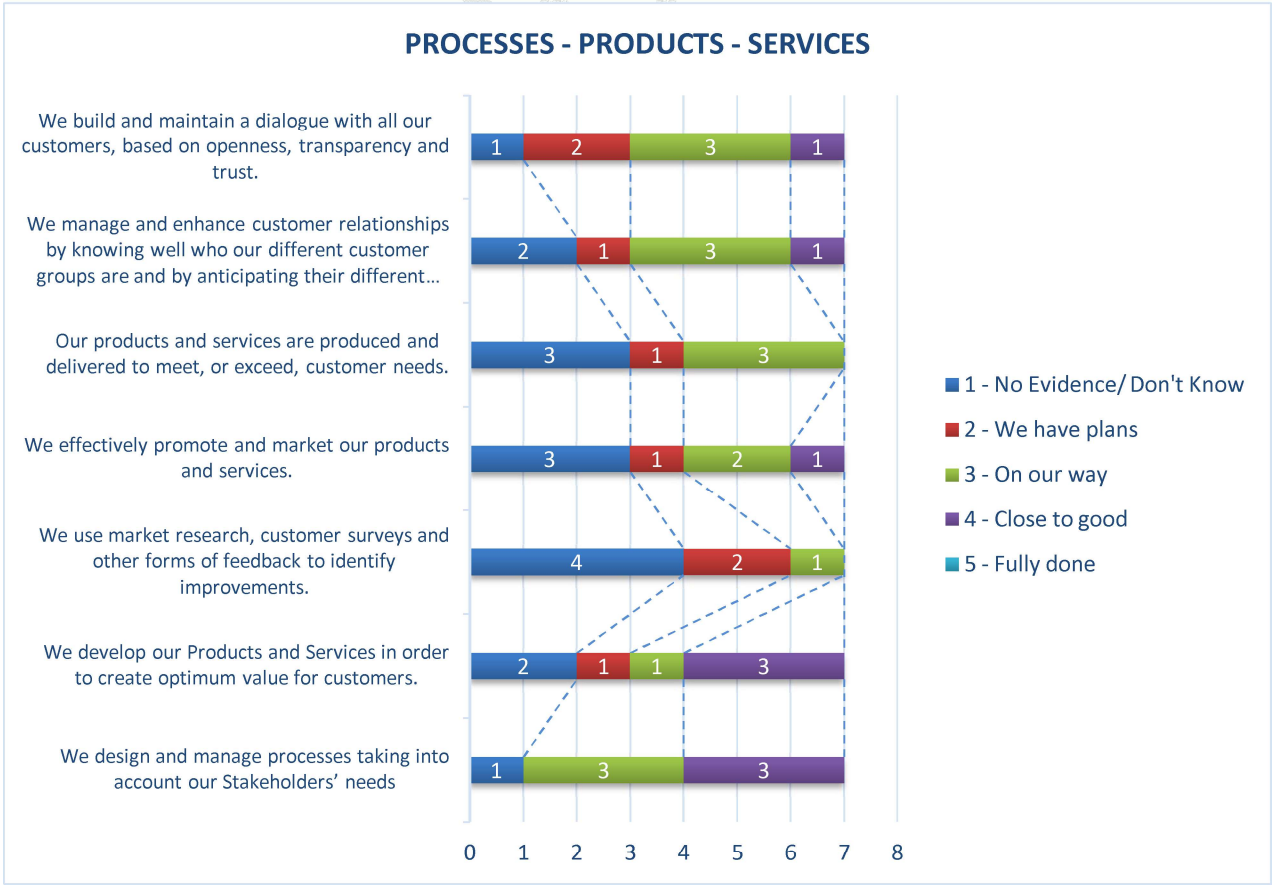


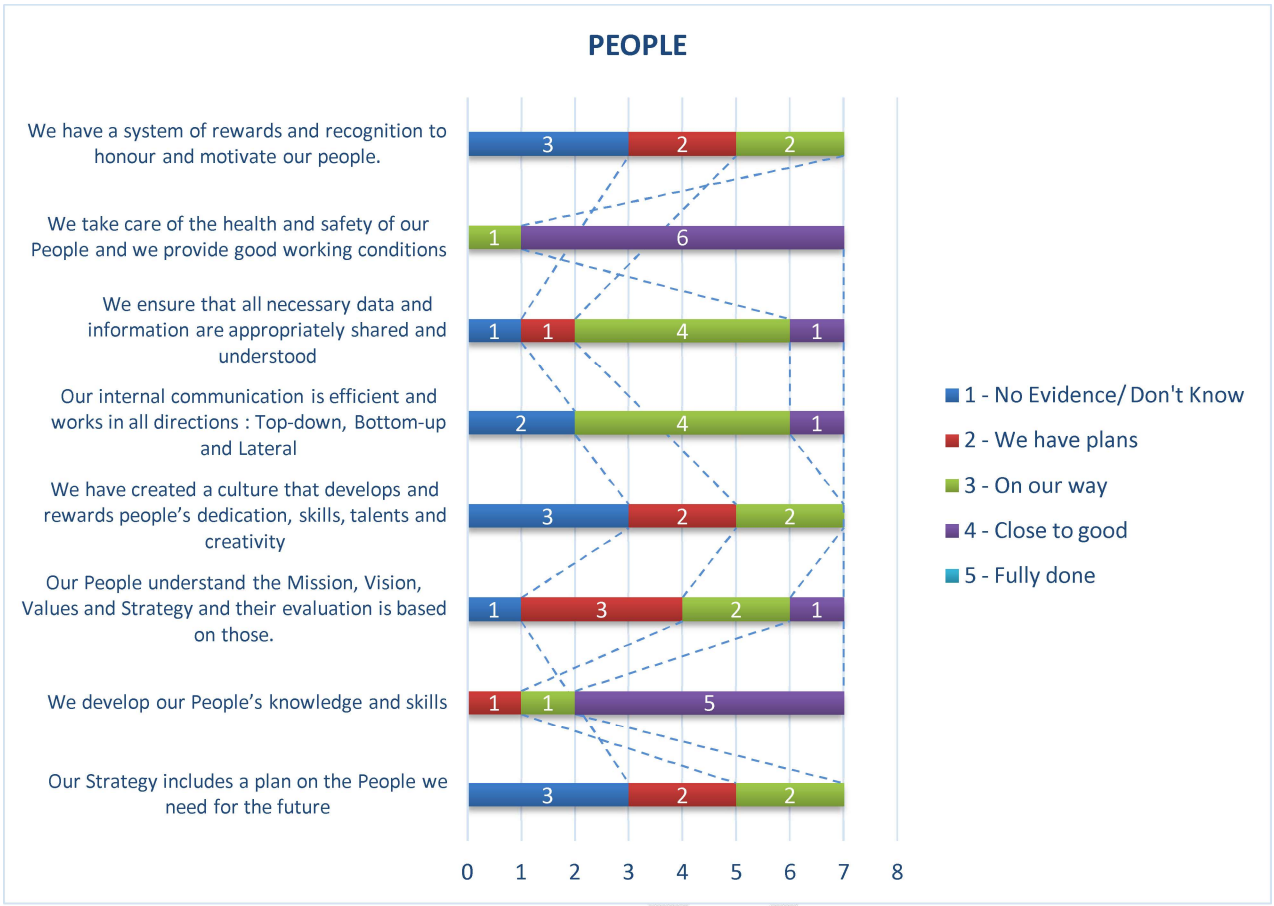
* 1 - No Evidence/ Don't Know 2 - We have plans 3 - On our way 4 - Close to good 5 - Fully done


STRATEGY
We have a clear plan for the deployment of our Strategy and we review our progress regularly.
Our Strategy and how it will be achieved are widely and regularly communicated to the staff.
Our Strategy can be modified to answer changes in the environment.
We review and improve our Strategy regularly.
Our Strategy is based on a thorough understanding of our internal performance and capabilities
Our Strategy is based on a thorough understanding of our external environment.
Our Strategy is based on a thorough understanding of the needs and expectations of our stakeholders.
6
1 2 2 1
1 3 2
1 1 2 2
1 1 2 2
1 1 1 3
1 1 4
0 1 2 3 4 5 6 7
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done

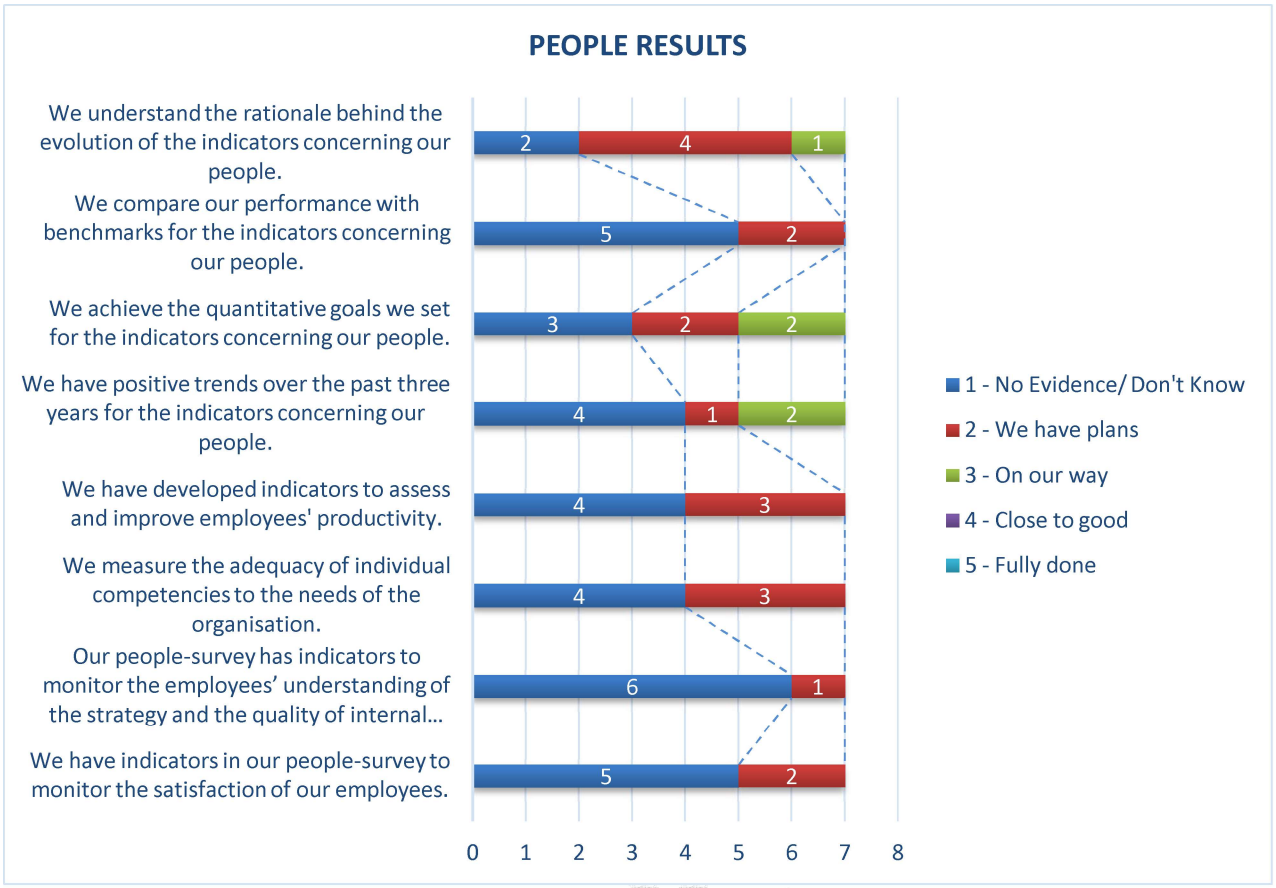

LEADERSHIP
Leaders assure the organisation is agile and flexible enough to face change effectively.
Leaders inspire people and create a culture of excellence.
Leaders have identified external stakeholders (Society, Partners, Customers...) and have regularly engage...
Improvements throughout the organisation are monitored, reviewed and championed by Leaders.
Leaders act as role models for the values of the organisation.
Leaders have developed a set of values and a code of ethics for the organisation.
Leaders have developed and shared the Mission and Vision of the organisation.
1 2 3 1
2 1 2 2
2 4 1
1 2 3 1
1 1 1 4
1 1 5
2 5
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done


PARTNERSHIPS & RESOURCES
We manage information to optimize decision making.
Technology is used appropriately, as a support to deliver the strategy.
We manage our buildings, equipment, materials and natural resources in a sustainable way. We continually reduce their impact on the...
We manage our finances to secure sustained success.
Our cooperation with partners and suppliers is based on sustainable benefits.
Our relations with them are based on mutual trust, respect and openness.
We have chosen our partners and suppliers based on our Strategy and manage our relationships with them accordingly.
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done

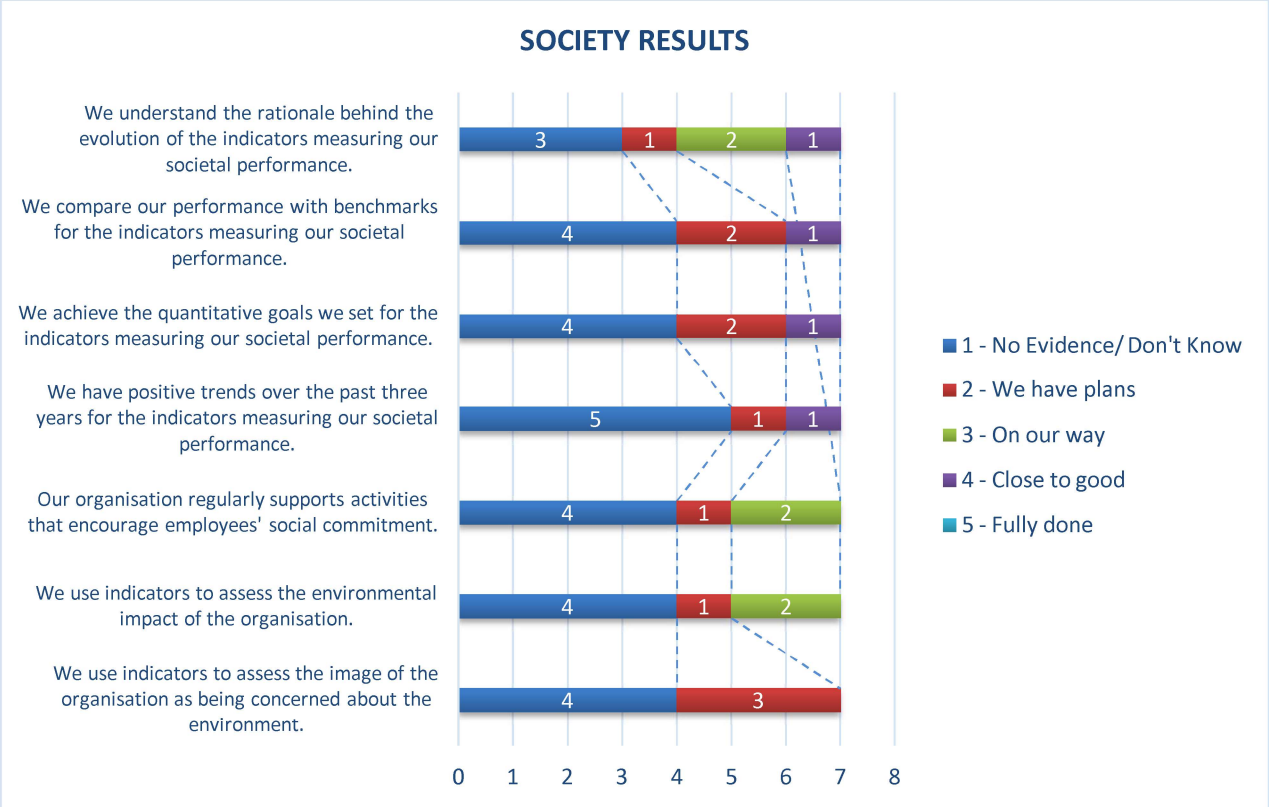

PROCESSES - PRODUCTS - SERVICES
We build and maintain a dialogue with all our customers, based on openness, transparency and trust.
We manage and enhance customer relationships by knowing well who our different customer groups are and by anticipating their different...
Our products and services are produced and delivered to meet, or exceed, customer needs.
We effectively promote and market our products and services.
We use market research, customer surveys and other forms of feedback to identify improvements.
We develop our Products and Services in order to create optimum value for customers.
We design and manage processes taking into account our Stakeholders' needs
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done

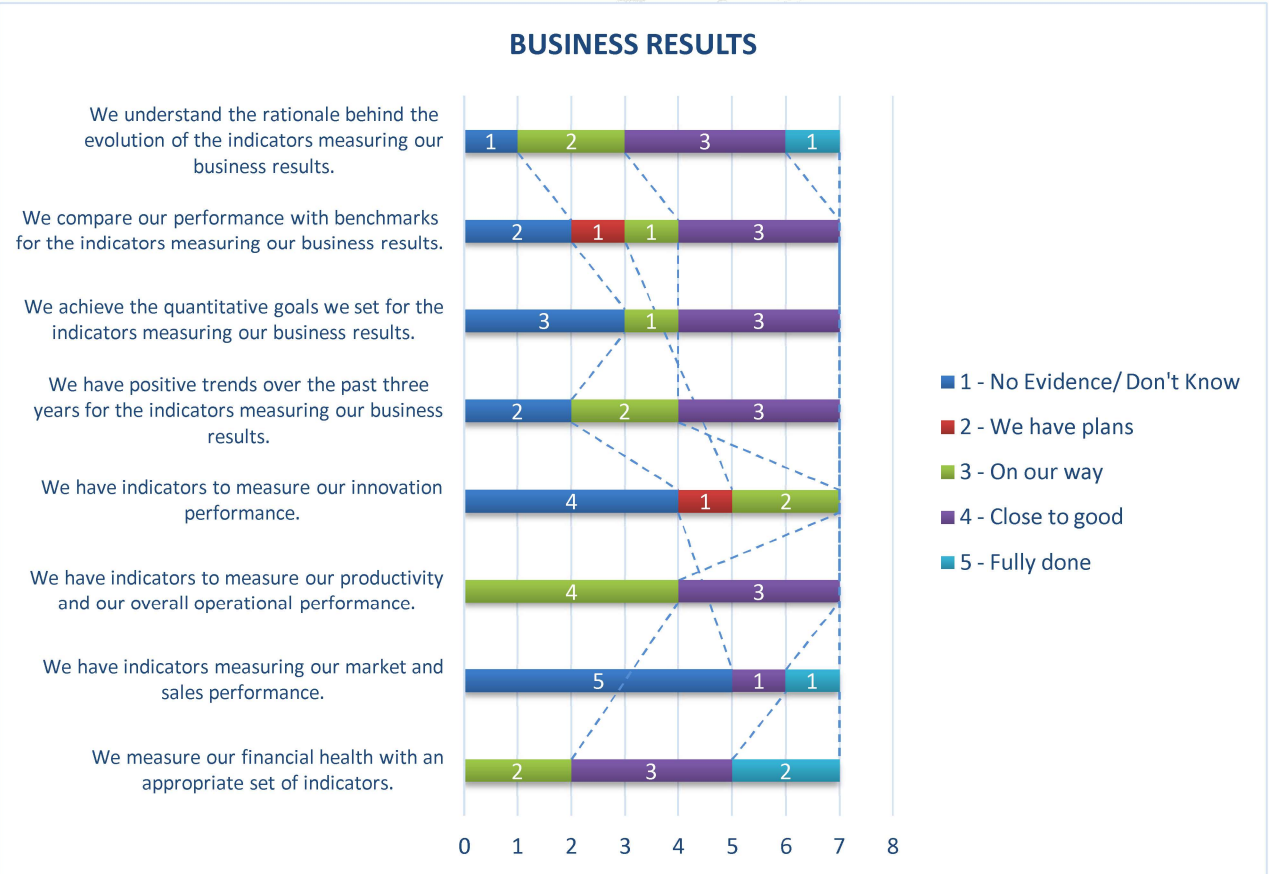

PEOPLE
We have a system of rewards and recognition to honour and motivate our people.
We take care of the health and safety of our People and we provide good working conditions
We ensure that all necessary data and information are appropriately shared and understood
Our internal communication is efficient and works in all directions : Top-down, Bottom-up and Lateral
We have created a culture that develops and rewards people's dedication, skills, talents and creativity
Our People understand the Mission, Vision, Values and Strategy and their evaluation is based on those.
We develop our People's knowledge and skills
Our Strategy includes a plan on the People we need for the future
3 2 2
1 6
1 1 4 1
2 4 1
3 2 2
1 3 2 1
1 1 5
3 2 2
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done

CONFIDE


PEOPLE RESULTS
We understand the rationale behind the evolution of the indicators concerning our people.
We compare our performance with benchmarks for the indicators concerning our people.
We achieve the quantitative goals we set for the indicators concerning our people.
We have positive trends over the past three years for the indicators concerning our people.
We have developed indicators to assess and improve employees' productivity.
We measure the adequacy of individual competencies to the needs of the organisation.
Our people-survey has indicators to monitor the employees' understanding of the strategy and the quality of internal...
We have indicators in our people-survey to monitor the satisfaction of our employees.
2 4 1
5 2
3 2 2
4 1 2
4 3
4 3
6 1
5 2
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done


CUSTOMER RESULTS
We understand the rationale behind the evolution of our indicators in our surveys and internal measures.
We monitor and predict our performance and compare it with benchmarks.
We achieve the quantitative goals we set for the indicators in the customer survey.
We have positive trends over the past three years for the indicators in the customer survey.
We monitor the customer's perception of our performance
We monitor complaints and suggestions from customers.
Our survey measures the likeliness of customers recommending us.
Our survey measures the loyalty of our customers.
We're holding a regular customer survey, with indicators that monitor the satisfaction of customers.
5 2
4 3
5 1 1
5 1 1
4 2 1
4 1 2
5 2
6 1
6 1
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done


SOCIETY RESULTS
We understand the rationale behind the evolution of the indicators measuring our societal performance.
We compare our performance with benchmarks for the indicators measuring our societal performance.
We achieve the quantitative goals we set for the indicators measuring our societal performance.
We have positive trends over the past three years for the indicators measuring our societal performance.
Our organisation regularly supports activities that encourage employees' social commitment.
We use indicators to assess the environmental impact of the organisation.
We use indicators to assess the image of the organisation as being concerned about the environment.
3 1 2 1
4 2 1
4 2 1
5 1 1
4 1 2
4 1 2
4 3
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done


BUSINESS RESULTS
We understand the rationale behind the evolution of the indicators measuring our business results.
We compare our performance with benchmarks for the indicators measuring our business results.
We achieve the quantitative goals we set for the indicators measuring our business results.
We have positive trends over the past three years for the indicators measuring our business results.
We have indicators to measure our innovation performance.
We have indicators to measure our productivity and our overall operational performance.
We have indicators measuring our market and sales performance.
We measure our financial health with an appropriate set of indicators.
1 2 3 1
2 1 1 3
3 1 3
2 2 3
4 1 2
4 3
5 1 1
2 3 2
0 1 2 3 4 5 6 7 8
1 - No Evidence/ Don't Know
2 - We have plans
3 - On our way
4 - Close to good
5 - Fully done

7.7.2 Front-line manager survey

7.7.2.1 Approach

The Front-line Manager Questionnaire was designed to help answer:

(a) How the CWDM's people management policies and processes are contributing to business performance?

(b) How does the relationship between HR and performance work in the organisation?

(c) Identify what the organisation does well or not in increasing the agility of the HR function and of the organisation as a whole.

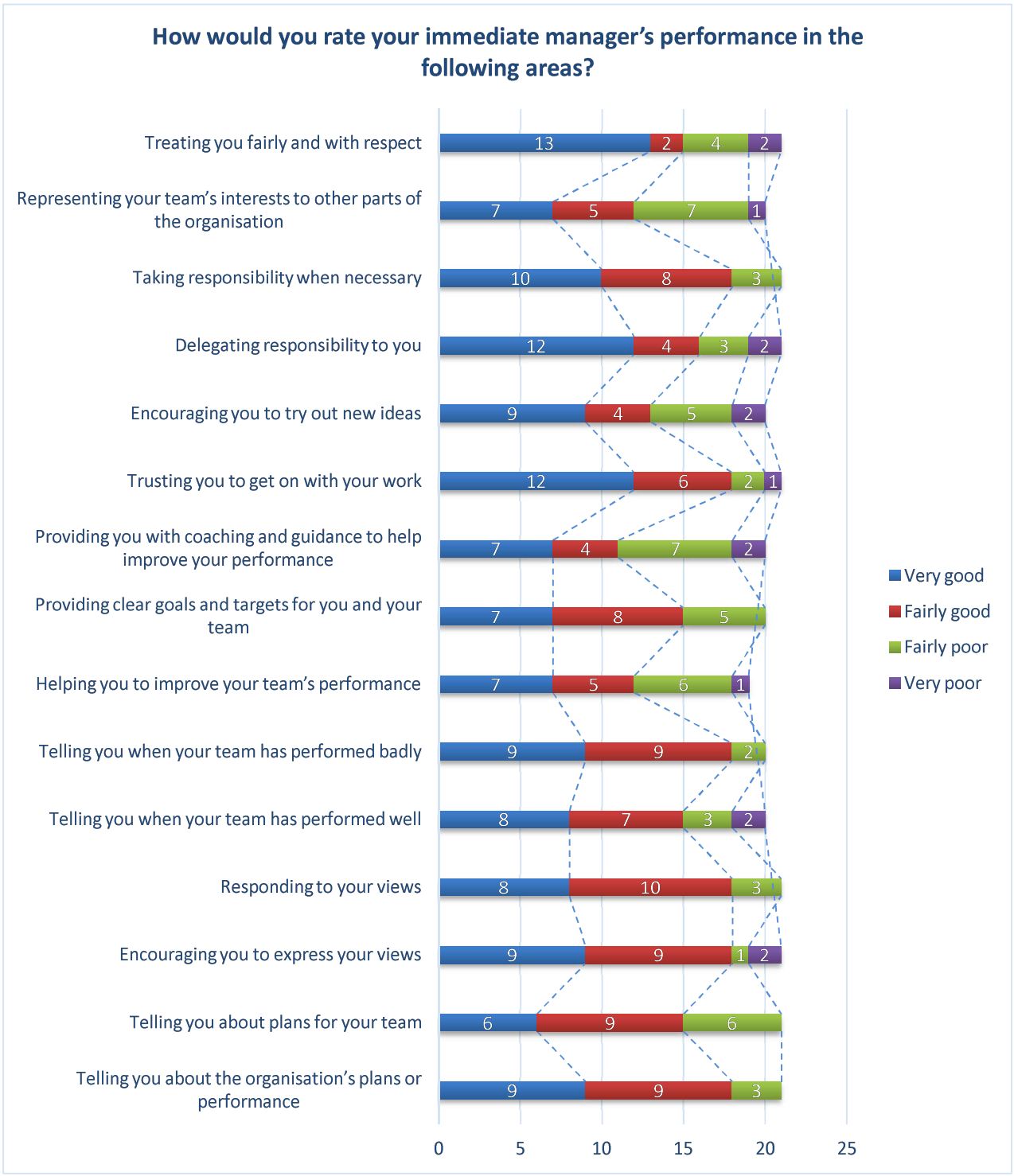
The questionnaire, specifically targeted at front-line managers at the CWDM, investigating their views and attitudes towards their distinctive role, and to help identify the factors that may influence their effectiveness in this role.

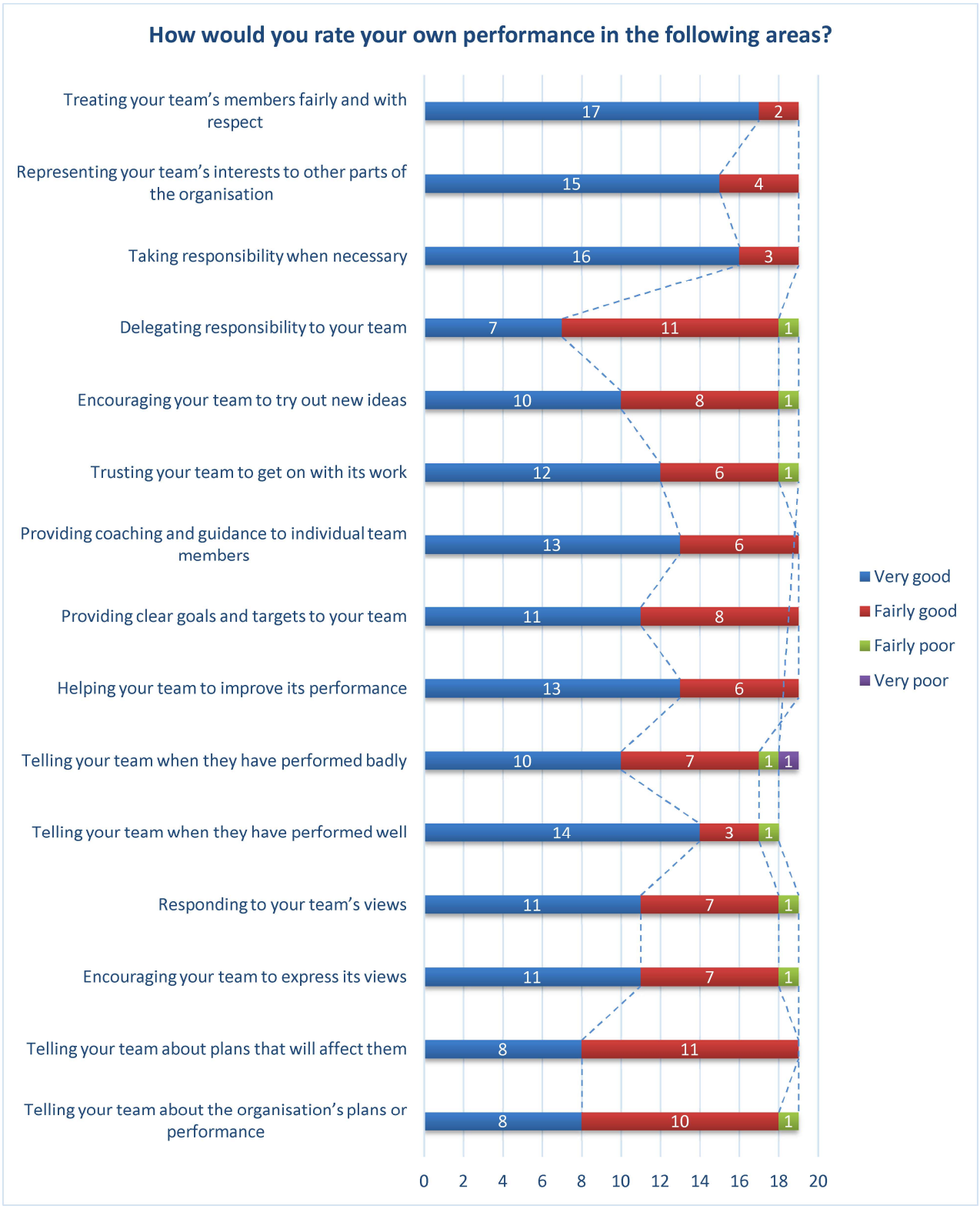
The questionnaire was distributed to 28 managers and 21 were survey were useably completed.

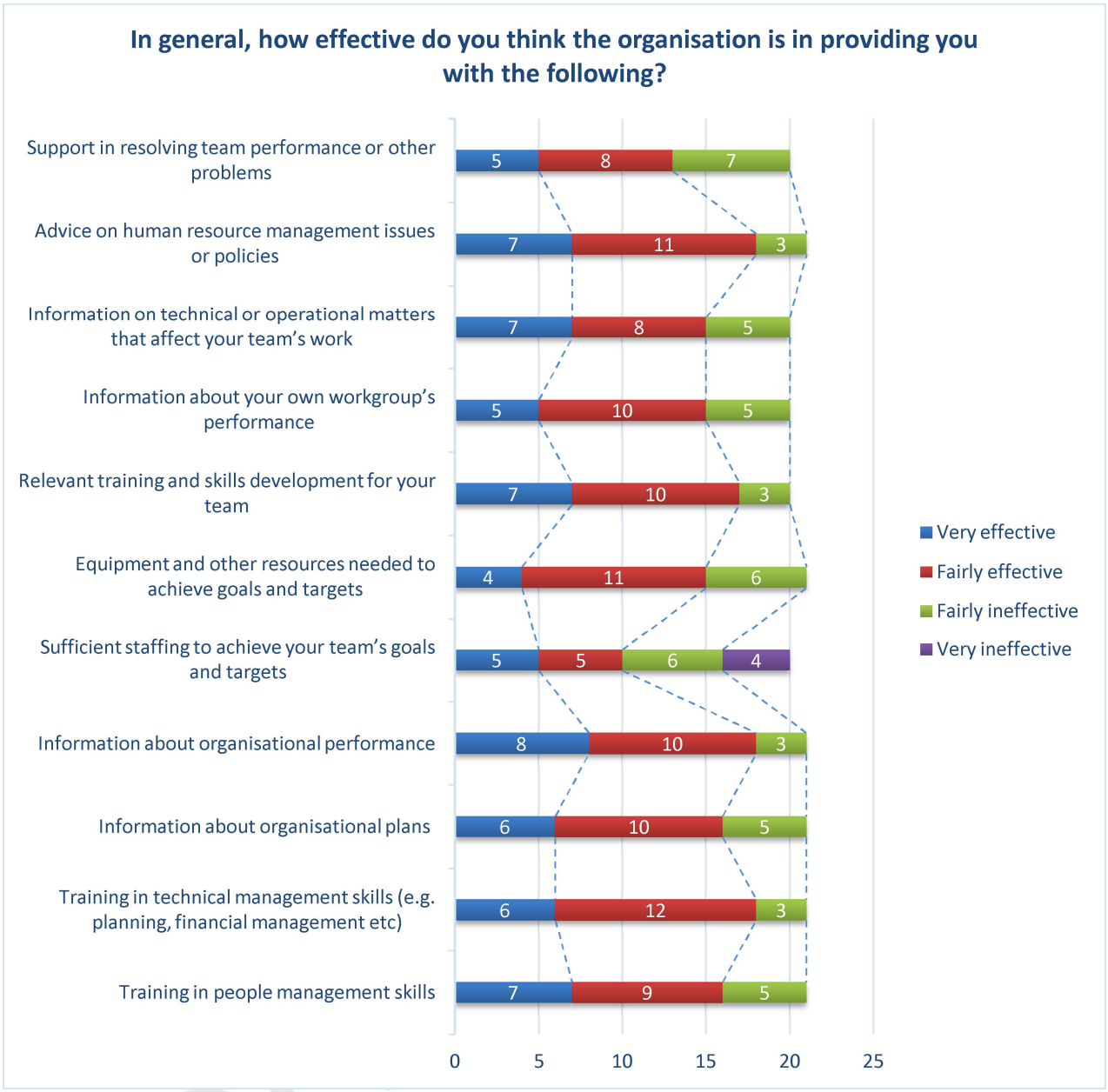
The content of the questionnaire parallels questions about perceptions of management in the employee questionnaire and the climate survey, enabling CWDM to gain a range of perspectives on the front-line management role.

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7.7.2.2 Survey results




How would you rate your own performance in the following areas?
Treating your team's members fairly and with respect
17
2
Representing your team's interests to other parts of the organisation
15
4
Taking responsibility when necessary
16
3
Delegating responsibility to your team
7
11
1
Encouraging your team to try out new ideas
10
8
1
Trusting your team to get on with its work
12
6
1
Providing coaching and guidance to individual team members
13
6
Providing clear goals and targets to your team
11
8
Helping your team to improve its performance
13
6
Telling your team when they have performed badly
10
7
1
1
Telling your team when they have performed well
14
3
1
Responding to your team's views
11
7
1
Encouraging your team to express its views
11
7
1
Telling your team about plans that will affect them
8
11
Telling your team about the organisation's plans or performance
8
10
1
0 2 4 6 8 10 12 14 16 18 20
Very good
Fairly good
Fairly poor
Very poor


In general, how effective do you think the organisation is in providing you with the following?
Support in resolving team performance or other problems
5
8
7
Advice on human resource management issues or policies
7
11
3
Information on technical or operational matters that affect your team's work
7
8
5
Information about your own workgroup's performance
5
10
5
Relevant training and skills development for your team
7
10
3
Equipment and other resources needed to achieve goals and targets
4
11
6
Sufficient staffing to achieve your team's goals and targets
5
5
6
4
Information about organisational performance
8
10
3
Information about organisational plans
6
10
5
Training in technical management skills (e.g. planning, financial management etc)
6
12
3
Training in people management skills
7
9
5
0
5
10
15
20
25
Very effective
Fairly effective
Fairly ineffective
Very ineffective



7.7.3 Employment survey

7.7.3.1 Approach

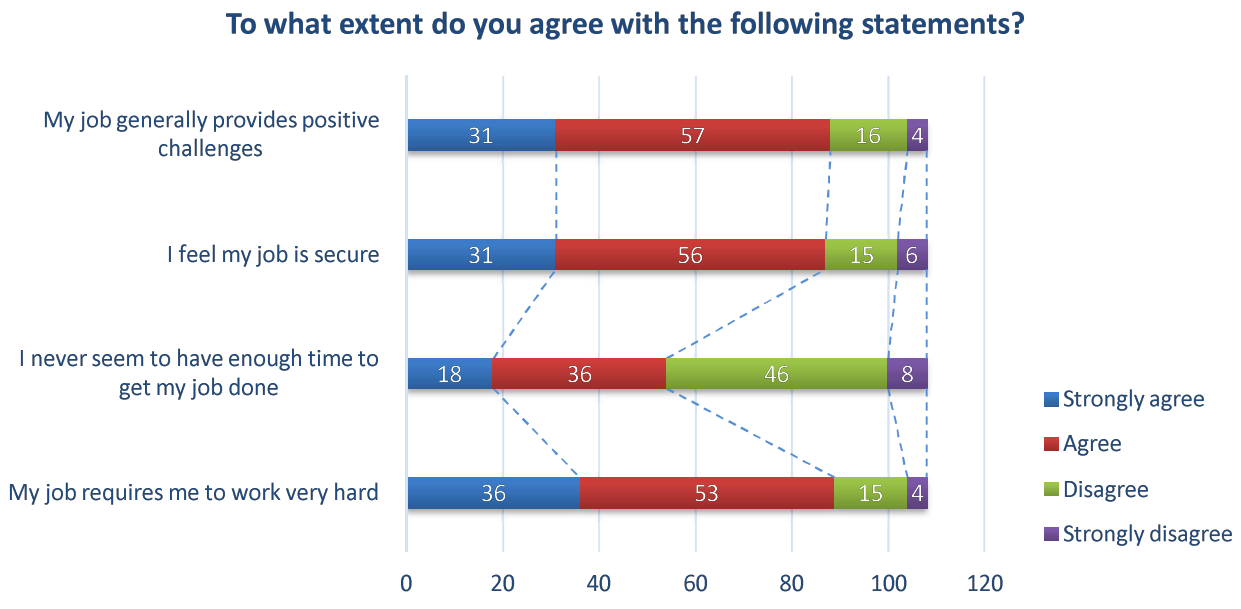
The Employee Questionnaire was designed to explore employees' views of all aspects of people management in the organisation.

The Employee Questionnaire is a 'tick box' instrument which provide quantified data about employees' perceptions and opinions, both about the organisation's people management policies and their application in practice.

The content of the questionnaire parallels questions about perceptions of management in the front-line manager questionnaire and climate survey, enabling users to gain a range of perspectives on the front-line management role.

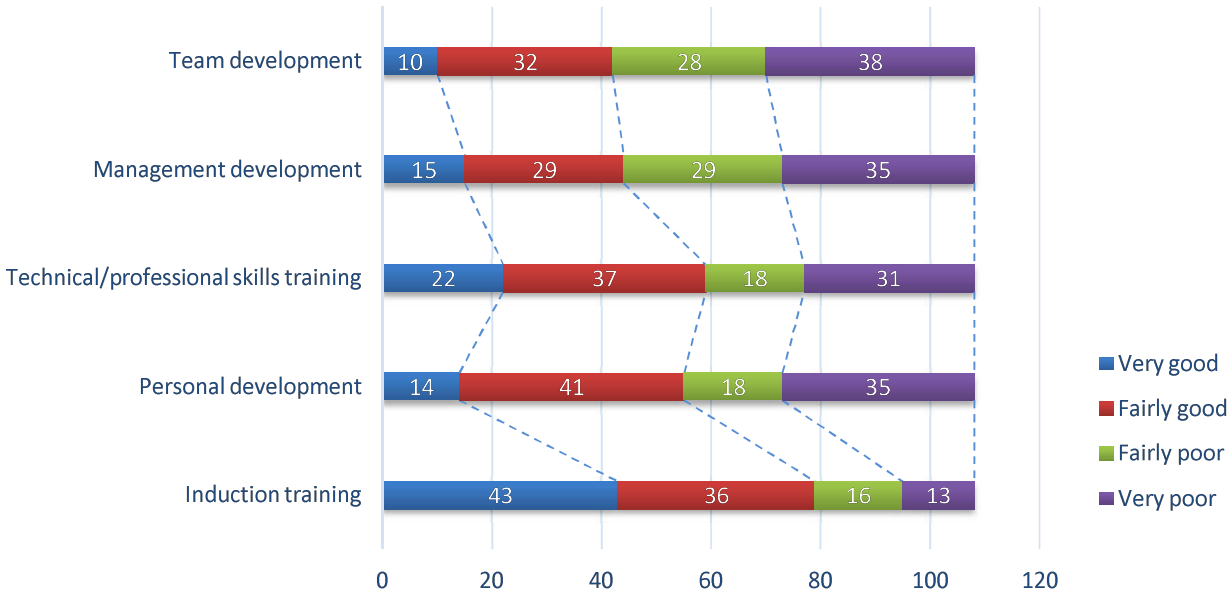
7.7.3.2 Survey results

7.7.3.2.1 My Job



	My job requires me to work very hard	I never seem to have enough time to get my job done	I feel my job is secure	My job generally provides positive challenges
Strongly agree	36	18	31	31
Agree	53	36	56	57
Disagree	15	46	15	16
Strongly disagree	4	8	6	4

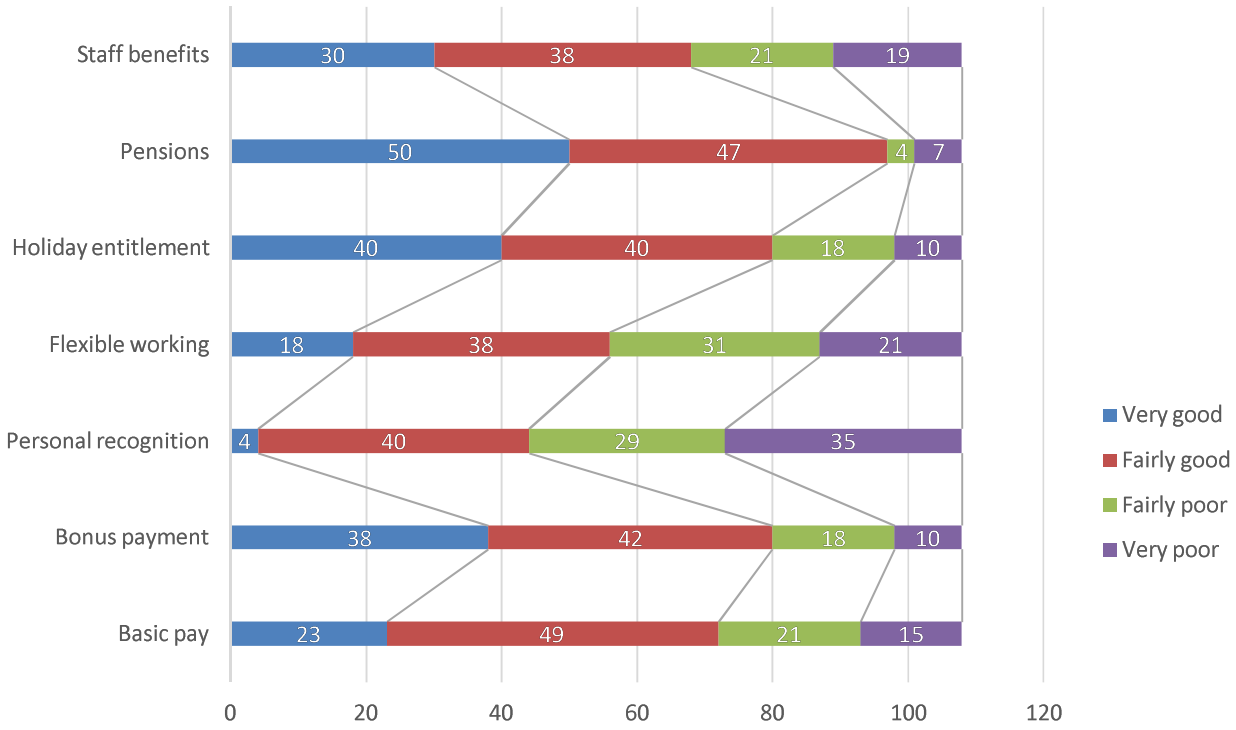
7.7.3.2.2 Training and development



	Induction training	Personal development	Technical/professional skills training	Management development	Team development
Very good	43	14	22	15	10
Fairly good	36	41	37	29	32
Fairly poor	16	18	18	29	28
Very poor	13	35	31	35	38

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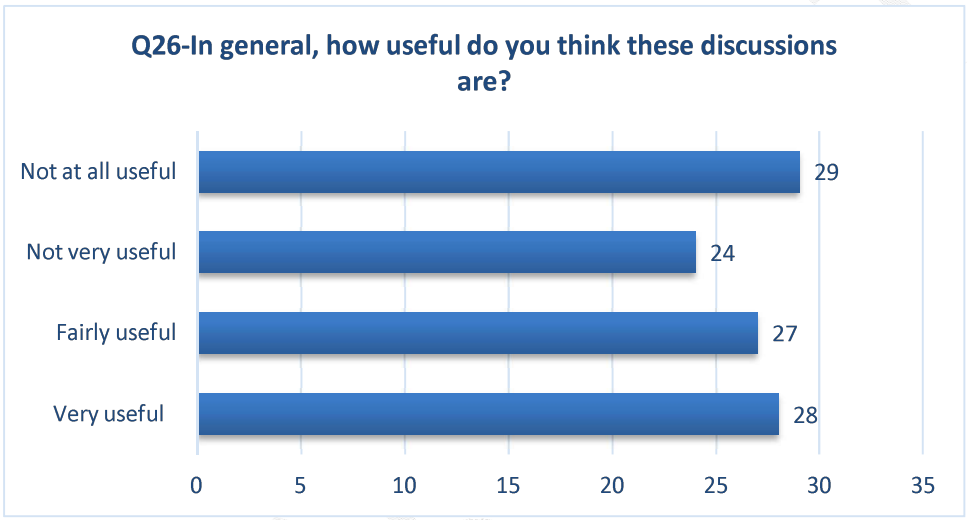
7.7.3.2.3 Pay

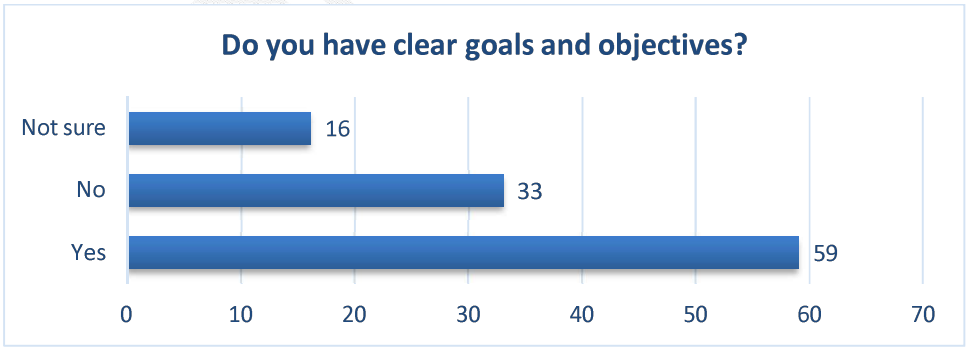


	Basic pay	Bonus payment	Personal recognition	Flexible working	Holiday entitlement	Pensions	Staff benefits
Very good	23	38	4	18	40	50	30
Fairly good	49	42	40	38	40	47	38
Fairly poor	21	18	29	31	18	4	21
Very poor	15	10	35	21	10	7	19

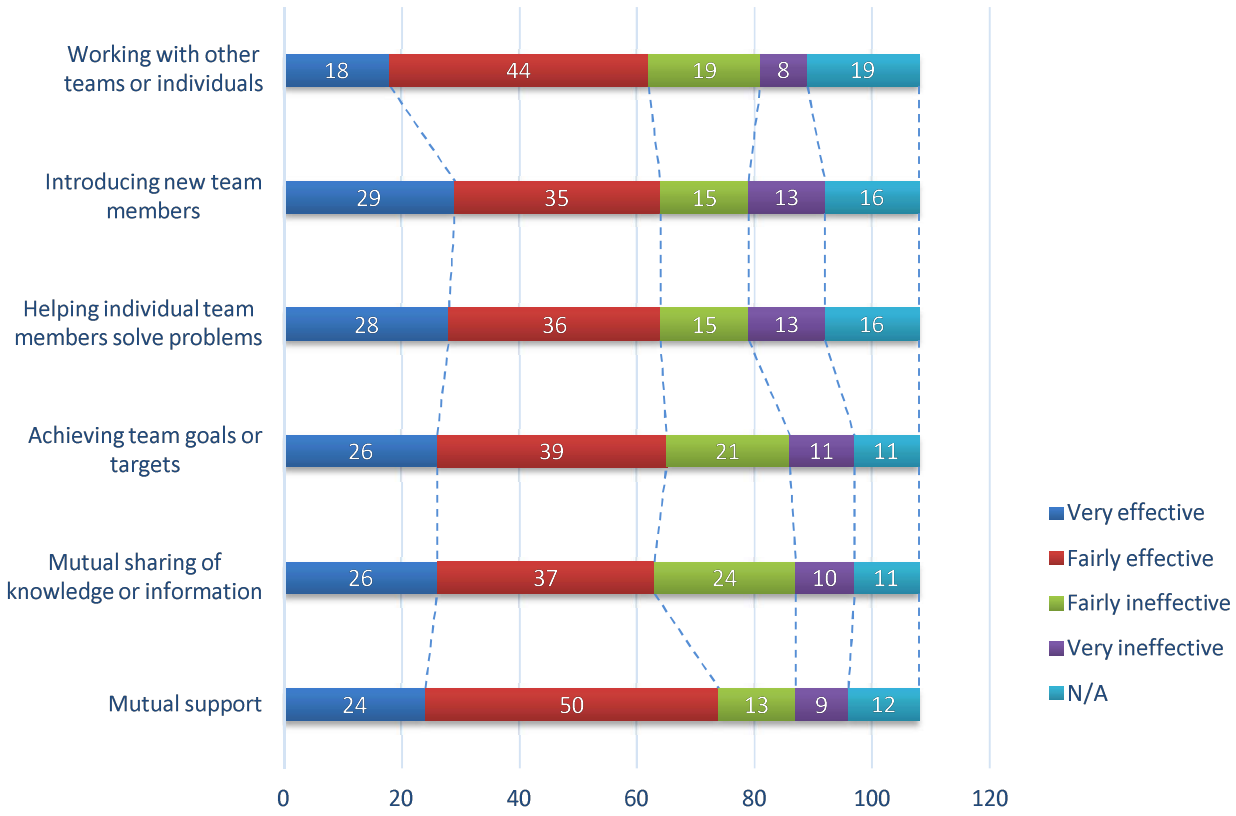
7.7.3.2.4 Performance management





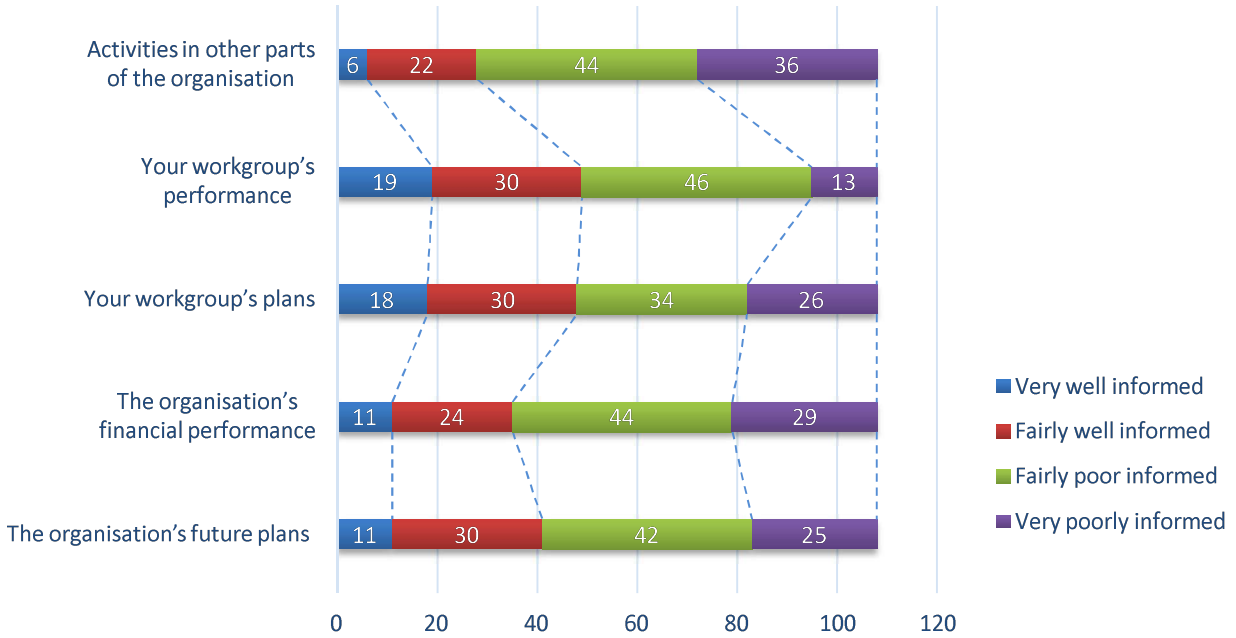


7.7.3.2.5 Team-working



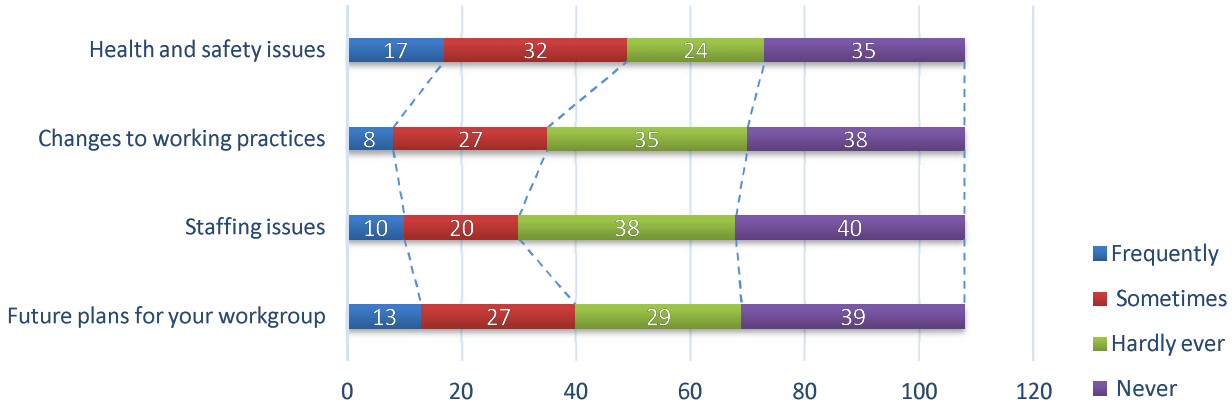
	Mutual support	Mutual sharing of knowledge or information	Achieving team goals or targets	Helping individual team members solve problems	Introducing new team members	Working with other teams or individuals
Very effective	24	26	26	28	29	18
Fairly effective	50	37	39	36	35	44
Fairly ineffective	13	24	21	15	15	19
Very ineffective	9	10	11	13	13	8
N/A	12	11	11	16	16	19

7.7.3.2.6 Communication



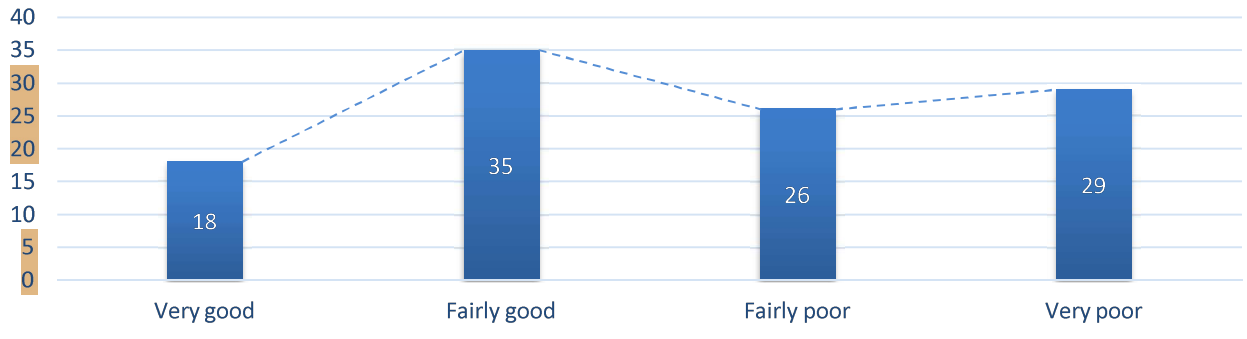
	The organisation's future plans	The organisation's financial performance	Your workgroup's plans	Your workgroup's performance	Activities in other parts of the organisation
Very well informed	11	11	18	19	6
Fairly well informed	30	24	30	30	22
Fairly poor informed	42	44	34	46	44
Very poorly informed	25	29	26	13	36

How often are you asked by your team leader/manager for your views on the following?

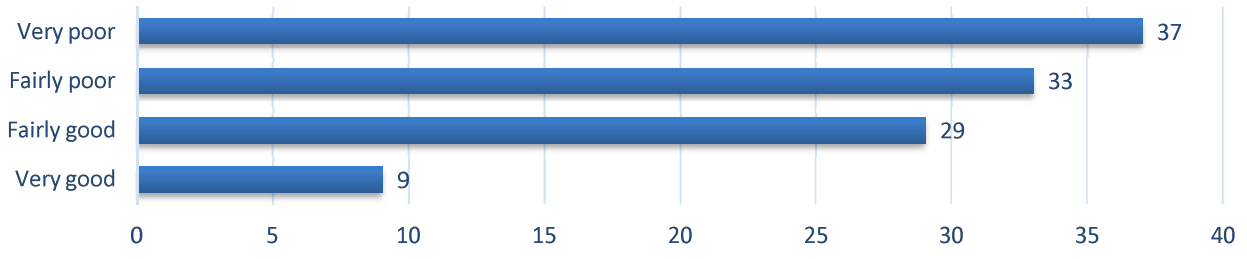


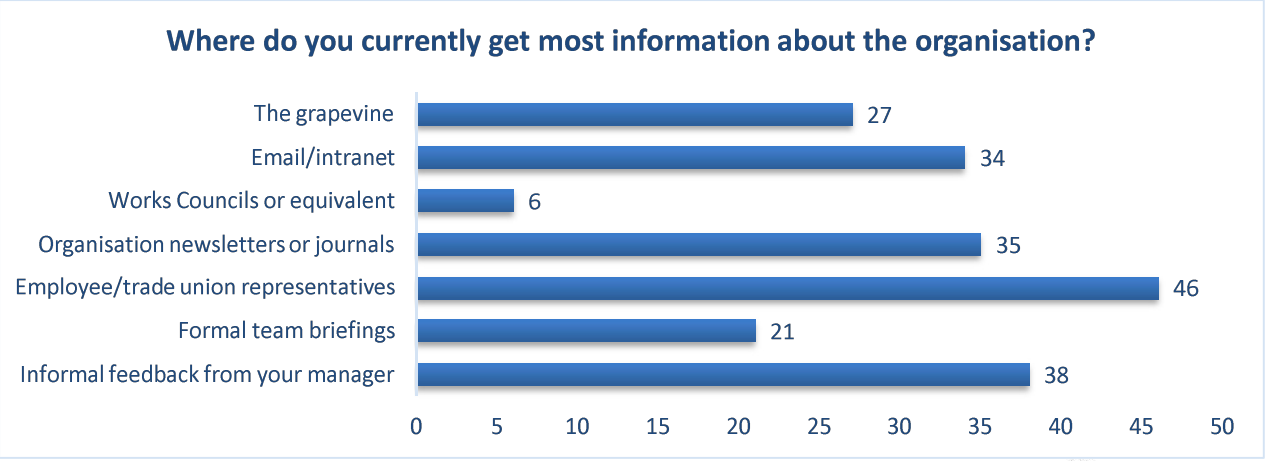
	Future plans for your workgroup	Staffing issues	Changes to working practices	Health and safety issues
Frequently	13	10	8	17
Sometimes	27	20	27	32
Hardly ever	29	38	35	24
Never	39	40	38	35

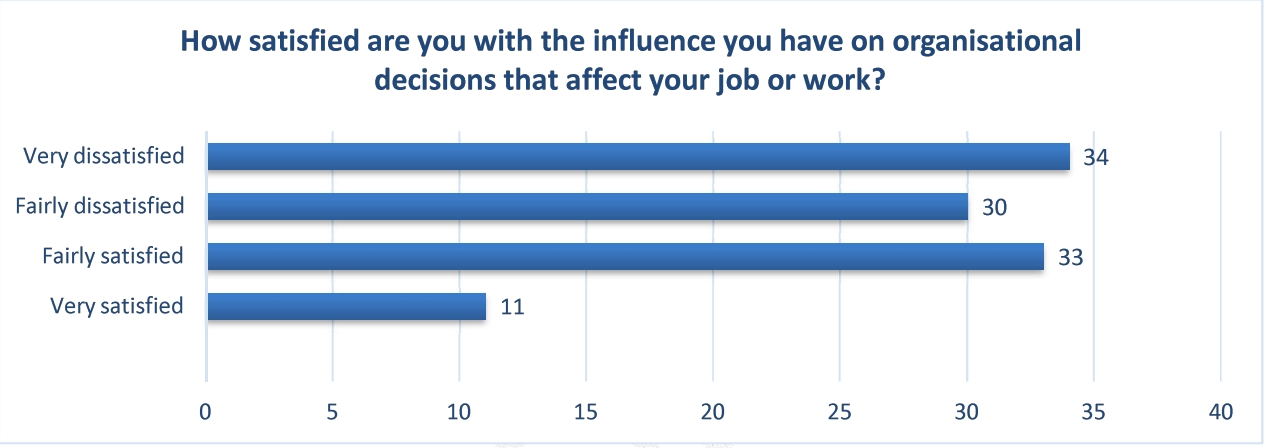
In general, how good do you think your organisation is at communicating with its employees?



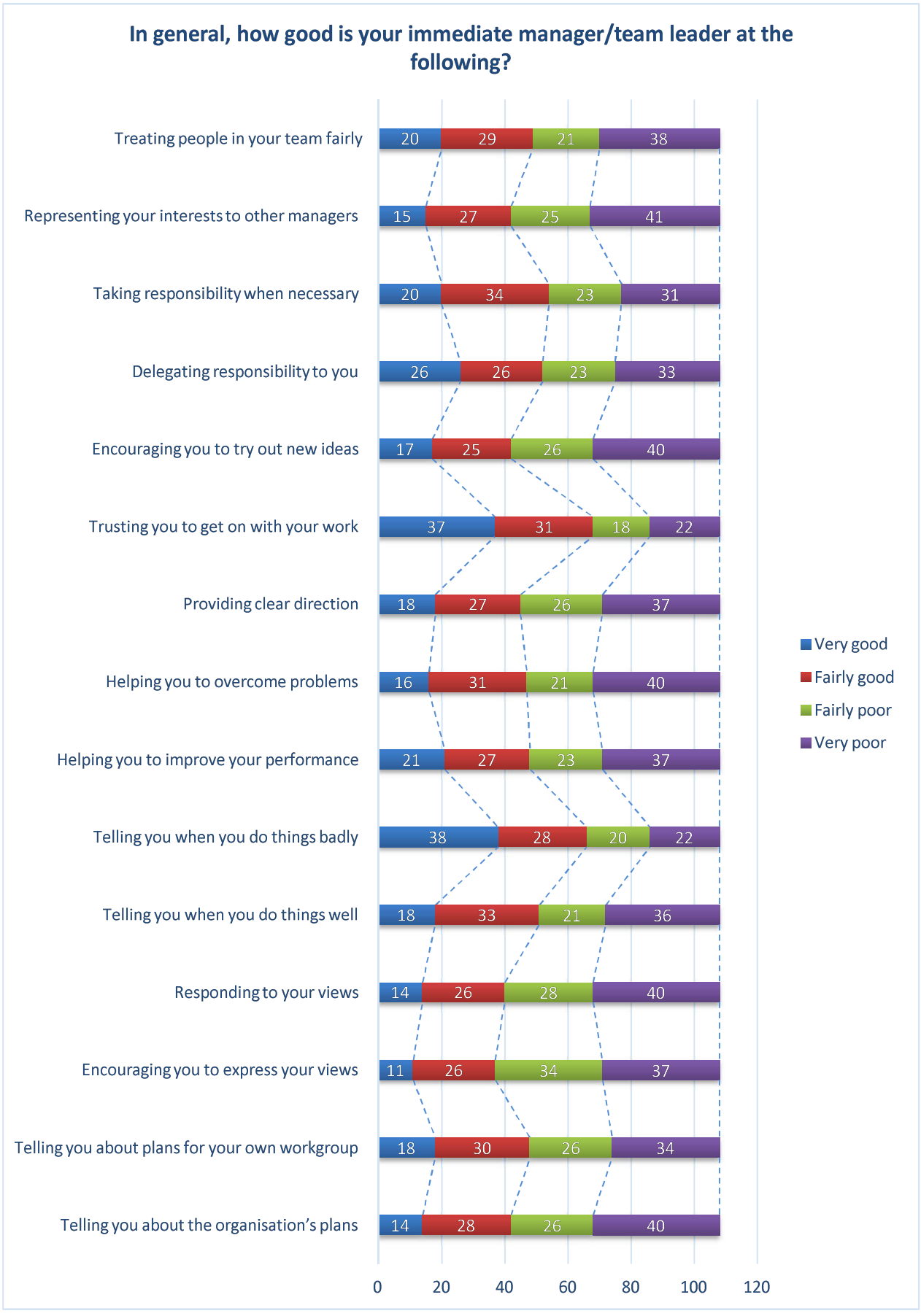
How good do you think the organisation is at listening to its employees?

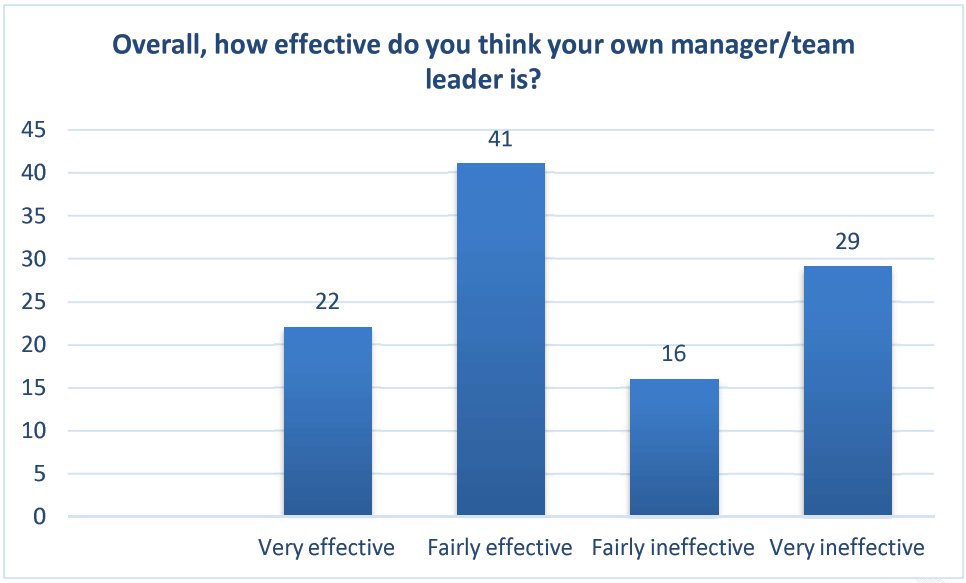



Where do you currently get most information about the organisation?
The grapevine
Email/intranet
Works Councils or equivalent
Organisation newsletters or journals
Employee/trade union representatives
Formal team briefings
Informal feedback from your manager
27
34
6
35
46
21
38
0
5
10
15
20
25
30
35
40
45
50


How satisfied are you with the influence you have on organisational decisions that affect your job or work?
Very dissatisfied
Fairly dissatisfied
Fairly satisfied
Very satisfied
34
30
33
11
0
5
10
15
20
25
30
35
40

7.7.3.2.7 Management

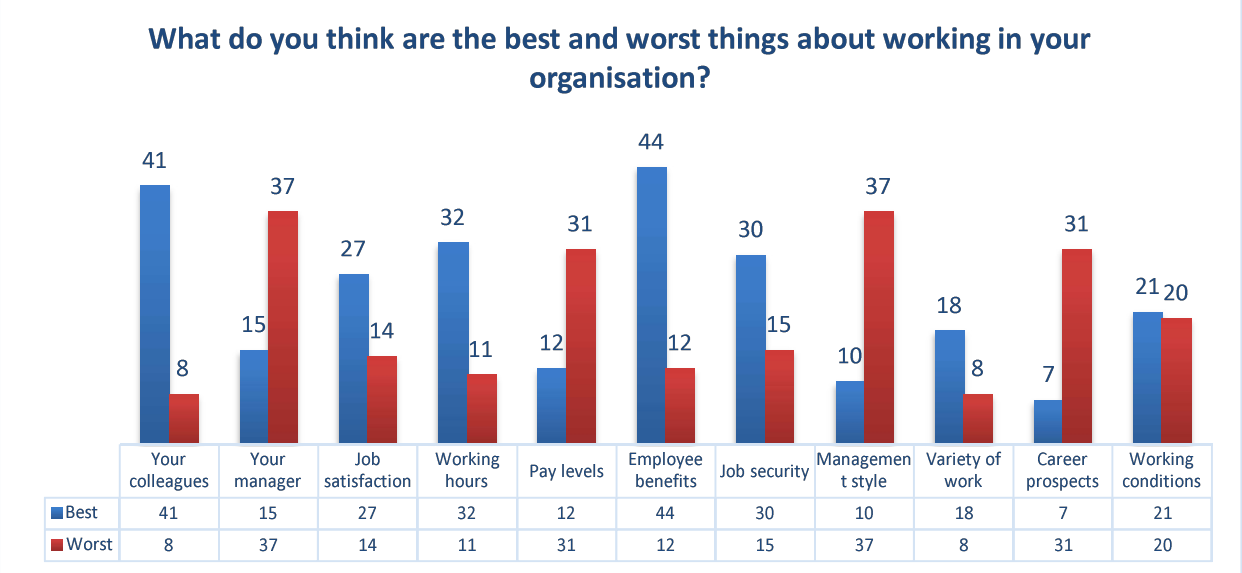


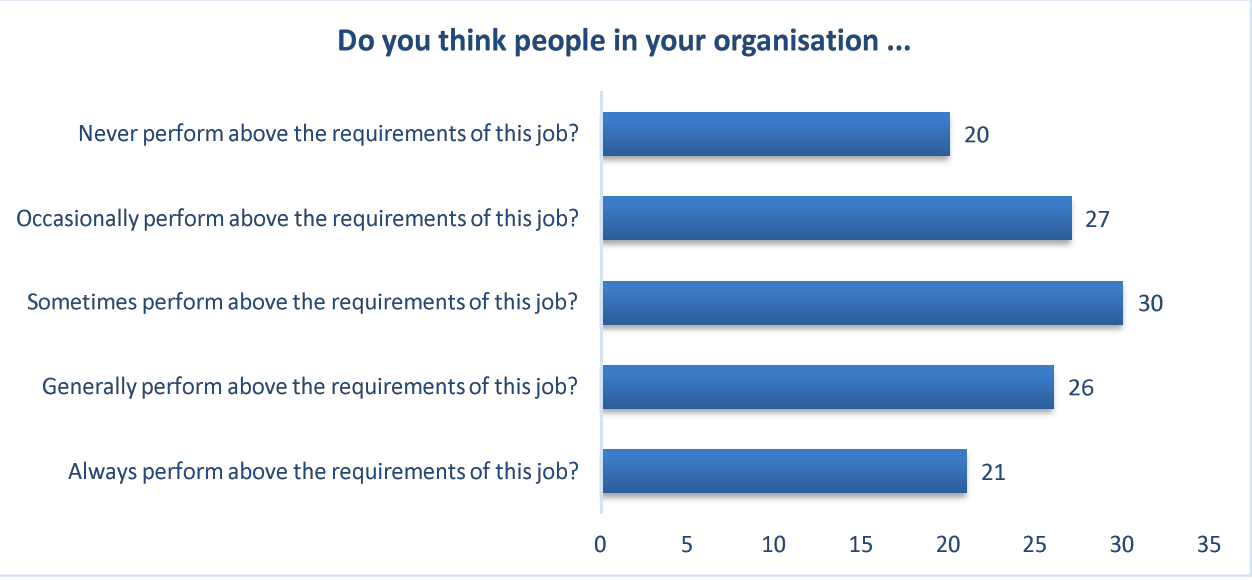

Overall, how effective do you think your own manager/team leader is?
45
40
35
30
25
20
15
10
5
0
22
41
16
29
Very effective
Fairly effective
Fairly ineffective
Very ineffective

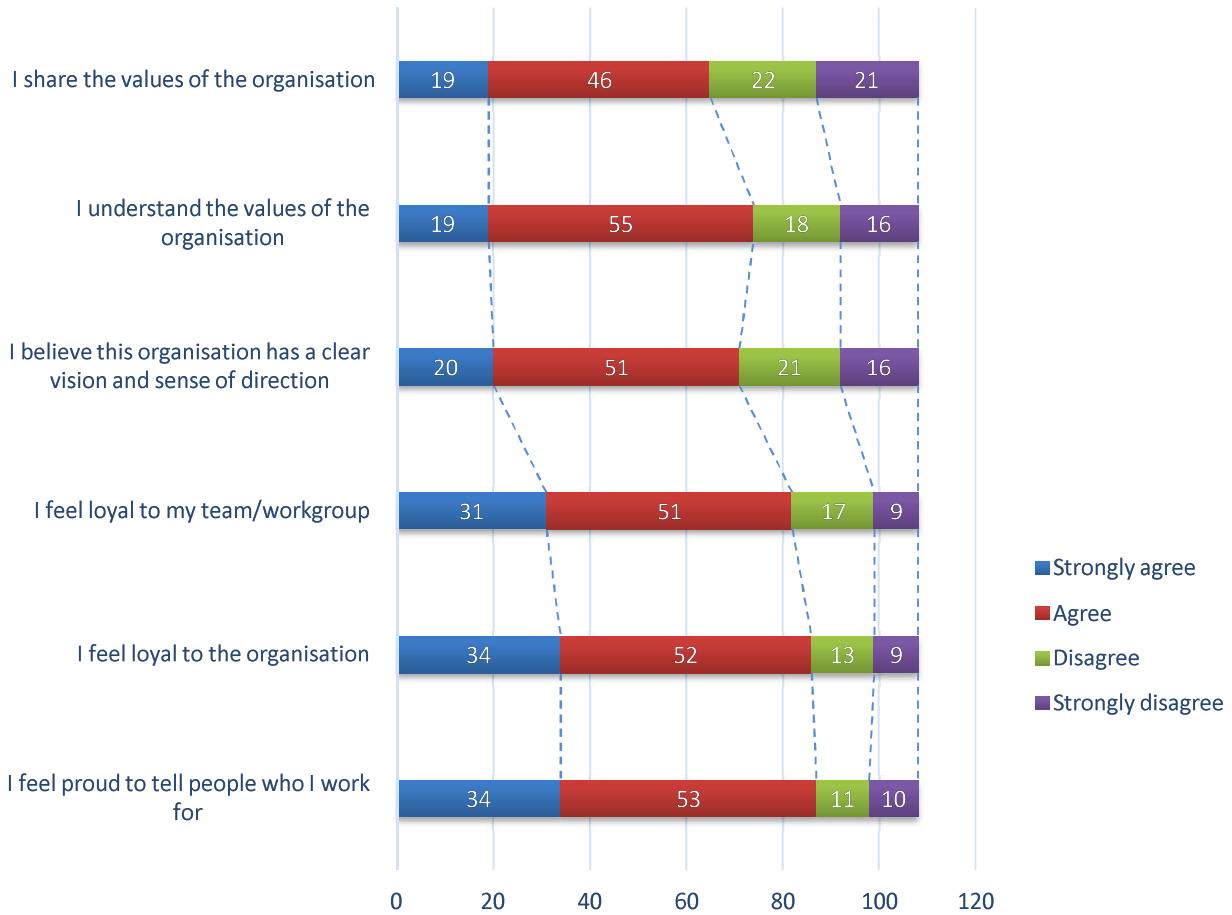

In general, how effective do you think managers/supervisors are in your organisation?
60
50
40
30
20
10
0
12
48
22
26
Very effective
Fairly effective
Fairly ineffective
Very ineffective

7.7.3.2.8 Your organisation









	I feel proud to tell people who I work for	I feel loyal to the organisation	I feel loyal to my team/workgroup	I believe this organisation has a clear vision and sense of direction	I understand the values of the organisation	I share the values of the organisation
Strongly agree	34	34	31	20	19	19
Agree	53	52	51	51	55	46
Disagree	11	13	17	21	18	22
Strongly disagree	10	9	9	16	16	21

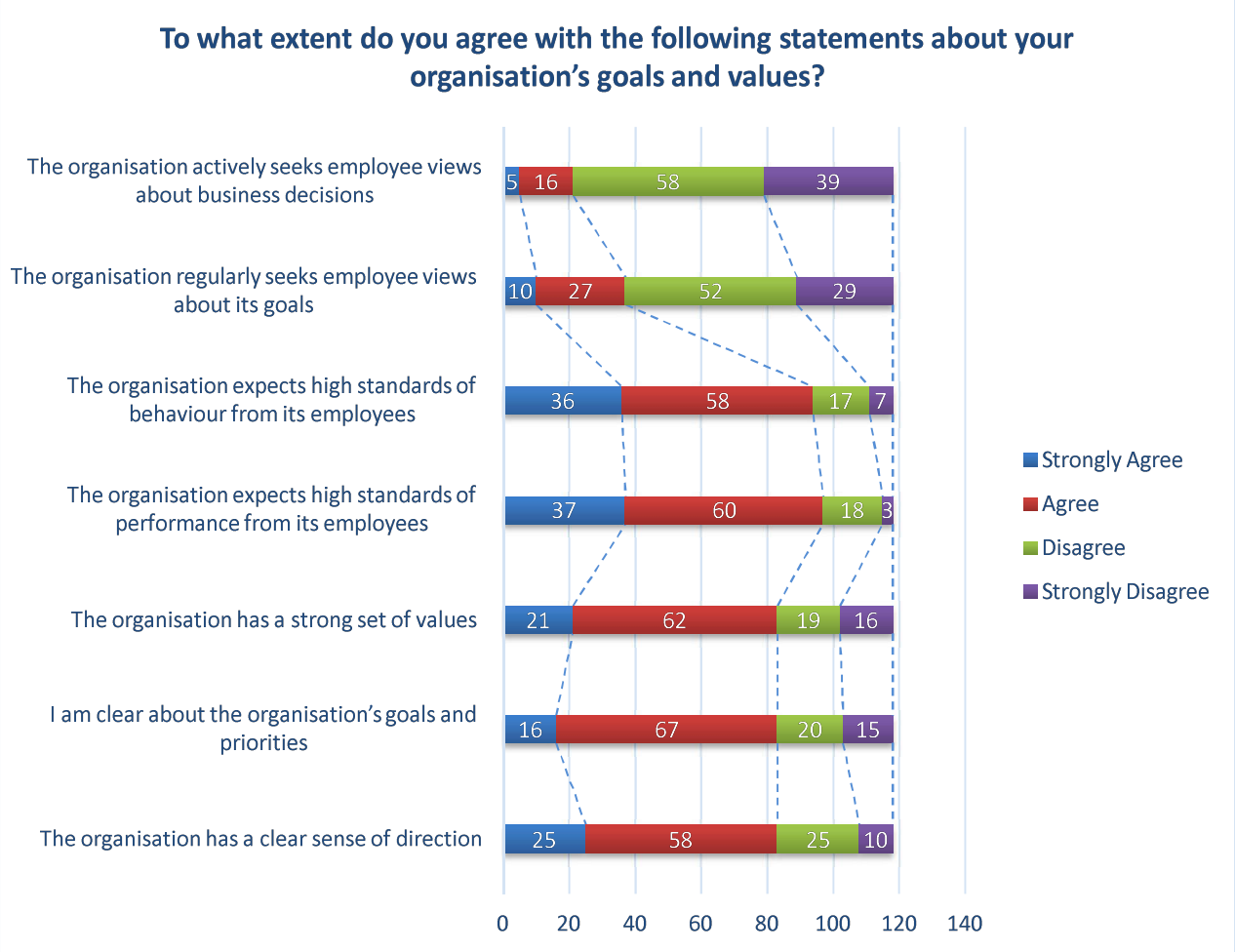
7.7.4 Climate survey

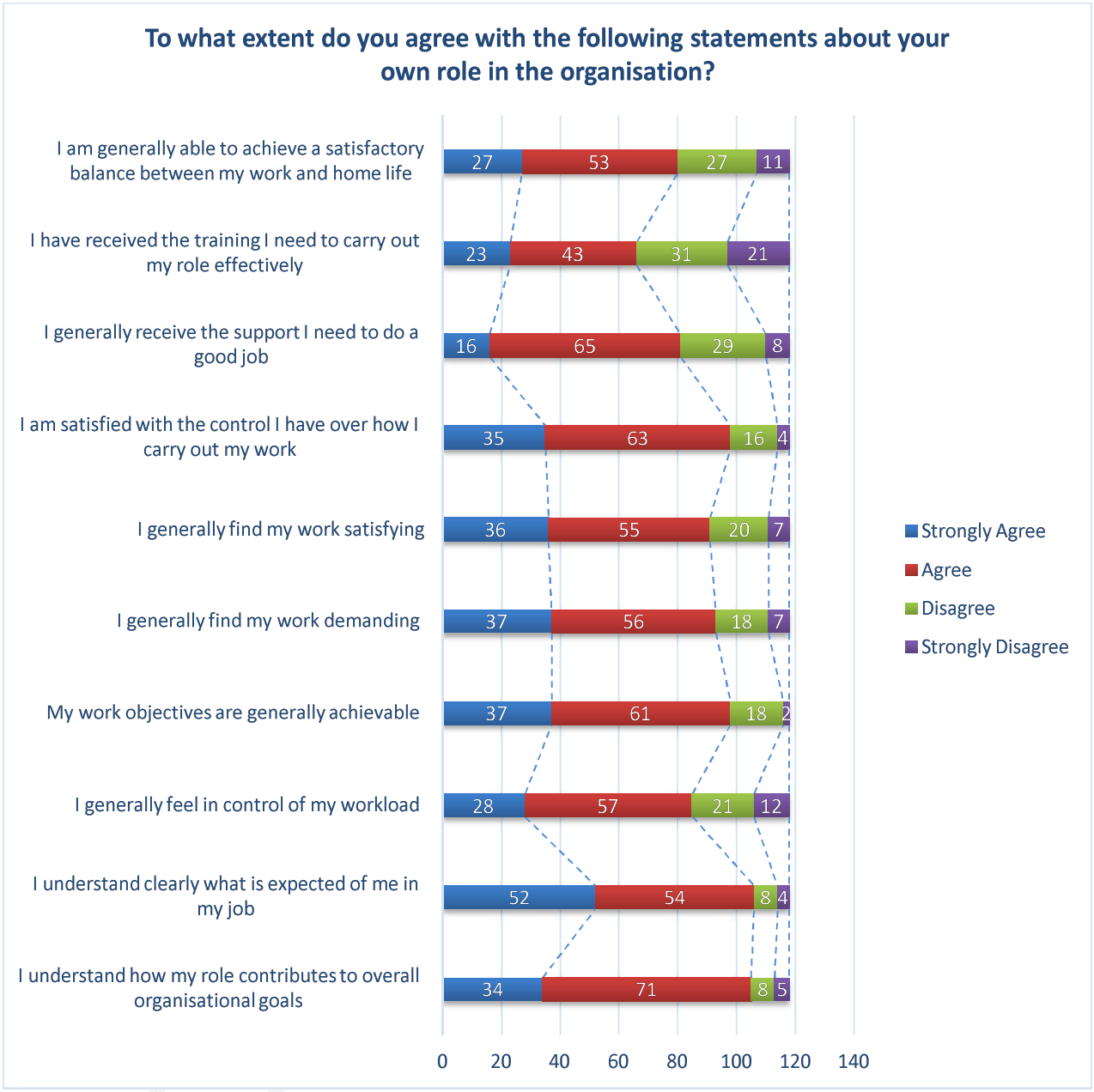
7.7.4.1 Approach

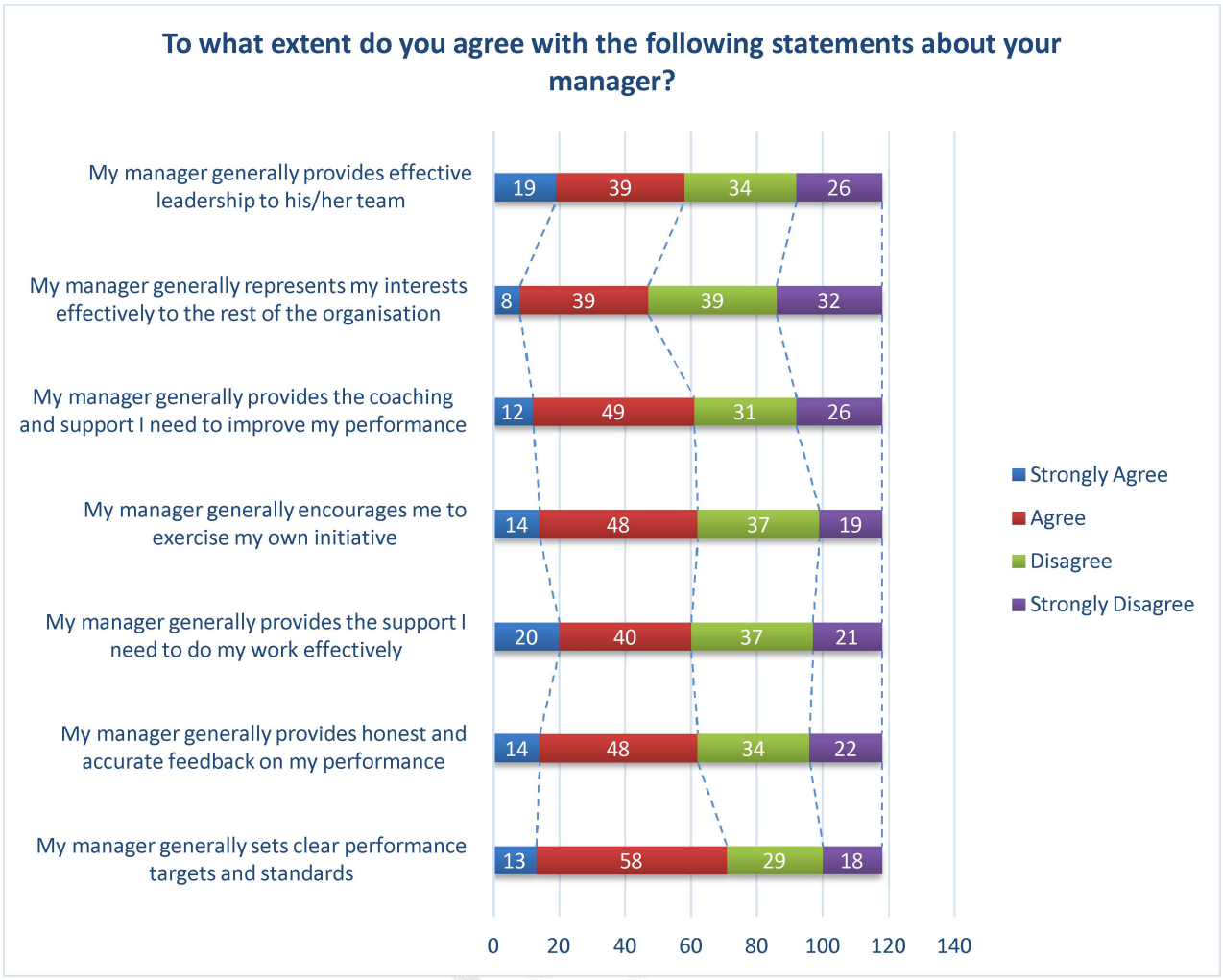
A Climate Survey Questionnaire was utilised to provide a more general overview of the climate of opinion across the organisation, exploring perceptions of the organisation itself, of employees' own roles, of management, and of the treatment of employees. The climate survey therefore provides baseline data about the extent to which the overall organisational climate is conducive to effective individual and team performance.

The climate survey questionnaire was distributed to a randomly selected representative sample (25 %) of the municipal workforce at all levels. The survey was useably completed by 118 respondents, whilst 14 questionnaires were unusable (spoiled), and 8 selected respondents absent.

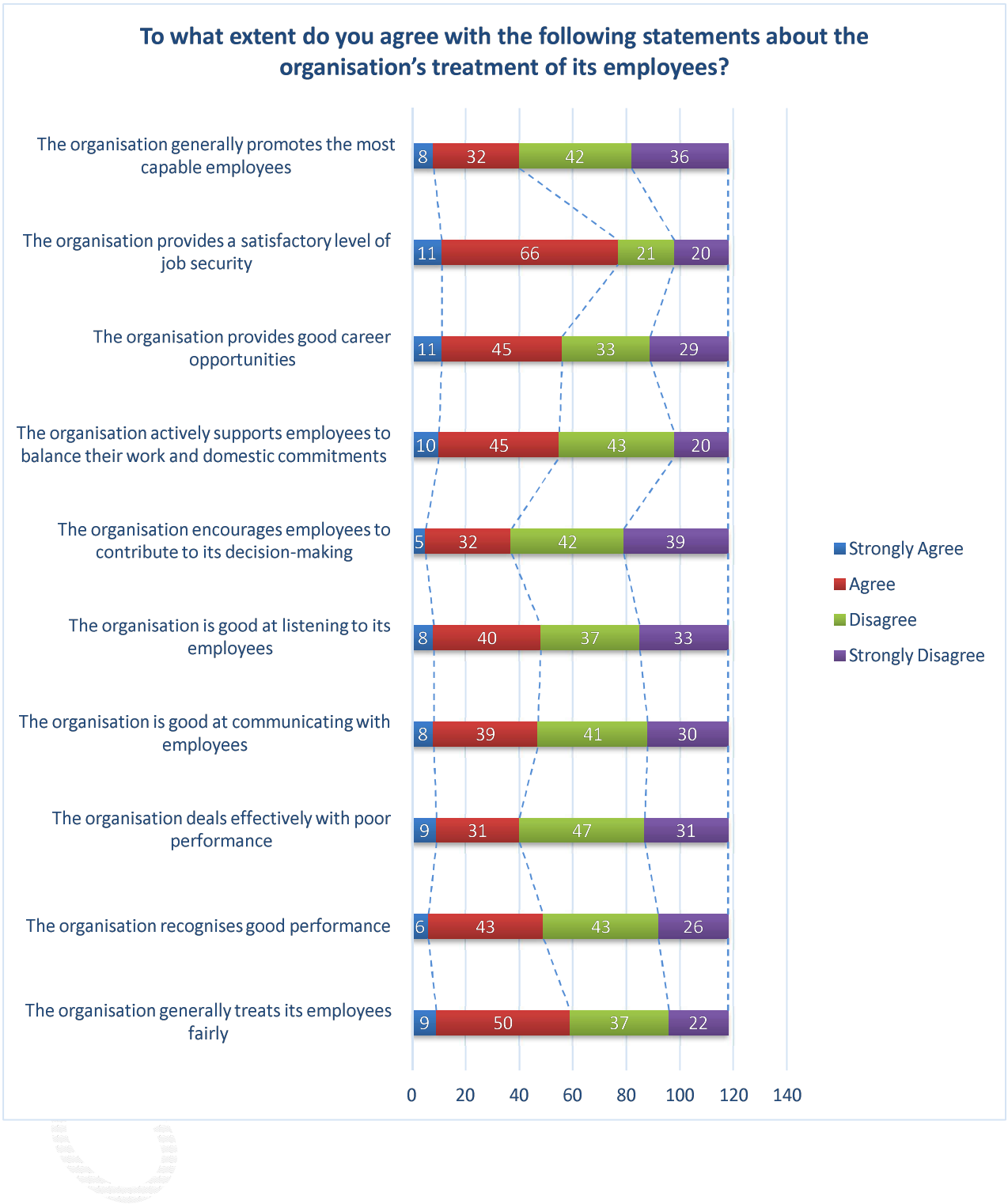
7.7.4.2 Survey results

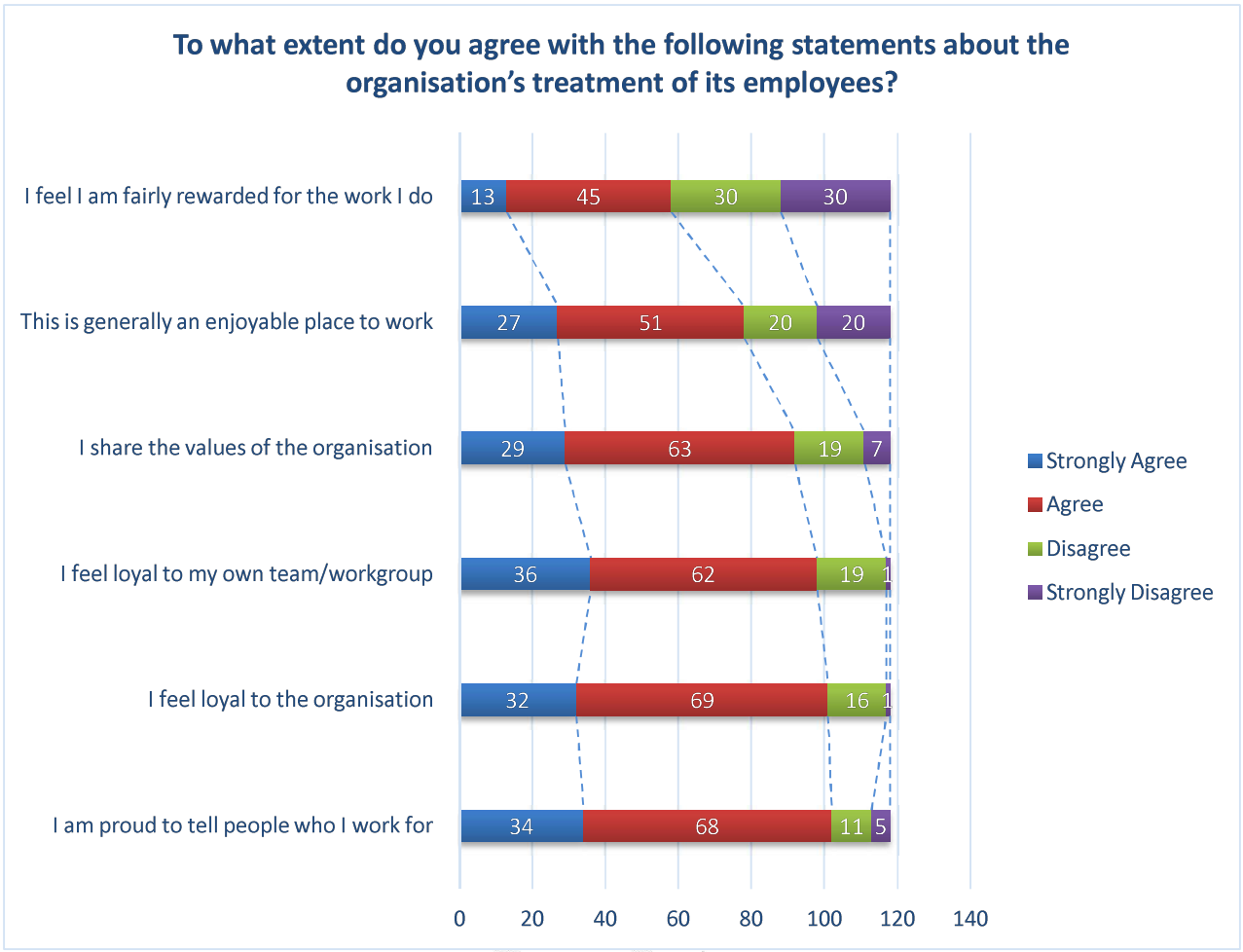



To what extent do you agree with the following statements about your own role in the organisation?
I am generally able to achieve a satisfactory balance between my work and home life
27
53
27
11
I have received the training I need to carry out my role effectively
23
43
31
21
I generally receive the support I need to do a good job
16
65
29
8
I am satisfied with the control I have over how I carry out my work
35
63
16
4
I generally find my work satisfying
36
55
20
7
I generally find my work demanding
37
56
18
7
My work objectives are generally achievable
37
61
18
2
I generally feel in control of my workload
28
57
21
12
I understand clearly what is expected of me in my job
52
54
8
4
I understand how my role contributes to overall organisational goals
34
71
8
5
0
20
40
60
80
100
120
140
Strongly Agree
Agree
Disagree
Strongly Disagree



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To what extent do you agree with the following statements about the organisation's treatment of its employees?
The organisation generally promotes the most capable employees
8
32
42
36
The organisation provides a satisfactory level of job security
11
66
21
20
The organisation provides good career opportunities
11
45
33
29
The organisation actively supports employees to balance their work and domestic commitments
10
45
43
20
The organisation encourages employees to contribute to its decision-making
5
32
42
39
The organisation is good at listening to its employees
8
40
37
33
The organisation is good at communicating with employees
8
39
41
30
The organisation deals effectively with poor performance
9
31
47
31
The organisation recognises good performance
6
43
43
26
The organisation generally treats its employees fairly
9
50
37
22
0
20
40
60
80
100
120
140
Strongly Agree
Agree
Disagree
Strongly Disagree



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7.8 Annexures H: HRM - a conceptual overview

7.8.1 The concept of HRM

HRM activities can be divided into two broad categories:

(a) Transformational (strategic) activities that are concerned with developing organisational effectiveness and the alignment and implementation of HR and corporate organisational strategies; and

(b) Transactional services, which cover the main areas of HR service delivery – resourcing, learning and development, reward and employee relations.

7.8.1.1 HRM defined

Human resource management is defined as a strategic and coherent approach to the management of an organisation's most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives.

Strategic HRM on the other hand is a general notion of how integration or 'fit' between HR and corporate organisational strategies are achieved, the benefits of taking a longer-term view of where HR should be going and how to get there, and how coherent and mutually supporting HR strategies should be developed and implemented. Importantly, it is also about how members of the HR function should adopt a strategic approach on a day-to-day basis. This means that they operate as part of the management team, ensure that HR activities support the achievement of business strategies on a continuous basis and are consciously concerned with seeing that their activities add value.

7.8.1.2 The goals of HRM

The goals of HRM are to:

(a) Support the organisation achieving its objectives by developing and implementing HR strategies that are integrated with the business strategy (strategic HRM);

(b) Contribute to the development of a high-performance culture;

(c) Ensure that the organisation has the talented, skilled and engaged people it needs;

(d) Create a positive employment relationship between management and employees and a climate of mutual trust;

(e) Encourage the application of an ethical approach to people management.

7.8.2 The HR architecture

7.8.2.1 HR systems

Human resource management operates through human resource systems as illustrated in ***Figure 3***. These bring together in a coherent way:

(a) HR philosophies, describing the overarching values and guiding principles adopted in managing people;

(b) HR strategies, defining the direction in which HRM intends to go;

(c) HR policies, which are the guidelines defining how these values, principles and strategies should be applied and implemented in specific areas of HRM;

(d) HR processes, consisting of the formal procedures and methods used to put HR strategic plans and policies into effect;

(e) HR practices, consisting of the informal approaches used in managing people;

(f) HR programmes, which enable HR strategies, policies and practices to be implemented according to plan.

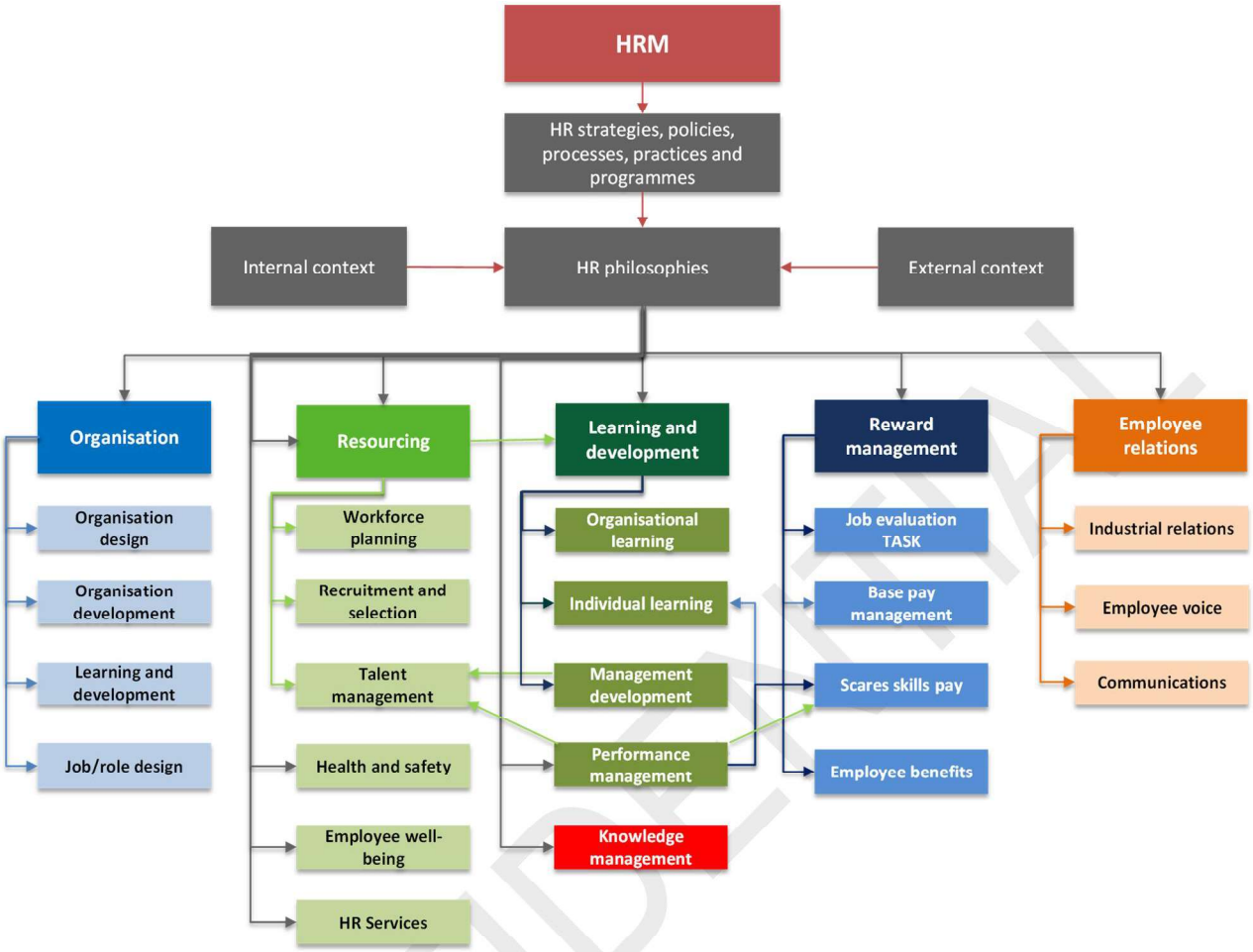


Figure 3: HRM Architecture

7.8.3 Role and organisation of the HR function

The roles of HR practitioners vary widely according to the extent to which they are generalist (e.g., HR director or HR manager), or specialist (e.g., head of learning and development, head of talent management, or head of reward), the level at which they work (strategic, executive or administrative) the needs of the organisation, the context within which they work and their own capabilities.

The basic role of the HR function is to deliver HRM services. But it does not end there. Increasingly the role of the HR function is to enable the organisation to achieve its objectives by taking initiatives and providing guidance and support on all matters relating to its employees. The basic aim is to ensure that the organisation develops HR strategies, policies and practices that cater effectively for everything concerning the employment and development of people and the relationships that exist between management and the workforce. The HR function plays a major part in the creation of an environment that enables people to make the best use of their capacities and to realize their potential to the benefit of both the organisation and themselves.

The various HR roles are described in more detail below.

(a) ***Service provision*** - The basic role of HR specialists is that of providing services to internal customers. These include management, line managers, team leaders and employees. The services may be general, covering all aspects of HRM: human resource planning, recruitment and selection, employee development, employee reward, employee relations, health and safety management and welfare. Alternatively, services may only be provided in one or two of these areas by specialists. The focus may be on the requirements of management (e.g., resourcing), or it may extend to all employees (e.g., health and safety). The aims are to provide effective services that meet the needs of the business, its management and its employees and to administer them efficiently.

(b) ***Guidance and advice*** - To varying degrees, HR practitioners provide guidance and advice to management. At the highest level, this will include recommendations on HR strategies that have been developed by processes of analysis and diagnosis to address strategic issues arising from business needs and human, organisational or environmental factors. They will also provide advice on issues concerning culture change and approaches to the improvement of process capability – the ability of the organisation to get things done through people.

(c) ***The business partner role*** - HR practitioners as business partners share responsibility with their line management colleagues for the success of the organisation and get involved with them in running the organisation. They must have the capacity to identify organisational challenges, to see the broad picture and to understand how their HR role can help to achieve the organisation's objectives.

(d) ***The strategist role*** - As strategists, HR professionals address major long-term organisational issues concerning the management and development of people and the employment relationship. They are guided by the business plans of the organisation but they also contribute to the formulation of those business plans. This is achieved by ensuring that top managers focus on the human resource implications of the plans. HR strategists persuade top managers that they must develop business strategies that make the best use of the core competences of the organisation's human resources.

(e) ***The innovation and change agent role*** - In their proactive role, HR practitioners are well placed to observe and analyse what is happening in and to their organisations as it affects the employment of people, and intervene accordingly. Following this analysis, they produce diagnoses that identify opportunities and threats and the causes of problems. They propose innovations in the light of these diagnoses that may be concerned with organisational processes such as interaction between departments and people, teamwork, structural change and the impact of new technology and methods of working, or HR processes such as resourcing, employee development or reward. As innovators, they have to be experts in change management.

7.8.3.1 Normal accountabilities of the HR Function

Working towards enabling the above, the HR function is typically accountable for:

(a) Develops HRM strategies, principles, policies and procedures in line with business requirements;

(b) Ensures consistency and standardisation of processes and practices across the organisation;

(c) Provides expert advisory services;

(d) Understands the business and tailors organisation wide practices to the specific needs of an organisational unit;

(e) Ensures application of appropriate best practice HRM services;

(f) Partners line management in effective people practices;
(g) Enables change and transition;
(h) Facilitates the assimilation of culture and values;
(i) Builds capacity of line managers to effectively manage people;
(j) Ensures good corporate governance around HRM practices;
(k) Delivers on service level agreements;
(l) Measures and reports on the effectiveness of HRM services within the business; and
(m) Labour Forum consultation and feedback.

7.8.4 Strategic role of the HR director

The strategic role of HR directors is to promote the achievement of the organisation's corporate goals by ***firstly*** developing and implementing HR strategies that are integrated with the corporate organisational strategy and are coherent and mutually supportive, and ***secondly***, ensuring that a strategic approach is adopted by the HR function that supports all organisational units and adds value.

7.8.5 Strategic role of heads of HR functions

The strategic role of heads of HR functions is fundamentally the same for their function as that of HR directors for the whole organisation. They promote the achievement of the organisation's corporate goals by developing and implementing functional strategies that are aligned with the corporate organisational strategy and integrated with the strategies for other HR functions and adopt a strategic approach in the sense of ensuring that HR activities support the business and add value.

7.8.6 HR role of line managers

HR can initiate new policies and practices but it is line managers who have the main responsibility for implementing them. ***HR proposes, but line disposes***.

Line managers are typically accountable for the following HRM actions:

(a) Partners with HRM in developing and implementing HRM strategies to achieve corporate organisational goals and results;
(b) Manages people according to principles, policies and procedures;
(c) Complies with HRM legal requirements;
(d) Proactively engages and partners with HRM around corporate and people challenges and solutions;
(e) Initiates and leads change;
(f) Drives the organisation's values;
(g) Takes responsibility for being informed of HRM matters and building own people management skills;
(h) Follows fair and procedural HRM practices and processes;
(i) Ensures high-performance through effective performance management and retention practices;
(j) Communicates and gives feedback on service level expectations;
(k) Tracks and measures the impact of HRM strategies in the business; and
(l) Measures and reports on the effectiveness of people management within functional areas.

7.8.7 Role of employees

(a) Partners with line and HRM to:

- Remain relevant to local government by taking responsibility for own performance, development and career planning;
- Take advantage of appropriate opportunities for development;
- Remain informed of HRM policy and procedures;
- Discuss expectations;
- Take personal accountability for and support change initiatives;
- Live the organisation's values; and
- Participate in HRM surveys and feedback mechanisms.

(b) Provides feedback to/ and liaises with Unions and relevant employee forums.

7.8.8 The role of Council

(a) Perform an oversight role with regards to HRM functions and support services;

(b) Approve relevant strategies, policies and procedures;

(c) Approve and/or validate specific decisions/outcomes/recommendations made with regards to various aspects of HRM; and

(d) Ensure that a conducive environment is created within the institution to ensure effective and efficient HRM.

7.8.9 The nature of HR strategy

7.8.9.1 HR Strategies as a Framework

HR strategies provide a framework within which is set out what an organisation is proposing to do about people management generally, or in particular areas of HRM. HR strategies set out ***aspirations*** that have to be expressed as ***intentions***, which then in turn have to be converted into ***actions***. The strategies may be defined formally as part of a strategic human resource management process, which leads to the development of ***overall*** or ***specific HR strategies*** as considered in this chapter for implementation. (See section 7)

7.8.9.2 What is strategy?

Strategy has two fundamental meanings. ***First***, it is forward looking. It is about deciding where you want to go and how you mean to get there. It is concerned with both ends and means. In this sense, a strategy is a declaration of intent: 'This is what we want to do and this is how we intend to do it.' Strategies define longer-term goals, but they also cover how those goals will be attained. They guide purposeful action to deliver the required result. A good strategy is one that works, one that enables organisations to adapt by 'mastering the present and pre-empting the future'.

The ***second*** meaning of strategy is conveyed by the concept of strategic fit. The focus is upon the organisation and the world around it. As Hofer and Schendel (1986) conclude, 'A critical aspect of top management's work today involves matching organisational competences (internal resources and skills) with the requirements and risks created by environmental change in ways that will be both effective and efficient over the time such resources will be deployed.'

7.8.9.3 What is strategic capability?

Strategic capability is a concept that refers to the ability of an organisation to develop and implement strategies that will achieve sustained competitive advantage. It is therefore about the capacity to select the most appropriate vision, to define realistic intentions, to match resources to opportunities and to prepare and implement strategic plans.

The strategic capability of an organisation depends on the strategic capabilities of its managers. People who display high levels of strategic capability know where they are going and know how they are going to get there. They recognize that, although they must be successful now to succeed in the future, it is always necessary to create and sustain a sense of purpose and direction.

7.8.9.4 What is HR strategy?

Strategic HRM leads to the formulation of HR strategies. Tyson and Witcher (1994: 21) defined HR strategies as '… the intentions and plans for using human resources to achieve business objectives'.

A strategy, whether it is an HR strategy or any other kind of management strategy must have two key elements: there must be ***strategic objectives*** (i.e. things the strategy is supposed to achieve), and there must be a ***plan of action*** (i.e. the means by which it is proposed that the objectives will be met.

The purpose of HR strategies is to guide HRM development and implementation programmes. They provide a means of communicating to all concerned the intentions of the organisation about how its human resources will be managed. They provide the basis for strategic plans and enable the organisation to measure progress and evaluate outcomes against objectives. HR strategies provide visions for the future but they are also vehicles that define the actions required and how the vision should be realized. As Gratton (2000) commented: ***'There is no great strategy, only great execution.'***

7.8.10 The distinction between strategic HRM and HR strategies

The terms 'strategic HRM' and 'HR strategy' are often used interchangeably, but a distinction can be made between them.

As indicated in section 2.2, strategic HRM can be regarded as a general approach underpinned by a philosophy to the strategic management of human resources in accordance with the intentions of the organisation on the future direction it wants to take. What emerges from this process is a stream of decisions over time that form the pattern adopted by the organisation for managing its human resources and define the areas in which specific HR strategies need to be developed. HR strategies will focus on the ***intentions*** of the organisation on what needs to be done and what needs to be changed.

The most significant feature of SHRM is the importance attached to strategic integration, which flows from top management's vision and leadership, and which requires the full commitment of people to it. It is an approach to managing human resources that supports long-term business goals and outcomes with a strategic framework. The approach focuses on longer-term people issues, matching resources to future needs, and concerns about structure, quality, culture, values and commitment.

7.8.11 Types of HR Strategy

Because all organisations are different, all HR strategies are different. Research into HR strategy conducted by Armstrong (2016) revealed many variations. Some strategies are simply very general declarations of intent; others go into much more detail. But two basic

types of HR strategies can be identified: 1) overarching strategies; and 2) specific strategies relating to the different aspects of human resource management.

7.8.11.1 Overarching HR strategies

Overall strategies describe the general intentions of the organisation about how people should be managed and developed, what steps should be taken to ensure that the organisation can attract and retain the people it needs, and ensure so far as possible that employees are committed, motivated and engaged. There are four categories of overall strategy:

(a) An emergent, evolutionary and possibly unarticulated understanding of the required approach to human resource management. It will be affected by the views, experience and management style of the chief executive, senior managers and the head of HR, whose influence will depend on position and credibility;

(b) Broad-brush statements of aims and purpose that set the scene for more specific strategies. They will be concerned with overall organisational effectiveness – achieving human resource advantage by, as Boxall and Purcell (2003) point out, employing 'better people in organisations with better process' and generally creating 'a great place to work';

(c) Specific and articulated plans to create 'bundles' of HR practices and develop a coherent HR system.

(d) The conscious introduction of overall approaches to human resource management such as high-performance management, high-involvement management and high-commitment management.

7.8.11.2 Specific HR strategies

Specific HR strategies set out what the organisation intends to do in areas such as:

(a) Organisation design and development - the planning and implementation of programmes designed to enhance the effectiveness with which an organisation functions and responds to change;

(b) Human capital management - obtaining, analysing and reporting on data, which inform the direction of value - adding people management strategic, investment and operational decisions;

(c) Knowledge management - creating, acquiring, capturing, sharing and using knowledge to enhance learning and performance;

(d) Corporate Social Responsibility - a commitment to managing the business ethically in order to make a positive impact on society and the environment;

(e) Engagement - the development and implementation of policies designed to increase the level of employees' engagement with their work and the organisation;

(f) High-performance management - developing and implementing high-performance work systems;

(g) Resourcing - attracting and retaining high-quality people;

(h) Talent management - how the organisation ensures that it has the talented people it needs to achieve success;

(i) Learning and development - providing an environment in which employees are encouraged to learn and develop;

(j) Reward - defining what the organisation wants to do in the longer term to develop and implement reward policies, practices and processes that will further the achievement of its business goals and meet the needs of its stakeholders; and

(k) Employee relations - defining the intentions of the organisation about what needs to be done and what needs to be changed in the ways in which the organisation manages its relationships with employees and their trade unions.

7.8.11.3 Ensuring effective delivery of HR Strategy

Armstrong (2016: 86) states that to provide for the effective provision of HR strategy it is necessary to adopt the approaches described below.

(a) Formulate practical strategies

A practical strategy is one that can be put into effect without too much difficulty. HR strategy should take into account all the barriers of the say-do gap. Particularly, careful thought has to be given to the practical issues involved in implementing them. It is necessary to consider the role of line managers in delivering HR strategy, as well as that of HR specialists. The aims should be to: 1) keep it simple; 2) spell out how the strategy is to be implemented as well as what to be implemented, 3) ensure that support is given to line managers in the shape of advice, guidance and training.

(b) Involve

Involve as many line managers and other employees as possible in formulating the strategy - people support what they help to create. This can be done through formal consultation processes or through workshops and focus groups whose members are representative of the different constituencies in the organisation and who can be encouraged to pass on what they have been doing to their colleagues.

(c) Communicate

It is essential to communicate details of the strategy to line managers and employees. The communication should explain what is proposed, why it has been proposed (indicating the benefits both to the organisation and employees), how it will work, who will be affected and the timetable for introduction.

(d) Build skills

New strategies may require the use of new skills or the development of existing ones. This applies to employees generally as well as line managers, who should be trained in what they have to do to implement the strategy.

(e) Monitor and evaluate

The introduction of HR strategy should be monitored in order to evaluate its effectiveness. Corrective action to shape modifications to the strategy can then be taken.

(f) Manage change

The implementation of HRM strategies involves change, which can be hard to introduce and be resisted. The role of HR in facilitating change is described by Vere and Butler (2007:34) as follows:

- Issues need to be on the strategic agenda and HR managers must be able to demonstrate how planned improvement will create value and investment return;
- Change interventions need to have the backing of the SMT – so it is for the Head of HR to gain the commitment of the people on the top;
- HR needs to engage managers in the design of change;
- The change programme needs to be framed in the language of the organisation in order to have real meaning;

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- Project and people management skills are crucial to ensure that planned interventions are well planned and resources and that risks are assessed and managed;
- Communication is paramount in order to explain, engage and commit people to the programme;
- HR plays a crucial role to ensure that employees are fully engaged; and
- HR needs to draw on others' experience and learning.

7.8.12 Methodology for formulating HR strategy

7.8.12.1 Typical elements in a written strategy

Strategy is expressed in *strategic goals* and developed and implemented in *strategic plans* through the process of *strategic management*. Strategy is about implementation, which includes the management of change, as well as planning. An important aspect of strategy is the need to achieve *strategic fit*. This is used in three senses:

(a) Matching the organisation's capabilities and resources to the opportunities available in the environment;

(b) Matching one area of strategy, e.g. human resource management, to the corporate strategy of the municipality; and

(c) Ensuring that different aspects of a strategy area cohere and are mutually supportive.

7.8.12.2 The classical approach to formulating strategy

Conceptually, the classical strategy formulation approach as described by Whittington (Armstrong 2008:29) involves the following steps:

(a) Define the mission;

(b) Set goals and objectives;

(c) Conduct internal and external environmental scans to assess internal strengths and weaknesses and external opportunities and threats;

(d) Analyse existing strategies to determine their relevance in the light of the internal and external appraisal. This may include gap analysis which also covers resource capability, answering the question: 'Have we sufficient human or financial resources available now or that can readily be made available in the future to enable us to achieve our objectives?';

(e) Define in the light of this analysis the distinctive capabilities of the organization;

(f) Define the key strategic issues emerging from the previous analysis. These will be concerned with such matters as product-market scope, enhancing shareholder value and resource capability;

(g) Determine corporate and functional strategies for achieving goals and sustainable advantage, taking into account the key strategic issues. These may include strategies for growth or diversification, or broad generic strategies for innovation, quality or cost leadership; or they could take the form of specific corporate/functional strategies concerned with service delivery scope, technological development or human resource development;

(h) Prepare integrated strategic plans for implementing strategies;

(i) Implement the strategies; and

(j) Monitor implementation and revise existing strategies or develop new strategies as necessary.

7.8.12.3 Evidence-Based Leadership

According to Barr (2016), evidence-based leadership is not about how to lead. It's about what to give your attention to as you lead, and what you're leading your organisation to. It's not about how to communicate or inspire or direct or engage. It's about how to use all these attributes to lead your organisation to high-performance.

Organisational performance is one of the outcomes all leaders are responsible for. And how an organisation performs is evidenced by the results it achieves, not by the work it does.

To truly know what results an organisation is achieving, and how it's getting better at this over time, those results must be measured.



Performance measures are evidence of the degree to which important results are occurring over time. Without good performance measures, we have no evidence. With no evidence, we can't know. If we can't know, we're guessing. Evidence-based leaders don't guess. Evidence-based leaders give their attention to three habits of high-performance: Direction, Evidence, and Execution.

(a) Direction is about articulating a measurable strategy. To be measurable in a meaningful way, a strategy must be results-oriented, understandable to everyone, and ruthlessly prioritised. And then it becomes the kind of strategy people feel compelled to make reality.

(b) Evidence is about setting meaningful performance measures for each strategic goal. Surprisingly, just about every strategic goal that matters can be made measurable, and measurable in a meaningful way. The most meaningful measures are quantitative, aligned to what matters, and focused on improvement.

(c) Execution is about getting the corporate strategy implemented and the strategic goals achieved. The best strategy execution, that produces the highest return on effort and investment, uses the leverage of continuous improvement of business processes. It's not about 'bolting on' new capability, it's about unleashing what's there.

7.8.12.4 Key strategy terminology for mapping measurable results

Terms	Definitions
Vision	A vision is a statement or short paragraph that concisely describes an ideal future state for an organisation, or the ultimate impact the organisation would like to have in its the world. The vision is the pinnacle of the organisation's direction.
Mission	A mission is a concise statement of the purpose of an organisation, its reason for being. Usually this is in terms of what difference the organisation makes in the lives of its customers or clients.
Critical Success factors	The concept underlying the group of terms to the left is the overarching themes or headings under which related goals or objectives are clustered. Organisations use many other names for

Terms	Definitions
Key Results Areas Strategic Theme	these, including “Strategic Performance Focus Areas” or “Strategic Priorities”.
Goal or Objective	These two terms are often used interchangeably, and both describe a single performance result to be achieved (e.g. ‘Increase invoice accuracy’). The clearest objectives and goals go a step further and link performance measures to targets and timeframes (e.g. ‘Reduce the average number of errors per invoice to 0.05 by December 31, 2017’). The ingredients of a good goal are a performance measure (average number of errors per invoice), a target (0.05) and a timeframe (December 31, 2014). In my experience, this ideal format is rarely found in strategic and business plans largely because performance measures are not given enough deliberate attention when strategy is being formulated.
Performance Measure	A performance measure is a comparison that provides objective evidence of a degree to which a performance result is occurring over time. It performance measure quantifies an important result that impacts an organisation’s success or the achievement of its strategic direction. Performance measures are usually tracked regularly over time so changes can be noticed and responded to quickly.
KPI	Key performance indicators (or KPI’s) are the most important measures for an organisation, and the ones that have the greatest impact on success. Perhaps because of its catchy name, KPI has become almost synonymous with the term “performance measure”. However, it is preferred to use “performance measure” as the generic label for any quantification of a performance result. KPI’s are one type of performance measure.
Targets	A target is not a goal or a performance measure, but rather a value that an organisation wants a performance measure to reach within a specific timeframe. We compare the value of current performance with the target when we want to figure out how far we are from the target, or when we’ve reached it.
Strategy	This word has two meanings. It ought to be easy to discern which meaning is intended by the content in which the word is used. It’s often used as an umbrella term to identify the collection of goals, objectives, measures and initiatives that together spell out the direction in which the organisation is heading (e.g. ‘This document details our strategy for the next 5 years’). It’s also used to refer to a specific initiative or tactic that an organisation has chosen for reaching a specific goal or objective.
Initiatives	An initiative is essentially the same as the second definition of “strategy”.
Projects	Projects are initiatives that have been formulated and have clearly defined purposes, scopes, outcomes, milestones, task schedules and budgets.

Terms	Definitions
Milestones	A milestone is a point reached during a project's implementation that marks the end of a logical phase (such as a design phase or a testing phase) or an accomplishment of a significant event that contributes to the success of the project (such as stakeholder sigh-off or launch of a website).
Standards	A **standard** is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose.

7.8.12.5 Application of measurement typology

Performance measurement is a process, not an event. It is a series of steps in which we choose what to measure, define how we'll calculate our measures, get the data, analyse the data to produce our performance measure values, graph and report our measures to highlight signals of performance changes, interpret these signals, and use this information to take meaningful action to improve organisational performance. (Barr 2014:18)

Performance measurement processes however, need to be deliberately designed to have meaningful performance measures. If we're measuring anything at all in our organisations right now, chances are that our performance measurement process is somewhat ad hoc and unstructured. Unless we have well-formulated performance measures throughout our organisation, and those measures are routinely hitting targets and making performance fundamentally better, then our performance measurement processes need to be improved. Barr (2014: 20) maps out a useful framework and explain the fundamental concepts of the elements thereof as follows:

(a) Object A - vision statement
(b) Object B - mission statement
(c) Object C - organisational values
(d) Object D - performance result
(e) Object E - performance measure
(f) Object F - target
(g) Object G - strategic theme
(h) Object H - improvement initiative

The abovementioned elements are illustrated in the tables below, populated with an example taken from Barr (2014: 21) for illustration purposes.

Object A: We dream of a Switzerland where chocolate is a healthy lifestyle enhancer for everyone	Object D: Chocolate is enjoyed in healthy doses	Object E: % Chocolate-using population who use chocolate below the overindulgence standard	Object F: for 2020 99.5%
Object B: To free all Swiss chocoholics from enslavement to their	Lifestyle-diminishing chocoholism disappears	% Population diagnosed with lifestyle-diminishing chocoholism	0.001%

lifestyle-diminishing overindulgences in chocolate	Chocoholics overcome their enslavement	Average time that post-treatment Chocoholics have refrained from their chocolate overindulgences	5 years
Object C: Innovation, Excellence, Positivity, Care and Nurture, Health and Well-being, Collaboration			

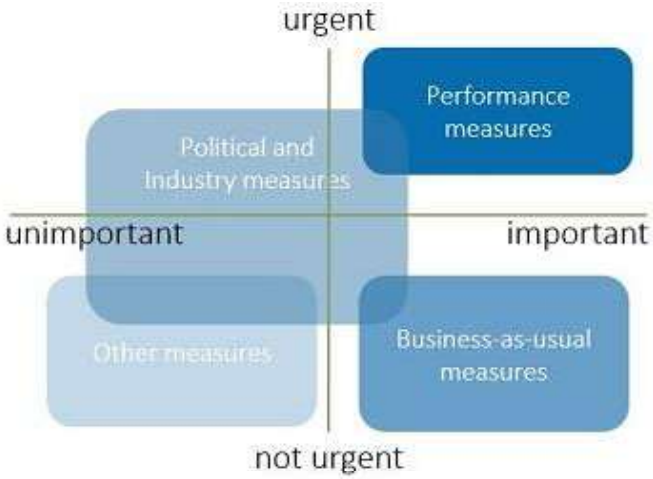
Object G:	Object D:	Object E:	Object F: for 2018	Object E:
Reach	The population can easily recognise the signs of lifestyle-diminishing chocoholism	% Population who correctly list the 3 signs of lifestyle-diminishing chocoholism	45%	Work with film and TV producers to integrate the 3 signs into subplots
	More chocoholics reach out for help	% Clinically diagnosed chocoholics who contact us	65%	Work with doctors to make referral to us easy and appealing
Easy Treatment Pathway	Chocoholics feel confident that treatment will work	% First contacts who enrol in a treatment program	70%	Create a fresh suite of treatment program promotional messages and materials that are entertaining and disarming
		Average days from diagnosis to treatment enrolment	14 days	
	Chocoholics cope well with the effects of their treatment	Average maximum lag time between treatment activities that a patient voluntarily participates in	24 hours	Work with our recent 'Chocohealthics' to design a variety of treatment activities that have low barriers to participation
High ROI	We save more chocoholics for the same funding	Average number of 'Chocohealthics' produced per million dollars of funding spent	5 years	Simplify administrative processes to remove bureaucratic lag times and bottlenecks

7.8.12.6 How to navigate through the measures universe

According to Barr (2015), there exist a universe of measures. It's the all-encompassing collection of anything an organisation happens to measure. Navigating through the

universe of measures, to decide how, when, why and whether to use each of them, can be a massively overwhelming task.

The following diagram depicts a model that can bring order to the chaos of the measures universe. The model uses the simple dimensions of 'importance to improve' and 'urgency to improve'.



7.8.12.6.1 Performance measures: important and urgent.

Performance measures are a subset within this universe of measures. They are measures of organisational results that are currently important and urgent to improve, given the current strategic direction. This strategic direction acts like a gravity that pulls the relevant measures from all levels in the organisation into alignment with the current goals.

7.8.12.6.2 Political measures: urgent but not always important.

Political measures are another subset within the universe of measures. They are measures of organisational results that are currently important to external stakeholders of the organisation, and therefore potentially urgent for the organisation to produce for these stakeholders.

More often than not, political measures are different from performance measures, because they align more to the strategic needs of the stakeholders and not to the strategic needs of the organisation. So, for the organisation itself, they are not necessarily important. They are an information product provided for external stakeholders.

7.8.12.6.3 Industry benchmark measures: urgent but not always important.

Industry benchmark measures are a subset of the universe of measures. They are measures of organisational results that are shared across similar organisations. Sometimes industry benchmark measures can be performance measures, but only when they align directly with the strategic direction of the organisation.

Industry measures tend to intersect a lot with political measures. So again, they monitor organisational results that aren't particularly important to improve, from the perspective of

the organisation itself. But there can be an urgency to produce them, for the sake of the external stakeholders they are important to.

7.8.12.6.4 Business-as-usual measures: important, but not urgent.

Business-as-usual measures are a subset of the universe of measures. These are measures of organisational results that might be important, but are not urgent to improve, in the context of the current business environment and strategic direction.

In the past, they might have been performance measures, and in the future, they might become performance measures. But only if they are direct evidence of a strategically important business result. So, at any given point in time, business as usual measures will not overlap with the current performance measures.

7.8.12.6.5 Everything else: not urgent and not important.

Every other measure in the universe of measures is like a piece of space junk. They are measures of things that aren't important to anyone, and aren't urgent to improve. Usually they come into existence because the data was there and someone thought it should be used, despite not having a clear use for it. Often, they are trivial counts of how much activity is being done.

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7.9 Annexure B: HR strategies explained

7.9.1 Strategic HRM

7.9.1.1 Strategic HRM defined

Strategic HRM is an approach that defines how the organisation's goals will be achieved through people by means of HR strategies and integrated HR policies and practices.

Strategic HRM is based on three propositions:

(a) The human resources or human capital of an organisation play a strategic role in its success and are a major source of competitive advantage;

(b) HR strategies should be integrated with business plans (***vertical integration***). As Allen and White (2007) stress, 'The central premise of strategic human resource management theory is that successful organisational performance depends on a close fit or alignment between corporate and human resource strategy.' Boxall et al (2007) also believe that 'The major focus of strategic HRM should be aligning HR with organisational strategies'; and

(c) Individual HR strategies should cohere by being linked to each other to provide mutual support (***horizontal integration***).

According to Truss and Gratton (1994:666) as quoted by Armstrong (2016: 38) SHRM can be regarded as an overarching concept that links the management and development of people to the organisation as a whole and its environment.

The ***first*** fundamental aim of SHRM (Armstrong, 2016: 39) is to generate capability by ensuring that the organisations has skilled, committed and well-motivated employees to achieve sustainability in delivering on its objectives. ***Secondly***, SHRM aims to achieve fit or integration - fitting or aligning HR strategies vertically with corporate strategies and integrating strategies with one another. ***Thirdly***, SHRM aims to provide a sense of direction so that organisations functional responsibilities, and the individual and collective needs of its employees, can be met by the development and implementation of coherent and practical HR policies and programmes.

7.9.1.2 Principles of strategic HRM

Strategic HRM supplies a perspective on the way in which critical issues or success factors related to people can be addressed, and strategic decisions are made that have a major and long-term impact on the behaviour and success of the organisation. As a means of developing integrated HR strategies, strategic HRM is facilitated to the extent to which the following seven principles are followed:

(a) There is an overall purpose and the human resource dimensions of that purpose are evident.

(b) A process of developing strategy within the organisation exists and is understood, and there is explicit consideration of human resource dimensions.

(c) Effective linkages exist on a continuing basis to ensure the integration of human resource considerations with the organisational decision-making process.

(d) The office of the chief executive provides the challenge for integrating human resource considerations to meet the needs of the business.

(e) The organisation of all levels establishes responsibility and accountability for human resource management.

(f) Initiatives in the management of human resources are relevant to the needs of the business.

(g) It includes the responsibility to identify and interact in the social, political, technological and economic environments in which the organisation is and will be operating.

7.9.2 Organisational design

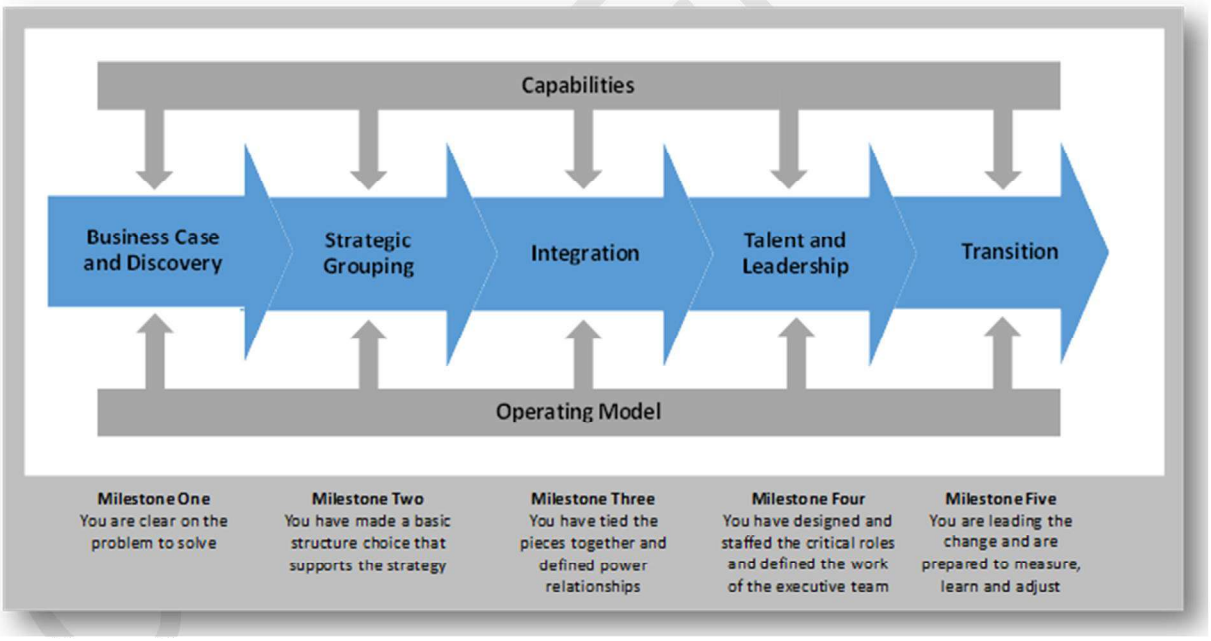
7.9.2.1 Definition

The two factors that determine how an organisation functions in relation to its internal and external environment are its structure and the processes that operate within it.

The structure of an organisation can be regarded as a framework for getting things done. It consists of units, functions, divisions, departments and formally constituted work teams into which activities related to particular processes, projects, customers, geographical areas or professional disciplines are grouped together. The structure indicates who is accountable for directing, coordinating and carrying out these activities and defines management hierarchies – the 'chain of command' – thus spelling out, broadly, who is responsible to whom for what at each level in the organisation.

7.9.2.2 Designing functional municipal organisations

Organisational design work according to Kessler & Kates (2011: 9-23), needs a roadmap, and the diagram below depicts a five-milestone process for organisational review and design. Milestones are used deliberately to focus on outcomes rather than activities.



(a) ***Milestone One*** indicates that leaders are clear on the problems to solve. This means the business case for change is determined. This is made up of the key elements of strategic priorities, an analysis of the current state of organisation, and a clearly defined set of design criteria.

(b) ***Milestone Two*** refers to the activities leading towards the outcome of Strategic Grouping. This is achieved by means of the chosen design drivers and developing and testing the best grouping options. This will postulate the design for operating governance and functional re-design.

(c) ***Milestone Three*** refers to the activities leading towards the outcome of Integration – the pieces are tied together and power relations are clear and functions re-designed.

(d) ***Milestone Four*** tells us that the talent and leadership requirements are expressed in critical roles that are designed and staffed, as well as that the work of staff are defined.

(e) ***Milestone Five***, focusing on the Transition, tells us that leaders are leading the change and are prepared to learn and adjust. An Implementation Plan is set to navigate the transition.

The rationale for following a specific sequence of first completing the functional structure before designing the organisational structure is to ensure that the principle of "form follows function" should be applied at all times. The "Functional Structure" should describe "What" and "Why" (legislation, policies, purposes, core functions and activities) the different units of the municipality must do; which then form the basis for the "Organisational Structure" ("How", i.e. organisational relationships, reporting lines, etc.) and by "Whom" (i.e. how many, type and levels of posts).

7.9.3 Organisational transformation

7.9.3.1 Defined

Organisational transformation is the process of ensuring that an organisation can develop and implement major change programmes that will ensure that it responds strategically to new demands and continues to function effectively in the dynamic environment in which it operates. Organisational transformation activities may involve radical changes to the structure, culture and processes of the organisation.

7.9.3.2 Types of transformational change

The four types of transformational change as identified by Beckhard (1989) are:

(a) a change in what drives the organisation;

(b) a fundamental change in the relationships between or among organisational parts – for example, decentralization;

(c) a major change in the ways of doing work – for example, the introduction of new technology such as computer-integrated manufacturing;

(d) a basic, cultural change in norms, values or research systems – for example, developing a customer-focused culture.

7.9.3.3 Transformation through leadership

Transformation programmes are led from the top within the organisation. They do not rely on an external 'change agent' as did traditional OD interventions, although specialist external advice might be obtained on aspects of the transformation such as strategic planning, reorganisation or developing new reward processes.

Transformational leaders go beyond dealing with day-to-day management problems; they commit people to action and focus on the development of new levels of awareness of where the future lies, and commitment to achieving that future. We can contrast transformational leaders with transactional leaders who operate by building up a network of interpersonal transactions in a stable situation and who enlist compliance rather than commitment through the reward system and the exercise of authority and power. Transactional leaders may be good at dealing with here-and-now problems but they will not provide the vision required to transform the future. Burns (1978)

7.9.4 Organisational culture

7.9.4.1 Definition

Organisational or corporate culture is the pattern of values, norms, beliefs, attitudes and assumptions that may not have been articulated but shape the ways in which people behave and things get done. Values refer to what is believed to be important about how people and the organisations behave. Norms are the unwritten rules of behaviour.

7.9.4.2 Organisational climate

The term organisational climate is sometimes confused with organisational culture and there has been much debate on what distinguishes the concept of climate from that of culture. In his analysis of this issue, Denison (1996) believed that culture refers to the deep structure of organisations, which is rooted in the values, beliefs and assumptions held by organisational members. In contrast, climate refers to those aspects of the environment that are consciously perceived by organisational members. Rousseau (1988) stated that climate is a perception and is descriptive. Perceptions are sensations or realizations experienced by an individual. Descriptions are what a person reports of these sensations.

7.9.4.3 The significance of culture

Furnham and Gunter (1993) say the following about culture: Culture represents the 'social glue' and generates a 'we-feeling', thus counteracting processes of differentiations which are an unavoidable part of organisational life. Organisational culture offers a shared system of meanings which is the basis for communications and mutual understanding. If these functions are not fulfilled in a satisfactory way, culture may significantly reduce the efficiency of an organisation.

7.9.4.4 The components of culture

Organisational culture can be described in terms of values, norms, artefacts and leadership or management style.

(a) Values are beliefs in what is best or good for the organisation and what should or ought to happen. The 'value set' of an organisation may only be recognized at top level, or it may be shared throughout the business, in which case it could be described as value driven. The stronger the values, the more they will influence behaviour.

(b) Norms are the unwritten rules of behaviour, the 'rules of the game' that provide informal guidelines on how to behave. Norms tell people what they are supposed to be doing, saying, believing and even wearing. They are never expressed in writing - if they were, they would be policies or procedures. They are passed on by word of mouth or behaviour and can be enforced by the reactions of people if they are violated. They can exert very powerful pressure on behaviour because of these reactions - we control others by the way we react to them.

(c) Artefacts are the visible and tangible aspects of an organisation that people hear, see or feel. Artefacts can include such things as the working environment, the tone and language used in letters or memoranda, the manner in which people address each other at meetings or over the telephone, the welcome (or lack of welcome) given to visitors and the way in which telephonists deal with outside calls.

(d) Leadership style, often called management style, describes the approach managers use to deal with people in their teams.

7.9.5 Human capital management

7.9.5.1 Definition

Human capital management (HCM) is concerned with obtaining, analysing and reporting on data that inform the direction of value-adding people management strategy. An HCM strategy is therefore closely associated with strategic HRM.

The defining characteristic of HCM is the use of metrics to guide an approach to managing people that regards them as assets. It emphasizes that competitive advantage is achieved by strategic investments in those assets through employee engagement and retention, talent management and learning and development programmes. HCM provides a bridge between HR and business strategy. It provides the basis for 'evidence-based human resource management'.

7.9.5.2 Aims of human capital management

The four fundamental objectives of HCM are:

(a) to determine the impact of people on the business and their contribution to value;
(b) to demonstrate that HR practices produce value for money in terms, for example, of return on investment;
(c) to provide guidance on future HR and business strategies;
(d) to provide data that will inform strategies and practices designed to improve the effectiveness of people management in the organisation.

7.9.6 Knowledge management

7.9.6.1 Definition

Knowledge management strategies aim to capture an organisation's collective expertise and distribute it to 'wherever it can achieve the biggest payoff' (Blake, 1988). A successful organisation is a knowledge-creating organisation.

7.9.6.2 The process of knowledge management

Knowledge management is 'any process or practice of creating, acquiring, capturing, sharing and using knowledge, wherever it resides, to enhance learning and performance in organisations' (Scarborough et al 1999). They suggest that it focuses on the development of firm-specific knowledge and skills that are the result of organisational learning processes. Knowledge management is concerned with both stocks and flows of knowledge. Stocks included expertise and encoded knowledge in computer systems. Flows represent the ways in which knowledge is transferred from people to people or from people to a knowledge database.

7.9.6.3 The purpose of knowledge management

The purpose of knowledge management is to transfer knowledge from those who have it to those who need it in order to improve organisational effectiveness. It is concerned with storing and sharing the wisdom and understanding accumulated in an organisation about its processes, techniques and operations. It treats knowledge as a key resource. It can be argued that, in the information age, knowledge rather than physical assets or financial resources is the key to effectiveness. In essence, as pointed out by Mecklenberg et al (1999), 'Knowledge management allows organisations to capture, apply and generate value from their employees' creativity and expertise.'

7.9.7 Corporate social responsibility (CSR)

7.9.7.1 Definition

Corporate social responsibility (CSR) is exercised by organisations when they conduct their business in an ethical way, taking account of the social, environmental and economic impact of how they operate and going beyond compliance. As defined by McWilliams et al (2006) CSR refers to the actions taken by businesses 'that further some social good beyond the interests of the organisation and that which is required by law'.

Strategic CSR is about deciding initially whether or not the firm should be involved in social issues and then creating a corporate social agenda - deciding what social issues to focus on and to what extent. As Porter and Kramer (2006) emphasize, strategy is always about choice.

7.9.7.2 CSR activities

CSR activities as listed by McWilliams et al (2006) include incorporating social characteristics or features into products and manufacturing processes, adopting progressive human resource management practices, achieving higher levels of environmental performance through recycling and pollution abatement and advancing the goals of community organisations. The following are common CSR activities and focus areas:

(a) ***Community*** - Skills and education, employability and social exclusion are frequently identified as key risks and opportunities. Other major activities were support for local community initiatives and being a responsible and safe neighbour.

(b) ***Environment*** - Most organisations focus on climate change and resource use as key issues for their business, and manage their impacts through an environmental management system.

(c) ***Economic influence*** - The issues most frequently mentioned by organisations are research and development, procurement and supply chain, responsible marketing and product safety. There is a rising focus on fair treatment of customers, providing appropriate service information and the impacts of products on customer health.

(d) ***Workplace*** - This is the strongest management performing area, as many organisations have established employment management frameworks that cater for workplace issues as they emerge. Organisations recognise the crucial role of employees to achieving responsible business practices. Increasing emphasis is placed on internal communications and training to raise awareness and understanding of why it is relevant to them and valuable for the organisation. Attention is also paid to health and well-being issues as well as the traditional safety agenda. Much are done on diversity, both to ensure organisations attracts a diverse workforce and to communicate the organisation care for diversity internally.

7.9.8 Organisational performance management

Armstrong 2016:196 defines performance management strategy as the intentions of an organisation on what it wants to do about performance management. Performance is often defined simply in output terms - the achievement of quantified objectives. But performance is a matter not only of what people achieve but how they achieve it. The concept of performance has been expressed by Brumbrach (1988) as follows:

> *Performance means both behaviours and results. Behaviours emanate from the performer and transform performance from abstraction to action. Not just the instruments for results, behaviours are also outcomes in their own right –*

the product of mental and physical effort applied to tasks – and can be judged apart from results.

7.9.8.1 Definition

Developing and implementing a strategy for the management of organisational performance is the continuing responsibility of top management who plan, organise, monitor, measure, analyse and review performance results to achieve strategic goals and objectives. Individual performance management systems play an important part; but they function within the context of what is done to manage organisational performance.

7.9.8.2 Performance Management and Performance Measurement

Two terms often used inter-changeably are performance management and performance measurement. Before performance can be improved, performance management processes need to be in place before measuring performance. The following definitions are provided:

(a) Performance Management is the practice of organizing, integrating, automating, and analysing organisational methodologies, processes, and systems to drive successful performance.

(b) Performance Measurement

- Performance Measure: the specific representation of a capacity, process, or outcome deemed relevant to the assessment of performance. A performance measure is quantifiable and can be documented.
- Performance Measurement: the process of developing measurable indicators that can be systematically tracked to assess progress made in achieving predetermined goals.

7.9.8.3 Essential systems that entrench good organisational performance measurement

According to Stacey Barr (2016), it is too often assumed that performance measurement depends on technical systems, like a business intelligence system or dashboard application. But for performance measurement to become entrenched in how our organisations work, it's the non-technical systems that matter most.

Performance measurement doesn't work just because we have a business intelligence system. Too many data warehouses and BI systems are bloated with unused data. And it doesn't depend on building a dashboard. Too many dashboards have been built and soon ignored, because they fail to give insightful information. These technical systems can certainly make performance measurement work better, but only when the non-technical systems are working well first. The following systems are significantly important in this regard:

7.9.8.3.1 The planning system.

The planning system is what sets the purpose and goals for the organisation, and all its parts. It's the way to set priorities for performance improvement. Without a clear direction, measurement has not focus and not boundaries. To work well, the planning system needs to make it clear what are the fewest things that are most worth measuring.

7.9.8.3.2 The belief system.

The beliefs about what performance measurement is really about, need to be clearly defined, openly spoken about, and actively role-modelled by leaders and managers. To work well, the belief system needs to be centred on continuous improvement and not on judgement and control.

7.9.8.3.3 The measure design system.

The system for choosing and creating measures is about getting the best evidence of how well the important goals are being achieved. To work well, the measure design system has to be a deliberate procedure that selects real performance measures to tightly monitor organisational goals and strategic objectives. And it needs to ensure those measures are implemented correctly and consistently.

7.9.8.3.4 The strategy cascading system.

The cascading of strategy is about engaging everyone in finding their place in the purpose of the organisation, and measuring the impact they have from that place. To work well, the cascading system needs to help each part of the organisation identify their biggest impact on the current strategic direction, and how they need to work on their processes and not just in them.

7.9.8.3.5 The strategy execution and performance improvement system.

Executing the strategy and continuously improving performance is about making changes happen; the changes that truly elevate performance and reach the goals that matter. To work well, the strategy execution and performance improvement system need to start with the measures, so energy is always going to the highest priorities. And they need to end with the measures, so the organisation can learn what works and what doesn't in achieving the goals that matter.

7.9.8.3.6 The accountability system.

Accountability is about having someone take ownership of a goal and its measures, because goals don't achieve themselves and improvements don't happen spontaneously. To work well, the accountability system needs to focus on people fulfilling the roles of monitoring the measures, validly interpreting them, and initiating action when action is needed. It shouldn't focus on hitting targets. No-one has that much control.

> ***"It is an immutable law in organisations that words are words, explanations are explanations, promises are promises but only performance is reality."*** *Harold S. Geneen*

When these non-technical systems are in place, there will be a much larger return on investment in the technical systems we so often associate with measuring performance.

7.9.9 Individual performance management

7.9.9.1 Definition

Individual performance management is a planned process of which the primary elements are agreement, measurement, feedback, positive reinforcement and dialogue. It is concerned with measuring outputs in the shape of delivered performance compared with expectations expressed as objectives. In this respect, it focuses on targets, standards and performance measures or indicators. It is based on the agreement of role requirements, objectives and performance improvement and personal development plans. (Armstrong 2006:497)

7.9.9.2 Performance appraisal and performance management

It is sometimes assumed that performance appraisal is the same thing as performance management. But there are significant differences. Performance appraisal can be defined as the formal assessment and rating of individuals by their managers at, usually, an annual review meeting. In contrast, performance management is a continuous and much wider, more comprehensive and more natural process of management that clarifies mutual expectations, emphasizes the support role of managers who are expected to act as coaches rather than judges, and focuses on the future. (Armstrong 2006:500)

7.9.9.3 Individual performance management as a process

Performance management should be regarded as a flexible process, not as a ‘system’. The use of the term ‘system’ implies a rigid, standardized and bureaucratic approach that is inconsistent with the concept of performance management as a flexible and evolutionary, albeit coherent, process that is applied by managers working with their teams in accordance with the circumstances in which they operate.

7.9.9.4 Individual performance management as a cycle

Performance management can be described as a continuous self-renewing cycle with the following parts:

(a) Planning: concluding a performance and development agreement.
(b) Acting: managing performance throughout the year.
(c) Reviewing: assessing progress and achievements so that action plans can be prepared and agreed and, in many schemes, performance can be rated.

7.9.10 HR risk management

7.9.10.1 Risks

Risks are inevitable and organisations have a moral and legal obligation to attend to the safety and well-being of those they serve, those who work for them and others who come into contact with their operations. This is known as "Duty of Care."

According to ISO 31000, risk is the “effect of uncertainty on objectives” and an effect is a positive or negative deviation from what is expected.

This definition recognizes that all of us operate in an uncertain world. Whenever we try to achieve an objective, there’s always the chance that things will not go according to plan. Every step has an element of risk that needs to be managed and every outcome is

uncertain. Whenever we try to achieve an objective, we don't always get the results we expect. Sometimes we get positive results and sometimes we get negative results and occasionally we get both. Because of this, we need to reduce uncertainty as much as possible.

Uncertainty (or lack of certainty) is a state or condition that involves a deficiency of information and leads to inadequate or incomplete knowledge or understanding. In the context of risk management, uncertainty exists whenever the knowledge or understanding of an event, consequence, or likelihood is inadequate or incomplete.

7.9.10.2 Risk management

Risk management refers to a coordinated set of activities and methods that is used to direct an organisation and to control the many risks that can affect its ability to achieve objectives.

According to the Introduction to ISO 31000 2009, the term risk management also refers to the architecture that is used to manage risk. This architecture includes risk management principles, a risk management framework, and a risk management process.

The management of risk is an essential part of corporate governance within a municipality. The Risk Management System utilised as an instrument to assist in strategic and operational planning, has many potential benefits in identifying opportunities and risks to the municipality achieving its strategic objectives as determined in the integrated development plan.

An effective Risk Management System will safeguard Councils interests and ensure the best use of limited municipal resources. By implementing and regularly reviewing the municipal Risk Management Strategy Council will not only achieve compliance with legislative requirements but also add value to its oversight and managerial processes.

7.9.10.3 Objectives of the Risk Management Strategy

To address risk management for the whole municipality and to give effect to the implementation of the Risk Management Strategy, Risk Policy, establishment of the Risk Management Committee, Risk Management Implementation Plan and Risk Management Systems. To inform and assist the executive and personnel on their roles and responsibility and to ensure that the risks relating to their particular area of control are managed to ensure that the best outcome is achieved

7.9.10.4 The risk management process

Risk management refers to a coordinated set of activities and methods that is used to direct an organisation and to control the many risks that can affect its ability to achieve objectives.

According to the Introduction to ISO 31000 2009, the term risk management also refers to the architecture that is used to manage risk. This architecture includes risk management principles, a risk management framework, and a risk management process.

7.9.10.5 Risk management plan

An organisation’s risk management plan describes how it intends to manage risk. It describes the management components, the approach, and the resources that will be used to manage risk. Typical management components include procedures, practices, responsibilities, and activities (including their sequence and timing). Risk management

plans can be applied to products, processes, and projects, or to an entire organisation or to any part of it.

7.9.10.6 Risk assessment

Risk assessment is a process that is, in turn, made up of three processes: risk identification, risk analysis, and risk evaluation.

Risk identification is a process that is used to find, recognize, and describe the risks that could affect the achievement of objectives.

Risk analysis is a process that is used to understand the nature, sources, and causes of the risks that you have identified and to estimate the level of risk. It is also used to study impacts and consequences and to examine the controls that currently exist.

Risk evaluation is a process that is used to compare risk analysis results with risk criteria in order to determine whether or not a specified level of risk is acceptable or tolerable.

7.9.10.7 Risk identification

Risk identification is a process that involves finding, recognizing, and describing the risks that could affect the achievement of an organisation's objectives. It is used to identify possible sources of risk in addition to the events and circumstances that could affect the achievement of objectives. It also includes the identification of possible causes and potential consequences. You can use historical data, theoretical analysis, informed opinions, expert advice, and stakeholder input to identify your organisation's risks.

7.9.11 Employment engagement

7.9.11.1 Definition

Engaged people at work are positive, interested in and even excited about their jobs and prepared to go the extra mile to get them done to the best of their ability. As defined by Towers Perrin (2007), the term employee engagement refers to 'the extent to which employees put discretionary effort into their work, beyond the minimum to get the job done, in the form of extra time, brainpower or energy'. An engagement strategy will address all the means that an organisation can use to promote this type of effort.

7.9.11.2 The significance of engagement

The significance of engagement is that it is at the heart of the employment relationship. It is about what people do and how they behave in their roles and what makes them act in ways that further the achievement of the objectives of both the organisation and themselves.

7.9.11.3 What is an engaged employee?

A detailed description was given by Robinson et al (2004), whose research indicated that an engaged employee is someone who:

(a) is positive about the job;

(b) believes in, and identifies with, the organisation;

(c) works actively to make things better;

(d) treats others with respect, and helps colleagues to perform more effectively;

(e) can be relied upon, and goes beyond the requirements of the job;
(f) sees the bigger picture, even sometimes at personal cost;
(g) keeps up to date with developments in his or her field;
(h) looks for, and is given, opportunities to improve organisational performance.

7.9.11.4 What are the factors influencing engagement?

Two key elements that have to be present if genuine engagement is to exist. The first is the rational aspect, which relates to employees' understanding of their role, where it fits in the wider organisation and how it aligns with business objectives. The second is the emotional aspect, which has to do with how people feel about the organisation, whether their work gives them a sense of personal accomplishment and how they relate to their manager.

These two overall aspects can be analysed into a number of factors that influence levels of engagement as set out below.

7.9.11.4.1 The work itself

Intrinsic motivation through the work itself, and therefore engagement, depends basically on the way in which work or jobs are designed. Three characteristics have been distinguished by Lawler (1969) as being required in jobs if they are to be intrinsically motivating:

(a) Feedback - individuals must receive meaningful feedback about their performance, preferably by evaluating their own performance and defining the feedback. This implies that they should ideally work on a complete product, process or service, or a significant part of it that can be seen as a whole.
(b) Use of abilities - the job must be perceived by individuals as requiring them to use abilities they value in order to perform the job effectively.
(c) Self-control (autonomy) - individuals must feel that they have a high degree of self-control over setting their own goals and over defining the paths to these goals.

7.9.11.4.2 The work environment

A strategy for increasing engagement through the work environment will be generally concerned with developing a culture that encourages positive attitudes to work, promoting interest and excitement in the jobs people do and reducing stress.

7.9.11.4.3 Leadership

The leadership strategy should concentrate on what line managers have to do as leaders in order to play their vital and immediate part in increasing levels of engagement. This will include the implementation of learning programmes that help them to understand how they are expected to act and the skills they need to use. The programmes can include formal training (especially for potential managers or those in their first leadership role), but more impact will be made by 'blending' various learning methods such as e-learning, coaching and mentoring.

It should also be recognized that a performance management process can provide line managers with a useful framework in which they can deploy their skills in improving performance though increased engagement.

7.9.11.4.4 Opportunities for personal growth

A strategy for providing development and growth opportunities should be based on the creation of a learning culture. This is one that promotes learning because it is recognized by top management, line managers and employees generally as an essential organisational process to which they are committed and in which they engage continuously.

Specifically, the strategy should define the steps required to ensure that people have the opportunity and are given the encouragement to learn and grow in their roles. This includes the use of policies that focus on role flexibility - giving people the chance to develop their roles by making better and extended use of their talents. This means going beyond talent management for the favoured few and developing the abilities of the core people on whom the organisation depends.

The strategy should also cover career development opportunities and how individuals can be given the guidance, support and encouragement they need if they are to fulfil their potential and achieve a successful career with the organisation in tune with their talents and aspirations.

7.9.11.4.5 Opportunities to contribute

Providing people with the opportunity to contribute is not just a matter of setting up formal consultative processes, although they can be important. It is also about creating a work environment that gives people a voice by encouraging them to have their say, and emphasizes as a core value of the organisation that management at all levels must be prepared to listen and respond to any contributions their people make.

7.9.12 Resourcing

7.9.12.1 Definition

An employee resourcing strategy is concerned with ensuring that the organisation obtains and retains the people it needs and employs them efficiently. It is a key part of the strategic human resource management process, which is fundamentally about matching human resources to the strategic and operational needs of the organisation and ensuring the full utilization of those resources. It is concerned not only with obtaining and keeping the number and quality of staff required but also with selecting and promoting people who ‘fit’ the culture and the strategic requirements of the organisation.

7.9.12.2 Objective of HRM resourcing strategy

The objective of HRM resourcing strategy, as expressed by Keep (1989), is ‘To obtain the right basic material in the form of a workforce endowed with the appropriate qualities, skills, knowledge and potential for future training. The selection and recruitment of workers best suited to meeting the needs of the organisation ought to form a core activity upon which most other HRM policies geared towards development and motivation could be built.’

7.9.12.3 The components of HRM resourcing strategy

Resourcing strategy provides the basis for the following plans within the framework of organisational needs. These are:

(a) Resourcing plans: preparing plans for finding people from within the organisation and/or for training programmes to help people learn new skills. If needs cannot be satisfied

from within the organisation, preparing longer term plans for meeting them by attracting high quality candidates as the 'employer of choice'.

(b) Flexibility plans: planning for increased flexibility in the use of human resources to enable the organisation to make the best use of people and adapt swiftly to changing circumstances.

(c) Retention plans: preparing plans for retaining the people the organisation needs

7.9.12.4 Estimating future human resource requirements

Scenario planning is in some situations as far as it is possible to go in estimating future people requirements, but where it is feasible and appropriate, attempts can be made to produce demand and supply forecasts, and to determine what action needs to be taken if the forecasts indicate the possibility of a human resource deficit or surplus.

7.9.12.5 Demand forecasting

Demand forecasting is the process of estimating the future numbers of people required and the likely skills and competences they will need. The ideal basis of the forecast is an annual budget and longer-term business plan, translated into activity levels for each function and department, or decisions on 'downsizing'.

The demand forecasting techniques that can be used to produce quantitative estimates of future requirements are listed below:

(a) Managerial or expert judgement

(b) Ratio trend analysis

(c) Work study techniques

(d) Forecasting skill and competence requirements

(e) Supply forecasting

7.9.12.6 Labour turnover

The analysis of the numbers of people leaving the organisation provides data for use in supply forecasting, so that calculations can be made on the number of people lost who may have to be replaced. More importantly, however, the analysis of the numbers of leavers and the reasons why they leave provides information that will indicate whether any action is required to improve retention rates. It can prompt further investigations to establish underlying causes and identify remedies.

7.9.12.7 Action planning

Action plans are derived from broad resourcing strategies and more detailed analysis of demand and supply factors. However, the plans often have to be short term and flexible because of the difficulty of making firm predictions about human resource requirements in times of rapid change. Plans need to be prepared in the areas of resourcing, flexibility and downsizing

7.9.13 Talent management

7.9.13.1 Definition

Talent management consisting of talent planning and development is a relatively new concept, only emerging in the 2000's. It derives from the phrase 'the war for talent', which

originated in the late 1990s as a means of highlighting the problems that organisations were having in attracting and retaining talented people.

Talent management is the use of an integrated set of activities to ensure that the organisation attracts, retains, motivates and develops the talented people it needs now and in the future. The aim is to secure the flow of talent, bearing in mind that talent is a major corporate resource.

7.9.13.2 The elements of talent management

Talent management starts with the business strategy and what it signifies in terms of the talented people required by the organisation. Ultimately, its aim is to develop and maintain a talent pool consisting of a skilled, engaged and committed workforce. Its elements are described below.

(a) The resourcing strategy
(b) Attraction and retention policies and programmes
(c) Talent audit
(d) Role development
(e) Talent relationship management
(f) Performance management
(g) Total reward
(h) Learning and development
(i) Career management

7.9.14 Learning and development

7.9.14.1 Definition

Learning and development strategies enable activities to be planned and implemented that ensure that the organisation has the talented and skilled people it needs and that individuals are given the opportunity to enhance their knowledge and skills and levels of competency. They are the active components of an overall approach to strategic human resources development (strategic HRD).

SHRD is defined by Walton (1999) as follows: 'Strategic human resource development involves introducing, eliminating, modifying, directing, and guiding processes in such a way that all individuals and teams are equipped with the skills, knowledge and competences they require to undertake current and future tasks required by the organisation.'

7.9.14.2 Strategic HRD aims

Strategic HRD aims to produce a coherent and comprehensive framework for developing people through the creation of a learning culture and the formulation of organisational and individual learning strategies. Its objective is to enhance resource capability in accordance with the belief that an organisation's human resources are a major source of advantage. It is therefore about developing the intellectual capital required by the organisation as well as ensuring that the right quality of people is available to meet present and future needs.

7.9.14.3 Elements of human resource development

The key elements of human resource development are:

(a) Learning - defined by Bass and Vaughan (1966) as 'a relatively permanent change in behaviour that occurs as a result of practice or experience'. As Kolb (1984) describes it, 'Learning is the major process of human adaptation.'
(b) Training - the planned and systematic modification of behaviour through learning events, programmes and instruction that enable individuals to achieve the levels of knowledge, skill and competence needed to carry out their work effectively.
(c) Development - the growth or realization of a person's ability and potential through the provision of learning and educational experiences.
(d) Education - the development of the knowledge, values and understanding required in all aspects of life rather than the knowledge and skills relating to particular areas of activity.

7.9.15 Reward

7.9.15.1 Definition

Reward strategy is a declaration of intent that defines what the organisation wants to do in the longer term to develop and implement reward policies, practices and processes that will further the achievement of its business goals and meet the needs of its stakeholders.

Reward strategy provides a sense of purpose and direction and a framework for developing reward policies, practices and processes. It is based on an understanding of the needs of the organisation and its employees and how they can best be satisfied. It is also concerned with developing the values of the organisation on how people should be rewarded and formulating guiding principles that will ensure that these values are enacted.

7.9.15.2 Why have a reward strategy?

Overall, in the words of Duncan Brown (2001), 'Reward strategy is ultimately a way of thinking that you can apply to any reward issue arising in your organisation, to see how you can create value from it.' More specifically, there are four arguments for developing reward strategies:

(a) You must have some idea where you are going, or how do you know how to get there, and how do you know that you have arrived (if you ever do)?
(b) Pay costs in most organisations are by far the largest item of expense – they can be 60 per cent and often much more in labour-intensive organisations – so doesn't it make sense to think about how they should be managed and invested in the longer term?
(c) There can be a positive relationship between rewards, in the broadest sense, and performance, so shouldn't we think about how we can strengthen that link?
(d) As Cox and Purcell (1998) write, 'the real benefit in reward strategies lies in complex linkages with other human resource management policies and practices'. Isn't this a good reason for developing a reward strategic framework that indicates how reward processes will be linked to HR processes so that they are coherent and mutually supportive?

7.9.16 Employee relations

7.9.16.1 Definition

Employee relations strategies define the intentions of the organisation about what needs to be done and what needs to be changed in the ways in which the organisation manages its relationships with employees and their trade unions. Like all other aspects of HR

strategy, employee relations strategies will flow from the business strategy but will also aim to support it.

Employee relations strategies should be distinguished from employee relations policies. Strategies are dynamic. They provide a sense of direction and give an answer to the question 'How are we going to get from here to there?' Employee relations policies are more about the here and now. They express 'the way things are done around here' as far as dealing with unions and employees is concerned.

7.9.16.2 Concerns of employee relations strategy

Employee relations strategy will be concerned with how to:

(a) build stable and cooperative relationships with employees that minimize conflict;

(b) achieve commitment through employee involvement and communications processes;

(c) develop mutuality – a common interest in achieving the organisation's goals through the development of organisational cultures based on shared values between management and employees.

7.9.16.3 The HRM approach to employee relations

The philosophy of HRM has been translated into the following prescriptions, which constitute the HRM model for employee relations:

(a) a drive for commitment – winning the 'hearts and minds' of employees to get them to identify with the organisation, to exert themselves more on its behalf and to remain with the organisation, thus ensuring a return on their training and development;

(b) an emphasis on mutuality – getting the message across that 'we are all in this together' and that the interests of management and employees coincide (i.e. a unitarist approach);

(c) the organisation of complementary forms of communication, such as team briefing, alongside traditional collective bargaining, i.e. approaching employees directly as individuals or in groups rather than through their representatives;

(d) a shift from collective bargaining to individual contracts;

(e) the use of employee involvement techniques such as quality circles or improvement groups;

(f) continuous pressure on quality – total quality management;

(g) increased flexibility in working arrangements, including multiskilling, to provide for the more effective use of human resources, sometimes accompanied by an agreement to provide secure employment for the 'core' workers;

(h) emphasis on teamwork;

(i) harmonization of terms and conditions for all employees.

7.9.17 HR service delivery strategy

7.9.17.1 HR service delivery model

The role of the HR function is to enable the organisation to achieve its objectives by taking initiatives and providing guidance and support on all matters relating to its employees. The basic aim is to ensure that the organisation develops HR strategies, policies and practices that cater effectively for everything concerning the employment and development of people and the relationships that exist between management and the workforce. The HR function can play a major part in the creation of an environment that enables people to make the

best use of their capacities and to realize their potential to the benefit of both the organisation and themselves.

Essentially, the HR function provides the advice and services that enable organizations to get things done through people. It is in the delivery business. Ulrich (1998) points out that: 'The activities of HR appear to be and often are disconnected from the real work of the organization.' He believes that ***HR 'should not be defined by what it does but by what it delivers'***.

The more sophisticated HR functions aim to achieve strategic integration and coherence in the development and operation of HRM policies and employment practices. Strategic integration could be described as vertical integration - the process of ensuring that HR strategies are integrated with or 'fit' corporate organisational strategies.

If HR is concerned - as it should be - with playing a major role in the achievement of continuous improvement in organizational and individual performance and in the HR processes that support that improvement, then it will be concerned with facilitating change. Ulrich (1997a) believes that one of the key roles of HR professionals is to act as change agents, delivering organizational transformation and culture change.

7.9.17.2 Variations in the Practice of HR

Adams (1991) identified four approaches to the role of the function, each of which can be seen as representing a 'kind of scale of increasing degrees of externalization, understood as the application of market forces to the delivery of HR activities':

(a) The in-house agency, in which the HR department is seen as a cost centre and the activities are cross-charged to other departments or divisions.
(b) The internal consultancy, in which the HR department sells its services to internal customers (line managers), the implication being that managers have some freedom to go elsewhere if they are not happy with the service that is being provided.
(c) The business within a business, in which some of the activities of the function are formed into a quasi-independent organisation that may trade not only with organisational units but also externally.
(d) External consultancy, in which the organisational units go outside to completely independent businesses for help and advice.

7.9.17.3 Structure the HR function

The organisation (structure) and staffing of the HR function depends on the size of the organisation, the extent to which operations are decentralized, the type of work carried out, the kind of people employed and the role assigned to the HR function.

There is no standard ratio for the number of HR specialists to the number of employees. The ratio can only be decided empirically by analysing what HR services are required and then deciding on the extent to which they are provided by full-time professional staff or can be purchased from external agencies or consultants. The degree to which the organisation believes that the management of human resources is the prime responsibility of line managers and team leaders affects not only the numbers of HR staff but also the nature of the guidance and support services they provide.

There are, therefore, no absolute rules for structuring the HR function, but current practice suggests that the following guidelines should be taken into account:

(a) The head of the function should report directly to the Municipal Manager, or at least be a member of the senior management or leadership team, in order to contribute to the

formulation of corporate strategies and play a full part in the formulation and integration of HR strategies and policies.

(b) In a decentralized organisation, divisions or operational units should be responsible for their own HR management affairs within the framework of broad strategic and policy guidelines from the centre.

(c) The HR function has to be capable of delivering the level of advice and services required by the organization. Delivery may be achieved by the direct provision of services but may be outsourced.

(d) The function should be organised in accordance with the level of support and services it is required to give and the range of activities that need to be catered for, which could include resourcing, management development, training, reward management, employee relations, knowledge management and HR services in such areas as health and safety, welfare, HR information systems and employment matters generally. In a large department, each of these areas may be provided for separately, but they can be combined in various ways.

(e) The structure and staffing of the HR function needs to take account of its role in formulating HR strategies and policies and intervening and innovating as required. But the function also has to provide efficient and cost-effective services. These cannot be neglected; the credibility and reputation of the function so far as line managers are concerned will be largely a function of the quality of those services to the HR department's internal customers. It is, in fact, important for members of the function to remember that line managers are their customers and deserve high levels of personal service that meet their needs.

The most important principle to bear in mind about the structure of the HR function is that it should fit the needs of the organisation.

7.9.17.4 Marketing the HR Function

Top management and line managers are the internal customers whose wants and needs the HR function must identify and meet. How can this be done?

It is necessary to understand the needs of the organisation and its critical success factors - where the organisation is going, how it intends to get there and what are the things that are going to make the difference between success and failure.

Persuade management that HR is a service the organisation needs. This means spelling out its costs and benefits, covering the financial and human resources required to develop, introduce and maintain it, and the impact it will make on the performance of the organisation.

7.9.18 HR technology (HRIS) strategy

As defined by Kettley and Reilly (2003) in Armstrong (2006:889), a computerized human resource information system consists of 'a fully integrated, organization-wide network of HR-related data, information, services, databases, tools and transactions'. Such a system can be described as 'e-HR', meaning 'the application of conventional, web and voice technologies to improve HR administration, transactions and process performance'. They suggest that the reasons for adopting e-HR are:

(a) HR service improvement;

(b) cost-cutting and operational efficiency;

(c) the desire of the HR function to change the nature of its relationship with employees and line managers;

(d) the transformation of HR into a customer-focused and responsive function;

(e) the offer of services that fit the new world of work and are attractive to current and future staff.

(f) According to IDS (2002), the benefits of a computerized human resource management system are:
- increased access to HR data;
- streamlined and standardized processes;
- more consistent and accurate data;
- a higher internal profile for HR.

The HR strategy of an organisation in relation to HR information is concerned ***firstly*** with the use of computerized information for strategic decision making, and ***secondly*** with the range of applications which should be included in the system and finally with the provision to line managers of the facility to have direct access to any personnel data they need to manage their own teams in a devolved organisation.

7.9.18.1 HRIS and strategic decision taking

The strategic areas involving computerized information and the knowledge gained from analysing that information include macro concerns about organisation, human resource requirements, and utilization of human resources, employee development and organisational health. Specifically, the information may focus on areas such as:

(a) Organisation development – how the structure may need to adapt to future needs and how IT can enable structural change, for example, high performance team structures;

(b) Human resource plans, especially those concerned with 'mapping' future competence requirements and enlarging the skills base;

(c) Determination of future development and training needs;

(d) Determination of the performance and personality characteristics of the people who will be successful in the organisation;

(e) Assessment of the 'health' of the organisation measured by climate surveys and turnover and absence statistics, leading to the development of motivation, retention and absence control strategies;

(f) Analysis of productivity levels as the basis for productivity improvement programmes;

(g) Analysis of the scope for cutting down the number of employees - taking unnecessary costs out of the organisation.

7.9.19 HR performance measurement

The value of the Human Resources (HR) Department within an organisation, resides in its capacity to fulfil its role as the primary enabler for human capital development and sustainability. Building a sustainable workforce today is a matter of developing manpower that can be both responsive and flexible to complex challenges and pressures within various working environments. Therefore, it is the Human Resource Departments' core attribute to ensure that relevant and innovative people policies, practices and systems are perfected, to the point that the HR capability becomes the partner that every organisation needs.

Long term performance and sustained effectiveness have seldom been achieved without retaining loyal, hardworking and motivated employees. Throughout this process, the Human Resources department has to realize the importance of actively implementing performance management tools to monitor key activities such as recruitment, talent management, succession planning or administrative work.

Performance management, through the use of Key Performance Indicators (KPI's), often enhances the role HR department's play in the organisation. In their strive to become strategic partners for the organisation, HR professionals turn to developing well-articulated strategies for their departments and to enable the strategy implementation through KPI's.

Given the variety of functions that HR Department serves in an organisation, a different set of KPI's can be identified for each function. The following functions presented cover some prominent facets of the HR division:

(a) Compensation and Benefits KPI's capitalize on the value of effectual reward systems.
(b) Efficiency and Effectiveness KPI's can be used in the measurement of productivity achievement.
(c) Service delivery KPI's reflect on the core attributes and responsibilities of the HR division.
(d) Recruitment KPI's reflect on the overall effectiveness of the recruitment process;
(e) Retention KPI's trigger emphasis on employee satisfaction, engagement and turnover;
(f) Talent Development KPI's focus on brandishing human capital potential in a manner that it maximizes its contribution to the overall performance of the organisation;
(g) Working Environment KPI's focus on the consolidation of a productive working environment that harnesses workforce performance;
(h) Workforce related KPI's reference upon its structure as part of an integrated performance management system;

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7.10 Annexure C: Sustainable organisation performance: HRM's strategic role

Sustainability is the key issue for HR and organisational leaders not only across the globe but also in South Africa, and the current environment has increases the need for organisations to focus on how they will ensure long-term sustainability for societal prosperity.

It is not enough for organisations to perform well in the short term; organisations need to sustain their performance over time, even throughout testing economic times. The importance of sustaining the organisation's people, financial, environmental and societal contribution over time therefore needs to be a top priority for HR and municipal leaders.

7.10.1 Themes relating to sustainable organisation performance

Recent global research indicates that there are eight themes deemed important for sustainable organisation performance. (CIPD: 2011a) These are indicated in the table below.

Theme	Definitions
Alignment	Perceptions of consistency, fit, links or integration between the values, behaviours or objectives of different stakeholders, both internal and external and with the organisation purpose.
Shared purpose	An organisation's purpose is its identity, the reason why it exists and the golden thread to which its strategy should be aligned. Shared purpose takes the connection with the organisational purpose one step further to be shared by all employees and often beyond, to include external stakeholders.
Leadership	Senior leaders articulate a future-oriented vision in an appropriate style that informs decision-making and empowers employees to achieve organisational effectiveness. The ability to lead, however, is not confined to senior leaders and can be demonstrated at all levels.
Locus of engagement	People can be engaged at different levels and with various aspects of the organisation or the work and their engagement can be transactional or emotional in nature.
Assessment and evaluation	To gather qualitative and quantitative information on processes that occur at different organisational levels, to assess the impact of actions and inform decision-making.
Balancing short- and long-term horizons	Active awareness, management and communication of both known and unknown organisational issues and pressures affecting the short term (of less than a one-year timeframe) while maintaining an active focus on longer-term priorities (with longer than a one-year timeframe).
Agility	The ability to stay open to new directions and be continually proactive, helping to assess the limits or risks of existing approaches and ensuring that leaders and followers have an agile and change-ready mind-set to enable them, and ultimately the organisation, to keep moving, changing, and adapting.
Capability-building	Equipping the people in the organisation with the skills and knowledge they need to meet both present and future challenges. Also identifying existing necessary and potential capabilities, ensuring they are accessible across the organisation. Capability-building applies not only to individuals, but also to teams and organisations.

Based on findings from longitudinal and comparative international studies by the CIPD (2011a), these eight themes are further elaborated upon in the sub-sections below.

7.10.1.1 Alignment

Alignment and sustainable organisation performance alludes to the degree to which employees' perceptions of the organisation, its aims and objectives are consistent and fit with other messages regarding values, behaviours and organisational priorities. It also holds the perceptions of different stakeholders that may be either internal - such as

employee groups, employee representatives, managers, and senior leaders; or external - such as customers, co-operating agencies or supplier organisations.

Alignment can go beyond people to include infrastructure, systems and processes. Various aspects of alignment that impacts on sustainable performance are indicated below:

(a) Job roles should be clearly aligned to higher-level objectives - One aspect of alignment is the degree of clarity individuals have about their own role and the extent to which they understand how this fits with the responsibilities of others and the contribution they are making to both organisational objectives and success. One vehicle for alignment is through cascading objectives, achieving a clear line of sight from organisation through manager, team and individual objectives.

(b) Attitudes and behaviour need to reflect organisational values - Alignment is more than simply ensuring objectives line up in a structural way. Objectives need to be clear, not just in terms of what performance levels are expected, but also the behaviours that are expected from people in achieving them. Values and attitudes are important shapers of culture and behaviour, so it is important they are aligned with each other and that they support activities critical to the organisation's performance, such as customer service or collaboration towards innovation.

(c) Systems and processes need to be aligned with organisational priorities - When systems and processes are not consistent with the organisation's priorities, this could be damaging or demotivating. This is particularly the case when employees felt that systems were out of sync with their objective of doing their best for customers or when they believed they were not given the space to try new ideas or ways of doing things.

(d) Internal alignment is critical - A strong theme is the importance of knowledge-sharing and cross-functional working. The benefits of this and of learning from others' experiences for efficiency and for providing a seamless service to the customer are advantageous. A lack of alignment around knowledge-sharing and cross-functional working cause frustration and impact on performance.

(e) Mindfulness of external alignment - A related issue is the extent to which organisations are aligned with the external world. This is particularly evident in those organisations either being or having strong links with the public sector, and specifically concerning pressures on costs.

(f) Relationships to other insights - The issue of alignment is closely related to shared purpose: with organisation alignment enhanced through having a common shared purpose. Alignment is also linked to an organisation's ability to respond to short- and long-term issues and to assessment and evaluation as it is important for organisations to have clear, cascaded objectives at all levels linked to the overall strategy for long-term performance.

7.10.1.2 Shared purpose

Organisation purposes need to be simple and clearly articulated so that individuals can make sense of them in their roles and reflect these in their behaviours. To enable sustainable organisation performance, employees also need to develop a strong (ideally emotional) shared connection or bond to an organisation's core purpose.

(a) Shared purpose is strongest when employee emotionally connect exist - Shared purpose seems strongest when employees developed an emotional connection with it. It is argued that this is easier for public sector organisations. However, it is best enhanced if employees are able to make sense of the organisation purpose, internalise it and practise it in their daily routines.

(b) Shared purpose is stronger when integrated into targets and performance - Organisations can strengthening shared purpose by developing ways of integrating shared objectives, values and behaviours into employees' targets and performance management systems.

(c) Shared purpose is important during periods of uncertainty and change - Developing a sense of shared purpose becomes is more important in a climate of uncertainty. As the public sector faces mounting pressures, those organisations that are able to align their (in some cases, new) purposes, values and goals for all employees will have a clear head start.

(d) Organisations need to balance the achievement of their core purpose with a focus on efficiencies - With increasing pressure to reduce costs and focus on efficiencies, organisations need to ensure that their core purpose is not negatively impacted. It is important that their core purpose must remain the same, but the way in which it is achieved might have to change.

(e) Shared purpose can be compromised by conflicting priorities or structural changes - Shared purpose can be significantly weakened by organisation environment changes such as different parts of the organisation having conflicted or even competing objectives. When this occurs, leaders need to re-assert the wider organisational purpose and future vision.

(f) Relationships to other insights - Shared purpose is closely aligned to both leadership and engagement. Leaders need to incite a strong sense of shared purpose and when achieved this keeps employees motivated and engaged by working towards the same ultimate goal. A strong sense of shared purpose can also ensure that various parts of the organisation stay in alignment with a common aim.

7.10.1.3 Leadership

Leadership is critical to sustainable organisation performance – it has a pivotal role in promoting change and agility. Distributed leadership is important for sustainable performance. Although leadership at all levels is certainly important, style is also significant.

Sustainable leadership is collaborative and connects people to the organisation purpose and vision. There are situations in the short-term where directive leadership may be considered appropriate, but this style is not sustainable and should not become a default setting. Leadership at all levels contributes to organisational sustainability, from employees taking responsibility for their own role and contribution at ground level, to senior leaders making sense of the environment and communicating the vision for change.

(a) Visible leadership and communication is a must in good and difficult times - senior management should increase their visibility at all times but especially during times of crisis, turbulence and change in the organisation.

(b) Line managers need to take an active role in coaching and providing encouragement - Line managers have a crucial role in coaching employees and providing them with guidance and feedback through change. Such positive feedback helps provide employees with the motivation they need to keep performing through periods of uncertainty and change.

(c) Line managers can help with sense-making - Line managers play an important role in making sense of change communications for themselves and their teams.

(d) Leaders need to empower others but set key principles and parameters - The need to empower and even 'license' employees to act is critical. So too is the need to ensure that employees are acting both with a common purpose and towards their organisation's

wider objectives. The balancing act is therefore to empower people as much as possible but to ensure they act within a framework of agreed key principles and parameters.

(e) There is a need for greater consistency of empowerment in organisations - While greater empowerment within parameters is desirable it needs to be consistent across organisations to make the best of people's ideas and avoid feelings of injustice. Front-line managers have to be empowered, given accountability and ownership, to do all aspects of their jobs effectively, especially when they have a lot of remote workers who don't always necessarily come into contact with the base location on a daily basis.

(f) Leaders need to develop a collaborative decision-making style - Collaborative leaders support sustainable performance. However, when the going gets tough leaders can often default to a driven and directive leadership style which can erode agility. Reinforcing a collaborative problem-sharing approach can drive longer-term, sustainable change, agility and engagement.

(g) Leadership skills are needed at all levels – It is now commonly recognised that leadership skills are not just the preserve of senior leaders but are needed at all levels in successful organisations.

(h) Relationships to other insights - There is a clear relationship between the quality and practices of leaders and engagement. Those organisations with visible and approachable senior leaders and line managers that act as coaches and sense-makers for employees have higher levels of engagement. Leaders also play a key role in creating alignment within organisations, both through their strategy-making and communications and shared purpose through their visioning.

7.10.1.4 Locus of engagement

Engaging employees is important for the long-term performance of organisations as they are more likely to 'go the extra mile' or put in extra effort. It is sometimes assumed that engagement is with the employing organisation. However, employees can be engaged on multiple levels: for example, with the organisation as a whole, with their line manager, with their team, their job role or their profession. Each of these levels is an example of a different locus of engagement. For sustainable performance, it is important to understand how, and with what, employees are engaged.

(a) Employees can be engaged with more than one locus at a time - Many employees appeared to be engaged on a number of levels at any one time. They might be engaged with their job role, the customer, their team or business unit, their own career or self-development and the organisation as a whole.

(b) Employees' locus of engagement is not static - Both the loci and the intensity of engagement are likely to differ over time, being influenced by a number of internal and external factors.

(c) Employees' locus of engagement may not translate to engagement with the organisation - Individuals can exhibit high levels of engagement overall but low levels of engagement to the organisation. This usually occurs where their locus of engagement is a work team or business unit that is seen as somehow remote or even at odds with the wider organisation.

(d) The line manager has a critical role, affecting engagement at different levels - One of the most important influences on engagement demonstrated is that of the line manager - specifically, their behaviour, attitude and performance. People become disengaged when they are not supported to carry out their role, and if line managers do not always treat people fairly and are slow to deal with poor performers, it can be very demotivating. In any organisation there will be a small minority of people who are disengaged and again the line manager has an important role in trying to re-engage them.

(e) Leader behaviour also affects employees' engagement - Employees' perceptions of organisational justice are linked to the behaviour of leaders. Employees are likely to be more engaged with the organisation and its purpose if they felt their leaders are also engaged. Sometimes referred to as authentic leadership, people are more likely to believe and trust what leaders say if they feel those leaders really believe in what they are saying.

(f) Too much engagement with a particular locus can be a blocker to change - Engagement can act as an enabler or blocker of performance.

(g) Perceptions of organisational injustice can be a performance blocker - Perceptions of unfairness acts as a blocker of performance. Such perceptions of organisational injustice could negatively impact employees' engagement with a range of loci. For example, when line managers' behaviour is inconsistent across teams, employees perceive some individuals as having greater access to career development or being given greater flexibility to exert their own judgement. While the engagement of those 'lucky' enough to work for the 'good' managers might be enhanced, for others this perception eroded their engagement. As well as eroding engagement with the line manager, the resulting perception of inequalities in the career development offered across the organisation can also erode employees' engagement with the organisation as a whole.

(h) The nature of engagement can be transactional or emotional - Transactional engagement being contractual in nature, with individuals fulfilling basic expectations in terms of getting the job done and looking after the interests of the organisation. They may be engaged because they believe this is what the organisation expects and this is what they need to do to stay in employment or be promoted to the next level. However, they are not necessarily emotionally engaged with the organisation.

(i) Emotional engagement is more deep-seated and occurs when people really identify with their work and are motivated by the desire to do a good job or do the right thing. People may be transactional engaged with certain loci and emotionally engaged with others.

(j) Relationships to other insights - An integral part of engagement is the extent to which organisations are able to engender a sense of shared purpose among their employees. Employees generally find it easier to engage with a shared purpose when they are able to emotionally connect with it. Engagement is also linked to alignment. If individuals can see and understand the extent to which their roles and objectives fits with organisational goals and how they contributed to the organisational purpose, they are more likely to develop a stronger sense of engagement.

(k) It is important for managers to be aware of what is important to employees and will motivate them over both the short and long term. For example, rewards and recognition may contribute to engagement in the short term, but career development, identification with the organisation purpose and being part of an engaged team may help drive engagement in the long term.

7.10.1.5 Assessment and evaluation

For many organisations, assessment and evaluation is a less developed area but one that is considered a high priority. Assessment and evaluation should be a continuous process, ensuring the right measures are developed and quantitative findings are evaluated alongside qualitative, contextual information to provide organisational insights. Through constant assessment and evaluation, it is possible to provide insights not only about past performance, but also to 'take the temperature' of the organisation at present. This

information can be used to inform future direction, therefore contributing to sustainable performance.

(a) Context affects how organisations assess their performance - The demands of the external context will affect the measures organisations pay most attention to. For example, the current external pressures to drive down costs are acting as a stimulus for organisations to improve in this area.

(b) It is important to strike the appropriate balance between collecting quantitative and qualitative data - Collecting qualitative data can help to inform and explain quantitative data. Qualitative data can also provide a depth of information that can be used to evaluate and inform operations when it is not possible to quantify outcomes.

(c) Too much, or the wrong emphasis on metrics, can impede productivity - People can get frustrated if they cannot see the information they record being used and feed back into the organisation. Having too many measures can lead to a focus on quantity over quality. Organisations need to balance stakeholder demands to focus on certain measures. With municipalities collecting data for regulators (national & provincial & municipal measures/indicators), to compare against government targets, a challenge for organisations is how to tie these performance measures with their own internal metrics.

(d) Capturing and analysing information is the first step in assessing and evaluating performance, but acting on the data collected is critical. Interpreting the data collected and feeding it back into the organisation is a weak area for many municipalities. Few are doing it effectively and it is viewed as a critical area for improvement. It is important to make use of the performance data. Bring alive and make it a real and valid a process rather than a pleasing compliance exercise once a year.

(e) Making data readily available to managers ensures more informed decision-making – Organisations which are strong on ensuring managers have the information needed, in an accessible and comprehensive format, informs decision-making and allocating resources more effectively. Better provision of management information has implications for resourcing and skills.

(f) The improved flow and use of information makes managers more accountable for what they and their team do and also more informed about the skills and resources they need to do it.

(g) Managers need to have the right skills to make sense of and interpret the data.

(h) As well as using data to evaluate past performance, it is important to draw insight from it to inform future activity - Organisations need to use the data they collect to inform future operations and to scenario-plan, enabling them to be more agile. Although many organisations are collecting data to evaluate performance and key initiatives, few are actually using this knowledge pool to generate insights that can inform future activity.

(i) Relationship with other insights - The assessment and evaluation of an organisation's different activities and processes will help to provide an overall sense of alignment through having cascaded measures. Different assessment and evaluation measures will also be linked to both the short- and long-term horizons. In addition, leadership needs to be interlinked with assessment and evaluation because leadership strategy and approach must be supported by meaningful data and its interpretation.

7.10.1.6 Balancing short- and long-term horizons

In order to be successful and sustainable, organisations need to be flexible in responding to the short-term imperatives of change while keeping sight of the long-term horizon.

(a) Context determines the length of the 'short' and 'long term' - Different organisations have varying timeframes that they plan and work to and this will be dependent on factors specific to their context. While corporate visions/missions may take a longer-term view, in practice it is not that easy to plan extensively into the future. Research, for example, finds that only 25% of strategic workforce plans look three years or more in advance. What organisations can do, however, is proactively scan for future trends that will impact the way they deliver their services or products.

(b) Organisations must anticipate and plan for future external and internal changes - For public sector organisations, the Government's spending review and resulting efficiency savings is understandably uppermost in their minds. The challenge here is to understand that the necessary cuts need to be made without losing sight of the long-term vision, while also recognising the need to ensure the consistent delivery of day-to-day services.

(c) Organisations need to be comfortable with uncertainty - A key theme prevalent in many public sector organisations is to be comfortable with uncertainty. Although a proactive stance needs to be taken in scanning future issues, in a period of economic uncertainty, senior managers have to accept that some things are simply out of their control: 'because you haven't really got a sense of the long term.'

(d) The ongoing communication of the organisation's vision and aims is important - Despite possible uncertainties, the ongoing communication of the organisation's vision and aims will help to provide focus for organisations and employees at all levels. It is important for keeping this alive and fresh for people and the importance of keeping both short- and long-term horizons uppermost in their minds.

(e) Sometimes the short term has to take priority, but short-term pressures can act as derailers - Many organisations are coming under increasing pressure to respond to short-term demands. These pressures related to a number of things, including spending cuts, contractual arrangements and increased regulatory scrutiny.

(f) Relationships to other insights - A strong interplay appears to exist between alignment, short and long term, and assessment and evaluation. The relationship between alignment and balancing the short and long term is clear – organisations need to ensure that they create and execute appropriate short- and long-term objectives and that these are clearly understood by all. For assessment and evaluation, balancing the short and long term presents some challenges. Organisations need to create both short- and long-term goals for evaluation and find ways of assessing comfort with uncertainty and good performance through uncertainty.

(g) It is also important for evaluation of the short term to be used to inform the long-term direction and future decisions. Finally, keeping a sharp focus on balancing the short and long term can help organisations become more agile.

7.10.1.7 Agility

The need for agility is essential for long-term performance, especially given the challenging set of circumstances that organisations currently face. It is important that people at all levels are actively encouraged to develop a change-ready mind-set and look for ways to improve how work is done.

(a) An appreciation of current organisational challenges enables an agile mind-set – It is important for organisations to prioritise communication between senior leaders and employees about the current organisational pressures and needs for change. Promoting this understanding among the workforce as a whole is seen as the first step in encouraging employees to 'buy in' to the necessary changes facing the organisation.

(b) Line managers play a key role in translating the formal messages for staff in terms of what is required of them as a team and in their individual job roles. As such, managers can start to encourage an open and agile mind-set, at a particular point in time.

(c) People at all levels need to be 'change-ready' in both good as well as challenging times if lasting organisational agility is to be. It is important to ensure that both leaders and employees have an agile and change-ready mind-set if the organisation is to take advantage of new opportunities and proactively adapt to changing circumstances and external challenges, rather than simply react.

(d) It is important to also consider an organisation's history when embedding agility - If an organisation is not accustomed to change, its history may act as a blocker to agility. For example, employees may not be used to challenging the status quo. All parts of an organisation need to be change-ready and support each other for true agility.

(e) A silo mentality between different parts of the organisation can undermine agility - A suggested action point for organisations is to promote cross-functional working. This helps to ensure that all parts of the organisation are working together as one and are aligned to the overall goals and vision. It can also increase efficiency through sharing knowledge and learning, which can help inform individuals of the limitations of current approaches and hence provide an evidence base for initiating change

(f) Organisations need to balance the demanding management of resources with organisational agility - Organisations need to balance the tension between the demanding management of resources required in testing times with the organisational agility to keep moving, changing, adapting. With fewer resources available, organisations should embrace the need to be more innovative and creative to do more with less.

(g) A focus on continuous improvement is good for the long term but you have to get the balance right - Many organisations are now required to focus on cost improvements, efficiencies and continuous improvement. Striving for continuous improvement is recognised as helping organisations to meet short- and long-term objectives, but this needed to be balanced with having the agility to change path if circumstances, objectives or resources altered.

(h) Relationships to other insights - There needs to be a strong interplay between agility and assessment and evaluation if an organisation is to make informed responses to both short- and long-term pressures. In addition, agility is closely linked to capability-building as people need to have the capabilities required to respond to new challenges and opportunities presented by a change in focus or direction. It is important that what employees are engaged with does not impede change and hence stifle agility. In sum, there is a fine balance between ensuring that aspects of an organisation are aligned and having an agile mind-set to enable the organisation to keep changing and adapting when appropriate.

7.10.1.8 Capability-building

It is important to regularly assess the skills of employees to ensure they are suitable for the needs of a team and ultimately the organisation. To enable sustainable organisation performance, organisations need to ensure they are embracing the capabilities needed for today, but also those for future success.

(a) Capability-building needs to be a continuous process - Organisations need to embed development and skills training as part of business as usual, rather than as a one-off activity. Maintaining a focus on ongoing capability-building is especially important in times of fast change.

(b) Building capability is an integral part of successful organisational development and change programmes - It is important for organisations to have a programme of work designed to promote the long-term performance of the organisation. In doing so, they will be mindful of the capabilities required of individuals and of the organisation as a whole to deliver on them.

(c) Management capability is essential – It is paramount to ensure that managers have both the people management and the right technical skills crucial for performance. I many organisations the anomaly it is found where employees, and even managers themselves, identify inconsistencies in managers' behaviours and actions, for example, with some being good at managing process but not at managing people.

(d) Different manager capabilities are required in difficult times - Managers need to have the skills and attributes to operate even in challenging times. During periods of change, managers have to deliver difficult messages to staff and people often look to their manager for emotional support. As such, they are pivotal to the success or failure of change programmes and thus building their capability in these areas is critical.

(e) Organisations need to be creative about how they build staff capability in testing times - Even when budgets are tight, it is essential that staff get the development they need to ensure they have the capabilities for their current job role as well as starting to build those the organisation will need in the future.

7.10.2 Strategic HRM and organisational performance

Strategic HRM (SHRM) can be regarded as a general approach underpinned by a philosophy to the strategic management of human resources in accordance with the intentions of the organisation on the future direction it wants to take. What emerges from this process is a stream of decisions over time that form the pattern adopted by the organisation for managing its human resources and define the areas in which specific HR strategies need to be developed. (Armstrong: 2016)

Strategic HRM aims to improve organisational performance through people and to meet the needs of the organisation's employees. Employee well-being is or should be a major concern, but organisations in all sectors (private, public or voluntary) have to be business-like in the sense that they are in the business of effectively and efficiently achieving their purpose whether this is to make profits, deliver a public service or undertake charitable functions.

7.10.2.1 People's impact on organisational performance

The assumption underpinning the practice of HRM is that people are the organisation's key resource and organisational performance largely depends on them. If, therefore, an appropriate range of HR policies and processes is developed and implemented effectively, then HR will make a substantial impact on organisational performance.

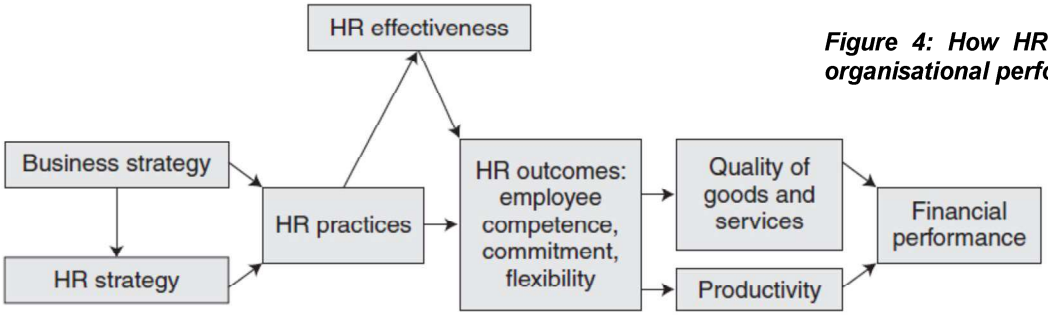


Figure 4: How HR impacts on organisational performance

The Holy Grail for human resource management is to establish a clear positive link between HRM practices and organisational performance.

7.10.2.2 HRM and the creation of performance culture

Organisational culture is an incredibly powerful factor in an organisation's long-term success. No matter how good your strategy is, when it comes down to it, people always make the difference. ***Strategy is rational and logical***. Strategy, at its core, is rational and logical, clear and simple. It should be easy to comprehend and to talk about. Without a clear strategy, an organisation is set to fail. ***Culture is human.*** Culture, on the other hand, means different things to different people. It is emotional, ever-changing, and complex. Culture is human and vulnerable as the people who define it. It can be intimidating and frustrating, often leaving leaders avoiding it, neglecting it, or discounting it.

Because so many organisations are run by people whose expertise is heavily skewed to the rational, financial, and legal side of the equation, culture is often subordinated, misunderstood, or unappropriated. The following depicts the intrinsic relationship between culture and strategy:

- Strategy drives focus and direction while culture is the emotional, organic habitat in which an organisation's strategy lives or dies;
- Strategy is just the headline on the organisation's story - culture needs a clearly understood common language to embrace and tell the story that includes mission, vision, values, and clear expectations;
- Strategy is about intent and ingenuity and culture determines and measures desire, engagement, and execution;
- Strategy lays down the rules for playing the game, and culture fuels the spirit for how the game will be played;
- Strategy is imperative for differentiation, but a vibrant culture delivers the strategic advantage;
- Culture is built or eroded every day. How you climb the hill and whether it's painful, fun, positive, or negative defines the journey;
- When culture embraces strategy, execution is scalable, repeatable, and sustainable;
- Culture is a clear competitive advantage; and
- Culture must be monitored to understand the health and engagement of your organisation.

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Figure 5: Strategy and Culture paths

7.10.2.3 Augmenting organisational culture

Most organisations aspire to build a performance culture. In South Africa municipalities have statutory obligations to enhance a performance culture.

High-performance organisations are those that can perform at a very high level in the domain it operates. Operations of such organisation is the fulfilment of its mission and the pursuit of its vision. What this means is that the organisation can do well at what it says it wants to do well at. It's true that there are municipalities that say they want to be excellent with service delivery, and do well in achieving that. There are also many municipalities that haven't made the world a better place to live in for their communities.

By believing that success is about excellent service delivery as an enabler for people and the planet, high-performance becomes more about the culture of the organisation, as well as the pursuit of the results it wants. This culture is one of ***continuous improvement***, measurement of performance, alignment with strategy, and consistently reaching targets. High-performance is a way of being, even more so than it is a place to be. It's a journey, more than it is a destination. It's about the behaviours even more than it is about the results.

7.10.2.4 5 steps for HR to build performance culture

Barr (2016) writes that many organisations aspire to build a performance culture, but this process must start with measuring the right things. In simple terms, she argues, that a high-performance organisation is one that can perform at a very high level in its domain.

If we believe that success is about prosperity as an enabler for people and the planet, high-performance becomes more about the culture of the organisation, as well as the pursuit of the results it wants. This culture is one of continuous improvement, measurement of performance, alignment with strategy, and consistently reaching targets. High-performance is a way of being, even more so than it is a place to be. It's a journey, more than it is a destination. It's about the behaviours even more than it is about the results.

Barr (2016) point out the following steps HR can engage with in organisations to establish a culture high-performance culture:

7.10.2.4.1 Practicing performance measurement is what enables a performance culture

Because they don't have a strong high-performance culture, many organisations will delay investment in the programs and processes that will instill the behaviours of measuring and improving what matters until there is a stronger performance culture. But the opposite is actually true: the organisation needs to invest in how it measures and improves what matters, right now. That's because the practice of measurement – done properly, of course - is transformational.

"*High-performance is a way of being, even more so than it is a place to be"*

In their HBR article, *Culture is Not the Culprit*, Jay W. Lorsch and Emily McTague rightly point out that fixing the culture is rarely the right solution to organisational performance problems. Rather, they described how leaders focused more on changing the way performance is practiced in order to shift the culture. The use of performance measures was one thing that the leaders used to shift the culture. They didn't wait for a performance culture to enable measurement. ***They used measurement to enable a performance culture.***

7.10.2.4.2 Stop measuring people

Culture is an outcome of, not an input to, organisational performance. And the way that performance measurement and performance improvement is practiced will have a direct impact on the culture that emerges. This has everything to do with what exactly is measured, and how exactly those measures are used. In HR, it's common to associate KPI's and measures with employee performance appraisal. But this is one of the most insidious constraints on the evolution of a performance culture.

If measures are used in the wrong way it end up driving all the wrong behaviours. People start to focus on the measure at the expense of the real objectives of the organisation. And the resulting behaviour varies from gaming the measure to downright unethical behaviours to 'hit targets'. It's about judgment of people. Measurement is then not about learning and improving organisational results. It's about judgment of people.

7.10.2.4.3 Performance culture is about working 'on', not just 'in'

If measures are used to monitor people's performance and reward or punish them, it's not hard to imagine the kind of culture that will emerge from that. People will not embrace accountability for performance. They will fear bad results and the blame that will come, and consequently will hide those bad results, turn attention to good news only, or do whatever it takes to hit the numerical targets. Trust, openness, and collaboration will deteriorate, and performance won't improve. If we want a true high-performance culture, the spotlight that measures radiate needs to be taken off people and shone on something else.

The shift is in what we hold people accountable for. Holding people accountable for hitting targets assumes people have full control over results. But the results are actually the product of organisational processes, policies and systems, and people have to work within the constraints of these. Reseach now indicate the overwhelming observation that most of

the constraints on organisational performance are in the processes, not the people. So we need people not just to work in their processes to get the results we want. We need people to work on those processes too, so the constraints can be identified and elevated to make the process more capable of producing the results we want.

7.10.2.4.4 Accountability needs to be redefined

Accountability can be framed in a more constructive way, a way that drives the right behaviour; the behaviours that create a performance culture. And this way has three parts to it. The ***first*** is to hold people accountable for monitoring the important results. When someone is responsible for a specific organisational result, like problem resolution or accuracy of advice or eliminating rework, they can be accountable for routinely monitoring that result with a performance measure. This drives the behaviour of people focusing on the results that matter.

Secondly, hold people accountable for validly interpreting the measures they own. When someone is responsible for monitoring a performance measure, they can be accountable for interpreting what that measure is telling them about the organisational result it measures. This drives the behaviour of people seeking feedback about how the results are actually tracking.

Thirdly, hold people accountable for initiating action when action is required. When someone is responsible for interpreting a performance measure they own, they can be accountable for deciding what kind of action is needed, if at all. This drives the behaviour of people working on their processes, and not just in them.

7.10.2.4.5 Measures are a tool in the hand, not a rod for the back

So if performance measures are used to monitor process results and diagnose how to elevate process performance, a different culture emerges. People will embrace accountability as the practice of problem solving, not judgment or blame. They will be curious and collaborative, and consequently will appreciate how to work on the organisation and not just in it. Ownership and transparency will increase, and performance will improve.

When performance measures are a tool in people's hands, to inform and empower and enable them, the performance culture is in motion!

7.10.3 Governance of Human Resources Management

HRM and HR governance revolves around leadership, sustainability and corporate citizenship. To simplify understanding of this notion, the following key aspects are emphasised.

7.10.3.1 HR Governance defined

HR governance is the act of oversight of the HRM function and related administrative arrangements to:

(a) Optimize performance of the organisation's human capital assets;

(b) Fulfil statutory and financial responsibilities;

(c) Mitigate organisational HR risk;

(d) Align the function's priorities with those of the organisation; and

(e) Enable HR executive management and decision making.

Governance is not a strategic objective. It is a systematic approach to Management and Councils that enables the HR function to achieve strategic and operational objectives. ***Figure 6*** illustrates the relationship between organisational, human capital, and HR functional strategies that influence HR's operating model and inform its governance system.

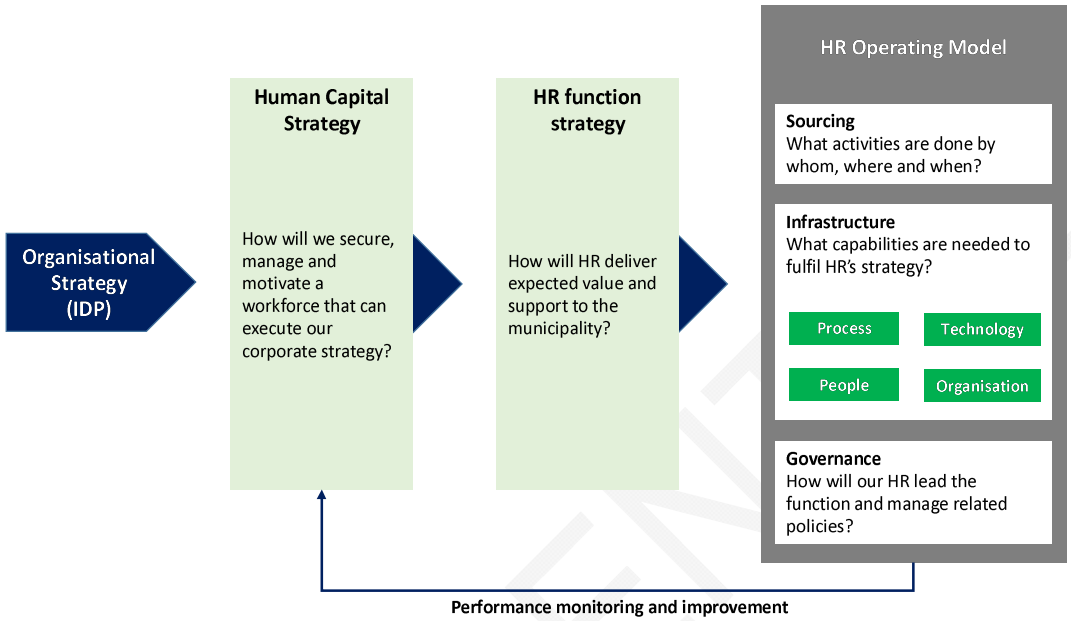


Figure 6: How HR governance aligns with organisational strategies

7.10.3.2 The Elements of HR Governance

7.10.3.2.1 Structure and accountability

Structure and accountability outline the composition and policies of the guiding group (council and management) as well as its relationships with involved stakeholders. Policies usually articulates the Council's and SMT's focus areas based on strategic, operational, and functional accountabilities. The policies may also address roles, meeting structures, and protocols.

7.10.3.2.2 Effective oversight

Effective oversight link strongly to organisational structure and refer to the personal, interpersonal, and group effectiveness of the SMT and other involved stakeholders.

7.10.3.2.3 Philosophy and operating principles

Philosophy and operating principles describes in policies, at a minimum, the function's risk tolerance, approach to delegating authority, and expected level of management autonomy at organisational unit levels.

7.10.3.2.4 Core management activities

Core management activities include HR strategy development, staff establishment planning, recruitment, oversight of remuneration and rewards, HR resource allocation, employee wellness, staff performance measurement, HR staff development and succession. Through these core management activities, the Council and SMT sets

direction and priorities, ensures effective execution over time, and enforces internal controls.

7.10.3.2.5 HR performance monitoring

Performance monitoring refers to the framework and metrics used to evaluate and communicate the HR function's operational effectiveness, compliance, and contribution to organisational success.

7.10.4 HRM capability maturity

Capability maturity models guide organisations in improving amongst others their processes for managing and developing their workforces. These models help organisations in relation to human resources to characterize the maturity of their workforce practices, establish a programme of continuous workforce development, set priorities for improvement actions, integrate workforce development with process improvement, and establish a culture of excellence. The following sub-sections describe two such models for purposes of comparison.

7.10.4.1 People Capability Maturity Model

The People Capability Maturity Model (People CMM) is a proven set of human capital management practices that provides an organisational change model through an evolutionary framework based on a system of HRM practices. It is designed on the premise that improved HRM practices will not survive unless an organisation's behaviour changes to support them. The People CMM is a process-based model; it assumes that HRM practices are standard organisational processes that can be improved continuously through the same methods that have been used to improve other business processes. The People CMM is constructed from HRM practices and process improvement techniques that have proven effective in many organisations. (Carnegie Mellon University 2009: 4)

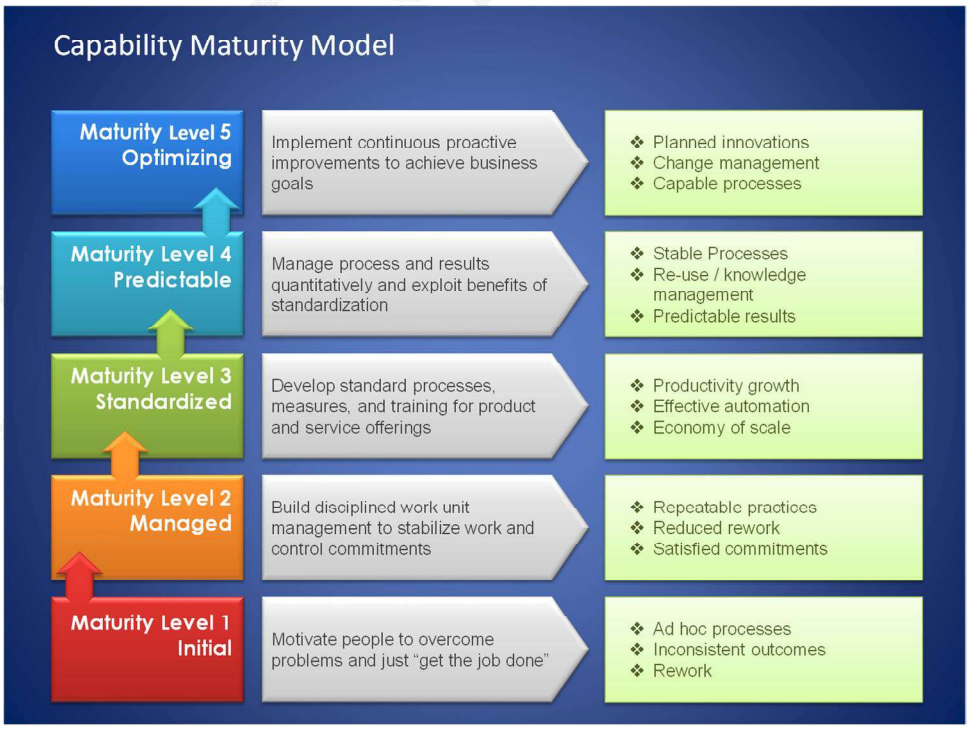


Figure 7: Capability maturity levels

7.10.4.1.1 Capability Maturity Model

A capability maturity model is an evolutionary roadmap for implementing the vital practices from one or more domains of organisational process. Most CMM's are constructed with four to five levels of maturity. A maturity level is an evolutionary plateau at which one or more domains of the organisation's processes have been transformed to achieve a (new) level of organisational capability. A maturity level consists of related practices for a predefined set of process areas that improve the organisation's overall performance.

7.10.4.1.2 Maturity levels

A maturity level represents a new level of organisational capability created by the transformation of one or more areas of an organisation's processes. The People CMM applies the principles of the process maturity framework to the domain of HRM practices. Each of the People CMM's five maturity levels represents a different level of organisational capability for managing and developing the workforce. Each maturity level provides a layer in the foundation for continuous improvement and equips the organisation with increasingly powerful tools for developing the capability of its workforce.

7.10.4.1.3 Behavioural Characteristics of Maturity Levels

The People CMM stages the implementation of increasingly sophisticated workforce practices through these maturity levels. With the exception of the Initial Level, each maturity level is characterized by a set of interrelated practices in critical areas of workforce management. When institutionalized and performed with appropriate regularity, these workforce practices create new capabilities within the organisation for managing and developing its workforce.

(a) **The Initial Level: Maturity Level 1** - Organisations at the Initial Level of maturity usually have difficulty retaining talented individuals. Despite the importance of talent, HRM practices in low-maturity organisations are often ad hoc and inconsistent. In some areas, the organisation has not defined HRM practices, and, in other areas, it has not trained responsible individuals to perform the practices that exist. Organisations at the Initial Level typically exhibit four characteristics:

1. Inconsistency in performing practices
2. Displacement of responsibility
3. Ritualistic practices
4. An emotionally detached workforce

Generally, managers and supervisors in low-maturity organisations are ill prepared to perform their HRM responsibilities. Their management training is sparse and, when provided, tends to cover only those HRM practices with the greatest legal sensitivity. The organisation may typically provide forms for guiding HRM activities such as performance appraisals or position requisitions. However, too often little guidance or training is offered for conducting the activities supported by these forms.

Low-maturity organisations implicitly assume that management skill is either innate or is acquired by observing other managers. However, if managers are inconsistent in managing their people, nascent managers will be learning from inconsistent role models. Management capability should ultimately be defined as a competency, just like other critical skill sets that are required by the organisation.

Since low-maturity organisations rarely clarify the responsibilities of managers, inconsistencies are to be expected. Consequently, the way people are treated depends

largely on personal orientation, experience, and the individual "people skills" of their managers, supervisors, or team leaders.

Managers in low-maturity organisations rarely share a common vision about the fundamental responsibilities of management. They perceive management to be about producing results, not about producing people who produce results. Although managers in low-maturity organisations accept responsibility for the performance of their unit, many do so without understanding how to manage the collective performance of those in the unit.

(b) **The Managed Level: Maturity Level 2** - The HRM practices implemented at the Managed Level focus on activities at the unit level. The first step toward improving the capability of the workforce is to get managers to take workforce activities as high-priority responsibilities of their job. They must accept personal responsibility for the performance and development of those who perform the unit's work.

The practices implemented at Maturity Level 2 focus a manager's attention on unit-level issues such as staffing, coordinating commitments, providing resources, managing performance, developing skills, and making compensation decisions. Building a solid foundation of HRM practices in each unit provides the bedrock on which more sophisticated workforce practices can be implemented at higher levels of maturity.

In a Maturity Level 2 organisation, managers are vigilant for problems that hinder performance in their units. Frequent problems that keep people from performing effectively in low-maturity organisations include:

1. Work overload
2. Environmental distractions
3. Unclear performance objectives or feedback
4. Lack of relevant knowledge or skill
5. Poor communication
6. Low morale

(c) **The Defined Level: Maturity Level 3** - Organisations at the Managed Level find that, although they are performing basic HRM practices, there is inconsistency in how these practices are performed across units and little synergy across the organisation. The organisation misses opportunities to standardize HRM practices because the common knowledge and skills necessary to conduct its business activities have not been identified.

At Maturity Level 2, units are identifying critical skills to determine qualifications for open positions, evaluate training needs, and provide performance feedback.

Once a foundation of basic HRM practices has been established in the units, the next step is for the organisation to develop an organisation-wide infrastructure building on these practices that ties the capability of the HRM to strategic corporate objectives. The primary objective of the Defined Level is to help an organisation gain a competitive advantage by developing the various competencies that must be combined in its workforce to accomplish its core competency activities. These workforce competencies represent the critical pillars that support the strategic business plan; their absence poses a severe risk to strategic business objectives. In tying workforce competencies to current and future business objectives, the improved HRM practices implemented at Maturity Level 3 become critical enablers of effective corporate strategy.

A common organisational culture typically develops as the organisation achieves the Defined Level. This culture is best described as one of professionalism, since it is built

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from common understanding of the knowledge and skills that need to be developed to achieve superior levels of performance and a definition of the competency-based processes that such individuals perform. Since these HRM competencies are strategic to the business, the organisation reinforces their importance by developing and rewarding them. As a result, the entire organisation begins to share responsibility for developing increasing levels of capability in the organisation's HRM competencies.

(d) **The Predictable Level: Maturity Level 4** - An organisation at the Defined Level has established an organisational framework for developing its workforce. At the Predictable Level, the organisation manages and exploits the capability created by its framework of workforce competencies. This framework is sustained through formal mentoring activities. The organisation is now able to manage its capability and performance quantitatively. The organisation is able to predict its capability for performing work because it can quantify the capability of its workforce and of the competency-based processes they use in performing their assignments.

(e) **The Optimizing Level: Maturity Level 5** - At the Optimizing Level, the entire organisation is focused on continuous improvement. These improvements are made to the capability of individuals and workgroups, to the performance of competency-based processes, and to workforce practices and activities. The organisation uses the results of the quantitative management activities established at Maturity Level 4 to guide improvements at Maturity Level 5. Maturity Level 5 organisations treat change management as an ordinary business process to be performed in an orderly way on a regular basis.

7.10.4.1.4 The Process Areas of the People CMM

Each maturity level of the People CMM, with the exception of the Initial Level, consists of three to seven process areas. Each process area (PA) identifies a cluster of related practices that, when performed collectively, achieve a set of goals considered important for enhancing workforce capability. These are illustrated in the tables below:

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Level	Focus	Process Areas
Optimized	*Continuous improvement*	Continuous workforce innovation Organizational performance alignment Continuous capability improvement
Predictable	*Quantifies and manages knowledge, skills and abilities*	Mentoring Organizational capability management Quantitative performance management Competency-based assets Empowered workgroups Competency integration
Defined	*Identifies and develops knowledge, skills and abilities*	Participatory culture Workgroup development Competency-based practices Career development Competency development Workforce planning Competency analysis
Managed	*Repeatable, basic people management practices*	Compensation Training and development Performance management Work environment Communication and coordination Staffing
Initial	*Inconsistent practices*	

Figure 8: CMM process areas

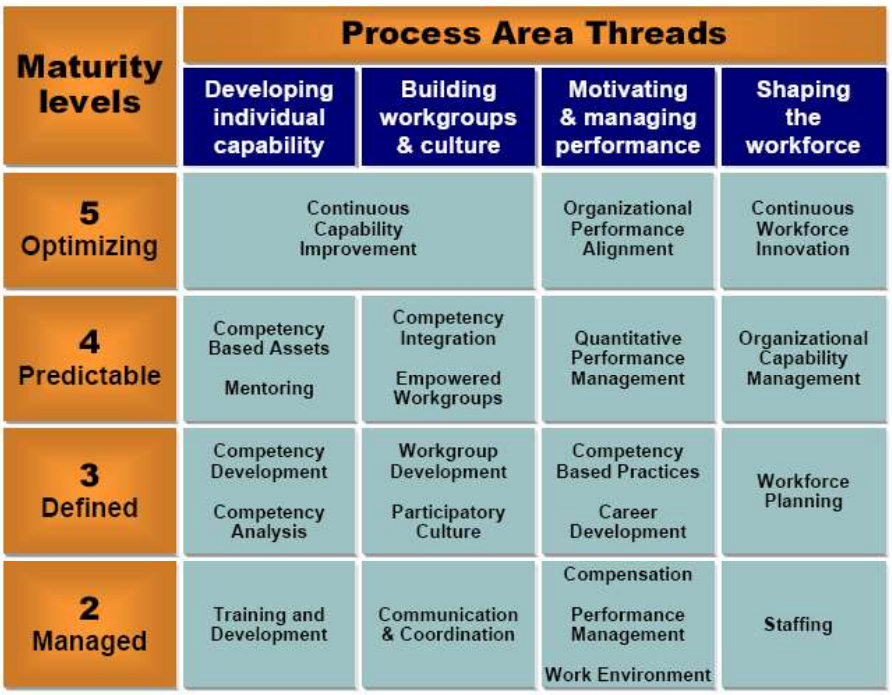


Figure 9: CMM process threads

7.10.4.2 The SALGA HRM&D Maturity Model

SALGA (2013) states that the need for a HRM&D maturity model for local government has escalated due to the primary fact that Municipalities are different. They differ in size, location, resources and hence their operating levels sit at different levels of a spectrum. The notion of a HRM&D maturity model is congruent with the needs and requirements of Local Government.

7.10.4.2.1 The Proposed HRM&D Maturity Model

According to the SALGA approach HRM&D capability has been separated into four progressive stages:

c) Transaction-driven HRM&D
d) Fundamental HRM&D Services
e) Institutional HRM&D, and
f) Developmental HRM&D.

These are demonstrated in the diagram below:

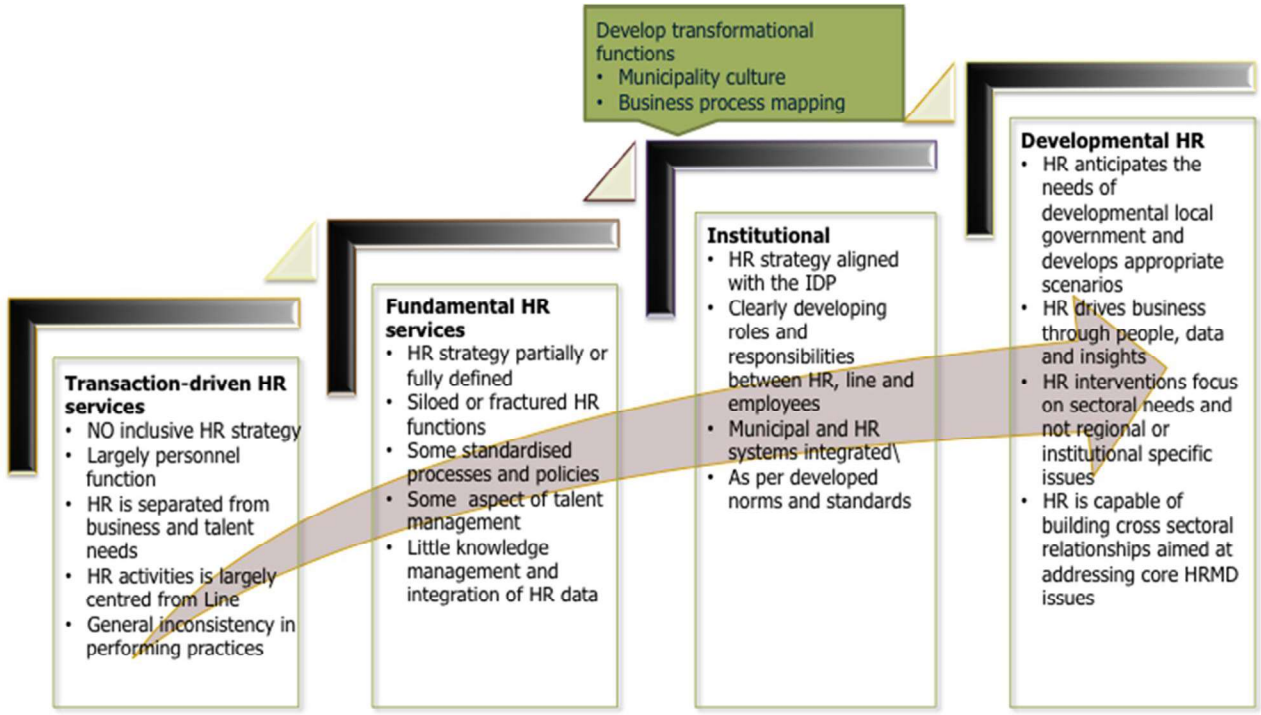


Figure 10: SALGA maturity levels

7.10.4.2.2 Municipal HR Systems Standards Model

The progressive stages of the Maturity Model have been assimilated with the drivers of the HRM&D value chain to create a local government maturity model with various elements, which culminated in measuring maturity aligned with the features of so-called Municipal HR Systems Standards Model. This model is in its entirety based on the HR Management System Standard Model of the South African Board for People Practices (SABPP). The model contains 13 standard elements (or focus areas) grouped by the classic quality assurance model of Plan, Implement, Review and Improve - as depicted below.

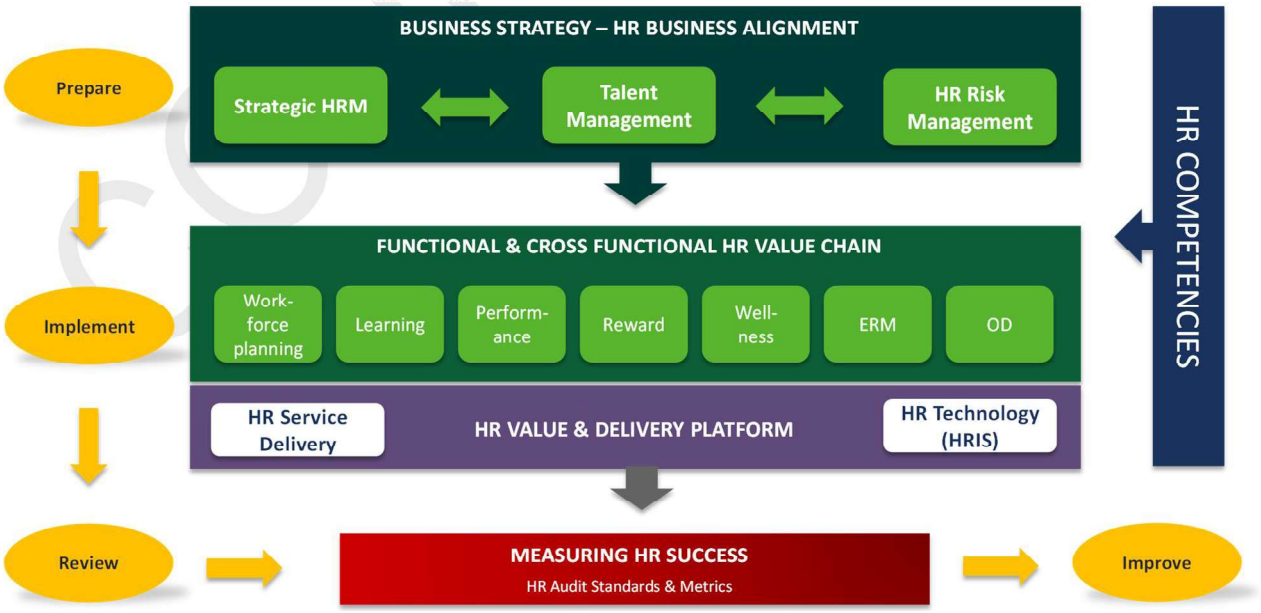


Figure 11: SABPP - HR Management System Standard Model

SALGA (2016: 1-2)) subsequently identified 15 HR standard elements as agreed by HR Practitioners in the industry are as follows:

a) Business strategy – HR alignment
    1. Strategic HRM
    2. Talent management
    3. HR Risk Management
b) Functional/cross functional HR value chain
    4. Workforce planning
    5. Learning & Development
    6. Performance management
    7. Reward
    8. Wellness
    9. Employment Relations Management
    10. Organisation Development
    11. HR Service Delivery
    12. HR Technology
    13. HR Environmental
    14. Macro and Environmental Capacity Building
c) Measurement
    15. HR Measurement

SALGA (2016:3) states that these Municipal Standards establish a common set of criteria for the management of human resources within all South African organisations, irrespective of size, sector or industry. This is a national standard for all organisations in South Africa.

The Municipal HR Management System Standards emphasises the importance of human resource management as a leadership imperative and management instrument for monitoring and verifying the effective implementation of an organisation's HR strategy. Establishing standards is also an essential part of conformity assessment activities such as external certification/registration and of supply chain evaluation and compliance. Essentially, if you meet the national HR standard, but your suppliers don't, your business could be adversely affected, hence the need for a national HR standard. (SALGA 2016:3)

The Municipal Standards provide guidance on the management of HR management programmes, the conduct of HR management systems, and on the competence of HR professionals applying the standards, as well as providing a framework for HR service providers operating as consultants and learning providers. The standards are intended to apply to a broad range of potential users, including organisations implementing human resource management systems for the first time; organisations needing to conduct benchmarking of existing management systems for contractual reasons; and organisations needing to include HR into internal audit and risk assessment processes. (SALGA 2016:3)

7.10.5 HR Standards

HR Management Standards (Standards) are intended to inspire, educate and support councillors, managers and employees with regard to the fundamental role HR management policies and practices have in creating effective organisations. Standards are designed and

presented to in developing effective HR management policies and practices. Organisations can use these Standards to:

a) Examine their current policies and practices;
b) Determine what needs to be changed; and then
c) Determine how the Standards can be used to improve the organisation's policies and practices in order to enhance the organisation's performance.

7.10.5.1 Principles

The following principles articulate the broad framework and intent of Standards and guided the development of the specific standards:

d) ***Reinforce compliance with legal requirements*** - Being compliant with relevant legislation is the absolute minimum standard that organisations must achieve. The Standards reinforce compliance but also provide a rationale as to why organisations should do more than the minimum.
e) ***Support active and positive approaches to working with employees*** - Rather than being reactive to continuing problems, the Standards provide managers with information to establish processes and practices that encourage and support employees in their current and future work.
f) ***Contribute to a fair and equitable work environment*** - The Standards set the stage for developing processes that are clear, known and applied consistently so that expectations in performance and relationships essential to an effective workplace are established and promoted.
g) ***Integrate with standards that support organisational excellence in governance and accountability*** - HR management practices do not function in isolation, but are part of the organisation's overall approach to interacting with the public and other organisations. HR Management Standards must be integrated with other standards, such as good governance, ethical conduct and financial accountability.
h) ***Act as a foundation for individual learning and organisational improvement*** - Standards support organisations in identifying areas for improvement and to make a clear link between employee performance and organisational results.
i) ***Provide tools that will build organisational effectiveness*** - By implementing Standards, organisations make a demonstrable commitment to excellence and allocating resources to ensure capacity is built and sustained and that their mandate is accomplished.

7.10.5.2 SALGA's Municipal HR Standards

The Draft Municipal HR Management System Standards (SALGA: 26 September 2016) proposed by SALGA will be utilised in HR strategies and plans for the CWDM. The following paragraphs are verbatim abstractions from the same SALGA reference.

These Municipal HR Standards provide guidance on the management of HR management programmes, the conduct of HR management systems, and on the competence of HR professionals applying the standards, as well as providing a framework for HR service providers operating as consultants and learning providers.

The standards are intended to apply to a broad range of potential users, including organisations implementing human resource management systems for the first time; organisations needing to conduct benchmarking of existing management systems for contractual reasons; and organisations needing to include HR into internal audit and risk assessment processes.

The HR Standard can also be useful to organisations involved in certification/registration of management systems, in accreditation or in standardisation in the area of conformity assessment.

7.10.5.2.1 Continuous improvement

These Standards establish the elements of a continuous improvement process to develop, implement and maintain an effective HRMS. Continual improvement is a set of recurring activities that an organisation carries out in order to enhance its ability to meet requirements. Continual improvements can be achieved by carrying out audits, self-assessments, management reviews, and benchmarking projects. Continual improvements can also be realised by collecting data, analysing information, setting objectives, and implementing corrective and preventive actions.

Within the spirit of integration and continuous improvement, the HRMS is also intended to provide practice standards in support of the National HR Competency Model. In this way, an integrated standards and competence-based approach is used. The implication is that HR practitioners need the right competencies in order to implement the HRMS.

7.10.5.2.2 Roles and responsibilities

HR professionals in all organisations will be responsible for implementing the standard in the workplace.

The SABPP will provide auditors to conduct external audits within organisations. A clear process, criteria and evidence requirements will be developed to assist in this process.

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