



**Western Cape  
Government**

**BETTER TOGETHER.**

## **Western Cape Provincial Spatial Development Framework**

March 2014



## PREFACE

The Western Cape Government is on record in stating that a key objective of any strategic plan or policy agenda must be to reduce poverty through a virtuous cycle of growth and development. In short, any strategic plan – and flowing from that, the development of transversal strategic objectives – should prioritise the creation of growth and job opportunities on the one hand, and the promotion of social inclusion on the other, both of which priorities require clean and effective governance.

Service delivery and the improvement of the quality of life of all inhabitants in the Western Cape Province is another high priority of this Provincial Government and all its structures. This reviewed Provincial Spatial Development Framework (PSDF) is intended to be a bridge between the National Development Plan (NDP), the Provincial transversal management strategies and all municipal plans from which service delivery will result. The Western Cape is a uniquely endowed global region which invites us all, as the present custodians of this region, to act with great stewardship and wisdom, with a view to a sustainable future for the present inhabitants and the generations that will follow us.

This PSDF 2014 is the culmination of a review of the previous PSDF, which was approved in 2009. While the reader of this document will notice some significant changes in format and improved user-friendliness, I am pleased to be able to say that many of the key principles have stood the test of time over the past five years and therefore remind us that while we are in a rapidly changing environment, the key guiding principles are now entering the second term of effecting the desired spatial and land use planning changes in our Province.

Furthermore, it is important to note that the key guiding principles are now also found in the National Development Plan (NDP) and have been contextualised for the Western Cape in this PSDF.

The global context with regard to the impact of climate change and other factors such as the effect of the economic slowdown in North America and Europe have reinforced our resolve to develop a plan which continues to place great emphasis on resource efficiency, environmental sustainability and also social justice. There is an increasing need to understand the value of resilience in the face of economic and environmental stresses.

Significant changes have occurred within the South African legislative milieu in the Planning Sector during the past two years. Most significantly, the signing by the President in August 2013 of new national planning legislation in the form of the Spatial Planning and Land Use Management Act, (Act 16 of 2013) and similarly, the recent approval of our own Provincial legislation: The Western Cape Land Use Planning Act (LUPA), will affect the planning relationships within all three spheres of government.

This PSDF was drafted in anticipation and with an understanding of the impacts which are sure to follow, in order to provide Provincial leadership on spatial planning matters, which will inform both government and the private sector through mutually supported principles. The PSDF 2014 will land neatly in the space provided by the changing legislative dynamic, because it derives its functionality from the Constitutional mandate of the Provincial sphere of government to conduct Provincial and regional planning.

In addition, PSDF 2014 carries the buy-in of all the Provincial departments to inform and guide their sector planning/spatial development strategies. It is a multi-lateral framework which will be owned by all Heads of Department and this is anticipated that this will significantly synergise the efforts to address the multi-faceted challenges facing our Province. PSDF 2014 will also be invaluable as a guide to ensuring the integration of infrastructure spending at municipal and regional level, as well as the roll-out of Provincial departments' spending on social and built infrastructure.

I encourage ongoing debate regarding the institutionalising of the PSDF by both government and the private sector, as this spatial development framework is meant to be a living document which we hope will be refined and improved as it is used by various role players, stakeholders and other users.



A handwritten signature in black ink, appearing to read 'A. Bredehl', with a stylized flourish at the end.

**ANTON BREDELL**

*Minister of Local Government, Environmental Affairs and Development Planning*

*March 2014*



## ACKNOWLEDGEMENTS

I am pleased to record that with the PSDF 2014 the Western Cape Government has risen to the challenge of making the required changes and conducting the review process of PSDF 2009 in an inclusive manner in order to provide greater clarity to decision-makers in the public and private sector with regard to the spatial future of the Western Cape Province.

The PSDF 2014 is the product of a Provincial Inter-departmental and Inter-governmental collaboration, under the guidance of a Project Steering Committee. A number of private sector organisations, academia and non-governmental organisations also contributed to the review process.

I would therefore like to acknowledge and record our appreciation for the participation and contributions of all the organisations and individuals listed below, to the realisation of the PSDF 2014.



**PIET VAN ZYL**

Head of Department

Environmental Affairs and Development  
Planning

March 2014

## 1. PSDF PROJECT STEERING COMMITTEE

### PROVINCIAL DEPARTMENTS

**Agriculture:** Andre Roux, Cor van der Walt, Jan Smit, Shelton Mandondo

**Community Safety:** Bhekithemba Simelane

**Cultural Affairs And Sport:** Hannetjie Du Preez

**Department of The Premier:** Basil Heald, Jacques Du Preez, Laurine Platzky, Roger Daniels

**Economic Development and Tourism:** Fayruz Dharsey, John Peters

**Education:** Gerrit Coetzee, Gericke Visser, Ismael Jakoet

### Environmental Affairs and Development

**Planning:** Alexia Julius, Allan Rhodes, Andre Van Der Merwe, Andre Vancoillie, Anthony Barnes, August Hoon, Ayub Mohammed, Azaad Sayed, Bonita Van Der Merwe, Chris Rabie, Chrizelle Kriel, Dalene Groenewald, Dalene Stapelberg, Dean Gilbert, Francois Wüst, Gottlieb Arendse, Jeanine Africa, Jessica Katz, Joos Roelofse, Kobus Munro, Laurel Robertson, Marek Kedzieja, Mellisa Naiker, Paul Hardcastle, Providence Rapoo, Raudhiyah Dien, Russel Mehl, Ryan Apolles, Tania De Waal, Tommie Bolton, Willem Smith, Wouter Swart, Zaahir Toefy

**Health:** Lorraine Rademeyer, Milne van Leeuwen

**Human Settlements:** Rika van Rensburg

**Local Government:** Dr. Hildegard Fast, Helena Jacobs, Jerome Potts

**Provincial Treasury:** Anthony Phillips

**Transport and Public Works:** Frans Hanekom, Klaas Langenhoven, Marco Morgan

**Social Development:** Gavin Muller, Nosisi Dingani

### NATIONAL DEPARTMENTS

**Water Affairs:** Ashia Petersen, Freda Jonck, Neels du Buisson, Penina Sihlah, Phumza Gasalubelwana

**Rural Development and Land Reform:** Leona Bruiners

### MUNICIPALITIES

**Bitou:** Lawrence Ramakuwela

**Cape Winelands District Municipality:** Quinton Balie

**Central Karoo District Municipality:** Barbara Brown

**City of Cape Town:** Arne Purves, Cameron Matthews, Jaco van der Westhuizen, Jaco Petzer, Keith Wiseman, Norah Walker

**Drakenstein Municipality:** David De Laney

**Eden District Municipality:** Henry Hill

**Knysna Municipality:** Mike Maughan-Brown, Randall Solomon

**Overstrand Municipality:** Riaan Kuchar

**Stellenbosch Municipality:** Bernabé De la Bat

**Swartland Municipality:** Alwyn Zaayman

**Theewaterskloof Municipality:** Bettie de Kock

**West Coast District Municipality:** Doretha Kotze

## OTHER

**CapeNature:** Kerry Maree, Ernst Baard

**Economic Development Partnership:** Christian Gable, Lyndon Metembo, Sandra Gordon

**Heritage Western Cape:** Andrew Hall, Johnathan Windvogel, Shaun Dyers

**SACCP:** Thys Walters

**SALGA:** Margie Murcott, Shantal Harigobin, Jacques Jansen van Rensburg

**SANBI:** Fahiema Daniels, Jeff Manuel, Sagwata Manyike

**SANParks:** Marne van der Westhuizen, Micheal Slayen, Willem Louw

**SAPS:** Piet Kloppers

**Transnet:** Eddie Seaton

## 2. FOCUS GROUPS

### Urban Land Markets

**DAG:** Helen MacGregor, Ingrid Jacobsen

**UCT School of Architecture, Planning and Geomatics:** Tanja Winckler

**Garden Cities:** Tony Marsh

**Isandla Institute:** Tristan Görgens

### Rural Development

**Agri Western Cape:** Carl Opperman

**CapeNature:** Kerry Purnell

**Department of Agriculture - Rural Development:** Stefan Conradie, Toni Xaba

**Department of Rural Development and Land Reform:** Barry Levinrad

**UCT - Food Security:** Gareth Haysom

**UCT:** Jane Battersby

**DAFF - Forestry:** Susan Steyn, Joel Syphus

**UWC - PLAAS:** Karin Kleinbooi

### Planning for and Managing Urban Informality

**City of Cape Town:** Phil Mashako, Natasha Murray

**DAG:** Helen MacGregor

**DEADP:** Frances van der Merwe

**Department of Human Settlement:** Raynita Robertson, Christabel Johnston

**Garden Cities:** Tony Marsh

**VPUU:** Michael Krause

**UCT School of Architecture, Planning and Geomatics:** Tanja Winkler

**Isandla Institute:** Tristan Görgens

### Indicator and Indices for Development and Poverty Pockets

**City of Cape Town:** Carol Wright, Karen Small, Martin van der Merwe, Jazze Mokoena, Natasha Prince, Nomande Tobi, Nonfundo Mdingi, Trevor Mitchell

**University of Stellenbosch:** Prof. Adriaan Van Niekerk, Prof. Sanette Ferreira, Danie du Plessis

**DEADP:** Lucille Petersen

**Department of the Premier:** Clive Stuurman, Dale van der Lingen, Fazel Noordien, Roger Daniels, Solange Rosa, Taryn van de Rheede

**Department of Social Development:** Gavin Miller, Johnnie Tolken, Julius Benn, Nesbert

Zinyakatira, Nosisi Dingani

**Provincial Treasury:** Nina Britto

**University of Stellenbosch:** Prof. Adriaan Van Niekerk, Prof. Sanette Ferreira, Danie du Plessis

### Land, Transport and Infrastructure

**Palmer Development Group:** Nick Graham

**DEADP:** Frances van der Merwe

**DTPW:** Francois Joubert, Marco Morgan, Yongama Ndungane

**DOHS:** Heinrich Mostert

### Regional Economic Development

**City of Cape Town:** Dilshaad Gallie, Claus Rabe, Tim Hadingham, Rob McGaffin

**DEDAT:** Bongikhaya Dayimani, Charline Mouton, John Peters, Nigel Gwynne-Evans, Olivia Dyers, Rahima Loghdey, Solly Fourie, Herman Jonker

**DOA:** Shelton Mandondo, Mogale Sebopetsa

**DTPW:** Marco Morgan

**Economic Development Partnership:** Charmel Curtis, Yumnnaa Firfirey, Christian Gable, Sandra Gordon

**University of the Western Cape:** Prof. Lieb Loots

**Wesgro:** Nils Flaaten, Rieferdo Mtango

### Municipal Work Session

**Beaufort West:** Ashley Mitchell

**Berg River:** Hannes Vermeulen

**Bitou:** Chris Schliemann, Dupre Lombaard, Lawrence Ramakuwela



**Breede Valley:** Carisa Peters, Karen Fouché

**Cape Agulhas:** Bertus Hayward, Donald October

**City of Cape Town:** Jaco van der Westhuizen

**Cape Winelands District:** Quinton Balie

**Cederberg:** Boetie Booysen

**Drakenstein:** Anthea Shortles, Henk Strijdom

**George:** Stiaan Carstens

**Hessequa:** Jeanne Fourie

**Knysna:** Fredri Kruger, Mike Maughan-Brown

**Laingsburg:** Gwynne Pekeur

**Langeberg:** Tracy Brunings

**Matzikama:** Bernette Kriek, Briaan Smit

**Mossel Bay:** Dries Cilliers, Olga Louw

**Overstrand:** Riaan Kuchar, Neville Green, Stephen Muller

**Saldanha Bay:** Gary Tomlinson, Lindsey Gaffley

**Stellenbosch:** Bernabé De La Bat

**Swartland:** Alwyn Zaayman

**Theewaterskloof:** Bettie de Kock

**Witzenberg:** Hennie Taljaard

### 3. DEPARTMENTAL BILATERAL ENGAGEMENTS

**Agriculture:** Joyene Isaacs, André Roux, Dirk Trotskie, Shelton Mandondo

**Community Safety:** Dr Gilbert Lawrence, Ansaaf Mohamed, Bhekithemba Simelane, Gideon Morris, Kenneth Africa, Simion George

**Cultural Affairs and Sport:** Brent Walters, Andrew Hall, Hanneljie du Preez

**Department of the Premier:** Adv. Brent Gerber, Clive Stuurman, Jacques du Preez, Jenny Cargill, Laurine Platzky, Solange Rosa

**Economic Development and Tourism:** Solly Fourie, Fayruz Dharsey

**Education:** Penny Vinjevold

**Health:** Prof. Keith Househam

**Human Settlements:** Jaqui Samson, Rayan Rughubar, Rika van Rensburg

**Local Government:** Dr. Hildegard Fast, Helena Jacobs

**Provincial Treasury:** Dr. Johan Stegmann, Anthony Phillips, Marcia Sheraton

**Social Development:** Robert Macdonald

**Transport and Public Works:** Johan Fourie, Carl October, Darryl Jacobs, Dru Martheze, Frans Hanekom, Jaqui Gooch, Jan du Plessis, Pakama Mlanbu, Yongama Ndungane

### 4. PSDF SERVICE PROVIDERS

**Setplan:** Rodney Cronwright, Tadesse Haile, Neville van der Westhuizen

**City Think Space:** Barbara Southworth, Janine Loubser, Bobby Gould-Pratt, Sabina Favaro, Ashleigh Brander, Caitlin Comrie

### 5. PSDF SPECIALIST STUDIES SERVICE PROVIDERS

**Growth Potential Study of Towns:** Prof. Adriaan van Niekerk, Danie du Plessis, Manfred Spocter, Ronnie Donaldson, Prof. Sanette Ferreira

**Impact of Commercial and Office**

**Decentralisation:** Bobby Gould-Pratt, Lize Malan, Wendy Hartshorne

**Heritage and Scenic Resources:** Bernie Oberholze, Sarah Winter

**Municipal Financial Sustainability:** Nick Graham, Katie Gull



**Western Cape  
Government**

**BETTER TOGETHER.**

## **Western Cape Provincial Spatial Development Framework**

FINAL REPORT | March 2014



# CONTENTS

<b>1. INTRODUCTION</b>	<b>12</b>	<b>3. THE SPATIAL FRAMEWORK</b>	<b>36</b>	<b>4. IMPLEMENTING THE PROVINCIAL SPATIAL AGENDA</b>	<b>94</b>
1.1. BACKGROUND	12	<b>3.1. SUSTAINABLE USE OF PROVINCIAL ASSETS</b>	<b>38</b>	4.1. TOWARDS COOPERATIVE SPATIAL GOVERNANCE	95
1.2. PSDF'S TERMS OF REFERENCE	12	3.1.1. OVERVIEW	38	4.1.1. CONSTITUTIONAL AND LEGAL FRAMEWORK	95
1.2.1. LEGISLATIVE CONTEXT	12	3.1.2. RESOURCE MANAGEMENT POLICY OBJECTIVES	39	4.1.2. SPATIAL GOVERNANCE CHALLENGES	95
1.2.2. CONTENT REQUIREMENTS	12	3.1.3. BIODIVERSITY AND ECOSYSTEM SERVICES	40	4.1.3. A TRANSVERSAL SPATIAL GOVERNANCE SYSTEM	95
1.2.3. AIMS	12	3.1.4. WATER	42		
1.2.4. ROLE AND USERS OF PSDF	14	3.1.5. SOILS AND MINERAL RESOURCES	46	4.2. FACILITATING PARTNERSHIP BASED DEVELOPMENT	100
1.2.5. PLANNING DOMAIN AND MUNICIPAL JURISDICTIONS	16	3.1.6. RESOURCE CONSUMPTION AND DISPOSAL	48	4.3. MANAGING SPATIAL GROWTH AND DEVELOPMENT	100
1.3. 2009 PSDF REVIEW	18	3.1.7. LANDSCAPE AND SCENIC ASSETS	53	4.4. SUPPORT TO MUNICIPAL PLANNING	102
1.3.1. APPROACH	18	<b>3.2. OPENING-UP OPPORTUNITIES IN THE SPACE-ECONOMY</b>	<b>56</b>	4.4.1. BUILT ENVIRONMENT SUPPORT PROGRAMME (BESP)	102
1.3.2. ACTIVITIES AND OUTPUTS	18	3.2.1. OVERVIEW	56	4.4.2. TRAINING	102
1.4. POLICY CONTEXT	19	3.2.2. REGIONAL ECONOMIC INFRASTRUCTURE	60	4.4.3. PLANNING SUPPORT	102
1.5. GUIDING PRINCIPLES	22	3.2.3. RURAL SPACE-ECONOMY	64	4.4.4. MUNICIPAL PLANNING MONITORING AND EVALUATION	102
<b>2. DEFINING THE PROVINCIAL SPATIAL AGENDA</b>	<b>24</b>	3.2.4. URBAN SPACE-ECONOMY	69	4.5. CATALYTIC INTERVENTIONS	102
2.1. SPATIAL CHALLENGES	24	3.2.5. SPACE-ECONOMY SYNTHESIS	73	4.5.1. KNOWLEDGE MANAGEMENT AND SPATIAL INTELLIGENCE	102
2.1.1. LEGACY CHALLENGES	24	<b>3.3. DEVELOPING INTEGRATED AND SUSTAINABLE SETTLEMENTS</b>	<b>74</b>	4.5.2. LAND ASSEMBLY	102
2.1.2. CURRENT CHALLENGES	25	3.3.1. OVERVIEW	74	4.5.3. PRIORITY INTERVENTIONS	103
2.1.3. FUTURE RISK CHALLENGES	27	3.3.2. SENSE OF PLACE AND SETTLEMENT PATTERNS	76	4.5.4. SPATIAL TARGETING	108
2.2. SPATIAL INERTIA	29	3.3.3. ACCESSIBILITY	79	4.6. MONITORING SPATIAL PERFORMANCE	108
2.3. SPATIAL GOALS	29	3.3.4. LAND USE AND DENSITY	82	4.7. IMPLEMENTATION ACTION PLAN	108
2.4. THE SPATIAL VISION	29	3.3.5. FACILITIES AND SOCIAL SERVICES	85		
2.5. TOWARDS A NEW APPROACH	32	3.3.6. INFORMALITY, HOUSING DELIVERY, INCLUSION AND URBAN LAND MARKETS	88	<b>ANNEXURE 1 - PROVINCIAL OVERVIEW</b>	
2.6. THE SPATIAL AGENDA	33	3.3.7. SETTLEMENT SYNTHESIS	91	<b>ANNEXURE 2 - LEGAL FRAMEWORK</b>	
2.7. THE SPATIAL LOGIC	34	3.4. SUMMARY OF PROVINCIAL SPATIAL POLICIES	92	<b>ANNEXURE 3 - SETTLEMENT TOOLKIT</b>	
		<b>3.5. THE COMPOSITE PSDF</b>	<b>92</b>	(SEPARATELY DOCUMENTED)	

## LIST OF FIGURES

FIG.1 WESTERN CAPE PROVINCE - MUNICIPAL JURISDICTIONS	16	CAMPAIGN POSTER	47	SETPLAN, 2013)	67
FIG.2 DEMOLITION AS PART OF 1974 FORCED REMOVALS IN DISTRICT SIX (SOURCE: PAUL ALBERTS)	24	FIG.18 WESTERN CAPE PROVINCE - WASTE INFRASTRUCTURE AND INCREASE IN WASTE DISPOSAL	48	FIG.31 A FARMER WORKING ON A FARM IN THE PHILIPPI HORTICULTURAL AREA (SOURCE: SETPLAN, 2013)	67
FIG.3 NON-WHITE PERSONS ONLY RAILWAY STATION PLATFORM IN 1983 (SOURCE: RODNEY BARNETT - SOUTH PHOTOGRAPHS)	24	FIG.19 WESTERN CAPE PROVINCE - AIR QUALITY WITH REGARDS TO FIRE DENSITY AND CARBON EMISSIONS	49	FIG.32 FARM WORKER HOUSING IN THE UPPER LANG KLOOF REGION (SOURCE: SETPLAN, 2013)	68
FIG.4 THE "LOST" PEOPLE OF THE RURAL HINTERLAND - WITH LIMITED ACCESS TO ECONOMIC AND SOCIAL OPPORTUNITIES	25	FIG.20 WESTERN CAPE PROVINCE - ENERGY INFRASTRUCTURE	50	FIG.33 FARM WORKER HOUSING IN THE CAPE WINELANDS REGION	68
FIG.5 SOCIAL UNREST - FARM WORKERS PROTESTING IN DE DOORNS	25	FIG.21 WESTERN CAPE PROVINCE - VULNERABLE AREAS WITH REGARDS TO DISASTER RISK MANAGEMENT AND SEA LEVEL RISE	51	FIG.34 WESTERN CAPE PROVINCE - INDUSTRY, COMMERCE, BUSINESS SERVICES AND TOURISM	69
FIG.6 ISOLATED AND SEGREGATED GATED COMMUNITIES ON THE EDGE OF SOMERSET WEST	25	FIG.22 WESTERN CAPE PROVINCE - LANDSCAPE AND SCENIC ASSETS AS INFORMED BY GEOLOGICAL FEATURES AND GIS DATABASE COMPILED BY OBERHOLZER AND WINTER FOR SPECIALIST STUDY (2013)	53	FIG.35 THE LOCATION OF EXISTING AND PROPOSED SUPER REGIONAL MALLS IN THE WESTERN CAPE OUTSIDE OF THE CCT	72
FIG.7 FLOODING INFORMAL SETTLEMENT IN STELLENBOSCH	27	FIG.23 MAIN GEOLOGICAL GROUPS OF THE WESTERN CAPE	54	FIG.36 GUIDELINE RECOMMENDATIONS INCLUDE GREATER EMPHASIS ON PROMOTING VIBRANT RETAIL STREETS (DC VIBRANT RETAIL STREETS TOOLKIT, 2012, PG58, STREETSENSE)	72
FIG.8 VULNERABLE INFORMAL SETTLEMENT	27	FIG.24 SECTION THROUGH LANDSCAPE TYPES	54	FIG.37 TRANSFORMATION OF A MALL INTO A MIXED USED NEIGHBOURHOOD (GREYFIELDS TO GOLDFIELDS, 2002, S BOZDIN AND L SOBIL)	72
FIG.9 SPRAWLING RDP HOUSING IN NKQUBELA - ROBERTSON	27	FIG.25 INTER- AND INTRA- PROVINCIAL SPATIAL INITIATIVES BASED ON NDP AND OTHER NATIONAL STRATEGIES	58	FIG.38 WESTERN CAPE PROVINCE - SPACE-ECONOMY SYNTHESISED AND CONSOLIDATED FRAMEWORK	73
FIG.10 WESTERN CAPE PROVINCE - BIODIVERSITY AND ECOSYSTEMS	40	FIG.26 WESTERN CAPE PROVINCE - PROVINCIAL ECONOMIC INFRASTRUCTURE	60	FIG.39 WESTERN CAPE PROVINCE - ILLUSTRATING THE CONCENTRATION AND RELATIONSHIP BETWEEN PROVINCIAL CULTURAL LANDSCAPES AND HERITAGE RESOURCES	76
FIG.11 THE LOCATION OF THE DRAFT PRIORITY CLIMATE CHANGE ADAPTION CORRIDORS	41	FIG.27 WESTERN CAPE PROVINCE - FIBRE NETWORK ROLL-OUT PLAN AS PER WESTERN CAPE BROADBAND STRATEGY (CONNECTING ALL WCG BUILDINGS)	61	FIG.40 INAPPROPRIATE LOCATION OF HOUSING IN BARRYDALE NEGATIVELY IMPACTING ON THE CHARACTERISTIC SCENIC LANDSCAPE	77
FIG.12 WESTERN CAPE PROVINCE - INLAND WATER SYSTEMS	42	FIG.28 WESTERN CAPE PROVINCE - PRIMARY SECTORS (AGRICULTURE, FISHING, FORESTRY AND MINING)	64	FIG.41 PETROL STATION OUTSIDE MOSSEL BAY NEGATIVELY IMPACTING ON SURROUNDING LANDSCAPE	77
FIG.13 WESTERN CAPE PROVINCE - OCEANS AND COASTS STATUS	43	FIG.29 WESTERN CAPE PROVINCE - THE LOCATION AND INTENSITY OF AGRICULTURAL CLUSTERS, LAND REFORM PROJECTS AND CRDP NODES	65	FIG.42 INSENSITIVE LAND USES LOCATED NEXT TO KEY HISTORICAL FEATURES OF SWELLENDAAM	77
FIG.14 PROPOSED FOCUS AREAS FOR OFFSHORE PROTECTION AS PER SOER 2013 (ADAPTED FROM SINK ET AL. 2012)	44	FIG.30 HOUSING ON THE URBAN FRINGE OF THE PHILIPPI HORTICULTURAL AREA (SOURCE:		FIG.43 MAP OF SETTLEMENT CHRONOLOGY AND	
FIG.15 CAPE TIMES ARTICLE (MAY 2013)	45				
FIG.16 WESTERN CAPE PROVINCE - LAND ASSETS AND AGRICULTURAL AND MINERAL RESOURCES	46				
FIG.17 THE NATIONAL LANDSCAPE PROGRAMME					



SPATIAL DISTRIBUTION AND ORIGINS OF NUMEROUS HISTORICAL SETTLEMENTS	78	FIG.56 NEW HOUSING PROJECTS IN WORCESTER LOCATED ON THE PERIPHERY WHILST VACANT STATE-OWNED LAND EXISTS CLOSER TO THE CENTRE	89
FIG.44 THE AMALIENSTEIN CHURCH IN ZOAR AND THE CORBELLED DWELLINGS OF THE KAROO	78	FIG.57 NUMBER OF BACKYARDER DWELLERS PER DISTRICT	89
FIG.45 WESTERN CAPE PROVINCE - ACCESSIBILITY BASED ON AVAILABILITY OF SERVICES AND INFRASTRUCTURE	79	FIG.58 WESTERN CAPE PROVINCE - SYNTHESISING SETTLEMENT FOCUS AREAS - ILLUSTRATING THE RELATIONSHIP BETWEEN AREAS OF URBAN GROWTH PRESSURE AND IMPORTANT NATURAL AND AGRICULTURAL RESOURCES	91
FIG.46 ACCESSIBILITY CHALLENGES AT MUNICIPAL SCALE - WITH ISOLATED SETTLEMENTS ACROSS THE MUNICIPAL LANDSCAPE	80	FIG.59 WESTERN CAPE PROVINCE - CONSOLIDATED FRAMEWORK PROPOSALS	93
FIG.47 DESIRED HIERARCHIES OF ACCESS AT A PROVINCIAL SCALE	81	FIG.60 NATIONAL MODEL TO SPATIALLY ALIGN BUILT ENVIRONMENT INVESTMENT - BASED ON THE URBAN NETWORKS APPROACH (ADOPTED FROM NATIONAL TREASURY, 2013)	101
FIG.48 WESTERN CAPE PROVINCE - PRIMARY AND SECONDARY CLUSTERS OF ACTIVITIES, FACILITIES AND SOCIAL SERVICES	82	FIG.61 REGIONAL INTERPRETATION OF SETTLEMENT HIERARCHY TO INFORM INVESTMENT PRIORITISATION	101
FIG.49 MONOFUNCTIONAL DECENTRALISED ACTIVITIES SUCH AS THE WESKUS MALL IN VREDENBURG NEGATIVELY IMPACT ON DIVERSITY AND RANGE OF AVAILABLE ACTIVITIES	83	FIG.62 USING FACILITIES STRATEGICALLY TO FACILITATE REGENERATION AND INTEGRATION	101
FIG.50 CHANGE IN LAND USE MIX INDEX IN CAPE TOWN (1994 - 2010) IN CONTRAST TO LOCATION OF PROPOSED CORRIDOR DEVELOPMENT AND DENSIFICATION AS PER SECTOR PLANS. (CRUISE RESEARCH, 2013)	84	FIG.63 THE THREE MAIN STREAMS OF THE RSEP/VPUU PROGRAMME	103
FIG.51 RACIAL DISTRIBUTION IN CAPE TOWN - BASED ON 2011 CENSUS DATA (ADRIAN FIRTH, 2013)	84	FIG.64 GROWTH POTENTIAL OF SETTLEMENTS AND MUNICIPALITIES IN THE WESTERN CAPE	105
FIG.52 WESTERN CAPE PROVINCE - PRIMARY AND SECONDARY CLUSTERS OF ACTIVITIES, FACILITIES AND SOCIAL SERVICES	85	FIG.65 GROWTH POTENTIAL OF SETTLEMENTS AND MUNICIPALITIES IN THE WESTERN CAPE	106
FIG.53 THE SEED LIBRARY	86	FIG.66 SOCIO-ECONOMIC NEEDS (REAL)	106
FIG.54 MAP INDICATES SPATIAL DISTRIBUTION OF EXISTING PRIMARY SOCIAL FACILITIES IN RELATION TO SETTLEMENT THRESHOLDS TO SUPPORT THESE FACILITIES.	87	FIG.67 SOCIO-ECONOMIC NEEDS (PROPORTIONAL)	106
FIG.55 WESTERN CAPE PROVINCE - INFORMALITY, HOUSING DELIVERY, INCLUSION AND URBAN LAND MARKETS	88		

#### FRONT COVER IMAGE:

AERIAL VIEW OF WELLINGTON  
(WWW.SKYSCRAPERCITY.COM)

**ALL IMAGES & DIAGRAMS NOT SOURCED CREATED BY  
CITY THINK SPACE**

## LIST OF TABLES

TABLE.1 NATIONAL DEVELOPMENT CHALLENGES AND RESPONSES	19
TABLE.2 ROLE AND AGENCIES RESPONSIBLE FOR ONECAPE 2040'S KEY TRANSITIONS	20
TABLE.3 KEY TRANSITIONS (2012-2040) AS PER ONECAPE 2040 VISION	20
TABLE.4 KEY TRANSITIONS PER SECTOR AS PROPOSED BY WCIF	21
TABLE.5 CAPITAL FUNDING TO SATISFY DEMAND	28
TABLE.6 CAPITAL FUNDING TO SATISFY DEMAND UNDER DENSER SPATIAL GROWTH	28
TABLE.7 SYNOPSIS OF THE KEY TRANSITIONS FOR THE PROVINCIAL SPATIAL FRAMEWORK	32
TABLE.8 THE SPATIAL LOGIC UNDERPINNING THE PSDF PROPOSALS	34
TABLE.9 RELATIONSHIP BETWEEN THE PROVINCIAL STRATEGIC OBJECTIVES AND THE PSDF THEMES	37
TABLE.10 LANDSCAPE TYPOLOGY OF THE WESTERN CAPE	54
TABLE.11 SETTLEMENT TRANSITIONS	75
TABLE.12 MODAL SPLITS OF THE VARIOUS DISTRICTS	80
TABLE.13 SETTLEMENT CLASSIFICATION AND EXAMPLES	87
TABLE.14 KEY PROVINCIAL FUNCTIONS IN PLANNING	96
TABLE.15 THEMATIC, INTERMEDIATE AND COMPOSITE INDEXES	104
TABLE.16 THEMATIC AND COMPOSITE INDEXES RELATING TO SOCIO-ECONOMIC NEEDS	104
TABLE.17 INDEX AND INDICATOR LEVEL OF APPLICATION	104
TABLE.18 EXAMPLE OF MUNICIPAL PROFILE - STELLENBOSCH	107
TABLE.19 DEADP IMPLEMENTATION ACTION PLAN	109

## LIST OF BOXES

BOX.1 THE ECONOMIC AND FISCAL COSTS OF INEFFICIENT LAND USE PATTERNS IN SOUTH AFRICA - STUDY FINDINGS AND EVIDENCE (SOURCE: PDG, ACC AND SBC, 2011)	26
BOX.2 IMPACT OF CURRENT SPATIAL GROWTH PATTERNS ON MUNICIPAL SUSTAINABILITY - SPECIALIST STUDY FINDINGS AND EVIDENCE (PDG, 2013)	28
BOX.3 A DAY IN THE LIFE OF WESTERN CAPE RESIDENTS IN 2040	30
BOX.4 A DAY IN THE LIFE OF WESTERN CAPE RESIDENTS IN 2040	31
BOX.5 NATIONAL LANDCARE PROGRAMME	47
BOX.6 HERITAGE AND SCENIC RESOURCES - SPECIALIST STUDY FINDINGS AND EVIDENCE (SOURCE: OBERHOLZER AND WINTER, 2013)	54
BOX.7 POLICY FOR THE ESTABLISHMENT OF AGRICULTURAL HOLDINGS IN THE URBAN FRINGE	67
BOX.8 POLICY FOR THE SETTLEMENT OF FARM WORKERS	68
BOX.9 IMPACT OF COMMERCIAL AND OFFICE DECENTRALISATION - SPECIALIST STUDY FINDINGS AND EVIDENCE	72
BOX.10 HERITAGE AND SCENIC RESOURCES - SPECIALIST STUDY FINDINGS AND EVIDENCE (SOURCE: OBERHOLZER AND WINTER, 2013)	78
BOX.11 NATIONAL TREASURY CITIES SUPPORT PROGRAMME	101
BOX.12 GROWTH POTENTIAL STUDY - SPECIALIST STUDY FINDINGS AND EVIDENCE (SOURCE: UNIVERSITY OF STELLENBOSCH, 2013)	104
BOX.13 GROWTH POTENTIAL STUDY - SPECIALIST STUDY FINDINGS AND EVIDENCE (SOURCE: UNIVERSITY OF STELLENBOSCH, 2013)	107

## LIST OF DIAGRAMS

DIAGRAM.1 INFORMANTS AND PROCESSES RELEVANT TO THE PSDF	13
DIAGRAM.2 THE CONTEXT AND ROLE OF THE PSDF IN RELATION TO OTHER FRAMEWORKS AND PLANS	15
DIAGRAM.3 THE ROLE OF PSDF 2014 AS A TRANSVERSAL PROVINCIAL PLANNING INSTRUMENT	17
DIAGRAM.4 PSDF REVIEW PROCESS	18
DIAGRAM.5 THE PSDF PROCESS	23
DIAGRAM.6 SPATIAL AND FINANCIAL MODEL RESULTS	26
DIAGRAM.7 THE SPATIAL DEVELOPMENT STRATEGY	35
DIAGRAM.8 THE 3 SPATIAL THEMES AND THEIR ASSOCIATED ELEMENTS, SUPPORTED BY SPATIAL GOVERNANCE	36
DIAGRAM.9 MIND MAP OF ASSETS, RESOURCES AND RISKS THEME	38
DIAGRAM.10 MIND MAP OF SPACE-ECONOMY THEME	56
DIAGRAM.11 MIND MAP OF INTEGRATED AND SUSTAINABLE SETTLEMENTS THEME	74
DIAGRAM.12 A SUMMARY DIAGRAM OF THE POLICIES	92
DIAGRAM.13 THE SPATIAL GOVERNANCE OF THE IMPLEMENTATION OF THE PSDF IN RELATION TO OTHER FRAMEWORKS, PLANS AND BUDGETS	94
DIAGRAM.14 ELEMENTS REQUIRED FOR ACHIEVING A TRANSVERSAL SPATIAL GOVERNANCE SYSTEM	96
DIAGRAM.15 COOPERATIVE GOVERNANCE MODEL AS REFLECTED IN THE 2014 BUDGET OVERVIEW	98
DIAGRAM.16 DLG'S COOPERATIVE GOVERNANCE CONCEPT	99



## GLOSSARY OF TERMS AND ABBREVIATIONS

APP - ANNUAL PERFORMANCE PLAN

BAU - BUSINESS-AS-USUAL

BEPP - BUILT ENVIRONMENT PERFORMANCE PLAN

BNG – BREAKING NEW GROUND

BRT – BUS RAPID TRANSPORT

BSA - BUILDING STANDARDS ACT

CBA – CRITICAL BIODIVERSITY AREA

CBD – CENTRAL BUSINESS DISTRICT

CMR – CAPE METROPOLITAN REGION

CCT – CITY OF CAPE TOWN

CRDP – COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME

CRUISE - CENTRE FOR REGIONAL AND URBAN INNOVATION AND STATISTICAL EXPLORATION

CSIR - COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH

DEA - NATIONAL DEPARTMENT OF ENVIRONMENTAL AFFAIRS

DEADP - PROVINCIAL DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING (WCG)

DEDAT - PROVINCIAL DEPARTMENT OF ECONOMIC DEVELOPMENT AND TOURISM (WCG)

DLG - PROVINCIAL DEPARTMENT OF LOCAL GOVERNMENT (WCG)

DOA - PROVINCIAL DEPARTMENT OF AGRICULTURE (WCG)

DOHS - PROVINCIAL DEPARTMENT OF HUMAN SETTLEMENTS (WCG)

DORA - DIVISION OF REVENUE ACT

DRDLR - NATIONAL DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM

DTPW - PROVINCIAL DEPARTMENT OF TRANSPORT AND PUBLIC WORKS (WCG)

EDP – ECONOMIC DEVELOPMENT PARTNERSHIP

EIA – ENVIRONMENTAL IMPACT ASSESSMENT

FARE - FUTURE OF AGRICULTURE AND RURAL ECONOMY

GDP – GROSS DOMESTIC PRODUCT

GPS - GROWTH POTENTIAL STUDY

GVA – GROSS VALUE ADD

GWS – GOVERNMENT WATER SCHEME

HWC - HERITAGE WESTERN CAPE

ICT – INFORMATION AND COMMUNICATION TECHNOLOGY

IDP – INTEGRATED DEVELOPMENT PLAN

IDZ – INDUSTRIAL DEVELOPMENT ZONE

IPP - INDEPENDENT POWER PRODUCERS

IRP – INTEGRATED RESOURCE PLAN

IRT – INTEGRATED RAPID TRANSPORT

ITP – INTEGRATED TRANSPORT PLAN

KWH – KILOWATT HOURS

LED – LOCAL ECONOMIC DEVELOPMENT

LUMS – LAND USE MANAGEMENT SYSTEM

LUPA – LAND USE PLANNING ACT

LUPO – LAND USE PLANNING ORDINANCE

MERO - MUNICIPAL ECONOMIC REVIEW AND OUTLOOK

MBPS – MEGABITS PER SECOND

MSFM - MUNICIPAL SERVICES FINANCIAL MODEL

MTIEF - MEDIUM TERM INCOME AND EXPENDITURE FRAMEWORK

NBR - NATIONAL BUILDING REGULATIONS

NDP – NATIONAL DEVELOPMENT PLAN

NHRA - NATIONAL HERITAGE RESOURCES ACT

NIMBY - "NOT IN MY BACKYARD"

NMT – NON-MOTORISED TRANSPORT

NWMS – NATIONAL WASTE MANAGEMENT STRATEGY

PERO - PROVINCIAL ECONOMIC REVIEW AND OUTLOOK

PLAS - PROACTIVE LAND ACQUISITION STRATEGY

PLTF – PROVINCIAL LAND TRANSPORTATION FRAMEWORK

PPA - POWER PURCHASE AGREEMENT

PPP – PUBLIC-PRIVATE PARTNERSHIP

PRASA – PASSENGER RAIL AGENCY OF SOUTH AFRICA

PSDF – PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

POS – PUBLIC OPEN SPACE

PSO – PROVINCIAL STRATEGIC OBJECTIVE

RED – REGIONAL ECONOMIC DEVELOPMENT

RSEP - REGIONAL SOCIO-ECONOMIC PROJECTS

SANBI – SOUTH AFRICAN NATIONAL BIODIVERSITY INSTITUTE

SANRAL – SOUTH AFRICAN NATIONAL ROADS AGENCY LIMITED

SBR – SALDANHA BAY REGION

SCR – SOUTHERN CAPE REGION

SDF – SPATIAL DEVELOPMENT FRAMEWORK

SEA - STRATEGIC ENVIRONMENTAL ASSESSMENT

SIP – STRATEGIC INFRASTRUCTURE PLAN

SKA – SQUARE KILOMETRE ARRAY

SMART - SPECIFIC, MEASURABLE, ACHIEVABLE, RELEVANT, TIMEBOUND

SMMES - SMALL MEDIUM AND MICRO ENTERPRISES

SOE - STATE OWNED ENTERPRISES

SOER - STATE OF THE ENVIRONMENT REPORT

SPC – SPATIAL PLANNING CATEGORY

SPLUMA – SPATIAL PLANNING AND LAND USE MANAGEMENT ACT

UDZ - URBAN DEVELOPMENT ZONE

VPUU - VIOLENCE PREVENTION THROUGH URBAN UPGRADING PROGRAMME

WCG – WESTERN CAPE GOVERNMENT

WCIF – WESTERN CAPE INFRASTRUCTURE FRAMEWORK

WMA – WATER MANAGEMENT AREA

# 1. INTRODUCTION

## 1.1. BACKGROUND

This report presents the Western Cape's new Provincial Spatial Development Framework (PSDF), as prepared by the Department of Environmental Affairs and Development Planning (DEADP) with the assistance of service providers. A draft of this PSDF was made available for public review in October 2013, inputs made by interested and affected parties were considered, and final amendments were made. The PSDF 2014 has been approved by the Executive Authority, Minister Anton Bredell, Minister of Local Government, Environmental Affairs and Development Planning, and submitted to the Provincial Cabinet for endorsement in April 2014. The PSDF 2014 replaces the previous PSDF that was approved in June 2009.

The 2014 PSDF builds on and takes forward the 2009 PSDF's spatial policies. The 2009 PSDF was reviewed and has been replaced for the following reasons:

1. The previous PSDF was prepared in a buoyant property market. The 2008 global financial crisis fundamentally changed the economic context, and the resultant depressed market conditions still prevail and are forecast by the Southern African Reserve Bank to endure.
2. Greater clarity is emerging regarding the spatial planning responsibilities of the three spheres of government. This emanates from recent Constitutional Court rulings and the drafting of new spatial planning legislation (i.e. the Spatial Planning and Land Use Management Act (SPLUMA 2013) which the President signed into law in August 2013

but has not yet been brought into effect, and the Western Cape's Land Use Planning Act which is scheduled to be enacted in 2014). Aspects of the Western Cape's current spatial planning legislation (i.e. Land Use Planning Ordinance (LUPO 1985)) and the 2009 PSDF regarding Provincial and municipal planning functions are inconsistent with the Constitution, and need to be revised.

3. The release of the results of the 2011 Census provides up to date information on which to base a new PSDF.
4. The National Development Plan (NDP) and OneCape 2040 initiatives have established new complementary development agendas within which to reframe the Western Cape PSDF.

## 1.2. PSDF'S TERMS OF REFERENCE

### 1.2.1. LEGISLATIVE CONTEXT

The Constitution assigns Provincial and regional planning as exclusive responsibilities of Provincial Government. In terms of Section 15 of SPLUMA 2013 and Section 4 of the Land Use Planning Act, Premiers are required to compile and publish a spatial development framework (SDF) for their Province. This PSDF must coordinate, integrate and align:

- Provincial plans and development strategies with policies of National Government;
- the plans, policies and development strategies of Provincial departments; and
- the plans, policies and development strategies of municipalities.

Whilst the Constitution assigns shared and exclusive spatial responsibilities to each sphere

of government, it is evident that Provincial Government's PSDF mandate requires coordination, integration and alignment between all spheres of government.

### 1.2.2. CONTENT REQUIREMENTS

In terms of new spatial planning legislation a PSDF must cover the following aspects:

- i. a description of the process followed preparing a PSDF;
- ii. an assessment of a Province's spatial development status and the key spatial challenges it faces;
- iii. Provincial spatial implications of relevant national development strategies;
- iv. a Provincial spatial vision that articulates desired land use patterns;
- v. Provincial land development objectives, principles, strategies, policies and priorities (with particular attention to the sustainable use of spatial assets/resources, and adaptation/mitigation of climate change and energy risks);
- vi. a coordinated and integrated spatial reflection of the plans of Provincial departments; and
- vii. a coordinated framework for Regional and Municipal SDFs.

### 1.2.3. AIMS

The Western Cape PSDF sets out to put in place a coherent framework for the Province's urban and rural areas that:

- i. gives spatial expression to the national and Provincial development agendas;
- ii. serves as basis for coordinating, integrating



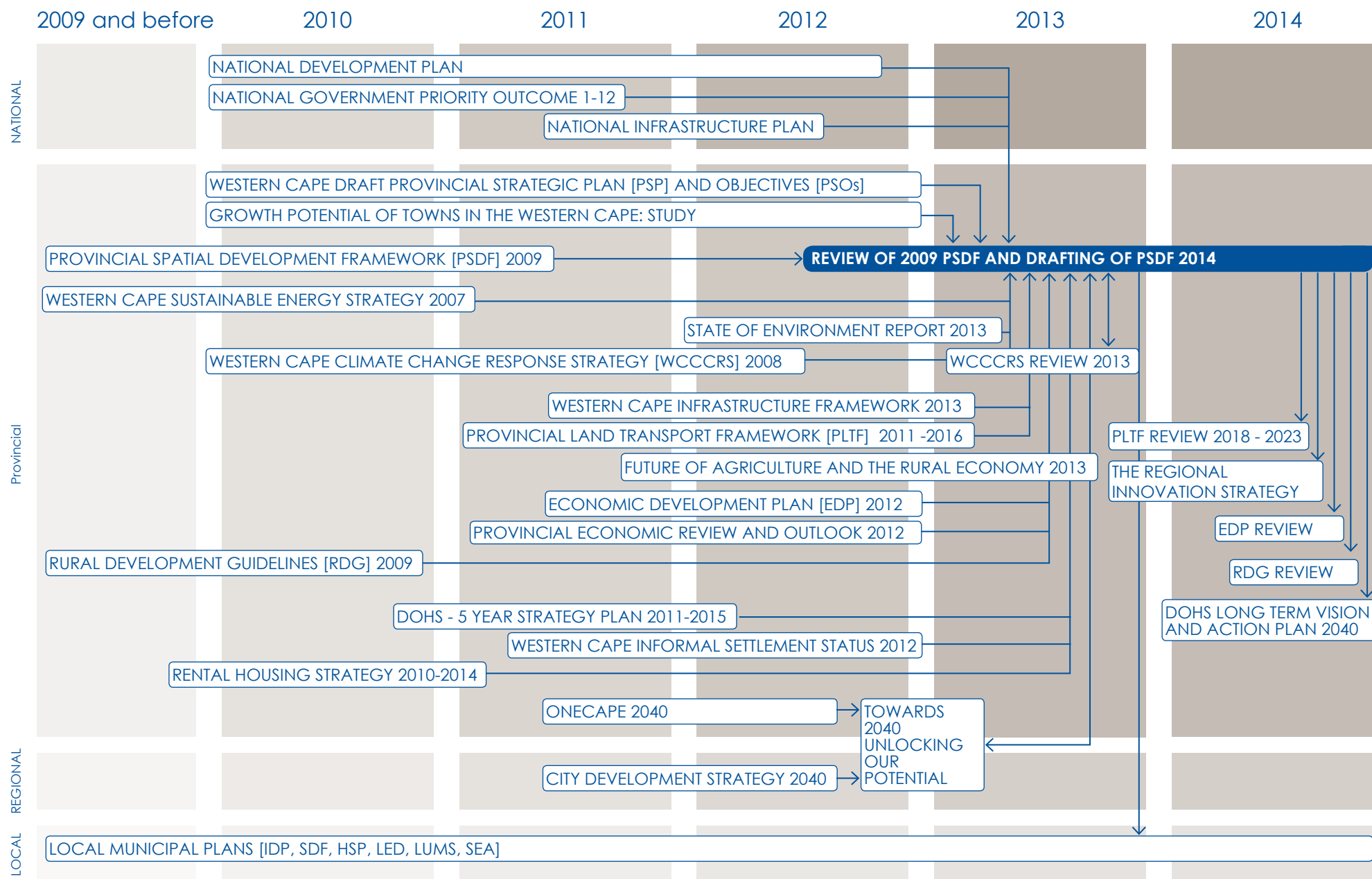


DIAGRAM.1 INFORMANTS AND PROCESSES RELEVANT TO THE PSDF, ILLUSTRATING THE ALIGNMENT OF THE PSDF WITH COMPLEMENTARY PLANNING PROCESSES

and aligning 'on the ground' delivery of national and Provincial departmental programmes;

- iii. supports municipalities fulfil their municipal planning mandate in line with the national and Provincial agendas; and
- iv. communicates government's spatial development intentions to the private sector and civil society.

Whilst the 2009 PSDF was framed as DEADP's plan, the new PSDF has been framed as the spatial agenda of all Provincial departments (i.e. it functions as a transversal spatial planning instrument). It is informed by, and in turn informs, complementary national, Provincial and municipal planning processes (see Diagrams 1 and 2).

The PSDF seeks to improve the effectiveness of public investment in the Western Cape's built and natural environments by:

- adopting credible spatial planning principles to underpin all capital investment programmes,
- spatially targeting and aligning the various investment programmes, and
- opening-up opportunities for community and business development in targeted areas.

#### 1.2.4.ROLE AND USERS OF PSDF

Diagram 2 illustrates where and how the PSDF fits into national, Provincial and local sphere frameworks and plans. The PSDF is a long term (i.e. > 5 year) spatial framework from which various plans will be implemented. It is informed by the NDP and related spatial policies, and takes its strategic direction from the Western Cape's development strategy and related policy frameworks (e.g. WCIF, PLTF). It conveys the Western Cape's spatial agenda to national and Provincial departments, as well as state owned enterprises (SOEs) so that their sector plans and programmes are grounded in a sound and common spatial logic.

The PSDF also conveys the Western Cape's spatial agenda to municipalities, so that their IDPs, SDFs and land use management systems (LUMS) are consistent with and take forward WCG's spatial agenda.

Diagram 2 also illustrates the linkages between spatial planning within the three spheres of government, and budgeting processes. The PSDF serves to strengthen these linkages so that the returns on public investment are optimized, as well as provide greater certainty to communities and the private sector on the direction of spatial growth.

As the PSDF serves to guide the location and form of public investment in the Western Cape's urban and rural areas, the public sector is a key user of the PSDF - mainly Provincial Government departments, but also national and municipal government as well as SOEs. Provincial Government cannot dictate where other institutions must invest, but the PSDF can influence these investment decisions by establishing a coherent and logical spatial investment framework.

The private sector is also a user of the PSDF. Whilst the PSDF has limited influence on private sector investment patterns, it has an important contribution to make in reducing business risk (by providing clarity and certainty on where public infrastructure investment will be targeted) thereby opening-up new economic opportunities in these areas.

Similarly, the transparency of the PSDF regarding where socio-economic investment will be targeted facilitates proactive and reactive responses by community based organisations. (CBOs) and non-governmental organisations.

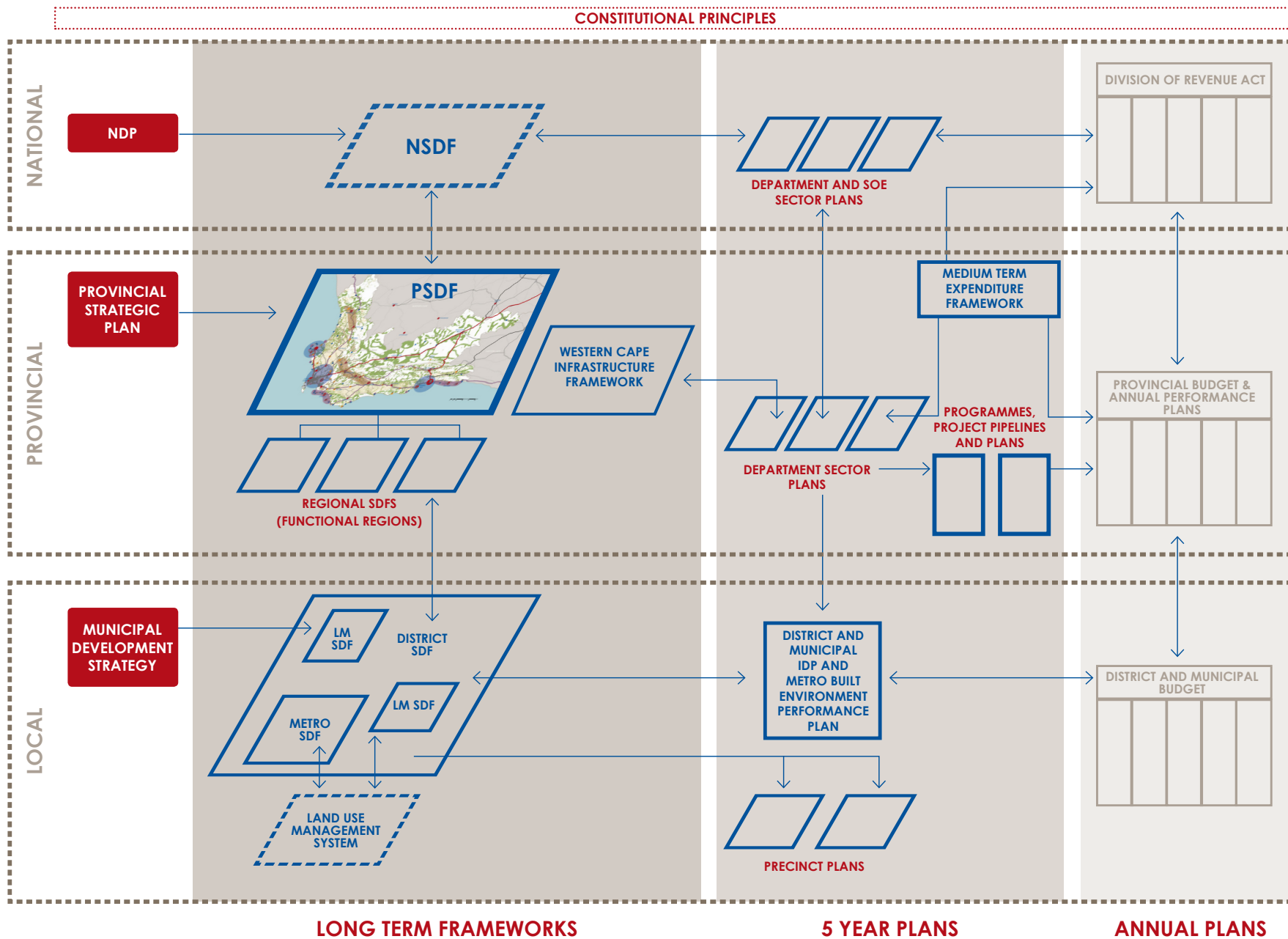


DIAGRAM.2 THE CONTEXT AND ROLE OF THE PSDF IN RELATION TO OTHER FRAMEWORKS AND PLANS



### 1.2.5. PLANNING DOMAIN AND MUNICIPAL JURISDICTIONS

The PSDF focuses primarily on the Western Cape Province, which makes up 10.6% of the country's land surface and encompasses an area of 129 462 km<sup>2</sup>. Within this primary study

area consideration is given to the City of Cape Town's (a Metropolitan Municipality) area of jurisdiction and the jurisdictions of the five District Municipalities (i.e. Central Karoo, Eden, Overberg, Cape Winelands and West Coast). In addition, the 24 Local Municipalities constituted within the District Municipalities are also within

the PSDF's reference frame (see Figure 1). The PSDF also gives consideration to the Western Cape's spatial relationships with neighbouring Provinces and the national space-economy.

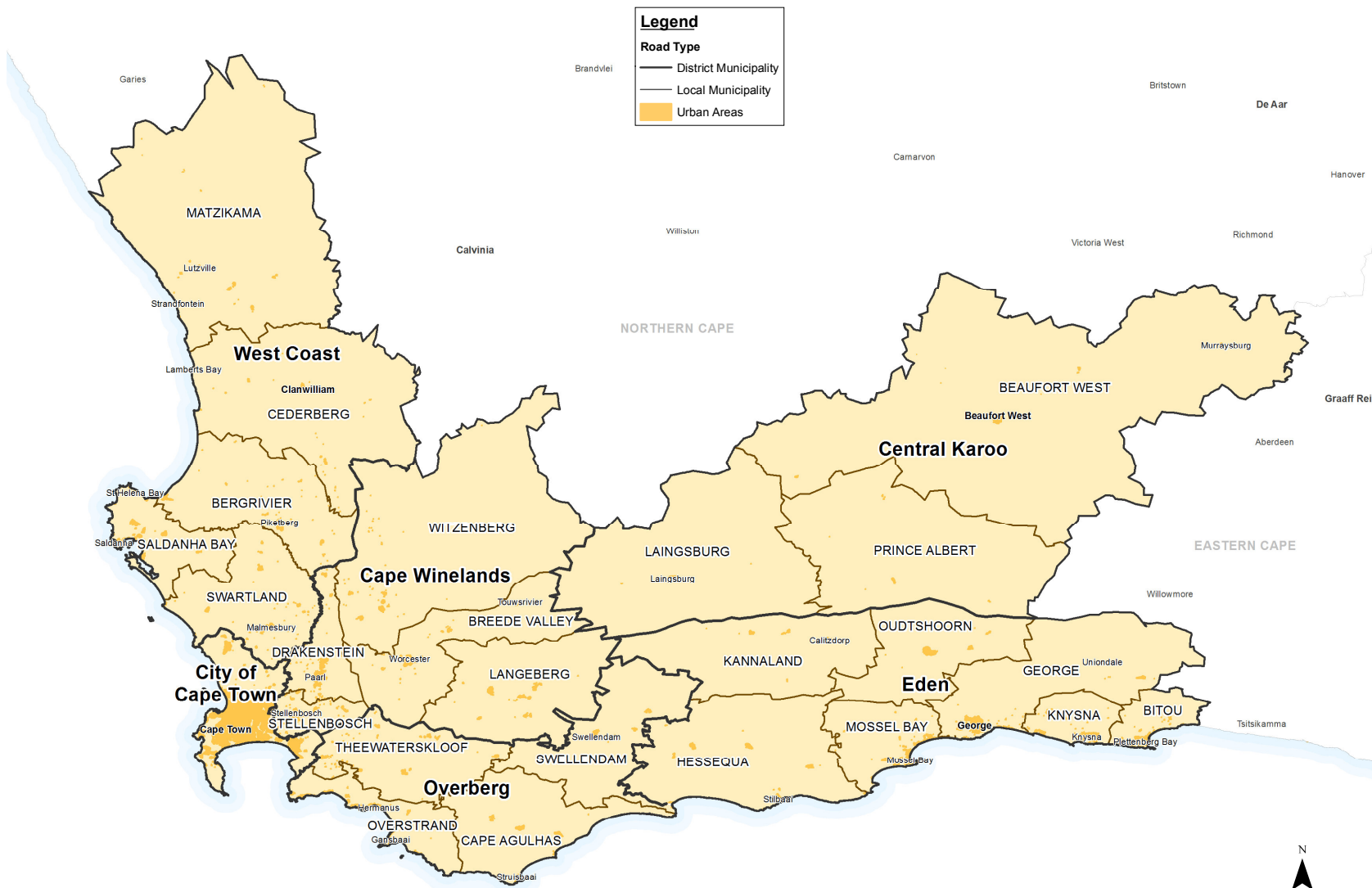


FIG.1 WESTERN CAPE PROVINCE - MUNICIPAL JURISDICTIONS

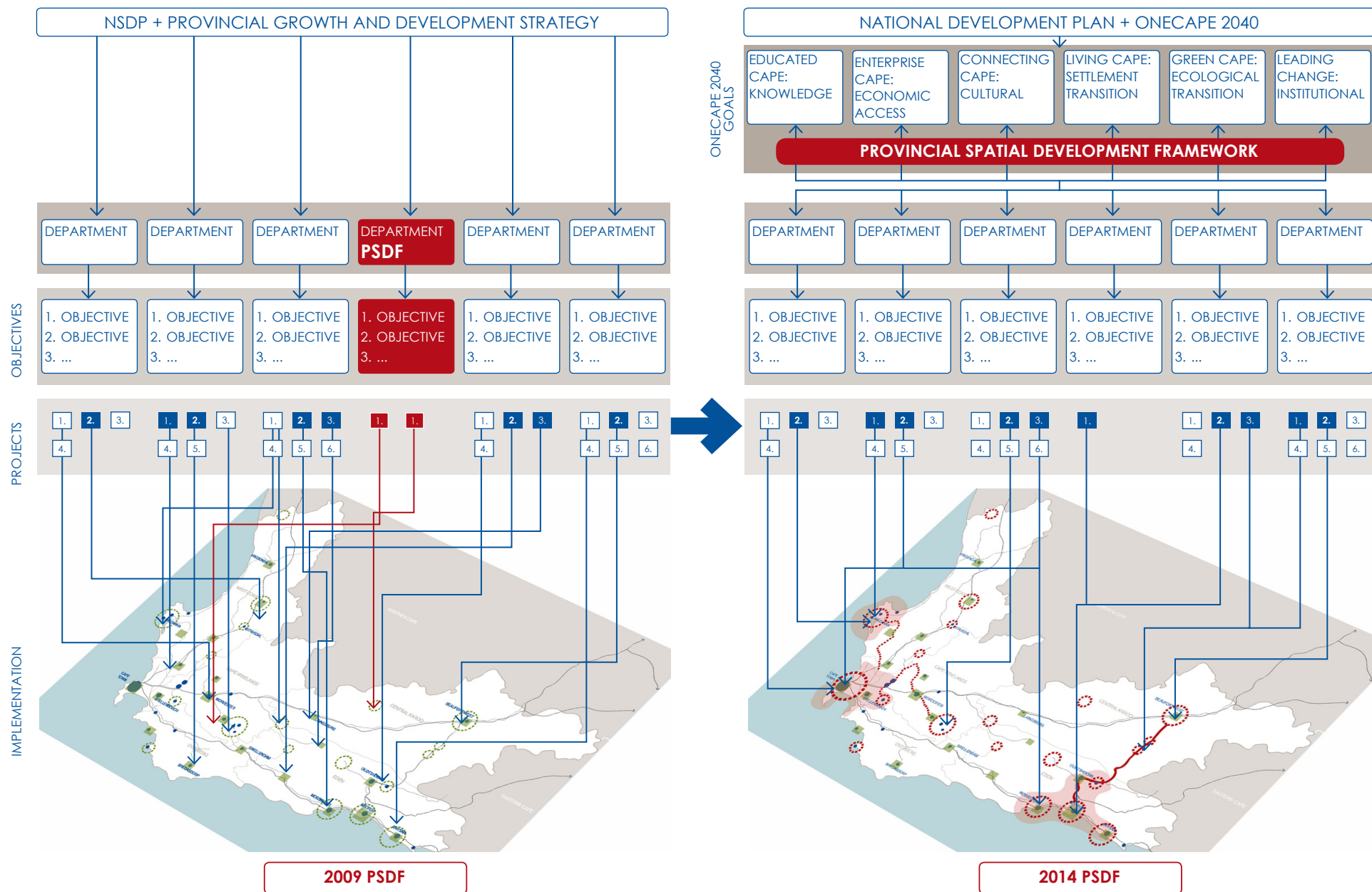


DIAGRAM.3 A CONCEPTUAL ILLUSTRATION OF THE ROLE OF PSDF 2014 AS A TRANSVERSAL PROVINCIAL PLANNING INSTRUMENT

## 1.3. 2009 PSDF REVIEW

### 1.3.1. APPROACH

The approach followed in reviewing the 2009 PSDF and replacing it with a transversal Provincial framework involved:

- i. Inviting interested and affected parties to submit their feedback on the 2009 PSDF and responding to inputs received (i.e. building on its sound policies, narrowing its focus to Provincial considerations, giving attention to transversal spatial governance, commissioning specialist studies to address gaps identified).
- ii. Building on and taking forward the strategic direction set by the National Development Plan (NDP) and OneCape 2040 initiative, given congruence between these national and Provincial development agendas
- iii. Interacting with parallel Provincial planning initiatives such as the Western Cape Infrastructure Framework (WCIF), Provincial Land and Transport Framework (PLTF), and the Future of Agriculture and Rural Economy (FARE) investigation (see Diagram 1).
- iv. Engaging with the national and Provincial processes to reform spatial planning legislation.
- v. Involving national and Provincial departments, municipalities and SOEs in oversight of the PSDF's review by way of an inter-governmental PSDF Steering Committee.
- vi. Engaging specialists (i.e. academics, NGOs, property industry) in a series of Focus Group workshops to explore key spatial policy considerations (i.e. urban informality, urban land markets, rural

development, infrastructure and transport, and development of the space-economy).

- vii. Sharing the outcomes of the policy focus groups with municipalities, and giving them the opportunity to contribute to the formulation of Provincial spatial policies.
- viii. One-on-one engagements with Provincial departments on spatial considerations within their portfolio, and multilateral engagement on developing a common spatial agenda.

### 1.3.2. ACTIVITIES AND OUTPUTS

The process to review the 2009 PSDF encompassed the following activities and generated a range of outputs (see Diagram 4):

- i. DEADP recorded the comments made by interested and affected parties on the 2009 PSDF, and how the new PSDF should respond to these.

- ii. To fill gaps identified in the 2009 PSDF, DEADP commissioned specialist studies on the following topics (the findings of which are separately documented):
  - The significance of the Western Cape's cultural and scenic landscapes.
  - The impact of decentralised office and commercial development.
  - The financial sustainability of current municipal spatial growth patterns.
- iii. The 2010 Growth Potential Study (GPS) was updated, based on the 2011 Census results.
- iv. The PSDF service providers did a desktop review of the Province's current spatial development status, the findings of which are documented in Annexure 1.
- v. The PSDF service providers consolidated available Provincial mapping into a baseline



DIAGRAM.4 PSDF REVIEW PROCESS

GIS spatial data base, which Provincial Government is incorporating into a web-based spatial information portal.

- vi. In October 2013 a draft of the PSDF was released for public review. Informed by comments received this final version of the PSDF 2014 was produced.

The PSDF 2014 has been approved by the Executive Authority, Minister Anton Bredell, Minister of Local Government, Environmental Affairs and Development Planning, and endorsed by the Provincial Cabinet.

## 1.4. POLICY CONTEXT

The Western Cape's new PSDF has been framed to take forward the NDP's spatial agenda, as well as give effect to the Provincial Strategic Objectives. The OneCape 2040 initiative builds on these complementary national and Provincial development agendas.

Key national and Provincial policy informants to the PSDF are highlighted below.

### 1.4.1. NATIONAL DEVELOPMENT PLAN (2012)

The National Planning Commission (NPC) identified 9 main challenges facing the country and approaches to tackling these (see Table 1). The NDP's key objectives to be achieved by the year 2030 are to eliminate income poverty and reduce inequality.

Of particular relevance to the new PSDF are the NDP's spatial priorities for building the required national capabilities. These are:

#### 1.4.1.1 URBAN AND RURAL TRANSFORMATION

The NPC proposes a national focus on spatial transformation given the enormous costs imposed by existing spatial divides. It recognises that achieving this is a complex long-term process. The NDP's human settlement targets are: more people living closer to their places of work; better quality public transport; and more jobs in proximity to townships. To achieve these targets it advocates strong measures to prevent further development of housing in marginal places, increased urban densities to support public transport, incentivising economic activity in and adjacent to townships; and engaging the private sector in the gap housing market.

The NDP also targets the development of a more inclusive and integrated rural economy. Its rural strategy is based on land reform, agrarian transformation, livelihood and employment creation, and strong environmental safeguards.

#### 1.4.1.2 IMPROVING INFRASTRUCTURE

The NDP identifies infrastructure as essential for development and prioritises: upgrading informal settlements on suitably located land; rolling-

out public transport systems; improving freight logistics; augmenting water supplies; diversifying the energy mix towards gas (i.e. imported liquid natural gas and finding domestic gas reserves) and renewables; and rolling-out broadband access.

#### 1.4.1.3 BUILDING ENVIRONMENTAL SUSTAINABILITY AND RESILIENCE

*"South Africa's primary approach to adapting to climate change is to strengthen the nation's economic and societal resilience. This includes ensuring that all sectors of society are more resilient to the future impacts of climate-change by; decreasing poverty and inequality; creating employment; increasing levels of education and promoting skills development; improving health care and; maintaining the integrity of ecosystems and the many services that they provide" [NDP 2012, p209].*

The long term strategy is to transition to a low carbon economy.

TABLE.1 NATIONAL DEVELOPMENT CHALLENGES AND RESPONSES

NATIONAL DEVELOPMENT CHALLENGES	RESPONSE
Unemployment	Create jobs and livelihoods
Infrastructure poorly located and inadequate	Expand infrastructure
Exclusive spatial patterns	Transform urban and rural spaces
Resource consumptive economy	Transition to a low carbon economy
Poor quality education	Improve education and training
Widespread disease burden and poor services	Provide quality health care
Poor quality public service	Build capable state
Corruption	Fight corruption and increase accountability
Divided society	Nation building



### 1.4.2. ONECAPE 2040

The Western Cape Government (WCG) and the City of Cape Town (CCT) mandated the Economic Development Partnership (EDP) to “scope a long-term economic vision and plan involving all key Western Cape economic leaders as well as citizens for the next 30 to 40 years.” This Provincial initiative, referred to as OneCape 2040, complements the NDP, and builds on the WCG’s Provincial Strategic Objectives (PSOs). It sets the goal of “creating a resilient, inclusive and competitive Western Cape with higher rates of employment producing growing incomes, greater equality and an improved quality of life”.

OneCape 2040’s vision is of “a highly-skilled, innovation driven, resource efficient, connected, high opportunity and collaborative society”. For each of these societal attributes aspired to OneCape 2040 identifies the ‘big step’ changes (i.e. transitions) that need to take place (see Tables 2 and 3). National, Provincial and municipal government, the private sector, labour, and civil society are all assigned roles in the achievement of the OneCape 2040 vision.

TABLE.2 ROLE AND AGENCIES RESPONSIBLE FOR ONECAPE 2040’S KEY TRANSITIONS

AGENCY	ROLE IN ‘LIVING CAPE’ SPATIAL TRANSITION
Local Government	<ul style="list-style-type: none"> <li>Integrated neighbourhoods and upgrading the built environment</li> <li>Integrated services planning and provision</li> </ul>
National Government	<ul style="list-style-type: none"> <li>Promote healthy and caring living</li> <li>Facilitate innovative financial mechanism</li> </ul>
Private Sector	<ul style="list-style-type: none"> <li>Design and produce settlement solutions that address resource scarcity and quality living</li> <li>Social value capture</li> </ul>

For the required Western Cape transitions to take place the following needs to be put in place:

- a supportive regulatory environment (e.g. streamlined environmental and land use approval processes),
- appropriate infrastructure,
- financing arrangements, and
- an enabling spatial framework (i.e.

concentration of economic activity in key nodes, supported by logistical, digital and transport connectivity).

Towards making the required transitions, OneCape 2040 adopts a phased step-change approach (i.e. four 7 year phases starting with gearing-up for change, followed by implementing at scale, then accelerating improvements, and concluding with sustaining performance).

TABLE.3 KEY TRANSITIONS (2012-2040) AS PER ONECAPE 2040 VISION

TRANSITION	FROM:	TO:
<b>KNOWLEDGE TRANSITION</b> (EDUCATING CAPE)	Unequal variable quality education plus limited innovation capacity	High-quality education for all plus high innovation capacity
<b>ECONOMIC ACCESS TRANSITION</b> (WORKING CAPE)	Factor and efficiency-driven economy with high barriers to entry and low productivity and entrepreneurship rates	Innovation-driven economy with low barriers to entry, high productivity and entrepreneurship rates
<b>ECOLOGICAL TRANSITION</b> (GREEN CAPE)	Unsustainable, carbon-intensive resource use	Sustainable, low-carbon resource use
<b>CULTURAL TRANSITION</b> (CONNECTING CAPE)	Barriers to local and global connectivity (language, identity, distance, parochial attitudes)	High level of local connectivity and global market fluency
<b>SETTLEMENT TRANSITION</b> (LIVING CAPE)	Unhealthy, low access, often alienated, low opportunity neighbourhoods	Healthy, accessible, liveable, multi-opportunity communities
<b>INSTITUTIONAL TRANSITION</b> (LEADING CAPE)	Defensive, adversarial structures	Open, collaborative systems

### 1.4.3. WESTERN CAPE INFRASTRUCTURE FRAMEWORK (WCIF) (2013)

The WCIF is a long-term strategic framework that aligns with the OneCape 2040 vision and timeframe. The WCIF sets out the required changes and development agendas relating to infrastructure provision to optimally achieve the OneCape 2040 transitions. Given the sector-based and institutionally fragmented history of infrastructure planning, the WCIF defines a new approach to coordinated and strategic infrastructure planning.

The WCIF quantifies the scale and nature of the infrastructure requirements in the Western Cape, how and where infrastructure provision needs to evolve to satisfy a new agenda in a changing world, and who will be responsible for its implementation. The framework also sets out high-level transitions required to achieve the optimised development agenda and is broken down in sub-infrastructure sectors (see Table 4). The PSDF strategically aligns with these transitional agendas to ensure for the optimization and alignment of Provincial planning policies with infrastructure delivery.

### 1.4.4. WESTERN CAPE PROVINCIAL LAND TRANSPORT FRAMEWORK (PLTF) (2013)

The PLTF sets out a long term vision for transport in the Western Cape. The PLTF's targets are that by 2050 the transport system in the Western Cape will have:

- i. Fully Integrated Rapid Public Transport Networks (IRPTN) in the higher- order urban centres of the Province.
- ii. Fully Integrated Public Transport Networks (IPTN) in the rural regions of the Province

- iii. A safe public transport system
- iv. A well maintained road network
- v. A sustainable, efficient, high speed, long distance rail network (public and freight transport) with links to the Northern Cape, Gauteng and the Eastern Cape
- vi. An efficient international airport that links the rest of the world to the choice gateway of the African continent
- vii. International-standard ports and logistics systems
- viii. A transport system that is resilient to peak oil.

### 1.4.5. WESTERN CAPE GREEN ECONOMY STRATEGIC FRAMEWORK (2013)

The "Green is Smart" Strategic Framework positions the Western Cape as the leading green economic hub in Africa. The framework outlines the risks to the Province posed by climate change, as well as the economic opportunity presented by a paradigm shift in infrastructure provision. The framework centres around six strategic objectives:

- i. Become the lowest carbon Province
- ii. Increase usage of low-carbon mobility
- iii. Diversified, climate-resilient agricultural sector and expanded value chain
- iv. Emerging market leader in resilient, liveable and smart built environment
- v. High growth of green industries and services
- vi. Secure ecosystem infrastructure

TABLE.4 KEY TRANSITIONS PER SECTOR AS PROPOSED BY WESTERN CAPE INFRASTRUCTURE FRAMEWORK

SECTOR	WCIF PROPOSED TRANSITIONS
ENERGY	<ul style="list-style-type: none"> <li>• Introduce natural gas processing infrastructure to use gas as a transition fuel.</li> <li>• Promote the development of renewable energy plants in the Province and associated manufacturing capability.</li> <li>• Shift transport patterns to reduce reliance on liquid fuels.</li> </ul>
WATER	<ul style="list-style-type: none"> <li>• Have more stringent water conservation and demand-management initiatives, particularly at municipal level.</li> <li>• Develop available groundwater resources.</li> <li>• Adopt more widely the reuse of wastewater effluent as standard practice.</li> <li>• Adopt large-scale desalination once it becomes the "next best" option to resolve inevitable water shortages in Saldanha Bay, Cape Town and the southern Cape.</li> <li>• Expand and diversify agriculture to increase availability of surface water but reduce the water intensity of the sector, given the limited availability of water for irrigation.</li> </ul>
TRANSPORT	<ul style="list-style-type: none"> <li>• Invest in public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres.</li> <li>• Prioritise general freight rail over bulk freight.</li> <li>• Shift freight traffic from road to rail along major routes.</li> </ul>
SETTLEMENT	<ul style="list-style-type: none"> <li>• Continue to provide basic services to achieve national targets.</li> <li>• Diversify the housing programme, with greater emphasis on incremental options.</li> <li>• Integrate settlement development, prioritising public service facilities in previously neglected areas.</li> <li>• Improve energy efficiency in buildings through design standards.</li> <li>• Consolidate management of state land and property assets for optimal use.</li> <li>• Distribute health and education facilities equitably.</li> <li>• Innovate in the waste sector to increase recycling and reuse, including the adoption of waste-to-energy in the longer term.</li> </ul>
ICT	<ul style="list-style-type: none"> <li>• The availability of a strong broadband infrastructure network is central to efficient communications and internet services and will play a key role in achieving the Provincial objectives.</li> </ul>

## 1.5. GUIDING PRINCIPLES

In taking these agendas forward the PSDF 2014 applies the following spatial principles:

### 1.5.1. SPATIAL JUSTICE

A socially just society is based on the principles of equality, solidarity and inclusion. While equal opportunity targets everyone in the community, social justice targets the marginalised and disadvantaged groups in society. 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. Past spatial and other development imbalances should be redressed through improved access to and use of land by disadvantaged communities.

### 1.5.2. SUSTAINABILITY AND RESILIENCE

Land development should be spatially compact, resource-frugal, compatible with cultural and scenic landscapes, and should not involve the conversion of high potential agricultural land or compromise ecosystems. Resilience is about the capacity 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 should be on creating complex, diverse and resilient spatial systems that are sustainable in all contexts.

### 1.5.3. SPATIAL EFFICIENCY

Efficiency relates to the form of 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.

### 1.5.4. ACCESSIBILITY

Improving access to services, facilities, employment, training and recreation, and safe and efficient transport modes is essential to achieving the stated settlement transitions of the NDP and OneCape 2040. Accessibility is also defined by convenient and dignified access to private and public spaces for people with impaired mobility. Good and equitable access systems must prioritise the pedestrian, as well as provide routes for bicycles, prams, wheelchairs and public transport. An accessible system will offer a choice of routes supporting these modes and safe connections between places and communities. Visual access implies direct sight lines or unfolding views, signs or other visual cues, and being able to see other people - all of which help in negotiating places.

### 1.5.5. QUALITY AND LIVEABILITY

The quality of an environment directly contributes to its liveability. A quality built environment is one that is legible, diverse, varied and unique. Legible built environments are characterized by the existence of landmarks such as notable buildings and landscaping, well-defined public spaces, as well as navigable street networks. Diverse built environments offer a variety of opportunities, experiences and choice. The more varied a place, the more it is distinguishable because of

the individual qualities that make it distinctive from other places. Liveable settlements balance individual and community facilities, and display a logic of order and random incident. In many cases, a town's public realm provides coherence and order while countless private ventures introduce variety and interest. One condition benefits from the other. The quality of public space can define the liveability of a place. Public spaces are the living rooms to settlements where people meet, play and relax. They need to be safe and attractive - features enabled by activity and surveillance.

## 1.6. STRUCTURE OF THE REPORT

The PSDF 2014 report is structured as follows:

- Chapter 2 defines the PSDF's spatial agenda. It explores the Western Cape's key spatial challenges, identifies the Province's spatial goals, visualises the spatial future aspired to, and outlines the required spatial transitions.
- Chapter 3 presents policy frameworks within which to roll-out the Western Cape's spatial agenda (i.e. managing the sustainable use of the Province's spatial resources, opening up new opportunities in the Provincial space-economy, and developing integrated and sustainable human settlements). To conclude this chapter the composite PSDF map is presented to illustrate desired land use patterns and nodes of economic opportunity.
- Chapter 4 sets out the required actions for implementing the Western Cape's spatial agenda.

Annexure 1 to the PSDF 2014 report presents a profile of the Western Cape's spatial development status.

Annexure 2 presents a detailed reference list to the various legal instruments relating to the legal context within which the PSDF functions.

Annexure 3 presents a Settlement Toolkit which provides spatial guidance on the PSDF's proposals at municipal, town and precinct scales.

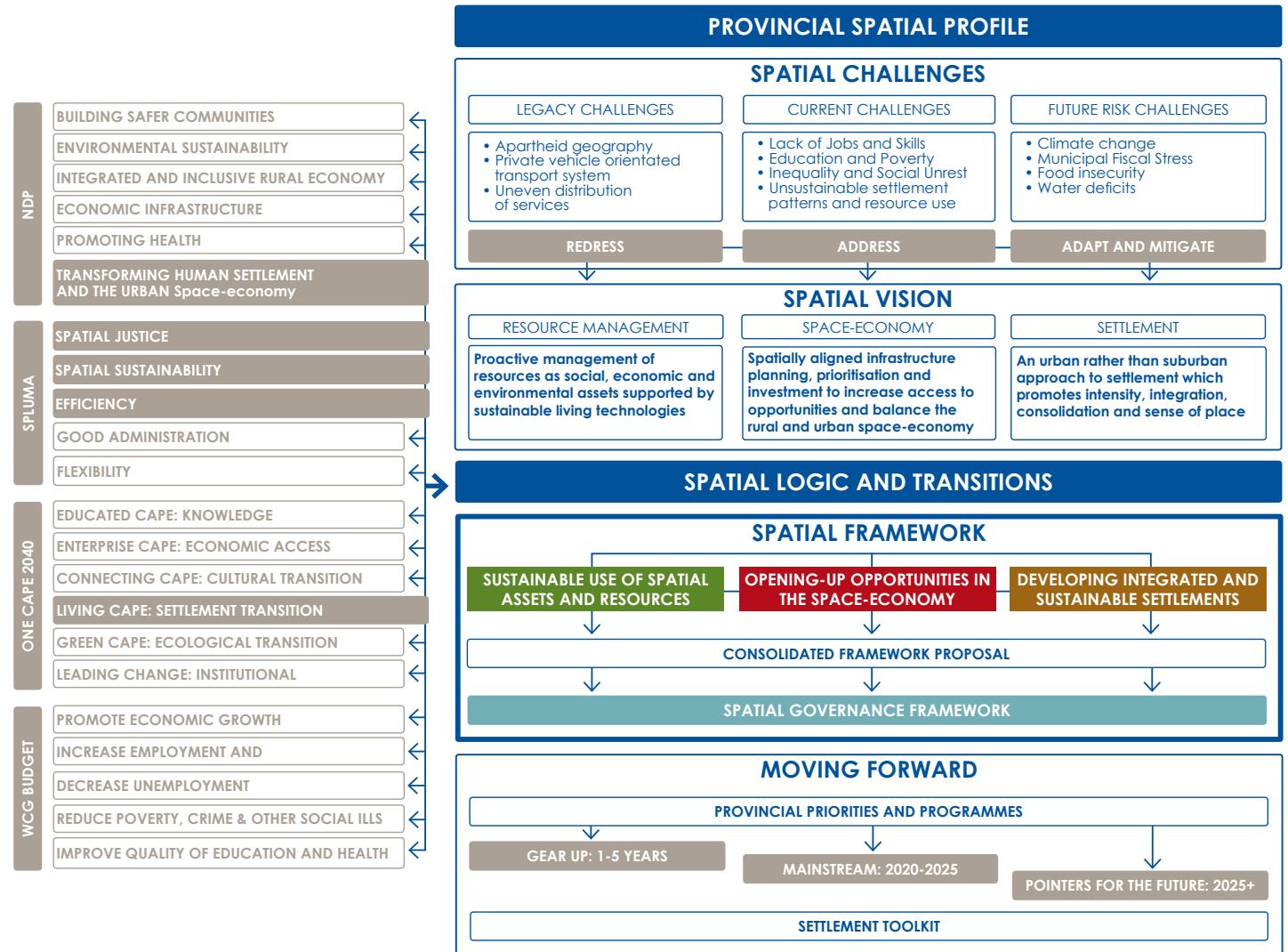


DIAGRAM.5 A CONCEPTUAL DIAGRAM OF THE PSDF PROCESS WHICH HAS INFORMED THE STRUCTURE OF THE REPORT



## 2. DEFINING THE PROVINCIAL SPATIAL AGENDA

OneCape 2040 positions the Western Cape to transition towards a more inclusive, productive and resilient economic future. This chapter explores the spatial implications of such a future, the changes required, and ways to get there. The chapter draws on a baseline profile of the Western Cape, separately documented in PSDF Annexure 1, the specifics of which are not repeated below.

Initially the chapter identifies the key spatial challenges that the Province faces, and reflects on why there has been slow progress in addressing these. The Province's spatial goals are then set, and the spatial future aspired to (i.e. the vision) and transitions required to get there are spelt out. Finally a strategic approach to making the required changes is presented, and the logic underpinning the approach is explained.

### 2.1. SPATIAL CHALLENGES

#### 2.1.1. LEGACY CHALLENGES

*"Despite reforms to the planning system, colonial and apartheid legacies still structure space across different scales" (NDP, 2012, p 260)*

Whilst the NDP recognises that it will take decades to undo colonial and apartheid spatial legacies, it highlights that limited progress is currently being made and calls for renewed and focused action by government, civil society and business to redress past injustices. The 1913 Native Land Act still impacts on the national space-economy, notwithstanding two decades of restitution efforts. The recent announcement on the

centenary of the Act to give consideration to pre 1913 land claims introduces a new dynamic to land restitution in the Western Cape.

A primary strategy of apartheid was to manipulate urban and rural space-economies so that those enfranchised had preferential access to economic assets, particularly well located and resource endowed land, and the disenfranchised were restricted in accessing these opportunities. The Western Cape's status in the apartheid era as a 'Coloured labour preference area' meant that Africans could only participate in the regional economy as temporary migrant labourers, and their families were explicitly excluded from living there. The consequences of the various racial segregation policies applied at the time were not only stark socio-economic disparities, dysfunctional human settlements, and disparate space-economies - but also fragmented families and communities.

To implement apartheid's urban master plan, many communities were forcibly removed and relocated to areas designated for their 'group'. Town planning in this era concerned itself with separating and keeping apart racial groups,



FIG.2 DEMOLITION AS PART OF 1974 FORCED REMOVALS IN DISTRICT SIX (SOURCE: PAUL ALBERTS)

with the disenfranchised generally located on the urban periphery and having to travel long distances to get to work, the hospital or to the shops. Settlement took the form of low density dormitory townships usually lacking the 'separate' facilities they were meant to have.

Not only were the working and living patterns of the time inequitable, they were also highly inefficient (i.e. they used up vast tracts of land and consumed large quantities of energy). Regrettably this spatial legacy endures almost two decades into the democratic era. Taking forward land restitution and redistribution remains an important component of the Provincial spatial agenda.



FIG.3 NON-WHITE PERSONS ONLY RAILWAY STATION PLATFORM IN 1983 (SOURCE: RODNEY BARNETT - SOUTH PHOTOGRAPHS)

## 2.1.2. CURRENT CHALLENGES

*"Inclusive growth is not simply about increasing employment, but rather about creating opportunities where people can be productively employed. At the same time individuals need to be equipped, through the process of education and training, to take hold of these opportunities. Creating these opportunities is therefore a necessary characteristic of and a central challenge in generating inclusive growth"* (Provincial Economic Review and Outlook, PERO 2013, p130.)

Growing the economy is the Western Cape Government's number one development priority. The PSDF's role is to open-up opportunities for inclusive economic growth in urban and rural areas. The NDP and OneCape 2040 both echo the imperative of transforming the nature and performance of the economy to achieve sustained economic growth, greater environmental resilience, and much better inclusion. The 2008 global financial crisis led to widespread job shedding, and with a slow economic recovery unemployment is still pervasive, especially amongst the youth.



FIG.4 THE "LOST" PEOPLE OF THE RURAL HINTERLAND - WITH LIMITED ACCESS TO ECONOMIC AND SOCIAL OPPORTUNITIES

OneCape 2040 ascribes this to "a deep mismatch between the needs of the economy and the skills-base of existing job seekers and those being produced by the country's education system" (OneCape 2040 – From Vision to Action, 2012). The resultant socio-economic exclusion underpins the high levels of crime, violence and social unrest, which further undermines confidence in the Provincial economy.

Notwithstanding two decades of policies aimed at transforming apartheid's geography, South Africa's cities, towns, villages and rural areas remain highly unequal, inefficient and segregated places.

Mindful of the complexity of undoing this entrenched spatial legacy, the PSDF takes on the challenge of restructuring the Western Cape's urban and rural landscapes so that they offer socio-economic opportunities for all – especially those previously restricted in accessing these benefits.

### 2.1.2.1 THE URBAN AGENDA

Whilst good progress has been made



FIG.5 SOCIAL UNREST - FARM WORKERS PROTESTING IN DE DOORNS

in the democratic era with delivering improved services and housing to previously disadvantaged communities, this investment has mainly taken place in peripheral locations. The 'beneficiaries' living there have difficulty in accessing opportunities in the urban space-economy (i.e. it has created further poverty traps). The peripheral location of most recent housing projects generates high travel demands at considerable cost to households and the environment, but their low density suburban form results in high per unit land and servicing costs. New housing projects on peripherally located land are motivated on the basis of 'cheaper' upfront land costs, but the real costs to households and government over the lifecycle of these assets are not factored into public housing investment decisions (see Box 1 and 2).

The formal urban land market remains unaffordable to over 80% of Western Cape households. This places an enormous pressure on state-assisted housing programmes, and has given rise to the development of vibrant informal urban land markets (i.e. shacks to rent in the backyards of formal townships and in informal settlements) and overcrowded



FIG.6 ISOLATED AND SEGREGATED GATED COMMUNITIES ON THE EDGE OF SOMERSET WEST

conditions in the formal housing stock. Housing backlogs are not being reduced, given in-migration into the Province and the State's emphasis on delivering complete and relatively expensive single family houses with subsidies available. Faced with limited accommodation choices (especially rental options), overcrowding is widespread and informality is a permanent feature in most Western Cape settlements.

Notwithstanding the Provincial Department of Human Settlements introducing a more nuanced and equitable State-assisted housing delivery programme and shifting to more incremental housing delivery models, the challenge remains formidable. The settlement challenge facing the Province revolves around:

- i. transforming apartheid era dormitory townships into integrated and sustainable human settlements,
- ii. recognising and proactively managing urban informality,
- iii. managing urban growth patterns.

The evidence from the PSDF specialist study into the impact of spatial growth patterns on municipal finances is compelling, current urban growth patterns are unaffordable and unsustainable (see Box 1 and 2).

### 2.1.2.2 THE RURAL AGENDA

As highlighted by the investigation into the Future of Agriculture and the Rural Economy (FARE), Western Cape agriculture is currently going through a difficult transition from reliance on cheap and unskilled labour to one characterised by fewer, more skilled and better paid workers. Other forces at play include a recession in its traditional export markets,

### THE ECONOMIC AND FISCAL COSTS OF INEFFICIENT LAND USE PATTERNS IN SOUTH AFRICA - STUDY FINDINGS

This 2011 study aimed to cost city efficiency, identify the specific drivers of current spatial patterns, and identify who incurs the costs of these patterns over time. The City Efficiency Costing Model (CECM) was developed to calculate the capital and recurrent costs of a given city, with a given spatial form, over a period of 10 years. Two hypothetical city growth scenarios were modelled: an 'urban sprawl scenario' using existing development principles; and an alternative 'compact city' development model.

In analysing the recurrent expenditure by income group, significant results on household expenditure emerged. While all income groups are better off financially in the compact city scenario, it is **low-income households** that are most adversely affected by the urban sprawl scenario, having to pay significantly more for **transport** with a **24% difference** between the two scenarios after 10 years.

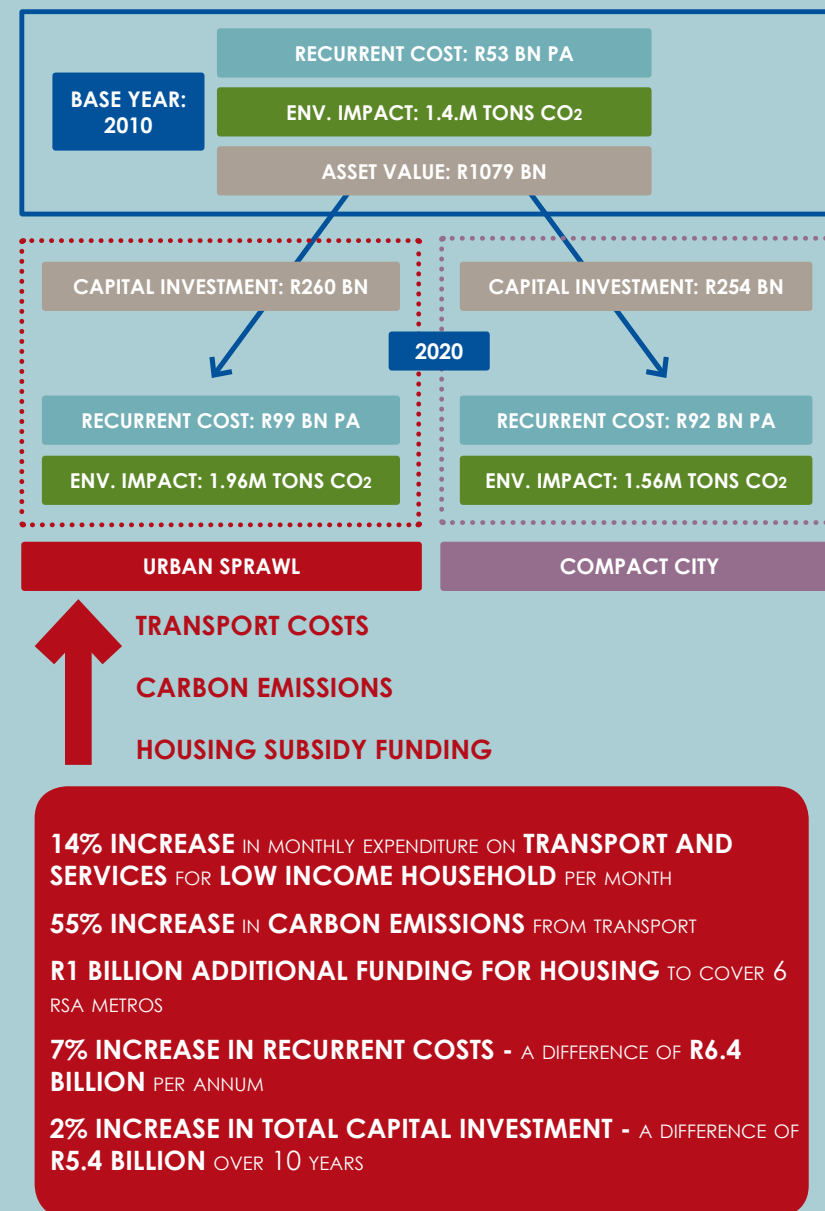
The study also found that the most significant difference and undeniable implication is the increase in **carbon emissions** in the urban sprawl scenario due to increased travel distance and private car use, with a **22% difference** in tons per CO<sub>2</sub> per annum.

Regarding public transport subsidies, a significant reduction of 33% is possible in the compact city scenario, amounting to some R9 billion over the 10 year period.

**THE TOTAL COST DIFFERENCE (CAPITAL AND RECURRENT) FOR 6 METROPOLITAN MUNICIPALITIES IN YEAR 10 IS CALCULATED TO BE R57 BILLION**

**THE CUMULATIVE DIFFERENCE OVER 10 YEARS AMOUNTS TO R219 BILLION**

DIAGRAM.6 SPATIAL AND FINANCIAL MODEL RESULTS



BOX.1 THE ECONOMIC AND FISCAL COSTS OF INEFFICIENT LAND USE PATTERNS IN SOUTH AFRICA - STUDY FINDINGS AND EVIDENCE (SOURCE: PDG, ACC AND SBC, 2011)



increasing pressure on operating margins (i.e. input cost escalations exceed commodity price increases), more stringent national and international compliance requirements, and instability in the labour market. Addressing the on and off-farm settlement needs of farm workers and dwellers, an impoverished and vulnerable rural constituency, presents unique challenges. Those who prefer to live off-farm find it difficult to access the housing subsidy programme in towns. The tenure of many living on-farm is tenuous.

Land reform and rural development, the responsibilities of National Government, is also on the PSDF's spatial agenda as they have an important contribution to make to rural transformation. FARE reports that the pace of land reform in the Province has been slow, and that there has been limited employment of underutilised State, Provincial and commonage land to date. Strategies to develop small scale farmers are yet to produce results at scale.

The sustainability of many of the Province's small towns is at risk, given their fragile local economies and that some are remotely located off the Province's infrastructure networks (i.e. "tussen pad en spoor"). Delivering services over

vast distances to small isolated communities (e.g. residents of 'bos dorpie's') and the high proportion of people living on farms presents serious logistical and financial challenges to most municipalities. The absence of public transport systems servicing rural communities and settlements fundamentally constrains socio-economic development.

### 2.1.3. FUTURE RISK CHALLENGES

*"It is evident that the organization of economic activities and infrastructure in space fundamentally impacts on the viability of these activities, people's access to opportunity and the natural environment. Continuing the current delivery model of isolated housing projects on the periphery of settlements will thus exacerbate the financial sustainability of municipalities, where the impact of this separation of social groups through peripheral development not only fragments our urban landscapes, but also ultimately undermines the progression towards more sustainable livelihood opportunities"* (PDG Specialist Study - see Box 1 and 2).

As highlighted in the Western Cape State of the Environment Outlook reports, the

Province is subject to global environmental risks (i.e. climate change, depletion in material resources, anticipated changes to the global carbon regulatory environment, and food and water insecurity). The challenge moving forward is to open-up opportunities for inclusive economic growth, and decouple economic growth from resource consumptive activities (i.e. the development of a 'greener' economy).

The PSDF responds to the following escalating risks:

- i. Understanding the spatial implications of known risks (e.g. climate change and its economic impact; and sea level rise, flooding and wind damage associated with extreme climatic events).
- ii. Energy insecurity, high levels of carbon emissions, and the economic impacts of the introduction of a carbon tax.
- iii. Water quality and quantity deficits.
- iv. Exclusionary land markets and the continued reality of urban informality.
- v. Food insecurity.
- vi. The sustainability of municipal finances.



FIG.7 FLOODING INFORMAL SETTLEMENT IN STELLENBOSCH



FIG.8 VULNERABLE INFORMAL SETTLEMENT



FIG.9 SPRAWLING RDP HOUSING IN NKQUBELA - ROBERTSON



# IMPACT OF CURRENT SPATIAL GROWTH PATTERNS ON MUNICIPAL SUSTAINABILITY - SPECIALIST STUDY FINDINGS AND EVIDENCE

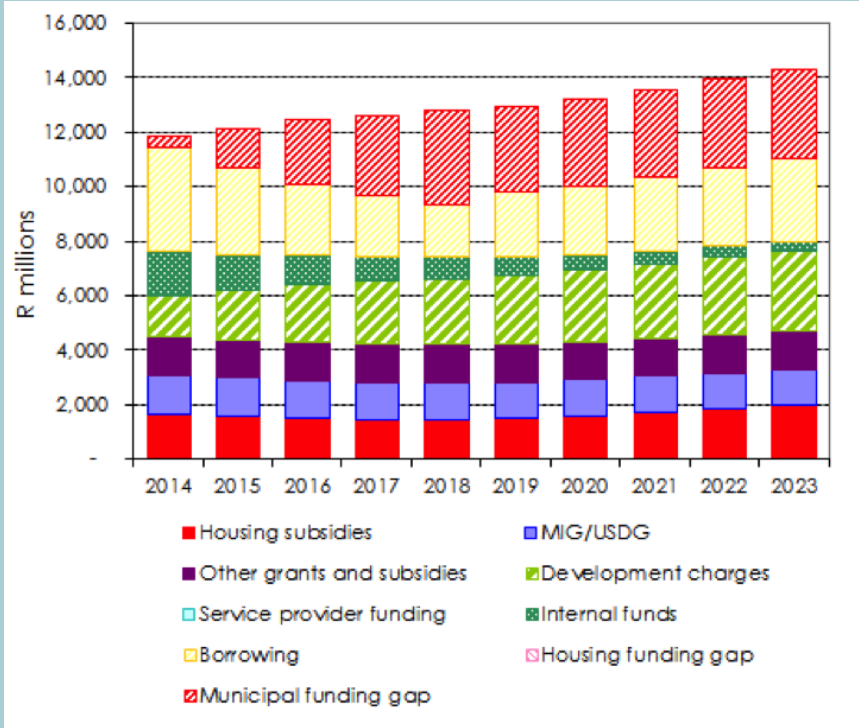
The study aimed to assess municipal sustainability with regard to the financial impacts of spatial growth patterns through running the Municipal Services Financial Model (MSFM) for 7 case study municipalities.

The impact of spatial growth patterns was assessed in terms of how it impacts on the net operating account of the municipality (and hence its ability to build up capital reserves or borrow), as well as the overall capital expenditure required over 10 years.

A significant finding is that the operating accounts of all the case study municipalities are extremely vulnerable. Increasing operating costs associated with sprawling spatial growth worsens the negative trend of municipal operating losses. For all municipalities, the theoretical **capital expenditure** that is required to reduce infrastructure backlogs, satisfy demand for new infrastructure and provide for renewal of existing infrastructure is **far higher than the available funding**.

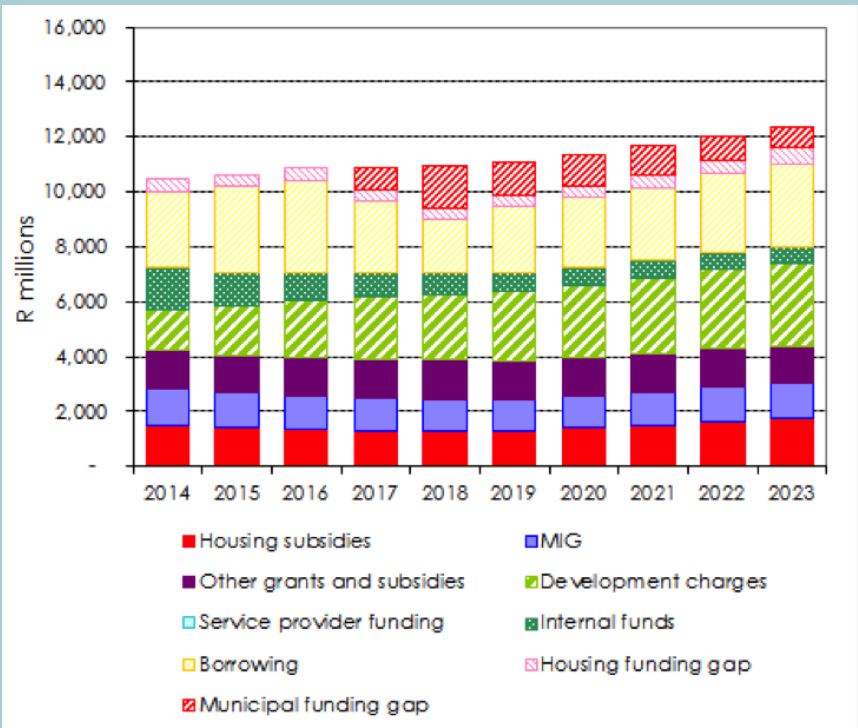
Existing spatial patterns were calculated to cost approximately **22% more** than a more compact form, which amounts to **R24 billion in additional capital** required over 10 years for the Western Cape. In addition, current spatial patterns will require low income households to pay significantly more for transport than they already do – up to 18% in the case of the City of Cape Town. The increase in transport also results in **33% more carbon emissions** for the Province as a whole than for a more compact growth scenario.

TABLE.5 CAPITAL FUNDING TO SATISFY DEMAND UNDER CURRENT SPATIAL GROWTH PATTERNS



CURRENT SOURCES OF CAPITAL FINANCE -  
CURRENT GROWTH PATTERNS:

TABLE.6 CAPITAL FUNDING TO SATISFY DEMAND UNDER DENSER SPATIAL GROWTH



CURRENT SOURCES OF CAPITAL FINANCE -  
DENSER GROWTH PATTERNS:

## 2.2. SPATIAL INERTIA

Two decades into democracy there is little noticeable change in the country's spatial patterns, notwithstanding numerous policy statements calling for spatial transformation. Some of the reasons for the slow progress in this regard are:

- i. It is only recently with the adoption of the NDP that spatial transformation has been recognised as a national development priority.
- ii. Laudable spatial transformation objectives have not been matched by actionable strategies, specific delivery targets and explicit implementation arrangements.
- iii. There is no quick fix to spatial transformation given the durability of the built environment and the time it takes to change land ownership and usage patterns. The PSDF recognises that systemic change will take generations to manifest itself on the ground, but decisions taken now will influence whether these changes do or do not come about in future.
- iv. Given the complexity and risks of changing current spatial patterns, the default position is to revert to business as usual. Politicians, the private sector and spatial planners have differing agendas and resultant timelines. Political decision making often contradicts stated spatial policies.
- v. Government does not currently have the capacity to accelerate implementation of the spatial transformation agenda.
- vi. Some built environment investment programmes incentivise the wrong outcomes (e.g. performance is measured on the number of residential units delivered

as opposed to progress made in developing sustainable human settlements).

- vii. Built environment interventions typically take place through specific departments - spatial transformation requires a shift from operating within 'silos' to a more cross-cutting approach.

## 2.3. SPATIAL GOALS

To address the spatial challenges identified the PSDF takes the Western Cape on a path towards:

- i. more inclusivity, productivity, competitiveness and opportunities in urban and rural space-economies;
- ii. better protection of spatial assets (e.g. cultural and scenic landscapes) and strengthened resilience of natural and built environments; and
- iii. improved effectiveness in the governance of urban and rural areas.

## 2.4. THE SPATIAL VISION

The PSDF builds on OneCape 2040's vision of "a highly-skilled, innovation driven, resource efficient, connected, high opportunity and collaborative society". For each of these societal attributes aspired to OneCape 2040 identifies thematic 'big step' changes that need to take place.

The PSDF envisages the spatial expression of these themes as follows:

- i. Educating Cape: Everyone has access to a good education, and the cities, towns and rural villages are places of innovation and learning.
- ii. Working Cape: There are livelihood prospects

available to urban and rural residents, and opportunities for them to find employment and develop enterprises in these markets.

- iii. Green Cape: All households can access basic services that are delivered resource efficiently, residents use land and finite resources prudently, and safeguard their ecosystems.
- iv. Connecting Cape: Urban and rural communities are inclusive, integrated, connected and collaborate.
- v. Living Cape: Living and working environments are healthy, safe, enabling and accessible, and all have access to the region's unique lifestyle offering.
- vi. Leading Cape: Urban and rural areas are effectively managed

In terms of living the PSDF's vision, stories and illustrations of what this means in the daily lives of Western Cape residents in 2040 are presented in Box 3. The 'big step' changes (i.e. spatial transitions) that need to take place to realise the vision aspired to are presented in Table 7.



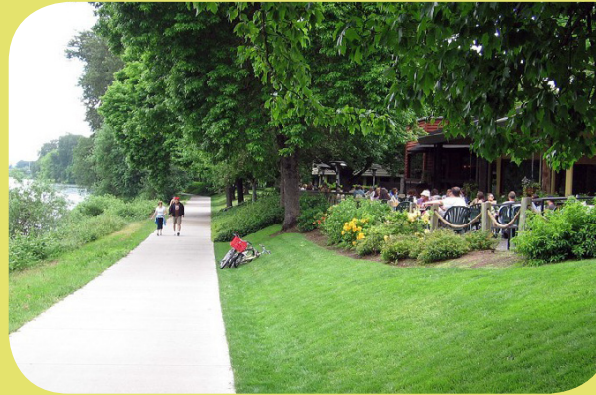
## LIVING THE VISION: A DAY IN THE LIFE OF WESTERN CAPE RESIDENTS IN 2040

It's 7am and Abongile's alarm goes off. It still surprises him to see that it is light outside when he wakes up now - remembering what it was like a few years ago when he had to wake up at 4:30am to get to work on time. Now he walks out his front door to the bus stop 2 minutes away where the bus arrives on time to be dropped off at work in less than 20 minutes.



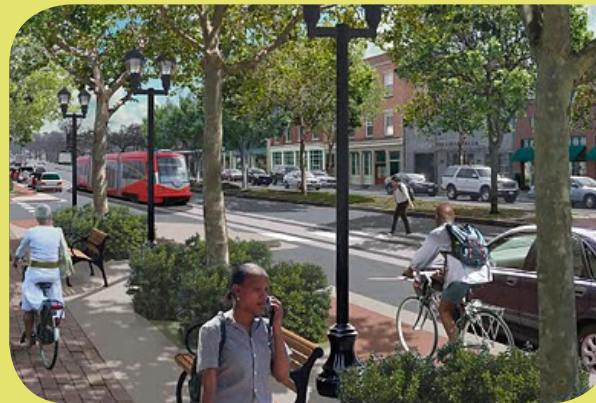
Nomhle rushes the children to finish their breakfast. They still have to brush their teeth and then walk to school. Luckily things have changed since 2013 - where they would have to walk for an hour along a dangerous unpaved road to reach their closest school. But today, from their new home on the 3rd floor of a 4 storey walk-up, they walk together in under 10 minutes to school where she gives them each a kiss on the cheek and continues walking a few blocks on to her new work.

Gadija runs to catch the train, which is just about to leave the station. 7:34am on the dot every day! Today she is a bit late because she stopped to chat her neighbour who was sitting on his stoep overlooking their street. For a moment she reminds herself how - just a few years ago - you never knew when the train was going to come, or if it would. When she



boards the train she breathes a sigh of relief and smiles at the passenger next to her. When Gadija reaches her destination she walks 15 minutes along her favourite street on her way to work - shaded by big oak trees and lined by small but bustling shops where the bicycle lane next to the pavement shelters her from the cars driving along the road.

Nomhle walks from her children's school where she thinks how nice it is that the children now have somewhere to play before school starts. The new forecourt in front of the school is lined with trees to protect the children from the street. She must remember to go to the community market that is happening there on the weekend.



The walk from Bukela's house to his work on the farm is along the river pathway. In 2015 the path was built and landscaped, starting from the urban river park and running all along the river throughout the region, connecting the surrounding farms through providing safe pedestrian routes, transport stops, cycle lanes and street lighting. Bukela remembers how dirty the river used to be when it was used as a dumping ground and how dangerous it was to walk along the riverbank. Now the beautiful park is used by many people either commuting to work by bicycle or on foot, jogging or just relaxing on the bank enjoying nature. The route has also meant that travelling between town and the farm has become so much more convenient and safe.



BOX.3 A DAY IN THE LIFE OF WESTERN CAPE RESIDENTS IN 2040



During lunchtime, Gadija and her colleague decide to go out for lunch at the central town square. They walk 5 minutes to the high street, popping into the chemist and bank along the way. Once at the square they chose their favourite food from one of the many cafes and enjoy lunch while sitting on the landscaped seating area. The central square is a new addition to their town and is always busy, serving as a safe and vibey space that is becoming the heart of the town.

After work Gadija walks to the local FET College. She has decided to do a business course after hours. Her neighbour recently opened a small shop on the ground floor of her apartment. She now lives above where she works which is so convenient and the shop is doing well. Gadija thinks there is an opportunity for her to do the same, although she hasn't decided what kind of business to open yet. First she



wants to study further to make sure she has explored all her options. The FET College has a lab full of new computers and fast broadband connection, where she loves to spend time on the Internet researching different business ideas and opportunities. Luckily the FET College is close to the train station so she can get home quickly after class. Her son is doing his homework when she gets home, even though it is dark. She remembers a time when they did not have electricity and he would struggle to do his homework by candlelight. Now he is able to study longer and harder and is hoping to become a doctor when he is older.

Nomhle gets home after a long day and realises she has forgotten to buy chicken for dinner. Luckily she can send her husband to down the road to the corner shop to get some. While he is buying the chicken, she goes into the community garden to check on the plants. Her and a few of her neighbours have been growing fruit and vegetables in the garden for a few years now and they are saving so much money. She cannot remember the last time that she bought tomatoes and she is happy that her children are learning about growing their own food.



James stares out his office window to the street below. It still amazes him that in only a few years this street has changed so much. It used to be such a congested and loud street with many cars, taxi's hooting and fumes rising up to his office window. Now he looks down on a very busy but more efficient and compact street lined with coffee shops up to

the edge of the street. The once 4-lane street now has only 2 lanes for cars with much wider sidewalks for bicycle and lanes dedicated to busses and public transport. The reliable bus service has reduced the amount of cars in town and he can now choose if he wants to take the bus, cycle or drive to work.

Koos looks out of the window of the mobile clinic shuttle that is taking him back to the farm. His operation at the new district hospital was a success. While he was at the hospital his son came to visit and told him about his job at the new agri-processing factory in town. He is so happy that the factory has been built as it is providing many new work



opportunities for the youth in his community. Day dreaming, Koos admires the beautiful rural landscape - he can't wait to be back working in his flourishing orchards, breathing in the rural serenity and fresh clean air. He hopes his farming partner was able to arrange with the contractors to repair the irrigation infrastructure for their newly planted apple trees. Since initiating the small-scale farming arrangement with the land owner of the farm that he works on, him and his partner have been growing their own apple trees in a sustainable manner and have even been hosting workshops for local community members and students on sustainable small-scale farming practices. The new farmer's market at the rural services centre square is the ideal location to sell his produce because of all the tourists often visiting the market. Conveniently he can also take care of his post, banking and other administrative duties there at the mobile service facility, with a bus service circulating between all the surrounding farms in the region.

## 2.5. TOWARDS A NEW APPROACH

Lessons learnt from the UN-Habitat's experience in supporting governments pursue spatial transformation reveals that:

- i. Without proactive planning and effective governance systems, business as usual prevails and vulnerability to risks increases.
- ii. Spatial planning needs to be linked with

transport and infrastructure investment programmes.

- iii. Mixed-use and compact settlements are correlated with:
  - competitiveness (through agglomeration economies);
  - social inclusion;
  - quality of life (i.e. liveability and access to

amenities);

- efficient delivery of affordable services; and
- resilience to environmental hazards and human safety.

The Western Cape's agendas for spatial transformation and improved efficiencies in the use of natural resources are closely linked. The paradigm that economic growth implies the on-going depletion of the Province's natural capital needs to be broken. This is the rationale for the PSDF embracing a transition to a Green Economy. The so-called 'decoupling' of economic growth strived for requires reductions/substitutions and/or replacements in the use of limited resources, while avoiding negative environmental impacts.

The PSDF recognises that there are trade-offs to be made in pursuing the Province's spatial goals and risks associated with implementing the transformation agenda (e.g. urban compaction requires more 'brownfields' development where land is expensive, often difficult to procure, and opposition from 'not in my back yard' (NIMBY) factions is likely).

Despite the obstacles and risks faced, spatial transformation remains an economic, social and environmental imperative. To address it a bold collaborative effort is proposed – a transversal (i.e. cross-cutting) and integrated approach at national, Provincial and municipal government levels. The PSDF takes the lead by putting in place Provincial-wide collaborative arrangements to align public investments in the built environment (e.g. transport, infrastructure, facilities, etc) towards realising the spatial vision aspired to.

Whilst the PSDF has jurisdiction over Provincial departments, it is also mandated to coordinate,

TABLE.7 SYNOPSIS OF THE KEY TRANSITIONS FOR THE PROVINCIAL SPATIAL FRAMEWORK

PSDF THEME	FROM	TO
RESOURCES	Mainly curative interventions	More preventative interventions
	Resource consumptive living	Sustainable living technologies
	Reactive protection of natural, scenic and agricultural resources	Proactive management of resources as social, economic and environmental assets
SPACE-ECONOMY	Fragmented planning and management of economic infrastructure	Spatially aligned infrastructure planning, prioritisation and investment
	Limited economic opportunities	Variety of livelihood and income opportunities
	Unbalanced rural and urban space economies	Balanced urban and rural space economies built around green and information technologies
SETTLEMENT	Suburban approaches to settlement	Urban approaches to settlement
	Emphasis on 'greenfields' development and low density sprawl	Emphasis on 'brownfields' development
	Low density sprawl	Increased densities in appropriate locations aligned with resources and space-economy
	Segregated land use activities	Integration of complementary land uses
	Car dependent neighbourhoods and private mobility focus	Public transport orientation and walkable neighbourhoods
	Poor quality public spaces	High quality public spaces
	Fragmented, isolated and inefficient community facilities	Integrated, clustered and well located community facilities
	Focus on private property rights and developer led growth	Balancing private and public property rights and increased public direction on growth
	Exclusionary land markets and top-down delivery	Inclusionary land markets and partnerships with beneficiaries in delivery
	Limited tenure options and standardised housing types	Diverse tenure options and wider range of housing typologies
	Delivering finished houses through large contracts and public finance and with standard levels of service	Progressive housing improvements and incremental development through public, private and community finance with differentiated levels of service



align and integrate the spatial plans of national and municipal government – institutions over which it has no direct jurisdiction. Herein lies its major challenge. To address this challenge the PSDF presents the logic of coherent spatial development, demonstrates the value to be added by applying sound planning principles, and uses inter-governmental forums as platforms for pursuing a cooperative spatial governance agenda. In this regard the PSDF cannot dictate to other government spheres, but it tries to influence their spatial investment decisions.

## 2.6. THE SPATIAL AGENDA

To deliver on the WCG's strategic objectives the PSDF focuses on growing the economy, building greater environmental resilience and much better inclusion. To these ends the Provincial spatial agenda may be summarised as follows:

### 1. GROWING THE WESTERN CAPE ECONOMY IN PARTNERSHIP WITH THE PRIVATE SECTOR, NON-GOVERNMENTAL AND COMMUNITY BASED ORGANISATIONS

In the urban space-economy this involves:

- i. Targeting public investment into the main driver of the Provincial economy (i.e. the Cape Metro functional region, the emerging Saldanha Bay/Vredenburg and George/Mossel Bay regional industrial centres, and the Overstrand and Southern Cape leisure and tourism regions).
- ii. Managing urban growth pressures to ensure more efficient, equitable and sustainable spatial performance.
- iii. Aligning, and coordinating public investments and leveraging private sector and community investment to restructure dysfunctional human settlements.

- iv. Supporting municipalities manage urban informality, making urban land markets work for the poor, broadening access to accommodation options, and improving living conditions.
- v. Promoting an urban rather than suburban approach to settlement development (i.e. diversification, integration and intensification of land uses).
- vi. Boosting land reform and rural development, securing the agricultural economy and the vulnerability of farm workers, and diversifying rural livelihood and income earning opportunities.

### 2. USING INFRASTRUCTURE INVESTMENT AS PRIMARY LEVER TO BRING ABOUT THE REQUIRED URBAN AND RURAL SPATIAL TRANSITIONS

This agenda encompasses:

- i. Aligning infrastructure, transport and spatial planning, the prioritisation of investment and on the ground delivery.
- ii. Using public transport and ICT networks to connect markets and communities.
- iii. Transitioning to sustainable technologies, as set out in the WCIF.
- iv. Maintaining existing infrastructure.

### 3. IMPROVING OVERSIGHT OF THE SUSTAINABLE USE OF THE WESTERN CAPE'S SPATIAL ASSETS

This agenda encompasses:

- i. Safeguarding the biodiversity network and functionality of ecosystem services, a prerequisite for a sustainable future.
- ii. Prudent use of the Western Cape's precious land, water and agricultural resources, all of which underpin the

regional economy.

- iii. Safeguarding and celebrating the Western Cape's unique cultural, scenic and coastal resources, on which the tourism economy depends.
- iv. Understanding the spatial implications of known risks (e.g. climate change and its economic impact, sea level rise associated with extreme climatic events) and introducing risk mitigation and/or adaptation measures.

## 2.7. THE SPATIAL LOGIC

The logic underpinning the PSDF's spatial strategy is to:

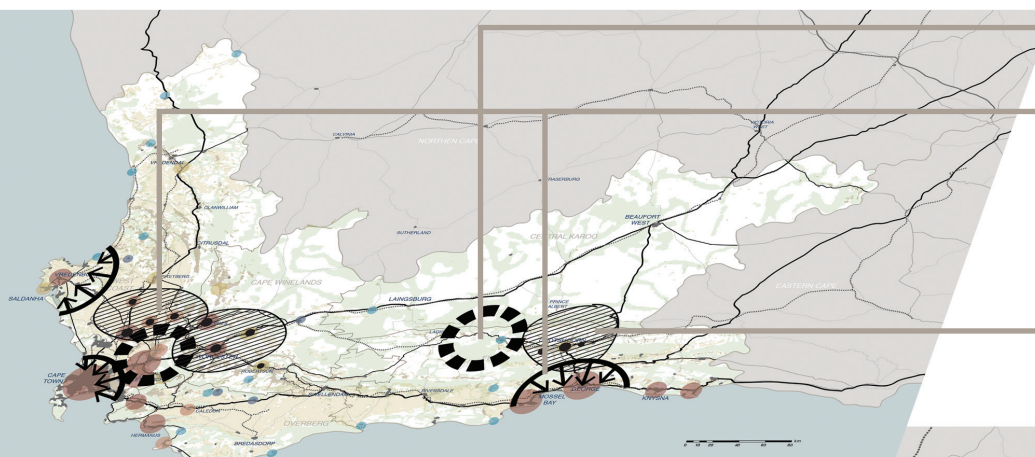
- 1. CAPITALISE** and build on the Western Cape comparative strengths (e.g. gateway status, knowledge economy, lifestyle offering) and leverage the sustainable use of its unique spatial assets.
- 2. CONSOLIDATE** existing and emerging regional economic nodes as they offer the best prospects to generate jobs and stimulate innovation.
- 3. CONNECT** urban and rural markets and consumers, fragmented settlements and critical biodiversity areas (i.e. freight logistics, public transport, broadband, priority climate change ecological corridors, etc)
- 4. CLUSTER** economic infrastructure and facilities along public transport routes (to maximise the coverage of these public investments) and respond to unique regional identities within the Western Cape.

The PSDF's strategy is to accelerate and give momentum to spatial transformation by embarking on a series of logical and sequential transitions of the Western Cape's urban and rural areas. The Provincial spatial framework for the roll-out of this agenda is presented in the next chapter.

TABLE.8 THE SPATIAL LOGIC UNDERPINNING THE PSDF PROPOSALS ACCORDING TO SCALE AND THE 4 FOCUS AREAS (4 C'S)

SCALE	DESCRIPTION	PSDF SPATIAL LOGIC			
		1. CAPITALISE	2. CONSOLIDATE	3. CONNECT	4. CLUSTER
<b>REGIONAL GROWTH NODES</b>	<i>Primary urban concentrations and areas of growth - Cape Town region, George region, Saldanha Bay region</i>	Capitalise on Provincial assets (Iconic landscapes, rural and coastal lifestyle, knowledge economy, agriculture, events)	Prioritise consolidated investment in economically vibrant areas	Connect regional economic infrastructure (regional transport, freight logistics, energy, broadband)	Align high-level planning and investment prioritisation (BRT Systems, human settlement pilots)
<b>REGIONALISM</b>	<i>Rural regions defined by agricultural and water system, cultural and landscape character, local conditions and function</i>	Celebrate unique regional identities and experiences (Karoo, Winelands, West Coast, Garden Route, Agulhas Plain, Overberg)	Balance development and resource protection through close management of natural, cultural landscape and agricultural assets in relation to growth pressures	Strengthen regional ecological connectivity  Build economic linkages regionally between rural and urban areas	Coordinate regional planning based on response to local conditions and function
<b>INTER-SETTLEMENT SYSTEM</b>	<i>Hierarchy and functional linkages between regional centres and smaller surrounding towns</i>	Capitalise on unique cultural landscapes, heritage assets, character areas and typologies	Promote hierarchical social service delivery patterns based on regional role of settlement (regional centres vs small towns)	Focus on sub-regional public transport systems  Ensure for connected rural-urban social service systems and networks	Regionally align clustering of primary health, educational and other social facilities
<b>SETTLEMENT FORM AND STRUCTURE</b>	<i>Physical and socio-economic manifestation of activity within a town and/or neighbourhood</i>	Capitalise and preserve unique local built form and natural typologies, character and heritage	Promote urban rather than suburban model: avoid further fragmentation of townships.  Consolidate social services, mixed uses, density	Focus on creating connections to economic and social opportunity to promote spatial and socio-economic integration	Cluster all social facilities and complementary activities  Promote multipurpose and mixed use activity

## SETTLEMENT



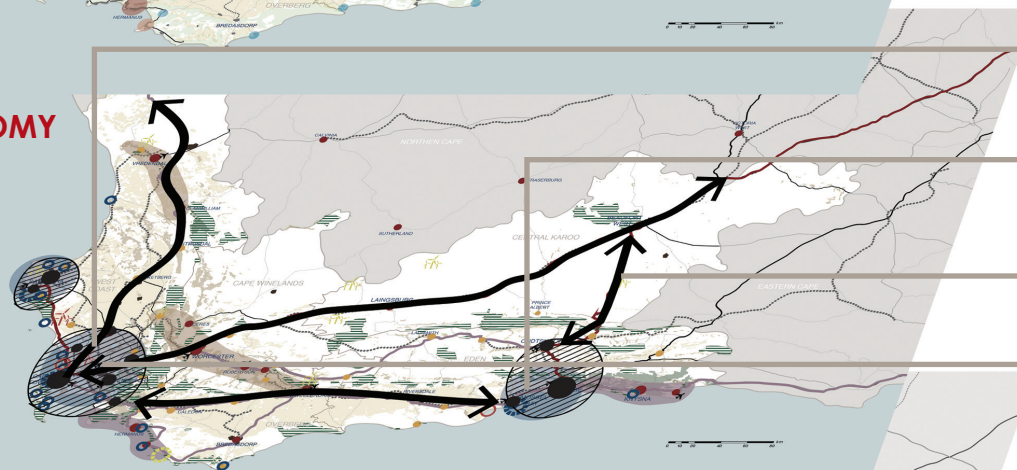
1. **CAPITALISE** ON HERITAGE ASSETS, UNIQUE TYPOLOGIES AND CHARACTER AREAS

2. **CONSOLIDATE** HIERARCHY OF SERVICE DELIVERY

3. **CONNECT** ECONOMIC AND SOCIAL OPPORTUNITIES

4. **CLUSTER** ACTIVITIES AND PROMOTE URBAN RATHER THAN SUBURBAN SETTLEMENT

## SPACE-ECONOMY



1. **CAPITALISE** ON KNOWLEDGE ECONOMY

2. **CONSOLIDATE** INVESTMENT IN ECONOMICALLY VIBRANT AREAS

3. **CONNECT** REGIONAL ECONOMIC INFRASTRUCTURE

4. **CLUSTER** INVESTMENT OF ECONOMIC INFRASTRUCTURE

## RESOURCES



1. **CAPITALISE** ON PROVINCIAL SCENIC ASSETS AND UNIQUE CULTURAL LANDSCAPES

2. **CONSOLIDATE** RESOURCE AND DEVELOPMENT MANAGEMENT

3. **CONNECT** CLIMATE CHANGE ADAPTION CORRIDORS

4. **CLUSTER** RESOURCE MANAGEMENT

DIAGRAM.7 A CONCEPTUAL ILLUSTRATION OF THE SPATIAL DEVELOPMENT STRATEGY

### 3. THE SPATIAL FRAMEWORK

In fulfilment of the mandate ascribed to it in SPLUMA and to take forward the Province's spatial development agenda, this chapter sets out the policy framework within which the Western Cape Government will carry out its spatial planning responsibilities. The policy framework covers Provincial spatial planning's three interrelated themes (see Diagram 8), namely:

1. Sustainable use of the Western Cape's spatial assets (3.1),
2. Opening-up opportunities in the Provincial space-economy (3.2), and
3. Developing integrated and sustainable settlements (3.3).

Each of these spatial themes contributes to the achievement of the Western Cape's strategic objectives (see Table 9). For each theme key challenges as distilled from the Provincial spatial profile (separately documented in PSDF Annexure 1) and their spatial implications are noted and Provincial policies for dealing with them are presented.

In accordance with the SPLUMA requirement that a PSDF also reflects desired provincial land use patterns, this chapter concludes with a presentation of the composite PSDF map (3.5) and an explanation of its spatial development proposals.

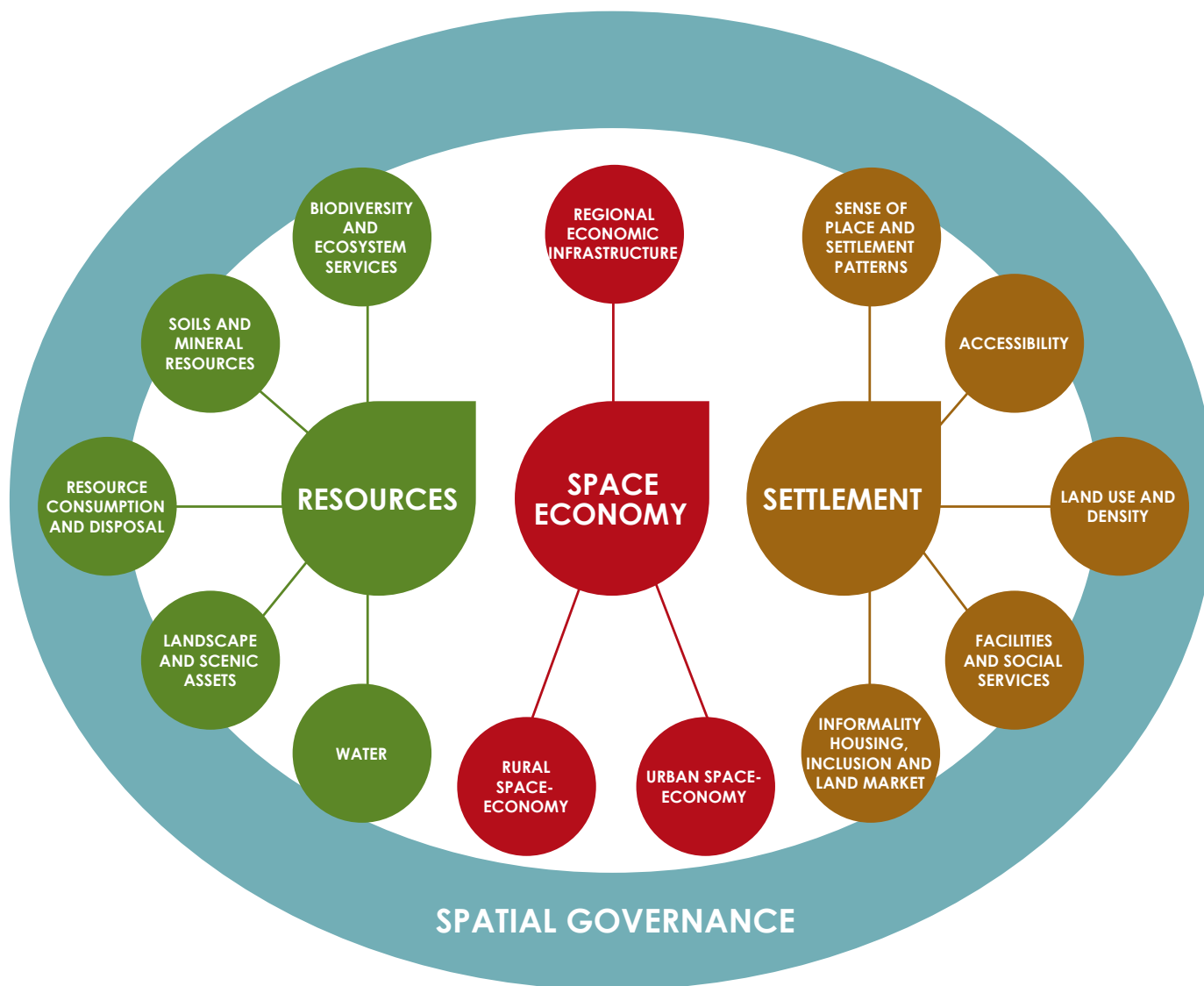


DIAGRAM.8 THE 3 SPATIAL THEMES AND THEIR ASSOCIATED ELEMENTS, SUPPORTED BY SPATIAL GOVERNANCE

TABLE.9 RELATIONSHIP BETWEEN THE PROVINCIAL STRATEGIC OBJECTIVES AND THE PSDF THEMES EMERGING FROM THE PSDF STATUS QUO ASSESSMENT - TO INFORM POLICY FORMATION

- STRONG CORRELATION
- CORRELATION

			PROVINCIAL STRATEGIC OBJECTIVES										
			ECONOMIC OPPORTUNITIES	EDUCATION	ACCESSIBILITY	WELLNESS	SAFETY	LIVABILITY	RESOURCE EFFICIENCY	INCLUSION	SERVICE DELIVERY	RURAL DEVELOPMENT	GOVERNANCE
Provincial SPATIAL PLANNING THEMES	SUSTAINABLE USE OF PROVINCIAL ASSETS	BIODIVERSITY AND ECOSYSTEM SERVICES	○	○		○	○	○	●		○	●	○
		WATER	○	○		○	○	○	●		○	●	○
		SOILS AND MINERAL RESOURCES	○	○		○	○	○	●		○	○	○
		RESOURCE CONSUMPTION and DISPOSAL	●	○		○	○	○	●		○	●	○
		LANDSCAPE AND SCENIC ASSETS	○	○				○	●	○	○	○	○
	OPENING-UP OPPORTUNITIES IN THE SPACE-ECONOMY	REGIONAL ECONOMIC INFRASTRUCTURE	●		●	○	○	●	○	●	●	○	○
		RURAL SPACE-ECONOMY	●	○		○		●	○			○	○
		URBAN SPACE-ECONOMY	●	●	●	●	●	●	○	●	●	○	○
	DEVELOPING INTEGRATED AND SUSTAINABLE SETTLEMENTS	SENSE OF PLACE and SETTLEMENT PATTERNS	●	○	●	○	○	○	○	○	●	○	○
		ACCESSIBILITY	●	○	●	○	○	○	○	○	●	○	○
		LAND USE AND DENSITY	●	○	○	○	○	●	○	○	○		○
		FACILITIES AND SOCIAL SERVICES	●	●	●	●	○	○	●	○	○	○	○
		INFORMALITY, HOUSING DELIVERY, INCLUSION AND URBAN LAND MARKETS	●	○	●	●	○	●		●	○		○



## 3.1. SUSTAINABLE USE OF PROVINCIAL ASSETS

### 3.1.1. OVERVIEW

The Western Cape economy is founded on the Province's unique asset base. These include **farming resources** that make the Western Cape the country's leading exporter of agricultural commodities and whose value chains (e.g. agri-processing) underpin the Province's industrial sector; and its **natural capital** (i.e. biological diversity) and varied **scenic and cultural resources** which are the attraction that makes the Western Cape the country's premier tourism destination.

Collectively these assets provide a unique lifestyle offering which contribute to the relative strength of the Province's tertiary sector and its comparative advantage as a so-called knowledge economy. Not only is the economy dependent on these assets, but they also underpin livelihoods and set the parameters for the development and ultimate well-being of all residents. The Western Cape's natural and social capital are interdependent, one cannot be substituted for the other.

The significance of the Province's spatial asset base stems from the fact that it:

- is the origin of life-supporting ecosystem services (e.g. clean air and water, pollination);
- underpins the economy, particularly agriculture which provides food security, sustains rural livelihoods and draws income into the Province, and tourism;
- comprises globally significant and diverse habitats and ecosystems;
- makes the Western Cape a world class

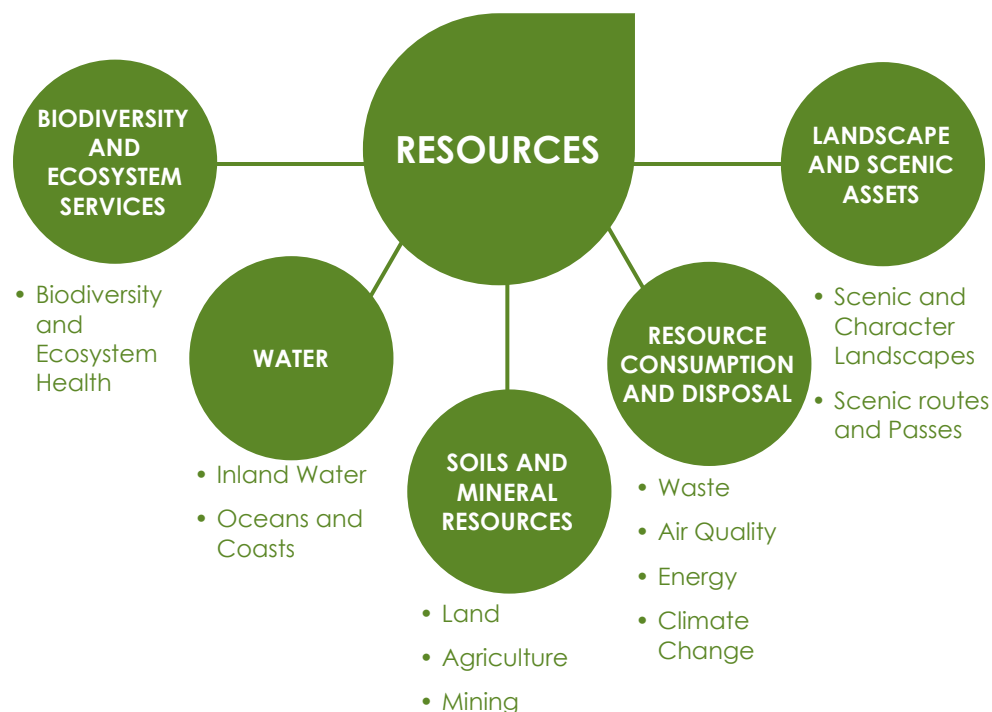


DIAGRAM.9 MIND MAP OF ASSETS, RESOURCES AND RISKS THEME

tourism destination, given the attraction and authenticity of rural landscapes of scenic, cultural and natural splendour; and

- provides the location of diverse outdoor recreational and leisure activities for residents of and visitors to the Western Cape.

In fulfilment of its Provincial Planning mandate the PSDF's policies ensure that these assets are used sustainably. They also safeguard them against risks by mitigating and/or adapting to current and looming risks. If managed responsibly, the Province's spatial assets hold immense socio-economic development

potential. Conversely, mismanagement of these resources can severely hinder development, particularly in the rural areas.

The policy framework for the sustainable use of the Western Cape's spatial assets is presented in terms of the following themes (see Diagram 9): biodiversity and ecosystem services; inland water, oceans and coasts; soils, agricultural and mineral resources; resource consumption and disposal; and landscape and scenic assets.

### 3.1.2. RESOURCE MANAGEMENT POLICY OBJECTIVES

The following 2009 PSDF primary objectives commit the Province to safeguarding these assets:

- i. Protect biodiversity and agricultural resources.
- ii. Minimise the consumption of scarce environmental resources, particularly water, fuel, and land – in the latter case especially pristine and other rural land, which is the Western Cape's 'goldmine-above-the-ground' (i.e. a non-renewable resource).
- iii. Conserve and strengthen the sense of place of important natural, cultural and productive landscapes, artefacts and buildings.

The Western Cape's 2011 Provincial Strategic Plan reconfirmed these objectives and placed the proactive management of current and looming risks (e.g. climate change) onto the spatial agenda.

### 3.1.2.1 KEY PROVINCIAL RESOURCE MANAGEMENT CHALLENGES

By accommodating the labour force far from employment centres, apartheid introduced resource consumptive working and living patterns. These endure two decades into the democratic era. Access to environmental assets remains unequal. The Province is water stressed from quality and quantity perspectives, with very limited scope to augment existing reserves. Agriculture and human settlement have transformed most of the lowlands, with the result that remnant natural habitats are highly endangered.

The challenge is to consolidate remaining critical biodiversity areas and secure lowland – upland ecological corridors to mitigate against climate change risks. The Province's unique scenic and cultural landscapes, which underpin the tourism economy, are being eroded and fragmented from inappropriate development. Many informal settlements are located on ecologically sensitive areas (e.g. flood plains) which compromises the health of residents and impacts negatively on the environment.

Emerging global environmental challenges and trends such as water deficits, climate change, resource depletion, loss of topsoil, and food insecurity pose major risks for the future. Furthermore, the lack of awareness of the urgency of addressing many of these issues perpetuates a 'business as usual' mindset.

## 3.1.3. BIODIVERSITY AND ECOSYSTEM SERVICES

### 3.1.3.1 KEY CHALLENGES

The Western Cape State of the Environment Outlook Report (2013) highlights the following challenges:

- i. Land transformation (i.e. conversion from natural to man-made landscapes), is the primary cause of biodiversity loss and deteriorating ecosystems health. The main threat is in the lowlands, particularly in areas intensively cultivated and subject to urban growth pressures (i.e. Cape Winelands District and Cape Town Metro). CapeNature are currently auditing the loss of critical biodiversity areas (CBAs) across the Province, and will be compiling a new Province-wide CBA map.
- ii. Climate change is predicted to be a major long-term threat to biodiversity, as it is likely to cause a shift in species distribution. The Succulent Karoo biome is most at threat.
- iii. Over abstraction and modification of natural watercourses is altering flow regimes, which impacts on species migration and breeding, aquatic habitats, food resources, and wetland ecosystems.
- iv. There has been an increased frequency and shifts in the fire season, which impacts negatively on biodiversity.
- v. If biodiversity threats are not

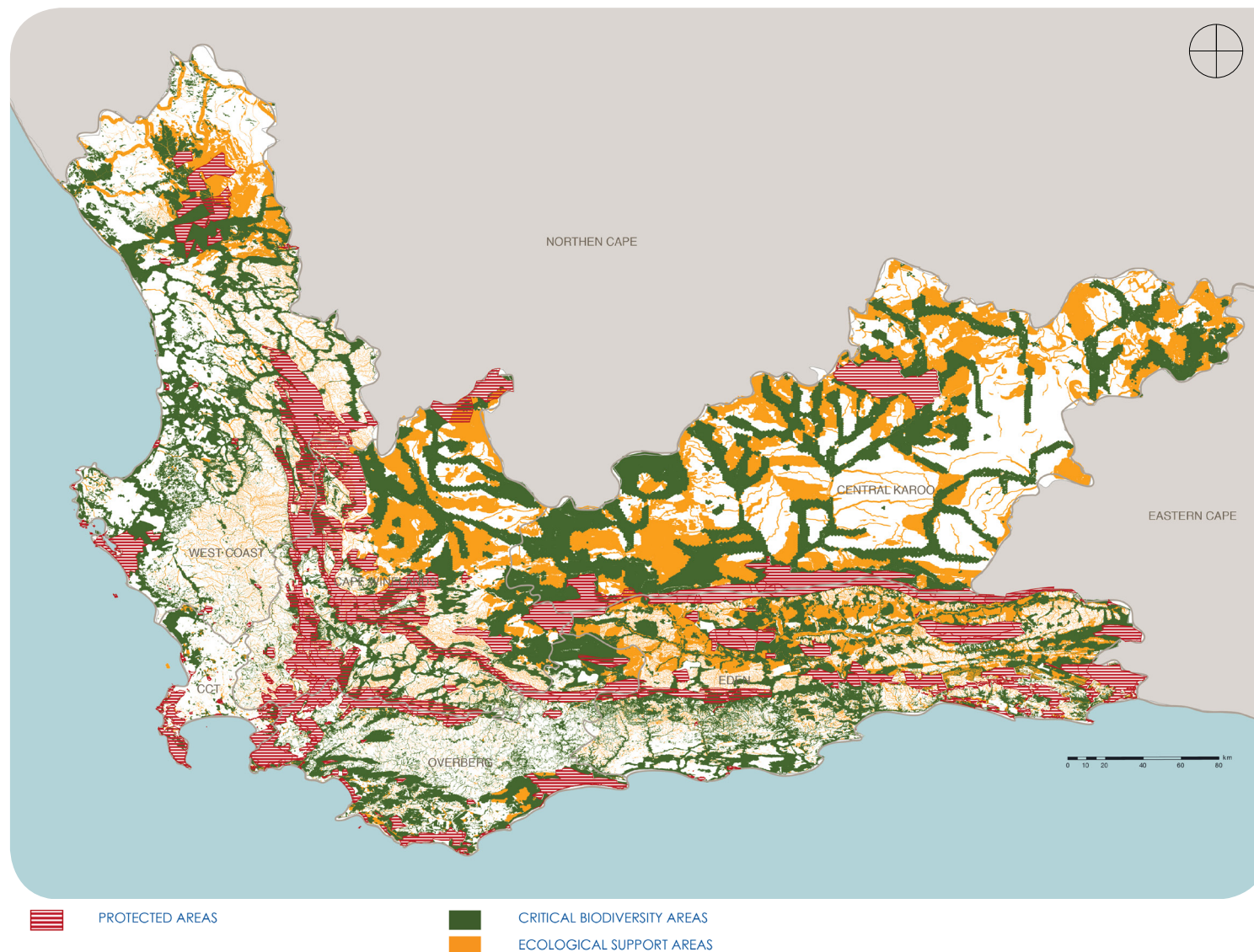


FIG.10 WESTERN CAPE PROVINCE - BIODIVERSITY AND ECOSYSTEMS

reduced some ecosystems could collapse, requiring expensive intervention to maintain or replace them.

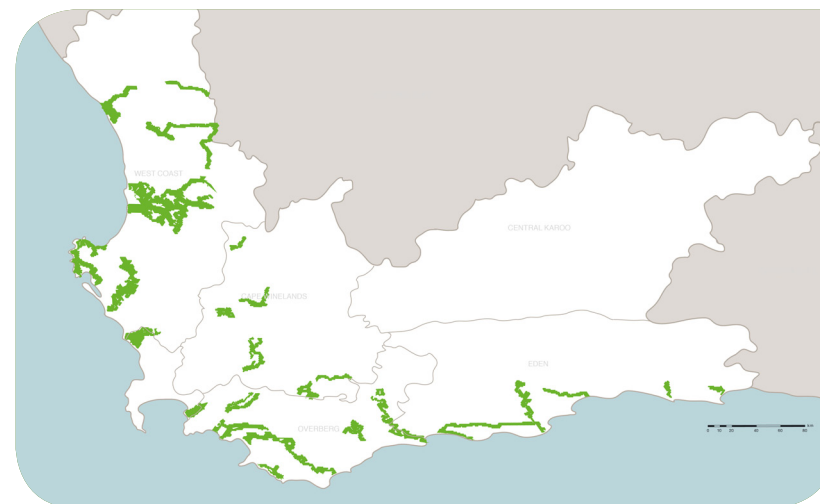
### 3.1.3.2 SPATIAL IMPLICATIONS

- i. The Western Cape's biological diversity underpins livelihoods, the Province's economy and the provision of ecosystem services (e.g. water purification, crop pollination). Spatial continuity and connectivity of the biodiversity network strengthens its resilience. The Table Mountain Fund have sponsored the delineation of draft priority climate change adaption corridors (see Figure 11), which link lowlands and uplands, focusing on climate refuges which are more resilient or provide linkages (e.g. along rivers, south-facing slopes, south-facing coastal areas and kloofs).
- ii. Towards securing fragmented natural habitats, it is necessary to prevent further intrusion of agricultural activity or urban expansion into key Critical Biodiversity Areas and ecological support areas. The lowlands are most at threat given a concentration of competing agricultural and settlement development pressures here.

### POLICY R1: PROTECT BIODIVERSITY AND ECOSYSTEM SERVICES

1. The Western Cape's CBA mapping (see Figure 10), which CapeNature are currently updating and refining, together with the draft priority climate change adaptation corridors delineates the Western Cape's biodiversity network. Continue to use CBA mapping to inform spatial planning and land use management decisions in the Province.
2. Using the latest available CBA mapping as a primary informant, regional, district and municipal SDFs need to delineate Spatial Planning Categories (SPCs) that reflect suitable land use activities in the different CBA classifications. To inform the delineation of SPCs and the interpretation of the nature, scale and form of land uses that are suitable in each SPC, the 2009 PSDF's draft Western Cape Rural Land Use Planning and Management Guidelines to be updated to incorporate new CBA and climate change corridor information.
3. To complement CapeNature's protected area expansion strategy and Stewardship programme, SDFs should highlight priority areas outside the protected area network that are critical for the achievement of the Province's conservation targets. SDFs need to develop strategies and policies for securing these areas, inclusive of incentivising private landowners to contribute to the Western Cape's biodiversity network. Similarly municipal zoning schemes should incorporate measures to secure the priority biodiversity network (e.g. delineation of CBA overlay zones, development bonuses). The updated Provincial Rural Land Use Planning and Management Guidelines need to provide options for implementing this policy.
4. Delineate urban edges in municipal SDFs to divert urban growth pressures away from critical biodiversity areas.

FIG.11 THIS MAP ILLUSTRATES THE LOCATION OF THE DRAFT PRIORITY CLIMATE CHANGE ADAPTION CORRIDORS, AS IDENTIFIED BY THE TABLE MOUNTAIN FUND. ALTHOUGH THE CBAS (SEE FIGURE 10) PRESENT THE TRUE BIODIVERSITY PRIORITIES OF THE PROVINCE - THE CLIMATE CHANGE CORRIDORS REFLECT A SUB-SET OF CAPENATURE'S PRIORITY AREAS WHICH SHOULD BE TARGETED FOR PROACTIVE BIODIVERSITY MANAGEMENT IN ORDER TO BETTER ADAPT TO CLIMATE CHANGE.





## 3.1.4. WATER

### 3.1.4.1 KEY CHALLENGES

#### 3.1.4.1.1 INLAND WATER

The Western Cape State of the Environment Outlook report (2013) highlights that surface water resources, currently the Western Cape's primary source, are unevenly distributed (see Figure 12), currently used to their limits, and offer few opportunities for more dams. Only 6% of the Western Cape's rivers are in a natural condition, and 14% are classified in a poor condition. Spatially there is a correlation between intensity of land use and ecosystems health, as degraded ecosystems and development in mountain catchment areas and riparian zones impacts negatively on water quality.

Water is a key determinant of future Provincial economic growth. The main agricultural water users are located in the Breede agricultural valley areas and Oliphants - Doorn agricultural corridor. The main industrial water users are located in the Cape, Saldanha Bay and Southern Cape regions. Key urban and industrial water users are located in the Cape Metro functional region.

The Cape Metro and Saldanha Bay functional regions compete for water derived from the Berg River Water Management Area (WMA). There is growing competition for water between the agricultural and

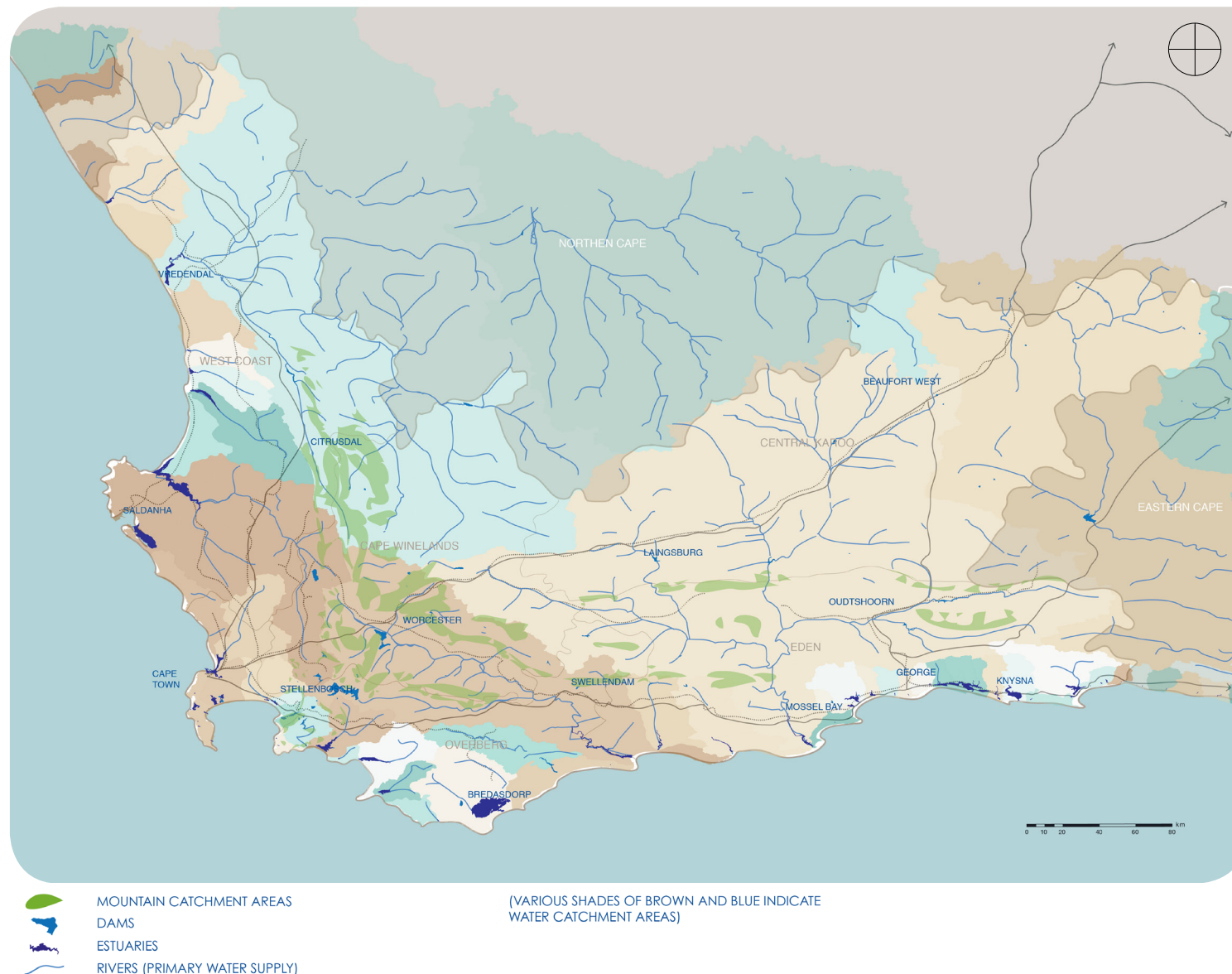


FIG.12 WESTERN CAPE PROVINCE - INLAND WATER SYSTEMS



industrial sectors and settlements, and therefore water demand management efficiency measures need to be put in place.

Escalating demand and finite supply means that protection and rehabilitation of river systems and ground water recharge areas is required. Human settlements need to be made more water-wise (e.g. by converting to low water use sanitation systems and making greater use of localised water storage systems). Gaining public acceptability for the greater reuse of water presents a significant mindset challenge.

#### 3.1.4.1.2 OCEANS AND COASTS

The Province's coastal assets include fisheries resources, kelp, penguin and seal colonies, fynbos and indigenous coastal forests – all of which underpin livelihoods and the fishing and tourism industries. Other coastal economic activities include shipping, nature and heritage based tourism, commerce, manufacturing and agriculture.

Figure 13 illustrates the marine protected areas, continental shelf and various endangered offshore habitats of the Western Cape coastal zone. Coastal water quality, based

on monitoring at Blue Flag Beaches, shows an acceptable state and is improving. Estuaries are generally in poor health, highly modified and under threat. Conservation of

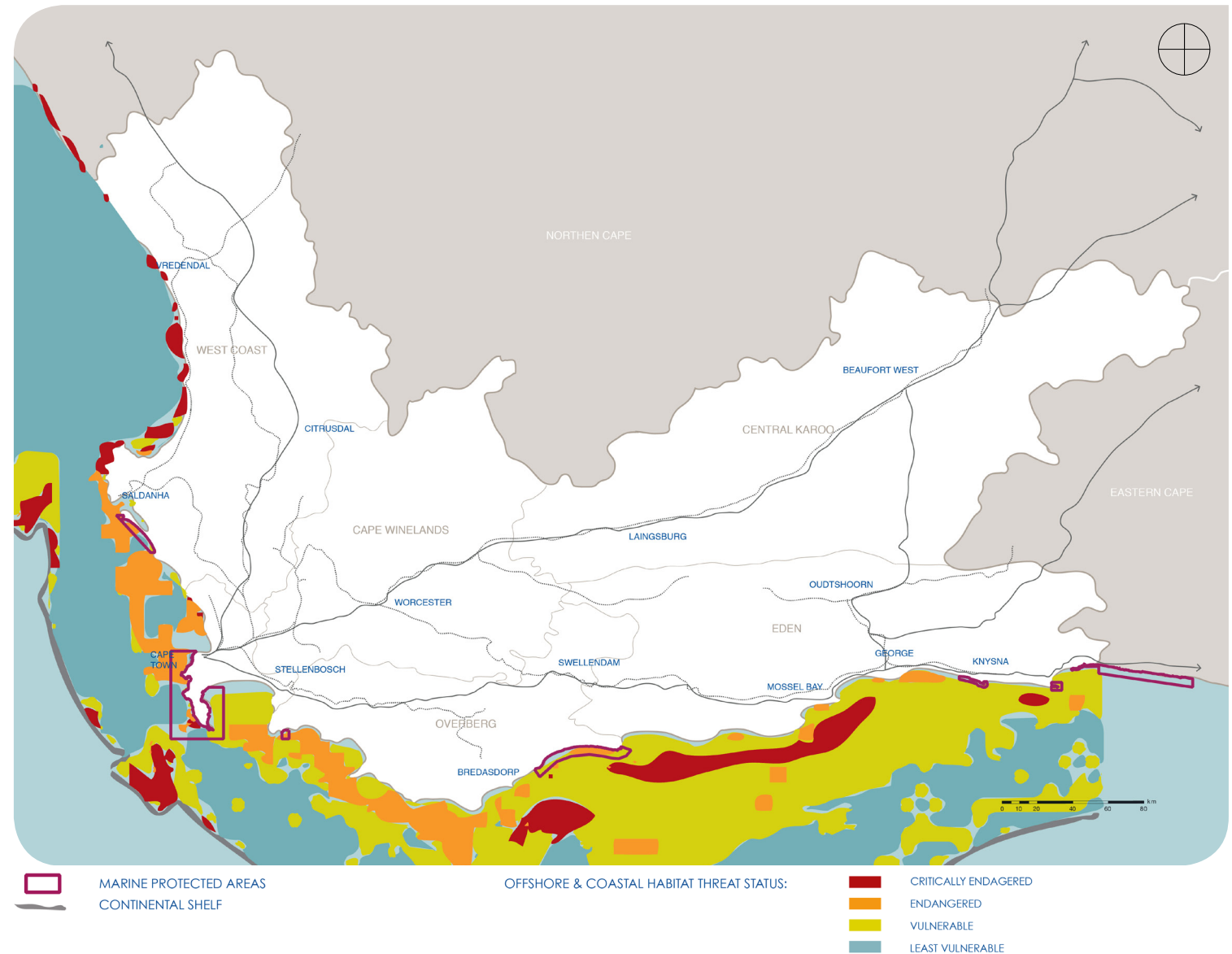


FIG.13 WESTERN CAPE PROVINCE - OCEANS AND COASTS STATUS

the coastal zone is improving with 8 Marine Protected Areas (MPAs), but their management effectiveness varies. Marine ecosystems (see Figure 14) are under threat with the West Coast nearshore, Eden and Overberg offshore and the Continental shelf edge critically endangered habitats. Langebaan and Cape Agulhas are endangered habitats. Transformation of the coastline is of particular concern given the loss of 14% of threatened ecosystems between 2001 and 2009, mostly as a result of human activity.

As the coastal zone is a desirable location for human settlement, diverse economic activities, harvesting of natural resources, and recreation, it is subject to increasing pressures. Impacts arising from these pressures include: reduced productivity of coastal ecosystems, which compromises its economic value; and disrupted coastal dynamics which increases environmental risks (e.g. mobile sand dunes) and decreases the ecosystem's resilience.

Sea level rise, and its interaction with increasing storm frequencies, intensities, and wind velocities, presents a significant challenge in the years ahead. Climate change will result in increased vulnerability to sea level rise.

If not appropriately managed coastal development pressures, especially around sensitive estuarine habitats, present a real threat to the ecological integrity, landscape quality and tourism value of the Province's coastal assets.

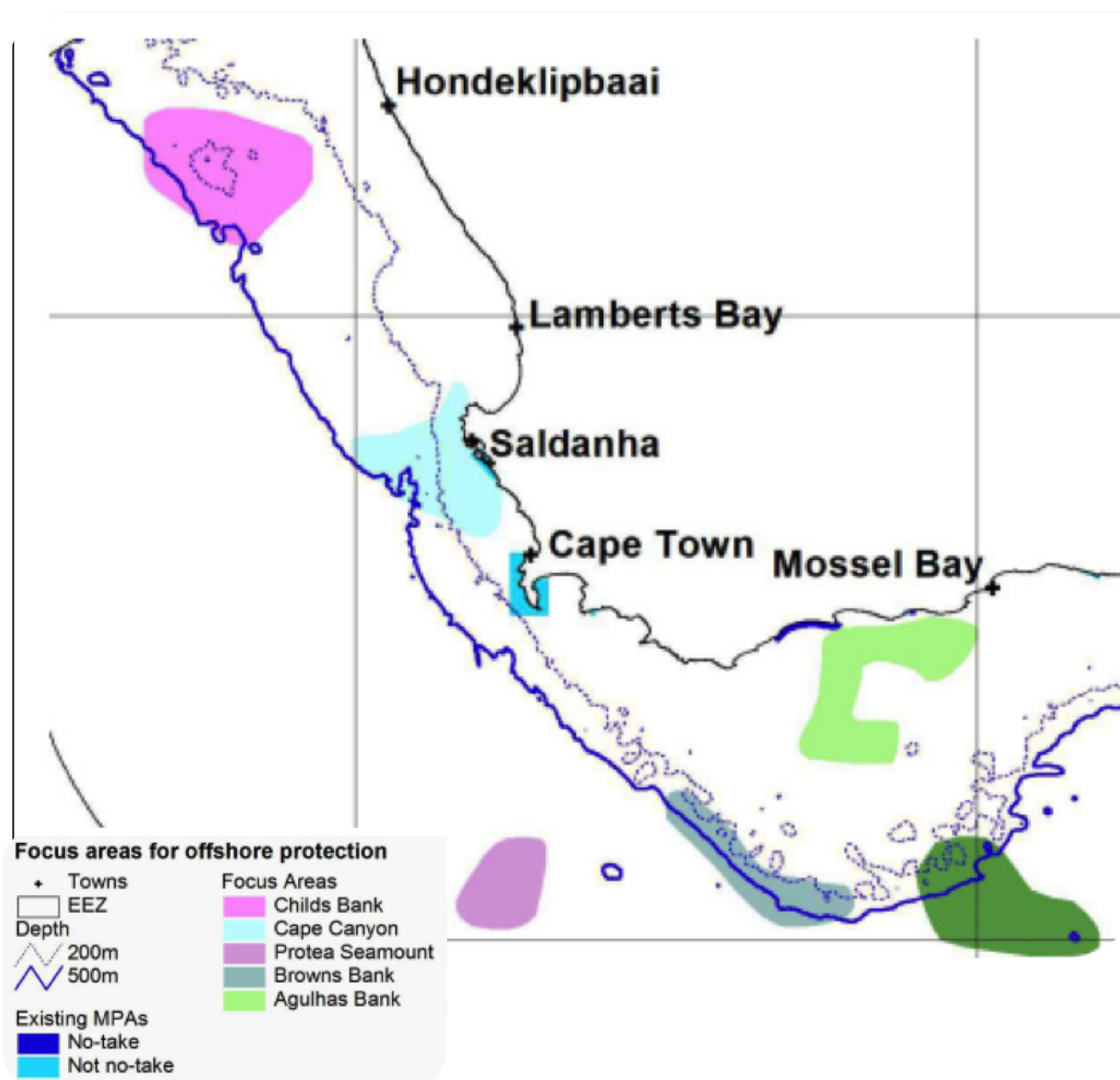


FIG.14 PROPOSED FOCUS AREAS FOR OFFSHORE PROTECTION AS PER SOER 2013 (ADAPTED FROM SINK ET AL. 2012)

## POLICY R2: SAFEGUARD INLAND AND COASTAL WATER RESOURCES, AND MANAGE THE SUSTAINABLE USE OF WATER

### INLAND WATER

1. Given current water deficits, which will be accentuated by climate change, 'water wise' planning and design approach in the Western Cape's built environment.
2. Rehabilitation of degraded aquatic systems is a complex inter-disciplinary intervention requiring, inter alia, built environment upgrading, improved farming practises, as well as the involvement of diverse stakeholders. Towards rolling-out a Province-wide water systems rehabilitation programme, share lessons learnt from the Berg River Improvement Plan and Working for Water.
3. Introduce and retrofit appropriate levels of water and sanitation systems technologies, targeting informal settlements and backyard shacks in formal neighbourhoods.
4. Adopt an overarching approach to water demand management – maximise efficiencies, optimise storage capacity and ground water extraction, explore desalination in the absence of alternatives.
5. Protect and rehabilitate river systems and high yielding groundwater recharge areas, particularly in areas of intensive land use.
6. Develop Regional Plans for Water Management Areas to reconcile interdependencies between the natural resource base and the region's socio-economic development.
7. Develop agricultural water demand management programmes, focusing on the Breede Valley and Oliphants/Doorn agricultural areas.
8. Develop water demand management programmes for the Province's main industrial/settlement nodes (i.e. Cape Metro, Saldanha Bay, and Southern Cape functional regions).
9. Implement water demand management programmes in Government facilities (e.g. education, health and public works).
10. Continue with programmes (such as Working for Water) which reduce the presence of alien vegetation along river systems.

### OCEANS AND COASTS

11. Delineate and promulgate coastal development set-back lines that mitigate against impacts and reduce risks, and incorporate these into Municipal SDFs.
12. For the Western Cape's vulnerable and degraded estuaries, compile and implement estuary management plans as a basis for reconciling ecological, social and economic interests. Whilst there has been progress on this front, currently only 30% of estuaries are being addressed.
13. As most productive offshore habitats that support marine biodiversity are not formally protected, extend the current MPA network on the basis of the strategic geographic

priority areas that have been identified (see Figure 14).

14. Development along the coast, lakes, rivers and dams must not compromise ecological integrity, tourism potential and landscape character. Development should be contained within a limited footprint, preferably within or adjacent to existing settlements, and the required ecological buffers and setbacks must be adhered to. Ensure public access to aquatic assets, and acknowledge the importance of coastlines in contributing to the sense of place.



FIG.15 CAPE TIMES ARTICLE (MAY 2013)



## 3.1.5. SOILS AND MINERAL RESOURCES

### 3.1.5.1 KEY CHALLENGES

Cultivable soils and mineral resources are non-renewable assets that are important underpinnings of the Western Cape economy.

As agricultural output is the foundation of the Western Cape's rural economy and an important input to the urban economy, safeguarding the Province's agricultural resources, and productively using them without compromising biodiversity, heritage and scenic resources, remains a key challenge. There is limited suitable land available for extension of the Province's agricultural footprint, and water availability limits the use of cultivatable soils. Ineffective and inefficient farming practices impinge on agricultural productivity, and contribute to the loss of valuable topsoil.

Although mining is not currently a significant economic sector in the Western Cape, the exact location of mineral resources whose extraction can contribute to economic growth is not always known. Similarly the environmental risks associated with extractive industries are also not always known. Nonetheless, the continued extraction of construction materials in close proximity to infrastructure and property investment is inevitable and necessary to facilitate economic growth, and reduce transport costs and carbon

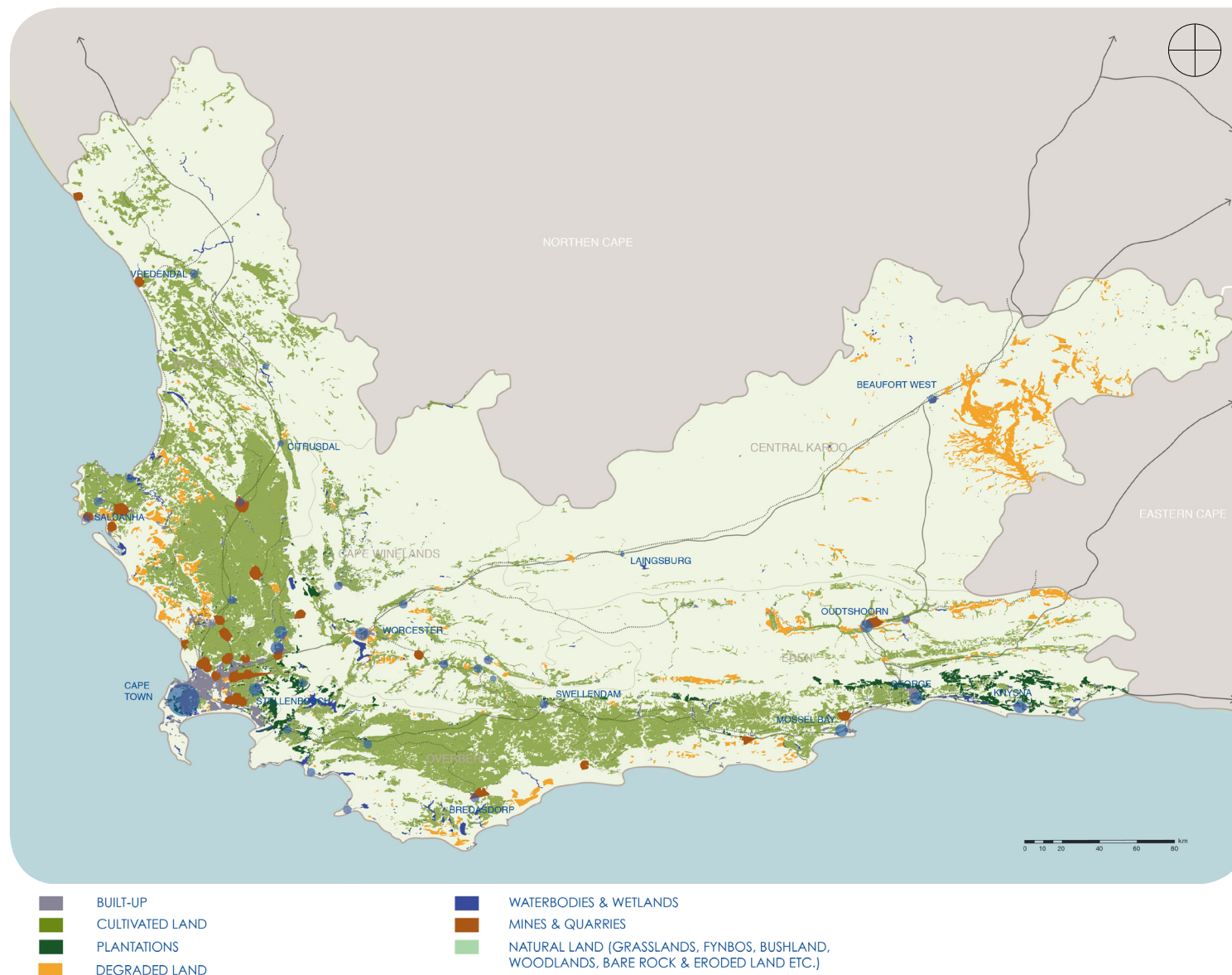


FIG.16 WESTERN CAPE PROVINCE - LAND ASSETS AND AGRICULTURAL AND MINERAL RESOURCES



emissions.

Further management challenges arise from the threats to remnant natural landscapes and ecosystem services from the expansion of current agricultural and mining activities. There are inevitable trade-offs between these often competing land uses, especially peripheral to urban areas.

### 3.1.5.2 SPATIAL IMPLICATIONS

The PSDF promotes sustainable farming and mining (i.e. activities that generate positive socio-economic returns and do not pose significant risks to the environment). A prerequisite for sustainable farming and mining is coherent land use planning and environmental management systems that are aligned with the Provincial Strategic Objectives.

The Provincial LandCare programme is an initiative to safeguard the Western Cape's agricultural and mineral resources – assets which underpin the value of its land and the rural economy (see Box 5).

Towards the productive use of these assets, the national Land Reform programme focuses on opening up opportunities for communities, enterprises and households to access and beneficially use land and natural resources.

#### POLICY R3: SAFEGUARD THE WESTERN CAPE'S AGRICULTURAL AND MINERAL RESOURCES, AND MANAGE THEIR SUSTAINABLE USE

1. Record unique and high potential agricultural land (as currently being mapped by the Provincial Department of Agriculture) in municipal SDFs, demarcate urban edges to protect these assets, and adopt and apply policies to protect this resource (especially in areas where raw water is available).
2. Record the location of mineral deposits and known reserves of construction materials in municipal SDFs, and introduce and apply land use policies that reserve these assets for possible use (subject to environmental authorization).
3. Reconcile ecosystem requirements with conflicting land development pressures through proactive spatial planning, and application of a land use management system that safeguards biodiversity, protects resources and opens up opportunities for improved livelihoods and jobs.
4. Use transformed areas first for new farming and mining ventures.

#### LANDCARE PROGRAMME - NATIONAL DEPARTMENT OF AGRICULTURE

The LandCare Programme is a community-based and government-supported approach to the sustainable management and use of agricultural natural resources.

The LandCare Programme's vision is one of communities and individuals leading the adoption of an ecologically sustainable approach to the management of South Africa's environmental and natural resources, while improving their quality of life. It implies that cultivation, livestock grazing and the harvesting of natural resources should be managed in such a manner that no further degradation (such as nutrient loss, soil erosion, loss of components of the vegetation and increased run-off) occurs.

In order to achieve this, the National Department of Agriculture gives support for natural resource management through the National LandCare Programme. Through this programme community groups are encouraged to responsibly manage and conserve the land, vegetation, water and biological diversity in their local area. Furthermore, the Department seeks to promote its National policy on Agricultural Land and Resource Management among all spheres of government and other stakeholders by implementing this Programme.

The LandCare Programme continues to perform a significant role in reversing soil and land degradation through support provided to community initiatives. This programme contributes significantly to green job creation, poverty eradication, food security and a better life for all.

During 2010/11, the programme directly and indirectly benefited 28 161 land users. A total of 66 272 ha were rehabilitated in all Provinces through the construction of soil conservation works, range-land use and protection works and the eradication of declared weeds and invasive plants.

As part of the 2011/12 LandCare Programme, about 15 000 job opportunities were created through rehabilitation and land-use activities. In 2011/12, R57,7 million was earmarked for the LandCare Programme.

(SOURCE: Van Niekerk (2012) South Africa Yearbook 2011/12 – Agriculture, forestry and fisheries Chapter, Government Communication and Information System)



FIG.17 THE NATIONAL LANDCARE PROGRAMME CAMPAIGN POSTER

BOX.5 NATIONAL LANDCARE PROGRAMME

## 3.1.6. RESOURCE CONSUMPTION AND DISPOSAL

### 3.1.6.1 KEY CHALLENGES

The Western Cape State of the Environment Outlook report (2013) highlights the following challenges related to the consumption and decomposition of resources (i.e. waste, air quality, energy and climate change):

#### 3.1.6.1.1 WASTE

Increasing waste generation in the Western Cape, if not recycled, gives rise to the need for more waste disposal sites – especially in proximity to urban concentrations (see Figure 18). The location of regional waste sites has the potential to either unlock opportunities or unnecessarily burden municipalities operationally.

New waste disposal sites are not needed if recovery/recycling facilities and related awareness programmes are rolled-out. The Cape Metro functional region, as the primary waste generator, is the priority area for upscaling waste recovery and recycling.

Further challenges arise from illegal dumping, shortfalls in hazardous waste facilities, growing informal settlements, and a lack of recyclable collection from homes. A mindset of 'reduce, rethink, recycle' still needs to be mainstreamed.

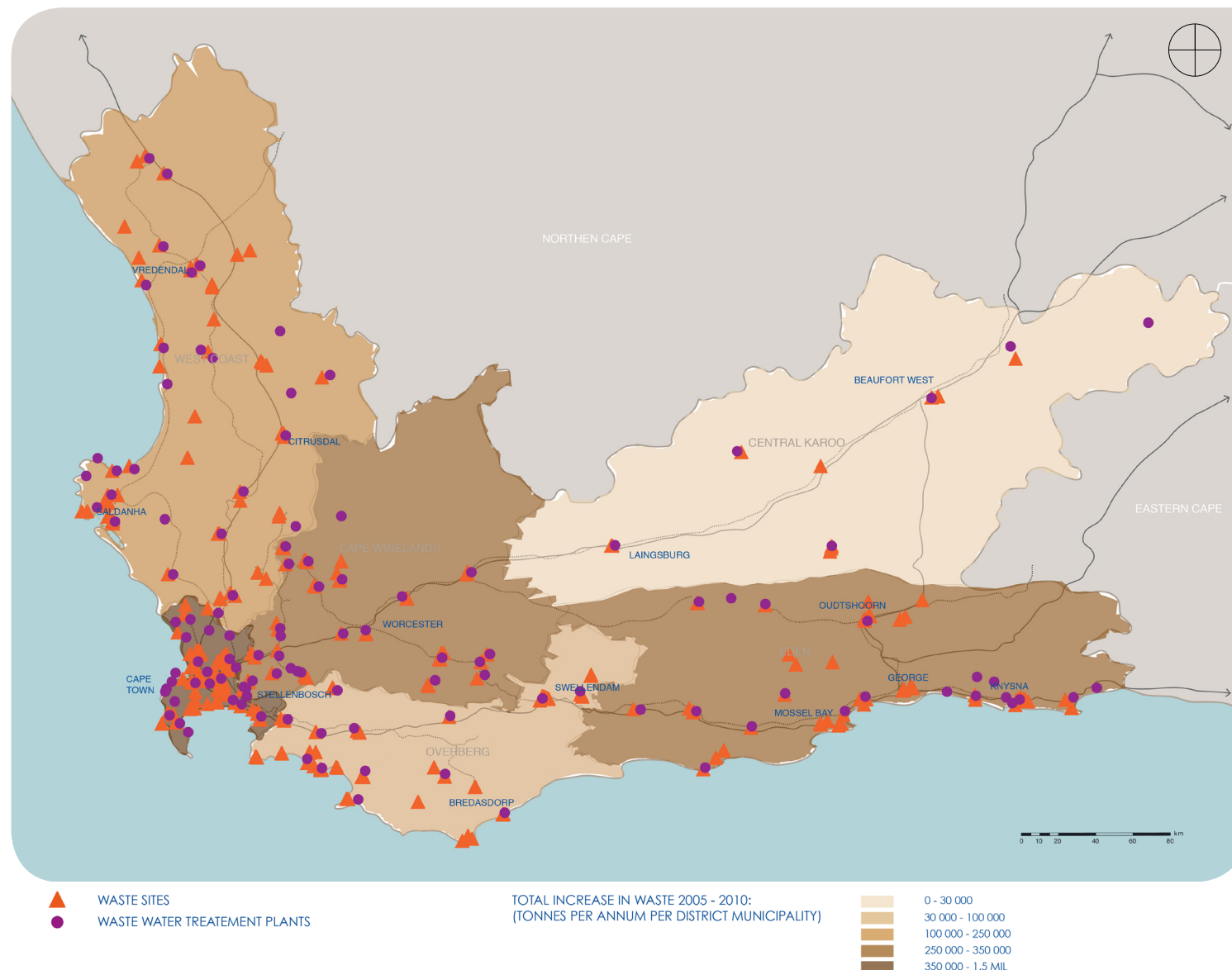


FIG.18 WESTERN CAPE PROVINCE - WASTE INFRASTRUCTURE AND INCREASE IN WASTE DISPOSAL

### 3.1.6.1.2 AIR QUALITY

Air quality is poor in the highly urbanised, low income areas of the Province where domestic fuel is burnt as a source of energy. Poor air quality in these areas increases the burden of disease and impacts negatively on economic productivity. Providing access to affordable clean energy in these areas is a priority.

Carbon emissions emanating from industry and urban transport systems are also a contributor to overall levels of air pollution in the Province, as are the incidence of fires (see Figure 19).

There is a risk of air pollution where settlements are located adjacent to farmlands that need to be periodically sprayed.

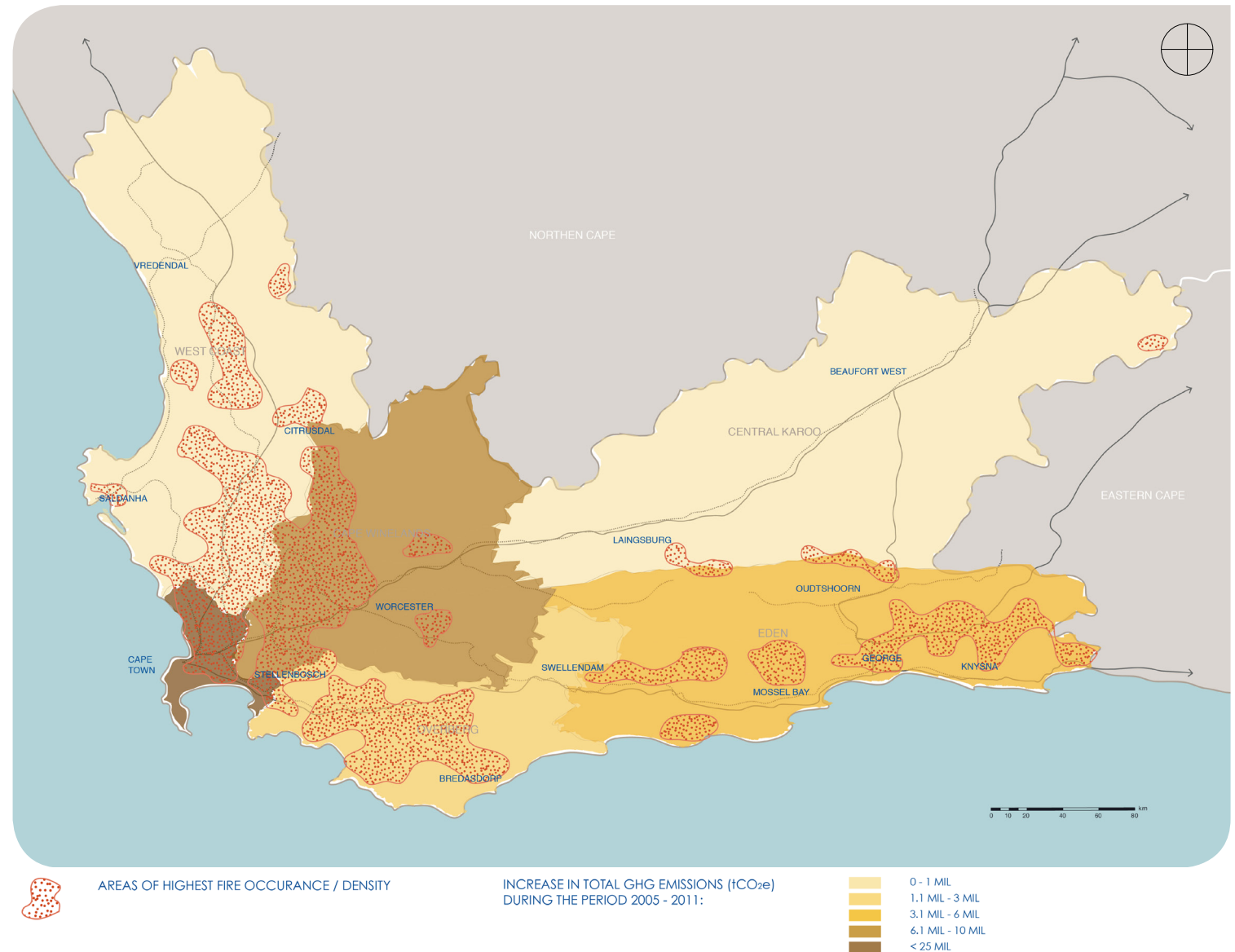


FIG.19 WESTERN CAPE PROVINCE - AIR QUALITY WITH REGARDS TO FIRE DENSITY AND CARBON EMISSIONS

### 3.1.6.1.3 ENERGY

As energy use is directly related to settlement size and economic activity, the Cape Metro and West Coast regions are the main energy users. The Cape Metro region, however, appears to use energy more efficiently when compared to the rest of the Province.

The Western Cape's energy is primarily drawn from the national grid which is dominated by coal-based power stations. The Province has a small emergent sustainable energy sector in the form of wind and solar generation facilities located in the more rural, sparsely populated areas (see Figure 20). The results of shale gas prospecting in the Karoo Basin could significant change the Province's energy mix, and introduce new land and water use pressures in a sensitive arid environment.

Transport is a potential game changer in the energy sector, with drastic energy use reductions realisable in shifting away from liquid fuels reliance and up-scaling public transport and rail freight transport.

The WCG has put its full weight behind the West Coast gas opportunity, predicated on imports. The shale gas position is far more nuanced, and requires much more work to be done. The WCG analysis to date suggests that an LNG terminal and associated infrastructure is a viable project to

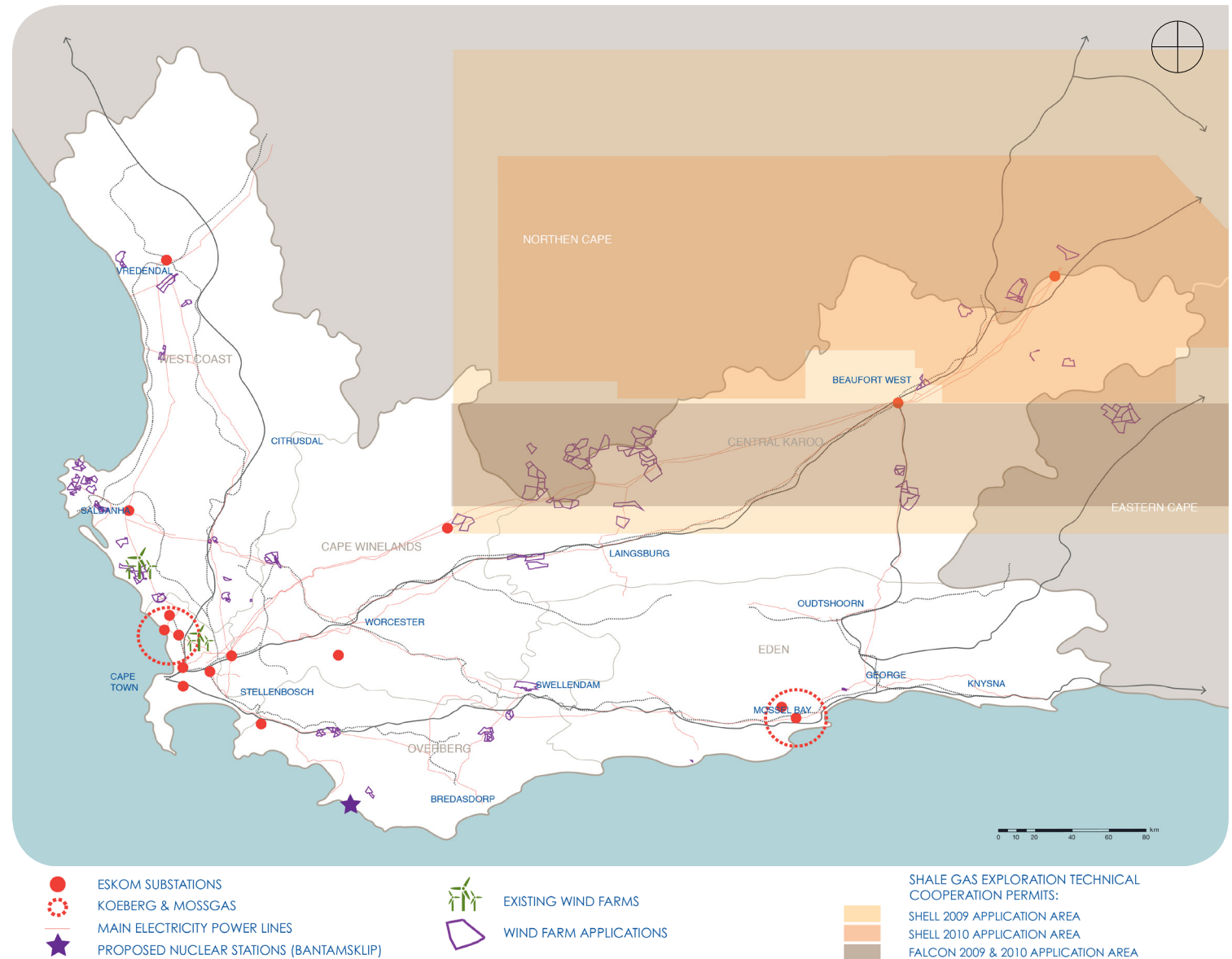


FIG.20 WESTERN CAPE PROVINCE - ENERGY INFRASTRUCTURE



support a (conservative) estimate of the potential gas market. The WCG is involved in the development of the national Gas Utilisation Master Plan (GUMP) being managed by DOE / National Treasury, where we will continue to promote the West Coast opportunity as a preferential priority. The Western Cape electricity mix is going to be decided by a host of factors (most of which are outside of the control of the natural gas agenda). Two critical considerations: What is the capacity of Eskom's transmission infrastructure (even with its planned expansion plans) to support an optimal mix of RE and gas power options? And assuming the availability of gas, how do we use that optimally to reduce electricity demand peaks (this speaks to fuel switching). If we had gas, we do not need nuclear.

#### 3.1.6.1.4 CLIMATE CHANGE

The key Provincial climate change challenge is to devise and introduce effective adaptation and mitigation responses, especially for vulnerable municipalities. Informed by specialist studies commissioned by WCG, there is a growing understanding of the spatial implications of the climate change associated risks of sea level rise and flooding (see Figure 21).

The focus areas for mitigation are

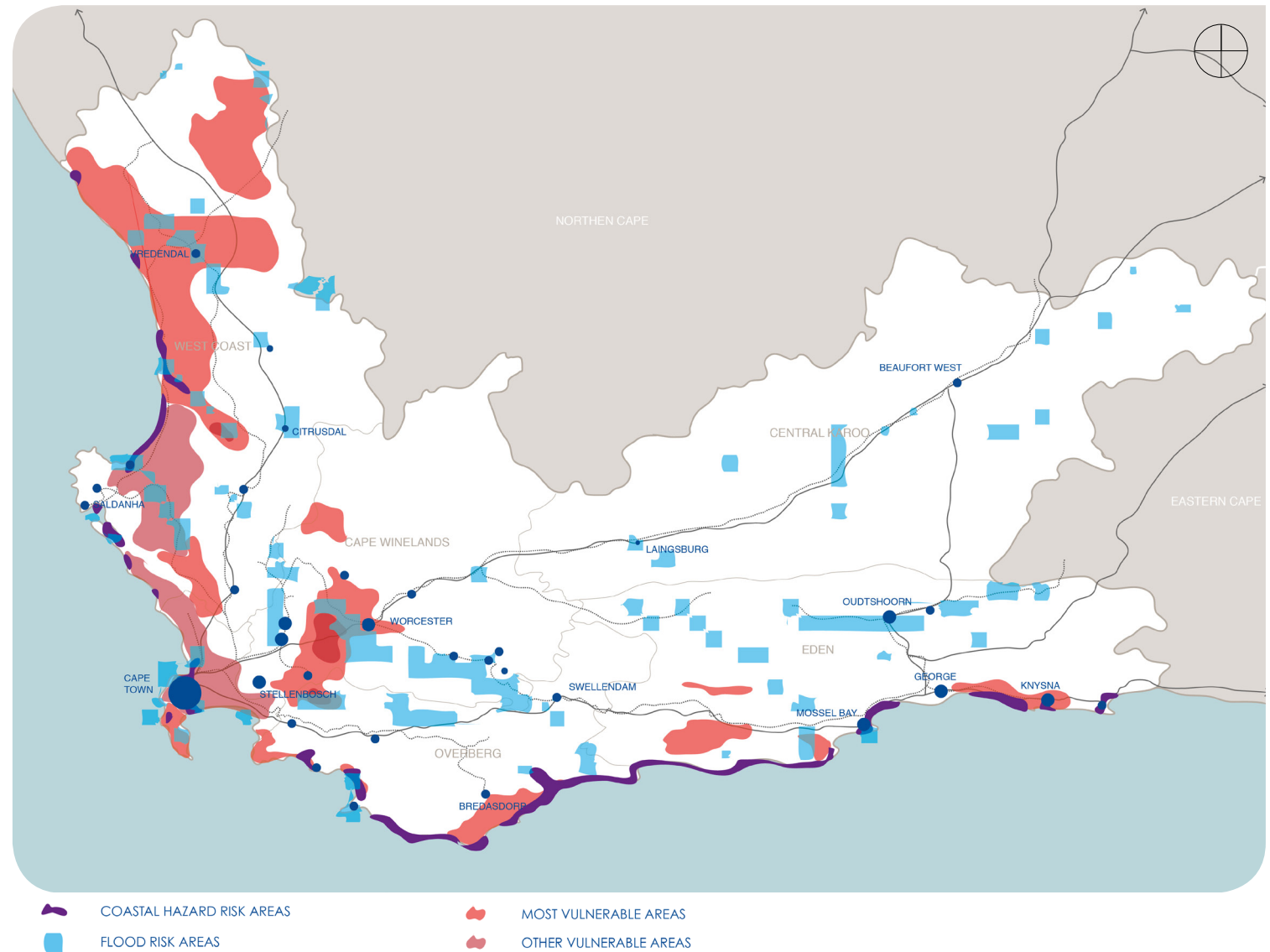


FIG.21 WESTERN CAPE PROVINCE - VULNERABLE AREAS WITH REGARDS TO DISASTER RISK MANAGEMENT AND SEA LEVEL RISE

energy efficiency, demand management and renewable energy. The focus areas for adaptation are:

- i. Water conservation and demand management
- ii. Built environment adaption
- iii. Ecosystem based adaption
- iv. Food security
- v. Social resilience
- vi. Sustainable public transport systems

The climate change implications of the food-energy-water nexus are currently under investigation, as are the integration of adaptation and mitigation approaches. Changing mindsets regarding the reality of climate change and an appreciation of its implications remains a fundamental challenge.

### 3.1.6.2 PROVINCIAL SPATIAL POLICIES

**POLICY R4: RECYCLE AND RECOVER WASTE, DELIVER CLEAN SOURCES OF ENERGY TO URBAN CONSUMERS, SHIFT FROM PRIVATE TO PUBLIC TRANSPORT, AND ADAPT TO AND MITIGATE AGAINST CLIMATE CHANGE**

#### WASTE

1. Learning lessons from the City of Cape Town's recycling programme, mainstream recycling and recovery of waste in the high waste generation areas of the Province to unlock economic opportunities and increase the lifecycle of current waste disposal sites. Apply the principles of 'reduce, reuse, recycle'.

2. Close down illegal sites and locate new regional waste sites adjacent to rail facilities to decrease operational costs and energy requirements associated with the need for road freight.

#### AIR QUALITY

3. Provide low income areas with access to electricity and/or off grid renewable energy sources, and systematically upgrade informal settlements.
4. Promote a shift from private to public transport modes, as well as from road to rail freight.
5. Avoid developing new residential areas in proximity to agricultural areas that utilise crop spraying.

#### ENERGY

6. Pursue energy diversification and energy efficiency in order for the Western Cape to transition to a low carbon, sustainable energy future, and delink economic growth from energy use.
7. Support emergent Independent Power Producers (IPPs) and sustainable energy producers (wind, solar, biomass and waste conversion initiatives) in suitable rural locations (as per recommendations of the Strategic Environmental Assessments for wind energy (DEADP) and renewable energy (DEA)).
8. Support initiatives that promote a shift from private to public transport and from road freight to rail, and reduce the need to travel (i.e. locate households closer to their place of work).
9. Introduce non-motorised transport

infrastructure (informed by urban design principles) in all settlements to complement other transport modes.

10. Investigate and develop the West Coast gas opportunity, with a focus on imported Liquid Natural Gas (LNG).

#### CLIMATE CHANGE ADAPTATION

11. Mainstream water conservation and demand management in settlement making and upgrading.
12. Retrofit infrastructure to accommodate extreme weather events (e.g. flooding) in settlements where vulnerable communities cannot be relocated.
13. Apply ecosystems based adaptation measures.
14. Protect agricultural land that holds long term food security value from urban encroachment.

#### CLIMATE CHANGE MITIGATION

15. Address climate change mitigation measures in Municipal SDFs, and mainstream energy efficiency and demand- side management in settlement making and upgrading.
16. Encourage and support renewable energy generation at scale.
17. Drive the development of innovative and sustainable (energy resilient) public transport systems.

## 3.1.7. LANDSCAPE AND SCENIC ASSETS

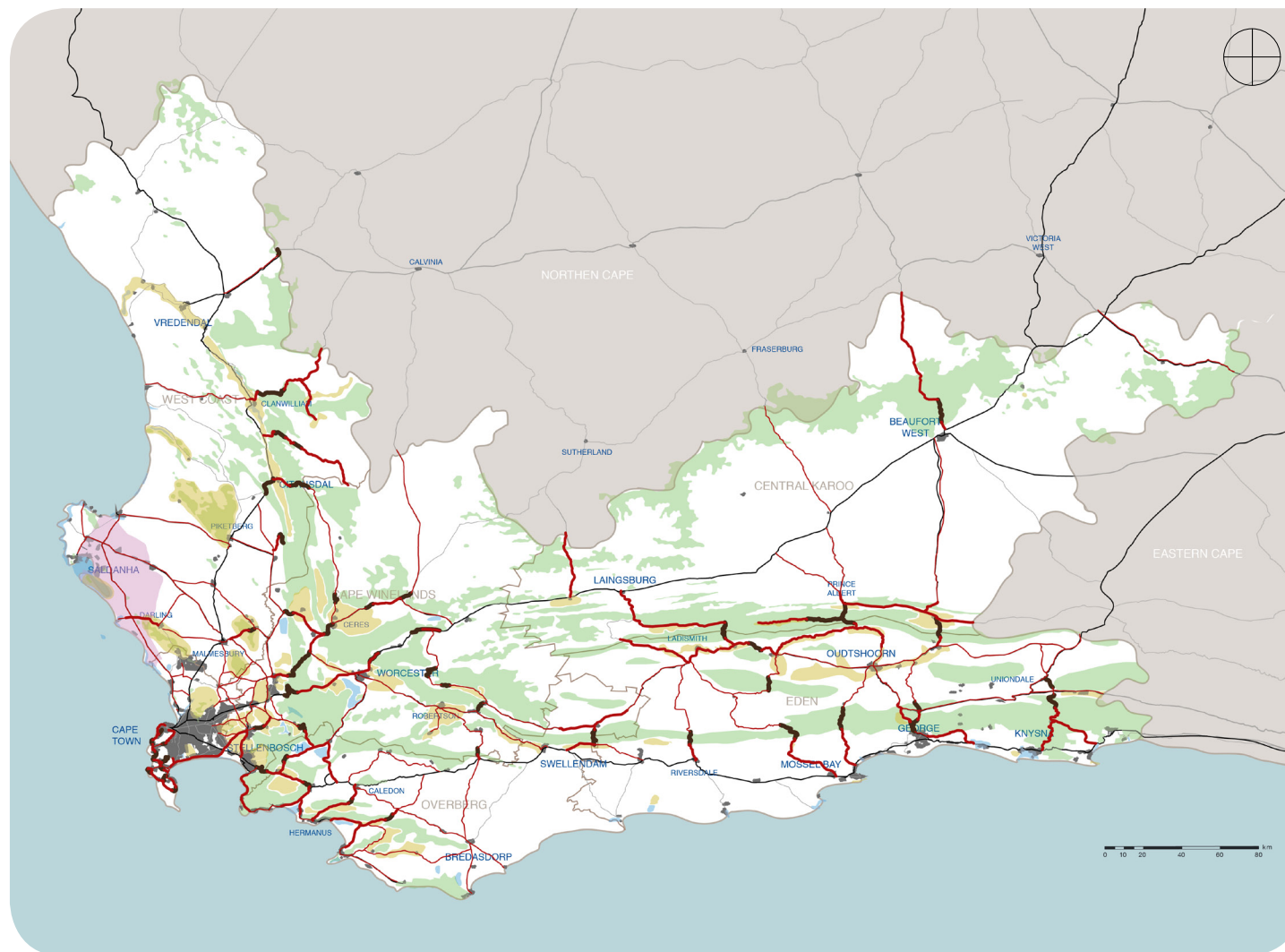
### 3.1.7.1 KEY CHALLENGES

Arising from the review of the 2009 PSDF a specialist study was undertaken into the Province's cultural and scenic landscapes (see Box 6 and Figure 22). This study established that Western Cape's cultural and scenic landscapes are significant assets that underpin the tourism economy, but that these resources are being incrementally eroded and fragmented. Agriculture is being reduced to 'islands', visual cluttering of the landscape by non-agricultural development is prevalent, and rural authenticity, character and scenic value is being eroded (e.g. urban sprawl into Cape Winelands).

The mountain ranges belonging to the Cape Fold Belt together with the coastline, are the most significant in scenic terms, and underpin the Western Cape's tourism economy. Losses of scenic and heritage rural character are taking place due to recent patterns of residential sprawl on the outskirts of urban centres associated with low- density property developments.

A number of scenic landscapes of high significance are under threat and require strategies to ensure their long-term protection. These include:

- i. Rural landscapes of scenic and cultural significance that are situated in close proximity to major urban development pressure (e.g. Cape Winelands).



SCENIC ROUTES & PASSES:

- MOUNTAIN PASSES
- PRIMARY SCENIC ROUTES
- SECONDARY SCENIC ROUTES

CULTURAL LANDSCAPES:

- ARCHAEOLOGICAL LANDSCAPES OF IMPORTANCE
- WILDERNESS / NATURAL LANDSCAPES
- RURAL / AGRICULTURAL LANDSCAPES
- NATURAL ESTUARIES, LAGOONS & LAKES

FIG.22 WESTERN CAPE PROVINCE - LANDSCAPE AND SCENIC ASSETS AS INFORMED BY GEOLOGICAL FEATURES AND GIS DATABASE COMPILED BY OBERHOLZER AND WINTER FOR SPECIALIST STUDY (2013)



## HERITAGE AND SCENIC RESOURCES: INVENTORY AND POLICY FRAMEWORK - SPECIALIST STUDY FINDINGS AND RECOMMENDATIONS

This desktop study was prepared for the review of the PSDF, with specific focus on the identification and grading of scenic and cultural resource assets of the Province. The study focuses on the broader regional scale rather than the local landscape or individual site scales, and is therefore an overview rather than a detailed inventory of all cultural and scenic resources. The framework for the study is largely based on NHRA.

The study focused on scenic as well as heritage resources. These two themes were directly interrelated and interdependent. Thus, the study involved the preparation of an extensive preliminary inventory of most of the significant scenic and cultural resources of the Western Cape.

The study included the following aspects:

- A desktop inventory of cultural and scenic resources at the regional and sub-regional scales;
- Mapping of resources at 1:250 000 scale for exporting to GIS maps;
- Determining the sensitivity, significance and possible grading of the resources;
- Identifying issues, development trends and threats to vulnerable resources;
- Preparing principles, policies and guidelines for the conservation and management of the resources;
- Reviewing the legal framework for the conservation and management of heritage/scenic resources; and
- Making recommendations on the way forward.

With regards to scenic resources, the study provides valuable insight into the distinctive regional landscape and settlement patterns evident across the Province, which have evolved in response to natural resources (i.e. water, geology, land form, agricultural soils, marine resources) and movement routes in tandem with social, political, and economic influences. A geomorphological approach, in combination with the existing district boundaries of the Western Cape, was used

as the first level of landscape classification (see Table 10). The study emphasised that, together with the coastline, the mountain ranges belonging to the Cape Fold Belt are the most significant landscapes in scenic terms, and consequently the Western Cape's tourism economy.

The study also provides a description, inventory and analysis of each district with regards to palaeontology, archaeology, scenic and cultural landscapes. The scenic resource survey revealed that there is an unconsolidated pattern of protected areas and that infrastructure and urban development often occur in visually sensitive wilderness or rural landscapes, which have the effect of reducing not only the scenic value, but also the tourism value and therefore the economic base of the Province. A further issue is the absence of a consolidated database and GIS mapping of scenic resources for the Province that could help to inform future growth and development.

The recommends that strategies for protection and sustainable management be prioritized. Based on the findings of the inventory, numerous landscapes and routes have been identified as worthy of formal protection - as indicated by their existing status or recommended Grade I, II and III significance. It is simultaneously proposed that a number of practical issues need to be considered regarding the appropriate protection and management of landscapes and scenic routes of heritage and scenic value, especially in cases where these cut across municipal boundaries, cover an expansive area and/or involve different components and levels of significance. Specific policies and guidelines for the protection and management of heritage and scenic resources have therefore been formulated and incorporated into the PSDF policy document. The guidelines are accompanied by diagrams to illustrate good practice when considering new development.

The implementation of this study should be seen as a way of not only protecting valuable resources for generations to come, but also as having social and economic benefits, particularly in the area of tourism on which the Province depends in great measure. There is a need for clear identification and mapping of scenic and heritage resources, along with ecologically sensitive areas, to inform and facilitate planning within the Province. This information is seen as an essential filter to ease the processing of development proposals, minimising inappropriate applications and improving predictability in the development application process.

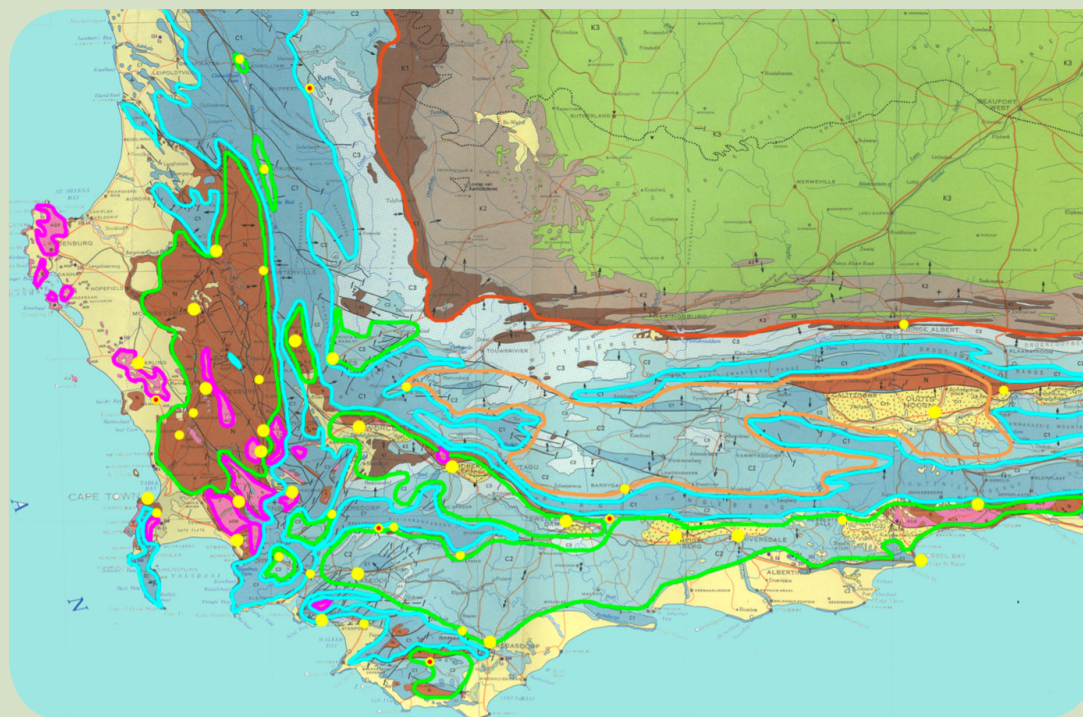


FIG.23 MAIN GEOLOGICAL GROUPS OF THE WESTERN CAPE: IN THIS MAP THE YELLOW DOTS INDICATE HISTORIC SETTLEMENTS, OFTEN LOCATED NEAR THE BASE OF MOUNTAINS WITH ACCESS TO WATER AND PRODUCTIVE SOILS OF THE FOOTHILLS. THE WINE GROWING AREAS HAVE TRADITIONALLY LOCATED ON THE GRANITES, AND THE WHEATLANDS ON THE MALMESBURY AND BOKKEVELD SHALES.

Landscape Type	Landscape Character / Scenic features	Examples
<b>A. Alluvial Valleys</b> Recent alluvium and colluvium	Fertile valleys along river courses. Mainly agricultural.	Olifants, Berg, Breede River Valleys
<b>B. Coastal Plains</b> Quaternary sand, calcrete	Flat plains or coastal platforms. Dunes, sandy plains, calcrete, limestone. Numerous coastal settlements.	Cape Flats, Sandveld, Agulhas Plain
<b>C. Escarpment / plateau</b> Beaufort shales	Flat upland plateau with dolerite koppies. Mainly sheep. Irrigated agriculture along rivers.	Die Vlakte, Roggeveld, Nuweveld
<b>D. Foothills / undulating plains</b> Bokkeveld / Malmesbury shales, granites	Foothills and gently undulating plains incised by rivers. Vineyards, orchards, wheatlands. Farming settlements.	Ruens, Swartland, Darling Hills
<b>E. Mountain Ranges</b> Table Mt. quartzitic sandstones	High peaks, ridges, cliffs of the Cape Fold Belt. Wilderness character. Mountain Fynbos, and montane forest in the kloofs.	Table Mountain, Cederberg, Langeberg

TABLE.10 LANDSCAPE TYPOLOGY OF THE WESTERN CAPE: A GEOMORPHOLOGICAL APPROACH WAS USED BECAUSE IT WAS FOUND THAT GEOLOGY AND LANDFORM WAS AN OVERRIDING TRAIT IN DETERMINING LANDSCAPE TYPES AT THE BROAD REGIONAL SCALE.

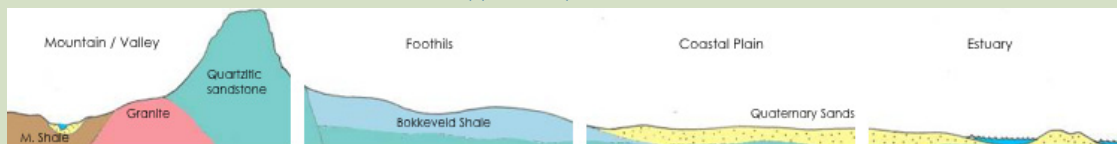


FIG.24 SECTION THROUGH LANDSCAPE TYPES



- ii. Undeveloped coastal landscapes under major development pressure.
- iii. Landscapes under pressure for large scale infrastructural developments such as wind farms, solar energy facilities, transmission lines and shale gas development in the Central Karoo.
- iv. Historic mountain passes and 'poorts' vulnerable to falling into disrepair, or alternatively inappropriate repairs and upgrading (e.g. Swartberg Pass).
- v. Loss of scenic qualities of wilderness landscapes.

### 3.1.7.2 SPATIAL IMPLICATIONS

- i. In terms of landscape significance, the overall natural and cultural landscape, and the layered pattern of settlements in response to the natural landscape over time is a Provincial asset worthy of protection.
- ii. In terms of landscape integrity, retaining the essential character and intactness of wilderness, rural and urban areas in the face of fragmentation through unstructured urbanisation and commercial agriculture, must be achieved.
- iii. In terms of landscape connectivity, continuity and interconnectedness of wilderness and agricultural landscapes must be retained, including ecological corridors and green linkages.
- iv. In terms of landscape setting, maintain the role of the natural landscape as a 'container' within which settlements are embedded, the landscape providing the dominant setting or backdrop.
- v. In terms of the logic of landscape, recognise

the intrinsic characteristics and suitability of the landscape and its influence on land use, settlement and movement patterns, in response to geology, topography, water, soil types and microclimate.

### 3.1.7.3 PROVINCIAL SPATIAL POLICIES

#### POLICY R5: SAFEGUARD CULTURAL AND SCENIC ASSETS

1. Input townscape and landscape making considerations into municipal SDFs, land use management systems and infrastructure development programmes.
2. Protect heritage and scenic assets from inappropriate development and land use change.
3. The delineation of urban edges have significant implications from a scenic perspective, especially with respect to the protection of natural and cultural landscapes from urban encroachment, defining an appropriate interface between urban development and significant landscapes, and protecting the visual and agricultural setting of historical settlements. However, it should be noted that the urban edges on their own do not provide effective long term protection of landscapes of heritage and scenic value.
4. Strategies towards achieving adequate legislation to protect scenic resources, as well as towards establishing more detailed classification of landscape and scenic typologies are required. Conservation strategies and guidelines are also particularly important in the effective management of scenic landscape quality and form. They

must describe the qualities of an area and the nature of development that is likely to be permitted, thus preventing wasteful expenditure, misunderstanding and conflict on the part of owners, developers, architects and the local authority. They can also ensure that the local authority is consistent in its management of the area in terms of the maintenance and enhancement of the public realm and in terms of development control.

5. Priority focus areas proposed for conservation or protection include:
  - i. Rural landscapes of scenic and cultural significance situated on major urban edges and under increasing development pressure, e.g. Cape Winelands.
  - ii. Undeveloped coastal landscapes under major development pressure.
  - iii. Landscapes under pressure for large scale infrastructural developments such as wind farms, solar energy facilities, transmission lines and fracking, e.g. Central Karoo.
  - iv. Vulnerable historic mountain passes and 'poorts'

## 3.2. OPENING-UP OPPORTUNITIES IN THE SPACE-ECONOMY

### 3.2.1. OVERVIEW

#### 3.2.1.1 ROLE OF GOVERNMENT IN THE SPACE-ECONOMY

*"Spatial planning has tended to follow patterns set up by private-sector investment. While the private sector has a role to play, the overall pattern of spatial development should be shaped by the long-term public interest" (NDP, 2012, p275).*

The Western Cape space-economy is made up of the diverse economic activities in the Province's urban centres and its rural areas (e.g. farming, eco and agri-tourism, etc), and the relationship of these places and spaces to the infrastructure that connects and supports them. Put differently, the space-economy is the network of workplaces across the Province and their linkages with local, national and international markets.

Government cannot grow the economy on its own or dictate to business how it must operate. But government can contribute to business success through the provision and maintenance of regional infrastructure, and how it organises economic activities in urban and rural space. How economic activities and infrastructure are organised in space fundamentally impacts on their viability, people's access to opportunity, and the environment. For example, locating housing for poor people far away from work opportunities reduces their chances of finding a job, and if they do have a job their disposable income, work productivity and family time are compromised. It also generates large movement flows over vast distances, at considerable financial and environmental cost.

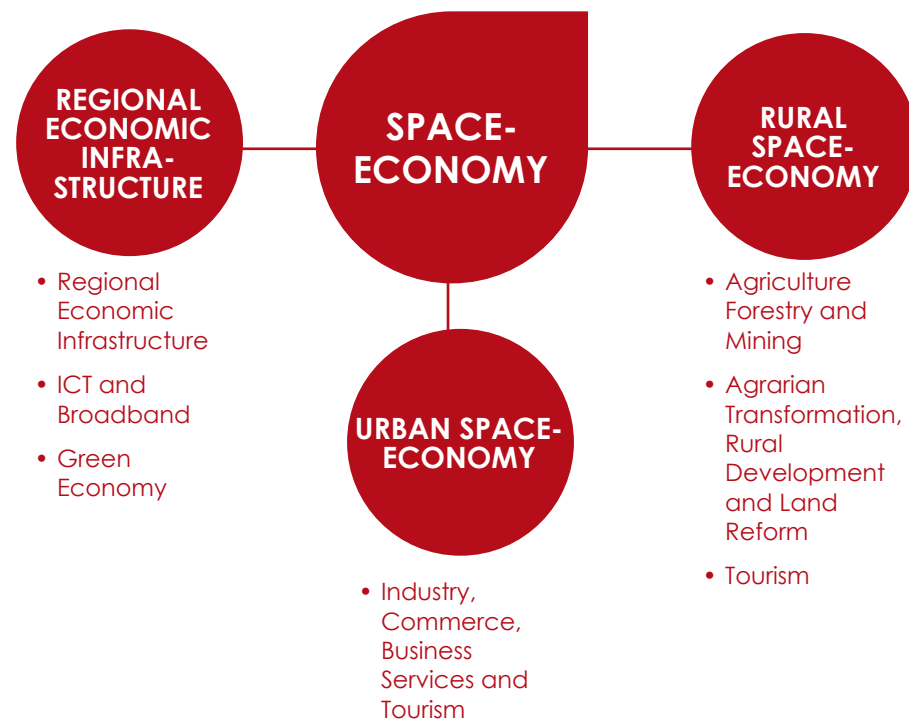


DIAGRAM.10 MIND MAP OF SPACE-ECONOMY THEME

It is for these reasons that a space-economy that opens-up livelihood and income earning opportunities, attracts private investment, and promotes inclusive growth is high on the Provincial agenda, and thus a focus area of the PSDF. Provincial Government has influence over the space-economy by having a say in the nature and location of regional infrastructure and facilities, where economic activities should occur and where not, and how these spaces should be configured. Government can also facilitate private investment and individual enterprise by making it easier to do business (e.g. by removing red-tape), by incentivising

investment in a particular place or economic sector, and by using partnerships as a delivery model. A space-economy conducive to private investment is one where there is certainty over the availability of essential infrastructure and transport, property rights, and living conditions for the workforce. Government plays an important role in reducing business risk by providing this certainty and consistently delivering on these considerations.

To this end the PSDF provides certainty over where public investment in the built environment will be channelled, and where

not. With due regard to government's social and environmental mandates, the PSDF also provides certainty over what economic activities are appropriate in different places and landscapes. The PSDF's point of departure is that the private sector is the primary driver of economic growth, but that government must take the lead in determining where this growth takes place (i.e. it is a key driver of the space-economy).

To contextualise the PSDF's proposals the sections below firstly explore the Western Cape's positioning in global markets and the NDP's national space-economy strategy. Then the unique features of the Western Cape space-economy are highlighted and its economic development prospects are identified. From this perspective proposals for unlocking opportunities in the Provincial space-economy are presented with respect to regional economic infrastructure, and the rural and urban space-economies (see Diagram 10).

### 3.2.1.2 ONECAPE 2040'S POSITIONING OF WESTERN CAPE IN GLOBAL ECONOMY

Diversifying from the Western Cape's traditional ties with European markets as the main consumers of the Province's agricultural exports and source of most of its overseas visitors, OneCape 2040 targets African, Asian and South American markets in trade and marketing expansion programs. Moving forward the Western Cape is positioned as:

- i. Gateway to Africa, strategically situated between the West and East.
- ii. International tourism destination that has a unique lifestyle offering.
- iii. Region of global excellence in ecological, creative, scientific and social innovation.

- iv. International entrepreneurial destination of choice.
- v. Leader and innovator in the green economy.

### 3.2.1.3 WESTERN CAPE'S ROLE IN THE NATIONAL SPACE-ECONOMY

*"Economic development is uneven, with some places growing more quickly than others. National spatial policy needs to support the major centres of competitiveness where jobs can be most efficiently produced"* (NDP, 2012, p278).

The NDP's national space-economy strategy is framed in the context of the Southern-African region, and is built on the principle of spatial differentiation (i.e. it recognises and responds to inherent differences between places). Of relevance to the Western Cape are the following areas proposed as national spatial targets in the NDP (see Figure 25):

- i. **NODES OF COMPETITIVENESS:** The Cape Metro region is identified as a major node of competitiveness which has the potential for higher growth. It recommends that government support should be targeted here to retain economic value, improve economic performance and maximise job creation.
- ii. **SPECIAL INTERVENTION AREAS:** These areas, which require specific kinds of State support for fixed periods, comprise:
  - **JOB INTERVENTION ZONES** – these are areas that have lost more than 20% of their jobs over the past decade, which the state may target to stimulate growth in alternative economic sectors. The NDP identifies the Western Cape's agricultural districts as areas of concern that may

warrant intervention. The Western Cape's coastal fishing towns also fall within this category.

- **GROWTH MANAGEMENT ZONES** – these are areas that require special planning and management interventions on account of anticipated rapid economic growth. The NDP identifies Saldanha Bay and environs as a prospective growth management zone on account of resource-related port and industrial development.
- iii. **GREEN ECONOMY ZONES** – these are areas that have a comparative advantage for the creation of "green jobs", where short term State intervention can leverage private sector investment. Whilst the NDP does not identify any prospective areas in the Western Cape, transitioning to a "green economy" is on the Provincial agenda.
- iv. **RESOURCE-CRITICAL REGIONS:** These are regions endowed with natural resources that are vital for the provision of ecosystem services or economic activity, and require specific policies to ensure their sustainability. The NDP identifies the Western Cape's critical biodiversity areas as a resource-critical region.
- v. **RURAL RESTRUCTURING ZONES:** To unlock opportunities in lagging regions or areas with agricultural, tourism or mining potential, the NDP proposes the designation of Rural Restructuring Zones. The NDP does not identify any specific areas for designation, but advocates that this be done selectively subject to them meeting a set of criteria.

National Government will designate these target areas, and the NDP calls for Provincial and local government to also designate areas

for special attention for which funding could be made available for suitable catalytic or demonstration projects (e.g. regeneration of run-down inner city areas, mixed business and residential use on strategic sites along corridors linking outlying townships and central business districts).

Arising out of the 2012 National infrastructure Plan the following Strategic Integrated Projects (SIPs) are being rolled out in the Western Cape:

- i. SIP 5: The development of the Saldanha Bay—Northern Cape corridor through rail and port expansion, increasing back-of-port industrial capacity by the development of an Industrial Development Zone (IDZ) for minerals beneficiation and servicing the maritime oil and gas industry.
- ii. SIP 7: Integrated urban space and public transport programme, which is currently being rolled-out in Cape Town and George.
- iii. SIP 8: Support to sustainable green energy initiatives nationally
- iv. SIP 11: Development of agricultural infrastructure and logistics
- v. SIP 15: Rolling-out broadband coverage to all households by 2020
- vi. SIP 18: Upgrading of water and sanitation infrastructure.

### 3.2.1.4 WESTERN CAPE SPACE-ECONOMY: FEATURES, PROSPECTS AND TARGET AREAS

The Western Cape space-economy has the following unique features (see separately documented PSDF Annexure 1: Provincial Overview for details):

- i. Agriculture, the most space extensive economic activity, only contributes 4%

of GDP yet underpins the economies of all districts outside of Cape Town as their manufacturing sector is involved in the processing of agricultural products.

- ii. The Cape Metro region, which generates 85% of GDP, dominates the Provincial economy and is the principal consumer market.

- iii. The Central Karoo, the largest district, is sparsely populated and contributes less than 2% of GDP.

The leading economic growth sectors, as forecasted by PERO, are all urban based (i.e. construction 5.1% pa, driven by public sector infrastructure investment; financial intermediation, insurance, real estate and

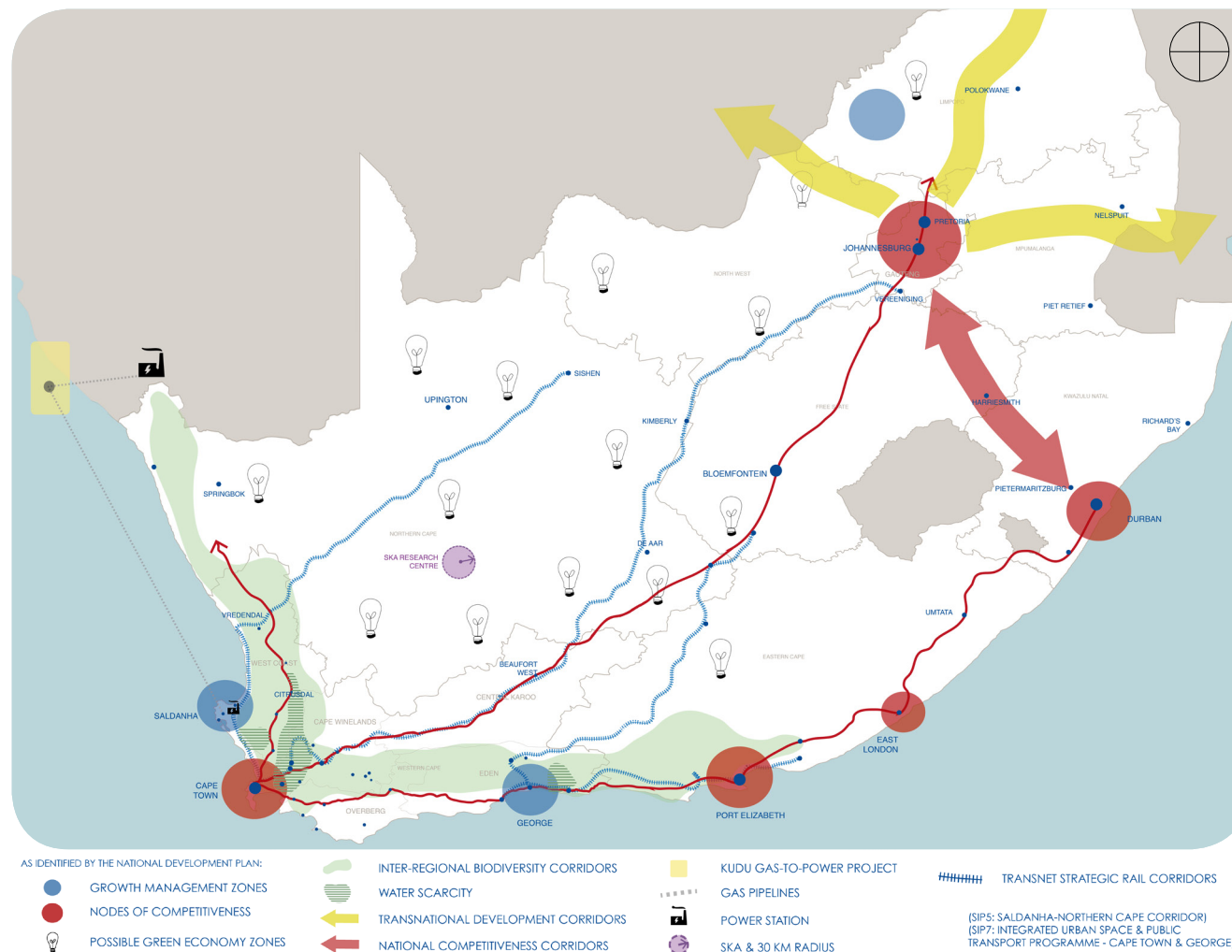


FIG.25 INTER- AND INTRA- PROVINCIAL SPATIAL INITIATIVES BASED ON NDP AND OTHER NATIONAL STRATEGIES



business services sector 4.6% pa; transport, storage and communication 4.3% pa, wholesale and retail trade, catering and accommodation 3.1% pa (driven by consumer expenditure and tourism)). The Province's economic prospects clearly lie in the urban space-economy, with public infrastructure investment forecast to be the leading driver of growth. Economic sectors and specific areas targeted for support are:

- i. Agriculture – commercial agriculture focused primarily in the existing intensively farmed areas, small farmer development in proximity to settlements (especially where raw water is available), subsistence urban farming.
- ii. Agri-processing and agri-tourism – on farms and in settlements
- iii. Niche manufacturing – primarily settlement based
- iv. Renewable energy (low job creation potential) – on farms subject to consistency with biodiversity, heritage, scenic, and agricultural requirements
- v. Gas - new LNG terminal facilities in Mossel Bay and between Saldanha Bay and Cape Town, associated gas power stations, and conversion of nearby industrial areas
- vi. Financial services – based in larger urban centres
- vii. Knowledge and creative industries – based in larger urban centres.
- viii. ICT, broadband – coverage extends across urban and rural areas
- ix. Tourism, in both urban and rural areas, based on regional tour routes, themed and focused on outdoor activities.

### 3.2.1.5 KEY PROVINCIAL SPACE-ECONOMY CHALLENGES AND RESPONSES

A primary strategy of apartheid was to manipulate urban and rural space-economies so that those with the franchise had preferential access to economic assets, particularly well located and resource endowed land, and the disenfranchised were severely restricted in accessing these opportunities. These patterns continue. The peripheral location of most subsidy housing projects generates high travel demands at considerable cost to low income households and the economy, and their low density suburban form results in high per unit land and servicing costs. As a result not all are benefitting, housing backlogs remain stubbornly high, the formal land market remains unaffordable to most, and the informal market remains vibrant.

The recent global financial crisis gave rise to widespread unemployment, especially amongst the youth, and recessionary conditions prevail. There is a mismatch between the skill requirements of the economy and levels of training of work seekers. Agriculture is shedding jobs as it transitions to a higher skilled and higher paid industry. As a result there are high levels of rural poverty and unemployment.

In terms of regional economic infrastructure, the challenge is to establish rail as the dominant mode of freight movement, introduce viable public transport systems, and transition to a 'greener' economy. Escalating risks to the Provincial space- economy include: climate change and its impact on economic activities, particularly agriculture; water deficits; and energy and food insecurity. The financial sustainability of municipalities is at risk, and their vulnerability is exacerbated by the high capital and operating costs of low density

settlement patterns. Inappropriate placement of development is not paid for by developers, but by society and the State.

In response to these challenges the Western Cape Government has made growing the economy its primary objective. To this end the PSDF focuses on opening-up opportunities in the Provincial space-economy, using public investment strategically to leverage private and community investments in urban and rural markets. The strategy revolves around:

- i. reinforcing the Province's economic growth engine (i.e. Cape Metro functional region),
- ii. investing in new regional economic infrastructure to unlock the potential of the emerging Mossel Bay/George and Saldanha Bay/Vredenburg regional economic nodes,
- iii. improving the efficiency and inclusivity of urban space economies, and the quality of their living environments to attract and retain the skills required by the services orientated urban economy,
- iv. rolling-out broadband coverage throughout the Province to connect isolated rural communities and expose them to training, skills development and market opportunities,
- v. introducing off-grid 'green' technologies as the basis of infrastructure service delivery outside the main urban centres, and introducing of resource efficient systems in urban markets,
- vi. diversifying rural economic activities and supporting land reform and rural development, and
- vii. reforming the land use management system to facilitate the unlocking of new economic opportunities.

## 3.2.2. REGIONAL ECONOMIC INFRASTRUCTURE

### 3.2.2.1 KEY CHALLENGES

Infrastructure enables socio-economic development, it does not create it. The demand for infrastructure in the Western Cape is determined by the rate of economic growth and the nature thereof (i.e. expanding sectors may require traditional infrastructure (e.g. modern port facilities) and new infrastructure (e.g. broadband linkages)). On the supply side, the strength of the economy influences the resources available to improve and maintain infrastructure.

The Western Cape, like all other provinces, is heavily reliant upon the infrastructure spending and programmes of National Government and of the State Owned Enterprises (i.e. for electricity, rail, national roads, ports, air transport and telecommunications). Infrastructure is long term by nature. The danger of delaying important infrastructure projects, or of making inappropriately scaled investments, is greater when there is a lack of an integrated vision for the Province.

### 3.2.2.2 SPATIAL IMPLICATIONS

The 2013 Western Cape Infrastructure Framework (WCIF) advocates a new approach to infrastructure - "one that satisfies current needs and backlogs, maintains existing infrastructure, and plans proactively for a desired future outcome leading to resilient and inclusive growth en route to a vibrant, equitable and low-carbon society". To this end

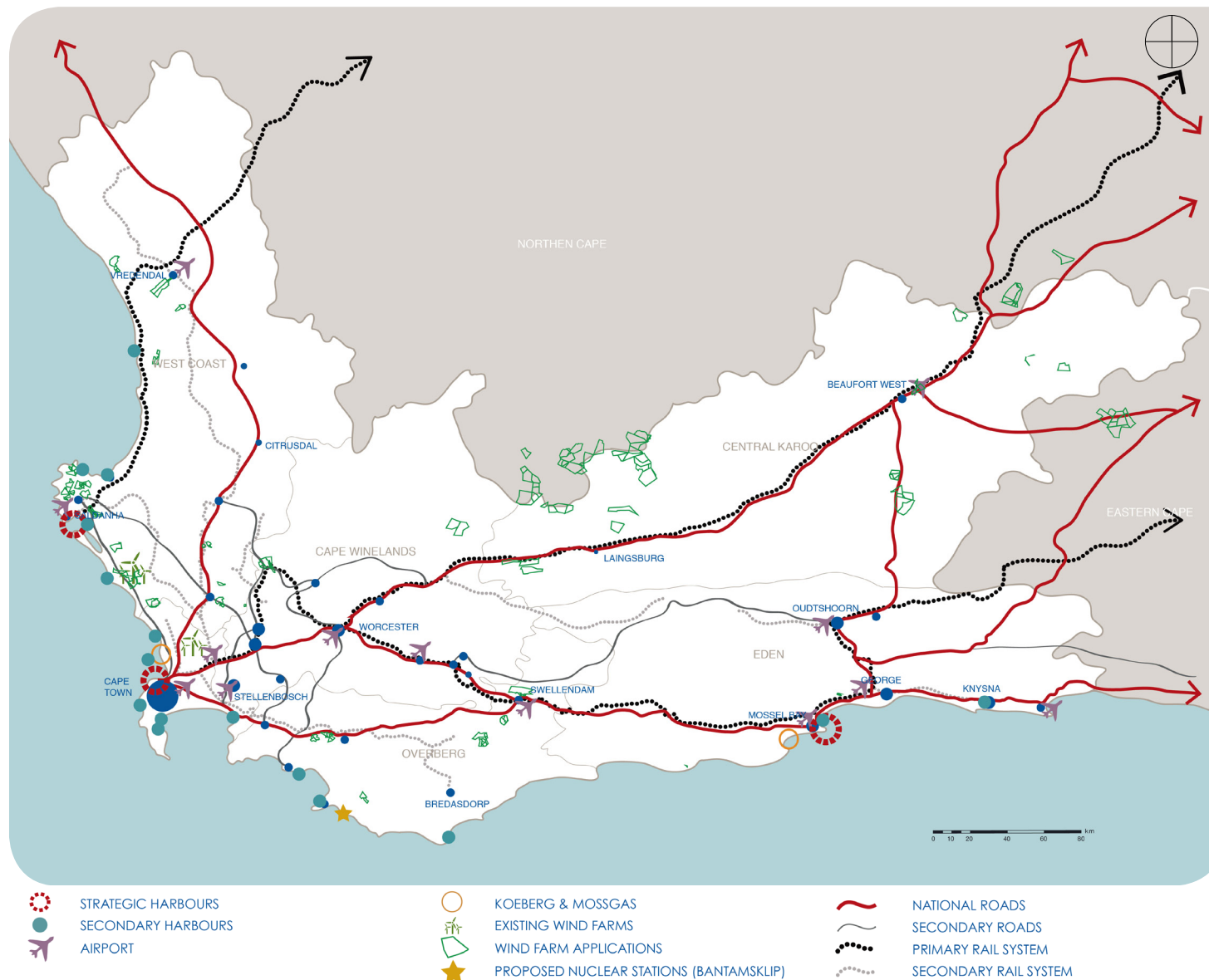


FIG.26 WESTERN CAPE PROVINCE - PROVINCIAL ECONOMIC INFRASTRUCTURE

the following infrastructure transition strategy is being followed:

#### ENERGY SYSTEMS:

- Introduce infrastructure to use natural gas as a transition fuel
- Align energy generation infrastructure with point of gas import (i.e. Saldanha Bay and Mossel Bay).
- Develop the renewable energy sector.
- Shift transport patterns to reduce reliance on liquid fuels
- Procure land for a gas-based energy system, including liquid natural gas (LNG) port facilities, gas plants (3 envisaged), and gas pipelines.

#### WATER SYSTEMS:

- Extend conservation and demand management programmes
- Develop groundwater resources where there is an adequate ecological reserve
- Introduce desalination and reuse of wastewater.

#### TRANSPORT SYSTEMS:

- Invest in public transport and non-motorised transport (NMT) infrastructure
- Shift freight from road to rail
- Expand port and industrial infrastructural requirements at Saldanha Bay.
- Promote denser settlement patterns to support the transition to public transport, and mixed land use patterns to reduce the need for travel and create walkable neighbourhoods.

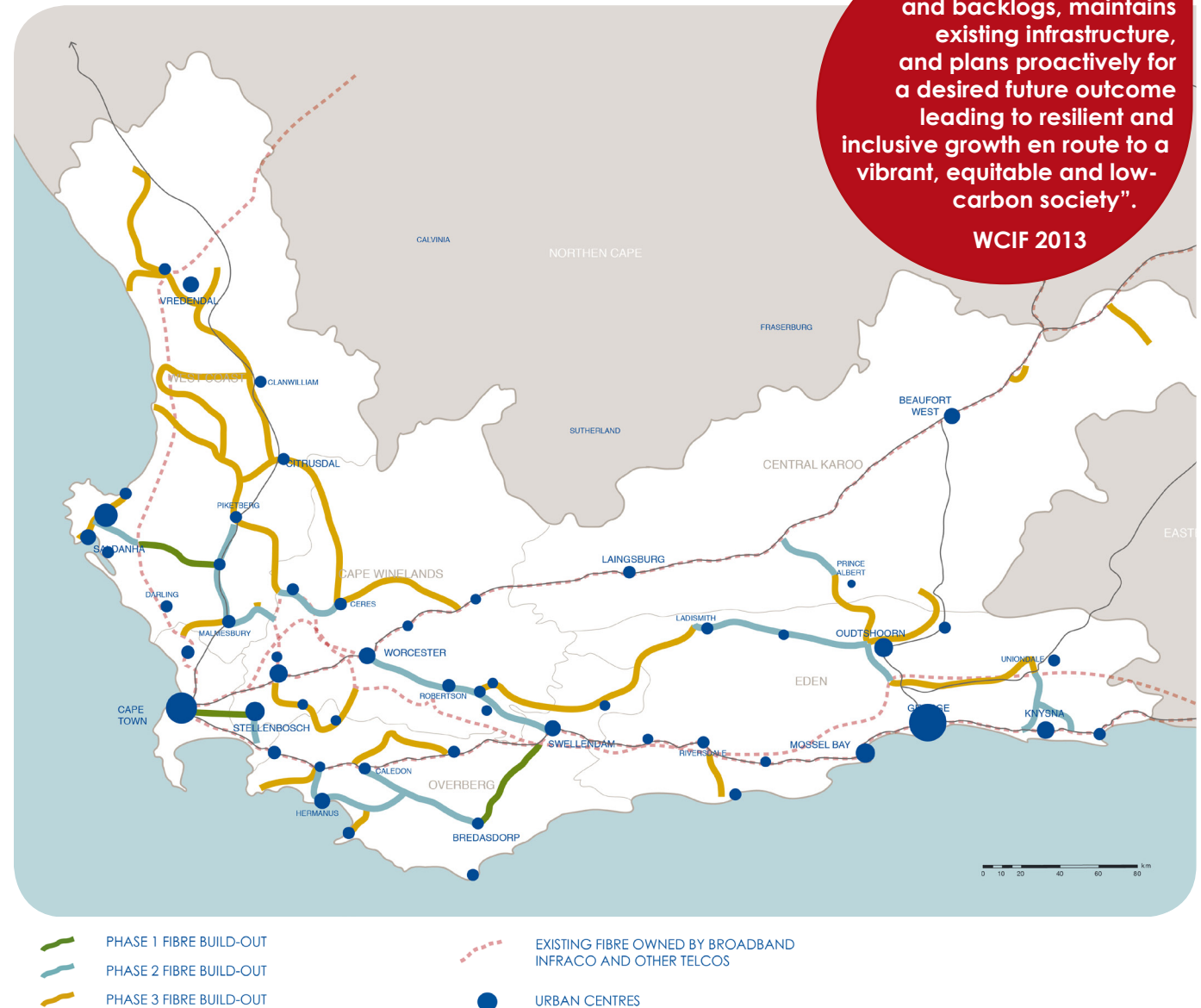


FIG.27 WESTERN CAPE PROVINCE - FIBRE NETWORK ROLL-OUT PLAN AS PER WESTERN CAPE BROADBAND STRATEGY (CONNECTING ALL WCG BUILDINGS)

## SOLID WASTE SYSTEMS:

- Increase waste recycling and reuse by replicating the City of Cape Town's programme in all settlements.
- Adopt waste to energy in long term.

## ICT SYSTEMS:

- Phase the roll-out of a strong broadband network.
- Develop an initial backbone to link all Provincial Government buildings.
- Pilot wireless mesh networks in municipalities (i.e. Khayelitsha/Mitchells Plain networks have been planned and the feasibility of Knysna and Bitou is being assessed)
- Provide public ICT access within a 2 km radius of anyone by 2019.
- Make available higher connection speeds to businesses.

The roll-out of the Western Cape Government's Green Economy Strategic Framework complements the Provincial infrastructure transitions. It is centred on investment in new and expanded market opportunities that support a low carbon, resource efficient and socially inclusive economic pathway. It revolves around:

- i. Expanding the renewable energy sector through off grid investments, Power Purchase Agreements (PPAs) and lobbying.
- ii. Creating the infrastructure to support gas-based energy options through a joint Provincial-City of Cape Town energy initiative.
- iii. Expanding water saving and recycling technologies.
- iv. Designing human settlements to accommodate infrastructural smart grids.

- v. Establishing an enabling regulatory environment.
- vi. Developing indicators for monitoring progress of the transition to a green economy.

Whilst the Western Cape's infrastructure transitions will open-up exciting new opportunities (e.g. the roll-out of public transport is a powerful lever to restructure dysfunctional human settlements, and broadband to overcome many of the problems of service delivery to remote areas), they bring significant uncertainties (e.g. shifting freight from road to rail). This reinforces the principle of incremental transitioning, where lessons can be learnt from successful and unsuccessful approaches, and the necessary modifications made to the roll-out programme.

To land the WCIF and PSDF in plans and on- the-ground action, involves multi-sphere government dynamics for which institutional relationships to do joint planning is essential (see Chapter 4 for proposals in this regard).



### 3.2.2.3 PROVINCIAL SPATIAL POLICIES

#### POLICY E1: USE REGIONAL INFRASTRUCTURE INVESTMENT TO LEVERAGE ECONOMIC GROWTH

1. Consolidate and align the various regional economic infrastructure investment proposals (i.e. SIPs, SOEs, National or Provincial Departments) in integrated regional SDFs for the Cape Metro, greater Saldanha Bay/Vredenburg, and Mossel Bay/George regions.
2. Use Regional or District SDFs as basis for addressing and reconciling competing and overlapping demands for regional economic infrastructure (e.g. regional airport).
3. Evaluate investment alternatives on the basis of holistic cost/benefit models that factor in capital and operating costs over the lifecycle of the investment. Use the WCIF prioritisation model to prioritise and programme alternative regional infrastructure investment proposals. Align and synchronise bulk infrastructure, transport and housing investment programmes.
4. Integrate the spatial component of bulk infrastructure master plans, public transport plans and housing/human settlement plans into one SDF prepared at the appropriate scale (i.e. regional, district or local municipal).
5. Provide spatial planning input and support to the sector plans of Provincial departments.
6. Prioritise developing the required bulk infrastructure capacity to serve the connection and compaction of existing human settlements, over developing bulk infrastructure to serve the outward growth of settlements.
7. Limit new urban transport investment to spatial developments that reduce average travel times, as opposed to extending them.
8. After the City of Cape Town and George, target the leading towns within the Cape Metro functional region (e.g. Paarl and Stellenbosch) and the emerging regional economic growth centres (i.e. Saldanha Bay/Vredenburg and Mossel Bay) for the next phase of the roll-out of urban public transport systems. Synchronise public transport investment with complementary investment in non-motorised transport.
9. Employ off-grid infrastructure technologies to serve new development outside the urban edge. Align public transport planning with spatial planning (i.e. complementary plans for settlement intensification along designated public transport corridors). Use off-grid technologies when the upgrading of infrastructure is required in small towns with no apparent growth potential.
10. Prioritise remote rural areas, small towns and low income urban areas for the roll-out of broadband.
11. Assess biodiversity, heritage, scenic landscape and agricultural considerations in evaluating the suitability of sites for bulk infrastructure projects.

## 3.2.3. RURAL SPACE-ECONOMY

### 3.2.3.1 KEY CHALLENGES

The rural economy includes but is not limited to farming; fishing and aquaculture; mining; forestry; commodity processing and servicing; eco and agri-tourism; outdoor recreation and events; infrastructure and service delivery; and diverse natural resource related activities (e.g. extraction, rehabilitation, harvesting, etc). Agriculture is going through a difficult transition period with its traditional export market in recession, escalating pressure on operating margins (i.e. input costs escalations exceed commodity price increases), more stringent international and national compliance requirements, and instability in the labour market.

### 3.2.3.2 STRATEGY INFORMANTS

The rural space-economy agenda is not only about agricultural development, it is also about broad based agrarian transformation, diversifying rural economic activities (see Figure 28), tourism, government promotion of rural development and land reform programmes, and functional ecosystems. Whilst Provincial and local government does not have an explicit rural development or land reform Constitutional mandate, all spheres of government have some level of control of rural development. Provincial and local government fulfil crucial support roles in the

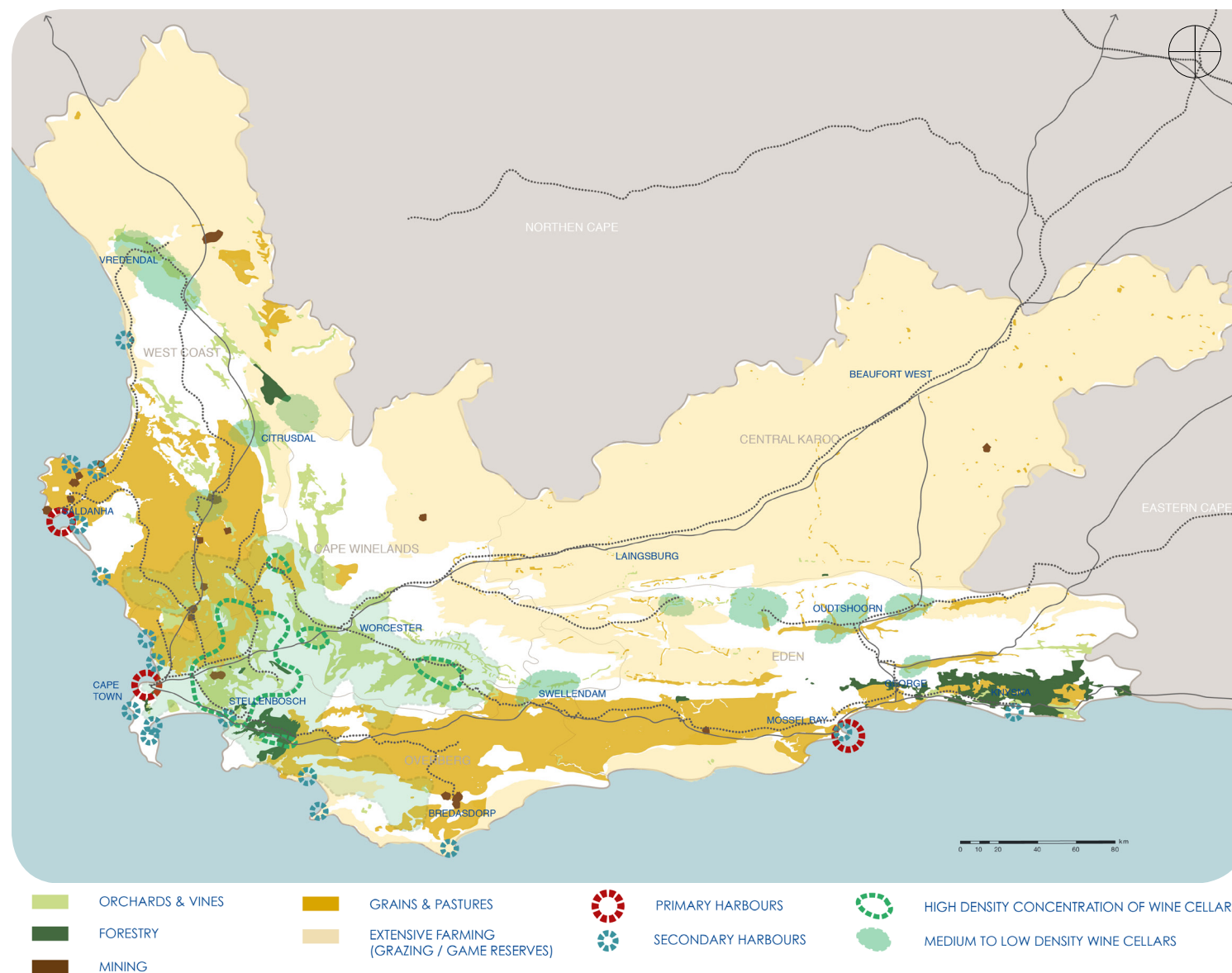


FIG.28 WESTERN CAPE PROVINCE - PRIMARY SECTORS (AGRICULTURE, FISHING, FORESTRY AND MINING)

implementation of the national Comprehensive Rural Development Programme (CRDP) as well as the Land Reform Programme.

The CRDP is targeted at 15 rural development nodes across the Province (see Figure 29) where participatory community-based planning is targeted at agrarian transformation as well as strategic investments in economic and social infrastructure. The PSDF establishes an enabling spatial framework for accommodating the CRDP and other national programmes.

Land reform is about opening up new opportunities to those previously restricted in accessing land and natural resources, and their beneficial use of these assets. Rural development involves government investment in economic and social infrastructure to improve the quality of rural life, skills and jobs. In this regard the Western Cape is rolling out three sub-programmes, namely Rural Nodal Development, Farmer Support Development and Farm Worker Development. Agrarian transformation encompasses: a change in the relations (systems and patterns of ownership and control), increased rural production; the sustainable use of natural resources; strengthening of rural livelihoods; the use of appropriate technology (indigenous and modern); and food security.

The Western Cape Government will support rural communities (inclusive of farm labourers and owners) to take control of their destiny, and help build opportunities for growth and development in rural areas. This involves a shift from a compliance driven system to a developmental system that encourages rural entrepreneurship.

In line with this agenda the PSDF strategy for opening-up opportunities in the rural space-economy has two dimensions, namely:

- i. Accommodating a greater diversity of compatible land use activities on farms and in the rural landscape in general. Compatible activities are those that do not compromise biodiversity, farming activities, cultural and scenic landscapes, and are of an appropriate scale and form to fit in with their context in the rural landscape (as specified in the to be updated 2009 PSDF Rural Land Use Planning and Management guidelines).
- ii. Channelling public investment in rural development initiatives (i.e. land reform, agrarian transformation, environmental rehabilitation, enterprise development, etc) to areas where it can offer real and sustained improvements to beneficiaries and the rural community.

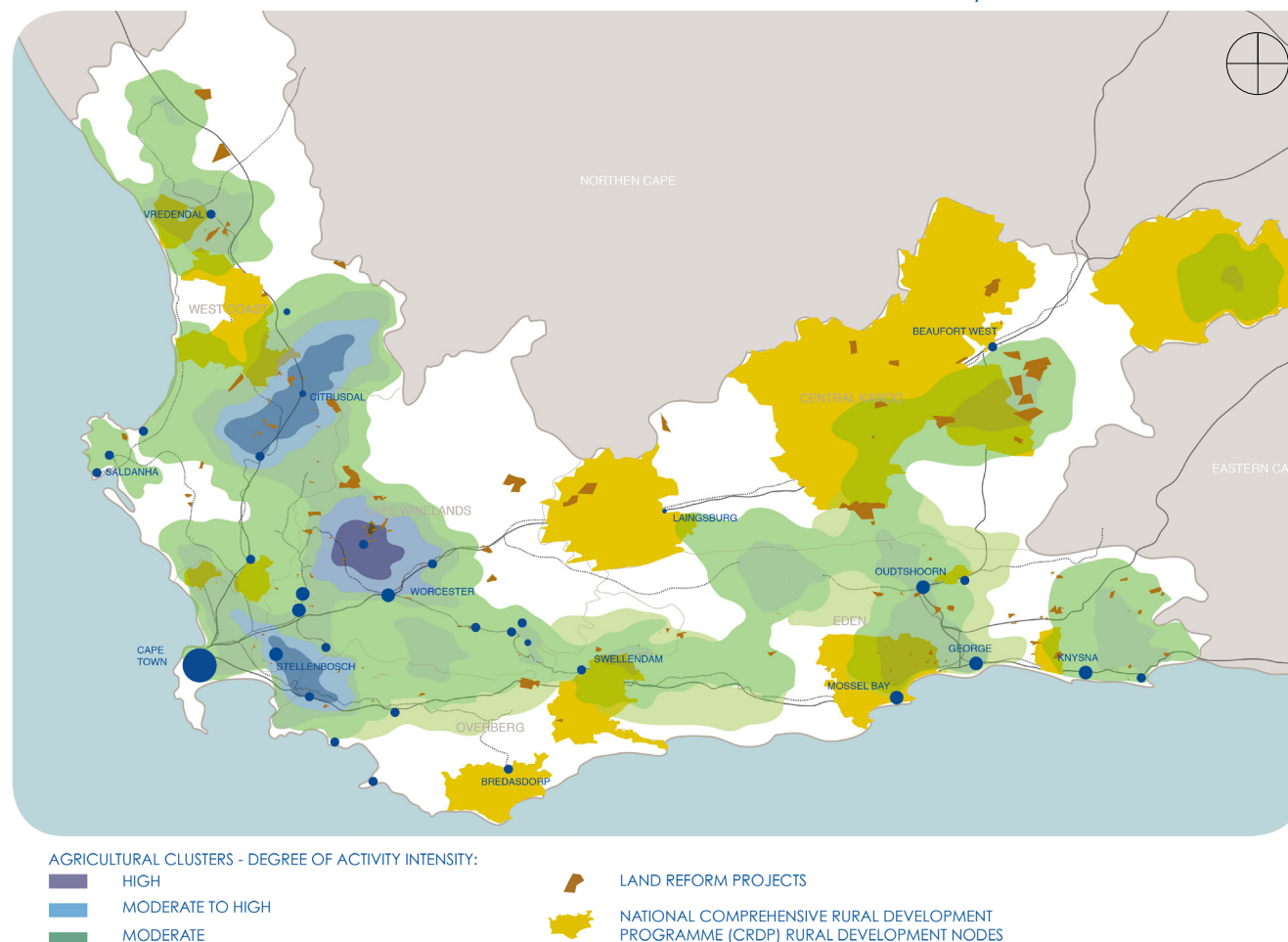


FIG.29 WESTERN CAPE PROVINCE - THE LOCATION AND INTENSITY OF AGRICULTURAL CLUSTERS, LAND REFORM PROJECTS AND CRDP NODES

### 3.2.3.3 PROVINCIAL SPATIAL POLICIES

#### POLICY E2: DIVERSIFY AND STRENGTHEN THE RURAL ECONOMY

##### RURAL PLANNING

1. Rural considerations to be factored into all municipal IDPs and SDFs, with priority given to getting rural coverage in all district SDFs and then refining the detail of the planning at local municipality level. SDFs should be able to assist in the identification of strategically located land for land reform purposes in terms of the Pro-active Land Acquisition Strategy (PLAS). Provincial Government should strengthen its partnership with DRDLR in giving support to municipalities in their undertaking rural planning.
2. The Provincial Department of Agriculture's area based plans (1:10 000 scale) and associated spatial data are useful tools to use for detailed planning or assessing farm level land use applications.
3. Where regional SDFs are compiled by Provincial Government, rural considerations are to be dealt with on the same basis as municipal SDFs.

##### DEVELOPMENT OUTSIDE THE URBAN EDGE

4. Compatible and sustainable rural activities (i.e. activities that are appropriate in a rural context, generate positive socio-economic returns, and do not compromise the environment or ability of the municipality to deliver on its mandate) and of an appropriate scale and form can be accommodated outside the urban edge

(except in bona fide wilderness areas).

5. The 2009 PSDF draft Rural Land Use Planning and Management Guidelines to be reviewed and updated to serve as basis for clarifying the interpretation of this policy. The following criteria should be applied in assessing consistency with this policy:
  - i. Environmental authorisation
  - ii. Compatibility with land use activities suitable in the CBA it is situated in, and subject to an EIA
  - iii. Does not alienate unique or high value agricultural land, or compromise existing farming activities.
  - iv. Does not compromise the current or future possible use of mineral resources
  - v. Is consistent with the cultural and scenic landscapes within which it is situated.
  - vi. Does not involve extensions to the municipality's reticulation networks (i.e. served by off-grid technologies)
  - vii. Does not impose real costs or risks to the municipality delivering on their mandate.
  - viii. Does not infringe on the authenticity of rural landscapes.
6. Land use incentives should be used to facilitate rural land use transitions that the State cannot afford to fund on its own (e.g. securing priority biodiversity areas or climate adaptation corridors; rural development; agrarian transformation).
7. The current Provincial Resort Policy to be reviewed to make it consistent with PSDF 2014, and its recommendations incorporated

in the updated 2009 PSDF Rural Land Use Planning and Management Guidelines.

8. The new Provincial guidelines for renewal energy facilities to be incorporated in the update of the 2009 PSDF Rural Land Use Planning and Management Guidelines.

##### FARM WORKER SETTLEMENT

9. The principles contained in the gazetted Provincial Farm Worker Settlement Policy are endorsed (see Box 8), but amendments may be warranted following decisions taken in terms of FARE's recommendations. It remains Provincial policy to accommodate those seeking off-farm settlement in the nearest town or village as part of the state-assisted housing programme.

##### RURAL DEVELOPMENT - STRENGTHENING RURAL LIVELIHOODS

10. Extend current rural livelihood support programme (i.e. CRDP) to cover a wider range of activities and build a broader rural skills base (e.g. environmental resource management, rural public works, land care, Working with Water, Working on Fire, Working with Wetlands, etc). Target future support to settlements that are stagnating or situated in a remote rural area. Use broadband technology to extend the programme's coverage and align with Thusong Centres.



## LAND REFORM

11. The principles contained in the Provincial Policy for Small Scale Farming in the Urban Fringe are endorsed (see Box 7) but amendments may be warranted following decisions taken on FARE's recommendations. In line with national policy, State land will be leased for this purpose – it should not be subdivided and alienated.
12. Where there is a combination of land suitable for agriculture and raw water available in proximity to settlements, this strategic Provincial asset should be safeguarded for agricultural purposes.
13. Commonages should be safeguarded for their original purpose, and municipal SDFs should give consideration to the establishment of new commonages. Municipalities should forge partnerships with non-governmental or public benefit organisations to assume management responsibilities for commonages, and investigate the practicality of providing basic agricultural infrastructure (e.g. treated effluent) with the support of Provincial and National Government.
14. Land targeted for new commercial ventures (e.g. farming, fishing, eco-tourism, etc) should have the same resource attributes as existing commercial ventures, and be in proximity to markets, facilities and transport.
15. Pilot projects should be motivated that fulfil the criteria of the NDP's Resource Critical Areas.

## WESTERN CAPE GOVERNMENT POLICY FOR THE ESTABLISHMENT OF AGRICULTURAL HOLDINGS IN THE URBAN FRINGE - SEPTEMBER 2000. PN 415/2000; NO. 5576

### PROVINCIAL POLICY REQUIREMENT:

The need for Provincial policy guidelines to facilitate the development of agricultural holdings in the urban fringe stems from the following:

- i. Need to reconcile national initiative Proposals (e.g. Land Reform, Transformation of Certain Rural Areas, commonage utilisation) and Western Cape circumstances, especially in agricultural areas with unique climatic and cultivation characteristics.
- ii. Need to fill certain gaps in Provincial development policy regarding how farm land can be optimally allocated and used in the urban fringe, especially given urban growth encroachment of farming areas and marginalised persons seeking access to farming land in order to enter the agricultural sector.
- iii. Need to co-ordinate urban and rural planning initiatives within the urban fringe at Provincial level.

### VISION AND AIM OF THE POLICY:

It is the vision of the Provincial Government of the Western Cape that access to land on the fringe of urban areas and rural towns, and its utilisation, contributes to sustainable agricultural and urban development. Accordingly the policy aims to create opportunities for aspirant farmers to access land and develop agricultural holdings in the urban fringe, and to explain how municipalities can plan and manage the implementation of these opportunities.

### ALTERNATIVE FARMING MODELS:

Responding to a variety of farming land needs and local needs and circumstances, the policy identifies alternative farming models differentiated in terms of: the type of venture (i.e. commercial, project based or community); the type of farming (i.e. soil or non-soil based); settlement, with agricultural holdings primarily intended for farming purposes; tenure on public and private land being secured in terms of land ownership, lease hold rights or the granting of conditional usage rights; and locality including existing or new municipal commonages, sub-divided portions of state, Provincial or municipal land or sub-divided farm portions on private land.

### URBAN FRINGE LAND DEVELOPMENT PLANNING:

The policy puts forward integrated land development planning of the urban fringe, with a Sectoral Plan or Spatial Development Plan being the appropriate forward planning mechanism through which municipalities can manage the development of

the urban fringe and integrate such planning into the municipal Spatial Development Framework. Accordingly such integrated land development planning of the urban fringe must ensure that; urban expansion is structured and directed away from environmentally sensitive land and farming land; agricultural resources are reserved; environmental resources are protected; appropriate levels of services are feasible to support urban fringe land uses; and land use allocations within the urban fringe are compatible and sustainable.

### GUIDELINES FOR THE ESTABLISHMENT OF AGRICULTURAL HOLDINGS:

The policy puts forward guidelines to assist municipalities in ensuring that agricultural holdings are established on a sustainable basis, including; locational criteria; appropriate zoning; sub-division of land; distinction between smallholdings and agricultural holdings; restricted settlement rights; use of commonages; and service delivery and cost



FIG.30 HOUSING ON THE URBAN FRINGE OF THE PHILIPPI HORTICULTURAL AREA (SOURCE: SETPLAN, 2013)



FIG.31 A FARMER WORKING ON A FARM IN THE PHILIPPI HORTICULTURAL AREA (SOURCE: SETPLAN, 2013)

BOX.7 POLICY FOR THE ESTABLISHMENT OF AGRICULTURAL HOLDINGS IN THE URBAN FRINGE

## WESTERN CAPE GOVERNMENT POLICY FOR THE SETTLEMENT OF FARM WORKERS - SEPTEMBER 2000. PN 414/2000; NO. 5572

### PROVINCIAL POLICY REQUIREMENT:

The need for policy guidelines with respect to the procedures and practices through which settlement options for farm workers can be promoted given the following:

- i. Need to achieve congruence between Western Cape circumstances and several national initiatives which focus on promoting security of tenure and settlement of farm workers.
- ii. Need to provide and develop settlement options informed by preferences of Western Cape farm workers and being compatible with Western Cape circumstances, especially in farming areas with unique climate and cultivation characteristics, varying densities of farm worker distribution and varying standards of farm worker housing.
- iii. Need to fill certain gaps which exist in Western Cape Provincial development policy regarding agri-villages and other forms of farm worker settlement in rural areas of the Western Cape at a Provincial level.
- iv. Need to co-ordinate rural planning and development initiatives at a Provincial level.

### VISION AND AIM OF THE POLICY:

It is the vision of the Provincial Government of the Western Cape that all farm workers must be able to settle permanently through alternative settlement options, with such options addressing local needs and circumstances, and contributing to sustainable community, rural and agricultural development in the Western Cape. The policy strives at creating "on the farm" and "off the farm" settlement options to allow farm workers and their dependants to fully benefit from the various tenure, housing and subsidy benefits and rights which are availed to them.

### SETTLEMENT OPTIONS FOR FARM WORKERS:

The policy puts forward two broad settlement models, namely "on the farm" and "off the farm" options.

**OPTION 1: "ON THE FARM"** options due to personal preference of farm workers or because of circumstances (e.g. distance to nearest town), with the following range of possibilities:

- i. Right of residence in terms of Section 6(1) of the Extension of Security of Tenure Act, 1997 (Act 62 of 1997) or ESTA.
- ii. Subdivision of the farm unit to facilitate settlement and accompanying right of ownership.

- iii. Provision for retirement in terms of Section 8(4) of ESTA as well as "off farm" settlement options including homes for the aged, retirement villages and housing projects in nearby towns or agri-villages.
- iv. Formal housing contract between farm owner and farm worker.
- v. Defining the monetary value of the housing benefit component of the farm worker remuneration packages, thereby allowing farm workers to use such housing allowance elsewhere for accommodation.
- vi. Introduction of minimum standards for farm worker housing by municipalities.

### OPTION 2: "OFF THE FARM" options, with settlement facilitated in:

- i. An existing town, or in exceptional circumstances a new rural town, with such settlement under the jurisdiction of a municipality and beneficiaries renting or owning their homes.
- ii. An agri-village which represents a private settlement exclusively accommodating the bonafide local farm worker community within an agricultural area, with the tenure of residents protected by a lease or notarial deed of servitude. Additionally the essential feature of an agri-village is that it is developed, owned and managed by a legally constituted institution (e.g. a Trust, Section 21 Company or Communal Property Association) representing a partnership between farmer/s, farm workers and State.



FIG.32 FARM WORKER HOUSING IN THE UPPER LANG KLOOF REGION  
(SOURCE: SETPLAN, 2013)



FIG.33 FARM WORKER HOUSING IN THE CAPE WINELANDS REGION



## 3.2.4. URBAN SPACE-ECONOMY

### 3.2.4.1 KEY CHALLENGES

The Province's urban centres are the main drivers of the Western Cape economy. The urban space-economy accommodates the finance, real estate and business sector (contributing 32% of GDP), the manufacturing sector (17% of GDP), retail and wholesale trade, catering and accommodation sector (15% of GDP), and the transport, storage and communications sector and the government services sector each contribute an additional 10% of GDP.

Whilst the Western Cape economy is essentially based on secondary and tertiary activities located mainly in the large urban areas, many of these activities relate to adding-value to the outputs of the Province's agriculture, forestry and fishing sector (4% of GDP). The linkages between the Western Cape's urban and rural economies are thus significant (see Figure 34).

Understandably there is a correlation between the Province's space-economy and where people live (i.e. the population is geographically concentrated in the Cape Metro region (i.e. 74% or some 4.3m people) and it contributes approximately 85% of the Province's GDP). Outside of the Metro the population and economy is concentrated in the urban centres along the coast.

Accommodating the majority of the

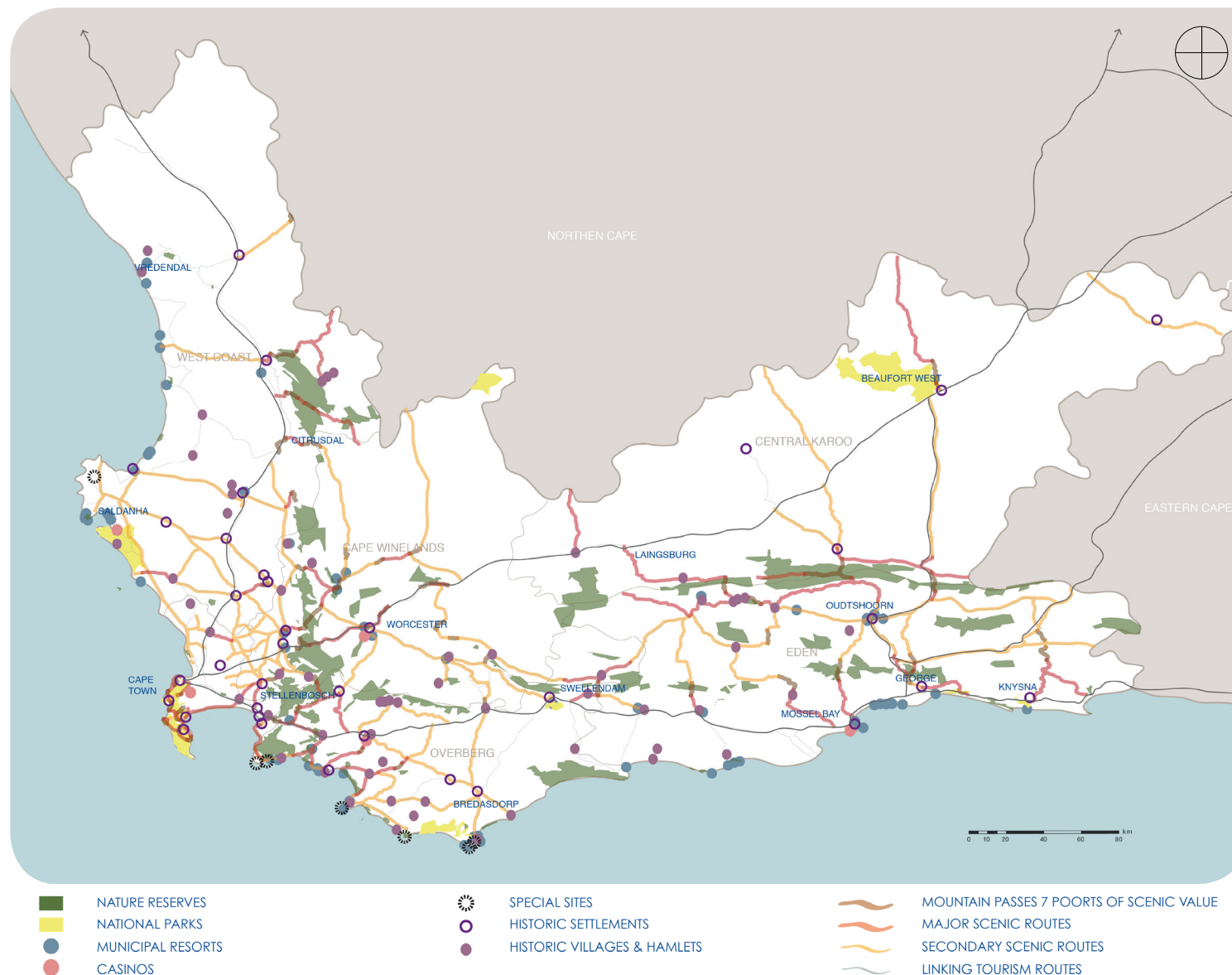


FIG.34 WESTERN CAPE PROVINCE - INDUSTRY, COMMERCE, BUSINESS SERVICES AND TOURISM

Provincial population and as the home of the Province's economic 'engine', the Cape Metro region overwhelmingly dominates the Western Cape's urban space-economy. Current growth trends as well as demographic and economic forecasts all point to Cape Town's economic and demographic primacy enduring. Outside of the Metro functional region the urban space-economy is structured as follows:

- i. Saldanha Bay/Vredenburg and George/Mossel Bay are emerging as lower order port based regional economic nodes.
- ii. The Overstrand and Southern Cape coastal belts are significant leisure, lifestyle, holiday and retirement economic centres.
- iii. The rural hinterland is served by regional service centres located along the Provincial transport corridors, which are complemented by a network of local service centres.
- iv. A series of coastal towns whose economy is based on fishing (harbours) and/or tourism.

The Western Cape's leading economic growth sectors, as forecasted by PERO, are all urban based (i.e. construction 5.1% pa (driven by public sector infrastructure investment); financial intermediation, insurance, real estate and business services sector 4.6% pa; transport, storage and communication 4.3% pa, wholesale and retail trade, catering and accommodation 3.1% pa (driven by consumer expenditure and tourism).

The Province's economic prospects clearly lie in the urban space-economy, with public infrastructure investment forecast to be the leading driver of growth. Most of the economic sub-sectors that the Western Cape Government are targeting for growth are urban based:

- i. Agri-processing and agri-tourism – on farms

and in settlements

- ii. Niche manufacturing – primarily settlement based
- iii. Renewable energy (low job creation potential) – on farms subject to consistency with biodiversity, heritage, scenic and agricultural requirements
- iv. Gas - new LNG terminal facilities in Mossel Bay and between Saldanha Bay and Cape Town, associated gas power stations, and conversion of nearby industrial areas
- v. Financial services – based in larger urban centres
- vi. Knowledge and creative industries – based in larger urban centres.
- vii. ICT, broadband – coverage extends across urban and rural areas
- viii. Tourism - based in settlements and along regional tour routes, themed and focused on outdoor activities.

Underpinning the strength of the Province's tertiary sector is its educational facilities, intellectual capital, and unique lifestyle offering. The further development of the urban economy is dependent on safeguarding these assets. The integrity of the Province's natural and built environments is also of critical importance to the further development of tourism, as the Western Cape's tourism economy is nature and heritage based, and built on a foundation of a high-quality and unique environment.

Whilst the Western Cape's urban centres drive the Provincial economy, the full benefits of these agglomeration economies are yet to be realized, given enduring socio-economic and spatial disparities. The fundamental spatial challenge is transforming the Province's human

settlements so that all, especially the poor, can access the opportunities of urban environments (i.e. services, facilities and amenities; accommodation options; job and livelihood prospects; etc) and that settlements are developed without compromising the Western Cape's unique environmental assets.

The lack of a robust economic base for settlements in the interior and arid parts of the Province is precipitating their decline and triggers permanent and periodic rural – urban migration. Conversely, population growth has been rapid in rural settlements in the Province's intensive farming areas that use seasonal labour.

### 3.2.4.2 SPATIAL IMPLICATIONS

The PSDF's strategy for opening-up opportunities in the urban space-economy places emphasis on the upgrading of the built environment in dysfunctional townships so that they become enabling living environments. In this regard the development of quality community precincts incorporating social development facilities is key to changing negative township perceptions and building investor confidence.

Both a 'top down' and 'bottom up' strategy for transforming the urban space-economy is being pursued. Infrastructure investment is the focus of 'top-down' urban restructuring interventions. Community based housing, facility and amenity development, and the upgrading of public spaces and living environment is the focus of 'bottom-up' initiatives. The approach going forward involves less emphasis on delivering completed houses, and more emphasis on incrementally developing human settlements in partnership with other government departments, communities and the private sector.



### 3.2.4.3 PROVINCIAL SPATIAL POLICIES

#### POLICY E3: REVITALISE AND STRENGTHEN URBAN SPACE-ECONOMIES AS THE ENGINE OF GROWTH

1. Priority to be given to building the national competitive advantages and innovation of the Western Cape's established and emerging regional economic centres through appropriate infrastructure, facility, amenity, and social service investment (i.e. public and non-motorised transport, tertiary education, health, public open spaces, gap and rental housing, etc) to support the knowledge economy. Human settlement planning to respond appropriately to the specialist requirements of these centre's skills base.
2. Whilst public investment in the built environment to be spatially targeted to complement new regional economic infrastructure investments (in the dominant and emerging regional growth centres as identified), it will also be made available to any settlement that makes a business case for delivering on the Provincial Strategic Objectives. In this regard the Growth Potential Study (GPS) to be used as a tool to inform spatial investment decisions.
3. Transversal spatial governance systems and structures (see 3.1) to be applied at regional or district levels to determine integrated public investment programmes (i.e. housing, transport, bulk infrastructure), and these premised on applying the PSDF's spatial principles. The long term land requirements in settlements for education and health facilities to be accommodated in these integrated plans.
4. Spatial targets within settlements for public investment to be delineated and defined, and the implementation of built environment investment programmes monitored to ensure that on the ground delivery is spatially aligned and synchronised. The suite of existing spatial targeting instruments (e.g. Urban Development Zones) be consolidated and rationalised.
5. Existing economic assets (e.g. CBDs, township centres, modal interchanges, vacant and under-utilised strategically located public land parcels, fishing harbours, public squares and markets, etc) to be targeted to lever the regeneration and revitalisation of urban economies.
6. A specialist 'land assembly' unit to be established within the Province (inter-departmental structure, or specialist unit within a Department, or public/private Special Purpose Vehicle) to identify, allocate, release, secure appropriate land use rights, and package strategic land parcels for development (i.e. state assisted housing/mixed use initiatives, PPPs, or private sector delivery incorporating inclusionary prescriptions). This unit to take- on Provincial land assembly responsibility and support municipalities assemble land parcels for development. Land assembly unit to investigate use of land policy instruments (e.g. land banking, land value capture, land rating system, etc) to make urban land markets accessible to all households.
7. Incentives should be put in place to attract economic activities close to dormitory residential areas, facilitate brownfields development (e.g. mixed use development and densification in appropriate locations), and private sector involvement in the rental and gap housing markets.
8. As per the recommendations of the specialist study into the impact of commercial and office decentralisation (ICOD), a policy framework for a regional (intra-municipality) perspective for the planning and approval processes of regional malls to be developed. In addition the findings and recommendations of the ICOD study need to be shared with municipalities (see Box 9).

## IMPACT OF COMMERCIAL AND OFFICE DECENTRALISATION - SPECIALIST STUDY FINDINGS AND EVIDENCE

An integrated assessment of the impacts of decentralised commercial and office centres on town centres was undertaken based on the evaluation of 3 case studies, being Vredenburg, Paarl and Hermanus. The assessment was supported by an international literature review and best practise study, while considerations in relation to urban design, spatial planning, transport planning, economic and property markets as well as heritage factors were included. Trends identified in the literature review found;

- a strong move away from developing decentralised malls in the USA and Australia with 19% of malls having closed in the USA, with more dying as a consequence of the global economic recession. This has led to the main streaming of the 'Malls to Mainstreet' and 'Retrofitting Suburbia' as an alternative;
- strong evidence of the economic and urban regeneration benefits of 'edge of centre' locations for commercial developments as an alternative to decentralised locations;
- a strong emphasis on 'Transit Oriented Development' (TOD) as being a more resilient model to decentralised and monofunctional development options; and
- That it pays to invest in town centres and the 'high street with 2-5 more non-retail jobs being created. (Cullen:2012)

The study found that decentralised commercial centres do have a negative impact on the performance of the town centre and that these impacts primarily relate to lack of integration, increases to vehicular travel demand; mono-functional, stand-alone, introverted and sterile development; intrusion into sensitive natural and agricultural environments and retail cannibalism. The town centre of small town's are resilient by nature but struggle to recover from the negative impacts created by an additional competing economic centre- especially in

resource scarce environments. Evidence suggests that town centres usually stagnate and slowly decline as result of loss of or a split of revenues and resources as found in Paarl and Vredenburg. The creation of new and long term jobs was only found with the development of new retail and when existing retail outlets remained in the town centre. (eg: Paarl and Hermanus) Urbanmark estimates that one job is created for very 30m<sup>2</sup> of new retail space.. Critically the focus of new commercial developments should be to provide new services to the town, not duplicate them as has occurred to some extent in Vredenburg.

The evidence from the study found that when designed, planned and located appropriately, commercial and office developments will assist in improving the economic performance, usability, attractiveness and experiential quality of the town centre. 'In centre' and 'edge of centre' developments are the recommended location for new large scale commercial/ retail developments having the least negative and most positive impacts to the town centre and town as a whole. They are the most likely development model to lead to significant economic returns as well as being the best suited to positively relate to its context and provide support to the sustainable functioning of the town centre (eg: Hermanus) This development model however is not the norm, with most of the new large scale commercial and retail centres in the Western Cape being proposed in decentralised locations.

Retail is one of the few significant forms of investment occurring in the emerging market' (Urban Landmarket 2013) with 4 million m<sup>2</sup> of new retail space being expected to be added over the next 10-12 years in SA. Critically there is a need to be adequately equipped to guide this new investment so its positive benefits are not lost. Thus recommendations have been made in relation to improved monitoring and evaluation as well as the identification new policy and guidelines. Specific recommendations in relation to the PSDF include the need to develop a policy framework for a regional (intra-municipality) perspective for the planning and approval processes of super-regional malls.



FIG.35 THE LOCATION OF EXISTING AND PROPOSED SUPER REGIONAL MALLS IN THE WESTERN CAPE OUTSIDE OF THE CCT, SHOWING A CLUSTERING IN THE CAPE TOWN METRO AND OVERSTRAND DISTRICTS WHICH COULD LEAD TO RETAIL SATURATION AND CANNIBALISM IN NOT MANAGED APPROPRIATELY



FIG.37 TRANSFORMATION OF A MALL INTO A MIXED USED NEIGHBOURHOOD (GREYFIELDS TO GOLDFIELDS, 2002, S BOZDIN AND L SOBIL)



Implementation Process Flowchart

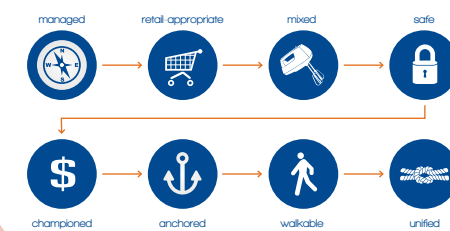


FIG.36 GUIDELINE RECOMMENDATIONS INCLUDE GREATER EMPHASIS ON PROMOTING VIBRANT RETAIL STREETS ( DC VIBRANT RETAIL STREETS TOOLKIT, 2012, PG58, STREETSENSE)

### 3.2.5.SPACE-ECONOMY SYNTHESIS

The key concepts related to the space-economy policies are illustrated in Figure 38. In summary these are to:

- i. Reinforce the Cape Metro region as the Province's economic engine
- ii. Use new regional and bulk economic infrastructure investment in the Cape Metro functional region and the emerging regional centres of Saldanha Bay/Vredenburg and George/Mossel Bay to leverage private sector and community investments (i.e. energy, water, transport and freight logistics, ICT)
- iii. Build 'land assembly' capacity in the urban space-economies and apply new land policy instruments (e.g. land banking, land value capture, etc)
- iv. Incentivise mixed land use and economic diversification in urban and rural land markets.
- v. Regenerate and revitalise existing economic nodes in the urban space-economy (i.e. CBDs, township business centres, modal interchanges, fishing harbours, etc)
- vi. Prioritise public transport investment and higher order facilities in district centres
- vii. Prioritise roll-out of the 'greener' economy. Promote rural economic diversification using off-grid infrastructure technologies, and support land reform and integrated rural development.
- viii. Stabilise small towns, invest in off-grid infrastructure technologies, and use the roll-out of ICT infrastructure to connect and economically empower across space.

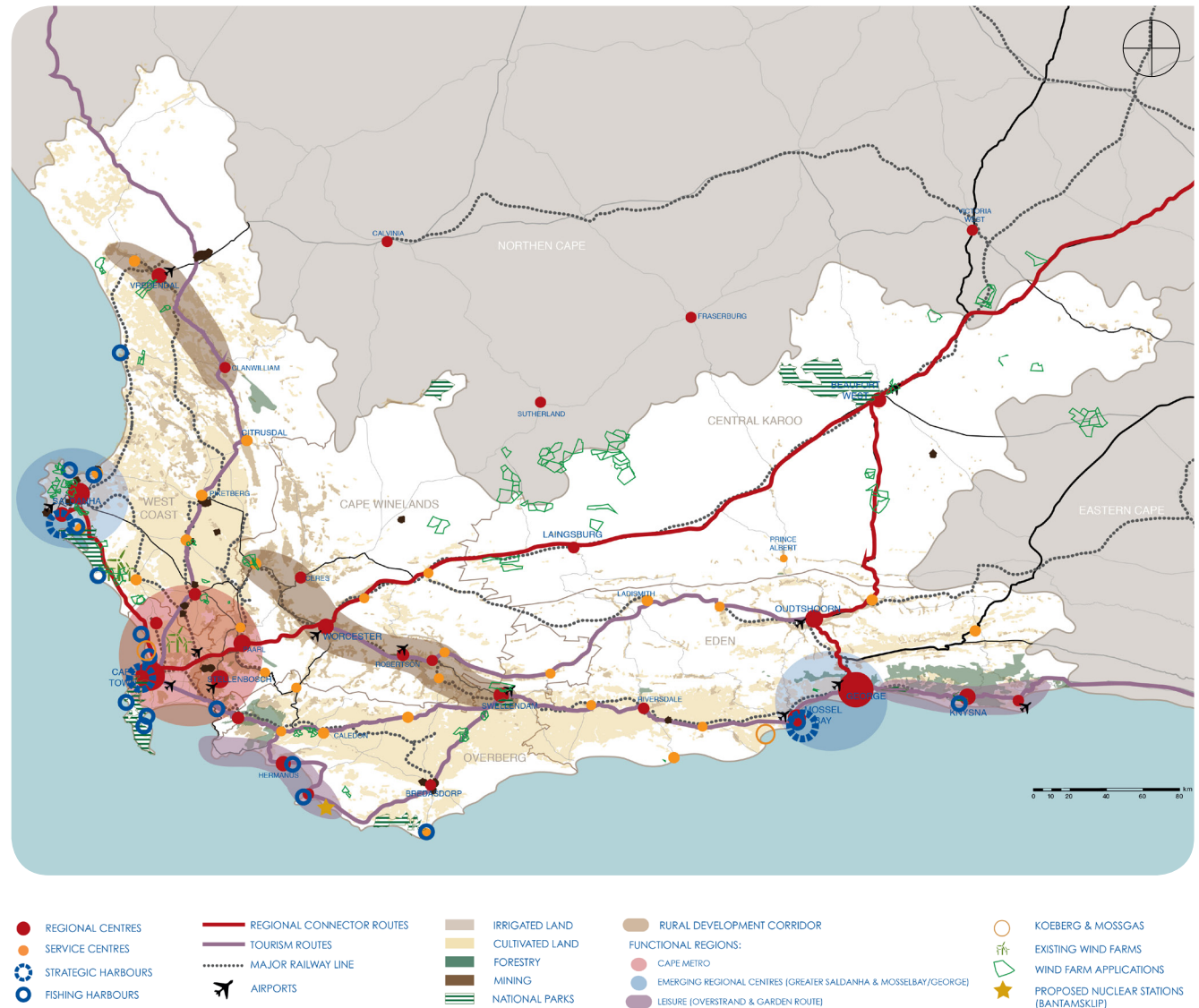


FIG.38 WESTERN CAPE PROVINCE - SPACE-ECONOMY SYNTHESISED AND CONSOLIDATED FRAMEWORK

## 3.3. DEVELOPING INTEGRATED AND SUSTAINABLE SETTLEMENTS

### 3.3.1. OVERVIEW

The Provincial settlement agenda is holistic and covers five interrelated spatial themes, namely; settlement morphology and sense of place, access, land use and density, facilities and social services, and informality and housing (see Diagram 11). As a transversal instrument the PSDF embraces the concept of sustainable and integrated human settlements.

The PSDF addresses the full spectrum of Western Cape settlements, irrespective of their size (i.e. from metropolitan Cape Town to the smallest hamlets), functional role (from diversified urban economies to subsistence rural villages), levels of service, or physical characteristics.

#### 3.3.1.1 SETTLEMENT POLICY OBJECTIVES

The Provincial settlement policy objectives are to:

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

The protection and enhancement of heritage and cultural resources is a clear Provincial mandate with indirect but strong links to its economic development mandate, especially with respect to skills retention in the knowledge economy.

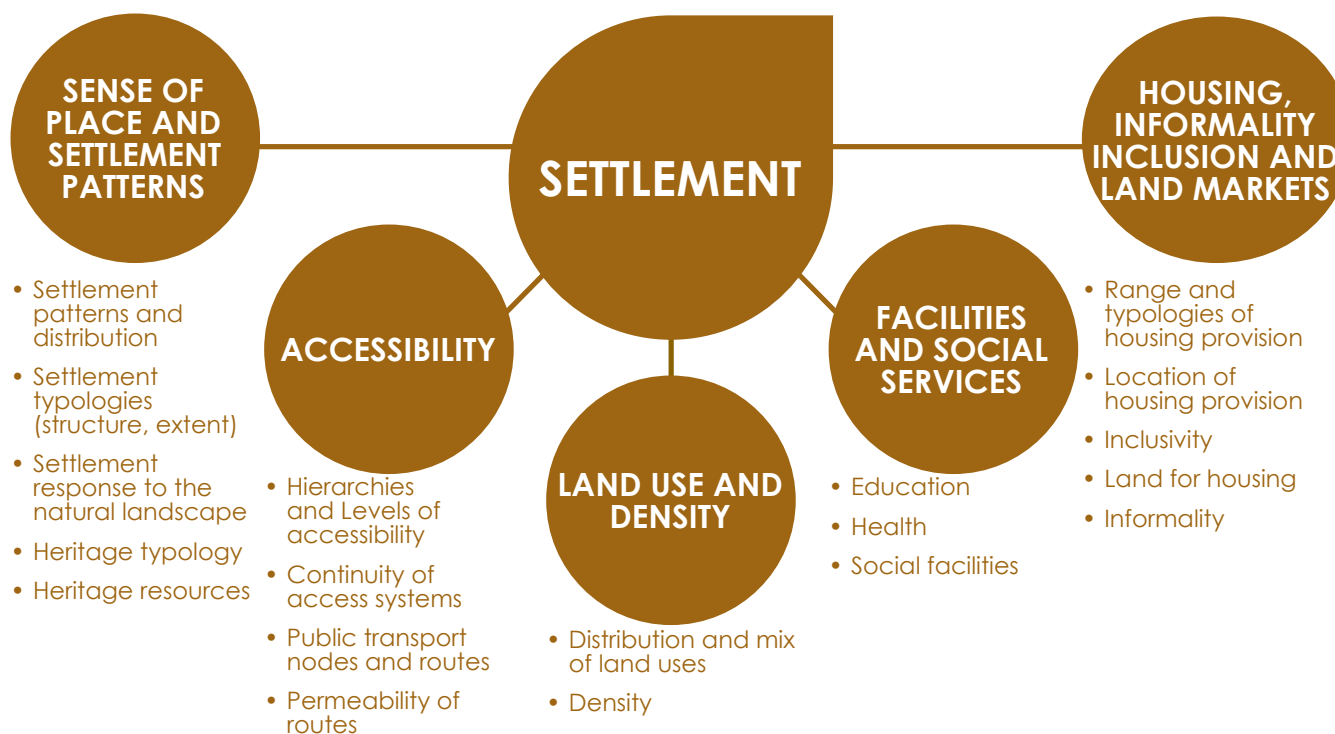


DIAGRAM.11 MIND MAP OF INTEGRATED AND SUSTAINABLE SETTLEMENTS THEME

A strong sense of place and quality environments within settlements at all scales is increasingly recognized as an essential dimension of sustainable settlement. This relates to the economic potential associated with tourism, attracting skills into the service and knowledge economy, as well as the wellbeing and dignity of communities of all income groups.

Access to opportunities and services is a keystone to building a strong regional economy and facilitating equitable access to opportunities and services in a financially

sustainable manner.

The provision of sustainable and effective social services requires that these are rationalised, clustered and managed in an integrated manner. The vast distances between settlements in the Western Cape makes this goal challenging and an understanding of regional and local movement dynamics is essential.

The provision and facilitation of an integrated and multi-modal transport system, as advocated by the NDP and Provincial Land



Transport Framework, relies on the appropriate location of mixed use areas and increased settlement densities to ensure adequate thresholds for sustainable public transport. A compact urban form and built environment also enables inclusivity and diversity of population, housing and social facilities, and acts as a precondition for the efficient and affordable delivery of basic services.

The PSDF promotes an integrated approach to housing delivery through deliberate settlement-level strategies, actions and collaborative arrangements that align housing with transport, land-use, economic and infrastructure decisions within a long-term vision of a more integrated urban future. The development of housing projects on poorly located land will be stopped. OneCape 2040 proposes “sustainably upgrade the built environment to directly respond to community needs through shifting from a focus on housing to one on accessible and integrated service delivery”.

### 3.3.1.2 KEY PROVINCIAL SETTLEMENT CHALLENGES

Low-density suburban sprawl continues, which encourages private vehicular travel, compromises the viability of public transport and undermines inclusive economic growth.

Given limited formal housing options, overcrowding is widespread and informality is a feature of most Western Cape human settlements, that will remain for the foreseeable future. Exclusionary land markets and the continued reality of urban informality pose major challenges for the Province. Continuing segregation and sprawling urban growth will undermine household and municipal financial sustainability, stifling economic growth.

Recognising the complexity of undoing the entrenched spatial legacy which persists in the Western Cape, the PSDF takes on the challenge of restructuring regions and settlements so that they offer opportunities for all – especially those previously restricted in accessing these benefits.

TABLE.11 SETTLEMENT TRANSITIONS

FROM..... MAINLY CURATIVE INTERVENTIONS	TO..... MORE PROACTIVE INTERVENTIONS
<b>SENSE OF PLACE AND SETTLEMENT PATTERNS</b>	
Resource consumptive living	Sustainable living environments and technologies
Developer led spatial growth	Spatial growth led by public interests
Emphasis on 'greenfields' development	Emphasis on 'brownfields' development
Mainly outward spatial growth	Mainly inward spatial growth
Low density sprawl	Contained settlement footprints high density in nodes and along transit corridors
Suburban settlement forms	Urban settlement forms that optimise the best of urban and rural contexts
Poor quality public spaces	High quality public spaces
Erosion of cultural and heritage assets	Protection and enhancement of heritage assets as important social and economic resources
Ad hoc building level focus on heritage assets	Holistic approach to heritage assets recognising landscape, cultural and settlement contexts
<b>ACCESS</b>	
A vulnerable, resource intensive transport system	A transport system that is resilient to peak oil
Uncoordinated transport and land use planning	Integrated transport and land use planning
Rural communities trapped in space	Coherent affordable access to rural communities
Car dependent neighbourhoods, towns and cities	Transit oriented development and walkable neighbourhoods
Fragmented regional public transport systems in the rural areas	Integrated regional public transport systems in the rural areas
Private transport orientated	Public transport orientated
<b>DENSITY AND LAND USE</b>	
Mono-functional developments	Mixed use development in appropriate locations
Segregated land use activities	Integration of complementary land uses
<b>SOCIAL SERVICES</b>	
Fragmented community facilities	Shared, integrated community facilities
Uneven social service provision	Balanced and equitable service provision
<b>HOUSING</b>	
Poorly located, monofunctional projects increasing settlement fragmentation	Well located, functionally integrated projects
Exclusionary land markets and focus on private property rights	Inclusionary land markets and balancing private and public property rights
Delivery for beneficiaries through public funded low-income housing	Delivery in partnership with beneficiaries through public, private, and community funded housing
Limited tenure options and standardised housing types	Diverse tenure options and diverse housing typologies
Delivering finished houses and standard levels of service	Progressive housing improvements and differentiated and upgradable levels of service

“Build cohesive, sustainable and caring communities with improved access to work and social amenities, including sports and recreation facilities”  
(DOHS Outcome 8)

## 3.3.2. SENSE OF PLACE AND SETTLEMENT PATTERNS

### 3.3.2.1 KEY CHALLENGES

The Western Cape's distinctive settlement patterns and typologies have developed in response to environmental conditions, historic patterns of subdivision, and built forms. These settlement typologies and spatial distribution relate to their rural and agrarian contexts in ways that remain relevant to their long term viability.

The scenic and heritage resources of the Western Cape, issues relating to their long-term protection, as well as recommendations for maintaining their productive value are contained in the PSDF Heritage and Scenic Landscapes specialist study (Oberholzer and Winter, 2013). The historical settlement chronology documented in this report is illustrated in Figure 43 (see Box 10).

Scenic landscapes, historic settlements and the sense of place which underpins their quality are being eroded by inappropriate developments that detract from the unique identity of towns. Causes include inappropriate development, a lack of adequate information and proactive management systems.

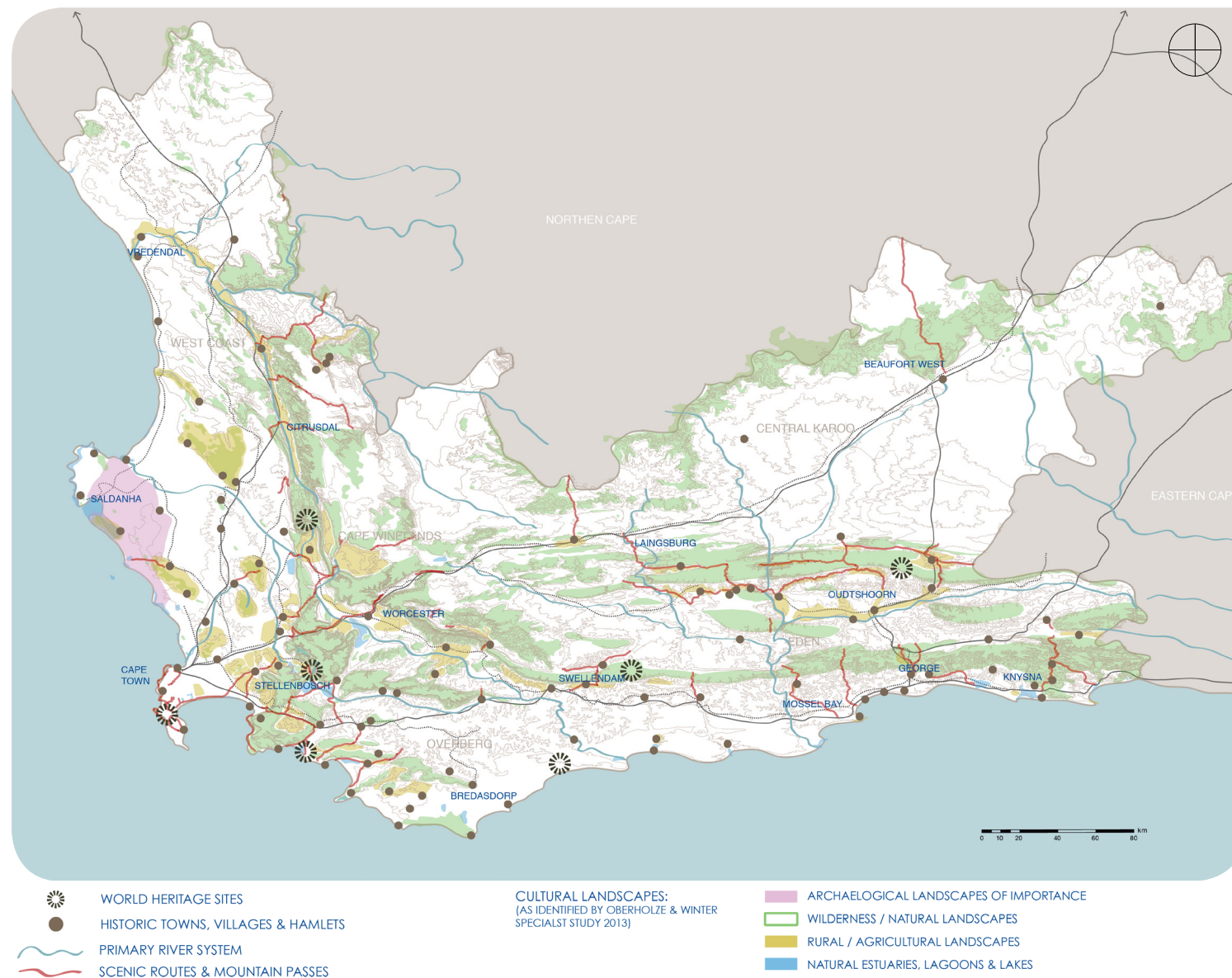


FIG.39 WESTERN CAPE PROVINCE - ILLUSTRATING THE CONCENTRATION AND RELATIONSHIP BETWEEN PROVINCIAL CULTURAL LANDSCAPES AND HERITAGE RESOURCES



### 3.3.2.2 SPATIAL IMPLICATIONS

The Western Cape's unique sense of place and identity underpins its economy in numerous ways and requires appropriate responses to the heritage, cultural and scenic assets of the Province.

Landscape and heritage management are an essential and integral aspect of spatial planning and not separate from it. Principles pertaining to settlement development should always support the protection and enhancement of cultural and heritage assets.

Underpinning the strength of the Province's tertiary sector is its unique lifestyle offering. Growing the Western Cape's economy is dependent on safeguarding these assets. The integrity of the Province's natural and built environments is of critical importance to the further development of tourism, as the Western Cape's tourism economy is nature and heritage based, and built on a foundation of a high-quality and unique environment.

Similarly, long term economic resilience relies on upgrading of the built environment in dysfunctional townships so that they become enabling living environments overcoming negative perceptions and building investor confidence.

Inappropriate, sprawling development which erodes these assets, also undermines the foundations of the Western Cape's economy.

The delineation of urban edges is an important tool to protect heritage and scenic assets. However, sole dependency on urban edges to provide the necessary effective long-term protection and management of scenic landscapes and heritage assets is not sufficient.

Heritage input into the preparation of Spatial Development Frameworks is essential to ensure effective integration of heritage management and planning issues and to develop ways to use these assets so that they contribute to regeneration and build economic resilience.

Finally, well-designed settlements support civic interaction and equitable access throughout the public environment. Inclusion and integration through an enhanced sense of belonging can be promoted through a focus on the public realm rather than on private enclaves, and by promoting the clustering and agglomeration of complementary activities and land uses.

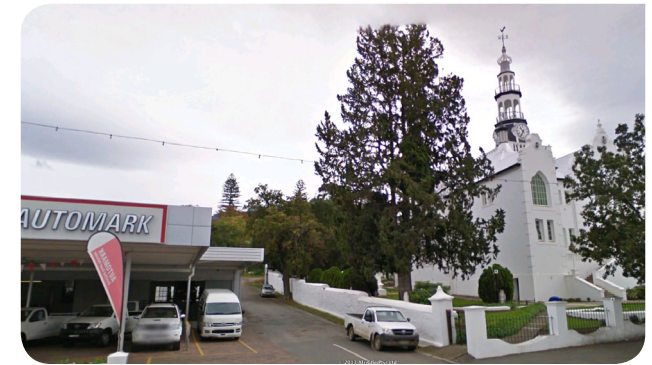


FIG.42. INSENSITIVE LAND USES LOCATED NEXT TO KEY HISTORICAL FEATURES OF SWELLENDAAM



FIG.41 PETROL STATION OUTSIDE MOSSEL BAY NEGATIVELY IMPACTING ON SURROUNDING LANDSCAPE



FIG.40 INAPPROPRIATE LOCATION OF HOUSING IN BARRYDALE NEGATIVELY IMPACTING ON THE CHARACTERISTIC SCENIC LANDSCAPE

## HERITAGE AND SCENIC RESOURCES: INVENTORY AND POLICY FRAMEWORK - SPECIALIST STUDY FINDINGS AND RECOMMENDATIONS

With regards to heritage and cultural resources, this study found that the Western Cape is unique for various reasons and includes a number of key representative and distinctive heritage themes. The study provides a brief description of the cultural context of the Province, ranging from its ancient fossil and pre-colonial archaeological record, to its early and later colonial, apartheid and democratic periods. It was found that the region possesses numerous cultural landscapes worthy of formal protection, landscapes of high archaeological and paleontological significance and sensitivity, as well as conservation-worthy historical settlements, routes and passes.

With reference to historical settlement, their heritage value is based on a combination of landscape setting (e.g. coastal setting, mountain backdrop and agricultural edges), historical associations, concentration of historical fabric and layering, as well as distinctive townscape and/or streetscape qualities. Based on a combination of settlement layout in response to environmental conditions (water and topography), patterns of subdivision and built form, a number of distinctive settlement qualities are also evident, often with distinctive rural and agrarian qualities.

Based on the findings of the inventory, numerous cultural landscapes, historical settlements and historical routes and passes have been identified as worthy of formal protection - as indicated by their existing status or recommended Grade I, II and III significance. A small percentage of the heritage resources identified in the study enjoy any formal protection status, where only 12 sites have been declared within the Western Cape since NHRA (1999). It is thus recommended that strategies for their protection and sustainable management be prioritized. Recognising that a standard management approach cannot be applied to all heritage resources, the study provides examples of the "crown jewels" of the Western Cape, where a more precautionary heritage management approach is recommended.

A key recommendation calls for municipal support and direction in carrying out local heritage management responsibilities as specified in the NHRA. To be effective, it is recommended that this be a collaborative effort between Provincial and heritage authorities and that such support include:

- The phasing and preparation of municipal heritage inventories. These inventories are essential to ensuring more efficient processing of development applications.
- Ensuring adequate heritage input as municipal SDF level as essential to effective integration of heritage management and planning.
- The implementation of local heritage protection measures through zoning schemes.



FIG.44 THE STUDY COMPILED A DETAILED INVENTORY OF KEY REPRESENTATIVE HERITAGE THEMES, WITH ACCOMPANIED EXAMPLES AND IMAGES, SUCH AS THE AMALIENSTEIN CHURCH IN ZOAR (FAR LEFT) RANGING TO THE CORBELLED DWELLINGS OF THE KAROO (LEFT)

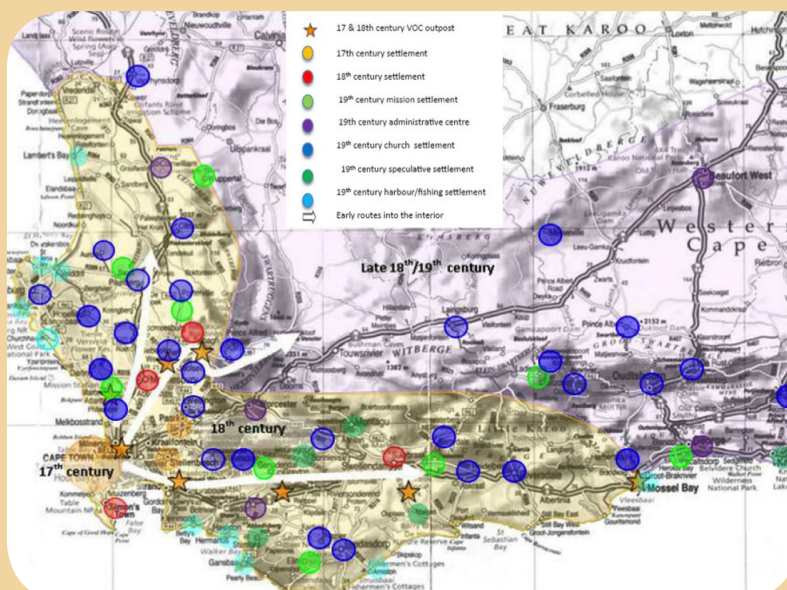


FIG.43 THE CULTURAL CONTEXT OF THE PROVINCE IS CHARACTERISED BY A RICH AND DIVERSE LAYERING OF HISTORY SPANNING THE MID-17TH, 18TH, 19TH AND 20TH CENTURIES - ILLUSTRATED THROUGH THE MAPPING OF SETTLEMENT CHRONOLOGY AND SPATIAL DISTRIBUTION AND ORIGINS OF NUMEROUS HISTORICAL SETTLEMENTS.

### 3.3.2.3 PROVINCIAL SPATIAL POLICIES

#### POLICY S1: PROTECT, MANAGE AND ENHANCE SENSE OF PLACE, CULTURAL AND SCENIC LANDSCAPES

1. Prevent settlement encroachment into agricultural areas, scenic landscapes and biodiversity priority areas, especially between settlements, and along coastal edges and river corridors.
2. Promote smart growth ensuring the efficient use of land and infrastructure by containing urban sprawl and prioritising infill, intensification and redevelopment within settlements.
3. Respond to and enhance an economically, socially and spatially meaningful settlement hierarchy that takes into account 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.
4. 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.
5. 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.



### 3.3.3. ACCESSIBILITY

#### 3.3.3.1 KEY CHALLENGES

The Western Cape State of the Environment Outlook report (2013) notes that “Transportation systems are well developed, although heavily skewed towards road-based transport, private vehicles and road-based freight movement”. Travel within and between municipalities is unaffordable to many, leaving communities trapped in space - unable to engage meaningfully with the economy and to access services and amenities.

The extent to which communities in the Western Cape are “trapped in space” is evidenced in the PLTF which indicates that, outside the metropolitan areas, 48 to 57% of people rely on non-motorised transport, or put another way, cannot afford a taxi fare (see Table 12).

Mono-functional land uses, urban sprawl and remote developments are increasing the need to travel within and between regions. Many developments are taking place on cheap land at the urban fringes, dissipating transport services and viability. Unsafe, poor quality public transport persists.

The operating costs for BRT systems in the metropolitan areas of Cape Town and George are high, with Cape Town’s MyCiti service currently recovering 20% of the operating costs.

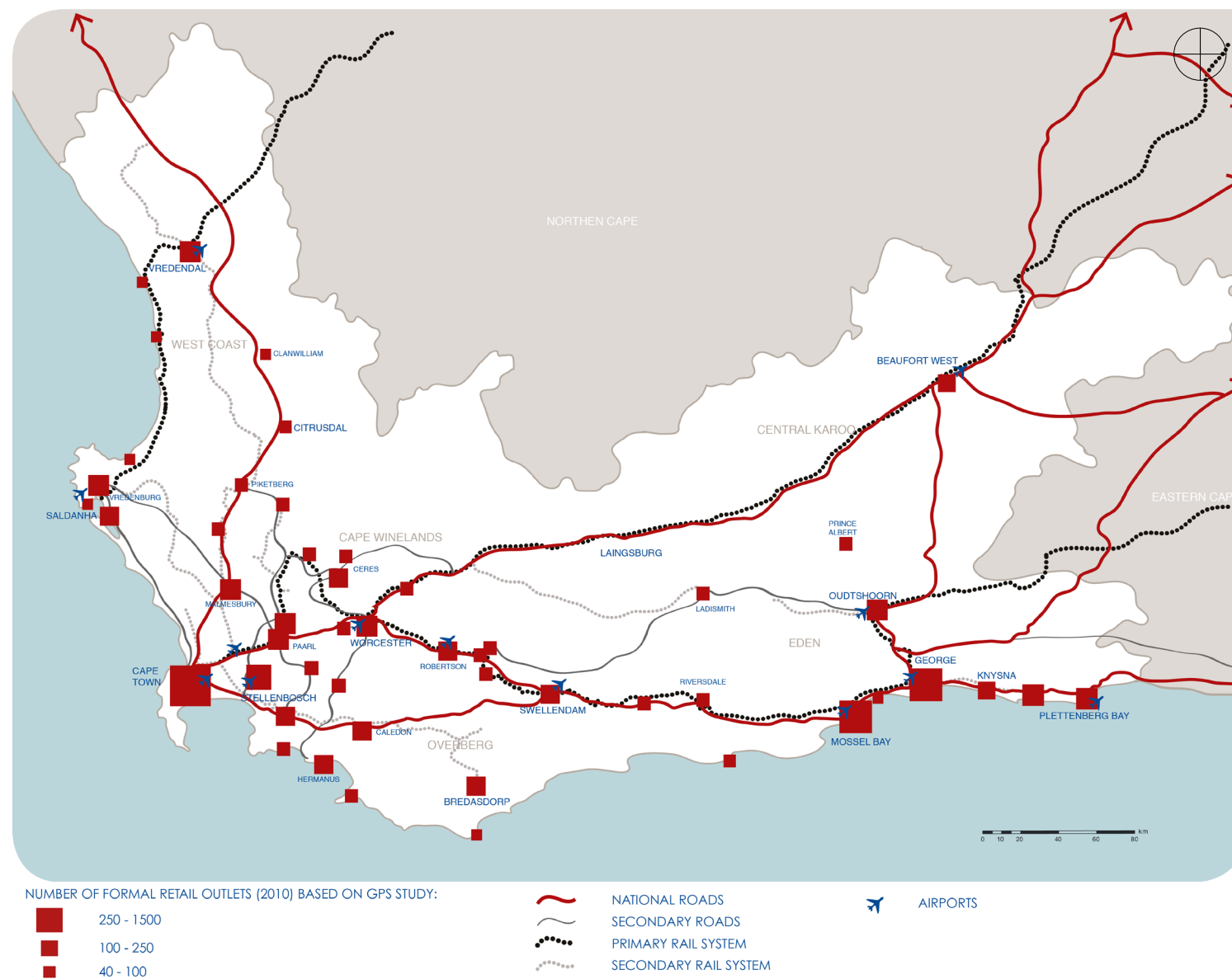


FIG.45 WESTERN CAPE PROVINCE - ACCESSIBILITY BASED ON AVAILABILITY OF SERVICES AND INFRASTRUCTURE

Small towns and remote settlements are difficult and expensive to service with public transport, and the absence of public transport systems servicing rural communities and outlying settlements fundamentally constrains socio-economic development. Already travel costs for poor communities within rural settlements are unaffordable, and dormitory settlements increase their vulnerability.

As Figures 45 and 46 demonstrate, many small towns have been isolated by the rerouting of regional and national routes, which has had direct impacts on the fragmented accessibility patterns across the Provincial landscape.

### 3.3.3.2 SPATIAL IMPLICATIONS

The spatial challenge is transforming the Province's human settlement patterns so that all, especially the poor, can access the opportunities of urban environments (i.e. services, facilities and amenities; accommodation options; job and livelihood prospects; etc). Decisive intervention is required to contain urban sprawl and increase densities so that public transport operating costs are reduced and levels of accessibility improved.

Given evidence that current settlement patterns are unsustainable and exacerbating inequalities, the PSDF is unambiguous the shifting towards more compact and connected human settlements. The PSDF makes the case that it can no longer be business as usual, and accordingly introduces strategies and programmes for systematically changing where and how human settlements are configured and built.

Settlement patterns and the provision of transport infrastructure needs to assist in “closing down space” across the Province and within municipalities to improve the affordability and viability of access to services and opportunities. The networks and systems of access (roads, paths and transport services) must always be designed to break down the spatial barriers created by apartheid and make settlements more convenient and pleasant to live in while creating economic opportunities close to where people live.

A priority is the establishment of an access system within and between functional regions. The strengthening of functional linkages and transport connections between rural settlements and regional service centres is also critical to ensure for spatial integration and associated economic resilience at all scales.

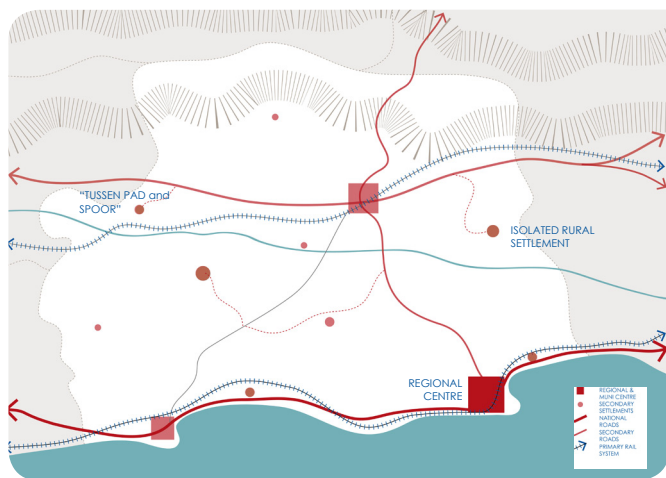


FIG.46 ACCESSIBILITY CHALLENGES AT MUNICIPAL SCALE - WITH ISOLATED SETTLEMENTS ACROSS THE MUNICIPAL LANDSCAPE

TABLE.12 MODAL SPLITS OF THE VARIOUS DISTRICTS - BASED ON DATA FROM WCG PLTF 2013 DRAFT (X INDICATES LACK OF DATA)

	CCT	CAPE WINELANDS	OVERBERG	WEST COAST	CENTRAL KAROO	EDEN
NMT	20%	48%	57%	55%	51%	34%
PRIVATE	45%	26%	26%	x	32%	46%
PUBLIC TRANSPORT	35% (17% - rail, 11% - minibus, 4% - bus, 1% - metered taxi)	14% (minibus and limited rail)	15% (mostly bus - no rail and limited minibus)	x (mostly minibus, limited rail and bus)	4.5%	20% (minibus and bus - no rail)

### 3.3.3.3 PROVINCIAL SPATIAL POLICIES

#### POLICY S2: IMPROVE INTER AND INTRA-REGIONAL ACCESSIBILITY

1. Built environment investment programmes to focus on compacting and connecting urban development (especially along public transport routes), and clustering public facilities along these connections.
2. Curtail new settlement formation that increases average travel times.
3. Improve intermodal integration and regional linkages of all public transport based services through linking localised public transport between villages and towns with regional multi-modal transport hubs.
4. Strengthen functional linkages between settlements and larger towns, with specific attention given to introducing rural transport

systems. Promote the upgrading of existing rail infrastructure to offer higher levels of service while developing combined road and rail transport corridors to provide a real alternative to road transport for passengers and freight.

5. Rank, prioritise and develop fully Integrated Rapid Public Transport Networks (IRPTN) in the regional urban centres of the Province such as the Cape Town Metro (including Paarl and Stellenbosch), Knysna/George/Mossel Bay and Saldanha Bay/Vredenburg.
6. Develop Integrated Public Transport Networks (IPTN) in the rural regions of the Province that are connected to regional centres.

"The envisaged end state is an integrated system consisting of different modes of transport with different levels of coverage, but which serves the needs of commuters and special purpose trips alike, whilst reducing the impact on the environment"

(SOER 2013)

7. Direct public funding to unlocking well-located land within cities and towns to reduce the operating costs of public transport (as per PLTF).
8. Develop a safe public transport system, while emphasising densification and opportunities for the poor to achieve adequate thresholds along all public transport routes and corridors.
9. Roll-out The Western Cape Government's Green Economy and broadband programmes, particularly related to building and services applications. New technologies offer the prospects of making living in and working out of rural towns and villages more attractive.

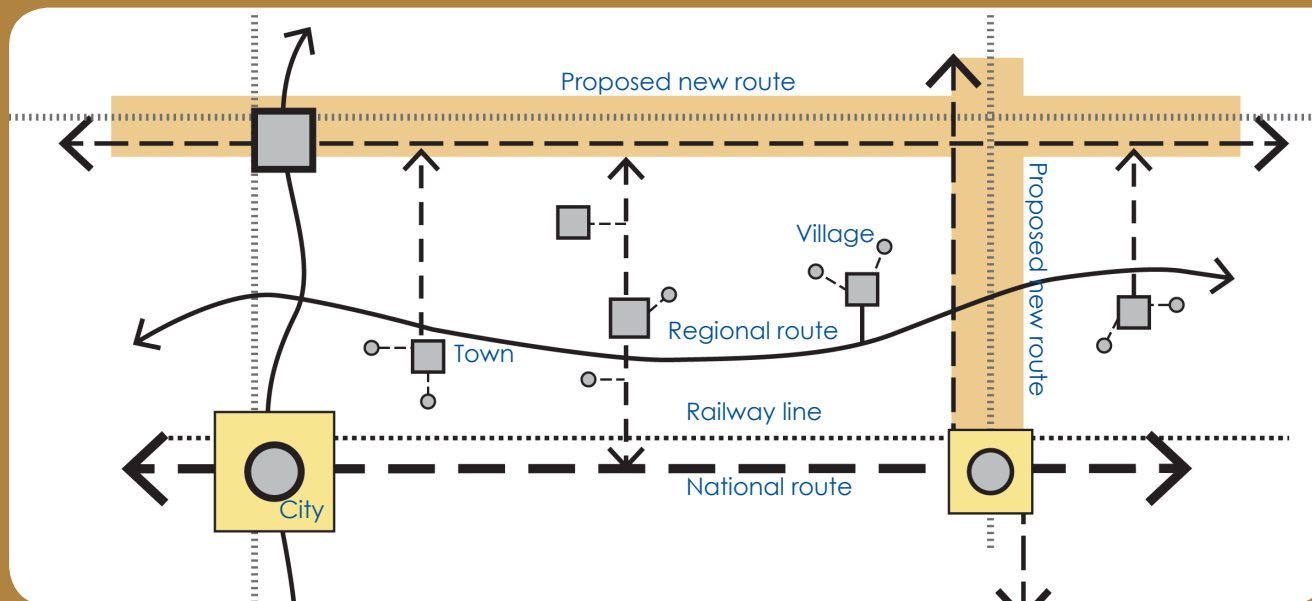


FIG.47 DESIRED HIERARCHIES OF ACCESS AT A PROVINCIAL SCALE

## 3.3.4. LAND USE AND DENSITY

### 3.3.4.1 KEY CHALLENGES

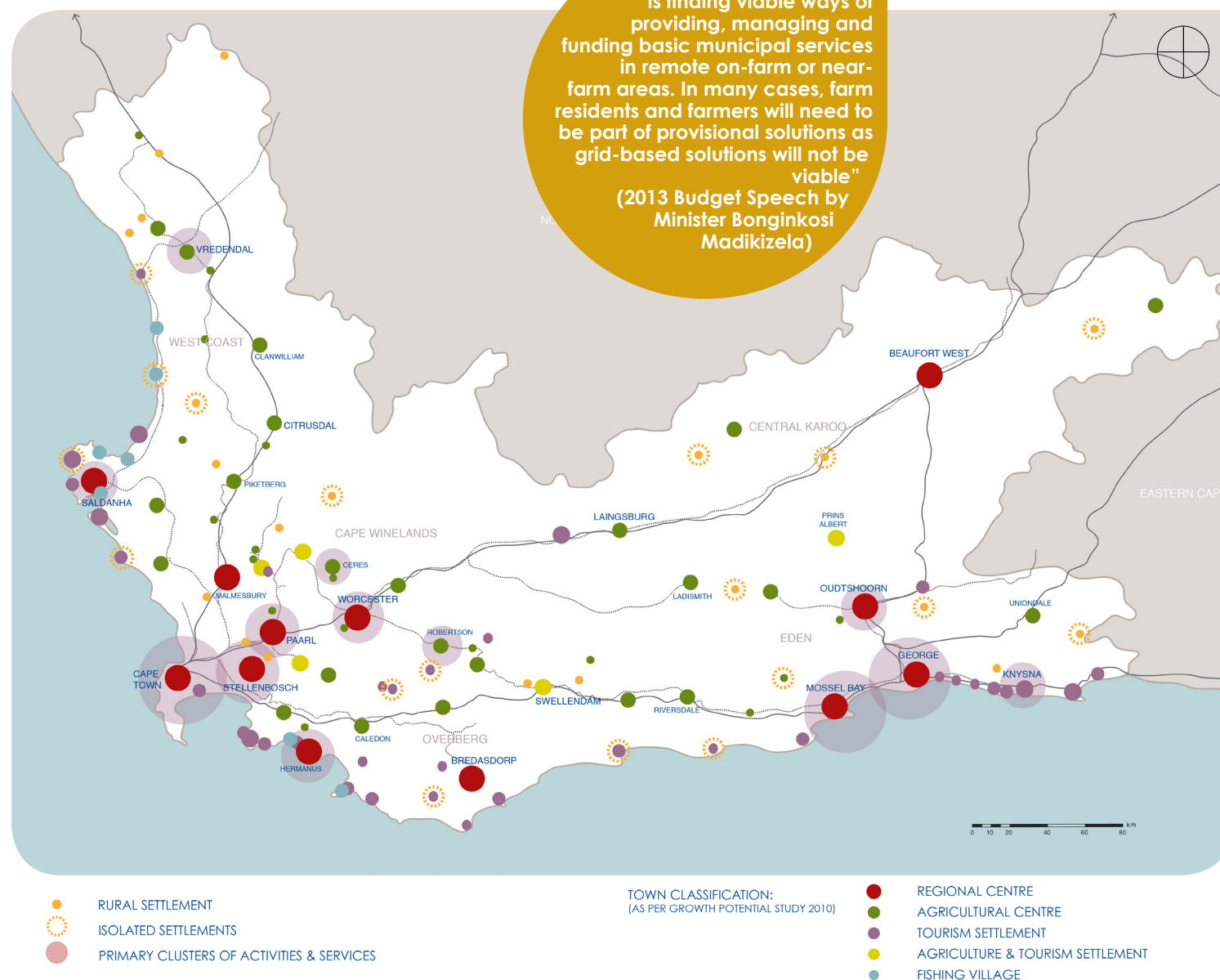
The average densities of cities and towns in the Western Cape is low by international standards, in spite of policies to support mixed use and integration. There is clear evidence that urban sprawl and low densities contribute to unproductive and inefficient settlements as well as increase the costs of municipal and Provincial service delivery. This is especially the case with respect to transport, health and education.

As Figure 48 demonstrates, settlement and population concentration continues in the urban centres. This trend is continuing with regional service centres growing over the past 10 years. At the same time there are many isolated, declining settlements in the Western Cape and these continue to be marginalised by distance and transportation costs. They are also costly to supply social services to.

In cities and large towns densification, infill and brownfield redevelopment are complex processes requiring clear public policy, direction and incentive. Poor planning and investment decisions tend to be made in favour of simpler, peripheral, developer-led developments for quick profits, while municipalities usually pick up the tab for the long term operating costs. This is not sustainable and the 2013 MSFM Study demonstrates that this is likely to

"The most important challenge is finding viable ways of providing, managing and funding basic municipal services in remote on-farm or near-farm areas. In many cases, farm residents and farmers will need to be part of provisional solutions as grid-based solutions will not be viable"

(2013 Budget Speech by Minister Bonginkosi Madikizela)





push already fiscally stressed municipalities over the brink (see Box 1 and 2).

Both low densities and mono-functional land uses mitigate against sustainable access, service provision and quality as investment tends to be scattered rather than concentrated, which diminishes its impact. Within the larger urban regions, some towns and outlying settlements are becoming dormitory commuter towns to the larger economic centres.

### 3.3.4.2 SPATIAL IMPLICATIONS

The lack of integration, compaction and densification in urban areas in the Western Cape has serious negative consequences for municipal finances, for household livelihoods, for the environment, and the economy.

The PSDF provides principles to guide municipalities towards more efficient and sustainable spatial growth patterns.

In order to secure a more sustainable future for the Province it is important that settlement planning and infrastructure investment achieves:

- i. higher densities
- ii. a shift from a suburban to urban development model
- iii. more compact settlement footprints to minimise environmental impacts, reduce the costs and time impacts of travel and enhance Provincial and Municipal financial sustainability in relation to the provision and maintenance of infrastructure, facilities and services.

- iv. address apartheid spatial legacies by targeting investment in areas of high population concentration and socio-economic exclusion.

By prioritising a more compact urban form through investment and development decisions, settlements in the Western Cape can become more inclusionary, widening the range of opportunities for all.

The 2009 PSDF proposed an increase of the average density of approximately 12 dwelling units (du) per hectare (ha) to 25du/ha, with 3-6 du/ha on the urban periphery and 40-60 du/ha in the urban core



FIG.49 MONOFUNCTIONAL DECENTRALISED ACTIVITIES SUCH AS THE WESKUS MALL IN VREDENBURG NEGATIVELY IMPACT ON DIVERSITY AND RANGE OF AVAILABLE ACTIVITIES

### 3.3.4.3 PROVINCIAL SPATIAL POLICIES

#### POLICY S3: PROMOTE COMPACT, MIXED USE AND INTEGRATED SETTLEMENTS

1. Target existing economic nodes (e.g. CBDs, township centres, modal interchanges, vacant and under-utilised strategically located public land parcels, fishing harbours, public squares and markets, etc) as levers for the regeneration and revitalisation of settlements.
2. Promote functional integration and mixed use as a key component of achieving improved levels of settlement liveability and counter apartheid spatial patterns and decentralization through densification and infill development.
3. Locate and package integrated land development packages, infrastructure and services as critical inputs to business establishment and expansion in places that capture efficiencies associated with agglomeration.
4. Prioritise rural development investment based on the economic role and function of settlements in rural areas, acknowledging that agriculture, fishing, mining and tourism remain important economic underpinnings of rural settlements.
5. Respond to the logic of formal and informal markets in such a way as to retain the flexibility required by the poor and enable settlement and land use patterns that support informal livelihood opportunities rather than undermine them.
6. Delineate Integration Zones within settlements within which there are opportunities for spatially targeting public

intervention to promote more inclusive, efficient and sustainable forms of urban development (see Box 11).

7. Continue to deliver public investment to meet basic needs in all settlements, with ward level priorities informed by the Department of Social Development's human development indices.
8. Municipal SDFs to include growth management tools to achieve SPLUMA's spatial principles. These could include: a densification strategy and targets appropriate to the settlement context; an urban edge to protect agricultural land of high potential and contain settlement footprints; and a set of development incentives to promote integration, higher densities and appropriate development typologies.

"The OECD's 2006 report on Competitive Cities in a Global Economy recommends that "liveable cities with high-quality infrastructure, green spaces, and inner city residential areas and public projects can contribute to economic success, attracting foreign investors as well as highly qualified professionals and tourists"

FIG.50 CHANGE IN LAND USE MIX INDEX IN CAPE TOWN (1994 - 2010) IN CONTRAST TO LOCATION OF PROPOSED CORRIDOR DEVELOPMENT AND DENSIFICATION AS PER SECTOR PLANS. (CRUISE RESEARCH, 2013)

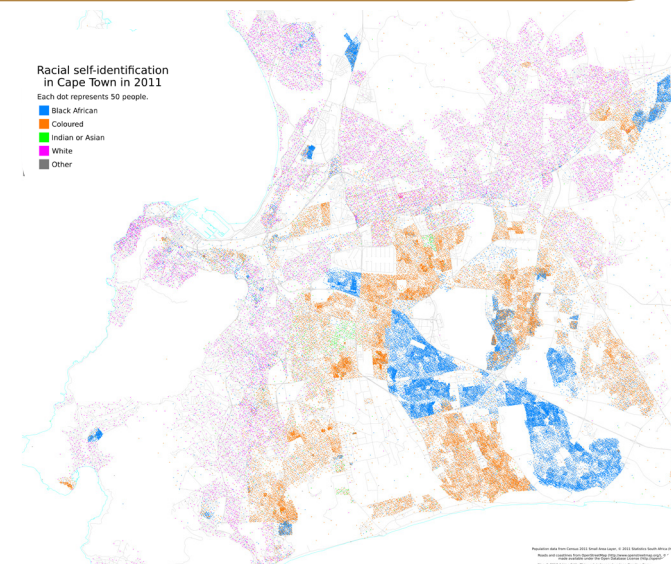
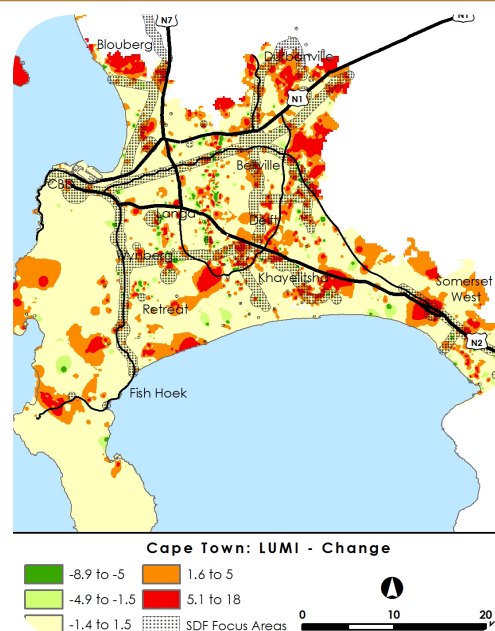


FIG.51 RACIAL DISTRIBUTION IN CAPE TOWN - BASED ON 2011 CENSUS DATA (ADRIAN FIRTH, 2013)



## 3.3.5. FACILITIES AND SOCIAL SERVICES

### 3.3.5.1 KEY CHALLENGES

Coupled with the fact that they are very sparsely distributed, the current manner in which the provision of social services and facilities are delivered is expensive and inefficient. Most of the education and health facilities in the Western Cape are located within the urban areas, following the strong concentration of both population and economic activity within these urban cores as demonstrated in Figure 52. This has led to an uneven distribution of amenities and services across the Provincial landscape, with overcrowding and under provision in some areas and under-utilised facilities in others.

The equal distribution of services across an extensive area such as the Western Cape is not achievable, especially in areas with low density, scattered settlements. Balancing need versus affordable distribution of services at a regional scale is an ongoing challenge. These issues are exacerbated by a lack of coordination of public investment in community facilities and amenities resulting in scattered and uneven levels of access, service quality and management.

School sites are typically too large, under-utilized and costly to maintain and secure. They also serve as spatial barriers within communities

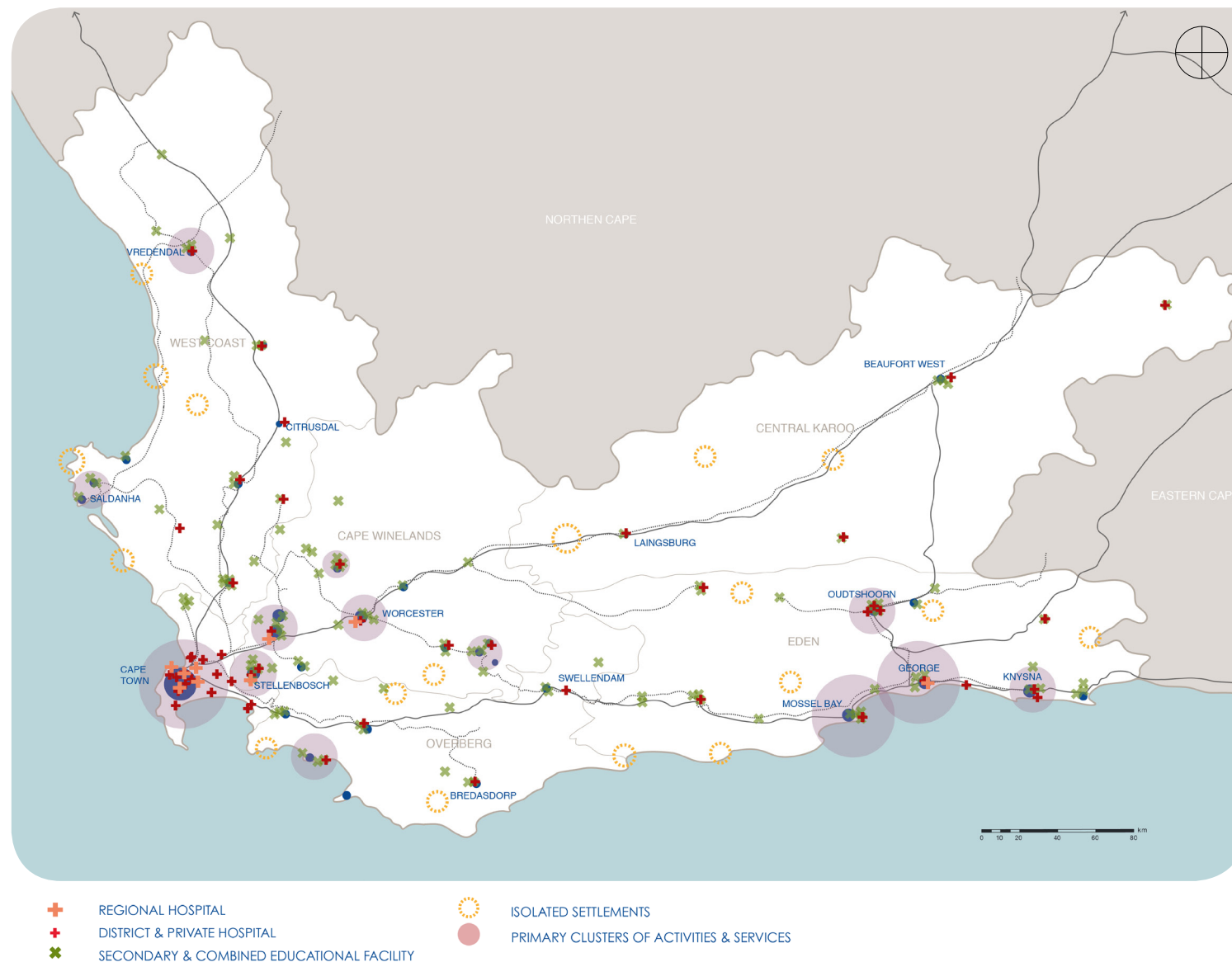


FIG.52 WESTERN CAPE PROVINCE - PRIMARY AND SECONDARY CLUSTERS OF ACTIVITIES, FACILITIES AND SOCIAL SERVICES

undermining accessibility and the quality of environment. According to the Equal Education Organization survey 1 in 4 children experience security issues associated with schools. The suburban form and resulting vast open spaces and inefficient fencing and spatial barriers associated with these facilities all undermine safety. A different model is required.

### 3.3.5.2 SPATIAL IMPLICATIONS

In order to ensure that current and future developments take place in an integrated and sustainable manner, equitable and accessible distribution of social services and facilities across the Provincial landscape is required. The transformation of the Province's spatial environments is highly dependent on the improvement of adequate and appropriate facility provision.

In line with the need to promote compact settlements and to reduce the need for motorised travel, multi-functionality of facilities public service spaces must be promoted and aligned with complementary land uses. The notion of clustering, as promulgated by Policy S3, as well as ease of access (see Policy S2) form the primary informants as to where social services are to take place, not only in relation to settlement planning but also at a regional and Provincial scale.

Locational requirements, general standards applicable to the facility, the required threshold population densities, as well as the appropriate levels of accessibility concerns need to be taken into consideration when planning for the provision of a facility (see Figure 54 and Table 13).

### 3.3.5.3 PROVINCIAL SPATIAL POLICIES

#### POLICY S4: BALANCE AND COORDINATE THE DELIVERY OF FACILITIES AND SOCIAL SERVICES

1. Balance sustainable service delivery and equitable access to education and health services
2. Apply the principles of space utilization efficiency, multi-functionality and clustering to all facility provision projects
3. Coordinate and cluster public facilities, services and government offices to increase convenience, accessibility and efficiency regarding operations, maintenance and security as well as optimal use of land.
4. Rationalise and balance the regional distribution of health and education service centres around a coherent hierarchy of services and only invest in places where people can easily access these services.
5. Develop a set of facility provision guidelines and indicators that encourage municipalities to plan their activities with a view to increasing the impact and effectiveness of social services and facilities.
6. Articulate short- and long-term goals for facility performance, which builds links between budgets, activities and expected consequences.
7. Promote flexibility through the prioritisation of mobile services in areas of need and limited access.
8. Focus fixed investment in schools and school upgrading on settlements with a population of over 12 500.
9. Mobile, internet based and period education systems and services should be delivered to settlements smaller than the required threshold to support a primary school (1 000 households)



FIG.53 THE SEED LIBRARY - AN INNOVATIVE EDUCATIONAL FACILITY DESIGN FOR ALEXANDRA'S MC WEILER PRIMARY SCHOOL WHERE THE LIBRARY WAS DESIGNED THROUGH THE USE OF CONTAINERS AS A TEMPORARY, FLEXIBLE AND SELF-SUFFICIENT FACILITY (WWW.ARCHITECTS OF JUSTICE.COM)



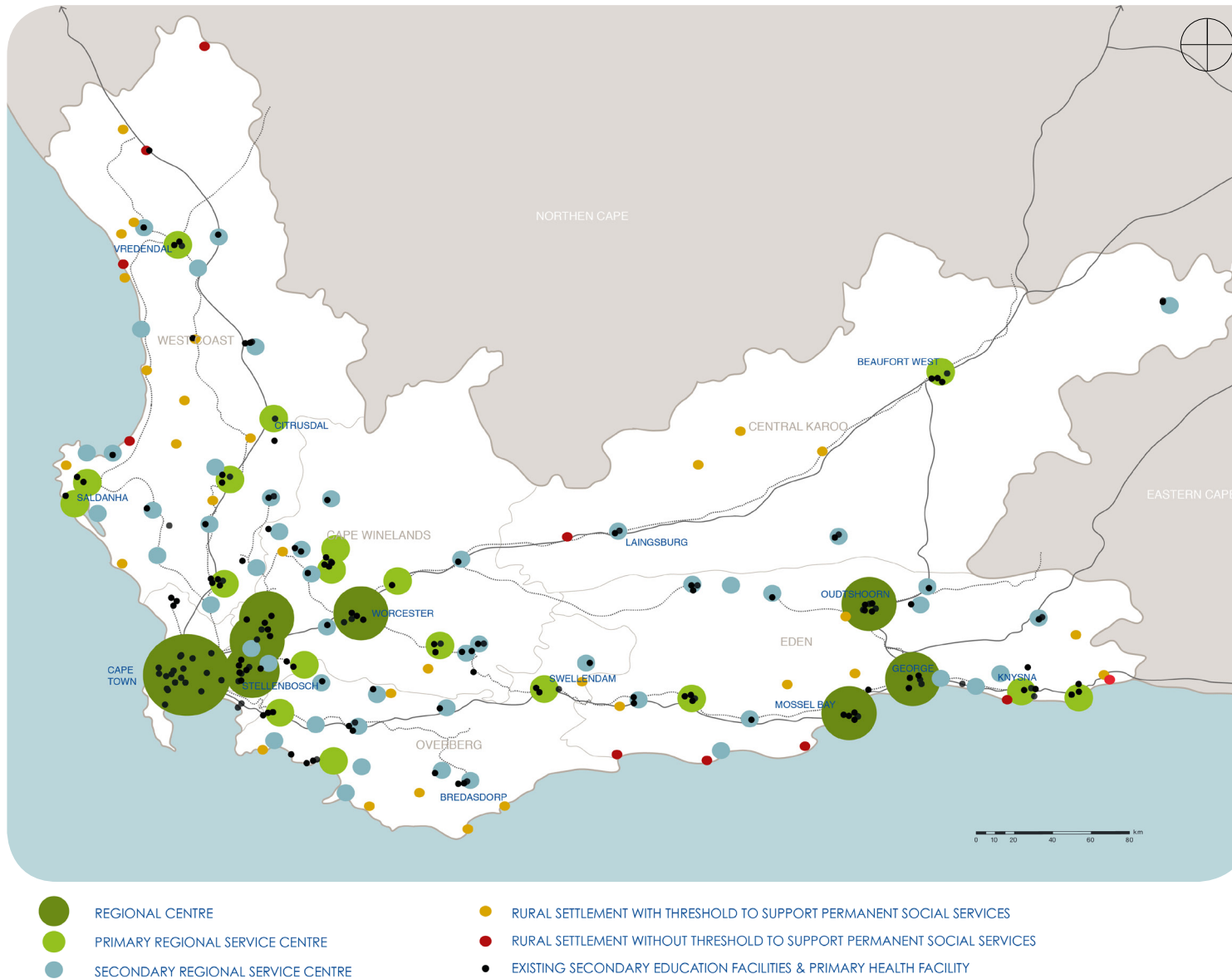


FIG.54 MAP INDICATES SPATIAL DISTRIBUTION OF EXISTING PRIMARY SOCIAL FACILITIES IN RELATION TO SETTLEMENT THRESHOLDS TO SUPPORT THESE FACILITIES. TABLE 13 PROVIDES A BREAKDOWN OF THE CLASSIFICATION ACCORDING TO CURRENT POPULATION (THRESHOLDS WERE DETERMINED BASED ON CSIR GUIDELINES, 2012)

TABLE.13 SETTLEMENT CLASSIFICATION (BASED ON CSIR GUIDELINES AND ASSOCIATED THRESHOLDS) AND EXAMPLES

CLASSIFICATION	POPULATION (2011)
<b>REGIONAL CENTRE</b> (CAPE TOWN, GEORGE, PAARL, WORCESTER, WELLINGTON, STELLENBOSCH, MOSSELBAAI, OUDTSHOORN)	> 70 000
<b>PRIMARY REGIONAL SERVICE CENTRE</b> (KNYSNA, MALMESBURY, GRABOUW, VREDENBURG, ROBERTSON, CERES, SWELLENBAM, BEAUFORT WEST, Saldanha Bay, ETC.)	20 000 - 70 000
<b>SECONDARY REGIONAL SERVICE CENTRES</b> (VILLIERSDORP, ASHTON, PORTERVILLE, TOUWSRIVER, LUTZVILLE, STILBAAI, LANGEBAAN, HOPEFIELD, ETC.)	5 000 - 20 000
<b>RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES</b> (GOUDA, LEEU GAMKA, SUURBRAAK, ARNISTON, MCGREGOR, YZERFONTEIN, GREYTON, ELIM, ETC.)	1 000 - 5 000
<b>RURAL SETTLEMENTS WITHOUT THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES</b> (STRANDFONTEIN, NUWERUS, BUFFELSBAAI, WITSAND, MATJIESFONTEIN, JONGENSFONTEIN, GOURITSMOND, KLIPRAND ETC.)	< 1 000

## 3.3.6. INFORMALITY, HOUSING DELIVERY, INCLUSION AND URBAN LAND MARKETS

### 3.3.6.1 KEY CHALLENGES

Investment in state-assisted housing over the past 10 years has, with some exceptions, exacerbated exclusion and placed communities in poverty traps in peripheral locations. This undermines the financial sustainability of municipalities and places huge cost burdens on households.

Apartheid's spatial legacy of exclusion and inequality persists in spite of sound policy intent. Large scale, contractor driven, mass housing delivery has failed to meet backlogs and 25% of the population of the Western Cape still live in informal dwellings, backyards or overcrowded conditions. These communities are vulnerable to fire, flooding and land slides and health risks and their capacity to engage meaningfully in the regional economy is stifled.

Challenges are exacerbated by poor co-ordination between the different spheres of government, and among departments within these spheres.

Exclusionary land markets mitigate against spatial integration of socio-economic groups and limit affordable housing on well located land. At the same time government sits on well located under-utilised land and buildings.

Subsidy housing finance structures do not allow for the development of higher quality, well located housing

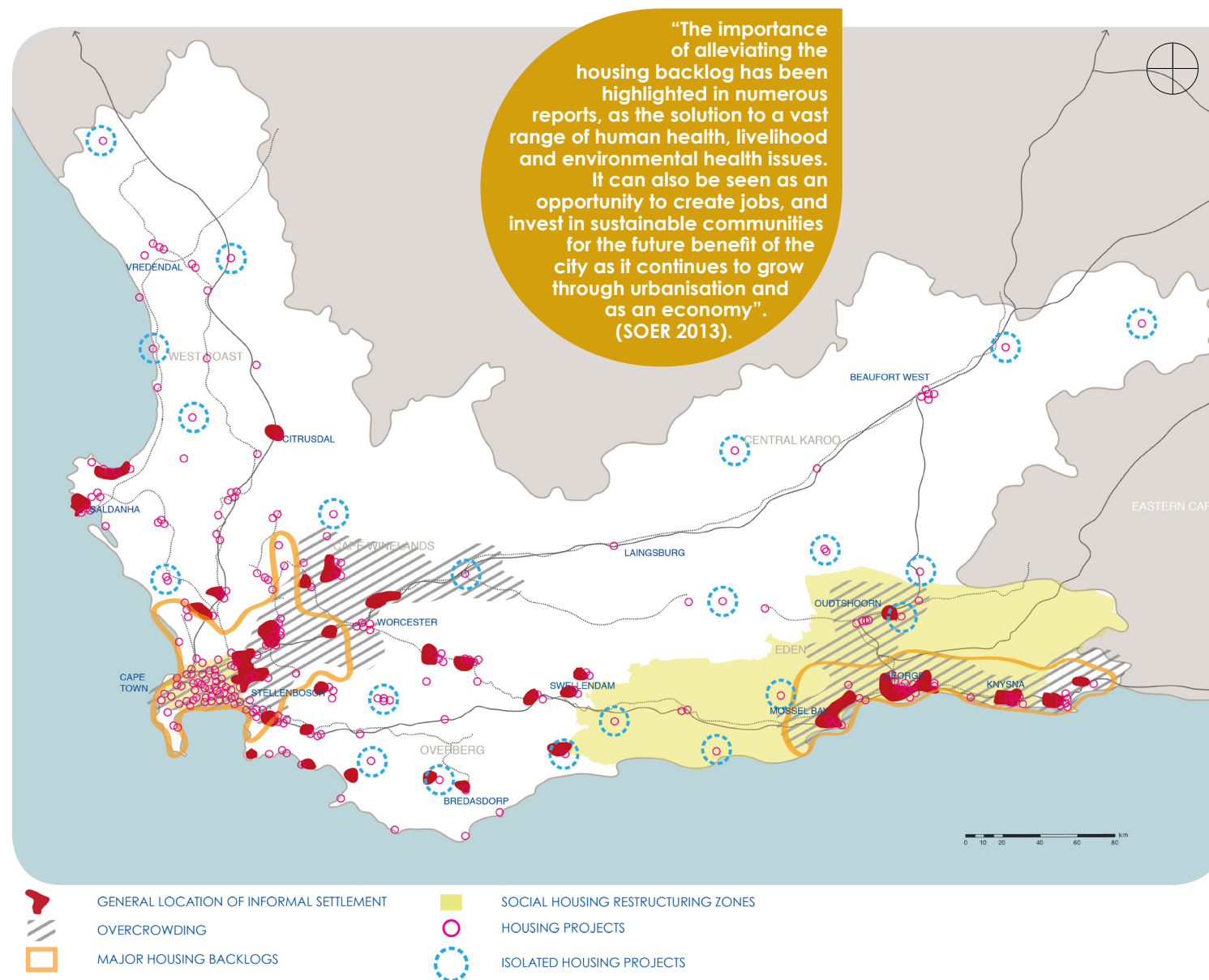


FIG.55 WESTERN CAPE PROVINCE - INFORMALITY, HOUSING DELIVERY, INCLUSION AND URBAN LAND MARKETS

for the poor.

This gap in the property market is not being addressed and affordable rental housing is not being delivered at the scale and in the locations required. Over the past 15 years, fewer than 2 500 new State funded social housing rental and rent-to-buy units were provided. This undermines skills retention, especially within the economic engines of the Province.

There are up to 395 000 backyard dwellers in the Province. This sector is not regulated and receives no direct state support. While it is an important economic support to landlords, it can present municipalities with a “hidden” burden on services.

The housing backlog is a concern throughout the Province, with the City of Cape Town reflecting a backlog of approximately 300 000

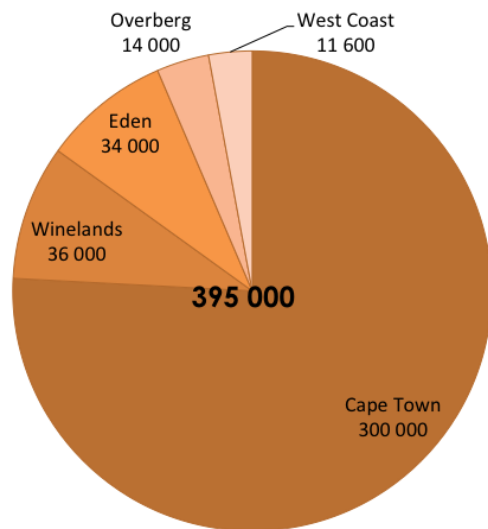


FIG.57 NUMBER OF BACKYARDER DWELLERS PER DISTRICT

units and the Provincial housing backlog at approximately 500 000.

Social Housing Restructuring Zones targeted at providing affordable housing opportunities in areas of primary economic activity, have been identified for the Eden district (see Figure 55) and need to be incorporated in all main urban centres.

A central challenge is that the performance of housing is being measured primarily in terms of numbers rather than quality and so inappropriate implementation tools are being employed. In spite hereof the backlogs are not being significantly reduced.

### 3.3.6.2 SPATIAL IMPLICATIONS

Investment in housing needs to ensure optimal returns on investment, while at the same time promoting settlement restructuring and

integration.

In order to create integrated and sustainable communities with access to social and economic opportunities throughout the Province, the housing focus is being shifted towards diversifying typologies delivered and aligning housing projects with economic opportunities, increasing the supply and management of affordable rental accommodation, and also addressing the formal and informal sectors in one market.

The PSDF places less emphasis on delivering completed houses, and more emphasis on incrementally developing human settlements in partnership with other government departments, communities and the private sector. The focus is on improving the quality of the public environment of settlements.

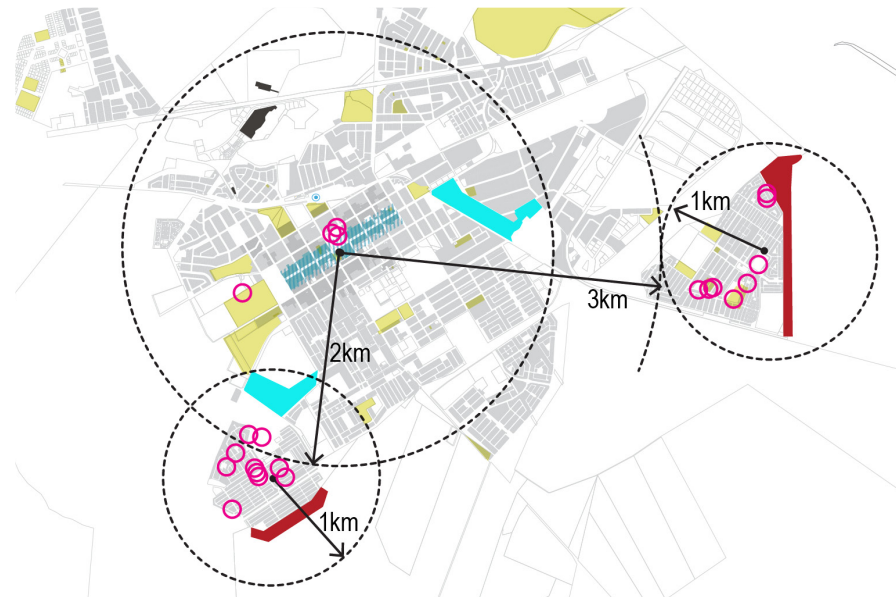


FIG.56 TOWN SCALE CHALLENGES - NEW HOUSING PROJECTS IN WORCESTER LOCATED ON THE PERIPHERY WHILST VACANT STATE-OWNED LAND EXISTS CLOSER TO THE CENTRE

Current delivery models are **UNSUSTAINABLE** - low densities and high land prices make decent housing in good locations unaffordable: 40du/ha = R18 000 per housing opportunity (400 000 hh to house @ 8800du/ annum = 45 years)

## PROVINCIAL SPATIAL POLICIES

### POLICY S5: PROMOTE SUSTAINABLE, INTEGRATED AND INCLUSIVE HOUSING IN FORMAL AND INFORMAL MARKETS

The following policies must guide planning, project prioritisation, budgeting and performance management at a Provincial scale. These relate to housing delivery, planning and design, urban land markets and informality.

#### STATE-ASSISTED HOUSING DELIVERY

1. Provide a wide choice of housing typologies and tenure options, based on economic, fiscal, and social affordability. Incremental housing development to be pursued, with phased service provision to accelerate housing provision.
2. Target housing delivery projects within Integration Zones and Social Housing Restructuring Zones.
3. Ensure that all housing delivery projects are founded on principles of sustainability and based on integrated development planning.
4. Promote private-sector participation in the gap market to diversify and expand housing delivery options.
7. Prioritise investment in community facilities, public infrastructure and public space, rather than an exclusive focus on housing or top structures.
8. Promote more mixed-income, mixed-use, inclusionary forms of development through incorporating various scales of economic opportunities within housing projects.

#### INFORMALITY, INCLUSION AND URBAN LAND MARKETS

9. Manage urban informality proactively through the Upgrading Informal Settlements Programme (UISP) and ABS programs, and managed land settlement.
10. Enable and support incremental housing, with phased service provision to accelerate housing provision that alleviates suffering and improves livelihoods to as many people as possible within the shortest possible time frames.
11. Achieve a wider range of housing opportunities with regards to diversity of tenure, size, density, height and quality in order to promote a ladder of upward mobility for households to progress as economic circumstances change over time

12. Identify, allocate, release and package strategic land parcels for all forms of state-funded rental projects, prioritising the rental market for households with monthly incomes of between R1 500 and R7 500.

13. Strengthen the role of municipalities to manage public intervention in urban land development processes.

14. Acknowledge the social value of land and develop investment and land management tools that evaluate development so that the societal value of land is prioritized in relation to other claims or benefits.

15. Proactively plan, align and coordinate the strategic use and disposal of public land to ensure that opportunities for its use for public housing are not lost

#### HOUSING PLANNING AND DESIGN

5. Provide households with the residential environments, mobility and access to opportunities that support productive activities and reduce levels of exclusion from opportunity.
6. Increase densities of settlements and dwelling units in new housing projects.



### 3.3.7. SETTLEMENT SYNTHESIS

The key concepts related to the settlement policies are illustrated in Figure 58. In summary these are to:

- i. Develop regional planning frameworks to manage the tension between the protection of high value resources and landscapes and urban growth in the growth nodes (i.e. Cape Metro, George/Mossel Bay and Saldanha Bay/Vredenburg functional regions)
- ii. Ensure that densification, infill and brownfield regeneration in these areas is a non-negotiable first action in the growth nodes
- iii. Invest in regional service centre towns to support and integrate with the rural hinterlands, prioritising investment in housing, health and education in these towns rather than dispersing investment to villages and hamlets
- iv. Develop regional rural development frameworks to align settlement planning with large scale infrastructure investments (oil and gas, dams, regional movement routes etc).
- v. Use ICT and periodic social services to reduce the need for rural dwellers to travel to services.
- vi. Support investment of Provincial resources and finance in existing settlements, in line with a clear understanding of their regional role and potential and limit unproductive or potentially abortive investment in poorly located, isolated new developments.

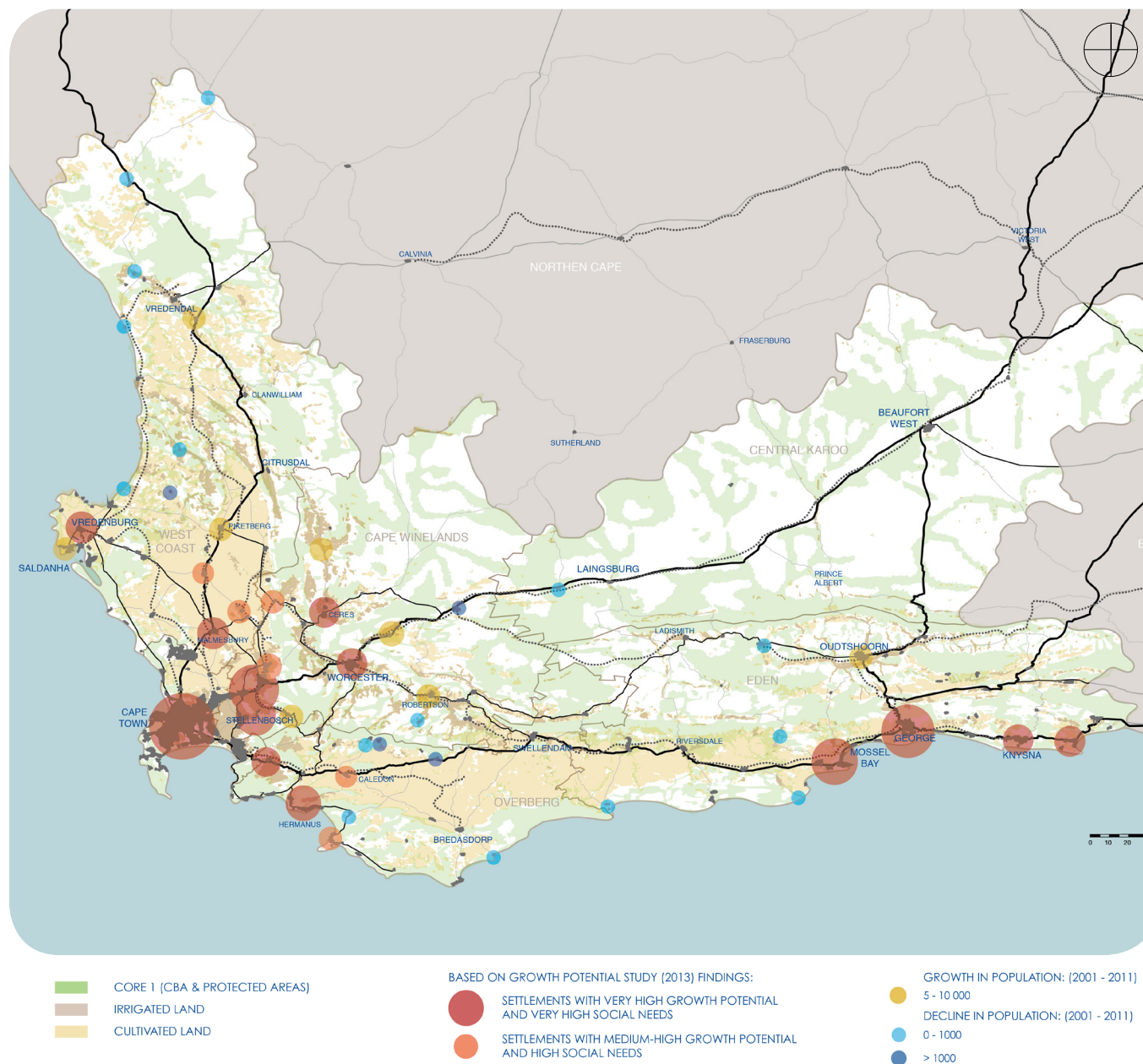


FIG.58 WESTERN CAPE PROVINCE - SYNTHESISING SETTLEMENT FOCUS AREAS - ILLUSTRATING THE RELATIONSHIP BETWEEN AREAS OF URBAN GROWTH PRESSURE AND IMPORTANT NATURAL AND AGRICULTURAL RESOURCES

### 3.4. SUMMARY OF PROVINCIAL SPATIAL POLICIES

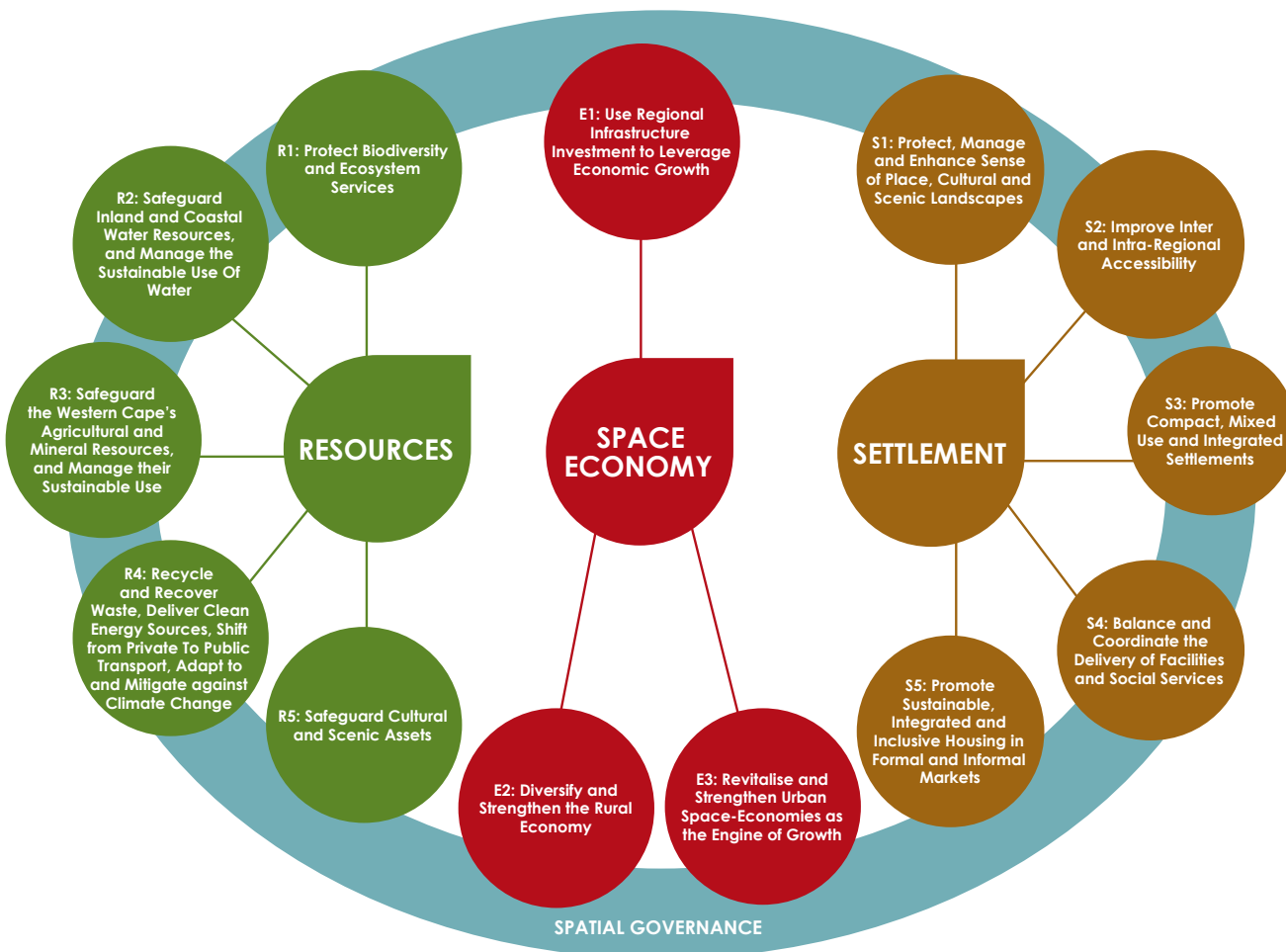


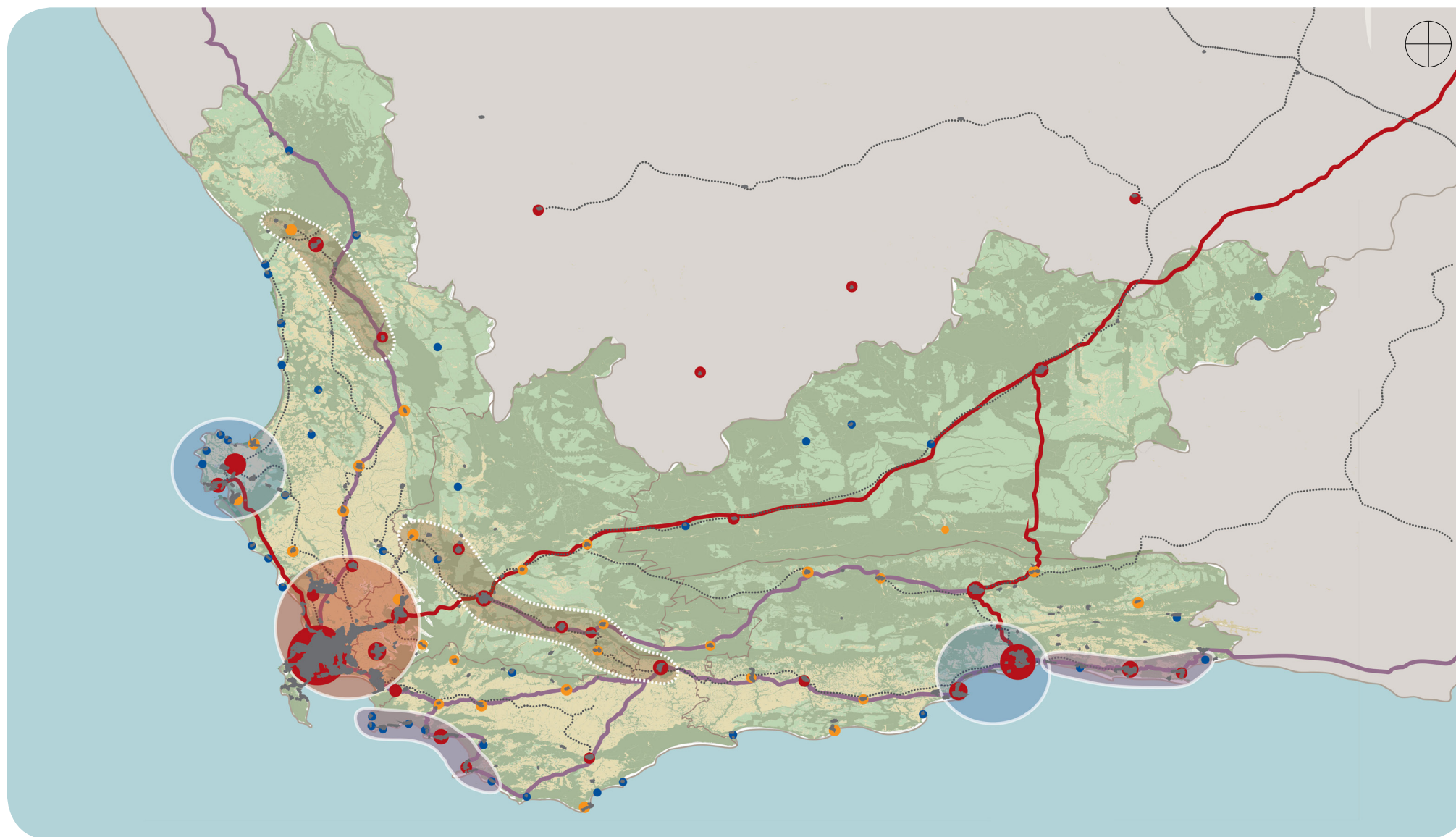
DIAGRAM.12 A SUMMARY DIAGRAM OF THE POLICIES RELATING TO EACH OF THE THREE THEMES

### 3.5. THE COMPOSITE PSDF

Besides articulating a vision of the spatial future aspired to, it is a requirement of SPLUMA that a PSDF reflects desired land use patterns. These are presented here in the format of the PSDF map (see Figure 59) – a spatial planning and land use management tool.

The PSDF graphically portrays the Western Cape's spatial agenda. In line with the Provincial spatial policies presented in this chapter, the map shows what land use activities are suitable in different landscapes. It also highlights where efforts should be focused to grow the Provincial economy. The PSDF map is made up of the following layers:

- Desired land use patterns are reflected in the delineation of landscape-wide Spatial Planning Categories (SPCs), namely Core, Buffer, Intensive Agriculture and Settlement SPCs. SPCs are derived from a landscape's biodiversity characteristics. The 2009 PSDF Rural Land Use Planning and Management Guidelines will be updated to specify details of the type, scale, and form of activities that are suitable in each SPC. The intention is to open up opportunities for sustainable land use activities
- Priority regions to target for growing the Provincial economy are also reflected in the PSDF Map, as is the regional economic infrastructure required to unlock this potential. Provincial Government will work with municipalities in rolling-out a regional approach to infrastructure investment and urban growth management. The map shows the Cape Metro functional region as the Province's economic development focus area. Saldanha/Vredenburg and George/Mossel Bay are targeted as emerging regional industrial complexes, and the Overstrand and Garden Route coastal belts as leisure/tourism regions. Opportunities to intensify agriculture are also identified in the lower Olifants and Breede River valleys.
- The role and function of settlements is also reflected in the PSDF map, with attention to the scale, role and function of settlements.



SPATIAL PLANNING CATEGORIES:

- CORE
- BUFFER
- INTENSIVE AGRICULTURE
- SETTLEMENT

PRIORITY URBAN FUNCTIONAL REGIONS:

- CAPE METRO
- EMERGING REGIONAL CENTRES (GREATER SALDANHA & MOSSELBAY/GEORGE)
- LEISURE (OVERSTRAND & GARDEN ROUTE)

RURAL DEVELOPMENT CORRIDOR

- REGIONAL CENTRE
- SERVICE CENTRE
- SECONDARY SETTLEMENT

REGIONAL CONNECTOR ROUTE

- TOURISM ROUTE
- MAJOR RAILWAY LINE
- MAJOR ROAD

FIG.59 WESTERN CAPE PROVINCE - CONSOLIDATED FRAMEWORK PROPOSALS



## 4. IMPLEMENTING THE PROVINCIAL SPATIAL AGENDA

"Twenty years ago, on the occasion of his inauguration as State President, Nelson Mandela stood on the Grand Parade and undertook to create a 'better life of opportunity, freedom and prosperity' for all South Africans. He said: 'This needs unity of purpose. It needs action. It requires us all to work together.' And so, as we prepare to celebrate twenty years of democracy, we must ask ourselves: are we translating Madiba's vision of opportunity into action? Are we working together to fulfil the promises he made at the dawn of our democracy? ...No government can, by itself, guarantee a better life. Progress is the product of partnerships. That is why, in this Province, we say, 'Better Together.'" (Extract from Premier Helen Zille's State of the Province Address, 2014.)

The PSDF presented in this report encapsulates the Western Cape's long term spatial agenda. It is not a blue print that can be implemented in the short term, but rather a framework within which:

- coherent and consistent sector and area based plans (i.e. for functional regions) can be formulated and rolled-out by the spheres of government and SOEs operating in the Western Cape; and
- communities and the private sector (i.e. government's partners) have greater certainty over where spatial development is heading in the Province, and so can proactively respond to the opportunities arising.

As such the PSDF promotes cooperative spatial

governance as well as partnership based development. To conclude this report the following proposals for the institutionalisation and implementation of the PSDF are presented:

- rolling-out cooperative spatial governance in the Western Cape (4.1);
- promoting community and private sector driven spatial development (4.2);

- managing spatial growth and development (4.3);
- giving support to Municipal Planning (4.4);
- making catalytic spatial interventions (4.5); and
- monitoring and evaluating spatial outcomes (4.6).

The chapter concludes with and implementation action plan (4.7)

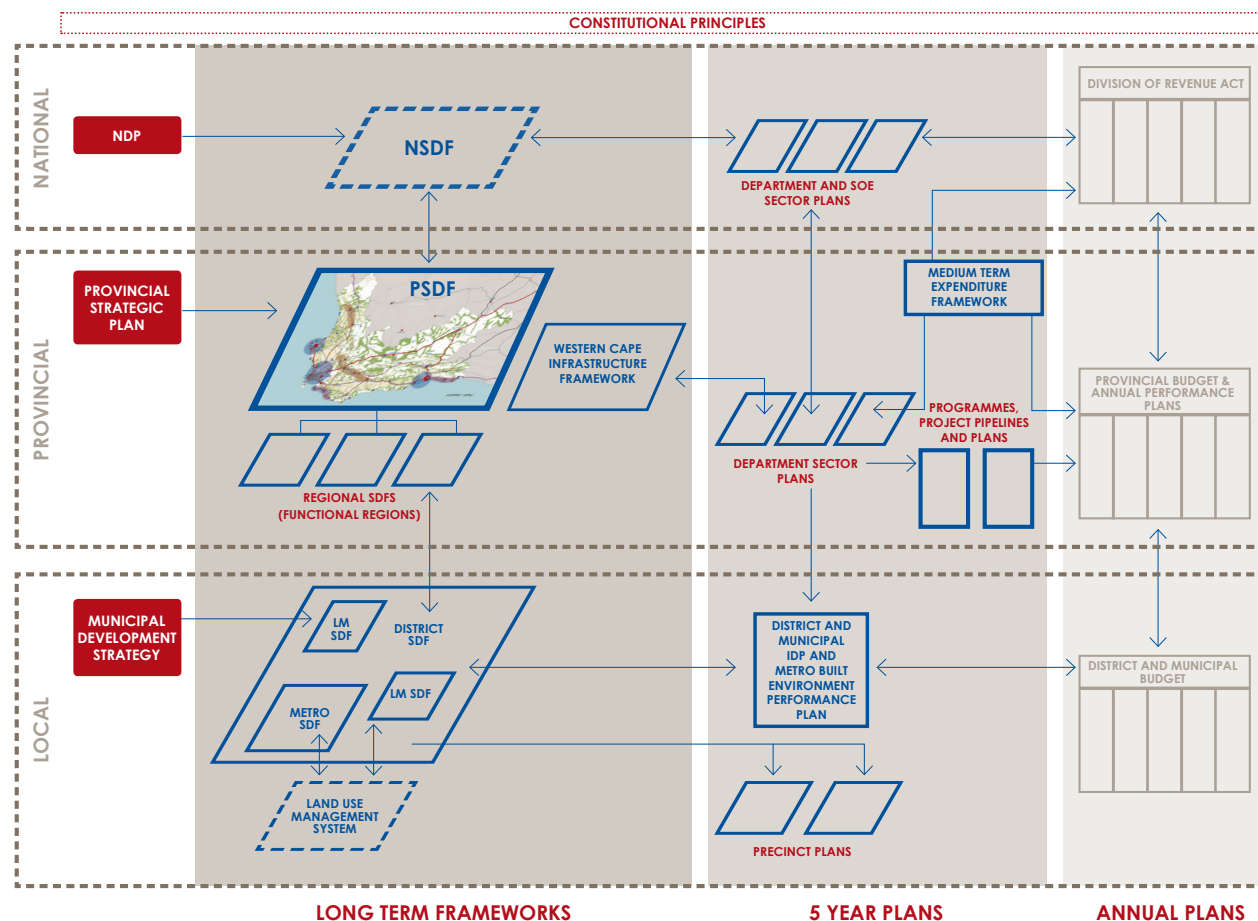


DIAGRAM.13 SPATIAL GOVERNANCE OF THE IMPLEMENTATION OF THE PSDF IN RELATION TO OTHER FRAMEWORKS, PLANS AND BUDGETS



## 4.1. TOWARDS COOPERATIVE SPATIAL GOVERNANCE

### 4.1.1. CONSTITUTIONAL AND LEGAL FRAMEWORK

The Constitution assigns dual planning responsibilities to the Western Cape Government (WCG), namely:

- i. Implementing policies and regulations to carry out the Constitutional functions of Provincial planning, and regional planning and development. In terms of this mandate the Constitutional functions allocated to Provinces, as set out in Schedules 4 and 5 of the Constitution, are coordinated, proactively planned for and implemented by the WCG.
- ii. Implementing policies and regulations to monitor and support municipalities in exercising their municipal planning Constitutional functions.

All government spheres also share the Constitutional responsibilities of contributing to the progressive realisation of the fundamental rights of citizens, and securing ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. Whilst the Constitution distinguishes between distinctive national, Provincial and local government spheres, it makes it clear that all three spheres are interdependent and interrelated. As such, all spheres of government and organs of state must co-operate, support one another, and coordinate their actions.

The Western Cape Government's Provincial planning responsibilities, as mandated by SPLUMA, are to co-ordinate, integrate and

align:

- Provincial plans and development strategies with policies of National Government;
- the plans, policies and development strategies of Provincial Departments; and
- the plans, policies and development strategies of municipalities.

The PSDF'S role is to facilitate the required coordination, integration and alignment that SPLUMA prescribes. In addition, the required coordination, integration and alignment is echoed in parallel legislation (i.e. Municipal Systems Act, Western Cape Land Use Planning Act (LUPA), National Environmental Management Act, and Promotion of Administrative Justice Act (see Annexure 2 for more detail).

### 4.1.2. SPATIAL GOVERNANCE CHALLENGES

The NDP emphasises the importance of effective spatial governance, and acknowledges the country's weak capabilities in this regard. It ascribes these weaknesses to: Constitutional ambiguities in spatial planning responsibilities; parallel, outdated and sometimes conflicting legislation; and capacity constraints in all three spheres of government. A consequence of weak governance is that the private sector often determines spatial growth patterns, whereas this is government's responsibility.

The NDP prioritises building capabilities for effective spatial decision-making and implementation, and acknowledges that this will take time. To develop the necessary capabilities the National Planning Commission recommends:

- i. Reform of legislation and institutions, so as to provide platforms for integration between spatial planning, transport and infrastructure planning, environmental management, and finance regimes;
- ii. improved spatial planning coordination (i.e. transversal approach);
- iii. spatial data assembly, analysis and dissemination;
- iv. strengthening planning capabilities within local government;
- v. developing a capability framework for spatial governance with professional bodies, educational institutions and government;
- vi. introducing spatial compacts, from neighbourhood to city level, to build consensus over spatial futures and mediate spatial conflicts; and
- vii. supporting and incentivising active citizenry in spatial development.

### 4.1.3. A TRANSVERSAL SPATIAL GOVERNANCE SYSTEM

As the Province-wide policy on spatial development, the PSDF must be co-owned by all Provincial Departments and other spheres of government operating in the Western Cape. To attain the required buy-in to the PSDF, cooperative spatial governance mechanisms and systems need to be institutionalised.

Within the Provincial sphere the PSDF paves the way for strengthening planning-led budgeting so that the necessary infrastructure is timeously provided. As such the PSDF paves the way for "planning-led, infrastructure-enabled" development.

Although every sphere of government, sector

TABLE.14 KEY PROVINCIAL FUNCTIONS IN PLANNING

	FOR WHOM:	DEADP TO:	HOW:
<b>PLAN</b>	Provincial Departments	<ul style="list-style-type: none"> <li>PSDF</li> <li>RSDF</li> <li>Inter-Provincial spatial plans</li> </ul>	Transversal spatial plans compiled in terms of SPLUMA and LUPA
<b>REGULATE</b>	Provincial Departments & Municipalities	<ul style="list-style-type: none"> <li>Provincial spatial planning system</li> <li>Provincial land use management system</li> <li>Use of Provincial spatial assets</li> <li>Risk mitigation and adaption</li> <li>Municipal Planning</li> </ul>	LUPA Bylaws and regulations Provincial policies
<b>SUPPORT</b>	Municipalities	<ul style="list-style-type: none"> <li>Urban development</li> <li>Rural development</li> <li>Municipal planning</li> <li>Transversal spatial systems</li> <li>Spatial information</li> </ul>	Rural development support programme Other municipal support
<b>MONITOR</b>	Provincial Departments & Municipalities	<ul style="list-style-type: none"> <li>Spatial transitions</li> <li>Urban</li> <li>Rural</li> <li>Resource use/ substitution/replacement</li> <li>Spatial alignment</li> <li>Adherence to national norms and standards</li> </ul>	Indicator based Provincial performance management systems Guidelines for municipal performance management system
<b>ALIGN/ COORDINATE</b>	Provincial Departments & Municipalities	<ul style="list-style-type: none"> <li>National policies and programmes</li> <li>Departmental spatial plans and capital investments</li> <li>Municipal spatial plans and capital investments</li> <li>Inter Provincial spatial initiatives</li> </ul>	Provincial spatial and fiscal framework

department and state-owned enterprise has its own planning responsibilities, the PSDF guides the coordination, integration and alignment of these initiatives. Key provincial functions in planning are highlighted in Table 14.

Whilst it is a sound principle to base new cooperative governance arrangements on the foundations of current arrangements, the formulation of the new Provincial Strategic Plan 2014-2019 may lead to institutional restructuring. Accordingly at this stage only the principles of the required transversal spatial governance are recorded below, specific responsibilities are not allocated. However, in terms of legal and functional mandates, overall responsibility for introducing transversal spatial governance arrangements vests with DEADP.

Towards delivering on the Provincial spatial agenda it is recommended that spatial governance in the Western Cape be reformed to incorporate the following elements:

- Institutional arrangements to facilitate transversal planning, budgeting and implementation between the three spheres of government, and within Provincial Government.
- A system for collecting, analysing and disseminating spatial information.
- Measures to strengthen Provincial 'land assembly' capacity.
- A Regional planning approach.
- Municipal planning support.
- Monitoring and evaluating Provincial and Municipal progress in making the required spatial transitions.



DIAGRAM.14 THE ELEMENTS REQUIRED FOR ACHIEVING A TRANSVERSAL SPATIAL GOVERNANCE SYSTEM

#### 4.1.3.1 TRANSVERSAL ARRANGEMENTS WITHIN PROVINCIAL GOVERNMENT

Within WCG mechanisms for aligning and synchronising each department's activities with the Province's spatial objectives is required.

##### 4.1.3.1.1 SPATIAL LOGIC AND ALIGNMENT THROUGH THE PTMS

Inter-departmental coordination within the WCG is managed through the Provincial Transversal Management System (PTMS), which currently consists of 11 transversal steering groups, each aligned to a Provincial Strategic Objective (PSO) of the Provincial Strategic Plan, and various work groups established under each PSO. The Provincial Top Management (PTM) will ultimately decide on appropriate

structures within which to mainstream transversal Provincial spatial governance.

It is important that the Western Cape's spatial agenda is represented within each PSO Steering Group to ensure programmatic and project alignment with the framework provided by the PSDF.

#### 4.1.3.1.2 DEVELOPMENT PLANNING WORKGROUP

In order to establish a forum for coordinating, integrating and aligning plans, policies and development strategies within each sphere and between the spheres, a Development Planning Work Group will be established under the current PSO 7.

All municipalities and departments and SOEs involved in infrastructure and land development will be represented, including but not limited to DEADP, Provincial Treasury, DOA, DTPW, DOHS, Health, WCED, SANRAL, PRASA, Intersite, ESKOM and Transnet. This work group will replace the current Land Use Planning Work Group.

#### 4.1.3.1.3 MEDIUM AND LONG TERM PLANNING AND BUDGETING SYSTEMS

The Western Cape Medium Term Budget Policy Statement 2014 – 2017 reflects the Province's development priorities, and the key initiatives and programmes being pursued to deliver on these priorities (see Diagram 14). Within the WCG's strategic focus on inclusive economic growth, jobs and improved socio-economic outcomes, priority is being given to:

- promoting economic growth;
- increasing employment and decreasing unemployment;
- reducing poverty, crime and other social ills;
- improving the quality of education and

health.

As illustrated in Diagram 14, in terms of the PTMS the PSDF is the common spatial reference framework for delivering on the Province's strategic development priorities individually and collectively.

In exploring new institutional arrangements to mainstream a common Provincial spatial agenda, it is prudent to build on the following existing and planned initiatives designed to synchronise and align public investment:

- The District Infrastructure Plans (DIPs) - This initiative, which evolved from the Western Cape Infrastructure Framework, researches and plans infrastructure requirements at the scale of a District Municipality. As it focuses on the overarching availability of infrastructure at regional level, there is close relation between regional spatial planning and the DIPs.
- The Infrastructure Delivery Management System (IDMS) - The IDMS represents an initiative from National Treasury to introduce a standardised asset planning and management system in Provincial Governments. The IDMS has been adopted by the WCG and is currently being rolled out by Provincial Treasury, DTPW, WCED and Health.
- To implement the PSDF it is necessary to impact on the planning phase of each User Asset Management Plan (which is part of the IDMS and prescribed by Government Immoveable Asset Management Act (GIAMA)). For instance there is a "User Asset Management Plan" (U-AMP) for Education which, amongst others, determines long in advance where schools are planned in the Province. It is self-evident that this type of planning must be informed by the PSDF.

- Housing "Pipelines" - are the mechanism that the Provincial Department of Human Settlements utilises to pre-approve a number of projects in each municipality. As housing projects have an enormous impact on the urban fabric of towns across the Province (and on economic and social sustainability), it is important that these pipelines give effect to the Provincial spatial agenda. In many towns subsidised housing comprises a high percentage of new residential units, but housing projects are not governed by the IDMS.
- Infrastructure Funding - The Municipal Infrastructure Grant (MIG), Urban Settlements Development Grant (USDG) in the City of Cape Town and Regional Bulk Infrastructure Grant (RBIG) are examples of major national funding streams available to unlock development at local municipal or town level. While the municipalities have discretion regarding which projects to apply for, Province has a degree of control over the prioritisation and approval of such projects. The PSDF is to be used to inform the prioritisation process, and to promote the inclusion of catalytic projects which are linked to the housing pipelines. It is clear that a three-way system is required, where planning, housing provision and bulk infrastructure provision are better integrated and aligned.
- MTEC - This forum of discussions between Provincial Treasury and Provincial Departments could be used to test policy, programme and project alignment in terms of spatial logic.

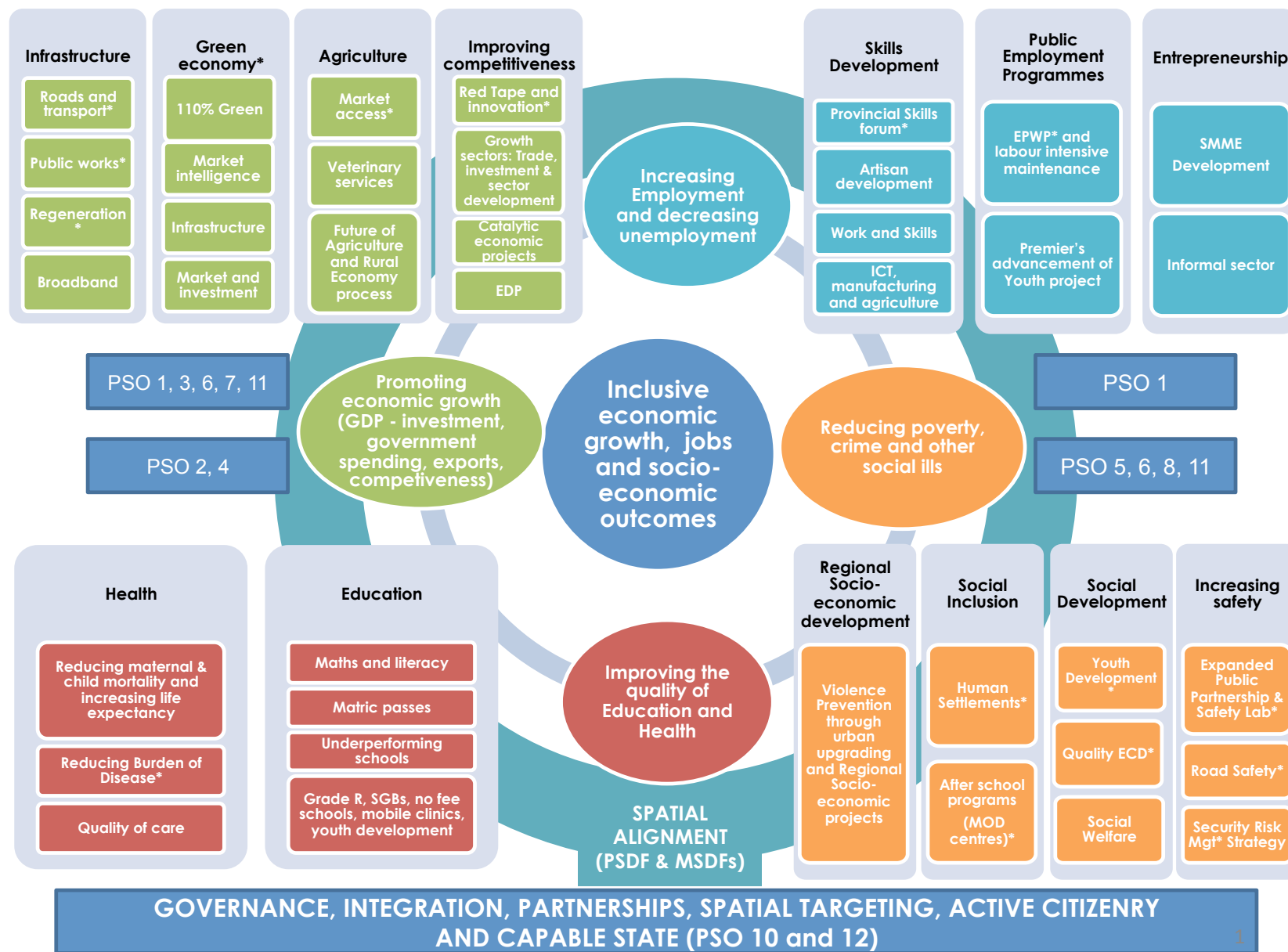


DIAGRAM.15 COOPERATIVE GOVERNANCE MODEL AS REFLECTED IN THE 2014 BUDGET OVERVIEW



#### 4.1.3.1.4 PLANNING SUPPORT TO PROVINCIAL DEPARTMENTS

In addition to supporting the current systems as mentioned above, specialist spatial planning input should be provided to programmes and projects in order to ensure that the PSDF spatial agenda is reflected in Provincial Departments' strategic plans. In this regard DEA&DP has a responsibility to provide planning support to Provincial Departments. It is important for the Provincial spatial agenda to be represented within each PSO Steering Group to ensure programmatic and project alignment with the PSDF.

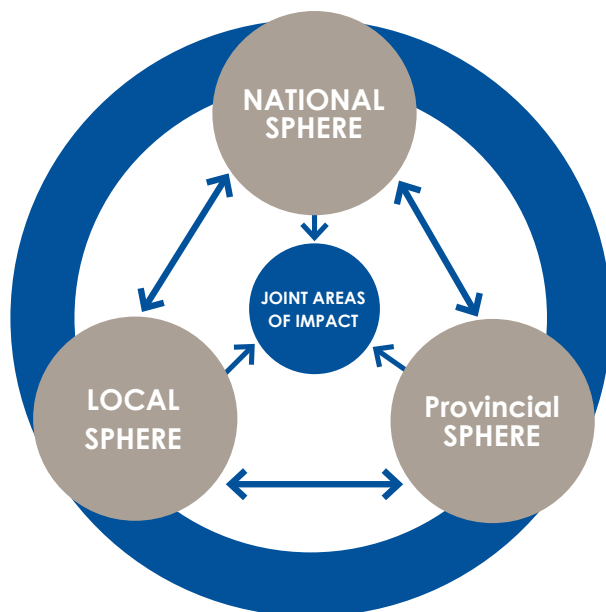


DIAGRAM.16 DLG'S COOPERATIVE GOVERNANCE CONCEPT

#### 4.1.3.2 TRANSVERSAL ARRANGEMENTS BETWEEN GOVERNMENT SPHERES

Inter-governmental relations (IGR) structures that should be utilised to facilitate implementation of the PSDF are identified below. These structures are managed and coordinated by the Provincial Department of Local Government and Provincial Treasury.

##### 4.1.3.2.1 IDP INDABAS, IDP ASSESSMENTS AND LGMTECS

Currently three forums are used to seek alignment between the PSDF and municipal SDF's and these are the Integrated Development Planning (IDP) Indabas, the Integrated Development Plan (IDP) Assessments and the Local Government Medium Term Expenditure Committees (LGMTECS).

The objective is to use these forums to improve the coordination, integration and alignment of IDPs, SDFs and the PSDF. In this regard, the coordination of Provincial planning by the PSO7 Development Planning Work Group will complement the coordination of IDPs by the IDP Indaba Workgroup. IDP Assessments would be one of the mechanisms used to monitor the extent of alignment and consistency with the PSDF and MSDF. In terms of the MSA, the SDF is a core component of the IDP. To this end MSDFs should incorporate Human Settlement Plans and Infrastructure Plans as one spatial plan for the municipal area.

The IDP Indabas, coupled with the IDP assessments and the LGMTEC process, are existing initiatives that create communication with the individual municipalities and promote coordination between what government departments and municipalities are doing. The PSDF and its coordination of Provincial planning

and creation of a framework for planning-led budgeting, will complement the objectives of the IDP interventions. Collectively the PSDF coordination, IDP engagements, and LGMTEC engagements will ensure aligned planning, budgeting and implementation.

##### 4.1.3.2.2 INTERGOVERNMENTAL FORUMS

Existing forums such as the MinMayTech between the Minister of Local Government, mayors and municipal managers and other sector committees like the Sustainable Water Plan Steering Committee should be used in order to promote the transversal implementation of the PSDF. Depending on the context and purpose, consideration should also be given to use forums mentioned in the Intergovernmental Relations Framework Act (Act 13 of 2005).

## 4.2. FACILITATING PARTNERSHIP BASED DEVELOPMENT

To deliver partnership based development, WCG needs to put in place effective mechanisms to actively involve the private sector and communities in planning processes. It also needs to streamline administrative processes for securing land use rights and obtaining environmental authorizations. DEA&DP's Development Facilitation Unit are well placed to assist with introducing effective channels of communication and relations with the private sector and community based organizations.

## 4.3. MANAGING SPATIAL GROWTH AND DEVELOPMENT

Managing spatial growth Provincially is a collaborative effort between the town and regional planners of DEA&DP and the engineers from DLG to assist municipalities in ensuring that public investment in the built environment is aligned and cost effective. The growth scenarios of towns are investigated by the town and regional planners in consultation with DOHS (thereby incorporating housing pipelines), while the spare capacity of infrastructure is investigated by the engineers. These investigations culminate in medium term infrastructure plans covering each town in the municipality. An important feature of the process is that it is co-owned by the municipality and role players from the municipality such as the engineer, town planner, housing official and town administrators are working together towards coordinated solutions.

Managing spatial growth needs to be pursued proactively and form a central component of the WCG's monitoring and evaluation function.

The notion of "smart growth" is accepted globally as an essential dimension of securing economic, social and environmental benefits, and building resilience. This integrating concept recognises the role that settlements play at local, regional and national scales. Applying smart growth principles has been a central pillar in the economic turnaround of the USA. As South African settlement patterns have closely followed the suburban model of the USA, there is an opportunity to avert the recent financial crises which resulted in many US cities and towns filing for bankruptcy.

There are two levels at which the WCG can play a role in spatial growth management. Firstly at the Provincial scale in relation to the planning, budgeting and evaluation of departmental investment programmes that directly impact settlement form and integration. With respect to the PSDF's first role as the transversal spatial strategy for the Western Cape, the PSDF can facilitate smart growth management at a strategy and implementation level. In terms of this mandate, the principles and spatial intentions of the PSDF must reflect in the investment decisions of Provincial Departments. The PSDF must guide Provincial Departments in their spending so that they do not reinforce urban sprawl and steer local spatial patterns towards more compact, integrated and appropriate forms.

Secondly, the WCG needs to support municipalities to manage spatial growth pressures. Growth management instruments that can assist in this regard include:

- i. A Municipal Services Financial Model (MSFM) baseline for all municipalities across the Province, supplementing the 7 models that were prepared as part of the PSDF specialist study (see Box 1 and 2).

- ii. Eco-system Services Model that provides a baseline and long-term measurement tool for determining the value of eco-system services currently provided and assessing the financial, economic and operating cost implications of having to replace these services with man-made systems.
- iii. Applying a range of spatial indicators that capture the policy intentions of the PSDF and which are integrated into the day to day decision making of Provincial Departments. These should be fully integrated and aligned with the Provincial Treasury's budget allocation criteria.
- iv. Establishing and maintaining baseline datasets for the ongoing monitoring and evaluation of spatial growth patterns. Evidence-based tools such as the Growth Potential Study and Municipal Services Financial Model are excellent examples of such tools and should be reviewed periodically to evaluate trends and determine whether the desired spatial transformation is being affected.
- v. Delineation of urban edges to protect critical biodiversity areas, unique and high potential agricultural land, and heritage and scenic landscapes, and to reflect the optimal long term spatial growth direction. Applied on its own, the urban edge has proven to be an ineffective instrument in containing outward growth pressures. But used in combination with other instruments (e.g. incentivising inward growth, land banking, rates, etc), urban edges have an important role.
- vi. A Western Cape heritage and scenic landscape audit and database, building on the desktop Heritage and Scenic Asset Study prepared as evidence for the 2014 PSDF (see Box 6). Such a baseline can

## NATIONAL TREASURY CITIES SUPPORT PROGRAMME - MAY 2013

The intentions and requirements of the National Treasury's City Support Programme, while currently applicable to the metropolitan areas, should be noted as important criteria for the allocation of national funding. This requires that cities and large towns identify integration zones (see Figure 60) where opportunities exist for public intervention to promote more inclusive, efficient and sustainable forms of urban development. Interventions in these zones are likely to include investment programmes, enhanced delivery of services, asset maintenance and regulatory changes.

Integration zones, as promulgated by National Treasury (2013) are anticipated to have the following characteristics:

- At a spatial level these zones include identified township hubs within the urban network and corridors connecting these hubs to established urban nodes.
- At an economic level, these zones should reflect opportunities to leverage private investment by households or firms, including through the use of available tax and investment incentives associated with Urban Development Zones and Social Housing Restructuring Zones.
- At a social level, these zones should include opportunities to break down the segregated, exclusive nature of South African cities, through promoting inclusion of historically disadvantaged and vulnerable communities, and supporting interaction across the historical divides of race and class in South African cities.

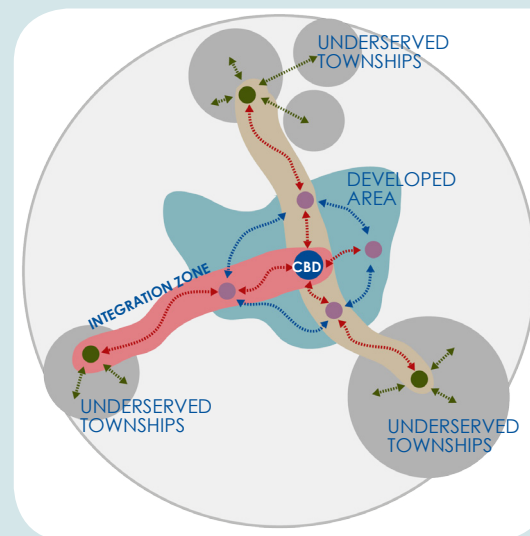


FIG.60 NATIONAL MODEL TO SPATIALLY ALIGN BUILT ENVIRONMENT INVESTMENT - BASED ON THE URBAN NETWORKS APPROACH (ADOPTED FROM NATIONAL TREASURY, 2013)

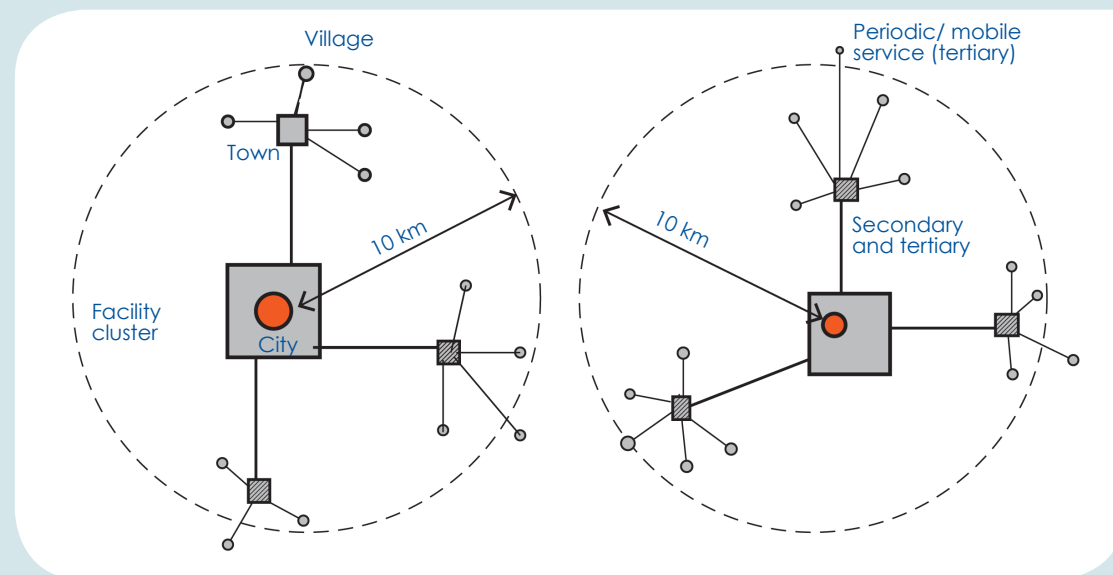


FIG.61 REGIONAL INTERPRETATION OF SETTLEMENT HIERARCHY TO INFORM INVESTMENT PRIORITISATION

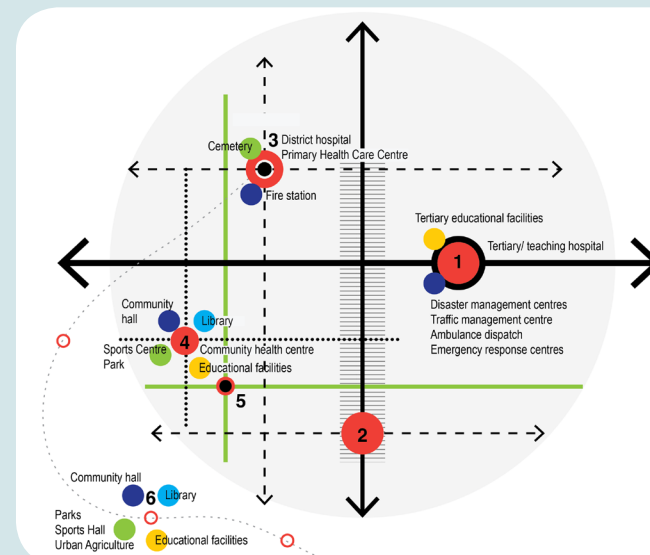


FIG.62 USING FACILITIES STRATEGICALLY TO FACILITATE REGENERATION AND INTEGRATION

assist municipalities that do not yet have a heritage inventory with decision-making. Here, the lack of information encourages applications for greenfields development in order to avoid the complexity, uncertainty and cost of heritage applications.

## **4.4. SUPPORT TO MUNICIPAL PLANNING**

In addition to the Settlement Toolkit (separately documented as Annexure 3) Province's municipal support initiatives need to be strengthened through the following mechanisms:

### **4.4.1. BUILT ENVIRONMENT SUPPORT PROGRAMME (BESP)**

BESP as an inter-departmental initiative focuses on DOHS and DEADP support to targeted municipalities in revising and strengthening their SDFs and human settlement plans (HSP) together with other Provincial Departments in order to facilitate their restructuring and transformation towards greater equity, shared growth, and sustainability. It also focuses on the development of an enabling regulatory environment by the DEADP.

### **4.4.2. TRAINING**

Training of municipal officials and councillors in Municipal Land Use Planning is a priority. The BESP programme focuses on building the skills and capacity in municipalities for spatial planning and the development of HSPs. The Municipal Readiness Programme rolled out as part of the 2013/14 Planning Change Management Strategy by DEADP to give effect to SPLUMA and the LUPA will provide further capacity building support.

### **4.4.3. PLANNING SUPPORT**

DEADP will provide planning support to the other Provincial Departments as well as to municipalities. Under-resourced municipalities will specifically be targeted and support will be given to municipal spatial planning, land use management, integrated development planning, and infrastructure and housing plans. Assistance with monitoring and evaluation functions will also be provided. This could be achieved through the assignment of Provincial town and regional planners from DEADP to municipalities.

### **4.4.4. MUNICIPAL PLANNING MONITORING AND EVALUATION**

The monitoring of municipalities is not only about ensuring that the Provincial interests are adequately taken into account by municipalities, but also very much about monitoring and supporting municipalities in terms of their Constitutional areas of responsibility. The monitoring and support function will also link strongly with the Performance Management Systems which each municipality must include as part of its IDP (see the MSA and specifically the MSA Regulations and what is prescribed in terms of performance monitoring). At the end of the day it is about aligned plans and budgets for aligned implementation; and therefore about aligned targets and indicators and monitoring performance against these.

## **4.5. CATALYTIC INTERVENTIONS**

### **4.5.1. KNOWLEDGE MANAGEMENT AND SPATIAL INTELLIGENCE**

A key element of the institutionalisation of the PSDF is to ensure the availability of good quality and up-to-date spatial information. Decision making in a transversal environment needs to be based on reliable shared information and the underlying production and quality control of spatial intelligence should be up-scaled as part of the PSDF implementations and institutionalisation. Data produced by the planning sector, for instance via the PSDF, GPS and MSDFs should be made available in a useful format to other sectors. The planning information should furthermore be linked to other sources of spatial knowledge, for instance the Provincial and Municipal Economic Review and Outlook Reports (PERO and MERO).

The GPS should be expanded to become an integrated and regularly updated town and settlement information system that will continuously track growth. This information base will guide and inform sectoral project planning. It will also contain a mechanism to more accurately project growth of towns in terms of physical quantities as these are essential for infrastructure and facilities planning.

### **4.5.2. LAND ASSEMBLY**

Land assembly entails a coordinated effort to develop integrated settlements by inter alia undertaking land audits to identify suitable land, securing land use rights and packaging land parcels for development, allocating and releasing land, and negotiating public-private implementation arrangements. This is necessary to create more compact and integrated



human settlements, greater emphasis needs to be given to 'brownfields' development that incorporates gap and subsidy housing on well-located land (e.g. along public transport routes or in proximity to economic nodes). To date it has proved difficult to secure such land, leading to a perpetuation of peripheral urban development that marginalises lower income households from accessing the benefits of urban living.

To address this fundamental challenge to urban restructuring the capacity needs to be built within government for 'land assembly'. Whilst the initial priority should be securing vacant and underutilised State land; attention should also be given to the acquisition of strategically located private land, and/or entering into joint ventures.

Options for taking the land assembly agenda forward include the mandated Housing Development Agency (HDA) or alternatively building this capacity within Provincial Government. Initially a new committee / forum could be formed (i.e. Land Assembly Steering Committee), with representation of relevant departments - DEADP, DTPW, DOHS, Health and WCED. There needs to be a linkage between this proposed structure and the Provincial Property Management and Disposal components in DTPW, as well as the Regeneration Programme. A range of built environment expertise is needed to assemble land, suggesting the possible requirement for a special purpose vehicle and input from the private sector. The current WCG/City of Cape Town land assembly pilot programme should provide valuable lessons on how best to take the land assembly agenda forward.

### 4.5.3. PRIORITY INTERVENTIONS

As the required Provincial spatial transitions need to happen 'on the ground', the priority emerging is for the WCG to support municipalities implement the spatial agenda agreed to. In this regard mainstreaming a spatial perspective into municipal IDPs is fundamental. In the 1st 7 year 'gearing-up' transition period, the priority is to implement urban and rural development demonstration projects that showcase a new approach to spatial development. In addition, priority should be given to implementing the SIPs and NDP pilot projects in accordance with transversal spatial governance arrangements proposed.

Regional Planning to a large degree is similar in approach and content to Provincial planning, but applied to an area smaller than the Province. The PSDF will be unpacked through regional planning, which generally provides more local and specific guidance to inform development planning and promotes the alignment of intersector planning at a more detailed level a regional plan should address specific planning issues or challenges.

The purpose of regional plans as provided for in both SPLUMA and LUPB is to facilitate the coordination, integration and alignment of Provincial and Municipal land use planning policy and to address specific economic, social, natural or unique features in a specific area. Regions will generally straddle municipal boundaries and will be identified according to the need and characteristics of the relevant set of challenges. The delineation of regions could, amongst others, be influenced by natural features (e.g. river catchment areas) or economic features (e.g. agricultural production area).

The urban priorities identified for the preparation of regional SDFs are the Cape Metro region, and the Mossel Bay/George and the Saldanha Bay/Vredenburg sub-regions. The rural priorities identified are the Breede and lower Oliphants River Valleys, where proposed additional allocations of irrigation water should be implemented as an integrated rural development programme. In the event that licenses are issued for shale gas prospecting in the Karoo, it is recommended that a regional SDF is prepared for the Karoo Basin (i.e. an inter-provincial initiative).

The RESP/VPUU Programme is a transversal and inter-governmental programme in the Western Cape which will drive socio-economic development in targeted areas based on the principles of the PSDF, regional planning as well as social inclusion. The WCG Cabinet decisions in December 2013 and January 2014 sets the foundation of the programme being implemented. The municipalities of Theewaterskloof, Drakenstein, Swartland, Breede Valley and Saldanha Bay were selected to benefit from the programme. The programme will be implemented based on the principles of the PSDF to coordinate multi-sector spending through planning-led budgeting.

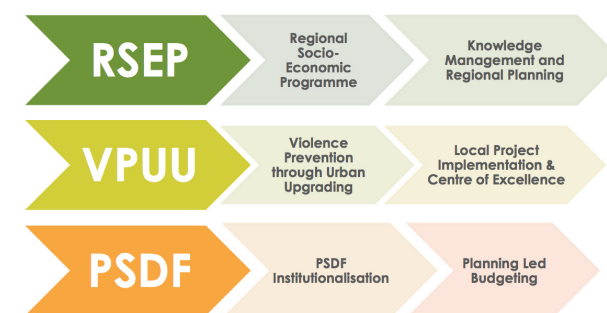
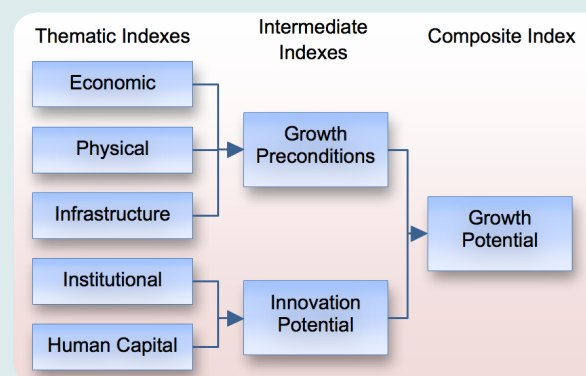


FIG.63 THE THREE MAIN STREAMS OF THE RSEP/VPUU PROGRAMME

## GROWTH POTENTIAL STUDY - QUANTITATIVE ANALYSIS, RESULTS AND IMPLICATIONS

The primary objective of the Growth Potential of towns Study (GPS 2013) was to determine the growth potential of settlements outside the City of Cape Town in terms of potential future economic, population and physical growth. The analysis of growth potential is based on two fundamental and related concepts: inherent preconditions for growth and innovation potential. Five thematic indexes formed the basis for modelling the growth preconditions and innovation potential within each settlement and municipality. For this purpose more than a hundred spatial indicators (e.g. availability and quality of infrastructure, level of education, crime statistics) were collected for 131 settlements and 24 local municipalities.

TABLE.15 THEMATIC, INTERMEDIATE AND COMPOSITE INDEXES



The analysis of growth potential must, however, also be framed within the context of the socio-economic needs within settlements and municipalities. A socio-economic needs index based on four thematic indices were developed for this purpose and based on both real values (number of households in need) and proportional values (proportion of households in need). A geographical information system (GIS) was used to aggregate the indicators and indices to produce composite maps depicting the overall growth

potential (Figure 64) and socio-economic needs of settlements and municipalities (Figures 66 and 67).

The thematic and composite indices provide an overall perspective of growth potential and socio-economic needs in the Western Cape, with its primary application to inform and guide strategic and cross-cutting decisions at a provincial level (see Table 17). These composite indices are, however, not the only decision support tool available for more detailed applications such as informing specific programmes within individual departments.

TABLE.17 INDEX AND INDICATOR LEVEL OF APPLICATION

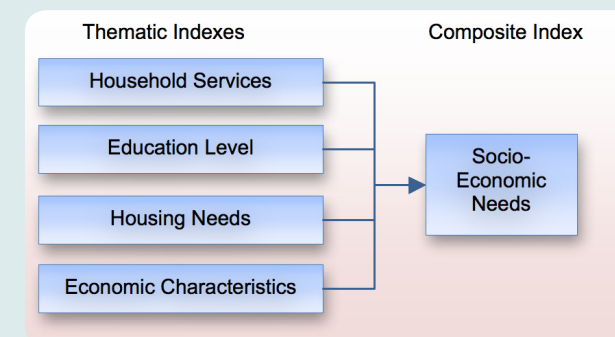
	Provincial Strategic Level Guidance	Cross-cutting Strategic Objectives	Individual Departmental Programmes & Objectives	Programme or Project-Specific
Composite Indexes	●	○	○	○
Thematic Indexes	○	●	○	○
Indicator Bundles	○	○	●	○
Individual Indicators	○	○	○	●

● Primary application      ○ Secondary application

As a further tool, the GPS thus also includes examples of "indicator bundles" that can more effectively inform decisions relating to specific departmental programmes and objectives. For example, by applying four GPS indicators that directly relate to housing (% Households living in informal housing, Level of overcrowding, Population growth rate and In-migrants) a geographical perspective was created of the spatial distribution of housing need.

At a fourth level of application, individual indicators may in some cases also be appropriate for guiding specific interventions, programmes and projects.

TABLE.16 THEMATIC AND COMPOSITE INDEXES RELATING TO SOCIO-ECONOMIC NEEDS



For instance, the % matric pass rate indicator may be invaluable in supporting decisions concerned with educational programmes, while Crime (all) occurrences (09 - 12) per 100 000 population indicator can be used to identify areas in the province where safety and security interventions are needed.

Not all aspects contributing to growth potential or socio-economic needs can however be quantified (e.g. attitude and work ethic of human resources). Some factors may also have both a positive and negative impact on development potential, depending on the context of its application. For example, biodiversity as an indicator for growth potential is challenging as high biodiversity values can have a positive impact on tourism, which can stimulate growth, but at the same time also place a physical and environmental limitation on the growth of a settlement. The quantitative GPS 2013 results should thus be interpreted in combination with existing biodiversity data. This is illustrated in Figure 65 where the Growth Potential Index results are superimposed onto the NBA 2011 Ecosystem Threat Status data. It is clear from this map that some settlements with a high growth potential are located in sensitive areas and will require careful management of future growth and expansion. Similarly, the GPS results should be used in conjunction with other existing data to better support decisions.

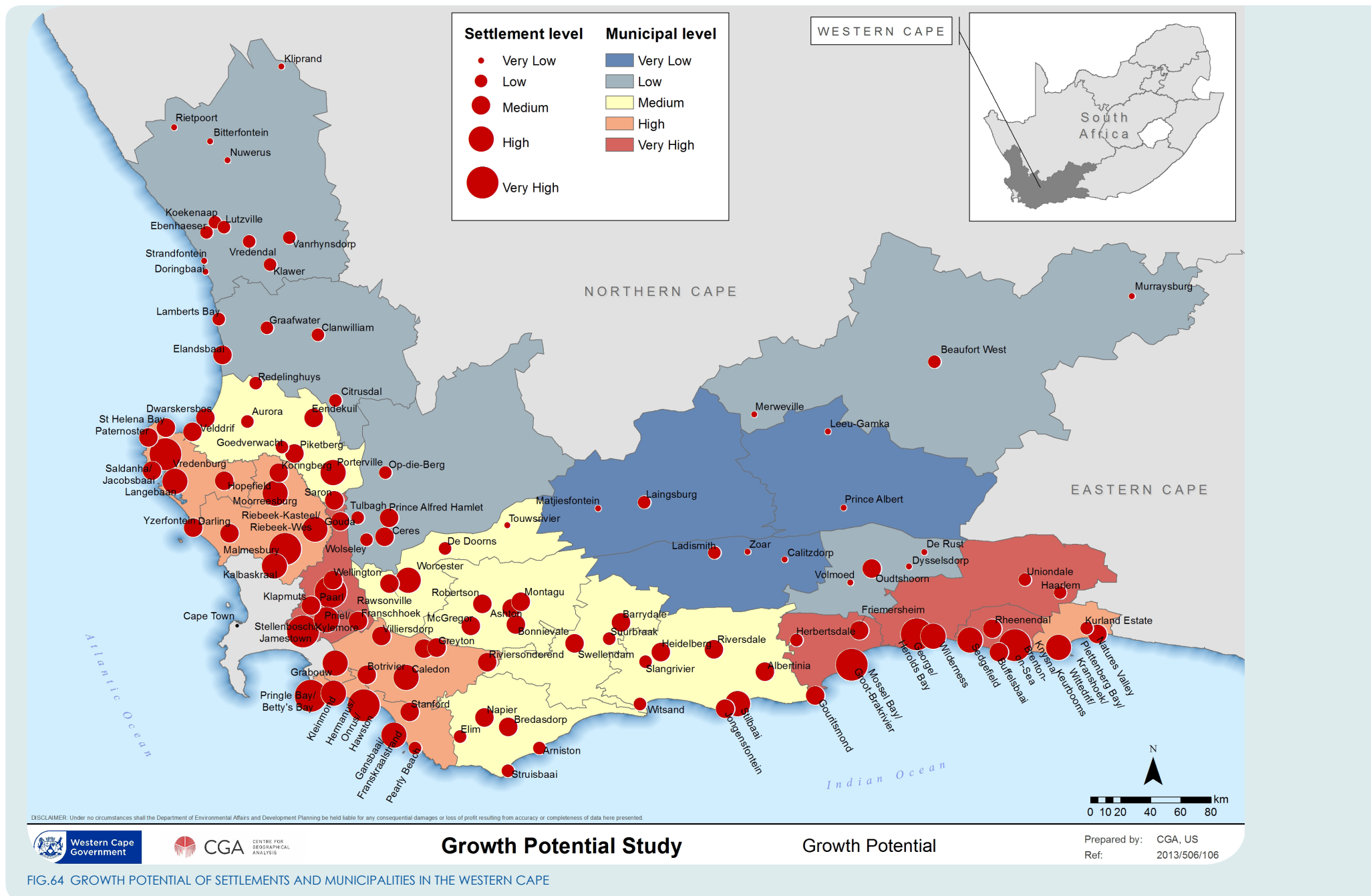


FIG.64 GROWTH POTENTIAL OF SETTLEMENTS AND MUNICIPALITIES IN THE WESTERN CAPE



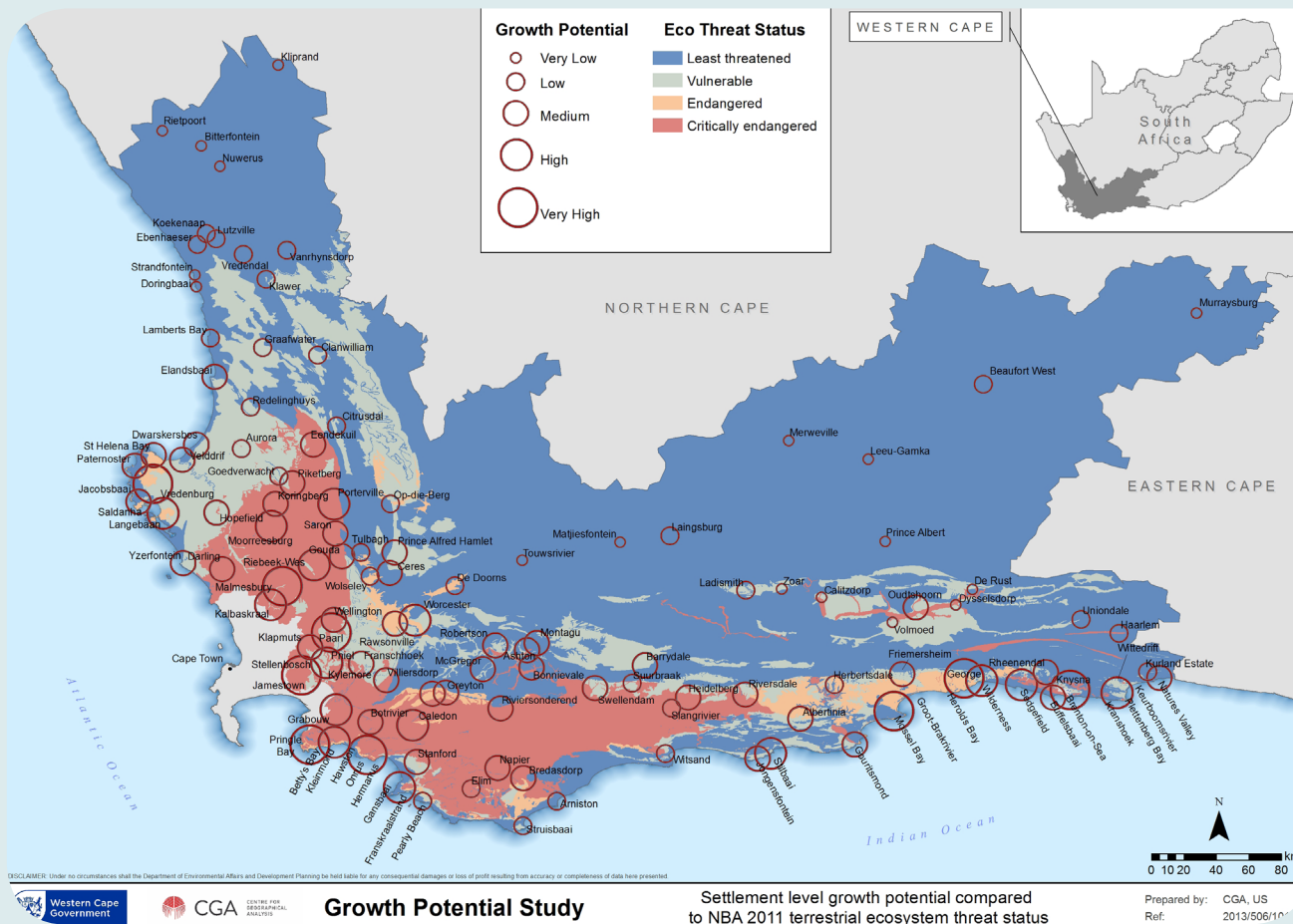


FIG.65 GROWTH POTENTIAL OF SETTLEMENTS AND MUNICIPALITIES IN THE WESTERN CAPE

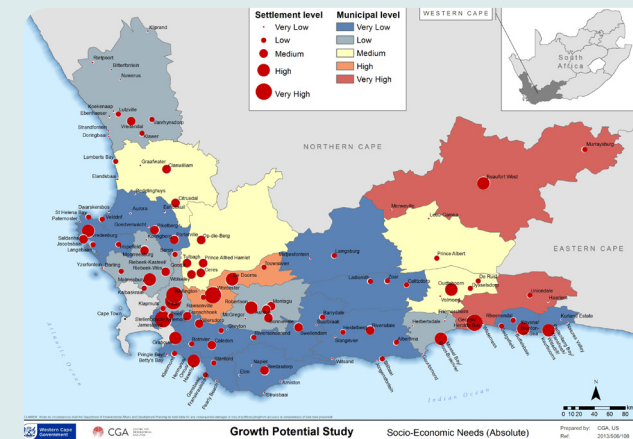


FIG.66 SOCIO-ECONOMIC NEEDS (REAL)

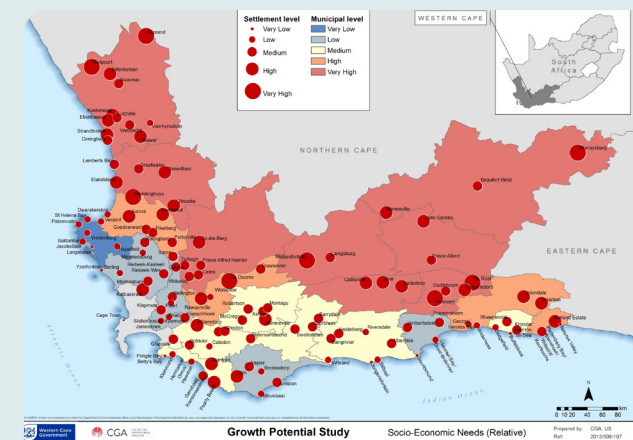


FIG.67 SOCIO-ECONOMIC NEEDS (PROPORTIONAL)



## GROWTH POTENTIAL STUDY - APPLICATION AT MUNICIPAL LEVEL

Although the growth potential study was primarily developed as a decision support tool at Provincial level, it can also be applied at municipal level. The composite growth potential and socio-economic needs indices provide municipalities with an overview of the individual settlements located within each municipality contextualised relative to the rest of the Province. In conjunction with the five thematic indices it provides local and district municipalities with a clear picture of the growth potential and socio-economic needs of individual towns and settlements. This

can improve understanding of municipal development priorities and needs within the broader Provincial context, and the formulation of strategies and programmes consistent with broader regional and Provincial initiatives. It can potentially also support the identification of strategies extending beyond the boundaries of local or district municipalities to address broader regional opportunities and concerns.

The GPS also provides a comprehensive profile for each settlement based on 85 individual indicators. As an example, the profile shown in Table 18 includes a selection of these indicators for a specific settlement. Each indicator in the profile is expressed in both absolute and relative terms. The latter is provided as a score out of 100, which

is a quantification of the relative performance of a particular settlement compared to all the settlements in the Western Cape. In this example the settlement was classified as having a very high overall growth potential (score of 91). However, it scored relatively low (54) in the Physical-Natural Index.

Similarly, the GPS settlement profiles can be used by municipalities to identify specific strengths and weaknesses of a particular settlement. This information can inform strategies and projects aimed at addressing the weaknesses of individual settlements and optimising the strengths in order to unlock opportunities for growth and development.

In the example provided the town performs very well in terms of its ability to generate income from property tax, has a good infrastructure network, the experience and capacity of the municipality management is of a high standard, and excellent support is provided for small business development. On the other hand it faces significant challenges in addressing the housing needs of the population, the capacity and state of its wastewater treatment works, and the limited potential of its physical environment.

ID	Indicator	Absolute value	Score out of 100
2	Average per capita income 2011 (Rands) [+]	75562.51	49
3	% of population receiving social grants [-] [o]	9.27	94
4	% of households living in informal housing 2011 [-] [o]	20.94	15
5	% change in economic empowerment 2001 - 2011 [+]	16.45	25
6	Overcrowding 2011 [-] [o]	0.81	70
7	% Unemployment 2011 [-]	14.23	85
10	Matric pass rate 2012 (%) [+]	82.45	54
12	% 20 - 65 year olds with at least grade 12 and higher [+]	44.19	54
13	Ratio non-economically active population age 2011 [-]	0.49	74
14	% Population growth rate 2001 - 2011 [+]	3.09	42
15	% In-migrants past 10 years 2011 [+]	11.70	50
1	<b>Human Capacity Index [High]</b>		<b>56</b>
16	Number of formal retail outlets 2010 [+]	939.00	60
17	Number of all service sector businesses 2010 [+]	1324.00	74
18	Tourism potential 2008 [+]	4.55	88
21	% Growth of economically active population 2001 - 2011 [+]	2.20	17
79	Growth in town extent 05 - 11 (ha) [+]	17.36	56
26	Distance to PE, CT and 6 leader towns [-]	778.99	77
27	Total personal income 2011 (Rands million) [+]	5511354960.00	95
28	% Growth in highly skilled labour 2001 - 2011 [+]	32.70	27
30	Value of property transactions 2010 [+]	7407434640.00	59
31	Property tax revenue 2010 [+]	106308473.00	100
98	Number of formal retail outlets and service sector businesses 2010 [+]	2263.00	69
2	<b>Economic Index [Very High]</b>		<b>89</b>
36	Mean annual precipitation [+]	802.60	65
90	Projected short term (2020) surplus/shortfalls of peak summer GAADD considering internal reticulation storage 2011 (mcm/a) [+]	-1.11	24
92	Groundwater availability 2011 (mcm/a) [+]	6.71	37
93	Groundwater quality 2011 [-]	2.50	38
94	Potential evaporation (mm) [-]	1804.11	70
41	Grazing capacity [+]	22.56	9
85	% Area cultivated 2012 [+]	38.74	44
86	Growth in % area cultivated (2007 - 2012) [+]	-0.82	4
42	Size and status of unexploited minerals 2010 [+]	7.00	20
101	Biodiversity [-] [o]	3.43	13
3	<b>Physical-Natural Index [Medium]</b>		<b>54</b>

TABLE 18. EXAMPLE OF MUNICIPAL PROFILE - STELLENBOSCH

43	% households with access to the Internet 2011 [+]	38.97	65
87	Access to main and national roads [+]	32.37	99
76	Access to railways [+]	62.03	96
48	% households with access to cellphone 2011 [+]	91.65	90
50	% households with access to sanitation (flush) 2011 [+]	94.17	94
51	% households with access to water (in house) 2011 [+]	87.67	87
52	% households with access to electricity (lighting) 2011 [+]	93.06	83
53	% households with access to waste removal 2011 [+]	87.64	89
88	WWTW spare capacity per person 2011 (l/day/pop) [+]	501.65	3
89	State of WWTW infrastructure 2011 [+]	1.00	20
4	<b>Infrastructure Index [Very High]</b>		<b>89</b>
56	Management experience and capacity 2010 [+]	35.00	100
59	Qualified audits 2012 [+]	2.00	67
60	Infrastructure backlog reduction 2010 [+]	8.58	54
63	Staff per cap ratio 2010 [-]	146.50	63
64	% Posts filled 2010 [+]	63.68	67
65	% Crime (all) occurrences change 2009 - 2012 [-]	7.31	59
68	Crime (all) occurrences (09 - 12) per 100,000 population [-]	0.09	91
72	Small business support 2010 [+]	1.00	100
73	Voter turnout 2010 [+]	50.00	28
74	Amenities 2010 [+]	63.00	47
75	Social service organisations 2010 [+]	6.00	50
5	<b>Institutional Index [Very High]</b>		<b>89</b>
0	<b>Growth Potential Index [Very High]</b>		<b>91</b>

[+] and [-] indicates if an indicator had a positive or negative influence on the index.  
[o] signifies that the indicator was excluded from the final growth potential index.

#### 4.5.4. SPATIAL TARGETING

The PSDF serves to guide the location and form of public investment in the natural and built environments, so that the returns on these investments are consistent with the Province's development objectives. This chapter has identified spatial targets and priorities with respect to the sustainable use of the Western Cape's spatial assets, opening-up opportunities in the space-economy, and developing integrated human settlements.

Whilst the PSDF Composite Map identifies broad-brush spatial targets, the Growth Potential Study (GPS) undertaken to inform the PSDF generated spatial information that serves as a powerful tool to use for detailed spatial targeting (see Box 12 and 13). Its outputs are a range of municipal and town level indicators covering the institutional, human capital, socio-economic needs, economy, infrastructure, and resource availability fields. The indicators can be applied individually or collectively, depending on the purpose and desired output. Its applications are diverse ranging from defining socio-economic priorities to assessing development potential – particularly at regional, district and local municipality and town levels.

#### 4.6. MONITORING SPATIAL PERFORMANCE

Towards the introduction of a planning performance, monitoring and evaluation system, a set of SMART (Specific, Measurable, Achievable, Relevant, Timebound) indicators need to be developed and applied. These should measure progress on delivering on the Provincial spatial agenda - both its spatial transformation and transversal governance components. In this regard the suitability of using the spatial indicators that National Treasury is currently piloting as part of the City Support Programme should be investigated. The IDP and LGMTEC process plays an important part here and the monitoring and support function must also link strongly with the Performance Management Systems which each municipality must include as part of its IDP.

#### 4.7. IMPLEMENTATION ACTION PLAN

*"Have a bias towards action – let's see something happen now. You can break that big plan into small steps and take the first step right away"* (Indira Ghandi)

An Implementation Plan for the implementation and institutionalisation of the PSDF will be facilitated by DEADP and finalised via the PSDF Project Steering Committee, represented by all Provincial Departments, municipalities and SOEs. Key implementation actions are highlighted in Table 19.

TABLE.19 DEADP IMPLEMENTATION ACTION PLAN

	WHAT	HOW	WHEN	WHOM
1.	Publication of PSDF	Media and Communication Strategy	By approval	• DEADP
2.	Development Planning and Spatial Targeting	Settlement growth tracking system through the Growth Potential of Towns Study	On-going	• All departments
3.	Provincial Spatial Plan	PSDF Map Viewer PSDF GIS based website	April 2014 March 2016	• DEADP • DOTP
4.	Spatial norms and standards for infrastructure and facilities	Policy on Development Parameters	April 2014	• DEADP
5.	Knowledge management	• Development Planning Work Group establishment • RSEP/VPUU Implementation	April 2014	• DEADP
6.	Provincial Economic Transformation Strategy	Growth Potential of Towns Study as empirical model and guide to municipalities and Provincial Treasury	September 2014	• DEDAT
7.	Regional planning	• Roll out plan • Delineation of functional regions for regional planning	September 2014	• DEADP
8.	Monitoring and Evaluation	Monitoring Framework and Development of SMART Indicators	March 2015	• DEADP
9.	Conservation of Provincial heritage and scenic resources	Strategy for the implementation of the Heritage and Scenic Resources Specialist Study	March 2015	• DECAS • DEADP
10.	Development compaction	Strategy for the implementation of the Impact on Commercial and Office Decentralisation (ICOD) and the Municipal Financial Sustainability Specialist Studies	March 2015	• DEADP
11.	Development facilitation	Facilitation/promotion strategy	March 2015	• DEADP
12.	Integrated infrastructure planning	• PSDF principles to be reflected in: a) Infrastructure and growth plans b) Housing pipelines c) IDMS • Land assembly structure	March 2015	• DTPW • DEADP
13.	Sustainable Rural development	Revision of Rural Land Use Planning and Management Guidelines, 2009	March 2015	• DEADP
14.	Sustainable development	Strategy for the implementation of the Water in the Economy study	March 2016	• DEADP

## REFERENCE LIST

CITY THINK SPACE ET AL (2013). IMPACT OF COMMERCIAL AND OFFICE DECENTRALISATION. SPECIALIST STUDY PREPARED FOR THE WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK.

CSIR (2012). GUIDELINES FOR THE PROVISION OF SOCIAL FACILITIES IN SOUTH AFRICAN SETTLEMENTS. FIRST ADDITION AUGUST 2012.

DOA (2013). THE FUTURE OF AGRICULTURE AND THE RURAL ECONOMY - DRAFT PANEL REPORT. SEPTEMBER 2013

DEADP (2009A). WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK. WESTERN CAPE GOVERNMENT.

DEADP (2009B). WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK - SETTLEMENT RESTRUCTURING, AN EXPLANATORY MANUAL. WESTERN CAPE GOVERNMENT.

DEADP (2009C). WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK - RURAL LAND USE PLANNING AND MANAGEMENT GUIDELINES. WESTERN CAPE GOVERNMENT.

DEADP (2013). STATE OF ENVIRONMENT OUTLOOK REPORT FOR THE WESTERN CAPE PROVINCE. WESTERN CAPE GOVERNMENT.

DOHS (2004). BREAKING NEW GROUND - A COMPREHENSIVE PLAN FOR THE DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENTS.

DOHS (2010). BUILDING SUSTAINABLE COMMUNITIES: RENTAL HOUSING STRATEGY 2010 – 2014. WESTERN CAPE GOVERNMENT.

DLGH (2007). WESTERN CAPE SUSTAINABLE HUMAN SETTLEMENT STRATEGY - THE ROAD MAP TO DIGNIFIED COMMUNITIES. WESTERN CAPE GOVERNMENT.

DTPW (2011). UPDATE OF THE WESTERN CAPE 2011/12 – 2015/16 PROVINCIAL LAND TRANSPORT FRAMEWORK. SECOND DRAFT - APRIL 2013. WESTERN

CAPE GOVERNMENT.

DTPW (2013). WESTERN CAPE INFRASTRUCTURE FRAMEWORK. MAY 2013. PREPARED FOR WESTERN CAPE GOVERNMENT.

NATIONAL PLANNING COMMISSION (2012). NATIONAL DEVELOPMENT PLAN 2030, OUR FUTURE – MAKE IT WORK. THE PRESIDENCY, REPUBLIC OF SOUTH AFRICA.

NATIONAL TREASURY (2013). CITIES SUPPORT PROGRAMME - GUIDELINES FOR FRAMING PERFORMANCE INDICATORS FOR THE METROS. DISCUSSION DOCUMENT. MAY 2013.

OBERHOLZER AND WINTER (2013). HERITAGE AND SCENIC RESOURCES - INVENTORY AND POLICY FRAMEWORK. SPECIALIST STUDY PREPARED FOR THE WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK.

PALMER DEVELOPMENT GROUP AND CITY THINK SPACE (2013). MUNICIPAL FINANCIAL SUSTAINABILITY OF CURRENT SPATIAL GROWTH PATTERNS. SPECIALIST STUDY PREPARED FOR THE WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK.

PROVINCIAL ECONOMIC REVIEW AND OUTLOOK (PERO) (2012).

DRAFT PROVINCIAL ECONOMIC REVIEW AND OUTLOOK (PERO) (2013).

SPATIAL PLANNING AND LAND USE MANAGEMENT ACT (ACT 16 OF 2013).

SPOCTER, M. A. (2013). NON-METROPOLITAN GATED DEVELOPMENTS IN THE WESTERN CAPE: PATTERNS, PROCESSES AND PURPOSE. DISSERTATION PRESENTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE FACULTY OF ARTS AND SOCIAL SCIENCES AT STELLENBOSCH UNIVERSITY.

STATSSA (2012). NATIONAL CENSUS 2011. STATISTICS SOUTH AFRICA.

STELLENBOSCH UNIVERSITY AND CSIR (2010). A REVISION OF THE 2004 GROWTH POTENTIAL OF TOWNS IN THE WESTERN CAPE STUDY - DISCUSSION DOCUMENT. COMPILED FOR WESTERN CAPE GOVERNMENT.

STELLENBOSCH UNIVERSITY (2013). GROWTH POTENTIAL OF TOWNS IN THE WESTERN CAPE - QUANTITATIVE ANALYSIS OF GROWTH POTENTIAL AT SETTLEMENT AND MUNICIPAL LEVEL. INTERIM REPORT - AUGUST 2013.

WCEDP (2013). ONECAPE2040 - FROM VISION TO ACTION - THE WESTERN CAPE AGENDA FOR JOINT ACTION ON ECONOMIC DEVELOPMENT. DRAFT 4 -19 OCTOBER 2012. WESTERN CAPE ECONOMIC DEVELOPMENT PARTNERSHIP.

WCG (2010). DELIVERING THE OPEN OPPORTUNITY SOCIETY FOR ALL - THE WESTERN CAPE'S DRAFT STRATEGIC PLAN.

WCG (2011). WESTERN CAPE TOURISM DEVELOPMENT PLAN. DEPARTMENT OF ECONOMIC DEVELOPMENT AND TOURISM, FEBRUARY 2011.

WCG (2013). GREEN IS SMART - WESTERN CAPE GREEN ECONOMY STRATEGY FRAMEWORK.

WCG (2013). MEDIUM TERM BUDGET POLICY STATEMENT (MTBPS).

WCG (2014). OVERVIEW OF PROVINCIAL REVENUE AND EXPENDITURE (OPRE)

UN-HABITAT (2004). URBAN PLANNING FOR CITY LEADERS. PREPARED BY THE UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME. UNON PUBLISHING SERVICES SECTION, NAIROBI.



**PRODUCED BY :**

Environmental & Spatial Planning

Western Cape Department of Environmental Affairs and Development Planning

Utilitas Building, 01 Dorp Street, Cape Town, 8001

Private Bag X9086, Cape Town, 8000

**Telephone:** 021 483 0765      **Facsimile:** 021 483 4527

**Email:** [Chrizelle.Kriel@westerncape.gov.za](mailto:Chrizelle.Kriel@westerncape.gov.za)

**Website:** [www.westerncape.gov.za/eadp](http://www.westerncape.gov.za/eadp)



**Western Cape  
Government**  
Environmental Affairs &  
Development Planning

**BETTER TOGETHER.**