

Department of Education



Province of the Eastern Cape

INFRASTRUCTURE PLAN 2005 – 2014

2009/2010 Version – Draft 2.0



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VERSION CONTROL			
Version	Originator	Approved	Date
prelim	CJP		22/06/08
1	CJP		19/09/08
2	CJP		28/02/09
3			

GLOSSARY OF ABBREVIATIONS

ABET	Adult Basic Education and Training
CES	Chief Education Specialist
CIDB	Construction Industry Development Board
DBSA	Development Bank of South Africa
DCES	Deputy Chief Education Specialist
DEAET	Department of Economic Affairs, Environment and Tourism
DHLGTA	Department of Housing, Local Government and Traditional Affairs
DMA	Department of Minerals Affairs
DoE	Department of Education
DoRA	Division of Revenue Act
DPW	Department of Public Works
DWAF	Department of Water Affairs and Forestry
EC	Eastern Cape
ECD	Early Childhood Development
EFMS	Education Facilities Management System
EMIS	Education Management Information Services
EPWP	Expanded Public Works Programme
FES	First Education Specialist
FET	Further Education and Training
GET	General Education and Training
HoD	Head of Department
ICT	Information and Communication Technology
IDIP	Infrastructure Delivery Improvement Programme
IDP	Integrated Development Plan
IDT	Independent Development Trust
IPIP	Infrastructure Programme Implementation Plan
IPMP	Infrastructure Programme Management Plan
JBCC	Joint Building Contracts Committee
LAIS	Learner Attainment Improvement Strategy
MEC	Member of Executive Council
MTEF	Medium Term Expenditure Framework
OBE	Outcomes Based Education
PIA	Programme Implementing Agent
PGDP	Provincial Growth and Development Plan
PMT	Programme Management Team
PRP	Physical Resource Planning
PSC	Provincial Steering Committee
PTC	Provincial Technical Committee
RCC	Regional Co-ordinating Committee
SDA	Service Delivery Agreement
SG	Superintendent-General
SGB	School Governing Body
SLA	Service Level Agreement
SNP	School Nutrition Programme
UPS	Uninterrupted Power Supply

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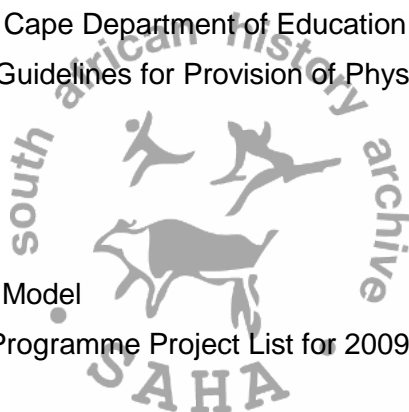
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REFERENCES:

- Reference 1: Division of Revenue Act (Act 1 of 2007)
- Reference 2: South African Schools Act (Act 84 of 1996)
- Reference 3: Eastern Cape Department of Education Strategic Plan 2006/2007
- Reference 4: Design Guidelines for Provision of Physical Facilities (EC DoE 2005)

ANNEXURES:

- Annexure A: Costing Model
- Annexure B: Capex Programme Project List for 2009/2010 – 2011/2012



1. PREAMBLE

In addressing quality teaching and learning, a complete focus needs to be placed on peace, prosperity, and welfare of the global human resources (safety and security; progression and success in life; access and fulfilment of basic needs).

To achieve this outcome, the Department has consciously engaged with the ten pillars of the Learner Attainment Improvement Strategy (LAIS). The enhancement of the ten pillars of LAIS depends on the integration and successful implementation of the following three critical issues:

- Whole School Evaluation (nine focal areas for a vibrant and functional school)
- Integrated Quality Management Systems with its twelve performance standards of for quality education
- Skills Development (in implementation, people will identify their areas of weakness, develop Personal Growth Plans, and engage in development programmes that will enhance their job performance).

Although the school is a physical model of the futuristic ideal goal, it may always remain a misfit when such is not embedded on the ideological thinking of the Government, and does not anchor its operation on the cornerstone thereof (ensuring that curriculum design, development and delivery propel the aspirations of the Government).

The school, therefore, is an agent of the community that transcends integration of individuals into a socio-economic environment that is user friendly, by incorporating development of diversified industrial skills.

The systems, controls and processes of this plan seek to put together a unified and comprehensive envisaged approach that involves all other Departments, Local Government, Business Sector and Community Based Organisations, to take an active part in integrating their development efforts for enhanced service delivery.

The golden thread in an ideal school is quality teaching and learning, which on the one hand needs to be anchored on the theory of economic rent, of which input and yield are directly proportional to the distance travelled to work, and on the other the quality of time spent on the task. This concept calls for immediate intervention and integration of efforts with the District and Local Municipalities, as well as the Business Sector.

The strategy of the Department of Education calls for an understanding that those living in the mainstream of economy should assist those stuck below the poverty level, struggling for survival.

2. INTRODUCTION

The Eastern Cape Department of Education has an infrastructure stock which comprises 6,112 schools. These schools, many of which are old mud structure buildings, provide teaching spaces for just over 2,17 million learners in the Province.

Over the past twelve years, the Department has made significant inroads into eradicating backlogs and improving physical conditions at schools throughout the Province, at a cost of some R6,5bn. There are, however, still substantial backlogs to be overcome. It is estimated that the cost of removing the classroom shortage, replacing mud structures, and providing water, sanitation, fencing and telephones to schools will amount to R21,23bn at today's costs. In addition, R3,60bn is required to address renovations, replacement, etc to bring existing schools up to an acceptable standard.

2.1 Background

The challenge for the ten year period to 2014 is to deal with these backlogs in the shortest possible time so that more funds can be allocated to maintenance, thereby ensuring that facilities are conducive to quality teaching and learning. Furthermore, the re-alignment of schools to conform to the national model of first stream Grades R– 7 and a second stream of Grades 8–12 needs to be accommodated.

This is further complicated by the migration of learners within and out of the province. It is these challenges that the Infrastructure Plan sets out to meet.

The Department's infrastructure programme has also suffered a significant setback with the delays and re-structuring surrounding the audit of the infrastructure unit. The recovery of the infrastructure programme is thus a strong focal area of the 2009/10 version of the Infrastructure Plan.

2.1.1 Purpose of the Infrastructure Plan

This document represents the **first draft** of the **2009/2010 version** of the Eastern Cape Department of Education's Infrastructure Plan 2005 – 2014.

The purpose of the Infrastructure Plan is to set out the Department's philosophy, approach and plan of action for the provision and maintenance of educational infrastructure over the ten-year period 2005 – 2014. In so doing, it seeks to demonstrate responsible and transparent management, while at the same time communicating and justifying its funding requirements.

Based on National, Provincial and Departmental policies and directives, this Plan is intended to reflect a clear strategy for educational infrastructure provision in the Eastern Cape.

This plan is updated annually to ensure its currency for the implementation of the infrastructure programme each year. This is done in June of the preceding year to comply with the Division of Revenue Act (DoRA) (Reference 1).

2.1.2 Orientation

The quality of education depends to a large extent on integrated systems, planning and processes. A consequence of poor infrastructure is an environment that does not promote effective quality teaching and learning.

The primary objective of the Department's infrastructure programme thus is to provide infrastructure that enhances the quality of teaching and the learning environment, and restores the pride and dignity of learners, staff and the communities.

To achieve the expected service levels of Infrastructure Development, the Department has decided to sharpen its focus on infrastructure and to review its implementation strategy. This revised Infrastructure Plan is intended to integrate systems, processes and controls in order to restore good governance, and compliance with legislative requirements.

This document will serve as the framework for implementing the delivery strategy that will be used to provide guidance to all participants in the Programme.

2.1.3 Strategic Departmental Goals

Through its infrastructure programme the Department seeks to achieve the following objectives, as set out in its Strategic Plan for 2005 – 2009:

- Replacement of mud and other inadequate structures, or provision of alternative accommodation
- Elimination of the backlog in classroom accommodation and other facilities within a reasonable timeframe
- Re-alignment of schools and re-organisation of small schools that are no longer sustainable, or which are under-utilised.
- Improved infrastructure planning, with sharper focus on poorer areas and nodal developments, together with more emphasis on life cycle planning (especially improved maintenance planning)
- Provision of infrastructure that complements and promotes the relevant curriculum, especially regarding outcomes based education
- Promoting the principles of Government policy initiatives (such as the PGDP, EPWP, etc) as far and as effectively as possible
- Promoting the principles of sound asset management, and laying the foundation for ensuring that all the relevant parties comply with their commitments in terms of current asset management legislation.

2.1.4 Relationship with Other Planning Documents

This Infrastructure Plan defines the infrastructure solutions proposed to support the service delivery requirements as defined in the Department's Strategic Plan. It is thus very closely aligned to the Strategic Plan, but also reflects the objectives of the:

- Departmental Performance Management Plan
- Departmental Operational Plan
- District Municipalities IDPs

All the above documents, in turn reflect the principles and priorities of the PGDP, and this Infrastructure Plan, therefore, embraces these in its strategies and programmes.

The inputs on which this Infrastructure Plan is based are shown graphically and further described in Section 2.4.1.1.

There are a number of internal Facilities Management documents which affect the planning process, and are thus referred to and consulted during the process, most significantly the Design Guidelines for Provision of Physical Facilities (Reference 4).

2.1.5 Role of Infrastructure Development in Education and its Contribution to Society

Infrastructural architecture is a state of the arts that:

- Reflects the social aspect of society
- Defines the futuristic outlook of society, its soulfulness, serenity and spirituality
- Epitomizes the identity of society, and promotes its public image
- Defines the social strata in society, and has a moulding effect in defining one's identity

The management of infrastructure should consider the aspirations of society, and should attract the interest of the external world.

2.1.6 Constitution of Infrastructural Development: Holistic Approach

Education and development mean finding oneself; identifying the environment within which one lives, and the resources that can be utilized to one's benefit. The ultimate goal is about freely integrating communities into the main stream economy of the country.

It goes beyond individual and/or organisational operations to the building of bridges and, establishing sound relations between the stakeholders that perform similar and/or related, including complementary functions, hence the following elements:

- Interdepartmental relations, including District and Local Municipalities
- Schools and office buildings

- Access roads and bridges
- Schools and office furniture
- Provision of accommodation and/or residential facilities
- Safety and security
- Water and electricity
- Tele-communication
- Information and communication technology

2.1.7 Features of an Ideal School

As an agent, working with borrowed tool (the child) from the community, the school:

- is a centre of excellence providing shared facilities for its members and/or cluster of schools or groupings
- consists of structures that cater for a holistic approach in respect of the needs for people development

Its ideal structures must meet the requirements of the curriculum, including:

- the provision of rare and/or scarce skills
- adequate facilities, including breaking through the digital divide

The outlook of an ideal school should restore the dignity, ownership, pride and patriotic spirit of the community itself.

2.2 Infrastructure Ownership

2.2.1 Legislative Mandate

The Department's mandate to provide infrastructure learning is embedded in the South African Schools Act (Reference 2):

- Clause 3(1) states that: "The MEC must ensure that there are enough school places so that every child who lives in his/her Province can attend school ..."
- Clause 12(1) states that: "The MEC must provide public schools for education of learners out of funds appropriated for this purpose by the provincial legislature."

2.2.2 Scope

This Infrastructure Plan covers the planning and management of all fixed physical infrastructure that is the responsibility of the Department of Education (DoE) in the province. This includes all government owned GET schools, FET schools and FET colleges, and provides for all buildings and services (such as water, sanitation and electricity) within the relevant premises.

Although district offices fall under the ambit of the Department of Public Works, these are also included in this Infrastructure Plan to ensure that cognisance is taken of their planning requirements, where there are no shared social needs facilities in a particular cluster.

2.2.3 Key Stakeholders

The Department of Education (DoE) owns this Plan: the senior management whose strategic objectives it must strive to meet, the relevant sections and Districts of the DoE who provide information and whose infrastructure requirements it must reflect, and the Facilities Management unit who is responsible for its implementation.

The key stakeholders in this Plan are:

- The communities, schools, SGBs, organised labour and learners of the province who are the ultimate beneficiaries and users of the infrastructure.
- The Department of Public Works and Implementing Agents whom the DoE engages to deliver the services
- District and Local Municipalities to ensure the integration of planning and service provision
- Other Provincial and National Government Departments, as well as state entities and state owned enterprises, who are also engaged in the delivery of physical infrastructure.
- The business sector and other potential donors who may wish to become involved (or have an interest) in the delivery of infrastructure to schools

2.3 Plan Framework

The format adopted for this Infrastructure Plan is as follows:

- Section 2 gives the background to the Infrastructure Plan, its objectives, scope, format and process of formulation
- Section 3 briefly describes the Department's norms and standards, current levels of infrastructure service provision, and the ideal levels of service
- Section 4 sets out the expected demand for services, based on community needs and demographic profiles and trends, and indicates how this demand is managed

- Section 5 describes the existing infrastructure in terms of physical parameters, capacity (and thus backlogs), condition, spatial distribution and value. It also quantifies the backlogs in new facilities, rehabilitation and maintenance
- Section 6 explains the departments approach to the various elements of infrastructure asset management
- Section 7 summarises the financial implications of the Plan, as well as the basis for deriving the cost estimates and expenditure projections as set out in the schedules appended to the Plan
- Section 8 describes the organisational and contractual arrangements necessary for the implementation of the Plan. It also refers to the need for any additional capacity requirements, and the implications of providing or not providing for this
- Finally, Section 9 indicates how performance against the Plan will be monitored, as well as how the Plan itself will be updated and amended to improve its accuracy and confidence in it
- In an annexure to the Plan is a schedule of all the proposed projects for the 2009/10 – 2011/12 MTEF period, together with the scope, cost estimates and projected annual cashflow thereof.

2.4 Planning Approach and Methodology

2.4.1 Process of Formulation

The process of compiling this Infrastructure Plan has two consecutive components, viz:

- (a) Strategic input which determines the focus of the Plan and its objectives
- (b) Identification of projects and programmes to give effect to the objectives of the Plan

2.4.1.1 Strategic Input

The first component, strategic input, is shown graphically in Figure 2.4.1.1 hereunder:

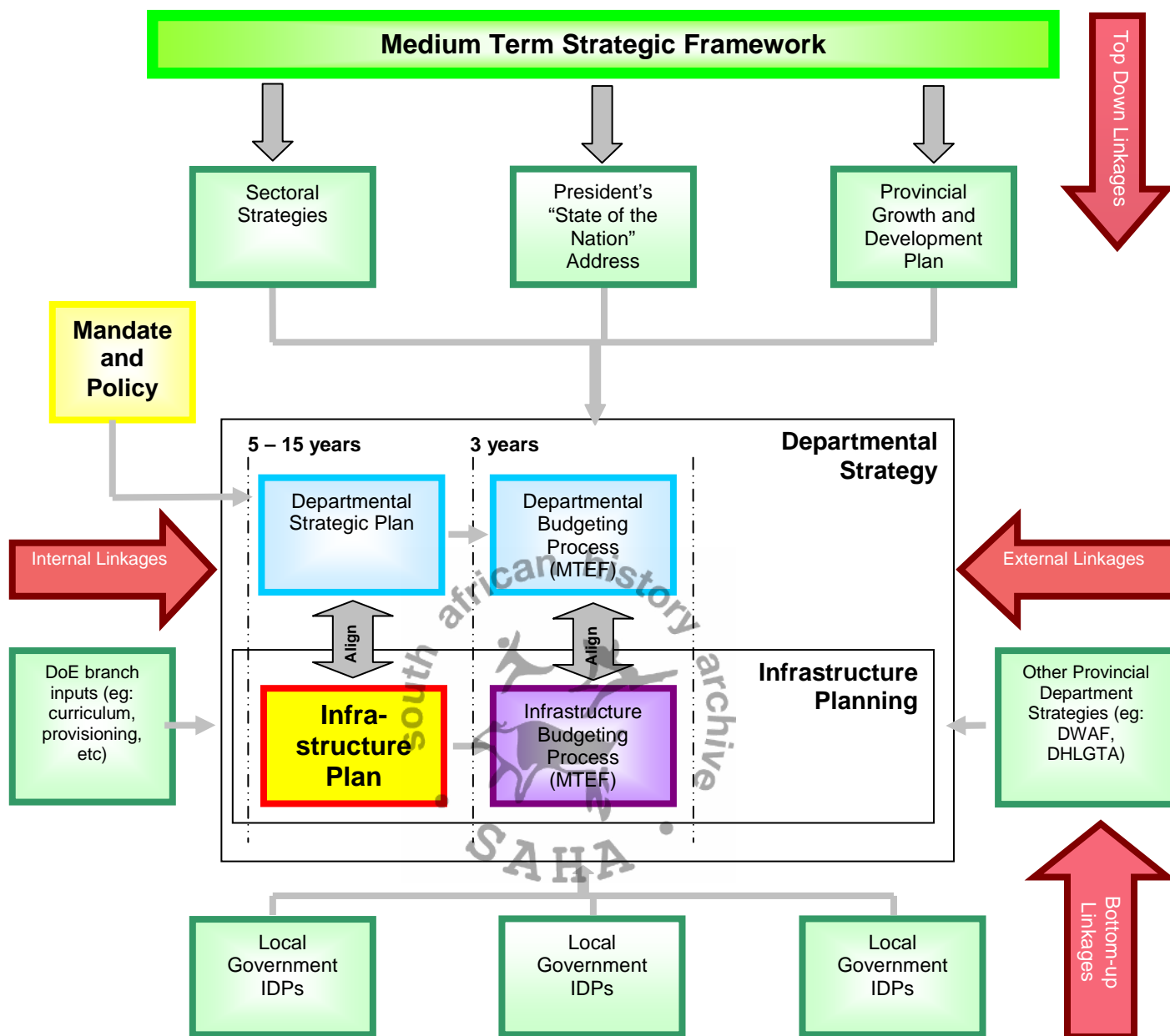


Figure 2.4.1.1: Strategic Input

The main sources of information for the medium term strategic framework are the following:

- President’s State of the Nation Address
- National Department of Education’s Strategic Priorities
- Premier’s State of the Province Address
- Provincial Growth and Development Plan
- Eastern Cape Spatial Development Plan

- Budget Speeches by the National Minister and Provincial MEC for Education
- Eastern Cape Department of Education Strategic Plan

The main external linkages are the strategic plans of other provincial Departments such as Housing, Local Government and Traditional Affairs (DHLGTA), Water Affairs and Forestry (DAAF) and Mineral and Energy Affairs (DMA), Economic Affairs, Environment and Tourism (DEAET), etc.

The internal linkages refer to the necessary co-ordination with other sections within the Department of Education to ensure that physical infrastructure programmes take cognisance of their strategic requirements, such as in the fields of provisioning, curriculum planning, etc.

The main bottom-up linkages are local and district municipality Integrated Development Plans (IDPs), and then obviously the inputs from the Districts on the priorities (see below).

Based on these inputs, and taking into account the physical conditions of the Eastern Cape and school infrastructure, the Department has set itself a number of strategic priorities. These are described in Section 3.3.1 hereof.

2.4.1.2 Project Identification

The second component, project identification, is shown graphically in Figure 2.4.1.2, where it comprises the first three steps.

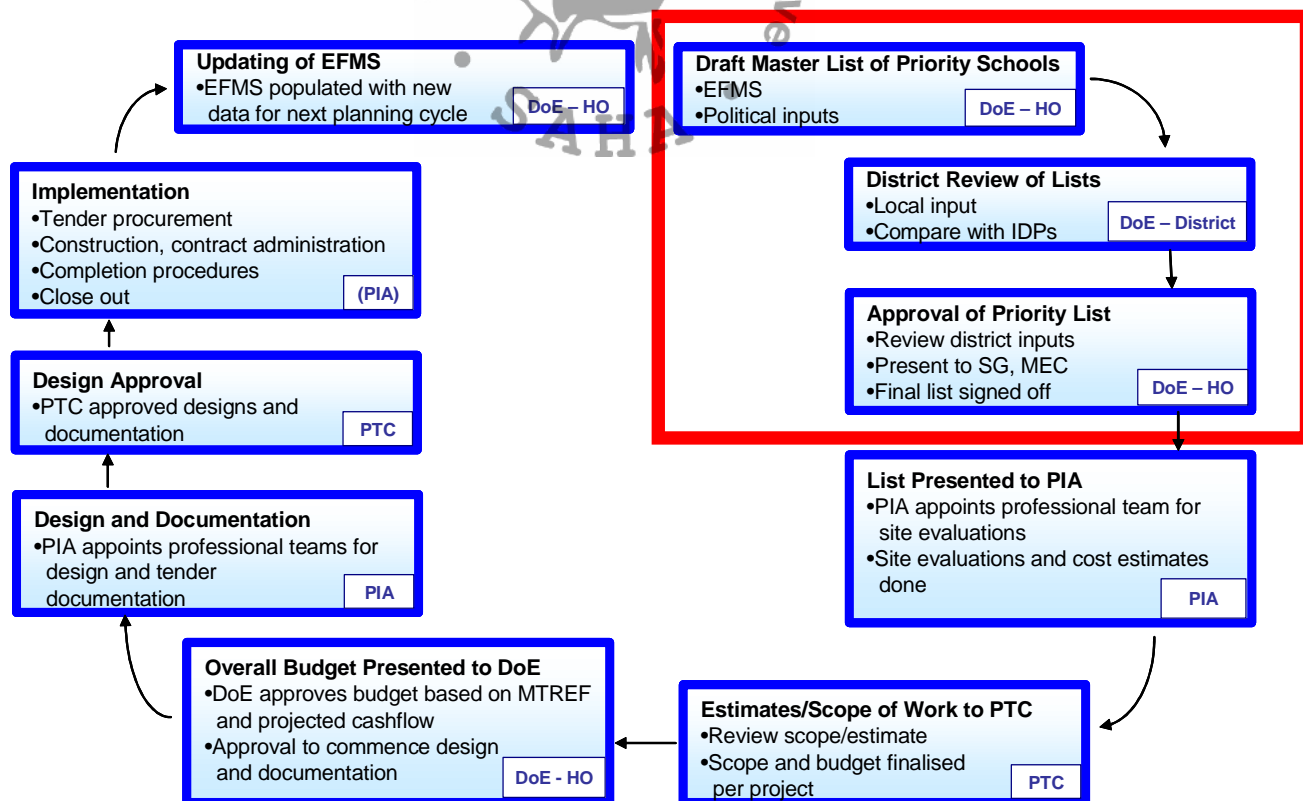


Figure 2.4.1.2: Project Identification

The criteria used for identification and prioritisation of projects are developed from the strategic inputs described earlier in this section. These are discussed in detail in Section 3 of this Plan.

This process referred to in Figure 2.4.1.2 is briefly described hereunder:

- The EFMS Manual sets out criteria for identifying and prioritising facilities to be provided, taking into consideration a Facility Condition Index and a Socio Economic Index. The Facility Condition Index is the ratio of renovation cost to replacement cost. The Socio Economic Index has four main criteria, viz.:
 - Income level
 - Literacy rate
 - Dependency rate
 - Access to water
- The EFMS, or current baseline documentation, is used to identify and prioritise projects on an agreed weighting basis (there are a number of criteria that can be used, the main areas for classroom provision being shortage of classrooms (ie: overcrowding) and condition of existing facilities).
- A District system generated draft priority list is compiled using EFMS and EMIS data, as well as strategic/policy input as described earlier.
- This list is then workshopped with stakeholders in the Districts to confirm the basis for prioritisation and the sources of data.
- The District then finalises its list, ensuring that the provision of facilities is fairly distributed throughout all the circuits. The District Director signs off the list and submits this to Head Office through the responsible Chief Directorate
- The Department then compiles the final list based on the feedback from the Districts.
- The list is then sent to the SG and MEC for final approval, which includes submission to the Standing Committee on Education.

2.4.1.3 Timeframes

The department acknowledges that the process of infrastructure delivery is complex and protracted, and it is therefore necessary to plan well in advance in order to allow sufficient lead time before construction is required to commence. In this regard the Department subscribes to the Infrastructure Alignment Model as approved by Cabinet on 21 February 2007, and commits itself to planning further in advance in order to comply. This model is shown graphically in the figure 2.4.1.3 below:

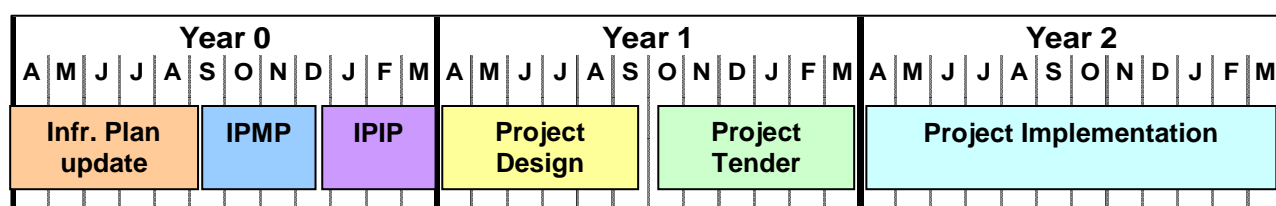


Figure 2.4.1.3

To date the Department has not been in a position to plan 2 year's ahead of delivery, as is now required, but is committed to improving its planning processes as the benefits thereof are clearly evident. To this end, the Department's participation in the IDIP programme will help to enhance procedures and meet this goal.

2.4.2 Proposed Reorganization of the Schooling System in the Eastern Cape and its Potential Impact on Infrastructure Planning and Budgeting

The *Transformation Agenda* highlights the fact that the former Transkei homeland had been the most deprived region in South Africa and had been severely under-resourced prior to 1994, and that post-1994 insufficient effort was made to effect redress in this region.

The EC DoE also inherited an inefficient schooling system from especially the former Transkei Education Department, which consists of primary, combined (junior secondary schools from Grade R to Grade 9) and senior secondary schools (from Grade 10 to 12) and which also resulted in too many small schools.

2.4.3 Level of Sophistication

The Dept has developed an in-house Education Facilities Management System (EFMS), which has been established for:

- Programme management (currently being operationalised)
- Property register
- Facilities planning
- Maintenance planning
- Property management

The EFMS is being reviewed to optimise its utilisation for programme management, reporting and communication. A procedure will also be put in place for the District offices to utilise the system optimally and keep information up to date. The Department is committed to the establishment of sufficient dedicated capacity at District level.

The National Department of Education commissioned the National Education Information Management System (NEIMS), through which physical asset data must be reconciled with EFMS.

This Plan will be updated accordingly to adjust to Policy development initiatives as they are introduced. Progressive sophistication will also apply to cost estimates contained herein. Currently these reflect prices valid as in May 2008.

3. LEVELS OF SERVICE

3.1 Norms and Standards

To ensure the cost effective and equitable provision of facilities, the Department has over time developed norms and standards (i.e. desired levels of service) for infrastructural provisioning. These have been captured into a Design Manual for School Building in the Eastern Cape, which is available on the Department's website, as summarised hereunder.

3.1.1 Classrooms

These will be provided on the following basis:

- Grade R : To be verified
- Primary schools (Grades 1 – 7) : One classroom for every 40 (forty) learners
- Secondary schools (Grades 8 – 12) : One classroom for every 35 (thirty-five) learners
- Learners with Special Education Needs : 15 learners (to be verified)

The programme provides for refurbishing of existing classrooms, and building new classrooms where necessary, to meet these norms. Mud structure classrooms will, however, be replaced.

3.1.2 Administration Facilities

Norms for provision of administration facilities are as follows:

- Up to seven classrooms: Only a principal's office with store room is provided
- Up to fourteen classrooms: A staffroom is added to the above
- Up to twenty four classrooms: An additional space for a HoD is provided
- For thirty classrooms and more: A maximum of four HoD cubicles are provided
- Sick Bay

3.1.3 Specialist Facilities

Where justifiable in terms of learner numbers and curriculum, the following specialist facilities will be provided at secondary schools:

- Computer laboratory and store room
- Science laboratory (senior secondary only)

- Home economics
- Library/resource centre (note where there is a fully fledged computer laboratory the traditional library space may not be necessary). Refer to content.

3.1.4 Water Supply and Sanitation

All schools will be provided with appropriate facilities for clean drinking water where running water is available and adequate. In the absence of such, rainwater tanks will be provided at a rate of four tanks per block.

All schools are to be provided with adequate sanitation for both learners and educators on the following basis:

- Learners: two toilets per classroom (one male and one female)
- Educators: one toilet per sex per five classrooms
- At least one unisex toilet must be provided for physically challenged users

Where waterborne sanitation is available, this is the preferred option. Where there is no waterborne sanitation, the following options will be considered:

- Ventilated improved pit latrines (preferred, but note that design must take cognisance of groundwater protocols)
- Septic tanks and french drains (soil and groundwater conditions permitting)
- Conservancy tanks (if facilities are available for emptying these regularly)

3.1.5 Electricity

All schools will be electrified where electricity supply is available. Where there is no electricity as yet, but the school is planned for inclusion in the Eskom grid, conduits will be provided and these blanked off at switch and plug points. (If the school is outside the Eskom grid, it will be included in the Department's non-grid electrification programme. This provides for essential electrification such as lighting). Classroom electrification requirements are:

- Two plug points will be provided in each classroom, and one in each office
- Lighting should provide at least 300 lux in all teaching spaces

3.1.6 External Works

Concrete aprons and dish drains should be provided creatively as to divert stormwater away from causing erosion around buildings.

Open air assembly areas or courtyards are to be paved and wind protection walls provided.

Covered walkways must be provided between classroom blocks and other facilities.

Parking area sufficient for at least 5 vehicles must be provided, increasing as the size and type of school deems appropriate.

In locations where there are no community sporting facilities available, the school should be provided with a levelled playing area of approximately 500 square meters.

Each school should be provided with two strategically placed flagpoles, and a name plaque or founding stone.

All school properties must be properly fenced off and have lockable gates. Security fencing should be provided around the buildings, including toilets, and stock fencing around the rest of the property. Security fencing should be appropriate and at least 20m from the classrooms.

At least 1% of the building cost should be allowed for landscaping and planting of indigenous trees.

3.1.7 Space Norms (in the context of proposed ideal school)

Classrooms:	60 m ²
Computer laboratory:	60 m ²
Computer storeroom:	15 m ²
Science laboratory:	60 m ²
Home economics:	60 m ²
Library/resource centre:	60 m ²
Principal's office:	15 m ²
Kitchenette:	8 m ²
HoD cubicle:	8 m ²
Records room:	0,5 m ² per classroom, minimum of 9 m ²
Staffroom:	1,5 m ² per classroom, minimum of 15 m ²
Reception classroom:	60 m ²
Hall	Instructional hall (2 classrooms with foldable partition), as well as an assembly hall at all schools with an enrolment of more than 500

3.2 Current Levels of Service Provision

The current levels of service show a huge deviation from the existing Departmental norms and standards. This is particularly so in the eastern half of the Province where rural schools in the former homeland areas predominate.

An analysis has been undertaken whereby the number of facilities in each District has been compared with the number of learners, in terms of which the undersupply has been quantified. This is summarised in Table 3.2.1 below. This table calculates the

capacity of the facilities at each school in the District and compares this with the enrolment at that particular school. The undersupply is expressed as a percentage, which is effectively the number of students that can be accommodated divided by the total number of pupils per District, but calculated on a school by school basis.

DISTRICT	Total enrollment 2008	Leamers Estimate - Without minimum norm Classrooms	Leamers Estimate - Without minimum norm Toilets	Leamers Estimate - Without minimum norm Resource Centre (Library)	Leamers Estimate - Without minimum norm Computer Lab	Leamers Estimate - Without minimum norm Science Laboratory	Sum of Leamers Estimate - Without minimum norm Home Economics	Leamers Estimate - Without minimum norm Nutrition Centre	Leamers Estimate - Without Electricity	Leamers Estimate - Not Piped Water	Leamers Estimate - Schools without Fencing
BUTTERWORTH	108,067	30,801	68,441	75,567	74,140	11,982	12,585	11,409	51,179	93,377	11,178
COFIMVABA	74,663	13,384	44,373	49,085	46,657	7,493	8,271	8,280	36,198	63,675	8,298
GRADOCK	25,015	1,602	7,248	12,615	17,720	1,132	872	13,197	736	7,672	1,482
DUTYWA	109,757	37,471	71,982	89,687	88,514	6,974	7,687	15,239	54,576	88,446	18,792
EAST LONDON	128,062	19,087	56,574	57,534	78,984	13,966	19,959	56,117	3,365	12,011	3,881
FORT BEAUFORT	49,254	2,878	17,719	15,529	19,579	2,398	2,647	21,788	4,372	16,528	2,301
GRAAFF-REINET	25,483	1,357	5,082	9,588	15,848	146	1,179	13,025	1,194	2,387	259
GRAHAMSTOWN	26,516	3,257	13,464	15,929	16,413	1,407	1,509	8,934	451	1,183	1,082
KING WILLIAMS TOWN	103,570	11,490	46,839	47,786	52,979	7,204	7,924	49,747	7,017	24,886	6,313
LADY FRERE	49,518	6,861	21,580	26,403	28,987	4,054	4,463	10,279	14,405	34,549	4,502
LEBODE	175,280	82,228	138,052	145,956	145,634	16,904	18,429	26,082	55,795	167,886	65,466
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MALLITI	69,877	20,777	59,995	59,639	54,110	8,633	7,896	8,219	48,004	57,050	5,916
MBIZANA	117,739	58,075	95,156	99,988	102,273	13,441	13,931	20,732	71,618	114,559	30,872
MT FLETCHER	52,580	11,988	33,750	35,065	32,580	5,649	6,445	9,429	37,278	41,432	5,745
MT FREERE	83,029	23,105	56,775	62,239	64,366	9,739	10,471	9,917	50,179	53,914	8,964
MTHATA	154,082	58,250	110,679	126,826	123,249	18,733	23,974	19,824	39,647	122,601	24,980
NGCOBO	75,600	23,979	49,067	53,172	52,293	6,860	7,191	11,026	36,729	63,686	10,503
PORT ELIZABETH	166,597	13,066	64,358	79,520	99,035	16,496	25,259	51,299	3,254	2,121	5,364
QUEENSTOWN	59,054	9,932	29,680	32,985	36,291	3,555	4,024	26,886	3,496	15,997	3,930
QUMBEU	77,393	23,994	56,083	57,246	54,672	8,349	7,467	10,750	34,823	74,843	19,795
STERKSPRUIT	61,808	13,135	33,304	43,564	46,317	6,370	8,676	16,980	1,597	31,770	1,280
LITENHAGE	80,694	5,763	33,377	38,407	51,438	9,371	11,830	33,676	1,019	5,710	2,731
GRAND TOTAL	2,025,619	547,441	1,245,961	1,362,286	1,433,766	197,912	229,744	482,165	647,887	1,250,830	292,489
	Percentage of learners with sub minimum access to facilities	27%	61%	67%	71%	10%	11%	24%	32%	62%	14%

From the table above it is clear that the levels of undersupply are substantial. Even basic infrastructure like classrooms and water & sanitation is woefully inadequate.

3.3 Desired Levels of Service

The strategic priorities of the Department are based on the policies and guidelines described in Section 3.1, as applied to the physical conditions of the Province and its schools.

The Department's strategic priorities are the following:

- Replacement of mud structures and unsafe schools

- Elimination of classroom and other backlogs (ie: shortage of facilities)
- Adequate water supply and sanitation at all schools
- Addressing the shortage of specialist facilities (eg: laboratories, libraries, e-learning facilities)
- Learning areas for children with special needs, ie: special schools and appropriate facilities at normal schools
- Re-alignment of school grades and re-organisation of small and under-utilised schools, especially farm schools, and the concomitant issues of providing hostels and/or transport
- Development of nodal areas, and provision of education infrastructure for such areas
- Scholar transport
- Utilisation of old government buildings
- Life cycle planning with growing emphasis on maintenance of infrastructure

While the increasingly technological world is calling for e-learning facilities and science laboratories, there are still thousands of learners being taught in mud structures and other unsafe environments. Against this background, the allocation of scarce resources represents a huge challenge to the Department.

3.3.1 General and Further Education and Training (GET and FET Schools)

The Department is moving away from the current practice of providing only classrooms and/or facilities without equipment, to the entire concept of an ideal school.

Central to an ideal school are landscaping and greening which form part of all the components described below.

An ideal layout will define the flow of activities taking place in a teaching and learning environment, setting out the requirements of the following constituent components:

- instructional classroom space, with administration block
- multi-media centre with assembly/instructional hall & technology unit
- sports and recreational grounds
- school garden

The details and costing hereof are being determined, and will be presented at a later stage. Currently the Department is prioritising classroom and administration space, and will progressively realise the ideal requirements in a phased approach.

3.3.2 FET Colleges

To attain the desired increased enrolment of 100 000 students by 2014, there is a growing need to go beyond the re-capitalisation process of FET Colleges to staff development in order to uphold the vision and sustainability of these institutions.

A sharper focus from these institutions must be on alleviation of poverty and unemployment in the neighbouring communities, through portable skills transfer. Amongst the benefits thereof is the diversified production of goods and services (e.g. school furniture) to be used by the Department.

3.3.3 Inclusive Schools (Special Needs)

In terms of White Paper 6 (Building an Inclusive Education and Training System), the Department is committed to providing infrastructure that is functionally and inclusively upgraded to address physical barriers to learning in schools. These include, for example:

- Accessible entrances for wheelchairs, as well as ramps
- Textured floors to assist blind learners identify specific learning areas
- Adequate lighting and colour contrasts to assist partially sighted learners
- Height of work surfaces and size of classrooms to facilitate use by learners in wheelchairs

In addressing the critical needs of inclusive education the Department is currently in a pilot phase of a National Programme that will seek to address the concept of a full-service school, which must be taken forward by the Department. It is the intention of the Department to apply the Full Service School Specification to the infrastructural design of identified schools on a phased basis in future.

3.3.4 Curriculum Management and Development (OBE)

The establishment of cluster centres of excellence.

3.3.5 Adult Basic Education and Training (ABET)

For the identification and provisioning of infrastructural facilities, FET Colleges are central – in line with poverty and unemployment alleviation. FET colleges are encouraged form strong links with technical high schools to act as satellite ABET campuses in their catchments.

In areas not covered by FET colleges and technical schools, there is a need to identify facilities resembling the concept of an ideal school and/or centres of excellence in order to break through the digital divide.

3.3.6 Nutrition Programme

In line with the concept of an ideal school, the Department of Education will:

- link up with Departments of Agriculture, Health and Social Development for establishing food gardens for sustainability of the School Nutrition Programme
- establish in all primary schools a covered eating area with storage, preparation area (initially a kitchenette) and water facilities (hand and dish washing), including space for document management, since the administration of the SNP involves an immense amount of paperwork

3.3.7 Information and Communication Technology (ICT)

In line with the concept of an ideal school, the Department will provide a computer network, air conditioning, and uninterrupted power supply (UPS) in all schools for connectivity and ICT training – according to the standard layout for an ICT centre that has been developed.

For good governance and administration all District offices' systems must be reviewed for upgrading and provisioning of reliable similar connectivity, including consideration of installing stand-by generators.

End users must be trained in this regard.

3.3.8 Post Provisioning

The Department will:

- review the scholar transport distribution system to benefit only deserving learners wherein the learner walks a distance of more than 5km each day without any closer school provided
- ensure the regulation of admission of learners to schools to avert negative impact on neighbouring schools and diseconomies of scale in terms of sound management and administration, since there must be a reasonable number of staff under a manager (span of control)
- put on hold all classroom additions, subject to review in 2010, except in highly industrialized/urbanized areas, so as to deal with mud and inadequate structures
- halt renovations of all recently built schools past 7 years, as they should maintain upkeep as per NSF budget allocation
- merge under capacity schools and integrate their management with that of overcrowded ones to relieve pressure thereon
- develop schools towards an ideal model, by adding components of centres of excellence

- consider systematic relief of pressure on overcrowded and under capacity schools, and tap on scholar transport, whenever necessary

3.3.9 HIV/AIDS

Infrastructure needs to accommodate HIV/AIDS strategies are unlikely to require any additional facilities over and above those provided for school nutrition, and the provision of a sick bay as part of the administration block.

3.3.10 Early Childhood Development (ECD)

White Paper 5 requires that all primary schools have a Grade R facility attached by 2014. The Department would like to achieve this by accelerating delivery up to 500 schools per year.

The Department is currently phasing in Grade R facilities at all primary schools, and Grade R facilities form part of all infrastructure plans. A standard layout has been developed in consultation with the Department's ECD section to guide school designs in future.

3.3.11 Development of Nodal Areas

In line with stated Government policy, the Department gives particular consideration to provision of educational facilities in the designated nodal areas, so as to ensure their adequacy to meet population needs.

This is taken into account during prioritisation exercises, whilst at the same time giving due consideration to demographic trends. Refer to the attached prioritised list of projects.

3.3.12 Rationalisation of Small Schools

There is a close link between rationalisation of schools and post provisioning.

The Eastern Cape is characterised by a prevalence of small schools (less than 120 learners), mainly due to the uneven topography which also handicaps accessibility, with the number of educators not meeting the requirements of the curriculum for effective teaching and learning.

This is, however, a complex process requiring complete transformation in the following areas:

- Realignment of schools
- Establishment of uniform standards
- Better management and administration (GET and FET bands)
- Proper implementation of norms and standards

- Effective governance, monitoring and control
- Effective curriculum implementation and provisioning

In the interim the Department will only provide mobile structures where needed in such schools, restricting admissions up to Grade 3, and merge under capacity schools and integrate their management with that of overcrowded ones to relieve pressure thereon.

3.3.13 Farm Schools

The Department must enter into Section 14 agreements with farm owners.

The Department is committed to providing mobile structures at such schools where the need exists.

3.3.14 Sportsfields

In line with concept of an ideal school, the Department will:

- establish sportsfields at all schools according their sizes and type
- link up with Local Government; Arts, Sports & Culture; and DWAF for development of recreational facilities, as well as Environmental & Economic Affairs for the promotion of greening and horticulture
- provide sports facilities progressively on the basis of determined District priorities, but taking cognisance of site conditions and budget availability since the construction of such is a costly exercise

3.3.15 District Offices

District offices fall under the ambit of the Department of Public Works wherein facilities are shared by the social needs cluster departments, and this is the case in only 6 of the 23 Districts.

Wherein such facilities are free standing, the user department carries the full cost, as is the case with 7 of the remaining that have reasonable facilities, while the rest need urgent attention.

Almost 20 of the Districts have staff vacancy rates currently standing at more than 50%, after the recent adjustment thereof from the previous average of 68%, thus putting pressure on the provision of office space.

For good governance and proper administration, document management and safe record keeping, as well as learner assessment records are at serious risk due to absence of proper registries and strong rooms.

District offices' systems must be reviewed for upgrading and provisioning of reliable similar connectivity, including consideration of installing stand-by generators.

3.3.16 Maintenance

The Department acknowledges that, to maintain the value of its physical assets, it needs to budget sufficient funds for this purpose. Industry norms indicate that an annual budget of 1,5% - 2% of the replacement value of the building should be made available for its maintenance. The replacement value of the Department's building assets is currently estimated at R36,6bn. This would imply an annual maintenance budget requirement of R550m – R730m, which is the same order of magnitude as the entire capex budget.

Clearly this is a situation that needs to be addressed urgently. However, in the light of the existing backlogs, it is difficult to justify the commitment of such substantial amounts to maintenance. The Department has increased its maintenance budget significantly from 2007/08 to 2008/09, and intends continuing this trend. It has also developed a maintenance plan for utilising this budget.

However, additional funding for maintenance needs to be sourced. The current budget is insufficient to eradicate mud structures and address backlogs, and also maintain existing infrastructure adequately.



4. DETERMINATION OF NEEDS

4.1 Orientation

It is important that this section of the Infrastructure Plan is read in the context of the situation in the Eastern Cape. Although the total population has been fairly static, there is an internal migration from rural to urban areas. In almost all cases, the provision of infrastructure has been about replacement or additions to existing schools, rather than the building of new schools.

The factors influencing demand are identified as follows:

- Quality of infrastructure versus effective teaching and learning
- Migration trends versus nodal points of developments
- Industrial development versus population dynamics
- Rationalisation of schools versus availability of educators
- Government policy development initiatives

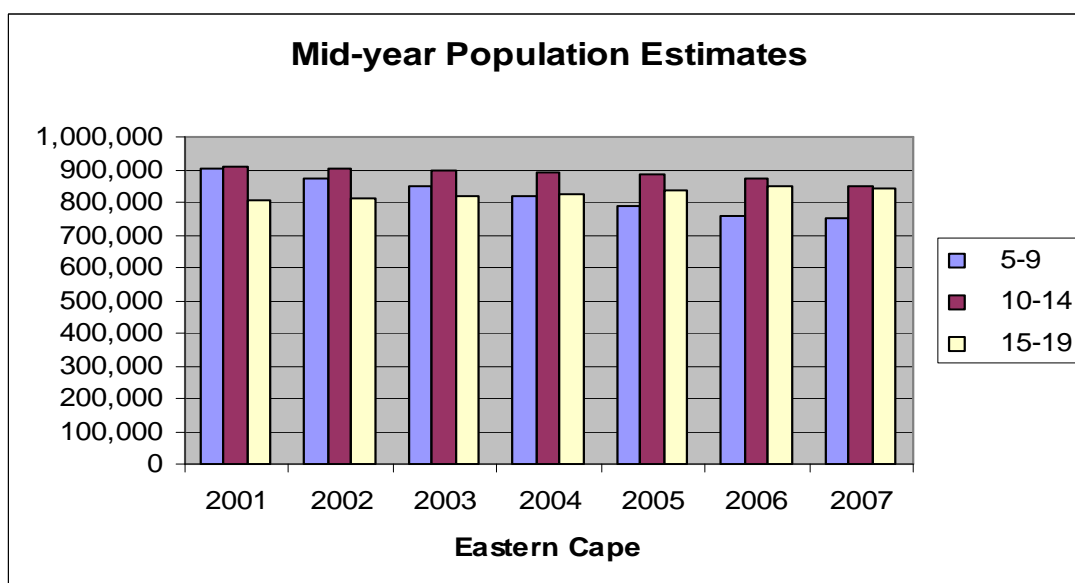
4.2 Demand Forecasting

4.2.1 Demographic Profile

4.2.1.1 Total Population

According to the 2007 Community Survey there are 47,85million people living in South Africa, up from 44,8 million in the 2001 census. Of these, 6,9million people live in the Eastern Cape. The percentage of the population living in the Eastern Cape has declined from 15,1% to 13,5% over this same period. The total Eastern Cape population of 6,5million has, however, has grown by 2,05% from the 6,3million people in 2001.

The age of the population has, however, increased over this period and the number of people in the school going categories has declined overall. The figure below shows that the number of children in the 5-9 and 10-14 age groups has declined, while the 15-19 age group has increased.



4.2.1.2 School Age Population

The Eastern Cape has a relatively youthful population in comparison to other provinces, with 34,4% of the population below the age of 15 years. By way of comparison, this figure is 26,3% for Gauteng. The current trend may be a correction in line with other provinces, and should be taken into consideration when planning any new facilities.

The demand for education has remained relatively stable during this period and there is unlikely to be a need to build new schools to meet new demographic demand. (This does not detract from an ongoing need to address existing backlogs and, in some cases, to build new schools to improve access to education). A challenge for the education system is to improve access to schooling, more especially to secondary and further education and training facilities for the high number of non-urban learners.

The estimated distribution of total population by local municipality for the period 2001 to 2007 is shown in the table below.

Year of Survey	2001			2007		
Age Group	5 - 9	10 - 14	15 - 19	5 - 9	10 - 14	15 - 19
NMA: Nelson Mandela Metropolitan Municipality	87953	98059	106056	83052	90223	107348
EC101: Camdeboo Local Municipality	4915	5554	4714	5005	4272	5030
EC102: Blue Crane Route Local Municipality	3516	3825	3825	2542	2461	2236
EC103: Ikwezi Local Municipality	1100	1196	1027	1353	1361	1025
EC104: Makana Local Municipality	6435	7682	9522	6095	6164	7470
EC105: Ndlambe Local Municipality	4997	5526	5536	3914	4083	4646
EC106: Sunday's River Valley Local Municipality	3863	4093	4197	3360	3116	3304
EC107: Baviaans Local Municipality	1560	1773	1745	1610	1426	1447
EC108: Kouga Local Municipality	6222	6908	6877	5972	5366	6413
EC109: Kou-Kamma Local Municipality	3322	3553	2983	4268	4473	3393
EC121: Mbhashe Local Municipality	39862	41825	34559	37605	45195	35452
EC122: Mquma Local Municipality	40242	45174	40502	38232	41709	40284
EC123: Great Kei Local Municipality	4948	5948	6011	2681	3403	4375
EC124: Amahlathi Local Municipality	16444	19165	17938	12033	12712	13734
EC125: Buffalo City Local Municipality	64899	73459	79703	62842	68401	75027
EC126: Ngqushwa Local Municipality	9666	11658	11229	8358	9658	10154
EC127: Nkonkobe Local Municipality	13748	16485	16241	12174	13651	16302
EC128: Nxuba Local Municipality	2593	2890	2848	1944	2261	1833
EC131: Inxuba Yethemba Local Municipality	6062	6740	7207	5723	5315	4931
EC132: Tsolwana Local Municipality	3921	4664	4602	2872	3606	3565
EC133: Inkwanca Local Municipality	2209	2718	2422	1387	1569	1725
EC134: Lukanji Local Municipality	20369	24098	24440	22144	25850	25492
EC135: Intsika Yethu Local Municipality	26515	30104	24506	26498	30608	24403
EC136: Emalaheni Local Municipality	17869	20907	18545	16320	18623	18415
EC137: Engcobo Local Municipality	23122	25370	20519	21005	21909	16423
EC138: Sakhisizwe Local Municipality	8806	9876	8614	6947	6616	6981
EC141: Elundini Local Municipality	20064	22749	19048	17775	18738	16164
EC142: Senqu Local Municipality	17726	20275	19080	14696	17218	16718
EC143: Maletswai Local Municipality	4028	4522	4721	4861	5219	4460
EC144: Gariep Local Municipality	3574	3905	3552	2783	2468	2386
EC151: Mbizana Local Municipality	40831	40827	33292	44832	45105	38433
EC152: Ntabankulu Local Municipality	22009	22009	17912	19057	21904	20297
EC153: Qaukeni Local Municipality	41750	40612	32369	45204	43718	33405
EC154: Port St Johns Local Municipality	25392	24907	18469	26947	29179	20772
EC155: Nyandeni Local Municipality	44901	44400	37181	49490	50748	42117
EC156: Mhlontlo Local Municipality	31359	33842	27671	33154	35354	33499
EC157: King Sabata Dalindyebo Local Municipality	60873	62042	56600	61460	65996	60513
EC442: Umzimvubu Local Municipality	30637	31637	26416	31868	34709	28944
EC441: Matatiele Local Municipality	28259	30564	25578	41801	38396	34073
SUB-TOTALS	796561	861541	788257	789864	842783	793189
TOTAL POPULATION 5-19 YEARS OLD	2446359			1586378		

Source: Stats SA Community Survey

This information is an important indicator of the trend in the demand for schooling, and should guide new school construction.

It is important to note that many of the identified high-growth districts are located in more peripheral parts of the Province, which traditionally have been under-served in terms of education. Many are facing severe physical infrastructure backlogs and this presents additional challenges for the Department, especially if a legacy of poor provision is coincident with rising demand for education due to population growth.

4.2.1.3 Socio-economic Deprivation

Since communities play a vital part in supporting the provision of education, it is important to review the socio-economic environment in which those communities exist. In order to undertake a comparison, a socio-economic deprivation index has been calculated (reference 3) for education districts by combining various social and economic criteria from the 2001 Census.

The following criteria were used to create the index:

- Functional literacy – percentage of the adult population that has attained at least Grade 6 schooling, divided by the total number of adults (age 20 and above)
- Per capita income – total annual income divided by the total population
- Percentage of households with electricity (supplied by Eskom or a local municipality)

Education districts with the highest score, or those identified to be the most disadvantaged in terms of the criteria used, are typically characterised by:

- High unemployment
- Large numbers of dependents
- Low levels of literacy
- Small proportions of the population with tertiary education
- Low levels of basic household services such as electricity and piped water

Each criterion was ranked from worst to best, given equal weight and combined into a single standardised index ranging from 4 (most poor) to 0 (least poor). It is important to note that the score measures relative rather than absolute disadvantage within the Eastern Cape, and compares the performance of districts to one another and not to a defined national benchmark.

The results are shown graphically in figure 4.1.3. From this it is evident that the poorer districts are also those with high proportions of 5-19 year olds in relation to their total populations, and hence many dependents. Districts such as these should be targeted for greater development assistance.

The deprivation index is used to determine the quintile into which a particular school falls, which affects the level to which its operational costs are subsidised. The Index can also be used to prioritise identified projects, which is the reason for its inclusion in this Infrastructure Plan.

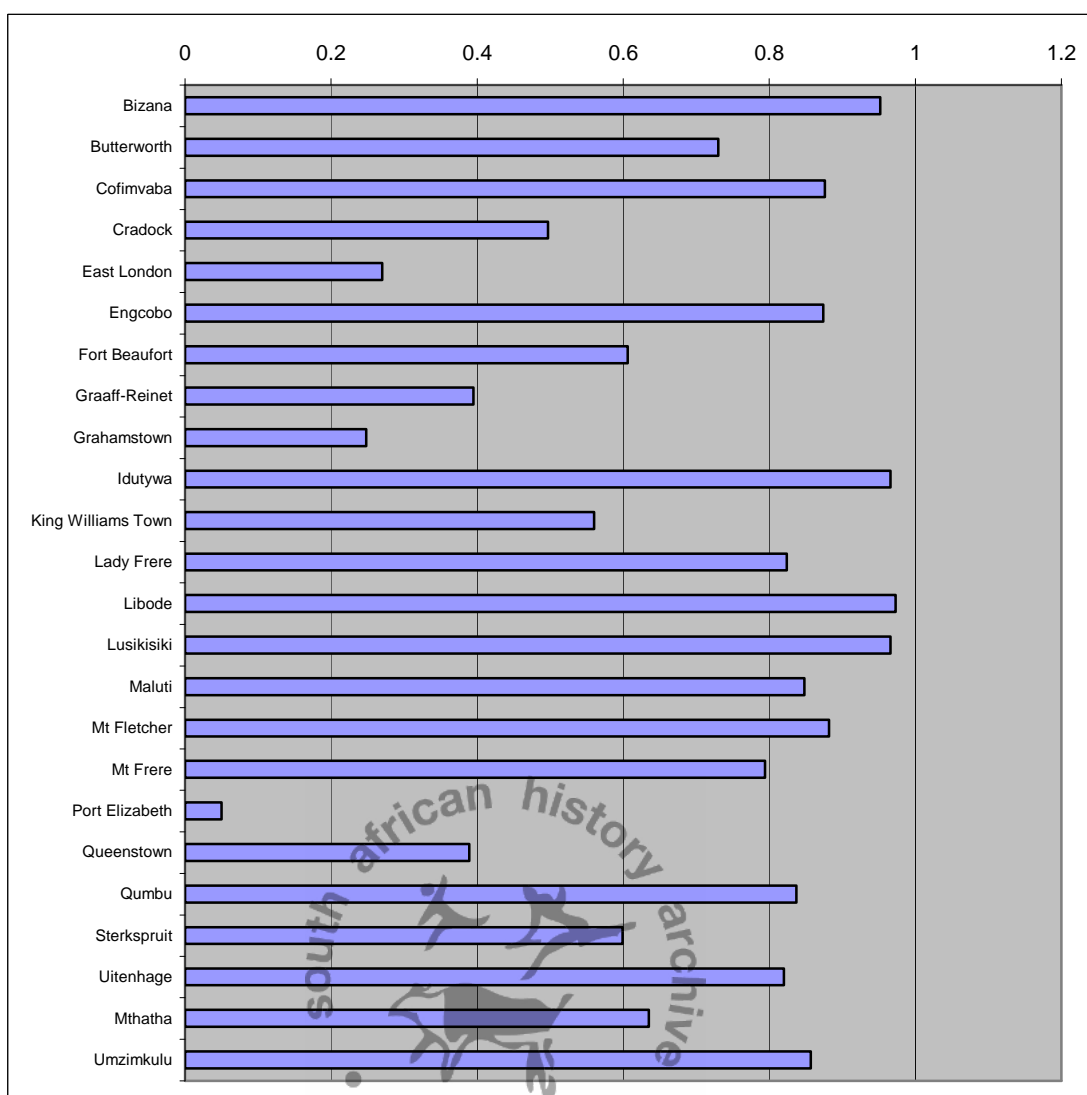


Figure 4.1.3: Comparative Socio-economic Deprivation (1996 Census)

4.3 Demand Projections

In the light of population migration and urbanisation trends it is difficult to predict the demand for education facilities in any particular area with confidence. The Department is considering various options for analysing demographic tendencies, but in the interim uses two available indicators:

- Enrolment history at a particular school or group of schools
- Changes in census data (per enumerator area) from 1996 to 2001

In addition to these two indicators, planning officials take into account all the other factors bulleted in Section 4.2 above before allocating accommodation to any particular school.

The planning module, which forms part of the EFMS, is a powerful tool for planning new facilities and can identify hotspots. This has the functionality of projecting in which areas increased demand for facilities can be expected.

This whole aspect of demand projection will be elaborated on in more detail in future updates of this Infrastructure Plan.

4.4 Demand Management

The Department recognises that there are often possibilities of finding non-infrastructure solutions to apparent infrastructure shortages, and that these need to be fully explored and exploited before investing in further infrastructure. Those being considered at present are the following:

- Re-alignment and rationalisation of schools, as discussed earlier herein
- Provision of hostels or restitution of existing hostels (as part of the above process)
- Provision of scholar transport – also as part of the rationalisation process – where this is the more cost effective means of providing quality education
- The advent of e-learning and its roll out will also affect the requirements for classroom and specialist facilities, and this will be taken into account as well.

Before any additional capital outlay is approved for any school, the non-infrastructure possibilities described above are reviewed to ensure that fixed assets are only created where they are most needed in the long term.

These and other relevant aspects will be carefully monitored throughout before any infrastructure is built that could possibly be avoided. The current procedure is to map the utilisation of facilities at all adjacent schools before additional accommodation is provided at any particular school. This is to ensure that no facilities are built as a result of an artificial need created by, for example, one school being more attractive / popular than an adjacent school.

However, despite any demand management efforts by the Department, there is still a huge need for additional facilities, and here the Department has looked outside of Government for additional resources. There has been a concerted effort by both government and the business community through the Nelson Mandela Foundation, the Eastern Cape Education Development Trust as well as foreign donors such as the Japanese Government and the European Union to assist the Department to deal with the classroom backlog. Approximately R2bn has been spent through this collective effort over the past ten years which has resulted in significant improvements in the learning environment of our schools.

5. EXISTING INFRASTRUCTURE

5.1 Introduction

The Department currently has 5704 public ordinary schools in the Province, which serve approximately 2,17 million learners. These are accommodated in 54,501 classrooms. The condition of these facilities is set out in Table 5.1 below.

Condition of Classrooms	Number of Schools	%
Very Weak	1060	19%
Weak	1601	28%
In Need of Repair	2088	37%
Good Condition	621	11%
New Building	237	4%
Being Upgraded	71	1%
TOTAL	5704	100%

Table: 5.1: Condition of classrooms: Public Ordinary Schools (April 2007)

These categories are to be re-defined according to the condition, status and level of service provided by the structure.

An analysis of the existing facilities has been undertaken at an individual school level and compared with the current norms and standards. This analysis considered three aspects which are required to be addressed to ensure that schools are brought to an acceptable level for affective education in terms of the Department's norms and standards, viz:

- Shortages of facilities (backlogs)
- Repairs/renovations to existing facilities
- Replacement (herein referred to as **upgrading**) of existing facilities that are no longer serviceable or of an unacceptable standard (ie: mud structures)

This analysis has been based on existing records in the NEIMS, EFMS and EMIS databases which have the relevant data.

5.2 Shortages of Facilities (Backlogs)

Based on the prevailing norms, an analysis has been made of the number of learners with insufficient access to the desired level of service. This is shown in Table 5.2a below.

DISTRICT	Total enrollment 2008	Learners Estimate - Without minimum norm Classrooms	Learners Estimate - Without minimum norm Toilets	Learners Estimate - Without minimum norm Resource Centre (Library)	Learners Estimate - Without minimum norm Computer Lab	Learners Estimate - Without minimum norm Science Laboratory	Sum of Learners Estimate - Without minimum norm Home Economics	Learners Estimate - Without minimum norm Nutrition Centre	Learners Estimate - Without Electricity	Learners Estimate - Hot Piped Water	Learners Estimate - Schools without Fencing									
BUTTERWORTH	108,067	30,801	68,461	75,567	74,140	11,982	12,585	11,409	51,179	93,377	11,178									
COFMYABA	74,663	13,384	45,373	49,085	48,657	7,493	8,271	8,280	36,198	63,675	8,298									
CRADOCK	25,015	1,602	7,248	12,615	17,720	1,132	872	13,197	736	7,672	1,462									
DUTYWA	109,757	37,471	71,962	83,637	83,514	6,974	7,687	15,239	54,576	89,446	18,792									
EAST LONDON	128,062	16,087	56,574	57,654	78,984	13,966	19,959	56,117	3,365	12,011	3,891									
FORT BEAUFORT	43,254	2,878	17,719	15,528	19,579	2,388	2,647	21,788	4,372	16,528	2,301									
GRAFF-REINET	25,463	1,357	5,062	9,598	15,848	146	1,179	13,025	1,194	2,387	259									
GRAHAMSTOWN	26,516	3,257	13,464	15,929	16,473	1,407	1,509	8,934	451	1,183	1,092									
KING WILLIAMS TOWN	103,570	11,490	46,859	47,758	52,979	7,204	7,924	49,747	7,017	24,896	6,313									
LADY FRERE	43,518	6,861	21,580	26,403	26,987	4,054	4,463	10,279	14,405	34,549	4,502									
LIBODE	175,260	82,228	138,052	145,955	145,634	16,904	18,429	26,082	55,795	167,886	65,466									
LUSKISIKI	165,021	78,461	134,351	138,985	135,707	17,056	17,055	29,320	90,875	153,557	48,855									
MALLUTI	69,877	20,277	56,985	54,639	54,110	8,633	7,896	8,219	48,004	57,050	5,916									
MBIZANA	117,739	58,075	95,158	99,998	102,273	13,441	13,931	20,732	71,618	114,559	30,872									
MT FLETCHER	52,560	11,988	33,750	35,065	32,560	5,649	6,445	9,429	37,278	41,432	5,745									
MT FRERE	83,029	23,105	56,775	62,239	64,366	9,739	10,471	9,917	50,179	53,914	8,964									
MTHATA	154,062	58,250	110,679	126,826	123,249	18,733	23,974	19,824	39,647	122,601	24,980									
NGCOBO	75,600	23,979	49,067	53,172	52,293	6,860	7,191	11,026	36,729	63,666	10,503									
PORT ELIZABETH	166,597	13,066	64,368	79,520	99,035	16,496	25,259	51,299	3,254	2,121	5,364									
QUEENSTOWN	59,054	9,932	29,680	32,995	35,291	3,555	4,024	26,886	3,496	15,997	3,930									
QUMBU	77,393	23,994	56,093	57,246	54,672	8,349	7,467	10,750	34,823	74,843	19,795									
STERKSPRUIT	61,808	13,135	33,304	43,584	46,317	6,370	8,676	16,980	1,597	31,770	1,260									
UITENHAGE	80,694	5,763	33,377	38,407	51,438	9,371	11,830	33,676	1,019	5,710	2,731									
GRAND TOTAL	2,026,619	547,441	1,246,961	1,362,286	1,433,766	197,912	229,744	482,165	647,807	1,250,830	292,469									
Percentage of learners with sub minimum access to facilities											27%	61%	67%	71%	10%	11%	24%	32%	62%	14%

Table 5.2a: Access to Facilities

5.3 Upgrading and Repairs

The figures quoted earlier are to eliminate shortages (backlogs) in facilities. However, there are a large number of schools that require either extensive repair (renovations) or upgrading (replacement) before they can be considered acceptable educational facilities. The costs of such repairs or upgrading are set out in Table 5.3 below, together with the backlog costs.

DISTRICT	Total Backlog Cost (New Works) All Inclusive	Total Repair Cost (Adjusted) 2008	Total Upgrade Cost (Adjusted) 2008	Total (Backlog/Repair/Upgrade)	Total Replacement Cost (Adjusted) 2008
BUTTERWORTH	1,297,365,094.18	103,249,690.89	116,952,186.11	1,517,566,971.18	1,496,406,270.34
COFIMVABA	797,781,992.79	55,678,528.81	71,889,338.89	925,349,860.48	1,101,639,395.20
CRADOCK	174,704,817.52	72,584,140.02	2,962,349.78	250,251,307.32	1,154,052,915.86
DUTYWVA	1,348,385,447.92	64,705,002.80	119,598,079.50	1,532,688,530.23	1,076,760,500.35
EAST LONDON	929,767,029.55	134,359,675.38	28,334,414.29	1,092,461,119.21	3,465,981,959.82
FORT BEAUFORT	403,195,255.11	229,444,740.24	32,339,787.75	664,979,783.10	1,880,648,393.14
GRAAFF-REINET	140,485,251.08	50,680,604.65	1,316,608.38	192,482,464.11	1,534,973,433.30
GRAHAMSTOWN	214,444,644.95	77,461,345.71	7,899,269.02	299,805,259.67	1,285,911,192.79
KING WILLIAMS TOWN	915,642,137.27	131,988,222.71	60,073,047.05	1,107,704,407.03	2,674,384,984.66
LADY FRERE	425,963,897.22	53,856,662.31	27,709,021.45	507,529,680.98	853,149,478.86
LIBODE	2,397,222,068.59	60,311,988.20	137,644,053.11	2,595,178,109.90	1,348,412,333.05
LUSIKISIKI	2,176,419,583.27	78,090,429.40	224,843,438.69	2,479,353,451.35	1,649,674,062.61
MALUTI	854,488,314.33	74,492,709.20	67,941,657.23	996,922,680.75	857,861,409.60
MBIZANA	1,501,142,088.43	59,668,944.35	49,881,483.72	1,610,692,516.50	789,913,174.22
MT FLETCHER	565,352,954.32	44,440,294.43	56,909,170.86	666,702,419.61	780,718,890.88
MT FRERE	987,408,400.87	46,818,872.82	98,635,606.88	1,132,862,880.56	767,285,560.84
MTHATA	1,845,147,950.85	60,279,653.20	117,867,271.64	2,023,294,875.69	1,801,119,154.89
NGCOBO	869,047,149.54	54,744,918.90	58,849,726.56	982,641,795.01	936,901,626.30
PORT ELIZABETH	886,251,658.14	372,465,245.70	5,710,128.92	1,264,427,032.75	5,349,889,883.34
QUEENSTOWN	487,677,254.31	75,024,072.94	20,678,571.43	583,379,898.67	1,427,038,368.02
QUMBU	945,455,132.16	83,379,101.13	87,940,823.87	1,116,775,057.17	801,998,944.10
STERKSPRUIT	596,208,412.59	88,049,810.45	31,730,815.69	715,989,038.73	1,274,937,396.23
UITENHAGE	471,893,523.46	99,513,182.35	4,270,384.87	575,677,090.67	2,312,490,144.06
GRAND TOTAL	21,231,450,158.43	2,171,288,836.56	1,431,977,235.69	24,834,716,230.68	36,622,149,472.47

Table 5.3: Cost Estimates

This table shows that the total repair cost amounts to R1,43bn and the total upgrading (replacement) cost to R2,17bn. When these are added to the cost of eliminating backlogs, the total amounts to R21,23bn.

The definitions of these categories and the basis for calculation are explained briefly below:

➤ **Repair Cost**

This cost is based on the condition rating of the building. This comes from the EFMS database, the data of which was captured during condition assessments that were undertaken in 2003. A value for reinstatement (per square meter) is attached to each condition rating, and this is then multiplied by the area of the building to determine the repair cost. These values reflect May 2008 costs.

- **Upgrade Cost**
In this case, “upgrading” refers to the replacement of the existing facility where its condition is such that it is no longer considered functional or economically repairable, eg: mud structure schools/classrooms. Also included herein are the costs of providing services such as electricity, water supply or fencing if these are not provided at an existing facility. The cost of such upgrading is also based on May 2008 cost estimates.
- **Backlog Cost**
As stated earlier, the backlog cost is based on providing facilities in accordance with the norms and standards contained herein. These costs are based on May 2008 estimates.
- **Replacement Cost**
The replacement cost is shown merely to give the reader an indication of the value of the Department’s current building. This is the present day cost of replacing the existing buildings in its current asset list.

This figure does not represent the current asset value in market terms, but is used in determining budgetary requirements for annual maintenance.

5.4 **Summary and Spatial Representation**

The total backlog, repair and upgrading cost to ensure the adequacy of all GET and FET schools (R24,83bn, as stated above) is shown graphically among the districts in Figure 5.4 below.

Note that these are shown in different colours to distinguish the categories above, viz:

- Backlog cost
- Repair cost
- Upgrade cost

The high repair costs in densely populated areas such as Port Elizabeth are as a result of the large amount of infrastructure there.

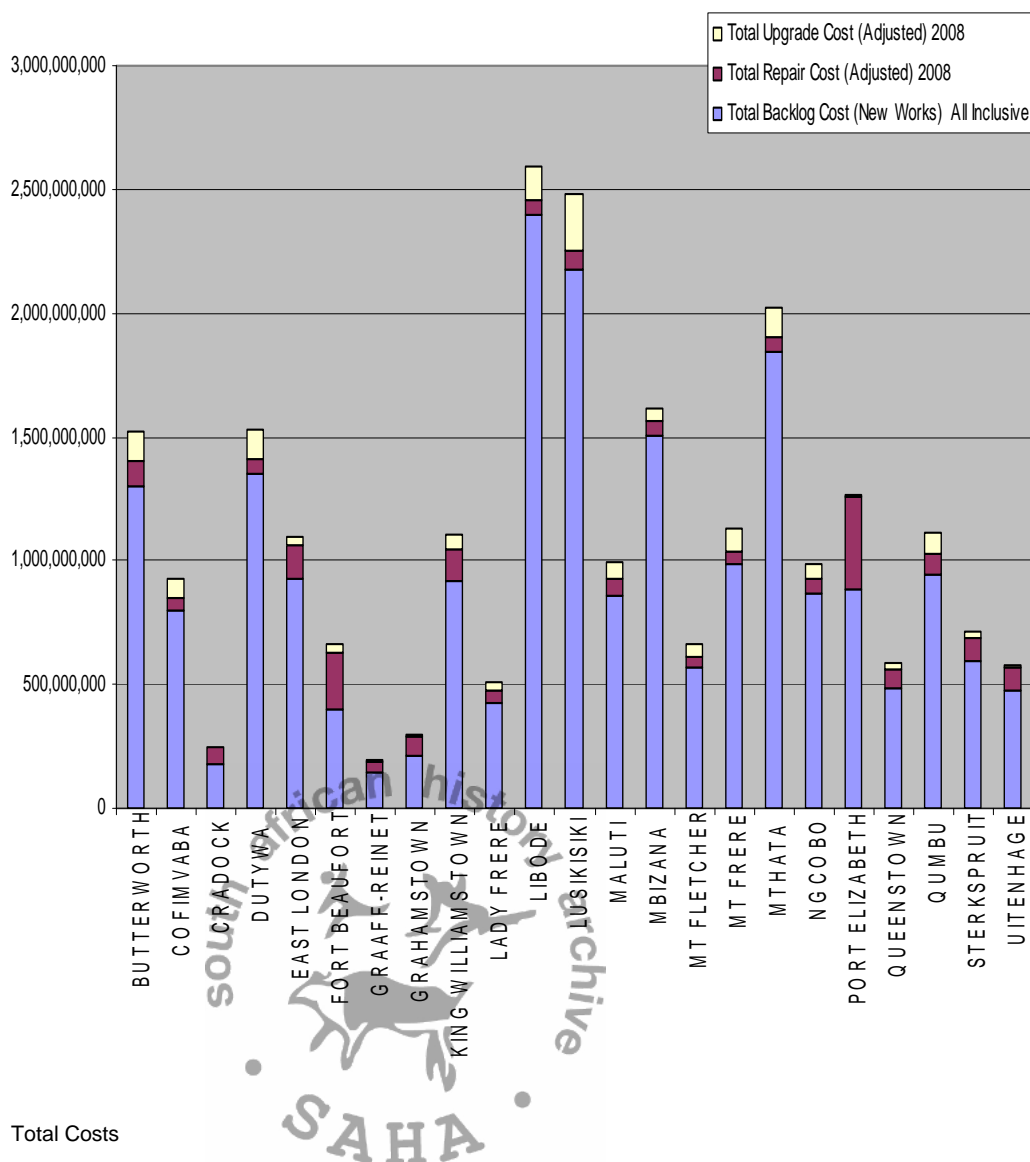
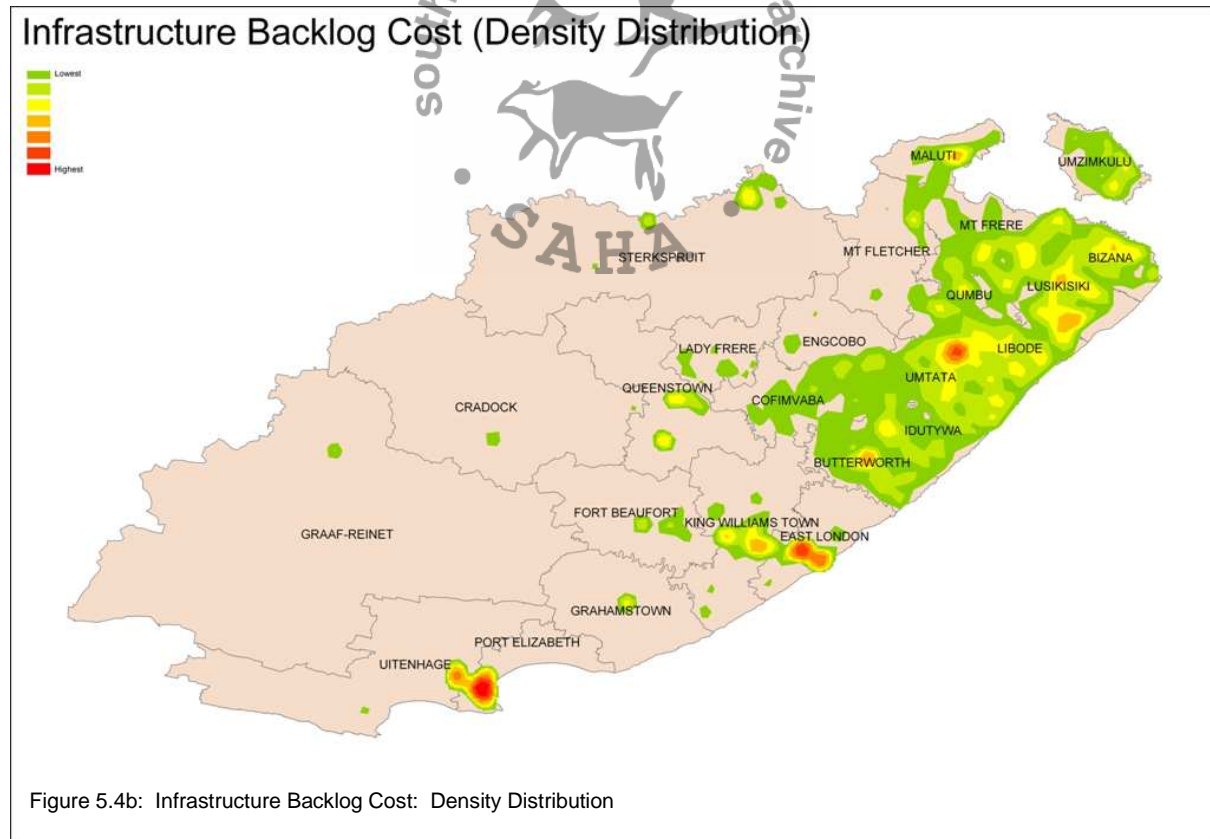
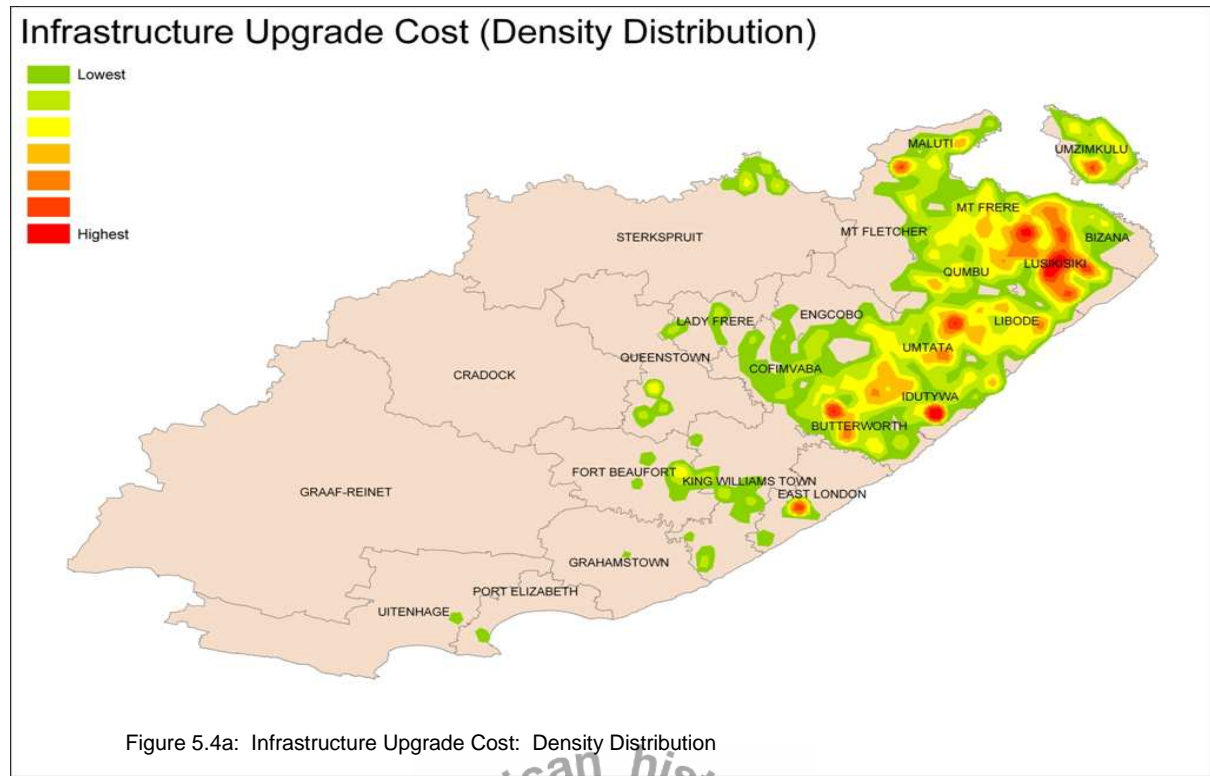


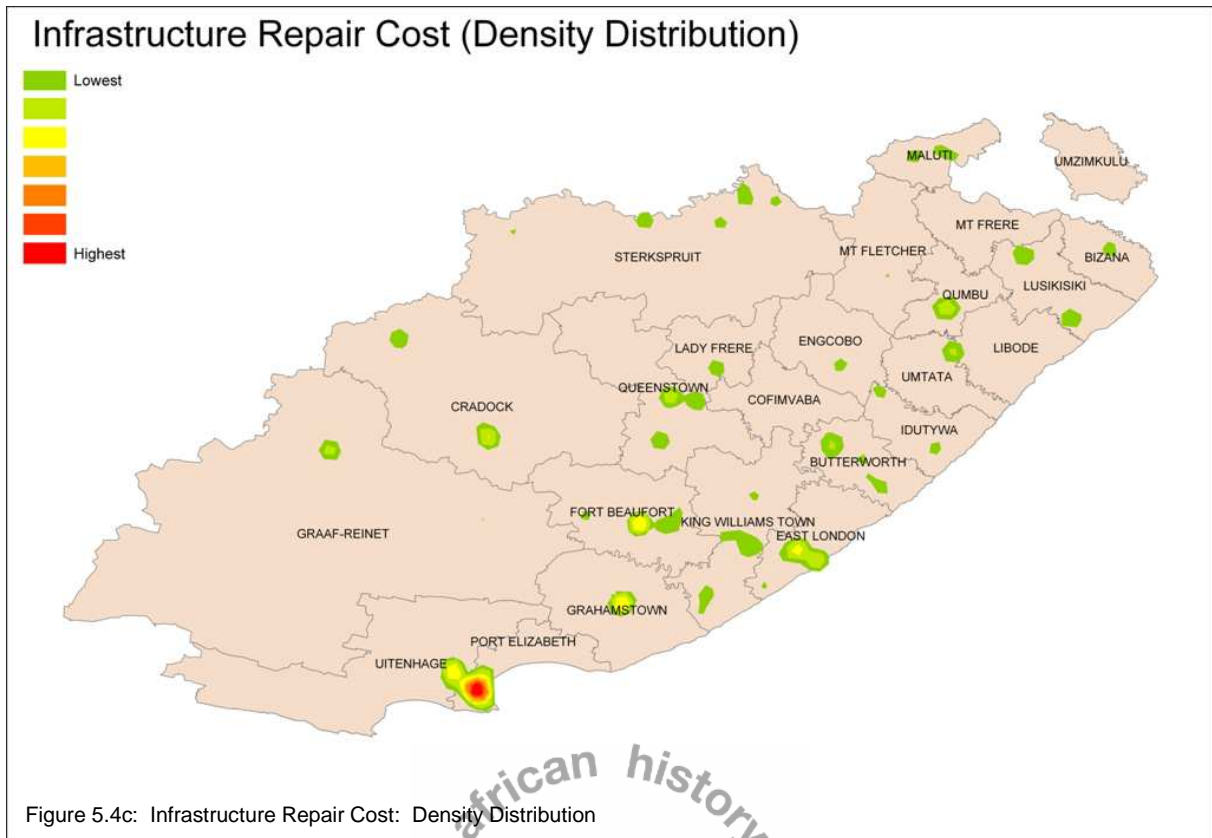
Figure 5.4: Total Costs

The various components of eliminating these shortcomings are shown spatially on the following pages. These give a good indication of where the hot spots are. For each of these components (as defined earlier herein) viz:

- Backlog elimination
- Repair/reinstatement
- Upgrading/replacement

The information is shown spatially in the maps on the following pages. These maps illustrate the density distribution of each of the 3 indicators, viz backlogs, upgrading and repair. This is the relative density of the particular need in question, and gives a good indication of where available funds can most effectively be utilised within an area.





6. ASSET MANAGEMENT

6.1 Strategic Objectives

In order to attain/achieve our vision, the Department has commitment to its mission as follows:

1. Eradicate all mud structures (schools with no brick and mortar), by the end of 2008/9 financial year.
2. Eradicate all inadequate structures (major renovations and replacement of temporary structures by 2010), and relocate those in good use to Farm and/or Small Schools, and utilize them as relief in cases of emergency.
3. Provide water and sanitation, and electricity to all schools by 2009.
4. Progressively increase funding for continuous maintenance of schools, as top-up where maintenance costs exceed provision in terms of norms and standards.
5. Establish Cluster Multi-Media Centres for the improvement of provisioning of rare and/or scarce skills:
 - 5.1. comprising of an instructional hall with a foldable partition; Science and Computer laboratories; library; and technological/audio-visual unit, by 2014
 - 5.2. identifying and progressively equipping existing and/or newly built schools, moving from the concept of the Dinaledi Project
 - 5.3. attaching a similar District Model to the Municipal Multi- Purpose Hall, by 2010
6. Forge links for strong collaboration and co-operation between:
 - 6.1 The Department of Arts and Culture, as well as District and Local Municipality for the establishment of reasonable Zonal Sporting facilities by 2010
 - 6.2 Local Government and Business Sector for the establishment of Cluster residential facilities in deep rural areas, to maximize the theory of economic rent, in terms of quality and effective teaching and learning
 - 6.3 Departments of Health, Agriculture, Water Affairs and Forestry, and Social development for the establishment of food gardens for sustainability of School Nutrition Programme
 - 6.4 Department of Transport, Public Works and Local Government for provisioning of suitable transport system and road networks and bridges, for effective scholar transport, wherein no viable schools can be established by 2009

- 6.5 Supply Chain Management for strengthening the system of Asset Record Management for effective, regular upkeep and/or updating of asset registers; (acquisition, maintenance, losses and disposals, as well as vandalism).

6.2 Routine Maintenance Plan

6.2.1 Maintenance Plan

To date routine maintenance has been fairly limited, as the emphasis of the infrastructure programme has been on eliminating historical backlogs and replacing uninhabitable buildings, such as mud structures.

Typically the annual routine (day to day) maintenance budget has been in the order of R50 – R80m. This is about 0,2% of the replacement value of the current asset stock, which is well below the industry norm of 2%.

Maintenance funds are transferred directly to the schools to which they are allocated (Section 21 schools) or to the District office to procure services on their behalf (Section 20 schools).

The Department:

- is systematically improving the quality of information on which routine maintenance is based. The EMIS and EFMS support this function
- intends increasing this portion of the infrastructure budget systematically but significantly in the medium term, and also to put a separate maintenance programme in place, using developing contractors and local expertise as far as possible
- will maintain a secure off-site records room for all relevant asset related documentation, in addition to operational files kept in the offices of the Facilities Management unit.

6.2.2 Standards and Specifications

Schools are expected to maintain their buildings to the same standards as that of the original construction, which should be according to the Department's design standards and specifications as determined in consultation with the DPW. These are available from the Department's Facilities Management unit.

District offices are accountable for the maintenance of their schools. Where any technical support is required, the local DPW office should be consulted. Currently the capacity of the DPW in the regions is also limited, and this requires attention.

6.2.3 Summary of Future Costs

According to the industry norm of 2% of replacement cost as an annual maintenance budget, the Department would be expected to allocate R720m to routine maintenance this year and increase this annually in line with escalation and new infrastructure being built.

6.3 Renewal/Replacement Plan

6.3.1 Conventional Building Programme

This programme addresses the shortage of educational facilities (mainly classrooms) together with the refurbishment of existing facilities where necessary. The necessary facilities required are provided in accordance with the norms and standards and levels of service as described previously. All the required facilities as determined are provided during a single intervention (ie: preferably not phased), the intention being that the Department should not need to return to any particular school until the medium to long term.

The main focus of the conventional programme is on the eradication of mud structures and the replacement of other inadequate and/or unsafe structures.

The Department's current policy is to split FET and GET schools in accordance with the national model for re-alignment, and this approach will be followed with all new schools that are built.

6.3.2 Eradication of Mud and Unsafe Structures

All new structures to be provided will be built according to the requirements of an ideal school.

The mud structure crisis situation will be addressed concurrently with the finalisation of the projects under way. This programme will provide for a master plan on each site on the basis of an ideal school. Initially only basic facilities will be constructed, with the balance of the facilities following incrementally.

The split in funds among this and the foregoing will vary, but initially it is foreseen that a significant portion of the available budget will go to this programme.

The conventional and the mud structure programmes are the Department's major infrastructure interventions, and normally comprise approximately 70% of the annual budget.

6.3.3 Emergency Intervention

Emergencies are defined as situations arising from failure of infrastructure, resulting in conditions which threaten lives or cause misery.

The S-G or delegated official can invoke emergency procurement procedures to deal with crises which occur and are acknowledged as emergencies.

6.3.4 Water and Sanitation

The Department is attempting to address the backlog in sanitation and water supply at schools, and has a dedicated programme for this. This is dealt with on an area basis, prioritising areas of greatest need first (especially areas that are prone to cholera outbreaks).

The Department collaborates closely with DWAF to plan and co-ordinate water supply and sanitation programmes to schools and clinics.

6.3.5 Fencing

There is a programme for fencing of school buildings and sportsfields. Stock fencing is provided around the perimeter, with security fencing around the buildings.

6.3.6 Electrification

All schools will be electrified where electricity supply is available. Where there is no electricity as yet, but the school is planned for inclusion in the Eskom grid, conduits will be provided and these blanked off at switch and plug points. (If the school is outside the Eskom grid, it will be included in the Department's non-grid electrification programme. This provides for essential electrification such as lighting).

The Department will meet with Eskom Electrification Planning Management (Schools) and determine the number of schools that will be electrified by Eskom. This will establish the schools electrification programme and promote alignment between this and the DoE infrastructure programme.

Ultimately all schools are to be electrified. In areas where grid electrification is not planned, non-grid electricity will be provided. There is a small but continuous process in place to upgrade non-grid electrification.

6.4 Creation/Acquisition Plan

6.4.1 Selection Criteria

Although overwhelming majority of infrastructure projects are extensions, replacement and/or upgrading on existing sites, the Department does provide new schools in areas where increasing population density demands this.

Site identification is based on proximity of demand and availability of sites.

- Establish the location of the schools property register
- Determine where it should be located

- Create property file for each school and locate within register
- Review the process of establishing a new school
- Consult with DPW with regard to the acquisition of property

The EFMS is used as a tool to identify highest priorities in terms of weighted criteria as described earlier herein. The two main criteria for the provision of new facilities, or upgrading/replacement of facilities are the following:

- Shortages of accommodation/facilities (ie overcrowding/backlogs)
- Condition of existing facilities (particularly if these are considered unsafe or unsuitable for tuition)

6.4.2 Standards and Specifications

The standards and specifications for the provision of new facilities, and for the upgrading/replacement of existing facilities are all set out in the Department's Design Manual (Reference 4), and are as described earlier herein.

6.4.3 Summary of Future Costs

The estimated present day costs of eliminating all the backlogs, upgrading/replacement, and repairs to an acceptable standard are set out elsewhere in this Plan. The projected costs of addressing all the projects on the project list for the current MTEF period are set out in Annexure A of this Plan.

6.4.4 Disposal Plan

The Department seldom disposes of any of its physical assets, but the cases that do occur are briefly described below.

Where the Department replaces a dilapidated or unsafe structure, the said structure is required to be demolished to prevent any harmful accidents. Where the structure is still sound (but unsuitable for tuition purposes) the SGB is given the option of retaining the structure for storage or other purposes, at their own risk and cost.

In certain, though rare, cases the Department owns property which it may decide it no longer needs. In such cases:

- properties no longer needed are handed over to the DPW
- properties may be sold off once the necessary approval has been obtained from the Provincial Exco
- disposal process is handled by the DPW
- DoE property register must be updated accordingly
- disposal procedure must be reviewed and updated

6.4.5 Construction and Maintenance Plan

The Department's construction programme is set out in detail in Section 7.5 of this Infrastructure Plan, and therefore not repeated here. There it can be seen that, while there is a broad range of project sizes, the predominance is smaller projects which target the replacement of mud structures with basic facilities. The size of these projects also facilitates the awarding of contracts as the largest number of contractors in the province is also in the lower CIDB gradings.

The Department subscribes to the EPWP objectives, and has a dedicated EPWP programme where emerging contractors are trained and developed.

The Department has taken a conscious decision to increase its commitment to the maintenance of its assets, and this is reflected in its budgetary allocation to this component (see Section 7.5). A strategy for planned maintenance is also being developed, and a programme for dealing with the day-to-day maintenance requirements of schools is being put in place.

6.5 Disasters

Major disasters (such as tornado or snow damage) on a wide scale are addressed on the basis of emergency intervention. Once a disaster has formally declared, funds can be sourced from a special provincial allocation.

The Department collaborates closely with the relevant Municipality who will have established a disaster management team.

The Department needs to formulate policy or directive in this regard, if such does not yet exist.

7. FINANCIAL SUMMARY

7.1 Basis for Estimates/Key Assumptions

All cost projections contained herein are based on May 2008 estimates, and have not been escalated. This is consistent with Treasury guidelines for infrastructure planning.

The assumptions and basis for estimates is given in the costing model, which is included in Annexure A.

7.2 Valuation Forecasts/Backlog Implications

As set out in Section 2 of this Plan, the present day cost of eliminating backlogs and bringing all buildings up to the required standard, as per the Department's norms, amounts to R21,23bn. In addition, the present day cost of upgrading mud structures, etc (R2,17bn) and the maintenance (repair) backlog (R1,43bn) must be added to this figure. An annual allowance for ongoing maintenance also needs to be made.

In order to consider funding options for completing all this outstanding work, a number of scenarios will need to be considered. To illustrate the magnitude of the challenge, the following scenario for eliminating backlogs and addressing current and outstanding work is set out below:

➤ Eliminate backlogs in facilities as per norms	13 years
➤ Upgrade (ie: replace unacceptable structures	6 years
➤ Repair existing buildings to serviceable standards	5 years
➤ Percentage of replacement cost of asset to be allocated annually to ongoing maintenance	1%
➤ Annual escalation of building costs	5%

Note that the recommended percentage to be budgeted for maintenance is 2% of replacement cost per annum (some authorities even recommend 4%). This model has used 1% to limit distortion of the figures and progressively address the backlog in maintenance on a more realistic basis.

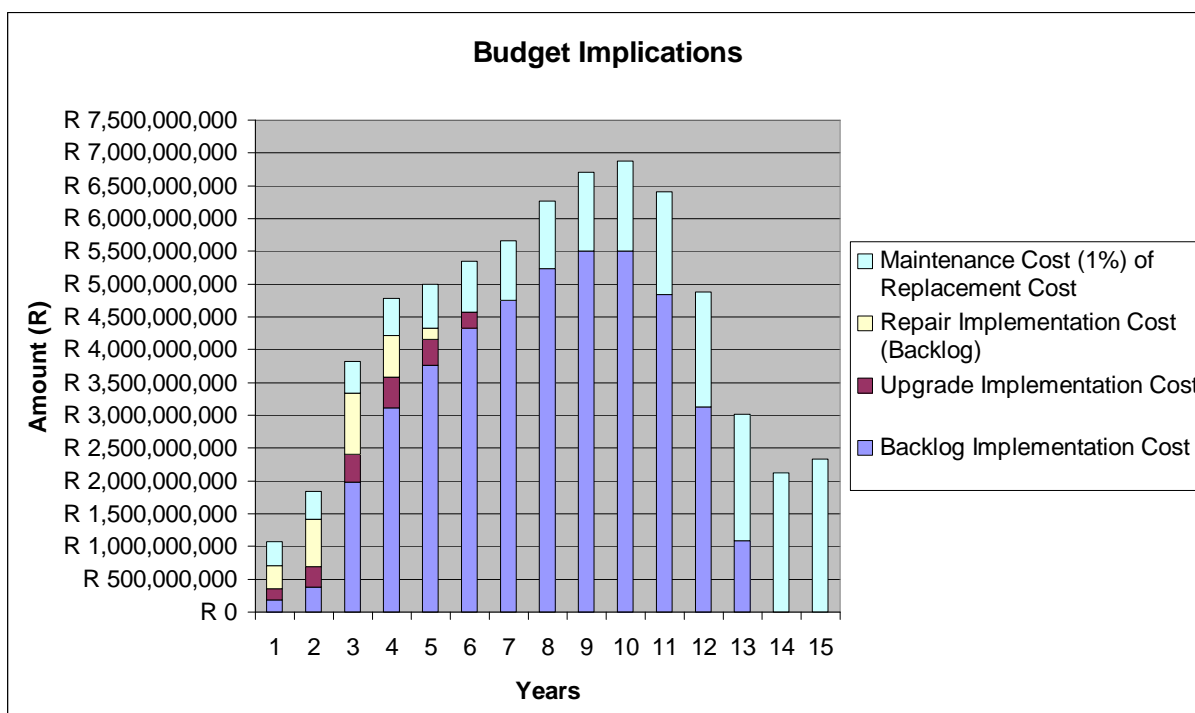


Figure 7.2: Budget Implications

The implications of the above scenario are shown graphically in Figure 7.2. This reflects a maximum annual budget of almost R7bn in Year 4 and an average annual budget requirement of approximately R4bn.

Clearly this is not achievable in the current circumstances where indicative annual budgets are in the order of R1bn – R1,5bn. Significant policy decisions therefore need to be taken around this issue, viz:

- Levels of service
- Target dates
- Budgetary allocation
- Sourcing of funds

However, one also needs to look outside the Department before embarking on any sudden major budgetary increase. The capacity of the industry needs to expand to deal with additional requirements - an aspect that needs to be explored with, for example, the Construction Industry Development Board (CIDB).

As important, too, is the issue of sustainability. To this end, the Department needs to ensure that its funding base is consistent, and that there are no sudden deviations in its implementation programme that can have a negative effect on the industry – especially the emerging sector thereof.

7.3 Indicative Budgets

The indicative budgets for the current MTEF period are given below:

- 2009/2010 R 940, 235m

- 2010/2011 R1 332, 278m
- 2011/2012 R1 604, 659m

Despite being an improvement on previous years, these budgets are still wholly insufficient to begin addressing backlogs as described earlier therein. This issue needs to be addressed in the funding strategy below.

7.4 **Funding Strategy**

The background to the Department's funding strategy for infrastructure is illustrated in figure 7.4 below. This shows the budget requirement for the next ten years (as determined in Section 7.2) together with expected annual capex budgets projected from current levels of funding (ie: increasing by approximately 10% per annum).

As stated earlier herein, the possibilities are fairly limited, viz:

- Increase the annual budget to meet the needs at the agreed levels of service
- Lower the levels of service to reduce financial requirements to budget levels
- Extend the period within which backlogs are to be eliminated (However at current funding levels this is impossible if adequate funds are still to be made available for maintenance).

The final strategy will probably have to be a combination of all 3 of the possibilities listed above. However, the latter two are likely to be less palatable to the affected communities. It is therefore earnestly recommended that the management of the Department lobby strongly for redress funding to eliminate backlogs, and look to central Government support for accessing foreign donor funding to assist in this regard.

In particular it is maintenance funding that must be made more accessible to ensure the physical learning environment is adequately maintained, and potential donors are given peace of mind that any investment they may make will be properly cared for.

The graph (Figure 7.4) on the next page shows the implications of not meeting the funding requirements to eliminate the existing backlogs over the proposed 10 year period as described in Section 7.2. The total funding requirements to eliminate the existing backlogs over a 10 year period are compared with the expected capital works budgets over the same period, and the cumulative effect of the shortfall each year is illustrated graphically.

The graph in figure 7.4 clearly shows the huge discrepancy between budget requirements to meet declared norms and standards and the expected availability of funding, as well as the cumulative effect of the resulting annual shortfall in funding. It is this tension that needs to be carefully managed by the Department.

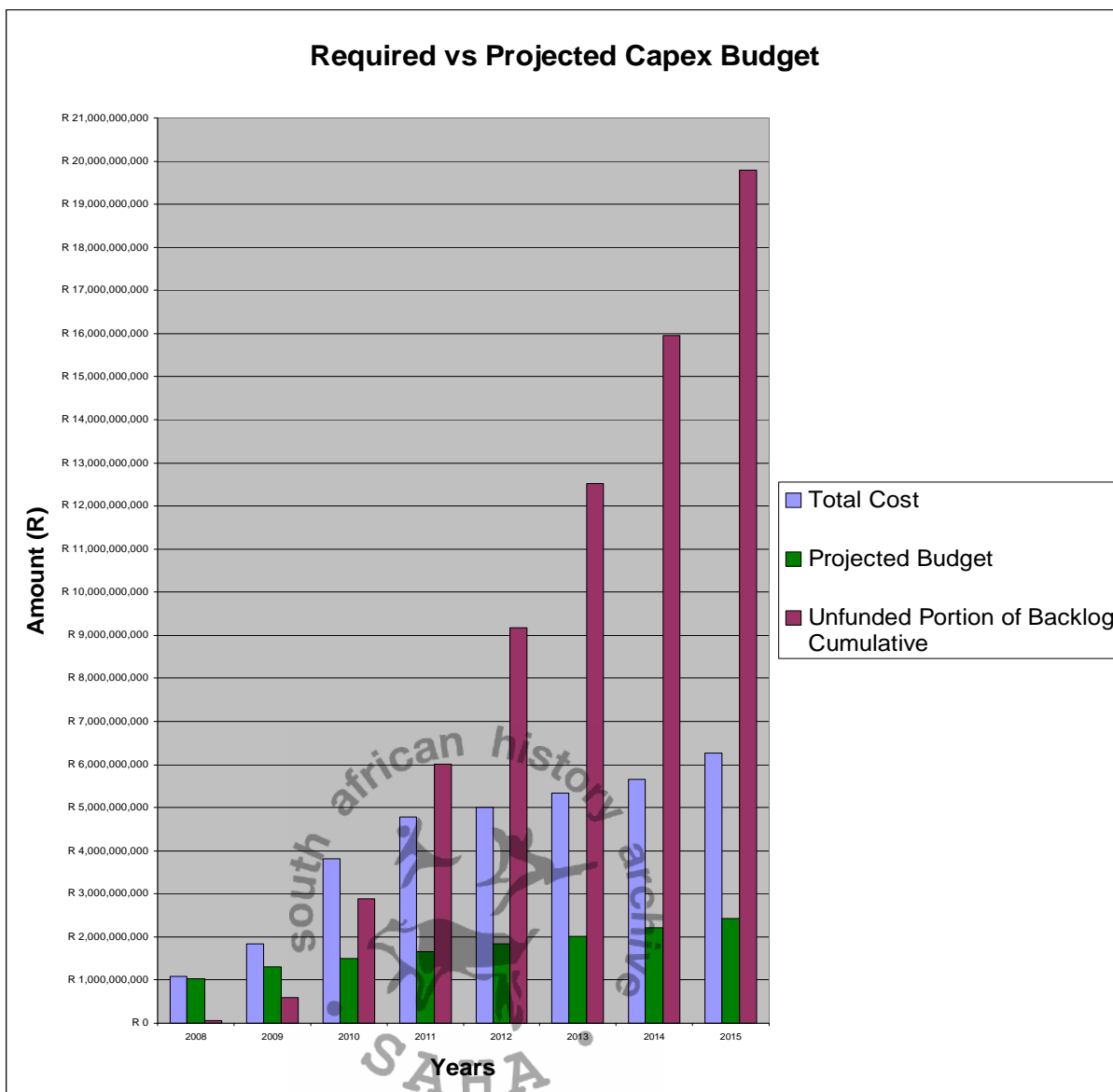


Figure 7.4: Required vs Projected Capex Budgets

7.5 Implementation Programme: 2009/10 Financial Year

7.5.1. Budget Summary

The total infrastructure budget for 2009/10 amounts to R 940 235. This has been allocated amongst the Departmental programmes as shown in the table below.

Category	Budget Allocation
New & replacement assets	R601 964 000
Maintenance & repairs	R106 019 000
Upgrades & additions	R169 056 000
Rehabilitation, renovations & refurbishment	R63 196 000
TOTAL	

7.5.2 Infrastructure Programmes

If the above amounts are translated into the Departmental programmes, the amounts are as set out below:

Programme	Budget Allocation
Prgme 1: Head Office & District Offices	R23 935 000
Prgme 2: GET & FET Schools	R624 599 000
Infrastructure Grant to Provinces	Included in above
Prgme 4: Special Education	R1246 861 000
Prgme 5: FET Colleges	R28 176 000
Prgme 7: Early Childhood Development	R102 250 000
Prgme 8: Learner Assessment centres	R34 413 000
Maintenance	Included in above
TOTAL	R940 235 000

Programme 1: Head office & District office development (R23,936m)

The Department will complete the provision additional office space at 9 District offices in the coming year, as well as at its Head Office. This programme also includes the services of the Programme Management Team and for development of the EFMS.

Programme 2: GET and FET Schools (R624,599m, incl IGP Grant)

This is by far the largest programme and comprises a number of initiatives, the major one being the eradication of mud structures.

The Department has 472 projects in various stages of completion that will run through the 2009/10 financial year. The budget is already over-committed, and no new projects will commence. Site assessments will, however, be done at 107 schools with a view to preparing them for implementation in 2010/11.

Maintenance also constitutes a significant portion of this programme, which includes a major multi-year hostel renovation programme.

Programme 4: Specialised Education (R126,861m)

The major commitment under this programme is to the completion of the Special Youth Care Centre in Bhisho. Additions and/or alterations will also be done to 13 special schools.

Programme 5: FET Colleges (R28,176m)

Additions and alterations are being carried out at 5 colleges in the 2009/10 financial year. Further work at the other colleges is programmed for the outer years.

Programme 7: Early Childhood Development (R102,25m)

The Department plans to add an ECD centre to a further 100 existing primary schools in the 2009/10 financial year.

Programme 8: Learner Assessment (R66,861m)

The Department plans to complete the provincial Learner Assessment Centre in Zwelitsha, as well as assessment facilities at 3 District offices during 2009/10.

8. ORGANISATIONAL AND SUPPORT PLAN

8.1 Organisational Arrangements

8.1.1 Contractual Arrangements

The organisational/contractual arrangements for the implementation of the Department’s infrastructure programme are shown diagrammatically in Figure 7.1.

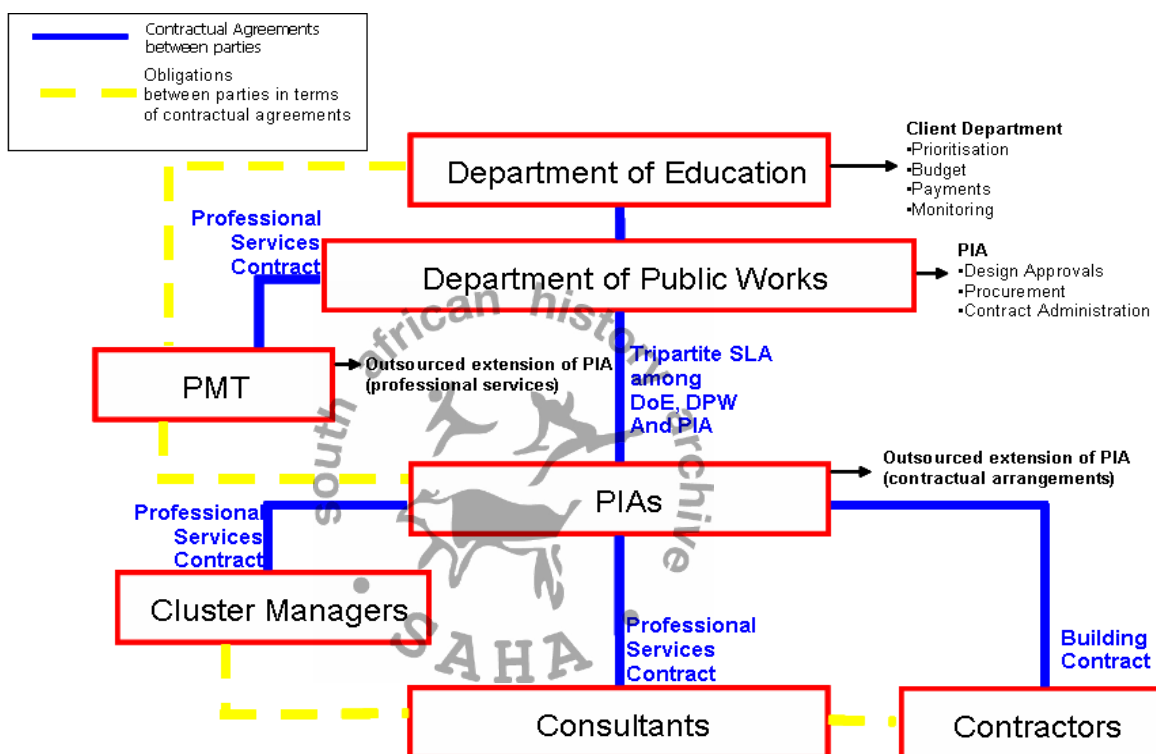


Figure 7.1: Organisational/Contractual Arrangements

8.1.2 Implementation Management

The delivery mechanism employed is prescribed in terms of a Provincial Exco resolution that the DPW shall be the Implementing Agent of choice for all provincial government departments. Where the DPW does not have the requisite capacity, it may engage other Implementing Agents to support this function. Currently the DoE is still party to such agreements with Implementing Agents, as indicated in the diagram above. While the Department of Public Works (or its Implementing Agents) is responsible for delivery, the Department of Education is still responsible for:

- Infrastructure planning
- Client-side programme management

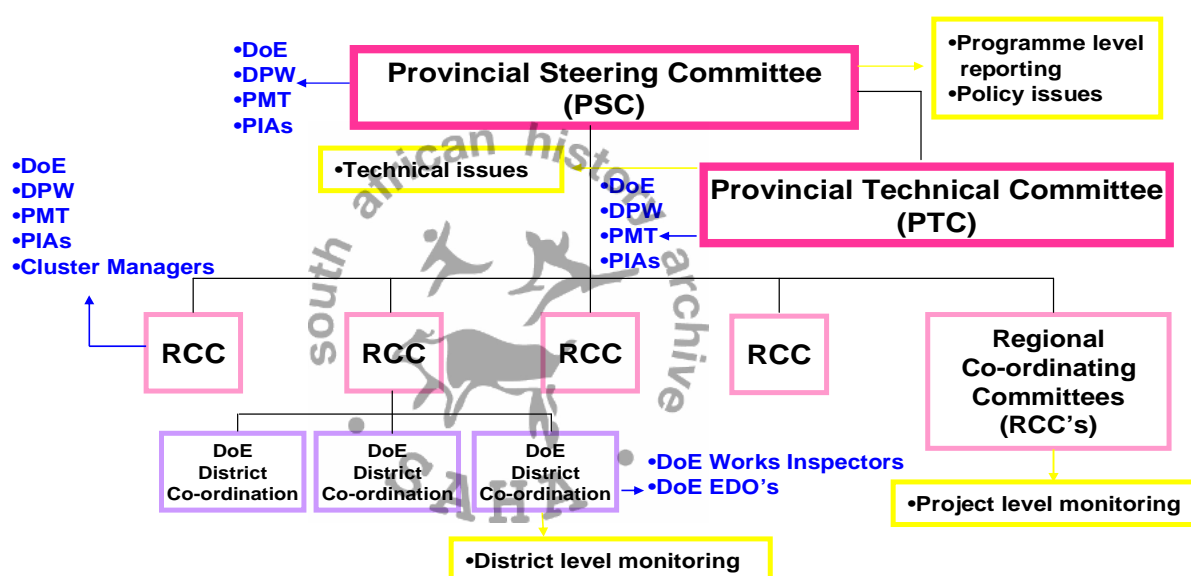
The Eastern Cape Department of Education manages the latter function through chiefly three structures, viz:

- Provincial Steering Committee
- Provincial Technical Committee
- Regional Co-ordinating Committees

The planning function is undertaken by the Eastern Cape Department of Education, and is based on information contained in its Education Facilities Management System (EFMS). This is also coupled to the Department's asset management function.

Both the planning (and asset management) and delivery management functions require sufficiently skilled personnel at both provincial and district level. These personnel requirements are described in the following section.

The programme implementation is managed by the following structure:



➤ Provincial Steering Committee (PSC)

Representation: Senior Management of Department of Education, Department of Public Works and Implementing Agents. Provincial Treasury also a member

Functions: Overall management of programme
Decision making body on all major issues affecting programme (eg: scope, budget, etc)

Meeting Frequency: Quarterly

➤ Provincial Technical Committee

Representation: Line function managers of Department of Education, Department of Public Works and Implementing Agents

Functions: Day to day decision making

Formulation of recommendations to the PSC
 Reviewing of all technical issues referred by RCCs
 Pro-active technical product evaluations

Meeting Frequency: Monthly

➤ **Regional Co-ordinating Committees (RCCs)**

Representation: Department of Public Works regional representatives,
 Department of Education district representatives,
 Regional management of relevant IAs, relevant IA
 Cluster Managers

Functions: Progress and quality monitoring

Meeting Frequency: Monthly

8.1.3 Roles of the Parties

➤ **Department of Education: (Client department)**

Infrastructure planning

- Strategic planning
- Project identification
- Prioritisation
- Budgeting
- Conceptualisation

Delivery management (client-side programme management)

- SLA management
- Payments/transfers
- Monitoring and evaluation
- Handovers

Asset management

- Facilities management
- Property management
- Electricity and telecommunications

Infrastructure systems management

- EFMS maintenance
- Data management
- Systems management

➤ **Department of Public Works (and Implementing Agents)**

Design and procurement

- Appointment of consultants
- Design approvals
- Tender procurement

Construction

- Contract administration
- Payment recommendations
- Reporting

- Variations
- Commissioning

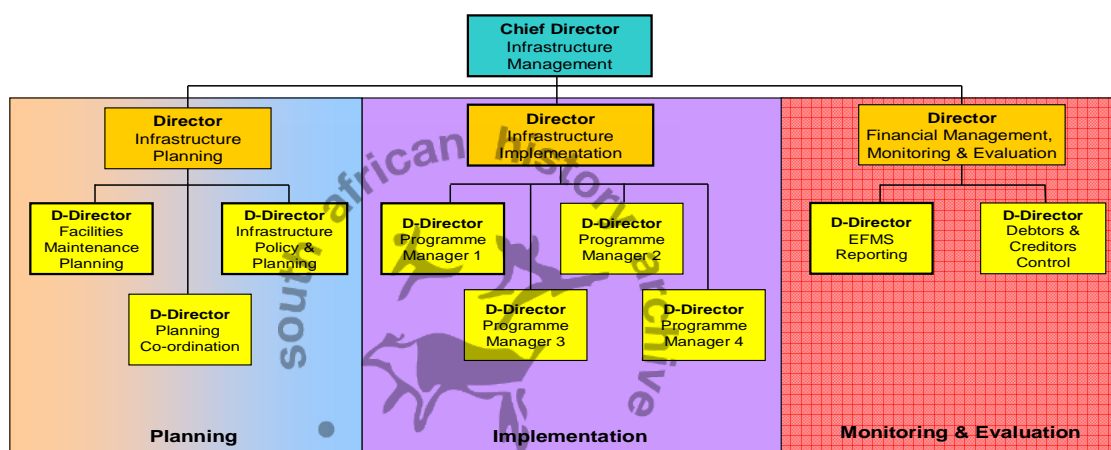
Note that the PIA is expected to comply with all the requirements of the PFMA, the CIDB Act, SCM regulations, and also promote the principles of the EPWP.

8.2 Human Resource Requirements

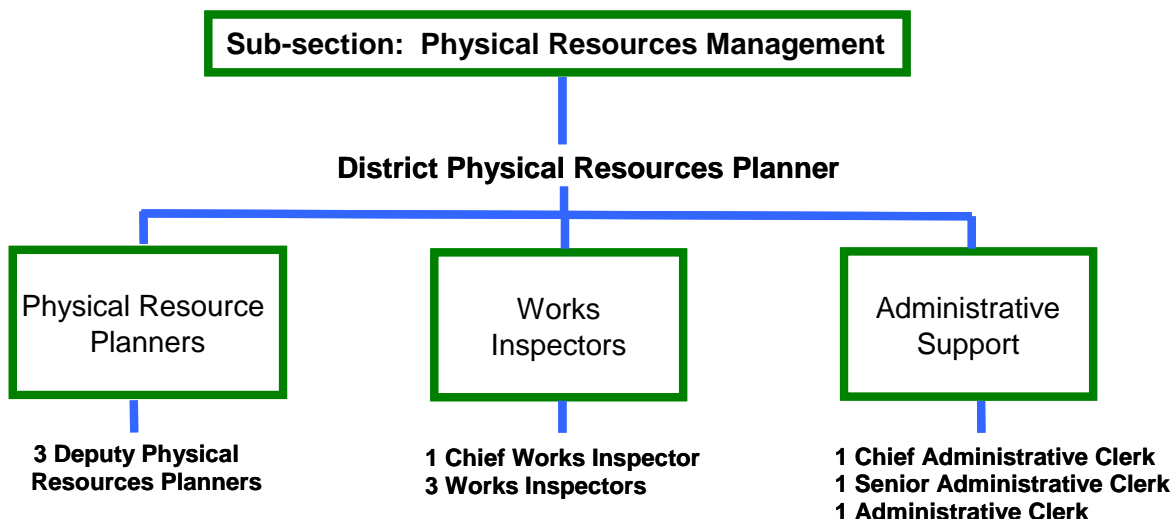
8.2.1 Required Internal Organisational Structure

The proposed structure for the Department of Education to manage a programme of this magnitude, and on such an extensive scale as the physical environment of the Eastern Cape demands, is set out below:

Provincial Level



District Level



The implications of this structure can be summarised as follows:

- Required staff complement 255
- Estimated annual salary requirement R45m

8.2.2 Current Staffing Levels

The current organogramme is shown below, together with an indication of the posts that are presently filled.

Provincial Level

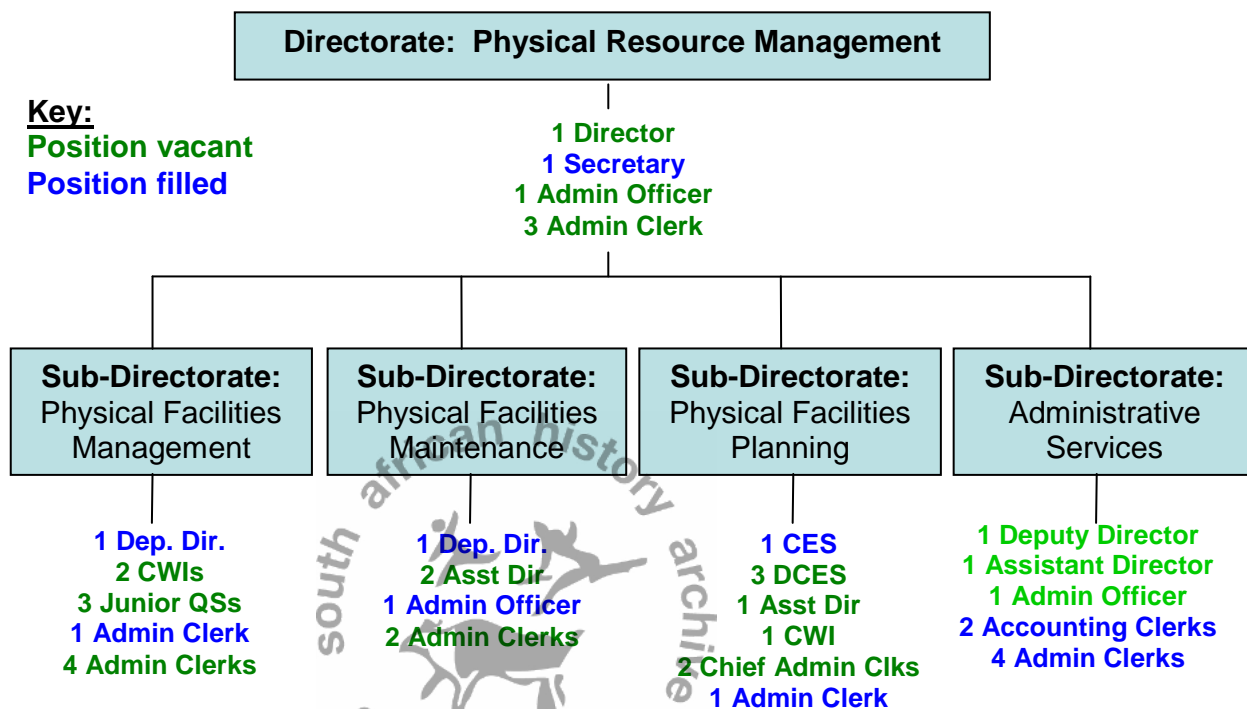
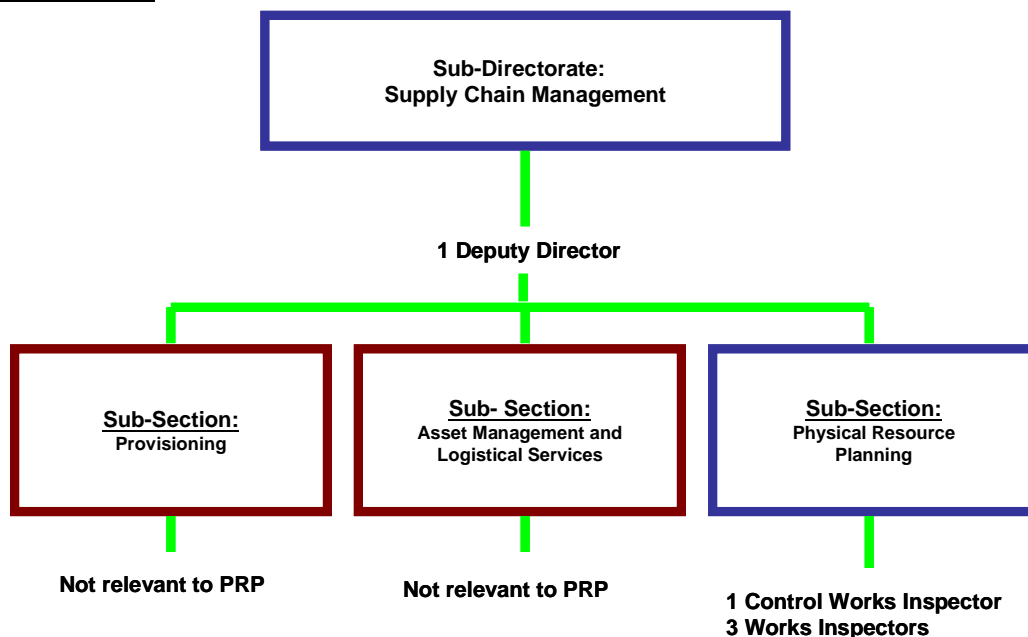


Figure 8.2.2: Organogramme for Directorate: Physical Resources Planning

Clearly the unit is severely understaffed, and therefore does not function along the lines indicated at provincial level.

District Level



Very few, if any, of the Physical Resource Planning posts are filled at district level. In fact the Department has only four Control Works Inspectors in the entire Province.

8.2.3 Interim Capacitation

The Department acknowledges that its Infrastructure & Facilities Management units (provincial and district) are badly understaffed. It also acknowledges that, given the current market conditions and other constraints, this situation will not be turned around in the short to medium term. Other arrangements therefore need to be made to enable the Department to perform its planning and delivery management functions. These are described in detail in the unit's Capacitation Plan.

Below is a brief summary of the current and recommended actions to improve the unit's capacity to deliver on its mandate:

1. Current capacitation initiatives

(a) Appointment of personnel

The Department has recently appointed 3 Deputy Directors and a DCES. Approval has also been given for advertising a further 7 posts, as well as District appointments.

(b) Appointment of Technical Task Team

To provide interim capacity for infrastructure planning and delivery management the Department has appointed a Technical Task Team comprising both built environment and finance professionals to support it in these functions.

(c) Enhancement of EFMS

The Department has commissioned the operationalising of the programme management module of its EFMS. This will, among other functions, enable it to access real time expenditure information and to produce reports automatically from a common database.

(d) Other support initiatives

During 2007 the Department approached the DBSA for assistance by way of project management capacity for its recovery plan. The DBSA has provided support in the form of 3 project managers who are assisting with both implementation management and systems enhancement.

(e) Capacitation Plan

As part of its commitment to developing its capacity, the Department has recently drafted a formal Capacitation Plan for its infrastructure unit, which is in the process of being approved. The recommendations below are extracted from this Plan.

2. Further capacitation recommendations

(a) Organisational Structure

- That the organizational structure set out in Section 6 hereof be adopted, which implies the creation of the following management posts:
 - 1 Chief Director
 - Directors
 - 9 Deputy Directors
- That job descriptions for the posts above, as set out in Annexure A, be approved.

(b) Human Resources

- That the current Deputy Directors be allocated to posts in the corresponding posts in the new organogramme.
- That approval be given for filling the additional Deputy Director posts identified.
- That an organizational development/work study expert be appointed to confirm the additional staff requirements and job descriptions.
- That the approval and recruitment of the proposed Director: Finance, Monitoring and Evaluation proceed with immediate effect.
- That in the interim a temporary external appointment be made in this position.
- That the current process of filling posts in the existing organizational structure not only proceed but be expedited.
- That an external support structure be developed to assist District offices in building capacity and meeting their infrastructure responsibilities, and that this be outsourced under a management contract.
- That a senior departmental official be made responsible for the implementation of this Capacitation Plan once approved.

(c) Management Information Systems

- That a formal process be developed to ensure that the EFMS data per school is updated regularly, ie: at least every 5 years. This process should be built on capacitating District offices in the longer term, but provide for mechanisms in the shorter term as well. These should include:
 - Assessments of entire school to form part of the close out procedure on all projects undertaken by the Department.
 - Training of works inspectors where available to undertake assessments on the basis of a prioritized schedule.

- Engagement of consultants to undertake assessments at identified schools in the vicinity of projects where they are involved.
 - Further assessments at high priority schools to be done through and as part of the EFMS operationalisation by extending the current service provider's terms of reference to manage this in conjunction with the Department.
- That the current initiatives to regularize the document filing and payment processes be formalized as part of the business process mapping to ensure that these follow formal procedures in future.
 - That the business process mapping proposed be expanded and utilized to identify further systems enhancements needed
- (d) Support Services
- That the roles of the current support structures (TTT, IDIP, DBSA and EFMS support) be optimized within their respective terms of reference, and that the co-ordination amongst these support initiatives be put on a more formal basis. This should be centralized within the office of the Chief Director or his delegate.
- (e) Infrastructure
- That additional office accommodation be procured as a matter of urgency, preferably as an extension of the TTT contract. This accommodation should be sufficient to accommodate the TTT personnel, as well as provide the additional space requirements needed by the infrastructure unit's own personnel.
 - That further accommodation needs for additional personnel as will be identified through the work study exercise be provided for by medium term plans for expanding the unit to its required capacity. This should include all the District offices as well.
 - Further infrastructure needs will also be identified through the work study exercise, and these should be provided for accordingly.

9. MONITORING AND IMPROVEMENT OF PLAN

9.1 Performance Measures

The Department sees the performance of this Plan not only in the achievements of the commitments set out herein, but also in the extent to which it reflects the realistic aspirations of the Department and, more especially, the extent to which it is acknowledged by all stakeholders as a comprehensive and reliable source of information on the entire Department's plan for infrastructure delivery and management in the short, medium and long term.

Performance measures are still to be set, but these will be designed to reflect the intentions expressed in the paragraph above.

9.2 Monitoring and Review Procedures

The Department, through the Chief Directorate: Infrastructure & Facilities Management, has committed itself to an annual review of the Infrastructure Plan to coincide with the annual budgeting cycle. This will include an evaluation of performance (both of the DoE, as well as the DPW and its implementing agents) over the past year against the Plan, using the various performance indicators as described earlier herein.

The above process will be facilitated by an active link being established between the EFMS and performance reports which are also being set up. This will make it easy to monitor the effectiveness of the Infrastructure Plan.

9.3 Improvement Programme

It is envisaged that significant improvements will be effected to this Infrastructure Plan with each annual update thereof, as infrastructure delivery proceeds and information systems are enhanced.

The improvement programme will be based on the following activities which will be undertaken annually, and incorporation thereof will form part of the annual review process:

- Interviews with stakeholders
- Monitoring of performance reports
- Benchmarking against international best practices
- External auditing
- Rigorous annual reviews



REFERENCES

- Reference 1: Division of Revenue Act: Act 1 of 2007
- Reference 2: South African Schools Act: Act 84 of 1996
- Reference 3: Eastern Cape Department of Education Strategic Plan 2006/2007
- Reference 4: Design Guidelines for Provision of Physical Infrastructure:
EC DoE 2005





ANNEXURE A:
Capex Programme Project List for 2008/2011