Province: Mpumalanga
Department: Education

Infrastructure Plan

2008 / 2009 to 2009 / 2010

Version Control

Revision	*Originator*	*Approved*	*Date*
0	Kajeni CJA		
1	Kajeni CJA		
2			

Date: 28 February 2008

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EXECUTIVE SUMMARY

1. PURPOSE OF THE PLAN

The purpose of the Infrastructure Plan is to indicate how the Department of Education (MDoE) wishes to manage the provision of infrastructure within the Province. The Plan serves as a medium to justify the provision of infrastructure to schools. It also serves as a communiqué to inform the stakeholders of the facilities to be provided and finally complies with the requirements of the Infrastructure Delivery Improvement Programme (IDIP) and the Division of Revenue Act, 2007 (DORA).

2. DESCRIPTION

The Plan deals with the provision of new schools where a need has been identified for such facilities. Further to this, additional classrooms are also provided where there is overcrowding. Schools that do not have other facilities like administration blocks, laboratories, libraries and computer centres are gradually provided with these to enhance teaching and learning.

The provision of fences where there is none or are dilapidated, electricity, water and sanitation forms part of the package. Ramps and rails are also provided gradually to make schools accessible to all. The provision of ramps and rails must comply with the standards as set by accredited bodies like the South African National Standards and the Council for Scientific and Industrial Research (CSIR).

3. LEVELS OF SERVICE

The desired level of service is determined through the norms set for the provision of classrooms to schools. The classroom learner ratio used in the Primary schools is currently forty learners to one classroom while in the Secondary schools it is thirty-five learners to one classroom. These norms are used to determine whether a school needs additional facilities or has idle capacity. The Infrastructure Plan must gradually work towards reducing the classroom learner ratio to an extent that these become acceptable.

All schools that have eight classrooms and above that are optimally utilised should be provided with administration blocks. This arrangement ensures that educators are able to do their work in a conducive climate. Idle capacity of classrooms should be considered for conversion into administration space.

Secondary schools should be provided with laboratories to ensure that the science subjects are taught effectively. Libraries cum media centres will gradually be provided to all schools to ensure that the culture of reading and research is inculcated throughout the education system. The construction of these facilities should include the furnishings needed in such structures to ensure immediate use after completion. The elimination of schools without laboratories and libraries is the ultimate goal under this category of facilities.

A decision to construct computer centres for schools within the Province was taken by the Member of the Executive Council (MEC) to ensure that learners exit the education system with basic computer skills. Schools that offer Computer Science, as a subject and do not have this facility will benefit first. Classrooms that are not utilised in schools can be converted to such a facility through the advice from the Department of Public Works (DPW). The presence of computer centres in schools is the measure against which the Directorate should gradually be measured against.

Water and sanitation are basic needs to all citizens. The provision of water in places where there is bulk water supply is mandatory. In instances where there is no infrastructure but ground water is available, boreholes need to be provided. Other places do not have infrastructure for bulk water supply and are also void of underground water. Such places should be provided with tanks so that water trucks from Municipalities can fill these up when required. The provision of water and sanitation to all schools cannot be overemphasised.

Fences are a necessity to ensure that schools are safe. New schools must be provided with steel palisade fences while existing schools will receive this facility when a need arises. The number of schools with fences will determine the success registered on this matter.

The provision of electricity to all schools is another matter that needs attention. Schools cannot use modern technology in instances where there is no electricity. A challenge, however, is the level of vandalisation that takes place regarding this facility. School Governing Bodies (SGBs) must work hard to educate the communities on the ownership of schools.

Over and above the facilities as outlined, schools must also have ramps and rails. This is to ensure that schools are accessible to all and sundry. The accessibility of schools is a measure that needs to be taken into account as the year progresses.

4. COMMUNITY NEED

The norms for the provision of classrooms and other facilities as outlined above are used to determine whether needs exist in the communities. Over and above the norms different factors are considered to indicate whether new or additional facilities are needed.

The changes in the curriculum mean that other facilities should now be provided. To this end the MDoE must ensure that such facilities are provided to satisfy the Constitutional requirements of making education accessible to all. Key to this is the requirement to provide quality education to the citizens of the country.

The demand for new schools and additional facilities will continue to be in existence due to the mobility of some families. In areas where communities are resettled due to the Land Restitution processes, new facilities may have to be provided, more especially, in instances where no facilities exist in the neighbourhood.

Young couples leave their parents to go and settle in other places. These movements increase the number of households in the settlements where such couples decide to go and settle. In some instances such people are settled in newly developed areas where no facilities exist. In such a scenario, new schools must be provided. If families settle where there are existing communities, the capacity of existing schools is considered and additional facilities provided or new schools established where this warrants it.

The school buildings that are old and were not well-maintained may also have to be replaced. This occurs in instances where buildings have structural cracks that cannot be repaired. The buildings in this category are mainly those that were constructed by the communities and thereby not necessarily meeting the building standards.

5. LIFECYCLE MANAGEMENT PLAN

Previously school buildings were constructed and handed over to communities without much ado. The buildings would then deteriorate due to the absence of maintenance. The introduction of the Infrastructure Development Improvement Programme (IDIP) meant that an Infrastructure Maintenance Plan should be put in place to ensure that buildings are renovated after a certain period of time to keep them in good condition over the period of their lifespan. Names of the first batch of schools that would need to be renovated are in the process of being captured in preparation for the compilation of the Infrastructure Maintenance Plan.

Newly built schools are to be captured onto the Infrastructure Maintenance Plan including those that are renovated. All schools will then be incrementally captured onto the list that has been commenced with to ensure their planned maintenance over their lifespan. The budget allocated for infrastructure will gradually be allocated to the maintenance of existing school buildings.

Together with the lifecycle maintenance of buildings will be the plan to dispose of buildings after they shall have served their purpose in terms of age. An allocation needs to be made to ensure that the buildings that are no longer in use are disposed of. It is also important to note that state buildings that are no longer in use are handed over to the DPW who serve as custodians of Government buildings. The Disposal Plan is currently non-existent and the presence of an Asset Register will come in handy to have a bird's eye view of all the facilities within the Province.

6. FINANCIAL SUMMARY

The MDoE uses the allocation given to it from own revenue (Equitable Share) to construct new schools and add facilities to existing schools as well as maintaining some of the buildings. Over and above money made available from own revenue, the MDoE also utilises money made available through the Provincial Infrastructure Grant (PIG) allocation to put infrastructure in place as well as maintaining some of the buildings.

The MDoE also works in partnership with Business through the Mpumalanga Education Trust Fund to construct some of the schools. The schools normally provided under this category would be extracted from the Infrastructure Plan that is operational in that financial year. The Trustees and the Superintendent General to ensure accountability control the money made available through this partnership. The Trust appoints its own Project Managers and contractors to ensure delivery of infrastructure within the period as agreed upon.

The table that follows is an indication of the projected budget allocation over the MTEF period and how it will be expended. It is, however, recommended that the projects for 2008 / 2009 not be implemented in order to ease up the pressure on the budget created by the previous projects that are incomplete.

MEDIUM TERM EXPENDITURE FRAMEWORK FORECASTS

CATEGORY	2006 / 2007	2007 / 2008	2008 / 2009	2009 / 2010	2010/2011
	R'000	R'000	R'000	R'000	R'000
Total Allocation	**287,558**	**400,587**	**417,500**	**503,272**	**559,082**
Programme 1	**0**	**6,500**	**8,000**	**9,000**	**9,441**
Sub - Programme: Regional / Circuit / Teacher centres	0	5,580	7,000	7,800	8,262
Professional Fees		920	1,000	1,200	1,179
Programme 2	**271,526**	**347,898**	**322,059**	**405,958**	**442,548**
Sub - Programme: Capital Projects	123,295	71,832	116,846	171,497	194,020
PIG	108,908	180,066	150,721	175,200	185,712
PIG Surrender		45,000			
Professional Fees: Capital Projects	17,730	30,087	32,054	32,217	34,150
Professional Fees: PIG	21,593	20,913	22,438	27,044	28,666
Programme 4	**0**	**13,000**	**7,000**	**6,000**	**0**
Capital Expenditure: Special Schools		11,000	6,020	5,160	
Professional Fees		2,000	980	840	
Programme: Maintenance	**2,482**	**7,500**	**38,750**	**53,352**	**84,828**
Sub - Programme: Reactive Maintenance	2,482	7,500	19,375	26,676	28,276
Sub - Programme: Proactive Maintenance			19,375	26,676	56,552
Organisation & Support	**1,089**	**3,189**	**6,691**	**8,962**	**22,265**
Technical Support	1,089	3,189	6,691	8,962	22,265
Movable Classrooms	**12,461**	**15,000**	**15,000**	**0**	**0**
Sub - Programme: Movable Classrooms	12,461	15,000	15,000		
Special Projects	**0**	**7,500**	**20,000**	**20,000**	**0**
Themebeka, Duvha & Wilge		7,500	20,000	20,000	

Table 16: Financial Matters - Continued

CATEGORY	2011/12	2012/13	2013/14	2014/15	2015/16
Classrooms	88,350	88,350	88,350	76,000	83,600
Administration Blocks	63,918	63,918	63,918	63,918	55,332
Laboratories	18,444	18,444	17,172	25,440	19,080
Media Centres	43,248	43,248	43,248	43,248	43,248
Computer Centres	47,064	47,064	47,064	47,064	47,064
School Halls	64,872	64,872	64,872	64,872	64,872
Sanitation	32,368	32,368	32,368	32,368	32,424
Fences	58,194	45,792	45,792	45,792	43,884
Electricity	6,837	6,678	6,678	6,678	6,678
Water					
Kitchens	45,156	45,156	44,520	44,520	44,520
TOTAL	**468,451**	**455,890**	**453,982**	**449,900**	**440,702**

7. ORGANISATIONAL AND SUPPORT PLAN

The MDoE is currently void of technical staff to deal with matters that may be technical in nature. A need therefore exist that the services of Quantity Surveyors and / or Engineers should be employed at Regional Offices to ensure proper planning from the onset. The services of the Quantity Surveyor and / or Engineer should also be employed at Head Office level to assist with issues of compliance to IDIP stipulations. Such staff may possess a Technikon qualification, as they may be scarce people to come around.

The organisational structure as it is currently in place does not assist to enhance the delivery of infrastructure within the Province. It does not make any accommodation for the employment of technically qualified staff. Over and above this observation the number of posts on the structure leaves much to be desired. The expansion of the structure to include technical staff cannot be overemphasised.

The arrangement for the interim is to set aside 4% of the allocation for infrastructure provision towards the procurement of technically aware persons in terms of Section **9(3)(b)** (DORA, 2007). This arrangement would assist to transfer skills and boost the delivery of infrastructure within the Province. The goal, however, should be to eventually permanently employ people with technical expertise to sustain quality delivery of infrastructure.

The MDoE is expected to make available allocations for infrastructure delivery according to own revenue divisions and DORA. In terms of DORA, planning must be multi year showing the necessary allocations. A few challenges, however, exist in that the money allocated for infrastructure delivery is not spent as expected thus leading to under expenditure. Projects should be advertised before the commencement of the financial

year to ensure that actual work commences at the beginning of the financial year rather than in the middle or end of the financial year.

There is no information technology compliant system in place to assist with the management of infrastructure within the Province. Such a void creates shortcomings in the planning process in the light of information from schools. The use of the School Profiles and information provided by the schools has proved to be inaccurate thus not assisting the process. Such information leads to decisions that are inaccurate as well. Regions have been engaged to verify the information on the School Profiles. The shortage of person power, however, means that this will take a longer period than anticipated.

The Circuit Managers are used to initiate the process of planning. This arrangement has its own shortcomings as the Circuit Managers regard such an exercise as an add-on to their functions due to their busy schedules. The information put together by the Circuit Managers is verified and collated at Regional level and submitted to Head Office. The verification is also not scientifically done due to the absence of a management system as already pointed out previously and this has an impact on the delivery of infrastructure.

8. MONITORING AND IMPROVEMENT PROGRAMME

The approved plan is handed over to the DPW for implementation. The DPW is expected to monitor the implementation of the projects regarding the quality and progress of work done on sites. There seem, however, to be a person power challenge as the DPW relies on the information given to them by the Consultants. The MDoE also experiences challenges regarding monitoring as it has only two Works Inspectors. These Inspectors are also expected to do other chores as well. This implies that the monitoring of the provision of infrastructure is left to the Consultants employed by the DPW or with no one.

Putting in place a technologically compliant system to manage infrastructure provision can enhance the accuracy of the plan. The system is to be updated on an ongoing basis once it is in place to ensure accurate information. The employment of persons with the necessary technical skills is also critical towards improving the accuracy and confidence in the plan. The move by the MDoE to expand the organisational structure to include technical posts is critical and cannot be delayed further.

The Infrastructure Plan is set for review annually to ensure that the projects that are to be provided are still necessary. The review process will commence around February to deal with projects to be delivered in the subsequent financial year. This is done to ensure that the Infrastructure Plan is submitted by the 31st July as per the directive in Section 41(1)(a) of DORA.

9. CONCLUSION

The purpose of the plan was given as the demonstration of how the MDoE intends to manage the provision of infrastructure and justify the funding requirements. The infrastructure was described and the level of service that is aimed at indicated.

Factors affecting the provision of infrastructure were interrogated and the impact they have on the provision of infrastructure was dealt with. It further emerged that infrastructure that has been provided should also be covered in terms of the Infrastructure Maintenance Plan to ensure systematic maintenance of infrastructure.

The need for technically qualified staff to beef up the Physical Resources Planning at both Regional and Head Office level was pointed out to enhance infrastructure delivery. Monitoring of the projects that are carried out is an area that should be jerked up to ensure delivery of infrastructure as planned.

INFRASTRUCTURE PLAN

1. INTRODUCTION

Infrastructure may be classified under four main categories, namely, social, political, economic and physical put in place in order to sustain the economic growth of a country or province. The country in general and the Mpumalanga Province specifically experience two worlds in one, that is, the well developed infrastructure in some parts and the masses of under- or un-development in others. The compilation of an Infrastructure Plan should take such realities into account in order to make an impact on the communities.

1.1 Background

The purpose of this plan is to give an indication of the infrastructure projects for the period 2008 / 2009 to 2010 / 2011 Medium Term Expenditure Framework (MTEF) period. This will demonstrate how the Department of Education (MDoE) manages infrastructure as well as communicate the needs that require funding. A plan of action regarding the provision and maintenance of facilities over a period of five years, that is, the duration of the current Integrated Development Planning (IDP) cycle of the Municipalities for compliance purposes is also necessary. To break the mould and move away from the annual planning and implementation of projects, the long list of needs of the Regions was confirmed during the 2006 / 2007 financial year. The commencement of this exercise assisted to begin to see the long-term view of infrastructure provision. The long-term view has not been realised partly due to the absence of an Asset Register that still needs to be compiled. The exercise to use the long list will therefore still continue until verified data is available.

The Constitution of the Republic of South Africa (Act 108 of 1996) is the cornerstone of all legislation that is established in South Africa. The strategic thrust that informs the developmental programmes of the Province as outlined in the Provincial Growth and Development Strategy (PDGS) document serves as cornerstones for the provision of facilities. The strategic direction in terms of the provision of infrastructure by the MDoE is discussed by considering the relevant prescripts.

- Improve the physical conditions of schools.

The schools used by the learners must be of an acceptable building standard meeting the norms and standards of safe buildings. The environment in the schools must be conducive for effective learning and teaching. For this to occur the buildings that are provided must enhance this need. The MDoE has a mandate to provide quality education in order to improve the life of the communities within the Province. The provision of quality education should be enhanced through the provision of quality infrastructure. In order that there should be quality infrastructure there must be deliberate action to improve such infrastructure. It is against this background that the improvement of the physical conditions of schools has become critical in order to address the strategic thrust of the MDoE.

- Ensure that all stakeholders participate in the provision of physical resources to the communities.

The Batho Pele principles capture among others that the communities must be informed of the service they are to receive for them to monitor if the correct service is provided. The provision of infrastructure is not the domain of the MDoE only. The beneficiaries of infrastructure should also be taken on board for them to know the level of service to be provided. Other sister Departments are also taken on board in the IDP meetings so that they also plan for the provision of other services like electricity and water. The MDoE at strategic level is interested to see such participation coming to fruition and move away from planning in silos. The participation of other stakeholders will also ensure that the completed buildings are well looked by the communities.

- Other goals

Other strategic goals of the MDoE may not necessarily be directly impacting on the provision of infrastructure thus was not isolated in this plan.

The MDoE strategic goals have a direct impact on the type and number of facilities that are to be provided to schools. The Infrastructure Plan can therefore not be immune from such impact. There is a dual linkage between the National Strategic Development Perspective (NSDP), PGDS, IDP and Infrastructure Plan. Moving from top down the NSDP informs the rest of the plans while moving bottom up the Infrastructure Plan feeds into the rest of the plans.

The Infrastructure Plan can only be able to deliver what is expected of it if it is linked to the vision, mission, goals and objectives agreed upon in the Strategic Planning sessions of the MDoE. The vision, mission, goals and objectives therefore determine the type of facilities that need to be provided and where the emphasis must be.

Reference has already been made to the NSDP, PGDS and IDP. The compilation of the Infrastructure Plan must take such documents into account. Other planning documents are those compiled by the MDoE (Snap and Annual Surveys), other Service Providers and Statistics South Africa (STATS SA).

The Infrastructure Plan is embedded within the context of the Provincial Growth and Development Strategy (PGDS). The PGDS is in turn linked to the National Spatial Development Perspective (NSDP) thus introducing the element of synergy in planning. The strategy is intended to provide a much broader level approach to growth and development in the Province and sectors are required to develop their own implementation plans that will directly achieve the targets of the PGDS. The overarching goal of the strategy is to develop consensus among stakeholders and to develop programmes that will align to the National, Provincial and Local strategies. It is not the intention of this document to capture all that is already available in the PGDS but only to allude to a few areas. Some of the priority areas that affect the MDoE are as follows:

Social Development.

- *Increased number of poverty alleviation projects*. The MDoE stipulates the use of the Preferential Procurement Policy Framework Act (PPPFA) in the procurement of goods and services that are utilised in the construction process. The Extended Public Works Programme (EPWP) and the Sakh'abakhi Project are further utilised in the process of building capacity to the previously disadvantaged individuals to develop emerging Contractors. The projects planned by the MDoE should therefore be labour intensive. The implication is that machinery can only be used where the conditions and circumstances dictate for the use of such.

- *Improved capacity for monitoring and impact evaluation on poverty alleviation initiatives*. Training and job creation should take place during the process of the construction of all schools and associated infrastructure. Head Office should not only concentrate on the provision of infrastructure but also must also evaluate and monitor the impact the projects have on the communities. Training communities to sustain their creation of own employment must be the ultimate goal. This in turn will assist to put food on the table.

Good Governance

- *Best practice, innovations and new models adopted in managing service delivery.* The institutional capacity within the MDoE is enhanced through participation in the IDIP processes. Innovative measures were thereby adopted and applied in the planning and implementing processes. The availability of the Provincial Technical Assistant Team (PTAT) member within the MDoE assists to inculcate best practice within the employees. The addition of the Operational Support Team (OST) members at Head and Regional Offices adds value to manage service delivery.

- *The National Spatial Development Perspective (NSDP), Provincial Growth and Development Strategy (PGDS) and the Integrated Development Plan (IDP) of Municipalities.* These strategies and Plans were used within the MDoE to ensure alignment in the planning processes. The MDoE participates in the meetings of the Municipalities where other Departments sit as well. This promotes the spirit of aligning all plans and thereby avoids any duplication that may occur. Over and above avoiding duplication, the different Departments are able to plan for the provision of services in a more structured and coordinated manner.

- *Successful execution of the Executive Council decisions.* The injunctions issued by the Member of the Executive Council (MEC) and the Premier during the Budget and Policy Speech and the State of Province Address respectively are taken on board when the planning and confirmation of the project list occurred. The injunctions as issued over the years are as follows:

    - No learners should be taught under trees.

- ✲ All schools must be provided with water and sanitation.
- ✲ All schools constructed on asbestos must be eliminated.
- ✲ Provide all schools with computer centres in order to make learners computer literate by the time they exit school.
- ✲ All new schools must be planned as complete schools including all basic amenities.

- *Unqualified Audit Reports.* The MDoE requires that the projects be conducted in such a fashion that unqualified audit reports will be achieved. All relevant documents related to infrastructure should be timeously available for submission, should the Auditors require them. To this end all the documents that were previously kept by the DPW are to be transferred to the MDoE in order to enhance auditing.

- *Budget allocations and expenditure in line with Government Programmes and delivery targets*. The MDoE introduced the MTEF planning and implementation of projects in order to solve the current challenge of under expenditure. The fruits of multi-year planning and implementation of projects should be realised commencing during the 2007 / 2008 financial year but the real benefits will only become evident during the 2008 / 2009 financial year. It is envisaged that with the introduction of such planning, projects will be completed according to plan thus expenditure will improve.

- *Risk Management Plan developed and implemented.* The MDoE does not implement its own projects due to the absence of technically qualified personnel but hands them over to the DPW for implementation. The risks that are supposed to be carried by the MDoE are thereby transferred to the DPW. The MDoE, however, still has to mitigate all the risks that may arise during the planning process and ensure that these are minimised.

- *Monitoring and evaluation capacity*. The Organogram of the MDoE has been reviewed to ensure the employment of suitably qualified technical personnel who can do monitoring. The process includes the devolution of power to Regions to free Head Office staff to perform this function. Monitoring and evaluation can only become a reality if the Regions are provided with the necessary person power.

- *Compliance capacity*. The infrastructure Directorate functions within the confines of IDIP and related prescripts to ensure compliance. The Directorate is, however, void of specialised capacity to handle infrastructure issues. It is anticipated that this will be realised through training that will be conducted by the PTAT and OST members. Planning around the MTEF period is but one of the matters that have commenced to receive attention within the Directorate.

- *Increase in the availability of scarce skills*. Members of the PTAT and OST are currently stationed in the MDoE to assist with capacity building in the absence of the

scarce skills. The Chief Director and a Director's post are to be advertised to ensure the recruitment of technically qualified persons. Technically qualified personnel are to be employed at the Regions under the Physical Facilities arm to ensure that capacity is built to relevant personnel within the Regions.

- *Promote secure and conducive environment for teaching and learning*. To enhance security at schools, steel palisade fences will be provided at new schools. Old and dilapidated fences will gradually be replaced at existing schools where other facilities are being constructed. There is already an indication that some schools prefer to be provided with a concrete palisade fence. The thinking is that this has less maintenance compared to steel palisade. This scenario, however, has cost implications to the MDoE. Physical security will be over and above the security awareness that should prevail in all the schools.

Economic Development

- This aspect cuts across all other priority areas. The most important fact to take cognisance of is the very low growth per annum in formal employment opportunities in the labour force (PGDS: 18). The training of people therefore becomes central so that they can self-employ.

- The PGDS has set Performance Indicators and targets regarding the advancement of the second economy to address poverty and unemployment. The training of people should therefore not be in terms of numbers only but others should graduate and find permanent employment. The MDoE through the projects handed over to DPW for implementation indirectly participates in meeting this objective as some projects are targeted for Sakh'abakhi, which means training the builders.

Human Resource Development

- The other priority areas cannot be realised if the human element is not considered. Good plans end up on paper if there is no human element to see them through. The purpose of Human Resource Development is to create an enabling environment for people to enjoy long, productive, healthy and creative lives (PGDS: 53).

- The improved quality of teaching and learning has an impact on the provision of infrastructure relevant to education. The quality of teaching and learning cannot improve in the absence of improving the quality of school buildings as well. For this reason the Resource Planners must also be trained to enable them to meet the challenges of planning and implementation.

The strategic direction of the MDoE is linked to the direction in the PGDS. This direction is also linked to the priorities as set out by the National Department of Education (DoE).

1.2 Goals and Objectives of Infrastructure Ownership

It is incumbent upon the MDoE to provide facilities to schools in order to enhance teaching and learning. SASA (1996: B-8) clearly stipulates that the MEC should, out of the budget appropriated by the Legislature for education purposes provide learning spaces. The vision of the MDoE is, "Providing quality education and training towards a better life for all". This links up with the main thrust of Government to "make a better life for all". The mission to render quality education and training through good governance, effective teaching and learning, skills development, involvement of stakeholders and maximum utilisation of resources for socio – economic enhancement of all citizens is the cornerstone of ownership of infrastructure.

The MDoE takes its strategic direction from the strategic goals pursued by Government. One of these strategic goals is "To end conditions of physical degradation in South African schools." To clarify how the strategic goals will be achieved, Government has also determined strategic objectives for the education sector. The strategic objective that becomes relevant to infrastructure is, "To provide learners in the Province with public ordinary schooling that is accessible and offered in facilities that are fully conducive to quality learning and teaching". This goal and objective contributes towards the vision as already unpacked above.

The MDoE upholds values that support its vision and mission. One of the values is to "Promote stakeholder participation". Ensuring that communities are consulted regarding the needs as identified through the IDP process enhances this value. After the construction of buildings is completed they are handed over to the communities for them to operate. The SGBs become the custodians of the facilities and are expected to conduct minor day-to-day maintenance. The schools that are under the MDoE were declared Section 21 schools, which imply that money is deposited into their accounts to, among other things, keep the school infrastructure going on a day-to-day basis. Government, however, carry the bulk of the responsibility regarding the major renovations and refurbishment. Overall ownership of infrastructure, therefore, remains with Government regarding major works but with the SGBs regarding day-to-day operations.

The promotion of skills development and equity is operational regarding the projects put in place by the MDoE. The promotion of skills development is one of the values the MDoE promotes and is not only meant for officials but also for the beneficiaries of infrastructure. Some of the projects are allocated for the Sakh'abakhi Project that deals with training the emerging Contractors. The shortage in skilled workforce is a challenge facing the country. This challenge cannot be wished away but has to be faced head on. The MDoE is better placed to address this challenge, as it is its core business to educate the nation. Educating the nation is a two way process thus the ownership of infrastructure is brought to the centre stage. The MDoE provides the infrastructure and hand it over to communities. The latter should ensure that the school buildings are protected against vandalism.

South Africa as a country is not isolated but function within the global world. The need, therefore, exist to have a citizenry that will participate meaningfully in the global village. Developments in the IT industry entails that the MDoE should respond to such needs. As educational quality standards rise there is a tendency to increase the number of specialised teaching spaces and to increase the size of educational spaces to accommodate active groups, which are replacing traditional class lecturing. The provision and ownership of infrastructure should take such developments into account.

Linked to exposure of the country to the outside world is the economy of the country. To sustain an economy that is competitive, South Africa needs an educated citizenry. The provision of education is the key mandate of the MDoE. It is therefore important that the necessary infrastructure must be provided for the nation to be educated. The communities through interaction with the SGBs should therefore understand the rationale behind the provision of infrastructure in order for them to take the ownership seriously. Legislation plays an important role in the provision of infrastructure.

The provision of infrastructure to schools is affected by a plethora of legislation and key to these are the:

- Constitution of the Republic of South Africa (No. 108 of 1996),

The Constitution of the Republic of South Africa states in Chapter 2 the right of access to education by all the citizens of the Republic of South Africa. It is the responsibility of the State to ensure that citizens get access to education as captured in the Constitution. Chapter 2 also gives the right to individuals to establish their own independent schools funded out of their own resources.

- National Education Policy Act (NEPA)(No. 27 of 1996) and the

The principles contained in the Constitution are further elaborated upon in the NEPA. The Department of Education's activities towards the provision of education are as outlined in NEPA. The document outlines the policies the National Department of Education should follow regarding the provision of education to the citizenry of the country.

- South African Schools Act (SASA)(No. 84 of 1996).

The SASA indicates how education should be made available to the citizens of the country. It further outlines the roles and responsibilities of the different stakeholders in the provision of education to the communities. The clarity of roles implies that stakeholders do not duplicate what they need to do as different stakeholders.

Some of the legislation not mentioned in this Infrastructure Plan still have a bearing on the provision of infrastructure to the communities and should therefore be considered as important as well.

- Mpumalanga Education Act of 1995

The Mpumalanga Education Act is the Provincial Act covering what is basically also covered by SASA but from the Provincial perspective.

- Public Finance Management Act (Act No. 1 of 1999)

The Act is meant to regulate financial management in the national government; to ensure that all revenue, expenditure, assets and liabilities of the government are managed efficiently and effectively; to provide for the responsibilities of persons entrusted with financial management in that government; and to provide for matters connected therewith. It affects the Department in that monies appropriated in terms of DORA are to be managed according to this Act.

- Division of Revenue Act 2007 (DORA)

The Act provides for the equitable division of revenue anticipated to be raised nationally among the national; provincial and local spheres of government for the 2006 / 2007 financial year and the responsibilities of all spheres pursuant to such division; and to provide for matters connected therewith. It further indicates the allocation of budget for infrastructure provision including the Provincial Infrastructure Grant. Key to it is the use of a percentage of the infrastructure allocation for beef up the capacity to deliver projects effectively.

- Occupational Health and Safety Act (OHSA) (Act 85 of 1993)

The OHSA was amended by the Occupational Health and safety Amendment Act 181 of 1993 and the Labour Relations Act of 1995. The Act provides for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and health arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith. The provisions of this Act affect all sites within the Department of Education, more especially, those sites where there is construction-taking place or the removal of asbestos has to be undertaken.

- Local Government: Municipal Systems Act (Act 32 of 2000)

To provide for the core principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of local communities, and ensure universal access to essential services that are affordable to all; to provide for community participation; to establish a simple and enabling framework for the core processes of planning, performance management, resource mobilisation and organisational change which underpin the notion of developmental local government; and to provide for matters incidental thereto.

Over and above these legislative prescripts there are also other documents that affect the provision of infrastructure. One among these is the IDIP.

- Infrastructure Development Improvement Programme (IDIP)

The Infrastructure Development Improvement Programme also known as Toolkit is not legislation but plays a pivotal role in outlining best practice. The Construction Industry Development Board (CIDB) in cooperation with National Treasury developed it. The Toolkit assists to outline the best practice in the construction industry. Building the capacity of employees within the MDoE to deliver infrastructure is the ultimate aim. IDIP is run by the National Treasury to outline and redefine best practises.

The investment made in infrastructure delivery has to be based on the clear understanding of the needs of the different communities. The needs of the communities are captured in the long list of needs compiled by the Circuits and Regions. The long list then informs the Infrastructure Plan. Infrastructure included in the plan includes the construction of new schools, additional facilities including Grade R Centres and renovations to other schools. The infrastructure is divided as follows:

NEW SCHOOLS

Three new schools are planned under the Provincial Infrastructure Grant allocation and are located in the Bushbuckridge, Ehlanzeni and Gert Sibande Region. An estimated cost for the construction of the three schools stood at R71.3m at the time of planning utilising the old designs. It is anticipated that the cost will be adjusted as soon as the full design drawings are made available. A total of 15 (Fifteen) new schools were already included in the 2007 / 2008 Infrastructure Plan. The construction of the latter schools will commence around June 2008 due to the delays caused by the new school design.

EMIS	PROJECT	LOCATION	CIRCUIT	MUNICIPALITY
New	Secondary	Ronaldsey	Mkhuhlu	Bushbuckridge
800035304	Sisulu Sec	Kamaqhekeza	Nkomazi E	Nkomazi
New	Inqubeko Sec	Thandukukhanya	Piet Retief	Mkhondo

ADDITIONAL FACILITIES

A total of 17 (Seventeen) schools is targeted to receive additional facilities.26 Grade R classrooms, 51 toilets and 12 fences are to be provided. 116 ordinary classrooms, 14 administration blocks, 4 laboratories, 13 libraries, 9 computer centres, 2 school halls, 2 hospitality centres, 117 toilets, 9 perimeter fences, 2 schools to be electrified, 6 to be provided with water, 13 to be provided with kitchens, 13 ramps and rails to be provided, 13 school sports grounds and 8 schools to be provided with car parking areas. An estimated total of R118.3m has been set aside for this category of schools.

UPGRADING AND RENOVATIONS

83 classrooms and 80 toilets are to be renovated in 16 schools. An estimated total of R11.6m has been targeted for this exercise.

INCOMPLETE PROJECTS (2001 / 2004)

The Department of Education is settled with a total of about 795 incomplete projects. Plans are afoot to have these completed and closed out and to this effect a total of R30m was set aside for this exercise. Site visits are to be conducted to determine the actual status of each project.

MAINTENANCE

R18m is targeted for the maintenance of facilities. This amount has been identified as an initial amount to commence the process of planned maintenance. It is a 5% of the total budget allocated for the development of infrastructure in the 2008 / 2009 financial year. The amount is to be divided among the four Regions at four equal chunks per quarter. The allocation is on the principle of don't spend it loose it. The Region that is able to spend its allocation will benefit from those that have not spent.

Quotations are to be utilised for all works below R200 000.00 as per the Preferential Procurement Policy Framework Act (PPPFA). All projects that exceed this amount must be prioritised in the Infrastructure Plan. Only Service Providers registered in the Departmental system are to be utilised for this objective.

DISPOSAL

The Department currently does not have infrastructure that needs to be disposed of. The absence of an Asset Register further complicates this exercise. Infrastructure that is no longer utilised as schools would normally revert to the Department of Public Works as custodian as Government buildings.

Other infrastructure provided in the plan includes the provision of fences, electricity, water and sanitation to all public schools. A decision to the effect that all new schools are built as complete schools with all the basic amenities provided was taken and has begun to be implemented. The construction of ramps to make schools accessible will be continued with in this plan. Rails will be provided where needed.

The MDoE takes on board a number of stakeholders to ensure that all and sundry owns the plan. The following instances are the key stakeholders in this plan:

The National Treasury is charged with a responsibility to make funds available to all spheres of Government. The available funds are also allocated to the MDoE in the form of Provincial Infrastructure Grant over and above the allocation received from the Province as Equitable Share. The Provincial Infrastructure Grant is released in terms of the Division of Revenue Act (2007).

The DoE is the main stakeholder. The responsibility to educate the nation rests with this Department. It establishes the policy that the Provinces follow in the pursuance of the mandate to education the nation. Over and above all it coordinates the education activities of the Provinces to ensure standards are met.

There are a number of stakeholders within the Province that also need to be taken on board. Chief among these are the officials charged with the responsibility to manage the provision of education. The organisational structure of the MDoE was reviewed and the approved structure is gradually being implemented. The Superintendent General is the administrative head of the MDoE. The scenario is as outlined below:

- The Superintendent General (SG) is the administration head of the MDoE. The SG is the custodian of the strategic direction of the MDoE. The incumbent ensures that the strategic direction of the MDoE is encapsulated in the plan. He is responsible for the activities that take place within the Department. The SG, as the Accounting Officer, is also responsible to ensure that all learners are accommodated accordingly.

- The SG is deputised by three Deputy Directors General (DDG). The three are for Curriculum, Systems and Chief Financial Officer. The role of the DDG for Curriculum is to ensure that the needs of the curriculum are communicated so that the facilities being built meet such demands. The DDG for Systems and Planning is the custodian of all the plans that relate to infrastructure provision. The Branch ensures synergy between strategy and implementation of the infrastructure projects. The linkages between strategy and implementation and the coordination with the DPW must also be monitored at his point. This is done through the SDA that is signed between MDoE and DPW. The mandate of this DDG is to ensure that the prescripts are observed in the provision of facilities. She is also the pivotal person regarding the signing of the SDA. The DDG Chief Financial Officer is responsible for making the allocation for the provision of infrastructure. This office also sees to it that the reports required by Treasury are submitted.

- The Branch Systems and Planning has six Chief Directors under it. One of the Chief Directors is responsible for Education Resource Planning and Development. This Chief Directorate in turn has three Directors who are responsible for Education Resource Planning, School Resources Planning and Education Management and Governance Development. The focus here is the Director School Resources Planning where infrastructure provision resides. This Director must manage the compilation of the Infrastructure Plan as well as the IPMP. The practical issues regarding the relations between the MDoE and DPW are also managed in this Directorate. The responsibilities of evaluation, monitoring and policy implementation regarding the infrastructure projects are carried out in this post. The posts are to be developed below the Director level and sent to Work study for recommendation to implement. The situation below is what obtains currently.

- The posts as alluded to above have not been populated thus the old arrangement stands. The Physical Resources Planning sub-Directorate is responsible to verify and collate the Infrastructure Plans from the Regions. The Provincial Infrastructure Plan must be finalised in this component. It is then submitted to the Director, Chief Director and finally the Superintendent General for approval. The Physical Facilities component is responsible for managing the implementation of the projects. The claims from the Consultants and Contractors are processed by this component before they are submitted for payments. The component must further draw the Infrastructure Programme Management Plan (IPMP) to instruct the DPW on the expected deliverables. The Directorate offers the necessary support to Regional Resource Planners.

- The Regional Resource Planners are responsible to verify and collate information from the Circuit Managers and prepare for the Infrastructure Plan. The Regions must ensure that all the plans submitted by the Circuits are implementable. In cases where there are challenges, then the Region must refer the plans to the Circuit or Principals for correction. The involvement of the Municipalities must occur at this level. The Principals and / or School governing Bodies must be involved at this level to ensure that the principles of Batho Pele are observed.

- The Department of Public Works (DPW) whose responsibility is to act as the Implementing Agent for the MDoE as well as appointing the professional staff to execute the projects. The Infrastructure Programme Implementation Plan (IPIP) is prepared by the DPW to respond to the MDoE. The IPIP indicates how DPW will carry out the projects handed over to it. The DPW enters into an SDA with MDoE based on the IPMP and IPIP to ensure that the projects are delivered as expected. The DPW must deliver all the completed projects to MDoE and ensure that the closeout reports are completed and submitted.

- The Municipalities must make school sites available for the construction of education facilities. Other basic services, for example, electricity and water are provided by the Municipalities up to the boundary of the schoolyards. The Local and District Municipalities further identify the needs of the communities and capture these onto the IDP document as a wish list from which the MDoE can prioritise and implement projects. The Municipalities must ensure that all sector departments participate in the IDP processes to ensure synergy in the use of resources.

- The communities, schools and the School Governing Bodies (SGBs) within the Province who are the ultimate beneficiaries and users of the infrastructure put in place. These stakeholders must be informed of the facilities they are to receive for them to know what to expect. This makes it possible for them to enquire if the services that are delivered differ from what they expected. Their involvement is also crucial for the buy-in to secure the facility when it is handed over to them at completion.

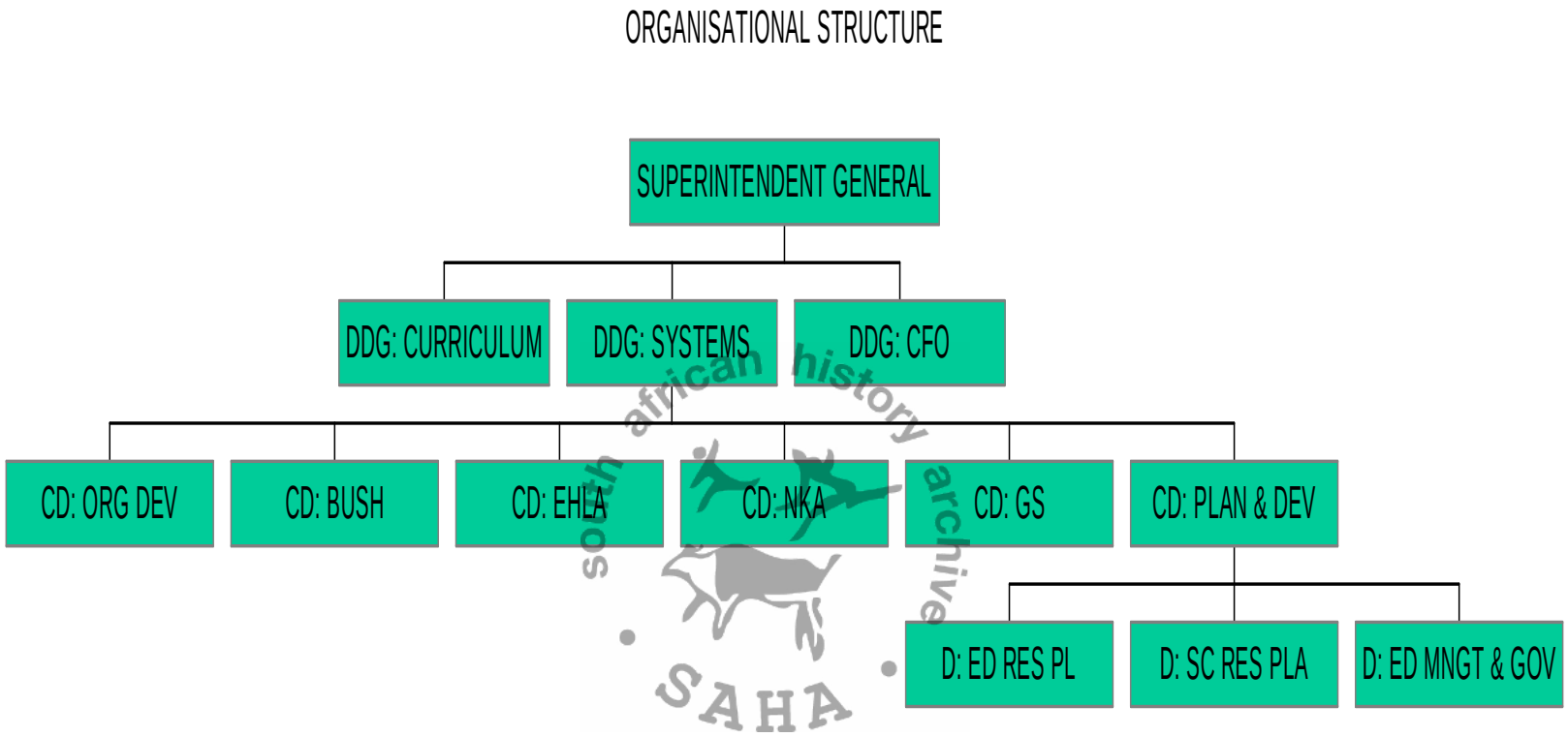

Figure 1: Organisational Structure of MDoE

1.3 Plan Framework

The document is divided into seven sections. The introduction is the subject of the current section. It basically outlines the goals and objectives of the Infrastructure Plan and the approach used in the compilation of the plan. Part 2 deals with the level of service delivery in the community and the community research that has been undertaken to realise the plan. The section indicates the strategic and legislative imperatives that drive the provision of infrastructure as well as give the indicators of the norms used to determine what the different communities' desire.

Part 3 of the plan handles what the communities need. The variance between what is available within the communities and the norms as outlined shows the infrastructure that needs to be provided. This is handled through the demand and forecast including the changes in technology.

Currently the plan does not include the maintenance of infrastructure over its lifespan. The challenge over this matter is that the MDoE has previously not kept any Asset Register. This then makes it difficult to trace infrastructure that needs maintenance at any given point in time. The fact that the budget of infrastructure was previously used for the provision of new facilities and nothing regarding maintenance is an issue that needs to be addressed. The Regional Resource Planners are already conscientised regarding the new approach on this matter. The results of the NEIMS process will also enhance delivery in this direction, as an Infrastructure Asset register is part of the deliverables of the process.

Another area that still needs attention is the development of the Disposal Plan. Currently the amalgamation of schools process yields situations where the buildings that are left behind are not planned. Sometimes buildings are vacated due to closure of schools where communities move on. The buildings stay idle up to a time when they are vandalised thus become obsolete. The matter needs to be attended to in order to have a holistic plan regarding the provision, maintenance and disposal of buildings.

The fourth section deals with the different types of plans contained in the Infrastructure Plan followed by the financial summary. The last part of the plan deals with the organisational and support plan. The Infrastructure Plan needs person power for it to be developed and realised. An indication is given in this section on how this will be done and the capacity issues that may be needed. Over and above the different sections, there is conclusion and attachments. The most important of these is the project list. The list outlines the projects that need to be provided over the MTEF period.

The Infrastructure Project List consists of different categories, namely, new projects and additional facilities. The provision of fence, electricity, water, kitchens, ramps and rails forms part of the package. The provision of sports ground and parking area is the latest items to be taken up on the Infrastructure Plan Project List. New projects imply the construction of newly registered schools where all basic facilities are provided. Basic facilities include the provision of classrooms, special rooms, administration block,

toilets, fence, electricity, water, kitchen in the case of Primary Schools including ramps and rails; school sports grounds and parking for staff and visitors.

The upgrading of facilities is done where additional facilities are provided over and above renovating existing facilities to increase capacity. The other facilities are provided depending on the need for such in those schools. The provision of ramps and rails is compulsory for all schools in order to make them accessible to people with disabilities. New schools are to be provided with ramps and rails at construction while existing schools are to be provided as they receive other facilities or are renovated.

The Infrastructure Plan Project List was compiled with the assistance of Principals working in conjunction with the Circuit Managers. The Principals bring with them the needs as identified by the school communities and the SGBs. The needs from different schools are then collated at Circuit level to coin a Circuit list of needs. The Circuit Managers submit the needs to the Regional Resource Planners where the different needs are collated into the Regional list of needs. The project list must also be verified at this level. Interaction with IDPs is also important at the Regional Office level to ensure synergy in the provision of facilities. The Regional lists end up at Head Office where the projects are checked then collated into a Provincial list of prioritised needs. An abridged version of the list of projects is as follows:

2008 / 2009

BUSHBUCKRIDGE REGION INFRASTRUCTURE PLAN PROJECT LIST

EMIS	PROJECT	MUNIC	SCOPE OF WORK	
			NEW CONSTRUCTION	RENOVATIONS
800035092	Dumisani S	Bushbuckridge	6cr, admin, lab, lib, cc, hospitality studies centre, hall, 10t, f, e, w, kit, rr, 3sg & p.	18cr & 12 toilets
New	Secondary	Bushbuckridge	28cr, admin, lab, lib, cc, hospitality studies centre, hall, 20t, f, e, w, kit, rr, 3sg & p.	
800035101	Mandondo S	Bushbuckridge	8cr, admin, lab, lib, cc, hospitality studies centre, hall, 16t, f, e, kit, rr, 3sg & p.	16cr & 8 toilets

EHLANZENI REGION INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	MUNIC	SCOPE OF WORK	
			NEW CONSTRUCTION	RENOVATIONS
800012955	Masibonisane P	Nkomazi	Gr R 2cr, 4t, f, 8cr, admin, lib, cc, 8t, kit, rr, 3sg & p.	12cr & 12 toilets
800012625	Maqhekeza P	Nkomazi	Gr R 3cr, 5t, f, 7cr, lib, cc, 8t, w, kit, rr, 3sg & p.	16cr, admin & 12 toilets
800004093	Evimbilanga P	Nkomazi	Gr R 2cr, 4t, f, 8cr, lib, cc, 24t, w, kit, rr, 3sg & p.	17cr & admin
800020206	Sekusile P	Nkomazi	Gr R 3cr, 5t, f, 4cr, admin, lib, cc, 18t, f, w, kit, rr, 3sg & p.	16cr & 14 toilets
800035304	Sisulu S	Nkomazi	28cr, admin, lab, lib, cc, hall, 20t, f, e, w, kit, rr, 3sg & p.	
800015719	Mpumelelo P	Nkomazi	Gr R 2cr, 4t, f, 5cr, admin, lib, cc, 16t, kit, rr, 3sg & p.	13cr & 6 toilets

GERT SIBANDE INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	MUNIC	SCOPE OF WORK	
			NEW CONSTRUCTION	RENOVATIONS
800030486	New Ermelo P	Msukaligwa	Gr R 2cr, 4t, f, 8cr, admin, lib, cc, 10t, f, e, w, kit, rr, 1sg & p.	13cr
800006817	Ithole P	Mkhondo	Gr R 2cr, 4t, f, 12cr, lib, cc, 10t, f, kit, rr, 2sg & p.	20cr, admin & 12 toilets
800003467	Buhlebuyeza P	Mkhondo	Gr R 3cr, 6t, f, 11cr, admin, lib, cc, 11t, f, kit, rr, 2sg & p.	8cr & 5 toilets
800008011	Kleinvrystaat P	Mkhondo	Gr R 2cr, 4t, f, 3cr, lib, w, kit, rr	5cr
New	Inqubeko S	Mkhondo	28cr, admin, lab, lib,	

			cc, hall, 28t, f, e, w, rr, 3sg & p.	

NKANGALA REGION INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	MUNIC	SCOPE OF WORK	
			NEW CONSTRUCTION	RENOVATIONS
800024539	Vamuhle P	Thembisile	Gr R 2cr, 4t, f, admin, kit, 3sg & p.	8cr
800022095	Somtshongweni P	Thembisile	Gr R 2cr, 4t, f, admin, 16t, f, 3sg & p.	16cr
800005264	Hlalisanani P	Thembisile	Gr R 2cr, 4t, f, 18cr, admin, lib, cc, 16t, f, kit, rr, 3sg & p.	12cr & 10 toilets
800001719	Buhlebesizwe S	Thembisile	Admin, lab, 12t, rr, 3sg & p.	8cr
800016147	Mzimhlophe S	Thembisile	18cr, admin, lab, lib, cc, 16t, f, 3sg & p.	16cr & 10 toilets
800006916	Jabulani P	Thembisile	Gr R 3cr, 5t, f, 5cr, 3sg & p.	19cr & admin
800024885	Vukuzame S	Thembisile	18t, f, w, kit, rr, 3sg & p.	16cr

The MDoE has moved away from annual planning to multi year planning. The DPW is utilised to implement the projects on behalf of MDoE. The situation will remain as is while an assessment is being made regarding whether the MDoE should implement its own projects, use one Implementing Agent or use more than one Implementing Agent. The review of the current situation will assist to map the way forward. If the performance is good then the one implementing agent will continue. If the performance is poor then the matter will be reviewed. Cognisance of the decision taken by Cabinet will not be lost sight of when these matters are considered.

The use of movable classrooms is underway within the Province. The construction of a stadium at a site near two schools has led to the provision of such structures as a temporary measure at a new site while permanent facilities will be provided at an allocated site. Some areas like Piet Retief experience overcrowding on a large scale thus have become flashpoints. Such areas are also to be to be assisted through the provision of movable classrooms while proper plans are put in place to provide brick and mortar structures.

Over and above the use of movable classrooms the Province also exploits other avenues. Scholar Transport is utilised to transport learners who are over 5kilometers from their schools. This arrangement is used mainly in the rural areas where learners walk great distances to access education. The provision of Scholar Transport, however, seems to be a great challenge in that the costs escalate beyond the allocated budget. Other means are being considered to ensure optimum utilisation of this facility.

Two approaches are currently in use regarding small schools. The first option is to teach in a multi-Grade set up. Learners in different Grades are kept in a single class and being taught by the same educator. During a certain time other Grades are taught while others have some work to do and vice versa. The scenario does not seem to be effective, as the educators may not necessarily have been trained for this type of teaching. Another scenario is that of amalgamating small farm schools. The learners from the amalgamated schools are taken to some other bigger schools or small schools amalgamated top form one bigger school. The process is, however, very slow due to the consultation process that must go with it.

Previously school hostels were used in certain schools. The option is being considered to ensure that learners from farm schools are brought together in a hostel environment. It is again an option that needs Senior Management to consider and endorse. Together with arrangement is the notion of platoon schools. In such schools the arrangement is that one school uses the buildings for a certain time and at closure another school takes over the use of buildings. This arrangement does not exist within the Province thus will not be interrogated further.

Discussions are currently on course at management level to regrade the schools according to the National Qualification Framework (NQF) scenario. The division of schools according to the different phases that are taught is important if the available infrastructure is to be used effectively. Currently some schools go up to Grade 7 while others stretch up to Grade 9. In small areas schools begin from Grade 1 to Grade 12. There is little that can be done with these as they are found mainly in small places.

The Department of Transport has provided bicycles to some learners in the rural areas. The project termed “Shova Kalula” is now in its second or third year. This entails providing bicycles that are used to travel from home to school and vice versa. The project has, however, not covered all the learners thus Scholar Transport is mainly used.

1.4 Basic and Advanced approach

There are assumptions that are looked at regarding infrastructure planning and provisioning. Hereunder follow some of these:

- The information received from the Circuits and Regions through the Education Management Information Systems (EMIS) is accurate.

- The MDoE has the necessary person power to plan for the projects to be implemented.
- The necessary budget allocation is made to the MDoE for the provision of the infrastructure.
- Planning is done based on scientific methods and tools.
- The DPW has the necessary capacity to manage the Consultants who in turn manage the Contractors to ensure quality workmanship.
- Contractors are skilled and fully resourced to do the work.
- Building material is available for the Contractors to do their work.
- The MDoE monitors the DPW.

The MDoE has a section that deals with the Education Management Information System (EMIS). This section is the custodian of all data that is utilised during the planning process. The packaging of this data does not always assist in the planning process. Resource Planners, on the other hand, do not have any software they use for planning purposes. The absence of such software implies that other means be utilised to come to some level of infrastructure provision. EMIS is however undergoing re-engineering and it is hoped that the result of this exercise will assist the Resource Planners as well.

The MDoE works under the assumption that the data it uses for planning purposes is correct and accurate. However, such data is not verified thus may be inaccurate. The release of the NEIMS report around March 2007 was supposed to confirm the type of information that needs to be used during planning. The modelling techniques that will enhance planning are also under development and were utilised to review the 2007 / 2008 and 2008 / 2009 plans. In the interim the Operational Support Team members employed by the Provincial Treasury are in the process to verify the data used in planning. This should go a long way towards compiling credible plans.

Planning around individual schools has proved to be problematic as it doesn't take into account neighbouring schools. Unit planning is therefore utilised to ensure that schools in the neighbourhood are taken into account when planning. Schools within a 5 kilometre radius in the same Circuit are grouped together into one unit for planning purposes. The schools are considered as a unit therefore included in the planning. This is done by utilising schools maps sourced from the Geographic Information Systems (GIS) Developer in the EMIS section. Schools at the boundaries of Circuits are considered looking at the situation in the neighbouring Circuit. The use of GIS is to be further introduced to ensure that the Regions and circuits plan according to this tool.

The approach utilised in this Infrastructure Plan is to identify the schools that need resources and capture these onto the plan. The first component is handled during the

Strategic Planning process. The mandate, policies and MTEF allocations are taken into account. The IDPs of the Municipalities are taken on board to ensure collaborative service delivery. This process allows for both top down and bottom up approach.

The three District Municipalities within the Province made presentations to a workshop where the Infrastructure Plan was updated. The inputs made by the Municipalities still needs to be strengthened further, more especially at Regional level, to encourage a holistic approach to service delivery. The other sister Departments, that is, DPW, Department of Water Affairs and Forestry (DWAF), Department of Provincial Local Government and Housing (DPLG&H) and Department of Minerals and Energy (DME) were invited to be part of the sitting. This process allows for holistic approach to planning.

The second component commences where the Circuit Managers work with the local school communities and stakeholders to draw a Circuit list of prioritised requirements. The process takes on board the number of learners as opposed to the number of classrooms in existence. The type of structures in existence needs to be considered to ensure that dangerous ones are eliminated and substituted by proper structures. The availability of other facilities like administration blocks and others are also considered. The use of Scholar Transport and other unused facilities structures must be looked at. It is at the second level that the political inputs should also be catered for. This implies going through the process of auditing existing facilities and analysing the gap that exists. The consideration of the alternatives as well as the costing of these options leads to a correct and cost effective option being implemented.

The Region reviews the submitted priority list and takes on board the local inputs through consulting the IDP documents. The Regional Resource Planners must verify the projects submitted by the Circuits before they are submitted to Head Office. Efforts are under way to involve the DPW District and Regional Offices at this level to ensure the correct identification, prioritisation and costing of projects right from the beginning. Further interaction with the Municipalities is encouraged so as to align planning right from the onset.

At Head Office level the Regional inputs are reviewed, collated and the Infrastructure Plan finalised. The involvement of the Provincial DPW together with the DME, DWAF and DPLG&H need to be strengthened at this level. The Infrastructure Plan is then circulated to the Regions before being forwarded to the Superintendent General (SG) and the Member of the Executive Council (MEC) for final approval.

The Infrastructure Plan is presented to the Physical Facilities and DPW. A Service Delivery Agreement (SDA) signed by both parties regulates the relationship between the MDoE and DPW regarding infrastructure projects. The DPW procures the services of Consultants to conduct site evaluations and do final costing. After the approval of the design and documentation, projects are advertised and the procurement of Contractors is made. The DPW acts as an Implementing Agent until the projects are completed and the close out phase reached where after the projects are handed over to the MDoE. The process is as schematically outlined in figure 1 hereunder:

It has been alluded to that the data used in the planning for infrastructure need to be pepped up. The Province has no baselines that were used thus it is a challenge to know the level of service delivery that occurred previously. The Province has planned to establish an Infrastructure Management System but had to suspend this objective. The NDoE commissioned a company to do the assessment of schools with a view to establish a NEIMS. The delay of the delivery of the NEIMS Report affects the Province adversely as data used has not been verified. The Province can also not move ahead with its own processes without seeing what the NEIMS Report looks like. The absence of accurate data has an impact in that some projects that are planned are from time o time relocated from one to another.

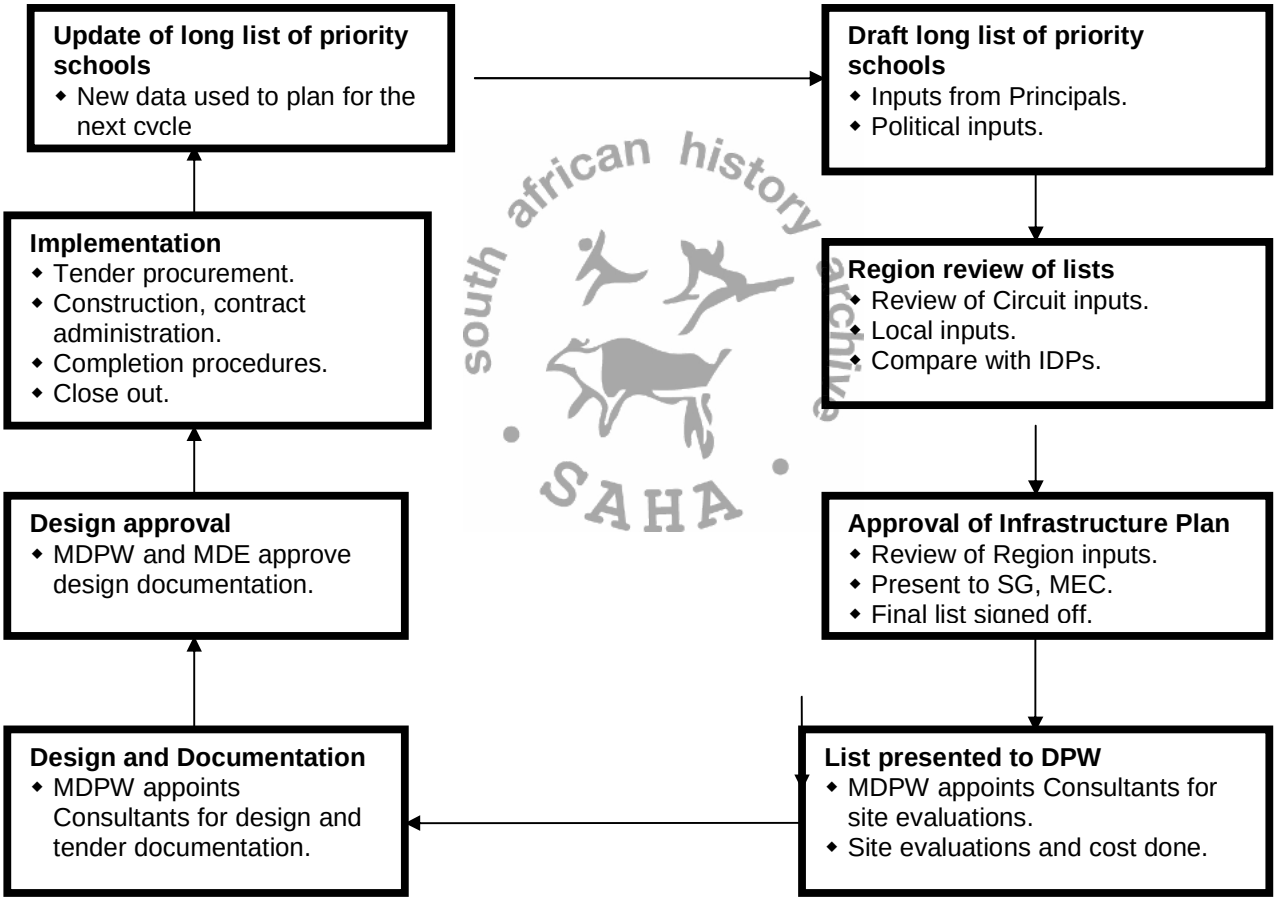

Figure 2: Flow Diagram of Processes

2. LEVEL OF SERVICE

2.1 Community Research and Expectations.

The MDoE uses the norms that were developed nationally for the provision of its facilities. The latest requirement is to provide Grade R Centres in preparation for the accreditation of Grade R learners by 2010. The learner classroom ratio proposed for these learners is 1:30. This places a lot of demands on the provision of facilities within the Province as none of the schools has such centres. The conversion of idle capacity may, however, have to be considered to ensure optimum utilisation of available resources. The size of the classroom needed to accommodate the activities that occur at this level is around 80m^2. The Grade R Centres must also have a basin and a tap in the classroom in order to teach basic hygiene to learners. Shelves must be fixed around the back and maybe sides of the walls to accommodate the learners' materials.

In the Primary schools the ratio that is utilised is 1:40. It has been noted that most Primary schools no longer need classrooms as the overall learner classroom ratio is below 1:40. Notwithstanding this observation there are pockets of Primary schools that need additional classrooms. The Secondary schools on the other hand the ratio of 1:35 is used. The latter schools show a great need for the provision of additional facilities. The sizes of classrooms used at the Primary and Secondary schools are 60m^2. The review of school design to accommodate the new design expected by the MEC may lead to the increment of this classroom size from 60m^2 to 70m^2. The number of classrooms in Primary schools should not exceed 24 and in Secondary schools 28.

The administration blocks are divided into three types based on the number of learners at the school. Type A is provided to schools that have an enrolment of 600 learners and above. The structure must contain the Principal's office, deputy Principal's office, 3 Heads of Department (HOD) offices, staffroom, administration Clerk's office, kitchenette, 2 sickrooms, storeroom and toilets. Type B is meant for schools with learners between 401 and 599. The building contains all the amenities contained by type A except for the Deputy Principal's and one HOD office. Type C is provided to schools with an enrolment of 400 in Primary schools and 350 in Secondary schools. These are schools that are static and do not show any growth. Schools that are too small are not provided with these facilities as it may not be cost effective and their future may not be guaranteed.

The special classrooms provided to schools are laboratory, media centre, computer centre, hotel and catering centre depending on the Learning Area being offered at the school and kitchen. The size for these facilities is around 81m^2. Laboratories are only supplied to Secondary schools while media centres are supplied to Primary schools as well. These facilities must be supplied with the basic fittings to make them functional at completion. Schools supplied with these facilities must also be electrified. The kitchen must also be furnished with boiler pots, walk in freezer, serving window, change room with showers for the staff working in the kitchen and have an extractor.

Toilets provided to schools must be provided at a rate of 1, 5 toilets to a classroom. One of the toilet seats serve as a urinary in the case of male toilets. The number of toilets provided might be limited to 20 in Primary and 24 in Secondary schools to avoid a village of toilets constructed in schools. The toilets supplied to schools must also two toilets for people with disability as part of the package. These toilets must allow a wheelchair to turn within. All toilets supplied must be water borne especially where there is bulk water reticulation and sewerage services by the Municipalities. Where no sewerage exists, the provision of septic tanks and French drains must be considered.

The fence provided to schools must be steel palisade. The fence must be 2m above soil level and spiked on top. 3 X 2 ground beams must be provided to strengthen security at the schools. The fence must cover the perimeter of the school to avoid the school site being invaded by people looking for accommodation.

New schools must be provided with sports fields at construction. All other existing schools will be provided with these incrementally and as the school sites allow. The sports fields must cater for the extra curricular activities of the school. A combination court for tennis, volleyball and netball will be standard. The combination sports field of soccer, rugby and athletics must also be standard to all schools. The school has a choice regarding other specialist sports like hockey, cricket and others.

The last amenity to be provided to schools is the car park. The car park must be situated such that it allows the people with disability to be dropped off with ease. It must also allow short walking distances between the buildings and sports fields. The car park must also allow easy access to all buildings through ramps and rails. The ramps must meet the specifications of accredited bodies. The rails must be provided where the safety of people using wheelchairs is in jeopardy.

The minimum size of a site that is needed must not be less than 6,5ha. This is to ensure that the new size of the school demanded by the MEC is able to fit. The inclusion of all other basic amenities at construction is the new thrust. Sports fields are part of a package of a new school design.

The usage of a scientific method to conduct research in preparation for the provision of infrastructure is non-existent. The SGBs are the formal link with the outside world when it comes to governance issues. The same applies when issues of infrastructure provision are brought to the table. The observation that some members of the SGBs are employed, the Principal serves as their representatives during the infrastructure sessions. The consultation conducted with the Principals is open for abuse and the provision of inaccurate information. It appears the Principals who are able to convince others and the Circuit Manager and are outspoken will be allowed to receive facilities even if they are not necessarily worse off compared to others. There is a dire need, therefore, to establish an Infrastructure Management System that will be used to determine what infrastructure is needed and where it should provided.

The NEIMS Report is awaited and will assist to solve the challenge of inaccurate information. A workshop conducted wherein Service Providers (Council for Scientific

and Industrial Research and others) made presentations around what can be done to close the gap in the interim. The workshop was scheduled for the 18th and 19th May 2006.

The Local Municipalities are responsible for the compilation of the IDP document. The projects identified by the Municipalities in the communities are taken on board when the Regions collate the projects received from the circuits. If there are differences between what has been identified by the Circuits and the Municipalities then meetings are arranged to discuss the differences.

A system of unit planning has been introduced to the Regions. This entails looking at a school that need facilities in relation to neighbouring schools. A school that needs additional classrooms when there is idle capacity in the neighbouring is not provided with such classrooms. Ways and means are looked at to ensure that the idle capacity in the next school is optimally utilised before any move is made to provide additional facilities.

Policy to be used for scoring to prioritise projects that are to be included in the Infrastructure Plan is in the process of being drawn in consultation with the Regional Resource Planners. Among issues to be included are the number of learners vis – à – vis the number of classrooms; safety of the buildings; other facilities available; type of structure in place; availability of unused structures; availability of Scholar Transport; age of communities and others. It is envisaged that a scientific approach that will be workshopped with the Regional Resource Planners will be in use when the 2008 / 2009 Infrastructure Plan Project List is put in place.

2.2 Current Level of Service Provision

It is important to have an idea of what facilities are in place before any additional facilities are provided to communities. The situation differs between Primary and Secondary schools regarding the number of facilities available. The matter of backlogs can be elucidated as follows when the 2006 Snap Survey as the best available statistics is used as a baseline:

- Classrooms

The Province uses a norm of one classroom is to 40 learners and one is to 35 learners in the Primary and Secondary schools respectively. There are about 1 040 643 learners who are accommodated in about 26 216 classrooms. These figures do not differentiate between Primary and Secondary thus creating an impression that the learner classroom ratio is normal. When these figures are broken down further the following scenario emerges: Bushbuckridge Region has 204 048 learners and 4 618 classrooms and the ratio is 1:44. Ehlanzeni has 293 081 learners and 6 352 classrooms with a ratio of 1:46, Gert Sibande with 257 118 learners and 6 959 classrooms and a ratio of 1:37 while Nkangala has 286 396 learners and 8 287 classrooms and a ratio of 1:35.

- Administration blocks

The Province has a total of about 276 schools that has administration blocks. This total excludes three Circuits, namely Kwaggafontein East, KwaMhlanga North East and Middelburg 3. If the last three Circuits are included the number can easily rise to about 286.

- Laboratories

Most of the schools within the Province are void of laboratories as the emphasis was on providing classrooms in order to eradicate learners under trees. Laboratories are normally provided to Secondary schools as their curriculum demands for such amenities. There are 424 Secondary and 202 Combined Schools that total up to 656. About 30% of these schools have the laboratories where learners benefit. Some of the existing laboratories are not quite functional due to the absence of the necessary fittings.

- Media Centres

All schools that have a roll of 400 and 350 in Primary and Secondary schools respectively must be provided with media centres. Smaller schools will only be provided with classroom resources that can be used as library reference books. Again a small number of schools, namely those in the previously advantaged areas have these facilities.

- Computer Centres

A great number of schools are without this facility as about only 1% is provided.

- Hospitality Studies Centres

All schools that offered Home Economics as a Learning Area were provided with these facilities. The Learning Area has since changed to Hospitality Studies since the advent of the New Curriculum Statement (NCS).

- School Halls

Only about 1% of the schools have proper school halls. These are found in the previously advantaged areas while a great number is void of such facilities.

- Water and sanitation

Information at the disposal of the planning component is that all schools within the Province have some basic sanitation supplied to them. It is, however, important to note that such facilities are not according to the norms for the supply of such. If a school has an occupational capacity of greater than 100%, then the ratio of 1.5 toilets for every 1 classroom is applied. If the occupational capacity is less than 100% then the ratio of

1.5 toilets for every 40 learners and 35 learners is applied in the Primary and Secondary schools respectively (Arends and Paterson 2003:16 – 17). The Province has not met this norm so far but care was taken that all education institutions do have sanitation that will gradually be increased towards meeting the norm.

- Fences

About 95% of the schools have some form of fence around them. The challenge is that some of these fences are already dilapidated thus no longer perform the function they were meant for.

- Electricity

A total of 1 595 schools are expected to have electricity. Some of the schools that were previously electrified were vandalised thus being reported as having no electricity. The number needs to be further confirmed by the Regional Resource Planners.

- Kitchens

Schools currently use makeshift structures as kitchens for the Nutrition Programme. The Portfolio Committee on Education, Sports, Art and Culture has already raised concerns around some of these structures. No proper kitchens have been provided, as the DPW was busy with the design thereof.

- Ramps and rails

Ramps and rails were also not previously provided thus schools were out of bounce for some category of people. The MDoE has commenced to provide these in order to make schools accessible. The actual statistical data still need to be determined though some schools have begun to receive such facilities and some do not need them as they are constructed with their foundations close to the ground.

A total of 58 schools are to be provided with ramps and rails as planned for in the 2007 / 2008 financial year.

- Sports Grounds and Car Park

The sports grounds and car parks are a new category of facilities that are to be provided commencing in the 2007 / 2008 financial year. Only a few schools have proper sporting facilities and these are concentrated in the former advantages schools. The formerly disadvantaged schools did not have properly constructed facilities.

2.3. Desired Level of Service

The norms and standards the Province utilises for the cost effective provision of infrastructure are the ones developed nationally. The key stakeholders in MDoE generally know these norms as they are captured in the Manual for the Provision of

Physical Facilities to schools and have been in place for a long period of time now. The existing norms and standards are currently under review nationally to align them to the changes taking place in the curriculum.

Over and above the existing norms and standards, the mobility of the communities is considered. Facilities are provided in instances where there is growth in settlements and existing facilities are optimally utilised. The distances learners have to walk should be limited to a radius of five kilometres. Where a distance to be travelled is beyond five kilometres, then new facilities are provided or the Scholar Transport kicks in. Communities that are young and have children stand a better chance to be provided with facilities. Hereunder follow the facilities that are needed by the communities:

2.3.1. Classrooms.

A total of 4 656 classrooms were needed within the Province to bring all schools on par. 2 184 classrooms are depicted as a backlog in the Primary schools within the Province. The situation also differs from Region to Region. The Ehlanzeni Region has the greatest number of classroom shortage as the number of classrooms needed stand at 894. Bushbuckridge has a shortage of 338, Gert Sibande 491 and Nkangala with 461.

270 new classrooms have been planned for in the 2007 / 2008 financial year in the Primary schools and are targeted to commence for construction around September or October. The construction of new schools will commence even later which implies that the total number of classrooms indicated here will not be complete by the end of the financial year.

The Secondary schools have a shortage of about 2 033 classrooms. The Region that leads the pack is Ehlanzeni with a shortage of 823 classrooms. The rest of the Regions have shortages as follows: Gert Sibande 402, Nkangala 307 and Bushbuckridge 501.

The secondary schools are targeted to receive 352 new classrooms in the 2007 / 2008 financial year to reduce the backlog that exists. The construction hereof will be as in the Primary schools.

It should also be noted that while other Circuits and schools run short of classrooms, there are other schools where idle capacity is the order of the day. Such idle capacity is converted to other facilities to ensure optimum utilisation. The construction of complete new schools also means that other facilities like administration blocks should also begin to be provided to improve the quality of education.

2.3.2. Administration Blocks

The shortage regarding the provision of administration blocks stood at 880 provincially during the 2007 / 2008 financial year. The Region that needs more administration blocks is Nkangala with 321 needed. The other Regions have shortages indicated as follows: Bushbuckridge 253, Ehlanzeni 221 and Gert Sibande 85.

A total of 47 administration blocks was planned for the financial year 2007 / 2008. The provision of these facilities during the current MTEF implies that a balance of 833 administration blocks will still be required to eradicate the backlog.

2.3.3. Specialist Rooms

Special rooms are defined as those facilities where tuition for specialised learning areas takes place. The special rooms covered here include laboratories, media centres, computer centres, hotel and catering centres and school halls. Around 612 laboratories are needed by the Province to satisfy the need for such a facility.

The provision of media centres affects both Primary and Secondary schools and 1 161 are as a result needed. Libraries must be such that they can be easily converted to media centres in the light of the technological advances.

The Home Economics Centres have now become obsolete due to the change in the curriculum. The introduction of the National Curriculum Statement (NCS) has introduced the Hotel and Catering Studies Learning Area. This change may see more schools introducing this subject. The provision of this centre will only be based on curriculum needs. In the 2007 / 2008 financial year only four such centres are being provided to Secondary schools that already offer the Learning Area. Other Secondary schools will be taken on board as they begin to introduce the Learning Area.

The 2007 / 2008 financial year saw the planning of 31 laboratories being done. The provision of these as planned will mean a further 665 laboratories being needed in the Province. Again the true picture will be confirmed when the NEIMS database is eventually released.

Previously schools in the previously disadvantaged areas were not provided with facilities like computer centres. Even some schools in the previously advantaged areas did not receive such facilities. The MEC announced in 2006 that these centres need to be provided so that the learners who go out of the system are at least computer literate. A total of 1 304 computer centres are needed to ensure that all schools that qualify for such a facility receive them.

74 new computer centres are planned for provision in the 2007 / 2008 financial year. This will reduce the number to 1 230 by the time their construction is completed.

The situation in the provision of school halls is the same as regarding the provision of computer centres. The bulk of the schools from the previously disadvantaged areas do not have such facilities as a result schools experience challenges during examination time. The total need for the school halls is 1 832.

2.3.4. Water and Sanitation

All schools, irrespective of size, should have basic infrastructure, which includes the provision of water and sanitation. Places that have bulk water supply should be connected to such services in consultation with the Municipality. In areas where there is no bulk water supply but the ground water table is high, boreholes should be dug. Some areas have neither bulk water supply infrastructure nor the ground water thus the provision of water tanks the only solution.

The Province had eradicated the shortages that were experienced regarding toilets. The provision of such facilities, however, still continues due to the need to eradicate pit toilets within the Province. Over and above the eradication of pit toilets there is also the need to provide toilets for people with physical disabilities. Under this category the Bushbuckridge Region has the most needs as a total of 4 233-toilet seats are needed. Ehlanzeni Region needs 820, Gert Sibande 698 and Nkangala 124.

The Province has moved away from the provision of pit toilets commencing in the 2006 / 2007 Infrastructure Plan. In areas where there is bulk water supply the toilets to be provided are water borne. In instances where sewerage is not available a septic tank and a French drain must be provided. The areas that do not have bulk water reticulation are to be provided with Enviroloo toilets and DWAF will advise on this matter. The Regional Resource Planners must ensure that areas with bulk water supply are indicated as such at the planning stage to avoid wrong allocation of resources.

The provision of water is another area that offers challenges. Some places experience a problem of being in areas that have intermittent water supply. Such schools regard themselves as having no water supply. The Bushbuckridge Region was previously not included in the reports regarding the shortage of water in schools. The team of Head Office, Regional Resource Planners and the DWAF could also not cover all the schools to verify the availability of water.

A total of 450 schools without water therefore still need to be revisited. Ehlanzeni has most schools (135) without water because some areas just do not have water available. Bushbuckridge, Gert Sibande and Nkangala have 132, 108 and 75 respectively.

42 schools are to be provided with water during the 2007 / 2008 financial year. This will mean that a further 386 will still need to be covered to ensure that all schools have water at their disposal.

2.3.5. Fence

Some schools do not have fences as these are dilapidated thus need to be replaced. In some instances fences have been run down due to their age. All new schools are to be supplied with steel palisade fences thus moving away from the ordinary mesh fences. The existing schools will also be supplied with steel palisade fences if and when a need arises. There is an indication that schools prefer concrete palisade fence

to the steel one. The motivation given is that the concrete palisade fence has less maintenance, if any. Senior Management will give a decision on the matter.

The current total of needs within the Province is 449. The schools that will need fences are as follows: Nkangala Region 139, Gert Sibande 127, Ehlanzeni 106 and Bushbuckridge 77. Planning for the 2007 / 2008 financial year reveal that a total of 33 fences are to be provided. A total of 416 toilets are still needed to eradicate the backlog that exists.

An indication already exists from schools through the Regions that the concrete palisade fence is preferred above the steel palisade fence. The rationale advanced for this scenario is that the concrete palisade fence needs less if any maintenance.

2.3.6. Electricity

The provision of electricity is regarded, as a basic need thus should be made available to all schools. The areas that have infrastructure will be targeted first and other areas will follow as the infrastructure become available. To align with millennium goals, other sources of energy have to be considered where infrastructure is non-existent. The DME is committed to electrify all schools that were constructed before 01st April 2001, more especially, where infrastructure is available.

Electricity is one of the facilities that is always vandalised in some areas. The result is that schools that previously had electricity report themselves as having none. Information around this facility therefore varies from time to time. The current situation is that 449 schools are reported to be without electricity with 127 of them being in the Gert Sibande Region. Nkangala needs 139, Ehlanzeni 106 and Bushbuckridge 77**.**

43 schools provided with electricity during the 2007 / 2008 financial year would reduce the current 376 backlogs. Electricity cannot be provided in isolation of construction and renovation thus the backlog is reduced at a rather leisure number per annum.

2.3.7. Kitchens

Primary schools are on the programme to feed learners at school. The programme entails providing food to learners while they are at school to enhance teaching and learning. The Primary schools should then be provided with kitchens to make the Nutrition Programme a healthy exercise. A total of 41 kitchens are already planned for construction in the 2007 / 2008 financial year in Primary schools that have the Nutrition Programme for the learners. Currently the kitchens that are needed are as follows: Bushbuckridge 327, Nkangala 307, Ehlanzeni 308 and Gert Sibande 266. The provision of 35 kitchens will reduce the current need of 1 211 to 1 176.

There are possibilities that in future Secondary Schools in Quintile 1 to 3 may participate in the Nutrition Programme should funds so permit. Immediately this decision is implemented then kitchens may have to be provided in these schools as well.

2.3.8. Ramps and Rails

The provision of education to the nation is an inclusive exercise, which calls for everybody to have an access to this service. To this end all schools should be provided with ramps where these are needed. The rails must also be provided in instances where they are needed to secure the ramps that may be unsafe. The Full Service Schools and Resource Centres should be given priority. The provision will then be rolled out to the rest of the schools. The cost of ramps and rails should include the covering of all walkways and providing paving for such. The ramps and rails should meet the requirements as set out by the South African Bureau of Standards (SABS), Council for Scientific and Industrial Research (CSIR) and other bodies qualified to set such standards.

2.3.9. External Works

External works have become an issue since the down pipes were discontinued in the construction on new buildings. Concrete aprons and dish drains should be provided creatively so as to divert storm water away from causing erosion around buildings.

The access to the sports fields is a matter that needs to be taken into account when external works are done. No backlog figure exists for these facilities as the sizes of schoolyards differ. Some schools have fenced out a part of their school perimeter thus exposing it to invasion by other people. The facilities as indicated would, therefore, only be provided in instances where sufficient space exists to accommodate such.

Sporting facilities should be provided such that people with disabilities are able to access them with ease. The provision of sporting facilities is one of the issues to be included in the whole approach of providing complete schools. A total of 104 sports grounds are planned for provision in the 2007 / 2008 financial year. Car parks that have been planned for are 51 in number.

Parking bays should include one parking bay for a disabled staff member and one for visitors. A drop off point for people with disability should be provided at a reasonable distance from the school buildings.

2.4. Waste Disposal

Schools that are in areas where there are services rendered for the removal of waste will have to make arrangements to link up with their Local Municipalities for waste removal. Other schools that are not linked up to waste removal by the Municipalities need to be encouraged through the unit that builds capacity to SGBs to consider contacting Waste Recycling Companies. In this instance recyclable waste can be collected and stored at an identified spot for the companies to collect per arrangement. This will also boost the income of such schools as companies pay for such services. The upside of the exercise is that the schools and the environment will be clean.

Making the SGBs aware of the contents of the State of the Environment Reports of the Municipalities will enhance the process.

2.5 Flash Points

Some areas develop fast due to the invasion of land and / or settlement by people from outside that settlement. Planning for new comers sometimes take longer than expected. This imply that the need for school infrastructure become grave within a short period of time. One such place that outgrew the number of available schools is Piet Retief. The use of movable classrooms while planning for the provision of brick and mortar structures has been put in full swing. Such places need closer monitoring because the Municipalities are in some instances also not aware of such invasion.

2.6. Total backlog

The Education Statistics in South Africa at a Glance in 2001 (2003:17) show a decline of -2.0% in the learners' enrolment for the period between 1999 and 2000. The figure went up to -2.9% for the period 1999 to 2001. Between 2001 and 2006 the learner numbers indicate a drop of about 3 947 learners in the system while there is a hike of about 19 000 learners around the Ehlanzeni Region for the year 2006. The hike in the number of learners in the Ehlanzeni Region in the face of declining numbers of learners on the whole may suggest an import of learners from other Provinces. This discrepancy needs further investigation around where these learners come from and the impact their inflow will have on the provision of services.

The total number of public schools is confirmed by the Education statistics in South Africa at a Glance in 2005 (2006: 4) as being 1 852 in 2005. This represents a total of 97.7% of the total number of schools in the Province. The schools catered for a total of 893 040 learners. The figures as shown indicate a learner school ratio of one school to 482 learners. The statistics point out the fact that a great number of learners within the Province are in the Foundation Phase (Ibid: 9). Planning for the provision of facilities mean that these learners must be taken into account as they move up the academic ladder with the passage of time. The general trend in the decrease of learner numbers from 2004 is again picked up though there is a growth of 1.1% when the situation is viewed from 2001 to 2005.

In the year 2000 Mpumalanga Province had a total backlog of 5 959 classrooms (DBSA, 2005:40). The year 2004 / 2005 saw a total of 4 053 classrooms indicated as backlogs. Comparing these figures with the current shortage of 4 551 classrooms suggest that the shortage of classrooms is gradually increasing though there is a drop in enrolment. This scenario could be due to the fact that the asbestos structures that are in existence within the Province are also considered as backlogs.

Table 1 indicates part of the period it will take to eradicate the backlogs in infrastructure. Most of the facilities need time beyond 2014 / 2015 financial year. The next paragraph indicates this scenario. It is important to note that the injunctions must be taken into account when the eradication of backlogs is spoken about. The table as mentioned

above must also take into account the condition of buildings, space shortage as dictated by overcrowding in schools as well as the outstanding buildings to satisfy the norm of what facilities are to be in school to name that school a complete school.

The Department currently utilises a spreadsheet that previously captured the statistical data around the situation in schools. The spreadsheet was subsequently extended to include other information like the condition of buildings. This exercise is, however, still work in progress. The completion of this work will enhance the determination of the infrastructure capacity deterioration.

Table 2 through to Table 12 indicate the backlog experienced in the Province. It will take around 20 years to eradicate this backlog if the allocated funds remain at the current level. The period can, however, be longer if the amount allocated to the maintenance of facilities is gradually increased and that of construction is gradually decreased.

Table 1: Infrastructure Overall Plan

			MTEF ALLOCATION			OUTER YEARS - PROJECTION			
	Category	**%**	**2008/2009**	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
Budget			443,782	503,272	559,082	592,627	628,185	665,876	705,829
Maintenance	Proactive	5	22,189	25,164	27,954	29,631	31,409	33,294	35,291
	Reactive	5	22,189	25,164	27,954	29,631	31,409	33,294	35,291
	Sub_Total	**10**	**44,378**	**50,327**	**55,908**	**59,263**	**62,818**	**66,588**	**70,583**
New Construction	Growth	0							
	Backlog	60	266,269	301,963	335,449	355,576	376,911	399,526	423,497
Rehabilitation		20	88,756	100,654	111,816	118,525	125,637	133,175	141,166
Refurbishment		10	44,378	50,327	55,908	59,263	62,818	66,588	70,583
	Sub-Total	**90**	**399,404**	**452,945**	**503,174**	**533,364**	**565,366**	**599,288**	**635,246**
	TOTAL	**100**	**443,782**	**503,272**	**559,082**	**592,627**	**628,185**	**665,876**	**705,829**

	Time	**Number**	**Cost Per Unit in R'000**						
Sanitation		4,921	56	423	598	578	578	578	578
Water		386	169	386					
Electricity		317	159	10	46	43	42	42	42
Computer Centres		1,230	636	30	74	74	74	74	74
Grade R		675	524	30	45	60	70	80	90
Kitchen		1,146	636	16	71	71	71	70	70
Ramps & Rails									

TABLE: 2 **TOTAL BACKLOG: CLASSROOMS**

REGION	CATEGORY	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS				
				2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Bushbuckridge	Primary	338	**327**		11	0	20	85	85	85	52
	Combined	12	**0**			0					
	Secondary	501	**470**		31	0	58	90	90	90	90
Ehlanzeni	Primary	894	**582**	145	116	0	66	50	50	50	50
	Combined	67	**0**	29	44	0					
	Secondary	823	**531**	94	198	0		50	50	50	51
Gert Sibande	Primary	491	**207**	171	113	0	9	20	20	20	33
	Combined	21	**0**	41	8	0					
	Secondary	402	**324**	28	50	0	62	45	45	45	45
Nkangala	Primary	461	**225**	166	70	0	14	20	20	20	30
	Combined	11	**0**	40		0					
	Secondary	307	**209**	78	20	0		40	40	40	49
Other	All	328	**328**			0	68	65	65	65	65
TOTAL		**4,656**	**3,203**	**792**	**661**	**0**	**297**	**465**	**465**	**465**	**465**
					COST EST P/A		**56,430**	**88,350**	**88,350**	**88,350**	**88,350**

REGION	CATEGORY	OUTER YEARS		
		2014/2015	2015/2016	2016/2017
Bushbuckridge	Primary			
	Combined			
	Secondary	52		
Ehlanzeni	Primary	60	50	206
	Combined			
	Secondary	60	270	
Gert Sibande	Primary	86	19	
	Combined			
	Secondary	82		
Nkangala	Primary	20	101	
	Combined			
	Secondary	40		
Other	All			
TOTAL		**400**	**440**	**206**
COST EST P/A		**76,000**	**83,600**	**39,140**

TOTAL	COST EST
3,203	**608,570**

TABLE: 3 **TOTAL BACKLOG: ADMINISTRATION BLOCKS**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS					
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Bushbuckridge	253	**246**		7	0	4	18	25	25	25	25
Ehlanzeni	221	**188**	9	24	0	10	14	14	14	14	14
Gert Sibande	85	**62**	8	15	0	5	14	5	5	5	5
Nkangala	321	**297**	15	9	0	12	23	23	23	23	23
TOTAL	**880**	**793**	**32**	**55**	**0**	**31**	**69**	**67**	**67**	**67**	**67**
				COST EST P/A		**29,574**	**65,826**	**63,918**	**63,918**	**63,918**	**63,918**

OUTER YEARS							
2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
16	16	16	16	15	15	15	15
14	14	14	14	13	13	13	13
5	5	5	5	3			
23	23	23	21	20	20	20	20
58	**58**	**58**	**56**	**51**	**48**	**48**	**48**
55,332	**55,332**	**55,332**	**53,424**	**48,654**	**45,792**	**45,792**	**45,792**

TOTAL	COST EST
793	**756,522**

TABLE: 4 **TOTAL BACKLOG: LABORATORIES**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS					
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Bushbuckridge	109	**102**		7	0	6	8	8	8	8	8
Ehlanzeni	65	**34**	4	27	0	2	7	7	7	5	6
Gert Sibande	50	**40**	2	8	0	4	7	7	7	7	8
Nkangala	441	**436**	5		0	5	7	7	7	7	18
TOTAL	**665**	**612**	**11**	**42**	**0**	**17**	**29**	**29**	**29**	**27**	**40**
				COST EST P/A		**10,812**	**18,444**	**18,444**	**18,444**	**17,172**	**25,440**

OUTER YEARS											
2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020/2021**	**2021/2022**	**2022/2023**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**
8	8	8	8	8	8	8					
0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0				
22	22	22	30	30	30	30	30	30	30	30	30
30	**30**	**30**	**38**	**38**	**38**	**38**	**30**	**30**	**30**	**30**	**30**
19,080	**19,080**	**19,080**	**24,168**	**24,168**	**24,168**	**24,168**	**19,080**	**19,080**	**19,080**	**19,080**	**19,080**

OUTER YEARS	
2027/2028	**2028/2029**
30	19
30	**19**
19,080	**12,084**

TOTAL	COST EST
612	**389,232**

TABLE: 5 **TOTAL BACKLOG: LIBRARIES**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS					
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Bushbuckridge	314	**304**		10	0	16	16	16	16	16	16
Ehlanzeni	361	**320**	1	40	0	19	18	18	18	18	18
Gert Sibande	127	**108**	1	18	0	12	12	12	12	12	12
Nkangala	435	**429**	3	3	0	22	22	22	22	22	22
TOTAL	**1,237**	**1,161**	**5**	**71**	**0**	**69**	**68**	**68**	**68**	**68**	**68**
				COST EST P/A		**43,884**	**43,248**	**43,248**	**43,248**	**43,248**	**43,248**

OUTER YEARS											
2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027
16	16	16	16	16	16	16	16	15	15	15	15
18	18	18	18	18	18	18	18	18	18	18	13
12	12	12									
22	22	22	22	22	22	22	22	22	22	22	21
68	**68**	**68**	**56**	**56**	**56**	**56**	**56**	**55**	**55**	**55**	**49**
43,248	**43,248**	**43,248**	**35,616**	**35,616**	**35,616**	**35,616**	**35,616**	**34,980**	**34,980**	**34,980**	**31,164**

2027/2028	2028/2029
15	5
20	14
35	**19**
22,260	**12,084**

TOTAL	COST EST
1,161	**738,396**

TABLE: 6 **TOTAL BACKLOG: COMPUTER CENTRES**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS					
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Bushbuckridge	330	**320**		10	0	3	18	18	18	18	18
Ehlanzeni	374	**328**	0	46	0	11	20	20	20	20	20
Gert Sibande	114	**97**	0	17	0	7	10	10	10	10	10
Nkangala	486	**485**	0	1	0	9	26	26	26	26	26
TOTAL	**1,304**	**1,230**	**0**	**74**	**0**	**30**	**74**	**74**	**74**	**74**	**74**
				COST EST P/A		**19,080**	**47,064**	**47,064**	**47,064**	**47,064**	**47,064**

OUTER YEARS											
2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027
18	18	18	18	18	18	18	18	18	15	15	15
20	20	20	20	20	20	20	20	20	20	17	
10	10	10	10								
26	26	26	26	26	26	26	26	24	23	23	23
74	**74**	**74**	**74**	**64**	**64**	**64**	**64**	**62**	**58**	**55**	**38**
47,064	**47,064**	**47,064**	**47,064**	**40,704**	**40,704**	**40,704**	**40,704**	**39,432**	**36,888**	**34,980**	**24,168**

OUTER YEARS	
2027/2028	2028/2029
15	5
23	22
38	**27**
24,168	**17,172**

TOTAL	COST EST
1,230	**782,280**

TABLE: 7 **TOTAL BACKLOG: ELECTRICITY**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS				
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Bushbuckridge	72	**69**		3	0	2	8	8	8	8
Ehlanzeni	95	**66**	6	23	0	3	12	11	10	10
Gert Sibande	121	**102**	18	1	0	5	14	14	14	14
Nkangala	95	**80**	10	4	0	0	12	10	10	10
TOTAL	**383**	**317**	**34**	**31**	**0**	**10**	**46**	**43**	**42**	**42**
				COST EST P/A		**1,590**	**7,314**	**6,837**	**6,678**	**6,678**

OUTER YEARS					TOTAL	COST EST
2014/2015	2015/2016	2016/2017	2017/2018	2018/2019		
8	8	8	8	3	**317**	**50,403**
10	10					
14	14	13				
10	10	10	8			
42	**42**	**31**	**16**	**3**		
6,678	**6,678**	**4,929**	**2,544**	**477**		

TABLE:8 **TOTAL BACKLOG: SANITATION**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS				
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Bushbuckridge	4,233	**4,145**		88	0	81	500	500	500	500
Ehlanzeni	820	**190**	202	428	0	170	20			
Gert Sibande	698	**586**	76	36	0	117	78	78	78	78
Nkangala	124	**0**	204	16	0	0	0			
TOTAL	**5,875**	**4,921**	**482**	**568**	**0**	**368**	**598**	**578**	**578**	**578**
				COST EST P/A		**20,608**	**33,488**	**32,368**	**32,368**	**32,368**

OUTER YEARS				
2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
500	500	500	500	64
78	79			
578	**579**	**500**	**500**	**64**
32,368	**32,424**	**28,000**	**28,000**	**3,584**

TOTAL	COST EST
4,921	**275,576**

TABLE: 9 **TOTAL BACKLOG: FENCES**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS				
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Bushbuckridge	77	**73**		4	0	2	8	10	10	10
Ehlanzeni	106	**79**	4	23	0	4	15	20	10	10
Gert Sibande	127	**111**	13	3	0	7	13	16	13	13
Nkangala	139	**113**	13	13	0	9	15	15	15	15
TOTAL	**449**	**376**	**30**	**43**	**0**	**22**	**51**	**61**	**48**	**48**
				COST EST P/A		**20,988**	**48,654**	**58,194**	**45,792**	**45,792**

OUTER YEARS				
2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
10	8	8	7	
10	10			
13	13	13	10	
15	15	14		
48	**46**	**35**	**17**	**0**
45,792	**43,884**	**33,390**	**16,218**	**0**

TOTAL	COST EST
376	**358,704**

TABLE: 10 **TOTAL BACKLOG: WATER**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS	
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011
Bushbuckridge	132	**125**		7	0	125	0
Ehlanzeni	135	**96**	10	29	0	96	0
Gert Sibande	108	**98**	8	2	0	98	0
Nkangala	75	**67**	4	4	0	67	0
TOTAL	**450**	**386**	**22**	**42**	**0**	**386**	**0**
				COST EST P/A		**65,234**	**0**

TOTAL	COST EST
386	**65,234**

TABLE: 11 **TOTAL BACKLOG: KITCHEN**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS					
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Bushbuckridge	330	**327**		3	0	3	19	19	19	18	18
Ehlanzeni	308	**282**	4	22	0	4	17	17	17	17	17
Gert Sibande	266	**240**	13	13	0	4	17	17	17	17	17
Nkangala	307	**297**	7	3	0	5	18	18	18	18	18
TOTAL	**1,211**	**1,146**	**24**	**41**	**0**	**16**	**71**	**71**	**71**	**70**	**70**
				COST EST P/A		**10,176**	**45,156**	**45,156**	**45,156**	**44,520**	**44,520**

OUTER YEARS											
2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027
18	18	18	18	18	18	18	18	15	15	15	15
17	17	17	17	17	17	17	17	17	17	17	6
17	17	17	17	17	17	17	17	15	0	0	0
18	18	18	18	18	18	18	18	18	18	18	4
70	**70**	**70**	**70**	**70**	**70**	**70**	**70**	**65**	**50**	**50**	**25**
44,520	**44,520**	**44,520**	**44,520**	**44,520**	**44,520**	**44,520**	**44,520**	**41,340**	**31,800**	**31,800**	**15,900**

OUTER YEARS	
2027/2028	2028/2029
15	12
0	0
0	0
0	0
15	**12**
9,540	**7,632**

TOTAL	COST EST
1,146	**728,856**

TABLE: 12 **TOTAL BACKLOG: SCHOOL HALLS**

REGION	TOTAL BACKLOG	BALANCE	MTEF PERIOD			OUTER YEARS					
			2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Bushbuckridge	330	**330**			0	6	18	17	17	17	17
Ehlanzeni	452	**437**		15	0	2	26	26	26	26	26
Gert Sibande	602	**602**			0	4	33	33	33	33	33
Nkangala	475	**474**		1	0	1	26	26	26	26	26
TOTAL	**1,859**	**1,843**	**0**	**16**	**0**	**13**	**103**	**102**	**102**	**102**	**102**
				COST EST P/A		**8,268**	**65,508**	**64,872**	**64,872**	**64,872**	**64,872**

OUTER YEARS											
2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027
17	17	17	17	17	17	17	17	17	17	17	17
26	26	26	26	21	20	20	20	20	20	20	20
33	33	33	33	31	30	30	30	30	30	30	30
26	26	26	26	26	26	26	26	26	26	26	26
102	**102**	**102**	**102**	**95**	**93**	**93**	**93**	**93**	**93**	**93**	**93**
64,872	**64,872**	**64,872**	**64,872**	**60,420**	**59,148**	**59,148**	**59,148**	**59,148**	**59,148**	**59,148**	**59,148**

2027/2028	2028/2029
17	17
20	20
30	30
26	5
93	**72**
59,148	**45,792**

TOTAL	COST EST
1,843	**1,758,222**

3. COMMUNITY NEEDS

3.1 Demand and Forecast

Data in the EMIS section indicate that there are 1 928 schools in the Province. 1 254 of these schools are Primary, 202 Combined, 454 Secondary and 18 are Special schools. It was alluded to that the learner classroom ratio in the schools is 1:44 in Bushbuckridge and 1:46 in Ehlanzeni while the other two Regions are below 1:40. This suggests that there is a need for the provision of infrastructure in the schools, more especially, in the two former Regions.

The Province experiences a number of backlogs regarding facilities that were previously not provided. The backlogs need to be challenged head on including the quality of some buildings. The provision of Nutrition to learners at schools was reported to have drawn more learners into the system. This is evidenced by the higher enrolments in the Foundation Phase as compared to the Intermediate, Senior and FET Phases. Such learners then put pressure regarding the provision of facilities. Scholar Transport is used in some instances to alleviate the situation. The latter solution is, however, workable in the short term while a long-term solution would be to provide the needed facilities. The integration of planning and the provision of Scholar Transport are necessary to ensure holistic planning.

The use of the Geographic Information System (GIS) to determine the number of learners within a five-kilometre radius as opposed to the number of learners transported needs to be plotted. The completion of the GIS infrastructure within the MDoE becomes key to realising this objective. The exercise will assist the Planners to make informed decisions around where to locate new schools.

The introduction of a new curriculum in the secondary schools may put a strain on the resources available to the Province as additional facilities are needed. An audit was conducted in the schools during the 2005 / 2006 financial year and the results were expected by the end of March 2007. An indication is that the results are still withheld by the National Department of Education awaiting tabling in Cabinet thus have not reached the Provinces as yet.

The fact that some families move from one area to the next implies that existing facilities are left unused while others are demanded at the new areas where they settle. The families that remain behind would generally consist of elderly couples while young couples move to other places. The increase in the number of households that come with the settlement of new residents in already established places implies the need for additional facilities in such a place.

Other facilities have outgrown being renovated thus need to be replaced. Some of the schools were previously constructed by communities and do not meet the building standards. Buildings that show structural collapse because of age cannot be left unattended. The walls and floors of such schools are a danger to all and sundry. If left unattended such buildings may collapse onto the school community. The cost the

renovation of a building will have compared to constructing a new is considered before a building is recommended for putting down and its eventual replacement.

Some schools were previously constructed on asbestos structures and these need to be replaced as they affect the health of users. Outside them being a health hazard, the MDoE was summoned to Court to answer questions around the use of asbestos as building material. In terms of prescripts, such structures were supposed to have replaced already. The substitution of these structures vis-à-vis providing facilities where they are needed must be balanced to ensure effective provision.

It is anticipated that the community expectations will change as the changes in curriculum occur. The need for experts in scarce subjects like maths and technology will change the way the communities perceive them. The change in perception will have a domino effect in that more and more parents will expect their children to take these Learning Areas. This change will further impact on the facilities that are provided to schools.

The demographic changes that occur in some places where new couples prefer to go and settle implies a demand for services to be rendered at such places. On the whole the demand for school infrastructure will remain as the population procreates or there is a sudden influx of people into a settlement. The finalisation of research to develop a cure for the HIV and AIDS virus will have a long-term effect on the demand that will be placed on the provision and use of infrastructure. The idea of conversion of these structures to other use should therefore be seriously considered.

Currently Government is busy allocating some land to its previous owners through the Land Restitution process. The observation that some of the land returned to communities was not necessarily used as settlements after their eviction calls for the establishment of new schools where communities decide to resettle. This movement places pressure on the MDoE to provide learning facilities in the event where such communities are far flung from such services.

The NSDP and the PDGS propose a situation where facilities are provided where people settle. Noting that people will normally settle in areas they see as having potential for growth, the provision of facilities should follow them. The demand for services will grow so long as communities remain mobile.

3.2 How Research Translates to Level of Service

The research conducted revealed that the Province generally has the needed infrastructure mainly in the form of classrooms. The numbers of classrooms at Primary level are generally sufficient therefore not necessarily needed. The need is realised when the schools are viewed more closely. The Secondary schools, on the other hand, show great needs across the Province. The greatest needs however remain at Bushbuckridge and Ehlanzeni Regions.

Most schools do not have other facilities like administration blocks, laboratories in the Secondary schools, media centres, computer centres and others. These facilities must be provided in order for schools to offer quality education to the learners.

3.3 Impact of changes in demand on infrastructure utilisation

Some communities do not stay in one place throughout their lifetime but move to places perceived to have better opportunities. Infrastructure that was provided to these communities is left behind with older people as younger ones move on. The observation that elder people may not necessarily have young children such infrastructure gradually becomes white elephants.

Areas where younger couples go and settle, on the other hand, are void of the needed infrastructure. Provision must therefore be made to ensure that children are not disadvantaged in their new situation. If the numbers are not big enough then Scholar Transport must be organise to transport these learners to nearby schools.

The changes in the curriculum meant the introduction of other Learning Areas that were previously not offered in many schools. The new Learning Areas demand a specialised type of infrastructure that is not in existence in many schools. Facilities like computer centres and hospitality studies centres must now be provided. Other specialised centres like workshops must also be provided in areas where the curriculum demands for such.

3.4 Changes in Technology

The GIS that will assist the Physical Resources Planners is still under construction in the MDoE. The officials at Regions and Head Office have attended the initial generic training in this regard. For this reason the GIS has not been utilised in the compilation of this Infrastructure Plan. The non-release of the NEIMS poses challenges, as synergy of information between the GIS and NEIMS cannot be achieved.

The possibility of access to education through technology is still far fetched in the Primary and Secondary schools, as learners need a live role model in their formative years. The broadband infrastructure to enhance connectivity is still under discussion at Senior Management level. Technology will therefore be used as an aid rather than to replace educators thus facilities will be needed for the learner – educator interaction.

The use of technology, however, can lead to the use of libraries in current form as obsolete. The construction of these facilities should make room for easy conversion to media centres where technological gadgets can easily be accommodated. Libraries constructed henceforth must not only be libraries in the old sense but must incorporate the element of being a media centre where electronic gadgets can also be housed.

The construction of structures using alternative construction materials and methods should be investigated. This will assist to solve challenges in the short term, for example five years, whilst the situation is interrogated further. The supply of movable

classrooms was another option. This option is, however, a temporary solution, as communities will eventually demand for brick and mortar classrooms. A change in the mindset may be necessary before such structures are provided for in the longer term. The absence of a Service Provider and the lengthy tender processes has made this option a nightmare as slow movement has been registered since this direction was put underway.

The notion of converting existing unused hostels to cater for rural learners was discussed but does not seem to be a viable option. A decision on the matter still has to be taken at Senior Management level. The Province had previously done away with school hostels due to the costs involved and that they only catered for the minority learners thus will not necessarily move in that direction.

Electricity is one of the facilities that have become a must for schools for them to cope with the changing demands of the curriculum. The schools that are in areas where there is bulk electricity supply are immediately connected to this service. Other areas are void of such service and are therefore reliant on solar power. A few schools in the KwaMhlanga area were previously connected to solar power to make their life bearable. The panels used to generate energy were, however, vandalised and that left the schools without electricity. Another alternative to be considered is the use of generators, which may also be stolen as evidenced by those using them to generate power for the boreholes. ESKOM therefore becomes the service provider to be relied upon for the provision of electricity.

Many areas are without the bulk infrastructure to carry waste in sewerage for treatment at other sites. This left the MDoE to supply pit toilets to schools. These are suspected to contaminate the underground water and can thus cause the outbreak of diseases like typhoid. These are no longer provided and attention has turned to the provision of Enviroloo toilets. The VIP toilets will only be provided in areas where the other types of toilets will not be cost effective. The advantage of Enviroloo toilets is that the solid dry waste can be used as manure in the food gardens at schools. Challenges facing the new situation are that some schools do not have sufficient space to have gardens cultivated. At another level, the communities may not be conversant with that technology thus needs education for them to know how to operate and service such structures.

The availability of water to schools is equally important. Areas with bulk water supply can be easily connected to that infrastructure working in close cooperation with the Municipalities. However, there are other places that are void of such bulk infrastructure. An alternative was the drilling of boreholes and the provision of water tanks on sites to ensure access to water.

The construction of new facilities will be revisited in future to exploit structures that are of multi use. Such structures need to be versatile to allow them to be used for different activities. The introduction of e-education will not necessarily need a type of classroom that is currently in place. The new arrangement should allow learners space to focus

into their computers for them to learn effectively. This may demand a change to how classrooms are currently constructed, more especially, regarding their sizes.

The Contractors are expected to leave the sites clean after construction. The school must dispose off all other waste material that is generated on site after the site has been handed over. The treatment of waste disposal was mentioned above and need to be indicated that recycling of such will assist both the environment and the communities. This goes together with the availability of telecommunication systems at schools. The SGBs are responsible for ensuring that telecommunication means are available at schools. Head Office has already commenced to connect the Regional Offices to Internet. This will be rolled out to Circuit Offices and then to schools through connection to satellite. The EMIS and IT components lead this exercise.

3.5 Demand Management Plan

Currently a number of learners are transported through Scholar Transport to alleviate the challenges of shortage of infrastructure at some places. Such services are provided mainly in rural areas where learners are far from schools and the provision of additional infrastructure is not a viable option. Scholar Transport, however, has its own shortcomings as the numbers of learners that need it keep on increasing thus putting a strain on the budget allocation. Balancing the act in terms of providing classrooms vis-à-vis Scholar Transport should be done in the long term to ensure that the available financial resources are optimally engaged. The presence of technically qualified personnel will assist to, among others, work out the costing of the alternatives to be considered.

The workmanship at places where facilities are being provided should be monitored very closely. Poor quality workmanship causes facilities to have a short lifespan thereby leading to buildings getting dilapidated faster than anticipated. A building that develops structural cracks in a short space of time can actually not be repaired but needs to be put down and replaced, as it may be very dangerous and unsafe to people using it. A case in point is some of the schools that were constructed on the ballaton system most of which are currently falling apart and are now in the process of being substituted.

The Department of Roads and Transport has supplied bicycles to some learners in rural areas under the “Shova Kalula Project”. The project commenced during the 2006 / 2007 financial year but has not covered learners who may be walking great distances in areas that are currently developing thus the construction of facilities may still stand.

The use of alternative construction material has not been exploited. Some research may need to be done in this direction to determine the suitability of such material. Movable classrooms were however used at two schools. It was discovered that these were too hot for the lowveld. This led to hidden costs coming up, as air conditioners were demanded in order to make the heat bearable.

The platoon system where schools share facilities is not in use within the Province. This happens where two schools share the same facilities but use different schools hours. This will not be entertained further due to its absence within the Province.

Some farm schools are so small that only one educator caters them for. In such circumstances learners in different grades are accommodated together in one classroom. During a certain period one Grade is taught while others are given some work to do. Later the next Grade is taught while others are given work to do. The system is not effective in that the educators were not trained to handle multi-grade teaching.

The schools are handed over to communities for use after construction. The insurance taken by the Contractor lapses at that point and the buildings remain uninsured. The age of most buildings will subject them to being refused by insurance companied due to the high risk involved. The SGBs also take over the buildings from the MDoE and not insure them.

The Consultants employed by DPW indicated that a number of projects targeted for implementation in the 2007 / 2008 financial year were unimplementable and needed verification. A process of verification was then put in motion. It was discovered that the needs at the schools were not well represented. The outstanding needs that were not captured were then captured in order to satisfy the holistic approach principle. It was decided that in loco inspections be conducted before projects are handed over to DPW.

The infrastructure to be provided during the 2008 / 2009 financial year is attached as appendix B. The Infrastructure Plan is reviewed annually to ensure that it is still relevant for the period under consideration. Should a need exist that projects be added or removed from the Infrastructure Plan, then the stakeholders like the Municipalities will have to be taken on board. The cost estimate was determined through consultation with the DPW, PTAT and the OST members of both Departments. The costing for toilets was influenced by the shift in policy to do away with pit toilets and beginning to move to water borne or Enviroloo toilets. Ramps and rails, already alluded to in the Infrastructure Plan, should take on board the provision of covered and paved pathways between buildings. The summary of the budget allocated to the projects is as indicated in figure 1.

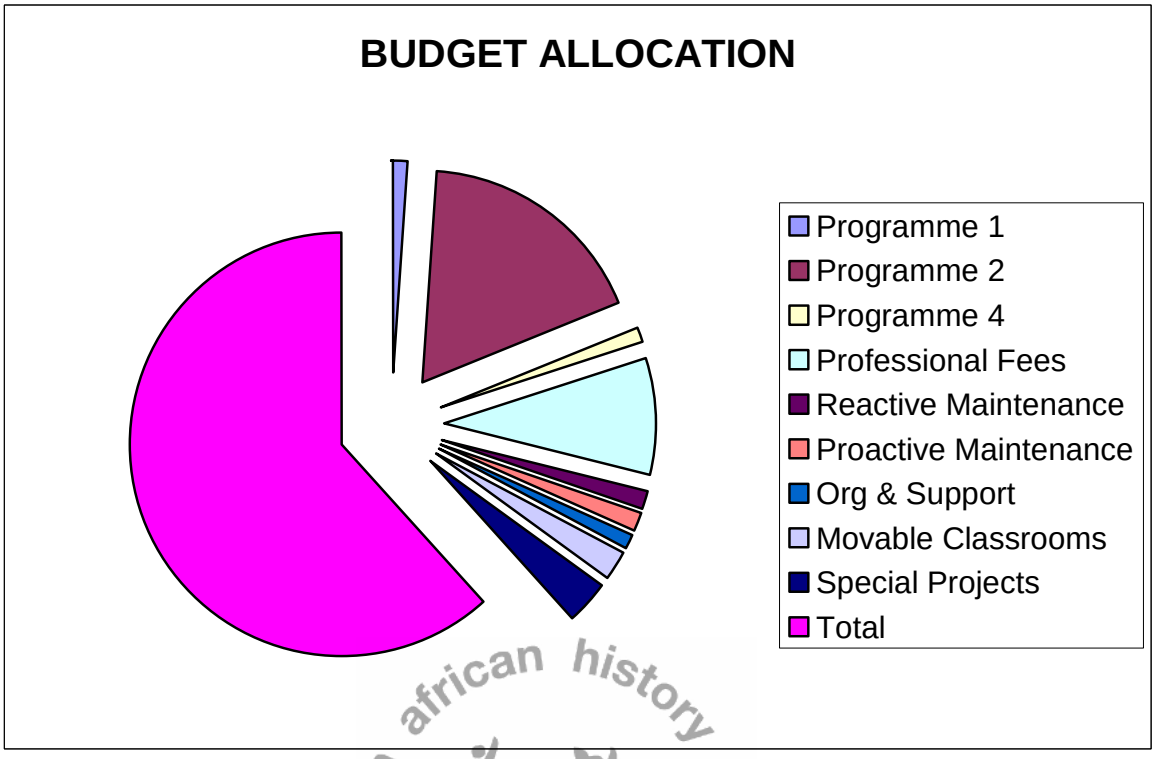

Figure 3: Budget Allocation per Category

TAKE NOTE:

The Bid Committee is only now awarding some of the 2006 / 2007 projects. These projects are in some instances not budgeted for as the financial year for which they were planned has gone past. Current budget is therefore used to service these contracts.

The projects for 2007 / 2008 should not be implemented in full due to the apparent over commitment of projects already in the system. Some of the projects must be planned, designed and shelved for future implementation.

All the projects for 2008 / 2009 and 2009 / 2010 should be planned and designed and not implemented. The Department of Public Works will from time to time be instructed on which projects to implement as the cash flows are interrogated. This arrangement will allow some projects on the shelves while the pressure on available funds eases up before more projects can be released for implementation.

Projects for 2008 / 2009 and 2009 and 2010 that can be planned and shelved are as follows:


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PROVINCIAL INFRASTRUCTURE GRANT

2008 / 2009

BUSHBUCKRIDGE REGION INFRASTRUCTURE PLAN PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
800035092	Dumisani S	Ronaldsey	Mkhuhlu	Bushbuckridge	6cr, admin, lab, lib, cc, hospitality studies centre, hall, 10t, f, e, w, kit, rr, 3sg & p.	18cr & 12 toilets	18856
New	Secondary	Ronaldsey	Mkhuhlu	Bushbuckridge	28cr, admin, lab, lib, cc, hospitality studies centre, hall, 20t, f, e, w, kit, rr, 3sg & p.		24220
800035101	Mandondo S	Somerset	Mkhuhlu	Bushbuckridge	8cr, admin, lab, lib, cc, hospitality studies centre, hall, 16t, f, e, kit, rr, 3sg & p.	16cr & 8 toilets	19955

EHLANZENI REGION INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
800012955	Masibonisane P	Block B	Nkomazi East	Nkomazi	Gr R 2cr, 4t, f, 8cr, admin, lib, cc, 8t, kit, rr, 3sg & p.	12cr & 12 toilets	10776
800012625	Maqhekeza P	Kamaqhekeza	Nkomazi East	Nkomazi	Gr R 3cr, 5t, f, 7cr, lib, cc, 8t, w, kit, rr, 3sg & p.	16cr, admin & 12 toilets	17834
800004093	Evimbilanga P	Kamaqhekeza	Nkomazi East	Nkomazi	Gr R 2cr, 4t, f, 8cr, lib, cc, 24t, w, kit, rr, 3sg & p.	17cr & admin	13167
800020206	Sekusile P	Kamaqhekeza	Nkomazi East	Nkomazi	Gr R 3cr, 5t, f, 4cr, admin, lib, cc, 18t, f, w, kit, rr, 3sg & p.	16cr & 14 toilets	12573
800035304	Sisulu S	Kamaqhekeza	Nkomazi East	Nkomazi	28cr, admin, lab, lib, cc, hall, 20t, f, e, w, kit, rr, 3sg & p.		23222
800015719	Mpumelelo P	Middelplaas	Khulangwane	Nkomazi	Gr R 2cr, 4t, f, 5cr, admin, lib, cc, 16t, kit, rr, 3sg & p.	13cr & 6 toilets	15577

GERT SIBANDE INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
800030486	New Ermelo P	Sun City	Ermelo 2	Msukaligwa	Gr R 2cr, 4t, f, 8cr, admin, lib, cc, 10t, f, e, w, kit, rr, 1sg & p.	13cr	16788
800006817	Ithole P	Lithole	Amsterdam	Mkhondo	Gr R 2cr, 4t, f, 12cr, lib, cc, 10t, f, kit, rr, 2sg & p.	20cr, admin & 12 toilets	18598
800003467	Buhlebuyeza P	Amsterdam	Amsterdam	Mkhondo	Gr R 3cr, 6t, f, 11cr, admin, lib, cc, 11t, f, kit, rr, 2sg & p.	8cr & 5 toilets	18166
800008011	Kleinvrystaat P	Kleinstad	Piet Retief	Mkhondo	Gr R 2cr, 4t, f, 3cr, lib, w, kit, rr	5cr	6242
New	Inqubeko S	Thandukukhanya	Piet Retief	Mkhondo	28cr, admin, lab, lib, cc, hall, 28t, f, e, w, rr, 3sg & p.		23925

NKANGALA REGION INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
800024539	Vamuhle P	Boekenhout	Kwaggafontein West	Thembisile	Gr R 2cr, 4t, f, admin, kit, 3sg & p.	8cr	6698
800022095	Somtshongweni P	Kwaggafontein B	Kwaggafontein E	Thembisile	Gr R 2cr, 4t, f, admin, 16t, f, 3sg & p.	16cr	8578
800005264	Hlalisanani P	Tweefontein G	Tweefontein S	Thembisile	Gr R 2cr, 4t, f, 18cr, admin, lib, cc, 16t, f, kit, rr, 3sg & p.	12cr & 10 toilets	14404
800001719	Buhlebesizwe S	Vlaklaagte 2	Tweefontein S	Thembisile	Admin, lab, 12t, rr, 3sg & p.	8cr	3635
800016147	Mzimhlophe S	Tweefontein J	Tweefontein S	Thembisile	18cr, admin, lab, lib, cc, 16t, f, 3sg & p.	16cr & 10 toilets	13556
800006916	Jabulani P	Tweefontein A	Tweefontein N	Thembisile	Gr R 3cr, 5t, f, 5cr, 3sg & p.	19cr & admin	9565
800024885	Vukuzame S	Tweefontein C	Tweefontein N	Thembisile	18t, f, w, kit, rr, 3sg & p.	16cr	8334

PROVINCIAL INFRASTRUCTURE GRANT

2009 / 2010

BUSHBUCKRIDGE REGION INFRASTRUCTURE PLAN PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
800035100	Makhosana S	Mantangaleni	Mkhuhlu	Bushbuckridge	4cr, admin, lab, lib, cc, hospitality studies centre, hall, 8t, kit, rr, 3sg & p.	16cr & 12 toilets	17808
800035099	Madzuma S	Alexander	Mkhuhlu	Bushbuckridge	12cr, lab, lib, cc, hall, 7t, f, e, kit, rr, 3sg & p.	16cr & 8 toilets	19931
800035090	Bhejani P	Calcutta C	Mkhuhlu	Bushbuckridge	Gr R 2cr, 4t, f, Lib, cc, kit, rr, 3sg & p.		8103
800035104	Mavimbela P	Calcutta	Mkhuhlu	Bushbuckridge	Gr R 3cr, 4t, f, 20cr, lib, cc, 20t, f, e, kit, rr, 3sg & p.		22363
800035094	Homuyeza P	Belfast	Mkhuhlu	Bushbuckridge	Gr R 2cr, 4t, f, 9cr, admin, lib, cc, 8t, f, e, kit, rr, 3sg & p.	16cr & 12 toilets	19271
800035111	Njanji P	Mkhuhlu	Mkhuhlu	Bushbuckridge	Gr R 2cr, 4t, f, 8cr, admin, lib, cc, 16t, f, e, kit, rr, 3sg & p.	12cr & 4 toilets	19500

EHLANZENI REGION INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
800021931	Sogasa P	Middelplaas	Khulangwane	Nkomazi	Gr R 2cr, 4t, f, 4cr, lib, cc, 14t, e, w, kit, rr, 3sg & p.	12cr, admin & 6 toilets	16686
800013524	Mawewe P	Mgobodzi	Khulangwane	Nkomazi	Gr R 2cr, 4t, f, 12cr, admin, lib, cc, 16t, f, w, kit, rr, 3sg & p.	12cr & 4 toilets	20709
New	Secondary	Magudu	Khulangwane	Nkomazi	28cr, admin, lab, lib, cc, hall, 20t, f, e, w, rr, 3sg & p.		23222
800005538	Hoescht P	Kamhlushwa	Malelane	Nkomazi	Gr R 2cr, 4t, f, admin, lib, cc, w, kit, rr, 3sg & p.	20cr & 22 toilets	14469
800018833	Matsafeni P	Kamhlushwa	Malelane	Nkomazi	Gr R 2cr, 4t, f, 10cr, lib, cc, 20t, kit, rr, 3sg & p.	14cr, admin & 6 toilets	17542

GERT SIBANDE INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
New	Ubuhle S	Thandukukhanya	Piet Retief	Mkhondo	28cr, admin, lab, lib, cc, hospitality studies centre, hall, 28t, f, e, w, rr, 3sg & p.		25009
800030445	Amadlelo Aluhlaza S	Thandukukhanya	Piet Retief	Mkhondo	6cr, hall, rr, 3sg & p.	22cr, admin, lab, lib, hospitality studies centre, other and 38 toilets	12662
New	Daggakraal S	Sinqobile	Wakkerstroom	Pixley Ka Seme	28cr, admin, lab, lib, cc, hospitality studies centre, hall, 28t, f, e, w, rr, 3sg & p.		25009
800025320	Wesley P	Mayflower	Mpuluzi	Albert Luthuli	Gr R 2cr, 4t, f, lib, cc, f, e, w, kit, rr, 1sg & p.	15cr, admin & 4 toilets	15473
800002105	Chief TD Nkosi S	Fernie	Mpuluzi	Albert Luthuli	Lab, lib, cc,, rr		4,577
800021618	Siyeta P	Nhlazatshe	Badplaas	Albert Luthuli	Gr R 2cr, 4t, f, 8cr, lib, 8t, kit, rr		7638
800011916	Makhosonke P	Tjakastad	Badplaas	Albert Luthuli	Gr R 2cr, 4t, f, admin, lib, f, kit, rr		7544
New	Thembisa P	Wesselton	Ermelo 1	Msukaligwa	Gr R 2cr, 4t, f, 24cr, admin, lib, cc, hall,		24848

					24t, f, e, w, kit, rr, 3sg & p.		

NKANGALA REGION INFRASTRUCTURE PROJECT LIST

EMIS	PROJECT	LOCATION	CIRCUIT	MUNIC	SCOPE OF WORK		EST COST R'000
					NEW CONSTRUCTION	RENOVATIONS	
800003277	Ekuphakameni P	Allemansdrift C	Libangeni	Dr JS Moroka	Gr R 3cr, 5t, f, 8cr, admin, lib, cc, f, kit, rr, 3sg & p.	16cr	15746
800003558	Emfundweni P	Vaalbank	Libangeni	Dr JS Moroka	Gr R 3cr, 5t, f, 4cr, admin, lib, cc, f, kit, rr, 3sg & p.	12cr	12712
800004182	Ukuphumula kwesizwe P	Allemansdrift	Libangeni	Dr JS Moroka	Gr R 2cr, 4t, f, admin, lib, cc, w, kit, rr, 3sg & p.	16cr & 6 toilets	15097
800018382	Phopolo P	Pankop	Mmametlhake	Dr JS Moroka	Gr R 2cr, 4t, f, admin, lib, cc, f, w, kit, 3sg & p.	15cr & 10 toilets	13522
800012484	Mapala P	Phake	Mmametlhake	Dr JS Moroka	Gr R 2cr, 4t, f, admin, lib, cc, f, kit, rr, 2sg & p.	11cr & 23 toilets	14411
800021386	Sithenjisiwe S	De Beers	Marapyane	Dr JS Moroka	Admin, lib, cc, w	12cr & laboratory	5940

EQUITABLE SHARE

2009 / 2010

EHLANZENI REGION INFRASTRUCTURE PROJECT LIST

800013391	Matsamo P	Schoemansdal	Malelane	Nkomazi	Gr R 2cr, 4t, f, 8cr, admin, lib, cc, 6t, f, e, w, kit, rr, 3sg & p.	16cr & 14 toilets	18703
800001694	Loti P	Buffelspruit	Malelane	Nkomazi	Gr R 2cr, 4t, f, 8cr, lib, cc, 3t, f, e, kit, rr, 3sg & p.	16cr, admin & 15 toilets	18025
800021329	Sisini P	Jeppes Reef	Malelane	Nkomazi	Gr R 2cr, 4t, f, 8cr, admin, lib, cc, 8t, f, kit, rr, 3sg & p.	16cr & 12 toilets	18723

NKANGALA REGION INFRASTRUCTURE PROJECT LIST

800022012	Somabedlana P	Katjibane	Nokaneng	Dr JS Moroka	Gr R 3cr, 5t, f, admin, lib, cc, 12t, f, kit, rr, 1sr & p.	14cr & 6 toilets	14804
800022053	Somkhahlekwa S	Siyabuswa	Siyabuswa	Dr JS Moroka	Lab, lib, cc, 13t, 1sg & p.	13cr, admin & 4 toilets	9072
800024133	Ukhwezi P	Belfast	Waterval Boven	Emakhazeni	Gr R 2cr, 4t, f, 2cr, admin, kit, rr, 3sg & p.	20cr	9894

4. INFRASTRUCTURE MANAGEMENT PLAN

4.1. Background Data

The Province consists of 1 928 public schools spread across the length and breadth of the four Regions. The Primary schools take a fair share of the number of schools in the Province as they account for 1 254 schools. The great number of these schools is situated in the Gert Sibande Region, which accounts for 406 schools. The second number of schools is taken by the secondary schools which account for 454 schools with a bulk of them falling under the Nkangala Region. The Combined schools are 202 in number and the bulk of them are found in the Gert Sibande Region. This explains the rural nature of the Region with many schools being Section 14 schools. Special schools are only 18 in the Province. These schools are characterised by being excluded from the Infrastructure Plan thus a Provincial Infrastructure Grant (PIG) was made available in the last financial year to attend to them. The situation is further explained by Figure 4 below.

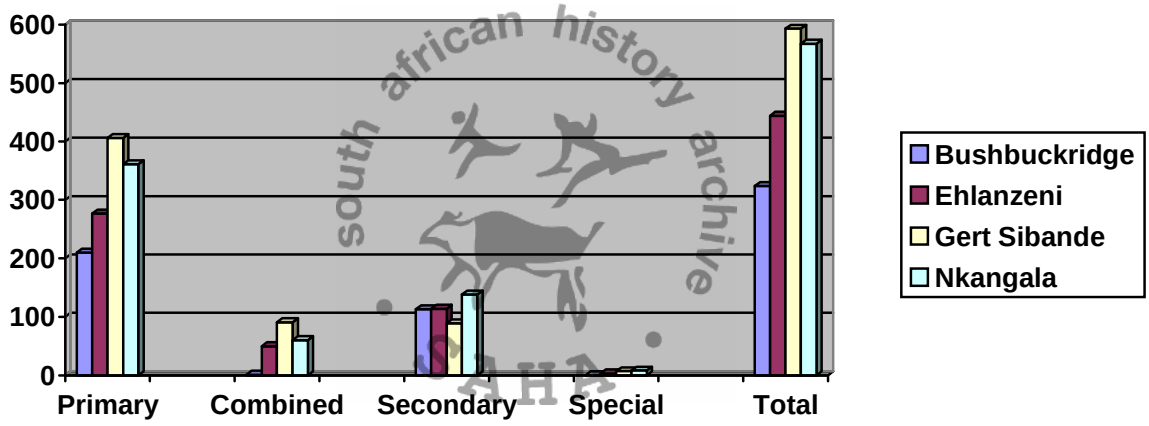

Figure 4: Number of Schools in the Province

The number of schools may either increase or decrease depending on the number of schools that may be amalgamated or registered and built. It is also important to note that the Gert Sibande Region has a number of Farm Schools and these are gradually being closed down due to the de-registration of learners.

On the whole it is not easy to determine the age of the buildings as they were built at different times and according to different standards. A number of these schools are found in rural and semi rural areas which were previously disadvantaged. Some schools in these areas were constructed by the communities and not necessarily according to building standards. These schools are characterised by being poorly maintained and stretched over the limit regarding their use. Some of these are overcrowded, both in terms of learners and the facilities that fill the yard, and cannot accommodate further developments. A case in point is the schools around the Moloto,

extensions in KwaGuqa areas, Piet Retief, Nkomazi and a few others around the Province.

Schools were previously constructed utilising different materials. A number of Farm Schools were constructed on mud. These schools are mainly located in the Gert Sibande Region as the Region that hosts many Farm Schools. The National Department of Education has employed the services of IDT to assist eradicate such schools. A few other schools that are overcrowded have erected corrugated iron structures to alleviate the congestion. Such schools are found mainly in the Ehlanzeni Region where overcrowding is rife. Schools constructed on asbestos are another category. The bulk of these schools are found in the former Model C schools, more especially, in the Nkangala Region that is characterised by the presence of a number of Mines. The Mines and ESKOM donated a few that are found in the previously disadvantaged areas. Those found in the towns were well maintained compared to those found in the locations and villages. Whether these schools were well maintained or not is not an issue. The issue is that these structures are a health hazard and must be removed.

The absence of a technologically compliant system and functional GIS implies that the exact location of institutions constructed on asbestos cannot be determined and their actual number always changes. Depicting these structures in a graph form therefore poses serious challenges. Coupled to this challenge is the issue of having such information captured in a database in the absence of a system to manage infrastructure. Again the release of the NEIMS report by National Office and the subsequent consistent update thereof will be a handy tool for the Province. The Report will give information around the physical parameters of infrastructure as it obtains and a database thereof quantified. It will also indicate the actual capacity and condition of infrastructure to enhance scientific approach to planning.

The MDoE has just commenced with planning according to the MTEF and is currently rolling out this process to cover three years. Plans are afoot to roll out to cover ten years and this will only be possible is there is a database that properly captures existing infrastructure. Eventually the Infrastructure Plan will cover a period of twenty years.

The capacity carried by the schools differs from Region to Region. Bushbuckridge and Ehlanzeni Region are more or less in the same league regarding the use of facilities. Around 30% of the schools are over-utilised in the two Regions while around 10% is under-utilised. Gert Sibande and Nkangala Region also have more or less the same number of schools that are over-utilised. The two Regions have around 30% of the existing capacity being unused and 10% over-utilised. The under-utilised capacity in the latter Regions is mainly due to the movement of people from old settlements to new ones. Figure 4 depicts the scenario of the capacity of schools in the different Regions.

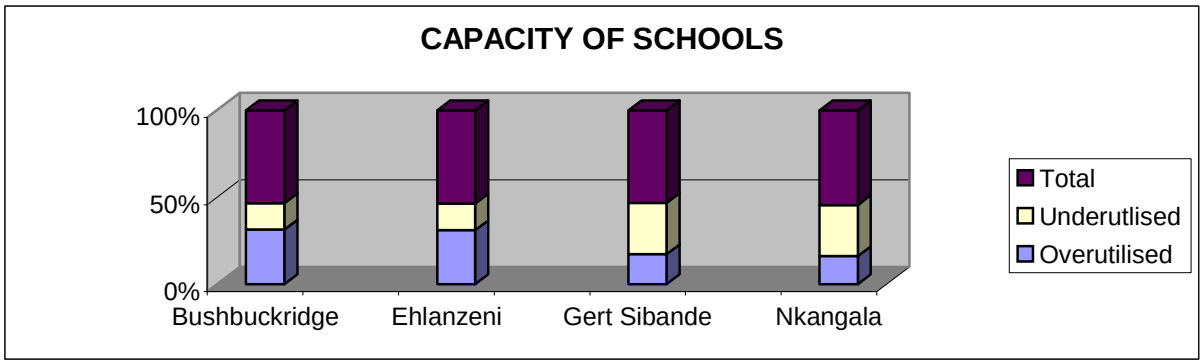

Figure 5: Capacity of Schools

The information utilised during planning is mainly captured in the School Profiles that are compiled by the Regions. The School Profile consists of the EMIS number of schools, names of schools, their locations, Circuits and Municipalities. Each row represents a school and further indicates the number of learners, educators and existing facilities. Beyond this information is data that indicated the needs of each school. This part of the School Profile is linked to the previous part of existing facilities through formulae. The formulae indicate the existing classroom / learner ratio as well as needs where a zero was inserted in the columns under existing facilities. The School Profiles were extended to begin to cater for detailed information regarding the existing facilities. The School Profiles are currently being developed into Circuit Profiles in order to have a broader view of facilities. The circuit Profiles are to be utilised in unit planning as opposed to planning around an individual school.

The design of schools also differs from school to school. Schools will depict the previous background from which they emanated. The best designed schools will mainly be found in the former Model C schools while those outside these areas will consist of piecemeal design. These schools also depict different levels of depreciation as the schools in the previously disadvantaged areas depreciate faster than others.

The condition of infrastructure is difficult to measure as there is lack of baseline data. It was hoped that the NEIMS database would assist to begin to compile this information. The Province suspended its own process of putting a system in place when the NEIMS commenced. This was done to avoid duplication and fruitless expenditure. The availability of the NEIMS database will dictate the type of system that can be rolled out by the Province. A total of 1 981 schools are public schools with a further 15 being ELSEN schools. Over and above these there are 224 ECD Centres thus pushing the total number of educational facilities within the Province to 2 220 with a further 296 being other facilities including offices. Table 12 below depicts the condition of schools.

SCHOOLS	EXCELLENT	GOOD	POOR	VERY POOR
2220	58%	19%	11%	6%

Table: 13 – Percentage regarding the condition of schools.

The graph below depicts the condition of infrastructure as it exists within the Province. Around 58% of the schools are in an excellent condition thus only need maintenance in order to ensure that they do not dilapidate. The schools under this category must be identified for major renovations after every five years. These are schools that have been recently renovated or built. Around 19% of the total number of schools are in a good condition and need to be renovated so that they can move to the excellent condition. Schools in the former two categories are maintained through an allocation that has been made available to the Regional Directors. A total of 17% of the schools are in condition that need urgent attention in that they are either in a poor or very poor state. These are the schools that need to be identified in order to include them onto the Infrastructure Plan for attention.

Figure 6: Condition of Schools within the Province

The lack of an Asset Register or a system used to manage infrastructure leads to the absence of valuations. Currently infrastructure is replaced when the Consultants who are appointed by DPW indicate that the building can no longer be renovated but need replacement. The matter needs to be rolled out immediately the outstanding tools are in place.

4.2 Objectives of the Infrastructure Plan

The MDoE has focussed objectives to meet in order to solve the challenges facing it. The infrastructure programme seeks to achieve the following objectives that are part of its Strategic Plan for 2005 – 2010:

- Eradication of learners under trees and classroom backlogs.
- Replacement of unsafe structures, for example, schools constructed on asbestos.
- Amalgamation of small Section 14 schools those that are no longer sustainable.
- Improve infrastructure planning with the emphasis of moving away from annual planning to multi year planning.

- Enhance Government prescripts and regulations, for example, PGDS, EPWP, GIAMA and others.

4.3 Routine Maintenance Plan

The regular ongoing day to day work that becomes necessary to keep infrastructure operating or where the parts of the infrastructure fails and needs immediate repair is referred to as routine maintenance. Previously, routine maintenance would be carried out through Day-to-Day Maintenance allocation, which was controlled by the Regions. Day-to-Day Maintenance Contractors would be appointed after tenders were called for. These Contractors would be on a two-year contract and fresh tenders would be called for. Commencing 01st April 2005 the money for Day-to-Day Maintenance is now deposited into the accounts of schools as all schools within the Province were declared Section 21 in terms of SASA. The only schools that are Section 20 are found in the Bushbuckridge Region, which has recently being brought under the Mpumalanga Province from the Limpopo Province.

Planned maintenance was previously not budgeted for with the end result that schools will only be renovated when they are worse off. Spending on maintenance was therefore an unknown phenomenon. A number of complaints would be received regarding the renovation of buildings. At this point in time the buildings would be worse to be maintained sand thus needed serious attention. Affluent schools would, however, conduct their own maintenance unless if the school needed major renovations.

An arrangement has been entered into that 5% of the infrastructure allocation must be made available to the Regional Directors for them to undertake planned maintenance of buildings. For the 2008 / 2009 financial year an amount of R18m has been set aside at about R4m per Region per annum. The R4m allocation is to be monitored on a quarterly basis. A Region that does not use up its allocation for the quarter will forfeit the allocation for the next quarter. The arrangement will be reviewed immediately an Asset Register is in place.

It is expected of the Regional Directors to draw a Management Plan that they would utilise to do planned maintenance. The arrangement regarding the unplanned maintenance has also being jerked up. The 5% of the total allocation for infrastructure development is to be transferred to the accounts of the Regions in order for them to deal with cases that would cost less than R200 000.00. Damages that exceed R200 000.00 are to be referred to the Department of Public Works. These will be handled through a shortened tendering process to allow the Contractors to be on sites faster. In sites where Contractors are already busy their contract will be extended to include the new work provided it is not part of the work they already are doing.

The Consultants and Contractors that work on sites normally use the same type of material that was initially used. In instances where the same type of material cannot be obtained then something next to it is utilised. The standards used are that where feasible the outstanding facilities must also be provided when a project gets to site. The specifications in use are developed by the Consultants as they move from site to

site to ensure that the site layout is taken into account. These are based on the standard drawings being utilised for the construction of schools.

It was decided that in the interim 10% of the infrastructure budget allocation be set aside for both planned and unplanned maintenance. This is a stopgap arrangement until an Asset Register is developed. The two categories share the allocation at 5% each. The status quo will change immediately the Asset Register has been put in place. The percentage allocated for maintenance will increase as the Asset Value will at time be a known factor. The allocation will be funded from the equitable share in order to allow the Provincial Infrastructure Grant to be used mainly for new construction to make a dent into the backlogs. Any maintenance that is deferred over a long period of time leads to a situation where the building ends up needing renovations. The allocation for maintenance over the MTEF period is as follows:

CATEGORY	2006 / 2007	2007 / 2008	2008 / 2009	2009 / 2010
	R'000	R'000	R'000	R'000
Total Allocation	**2,482**	**7,500**	**38,750**	**53,352**
Sub - Programme: Reactive Maintenance	2,482	7,500	19,375	26,676
Sub - Programme: Proactive Maintenance			19,375	26,676

Table 14: MTEF Maintenance Allocation

The period of maintenance will be reviewed after the Asset Register has been put in place. It is, however, difficult to ascertain when this will happen, as the NEIMS Report must first be tabled in the National Cabinet before it is released to Provinces. During the first and fifth years the SGBs are expected to maintain the buildings through the allocation made to the Section 21 schools. Many schools, however, complain that maintenance money made available to them is too little in the face of the amount of work that needs to be done. The allocated budget for the provision of infrastructure will incrementally be allocated towards the maintenance of buildings to elongate their lifespan and to comply with the Public Finance Management Act.

The MDoE did not keep any amount of money in abeyance in cases where reactive maintenance is needed due to storm damages and other unforeseen circumstances. The MDoE does further not insure school buildings against unexpected hazards like storms. The SGBs of many schools have also not insured their schools against such eventualities. This means that the MDoE must intervene in all instances where schools are storm damaged.

The schools damaged by storms or other unforeseen circumstances would be repaired through the normal priority list. This arrangement took over two years to have the schools repaired. Commencing in the 2006 / 2007 financial year a percentage of the infrastructure allocation is set aside for reactive maintenance. The amount has since

the 2007 / 2008 financial year been raised to 5% of the budget allocation. This will enhance the prompt repair of storm-damaged schools.

The MDoE has now adopted the method of planned maintenance in terms of IDIP that is systematic. The newly constructed schools including those that have been recently renovated are to be put on an Infrastructure Maintenance Plan in order to have information about when a number of schools are to receive major renovations. The objective of the plan would be to keep the buildings in a good working order. The tool that will be put in place will assist to make decisions around which schools need to be maintained and when. The PTAT and OST members will assist and advise on how this plan should be brought together and managed.

The material used on sites during the ad hoc maintenance of schools is depended on what was at the school previously or what the Consultant appointed by DPW recommends. The service standards are captured in the Bills of Quantities, which instructs the Contractor on the type of material to be used. The Consultant is tasked with the responsibility to ensure the material as prescribed is used. This arrangement has its own challenges in that the consultant may leave the Contractor to go on with the project without monitoring. The MDoE and DPW do not have sufficient person power to monitor the projects. The faults on sites may, therefore, not be the ones that can be fixed during the snag list and retention periods. The quality of workmanship becomes the greatest risk factor under the present arrangement.

The absence of a completed Infrastructure Maintenance Plan makes it impossible for the MDoE to forecast on planned and unplanned maintenance work. The arrangement leads to a situation where maintenance is deferred. The risk attached to this is some schools will not be maintained on time thus become dilapidated. The funding for the renovations is taken from the allocation made available to the MDoE through the Equitable Share and the Provincial Grant allocations.

4.4. Renewal / Replacement Plan

Renewal is major work done to existing facilities and does not increase the facilities' design but restores, rehabilitates, renews or replaces existing infrastructure to its original capacity. The renewal of schools is done on an ad hoc basis where it is clear that a building has now become very dangerous. There is no system to monitor and capture the condition of buildings. It is expected that the NEIMS will deliver such a system on an unspecified date. The schools that are dilapidated and cannot be attended to through Day-to-Day Maintenance are normally put on a list for renovations. In some instances the schools are so old that they cannot be renovated and thus are replaced. The buildings that need to be replaced, for example, are those constructed on asbestos some of which are captured in this Infrastructure Plan.

Some of the buildings are captured for renewal after the communities have reported them as collapsing. The Regional officials inspect these to confirm the observation of the school community. The schools that were previously constructed by the

communities are generally replaced due to their age and not meeting the required building standards.

A well maintained Maintenance Plan requires that the life cycle of a building is captured to ensure timeous maintenance. The Department of Education is currently without an Asset Register which makes it difficult to track each and every building. This makes the end-of-life-projection of buildings a nightmare. An Asset Management Unit has been put in place in the Supply Chain Management Directorate. It is anticipated that the Unit will compile an Asset Register that will then be utilised to work out the end-of-life-projection for all schools within the Province. The end-of-life-projections may only be done in instances where the baseline data is available. Currently such data is not available thus reliance on communities and Consultants is the order of the day.

Decision making for the maintenance of facilities is currently based on reports and requests received from the communities and Circuit Offices. The Regional Resource Planners confirm if the building needs renewal. In instances where the Resource Planners were unable to visit the affected school the recommendation by the Consultants comes in handy. Identified schools are captured in the Infrastructure Plan for attention except in instances where an emergency has occurred.

Materials used during the renewal of facilities are normally prescribed by the Consultants employed by the Department of Public Works. Such material would be based on the initial material found on site. In instances where the initial material used is no longer in circulation, then the Consultant recommends something next to it. The quality of work should be such that the building is able to last as planned rather dilapidate within a short space of time.

The risks associated with the use of alternative material are that the aesthetic value of buildings is sacrificed and may not be readily acceptable to the communities. The need to have facilities available for use, however, surpasses the challenges that may be raised by the use of alternative materials. The non-availability of materials due to the number of constructions taking place throughout the country is another risk. Work can commence and not be carried through.

Emergencies are catered for using the funds set aside for reactive maintenance that occurs as unpredicted phenomenon occurs. Such projects are reported to the Department of Public Works who then employs Consultants and Contractors to repair them. The material and risks regarding the renewal of facilities is as captured in the previous paragraphs.

It is not possible to have a forecast programme of replacement and costs due to the absence of any baselines, system and technical staff in the planning component at both Regional and Head Office level. The projections are on hold until a scientific tool is in place to handle this objective. The funding of the renewal of facilities occurs from the Equitable Share and the Provincial infrastructure Grant (PIG). The total projected funding for the MTEF period is as follows:

2008 / 2009	=	R88 756 000
2009 / 2010	=	R100 654 000
2010 / 2011	=	R111 816 000
2011 / 2012	=	R118 525 000
2012 / 2013	=	R125 637 000
2013 / 2014	=	R133 175 000
2014 / 2015	=	R141 166 000

4.5. Creation / Acquisition Plan

This item captures the works that create new infrastructure that was previously not in existence. When the works that are carried out upgrades or improves existing infrastructure beyond its existing capacity their inclusion under this item becomes mandatory. The prioritisation process commences at the Circuit Office level. The Circuit Manager meets with the Principals and recommends the facilities to be taken on board. The facilities are then listed according to their needs with the neediest schools being put high up on the list. The list is submitted to the Regional Resource Planners who then confirm the list and attach the budget to the projects. The facilities are then cut off where the budget ends and forwarded to Head Office. At Head Office the lists from the different Regions are further looked at to ensure that the facilities and the budget correspond. The lists are then collated to one list that forms part of the Infrastructure Plan. The Infrastructure Plan is then forwarded to the Regional Resource Planners to confirm the projects that are likely to be implemented and further forward planning by the Regions.

The Infrastructure Plan captures new schools that need to be constructed or new buildings that need to be added to existing structures. These are provided to eradicate learners under trees. Learners under trees receive first priority when infrastructure is to be provided. The observation that the Province is void of such learners then the next category receives attention. The areas that are new or developing are catered for under this category to ensure that schools exist where there is development.

New schools or additional facilities are provided where there is growth in population within a community or through the influx of new residents. The neighbouring schools, if any, are taken into account before additional facilities or a new school is constructed. In a new settlement the number of households and the number of school going age children are considered to decide on a provision and size of a school. In instances where additional facilities are to be provided to existing schools the capacity of that school and the neighbouring schools is put under scrutiny. The classroom learner ratio is used to rank the schools in terms of their need. The mobility of communities must be closely studied to ensure that facilities are not provided where communities are moving out.

The OHSA bars the use of dangerous infrastructure for human habitation. Such unsafe structures must be eliminated in order to avoid adverse effects they can have on people using them. A point in case is the schools constructed on asbestos, wood, clay, corrugated irons and other unsafe material. The Department of Labour, as the

custodian of OHSA, ensures that the MDoE eradicates schools constructed on unsafe material. Some of the schools built on asbestos have already been replaced and plans are afoot to replace others.

One of the most serious challenges in the Province is the phenomenon of overcrowding. To begin to deal with the overcrowding that is experienced in a number of schools within the Province the matter is taken as the next priority area. As already indicated, around 30% of the schools within the Province are over-utilised. This scenario is perpetuated by the movement of some communities from place where there could be facilities to areas where there is a shortage of such. The attention to such schools is given only if the neighbouring schools are also use to full capacity. Otherwise the notion of Scholar Transport must be used.

The additional facilities are normally built more or less on the same material found on site, if available. The Consultants requisitioned by the DPW attend to issues of design for the facilities to be provided. Future needs of facilities are currently determined through the use of School Profiles and the available figures regarding backlogs. Movable classrooms were used at the Mataffin Schools that is Cyril Clarke and John Mdluli. The risk attached to this form of construction is that hidden costs came to the fore. The temperatures in the Lowveld meant that air conditioners were needed to ensure that learners are able to learn effectively.

The Department of Education utilises standard drawings for the provision of facilities to schools. The old designs have been discontinued and new ones are being piloted. The first schools to be provided based on the new design are the 2007 / 2008 projects. These projects are to be advertised during the February / March period with construction commencing around June 2008. The process to compile other designs that will be utilised in future will unfold during the course of the year where more competitors will be called for.

The risk associated with the new designs was the time it took the Architect to put them together. The itinerant nature of the process meant that nearly the whole year be spend on designs. The learner communities who waited the use of the new schools have to date not enjoyed the right of access to proper classrooms that are not crowded. The new designs came up with a new costing regime that is far much higher than the normal classrooms the Province was used to providing. Lesser facilities must now be constructed compared to the previous arrangement. The potential of learners flocking from the old existing schools to the new schools may occur. The renovation of existing schools will therefore be very critical.

Looking at the pattern of provision of infrastructure and the allocation done in the MTEF cycles it is possible that the facilities can be provided over a period of about 20 years in order to break even. The provision of new infrastructure relating to the eradication of backlogs takes a bigger slice of the budget, that is, 60% of the infrastructure allocation. The figures for the MTEF as well as the projected outer years are as follows:

2008 / 2009 = R266 269 000

2009 / 2010	=	R301 963 000
2010 / 2011	=	R335 449 000
2011 / 2012	=	R355 576 000
2012 / 2013	=	R376 911 000
2013 / 2014	=	R399 526 000
2014 / 2015	=	R423 497 000

Currently the Equitable Share as allocated by the MDoE is used for the provision of infrastructure. This amount is only about 2% of the whole allocation the MDoE receives from the Provincial Treasury. Another source is the Provincial Infrastructure Grant (PIG) received as ring fenced allocation from Provincial Treasury. This amount is made available to enhance the eradication of backlogs within the Province. It is anticipated that the allocations will remain until the MDoE turns the corner regarding its expenditure patterns.

4.6. Disposal Plan

Disposal refers to discarding obsolete facilities that are no longer in use. Currently there is no Asset Register in place. This means that it is not easy to know at a glance the age of the different facilities within the Province and which ones are to be decommissioned due to their age. The majority of the schools that become easily decommissioned are the small schools found on farmland. Schools that are no longer in use are not sold but seem to be left to rot on their own or the owner of the land takes them over for another use. Where the Department is privy to the information regarding schools that close such are brought to the attention of Public Works who in turn make them available to other departments or the Municipalities for use. There is no evidence pointing out to any land that was sold, as the DPW is the custodian of all Government property that becomes obsolete.

The MDoE is engaged in the process of amalgamating the small farm schools. The process is to ensure that schools are made bigger in order to use available resources effectively, efficiently and economically. There was, however, no plan in place to ensure that the schools that have been amalgamated are disposed of. The apparent lack of communication between the Circuits, Regional and Head Offices further complicates the matter. Head Office only becomes aware that a school has closed after it has actually closed. Plans now need to be drawn to demolish those structures that are not likely to be used further.

The availability of an Asset Register in future and timeous communication will assist to forecast the disposal of buildings and the related costs. There is no money currently set aside for this exercise. The drawing of a complete Infrastructure Maintenance Plan will also take on board the budget needed for the disposal of facilities. It is, however, anticipated that there are no buildings that may need to be disposed of during the current Infrastructure Plan. The DPW needs to be taken on board when it comes to the disposal of schools, as it is the custodian of State buildings that are no longer in use.

The planned portfolio of projects differs according to their size and therefore the grade of Contractors to be used.

The MDoE plans for the projects and hands them over to the DPW for implementation. The projects as handed over to DPW consist mainly of two categories that are capital projects and Provincial Grant Projects. An indication is given that projects that are at or below R1, 2m can be used for the development of emerging Contractors. The construction of school facilities is by its very nature labour intensive therefore Extended Public Works Programme (EPWP) compliant. Over and above this the DPW manages a training programme of the same emerging Contractors known as Sakh'abakhi Programme. It is specifically meant to build the capacity of Contractors who are developing.

The Contractors who are targeted for the programme are between Grades 1 and 3. If a Contractor is able to finish the work allocated to them they are allocated another project. If quality work is produce by the Contractor they are assisted to apply and move to the next grade.

The projects that qualify for the use by the EPWP Contractors are not available during the 2008 / 2009 project list due to the holistic approach adopted for these projects. The Department still has to consider how the big projects can be handled in piecemeal in order to cater for the Sakh'abakhi Contractors. The second option to be exploited was to use them in the Maintenance allocation that is due to be handed over to the Regions come the 01st April 2008. The lists for such projects were compiled by the Regional Resource Planners and need verification before the actual work is done on sites. The use of the latter route will imply a number of projects that in the main have work below R200 000.00.

5. FINANCIAL SUMMARY

5.1 Financial Statements and Projections

The MDoE utilises two sources for its budget allocation, namely, the Equitable Share and the Provincial Infrastructure Grant. Another allocation used is obtained from the Mpumalanga Education Trust Fund where the MDoE works in partnership with business. This allocation does not come to the MDoE and will thus not be captured here. The revised allocations for the current MTEF period that came out of the Cabinet Lekgotla held from 12th to 16th February 2007 are as outlined in the Table 1 on the next page.

The total joint allocation including Professional Fees and projections for outer years is summarised as follows:

2007 / 2008 = R400 587 000.00

2008 / 2009 = R443 782 000.00

2009 / 2010 = R503 272 000.00

2010 / 2011 = R559 082 000.00

2011 / 2012 = R592 627 000.00

2012 / 2013 = R628 185 000.00

2013 / 2014 = R665 876 000.00

2014 / 2015 = R705 829 000.00

The R22 180 000.00 made available under Programme 4 is for the recapitalisation of Special Schools over the MTEF period. This amount is ring fenced and can therefore only be utilised for Special Schools. This amount has been broken down as follows:

2007 / 2008 = R11, 000 000.00

2008 / 2009 = R6, 020 000.00

2009 / 2010 = R5 160 000.00

The allocated funds obtained from the Province and Provincial Treasury is mainly for construction purposes. Other resources are however also provided or renovated under these categories.

MEDIUM TERM EXPENDITURE FRAMEWORK FORECASTS

CATEGORY	2006 / 2007	2007 / 2008	2008 / 2009	2009 / 2010	2010/2011
	R'000	R'000	R'000	R'000	R'000
Total Allocation	**287,558**	**400,587**	**417,500**	**503,272**	**559,082**
Programme 1	**0**	**6,500**	**8,000**	**9,000**	**9,441**
Sub - Programme: Regional / Circuit / Teacher centres	0	5,580	7,000	7,800	8,262
Professional Fees		920	1,000	1,200	1,179
Programme 2	**271,526**	**347,898**	**322,059**	**405,958**	**442,548**
Sub - Programme: Capital Projects	123,295	71,832	116,846	171,497	194,020
PIG	108,908	180,066	150,721	175,200	185,712
PIG Surrender		45,000			
Professional Fees: Capital Projects	17,730	30,087	32,054	32,217	34,150
Professional Fees: PIG	21,593	20,913	22,438	27,044	28,666
Programme 4	**0**	**13,000**	**7,000**	**6,000**	**0**
Capital Expenditure: Special Schools		11,000	6,020	5,160	
Professional Fees		2,000	980	840	
Programme: Maintenance	**2,482**	**7,500**	**38,750**	**53,352**	**84,828**
Sub - Programme: Reactive Maintenance	2,482	7,500	19,375	26,676	28,276
Sub - Programme: Proactive Maintenance			19,375	26,676	56,552
Organisation & Support	**1,089**	**3,189**	**6,691**	**8,962**	**22,265**
Technical Support	1,089	3,189	6,691	8,962	22,265
Movable Classrooms	**12,461**	**15,000**	**15,000**	**0**	**0**
Sub - Programme: Movable Classrooms	12,461	15,000	15,000		
Special Projects	**0**	**7,500**	**20,000**	**20,000**	**0**
Themebeka, Duvha & Wilge		7,500	20,000	20,000	

MEDIUM TERM EXPENDITURE FRAMEWORK FORECASTS - CONTINUED

CATEGORY	2011/2012	2012/2013	2013/2014	2014/2015
	R'000	R'000	R'000	R'000
Total Allocation	**592,627**	**628,185**	**665,876**	**705,829**
Programme 1	**10,008**	**10,608**	**11,245**	**11,916**
Sub - Programme: Regional / Circuit / Teacher centres	8,758	9,283	9,840	10,430
Professional Fees	1,250	1,325	1,405	1,486
Programme 2	**469,102**	**497,250**	**527,085**	**558,716**
Sub - Programme: Capital Projects	205,664	218,007	231,089	244,961
PIG	196,854	208,665	221,184	234,455
PIG Surrender				
Professional Fees: Capital Projects	36,199	38,370	40,672	43,112
Professional Fees: PIG	30,385	32,208	34,140	36,188
Programme 4	**0**	**0**	**0**	**0**
Capital Expenditure: Special Schools				
Professional Fees				
Programme: Maintenance	**89,916**	**95,310**	**101,028**	**107,088**
Sub - Programme: Reactive Maintenance	29,972	31,770	33,676	35,696
Sub - Programme: Proactive Maintenance	59,944	63,540	67,352	71,392
Organisation & Support	**23,601**	**25,017**	**26,518**	**28,109**
Technical Support	23,601	25,017	26,518	28,109
Movable Classrooms	**0**	**0**	**0**	**0**
Sub - Programme: Movable Classrooms				
Special Projects	**0**	**0**	**0**	**0**
Themebeka, Duvha & Wilge				

Table 15: MTEF and outer years allocations

The infrastructure programme that is implemented by the MDoE is as follows:

5.1.1. Building Programme

This programme attends to the shortage of facilities in the schools with special reference to classrooms though other facilities are provided as well. This is done to provide complete schools rather than doing it in a phased manner as it previously happened. The refurbishment and renovation of existing facilities is also catered for under this category. Some of the 2001 / 2002 to 2003 / 2004 financial years' projects are to date incomplete thus putting a strain on the current allocations. In order to attend to these projects and close this chapter in a phased manner and amount of R120m over the MTEF period need to be allocated. The amount is to be used to close out the projects that are already at stage. Instances where the retention fee is outstanding, this will also have to be paid.

5.1.2. Replacement of unsafe structures

The programme for the eradication of unsafe structures, for example, asbestos structures, complements the building programme. The programme will target specific areas where such structures exist in great numbers, for example, Witbank – Middelburg area and other similar areas. A greater percentage of the allocation should be channelled towards this category of infrastructure to ensure its elimination.

5.1.3. Reactive maintenance

The schools within the Province are from time to time affected by storms. For this reason a percentage of the total infrastructure allocation was set aside for such an eventuality. This amount proved to be minimal and had to be increased to five percent in the 2007 / 2008 financial year.

5.1.4. Proactive Maintenance of buildings

The schools within the Province are Section 21 schools. The implication is that the allocation for day-to-day maintenance is deposited into the account of schools. The new schools that have been recently constructed are however not covered by the blanket declaration of schools as Section 21. The situation at the Bushbuckridge Region still needs to be confirmed, as the indication is that there are both Section 20 and 21 schools.

The planned proactive maintenance of facilities has still to commence after the condition of schools has been confirmed through the NEIMS reports. The NEIMS report will enhance a planned programme of action.

5.1.5. Water and sanitation

The MDoE has to ensure that all schools have access to water and sanitation. The backlog has prompted the DWAF to join hands with MDoE to try and eradicate the

backlogs in water and sanitation. DWAF had initially made some allocation available but came back later to say such allocation is no longer available. This implies that the MDoE has to budget for these services and DWAF assists with technical expertise. The MDoE strives to solve this challenge as it awaits the verified information from the NEIMS process.

5.1.6. Fencing

Fencing is handled together with the provision of other facilities. The type of fencing provided is steel palisade to avoid the vandalisation of fences that happened in some areas. The fence should cover the perimeter of the school to ensure that schools are safe. There is already an indication from the Regions that schools prefer the concrete palisade fence. The rationale is that this type of fence has little or no maintenance needed. The SMM needs to ratify this matter.

5.1.7. Electrification of schools

The ultimate goal of the MDoE is to electrify all schools. A school in an area where there is grid infrastructure connection is easier to deal with but in areas where there is no grid other alternatives may have to be considered. A challenge here is that schools that were previously electrified were vandalised and now allege to be without electricity. The process of providing electricity moves slowly because it is a continuous process and depends on the provision of other facilities.

5.1.8. Special Projects

The MDoE works in partnership with the Mpumalanga Education Trust to attend to some of the projects on the Project List. For the financial year 2007 / 2008 to 2009 / 2010 there were three projects that were identified, namely, Duvha, Wilge and Thembeka. Thembeka seem to move faster than the other two as Consultants are reported as been appointed. Duvha is a doubtful starter as the learners are said to have moved to other places. The bulk of the budget allocated under this section will be used on Thembeka School of Excellence.

5.1.9. Previous expenditure trends

The MDoE was previously unable to spend its allocated budget. The annual planning and implementing of projects slowed the expenditure. The end result was that only about 40% of the budget could be spent. Other projects that commenced in the 2001 / 2002 financial year are incomplete to date thus compounding the challenge facing the MDoE. The 2007 / 2008 financial year will serve as the water shed year where the non-expenditure challenge needs to be changed. The introduction of multi year planning and implementation is targeted to solve this challenge. The presence of the PTAT and OST members will assist in this process.

The expenditure per project was previously a difficult matter as money was paid out on the receipt of an invoice. It was not possible to trace what money is paid to which

project. Open orders are now to be utilised to be able to trace the payments made per project. This arrangement will enhance the quick payment of Consultants and Contractors for them to be able to complete projects on time.

5.2. Funding Strategy.

The infrastructure needs of the MDoE are more than the allocation that is given. For this reason planning and prioritisation becomes crucial. Focussed attention will be possible if the MDoE has verified information regarding its backlogs. Funding of the projects is mainly from the MDoE Equitable Share that is received from the Provincial Treasury. This allocation mainly covers capital projects though some renovation and maintenance of buildings is also carried out under this allocation. A Provincial Infrastructure Grant allocation is also received to cater mainly for the eradication of backlogs though some renovation and maintenance of buildings is also carried out under this category.

Soothing out variations in cash flow commences with proper planning. The presence of the PTAT and the OST assists in this regard. Working at close proximity with the Department of Works provides what the market dictates as cost estimates for the provision of facilities. At cash flow level the payment certificates are now monitored on a daily basis to determine the amount of time it takes for a certificate to be processed in the Physical Facilities section. The Deputy Director reports daily on the number of certificates received, date on which received and the date of dispatch to the Supply Chain Management Directorate. The Deputy Director in the Supply Chain Management is expected to monitor and report on the certificates received and the time they have taken in that component. The Finance Section is represented by the Deputy Director Expenditure who monitors the certificates processed for payments and delivers a daily report on the matter. Where there are delays regarding the processing of the invoices an explanation is sought and corrective measures introduced. The reports from the different sections are submitted to the Chief Director Finance who then collates them into one report and submit this to the Deputy Director General: Systems and Planning. The Deputy Director General: Systems and Planning reports to the Superintendent General. The institutionalisation of this manner of doing business will remove the variations between what is planned to be spent in a month and the actual expenditure in that month.

There are other projects that are from time to time taken over by the Mpumalanga Education Trust Fund that is a partnership between the MDoE and Business. Such allocation does not come to the MDoE but is controlled by the Trust and the Superintendent General. The Business Trust will normally concentrate on big projects that the MDoE may take a long time to complete, for example, the Mogale Wa Bagale project. The projects carried out by the Trust are normally extracted from the Infrastructure Plan as prepared by the MDoE.

The MEC sometimes makes a special request to the Trust to assist with projects that come to his attention through community visits. An example is the construction of

Amandla Primary School in the Gert Sibande Region. The funding for such projects is normally transferred to the Trust Fund for management.

5.3. Valuation Forecasts

No valuation and depreciation forecasts are currently made due to the absence of an Asset Register and a system to manage infrastructure. An urgent need exists that an Infrastructure Management System is put in place to ensure proper management and reporting. This goes together with the expansion of the organisational structure to cater for the employment of technically qualified staff.

5.4. Key Assumptions

While there are challenges regarding the valuation forecasts assumptions are however made. The following are the assumptions on which the financial forecasts will be based:

- The necessary funds for infrastructure development will be made available to the MDoE.
- Funds made available to the MDoE will be spent on the projects.
- Planning was done based on scientific methods and tools.
- The DPW has the capacity to manage the Consultants who in turn manage the Contractors to ensure quality workmanship.
- Contractors are skilled and fully resourced to do the work.
- Material is available for the Contractors to do the work.
- The MDoE monitors the DPW.
- Weather is favourable for construction to proceed unabated.
- Payments to Consultants and Contractors are done timeously.
- The SDA between the MDoE and DPW is signed and observed.

It is always taken as a given that the necessary funds for infrastructure development will be made available. The Provincial Infrastructure Grant (PIG) is governed by DORA. If the stipulations of this prescript are not met then the allocation cannot be guaranteed. In such instances two responses may be possible. Firstly, prioritisation may have to kick in where other projects are slowed to relieve the system. Secondly, some projects may have to be funded out of the Equitable Share allocation or stop them if there the allocation is insufficient.

The expenditure of the allocated funds is another challenge. The observation is that the allocated funds are not spent as expected. The lack of proper expenditure impacts on the delivery of service to the communities. The developing Contractors become affected as their cash flow is disrupted thereby projects stall. Expenditure therefore needs to be managed to ensure that it happens.

Planning needs to be done based on accurate data. The absence of such data leads to planning that is flawed. This leads to projects not being implemented as planned. The availability of the NEIMS will augment other sources like EMIS and GIS that are also gradually being upgraded to close the gab that may exist currently.

The management of Consultants is the cornerstone of the delivery of quality work. The absence of sufficient person power in the Department of Public Works to manage them may mean that some Consultants do not monitor the progress registered on site. This scenario has a negative impact as some projects end up not being completed thus defeats the very objectives they were meant to satisfy. The introduction of Regional Office in Public Works will possibly assist to mitigate this challenge.

Some Contractors are emerging thus have little capacity and skill to complete work as expected. The mitigation of this is through the building of capacity of the emerging Contractors through the EPWP process. The payments of such Contractors are also a matter that needs to be followed up closely to ensure that they are not disadvantaged.

The availability of material is another reality that can hamper the Contractors in their quest to deliver the work they are employed to do. The amount of development taking place throughout the country has put pressure on the suppliers of materials. Ordering the material well in advance and in bulk may assist negotiate this challenge. Contractors can also club together and buy in bulk rather than in small quantities.

Inclement weather is another factor that needs to be taken into account. Construction cannot occur during periods when rain falls. A fair amount of work should therefore be done during shiny days to ensure that time frames are met. Alternatively proper records must be kept of such days to ensure that extension of time requested is in agreement with the days of bad weather.

The Service Delivery Agreement signed between the Departments of Education and Public Works must not be for compliance purposes but must be observed. Deviations from this agreement must be followed up even before a matter develops into a crisis.

6. ORGANISATIONAL AND SUPPORT PLAN

6.1. Human Resource

The 67 Circuit Managers working in partnership with the 1 928 Principals of Public Schools are utilised to compile the needs of the schools in the Circuits they are responsible for. The average age of Circuit Managers is around 52 years. The Circuit Managers hand over the projects to the Resource Planning component at Regional Office level. The 3 Regional Resource Planners per Region also have to do functions related to the implementation of projects. One of the officials is a Deputy Chief Education Specialist while the other two are First Education Specialists. The average age of the Resource Planners attached to the Regions is about 47 years. The post of the Deputy Chief Education Specialist has now been converted and advertised as Deputy Director's post. This has opened avenues for people who are non-educators to be employed. The high turnover rate at the Regional Office level creates a challenge in that people who have an idea of resource planning either move on or exit the system. Head Office is staffed by the Director: Physical Resource and Facilities Planning. This post is currently vacant as the Director has transferred to the Curriculum Support Directorate. There two Deputy Directors, one for Physical Resources Planning and the other for Physical Facilities. The Physical Resources Planning sub-Directorate has two vacant Assistant Directors posts that have been advertised with the hope of being filled by 01st April 2008. The Physical Facilities component has two Assistant Director's posts with one them filled. The vacant post has been advertised and awaiting the processes to unfold further. The Chief Works Inspector serves as the last leg under the Deputy Director: Physical Facilities. One of the Works Inspectors post under the Chief Works Inspector is vacant and will need to be filled. The average age for the Directorate is 52 years. There are support staffs of to give administrative support to the components. The pie diagram hereunder can schematically represent the person power dealing with infrastructure:

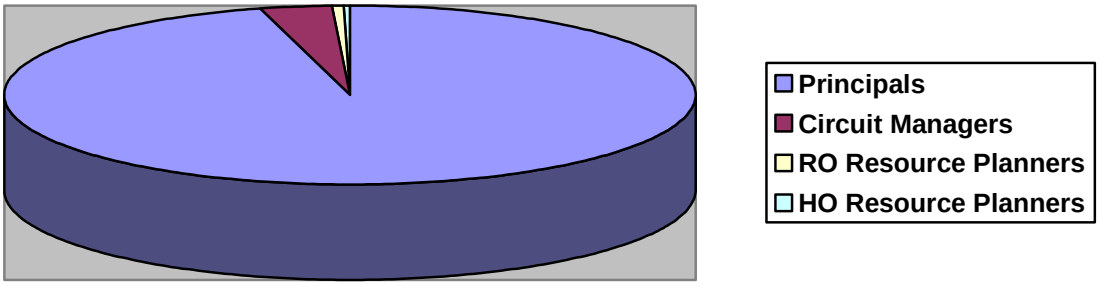

Figure 6: Available Person Power

The persons mentioned above are void of any technical skill except for the two officials in the Works Inspectorate section. The personnel at Circuit Office level is mainly educators that render professional support to schools. The Regional Office Resource Planners are also educators by training thus use that background regarding the provision of facilities to schools. Head Office staff Deputy Directors also have basic training in Education thus void of technical background. The presence of the PTAT and the OST therefore close a big void regarding the provision of infrastructure.

Persons with the necessary technical skills, more especially Programme Managers, are required at Regional Offices to assist in the planning process. The strengthening of the planning component at the Regional Offices will enhance better planning and delivery of infrastructure. The technical staff to be attached to Regions will also assist the Circuit Managers when they initiate the planning process. The Planning component can be left as is and a new arm established to deal with Physical Facilities at Regional level. The presence of the OST members currently closes this void. The proposed new posts at the Region to de-link Planning and Implementation are as follows:

1 X Deputy Director (With technical background in the Build Environment)

2 X Technicians (With technical background in the Build Environment)

2 X Support Staff

At Head Office level the Physical Resources Planning sub – Directorate is staffed with two warm bodies, one as Deputy Director and the other as Assistant Director. Again this component is void of any technical staff to assist with planning, more especially, concerning market related costing and the condition of buildings. The current officials are unable to visit schools targeted to receive projects due to the crisis management they are involved in on daily basis. There is currently one post made available according to the new proposed structure that needs to be filled. The post can be filled as follows:

1 X Assistant Director who is a Technician (With experience in the Build Environment)

The presence of technically qualified staff at Regional Offices complemented by the presence of a technically qualified person at Head Office will alleviate the challenges that are currently faced. A need therefore exist to create such posts at Head Office level to boost the level of service delivery.

The skills required to do the work effectively is to get support from people who are technically qualified. For this exercise to occur smoothly, the organisational structure of the MDoE under infrastructure is under review. The four percent made available in terms of Section 14(3)(a)(ii) of the Division of Revenue Act (Number 29763 of 2007) to build the capacity of personnel in the component will in the interim assist while plans are put in place to obtain permanently appointed staff. Currently the MDoE has received the services of the PTAT from National Office. One of the team members is

with the MDoE with a counterpart in the DPW. Already the MDoE is beginning to find its footing.

Over and above the PTAT the Province has also enlisted the services of an OST. The team consist of four members who are technically qualified. Three of the team members are placed at the Regions with one person placed at Head Office. The members are there to dirty their hands and build capacity of the staff within the MDoE. The Bushbuckridge Region is void of such a person. Arrangements need to be made that an OST member is also appointed for this Region.

6.2. Organisational

The Resource Planning Directorate organisational structure as was constituted didn't assist in the delivery of infrastructure within the Province.

The organisational structure that is needed to carry out and manage the massive infrastructure programme has been reviewed and is being implemented in phases. The Regional structure has undergone some cosmetic changes and is included here even if it is also under some review.

New Head Office Structure

The old organogram has been phased out therefore no longer applicable. The structure as shown hereunder is now operational and posts are gradually being filled.

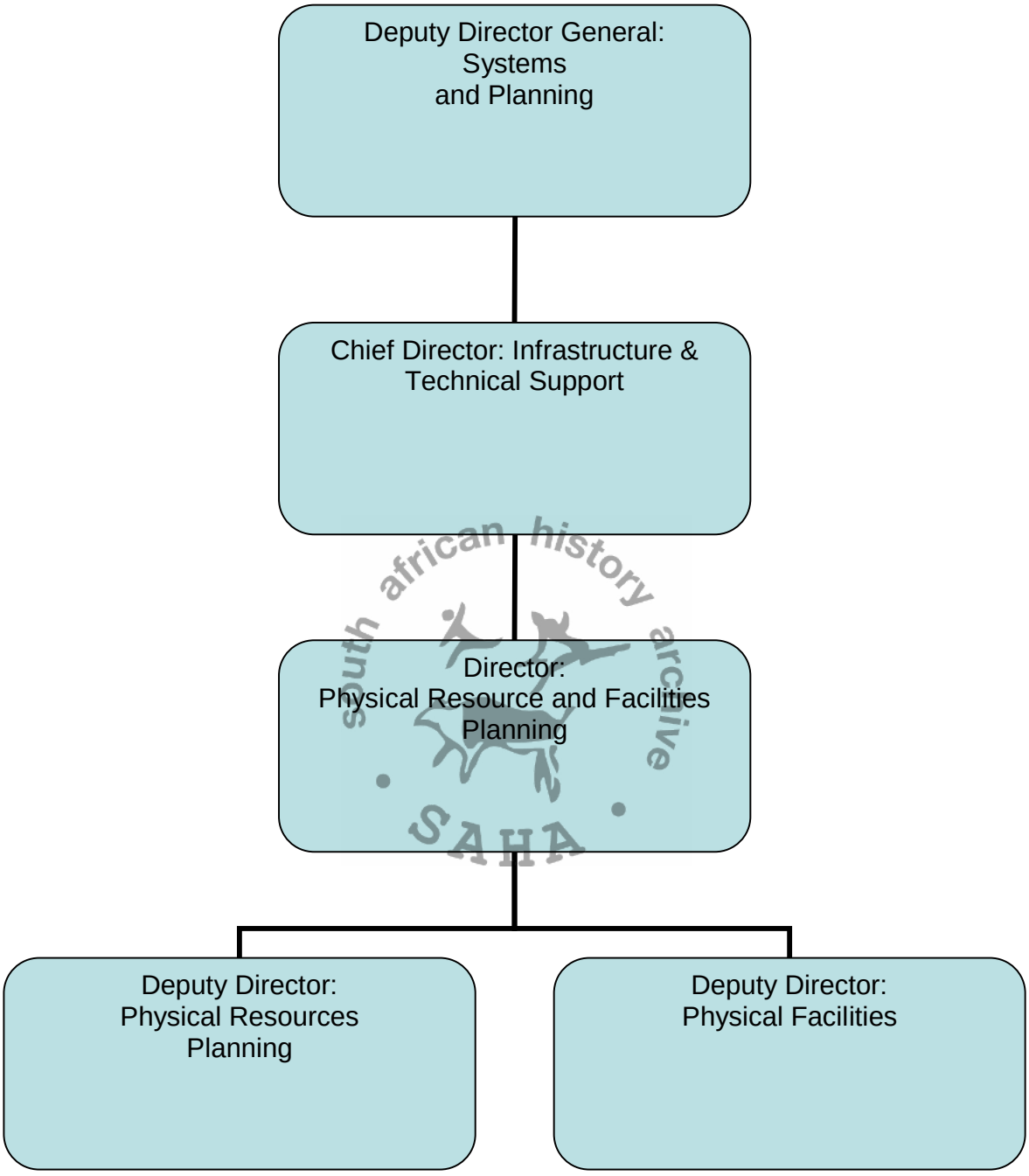

Figure 8: Head Office Infrastructure Organogram

New Regional Structure

The new Regional structure has four legs under the Deputy Director. The EMIS and ICT legs have been excluded. The structure is already under implementation thus the existing organogram has fallen off.

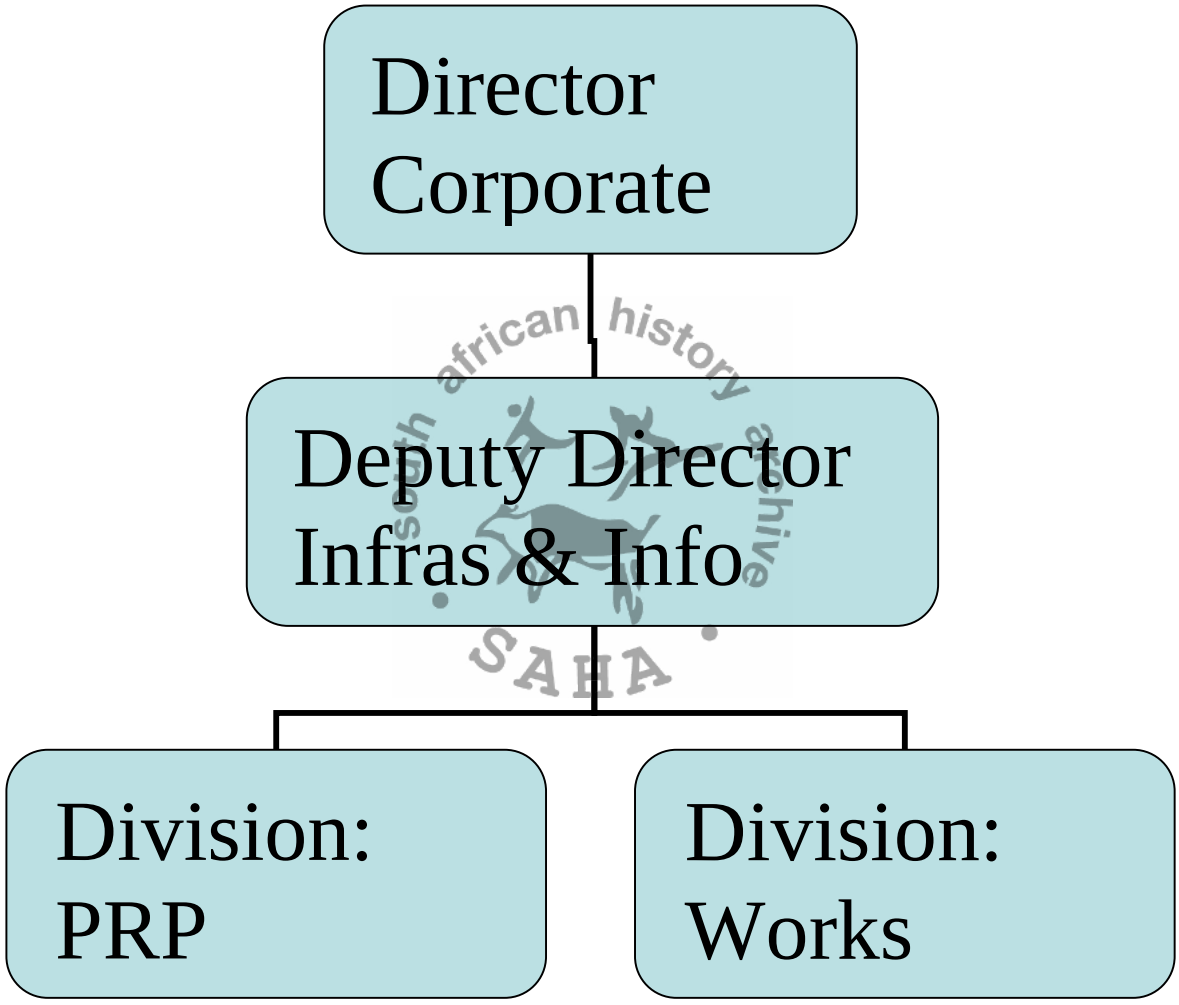

Figure 9: New Regional Structure for PRP

1 X DD
2 X Sr Edu Sp
2 X Sr Adm Clerk

1 X Chief Inspector
2 X Sr Works Inspector
1 X Sr Adm Clerk

The support staff headed by a Senior Administration Officer that reports to the Assistant Directors provides support to the Physical Facilities component at Head Office. The Physical Resource Planning component has two support staff that report to the Assistant Directors, one each. At Regional Office two persons who act as support staff is also employed. The Circuit Offices have an Administration Officer who has two Administration Clerks who report under him / her.

6.3. Financial

The funding for these projects come from three sources, namely, Equitable share, Provincial Infrastructure Grant and Mpumalanga Education Development Trust. The smoothing out of variations has already been discussed. To add to that discussion the planning plan is reviewed annually in order to ensure that what is captured in the Infrastructure Plan is what is still needed by the communities.

Table 16: Financial Matters

CATEGORY	R'000 USING CURRENT ESTIMATED COSTS: BACKLOGS				
	2006/07	2007/08	2008/09	2009/10	2010/11
Classrooms	121,968	132,861	7,980	56,430	88,350
Administration Blocks	24,064	54,395	2,862	29,574	65,826
Laboratories	4,895	17,850	1,908	10,812	18,444
Media Centres	2,225	30,175	1,908	43,884	43,248
Computer Centres		22,200	636	19,080	47,064
School Halls			2,862	8,268	65,508
Sanitation	12,050	21,584	3,496	20,608	33,488
Fences	8,970	14,104	1,908	20,988	48,654
Electricity	3,502	3,844	318	1,590	7,314
Water	2,332	5,796	338	65,234	
Kitchens	8,928	8,692	1,908	10,176	45,156
TOTAL	**188,934**	**311,501**	**26,124**	**286,644**	**463,052**

Table 16: Financial Matters - Continued

CATEGORY	2011/12	2012/13	2013/14	2014/15	2015/16
Classrooms	88,350	88,350	88,350	76,000	83,600
Administration Blocks	63,918	63,918	63,918	63,918	55,332
Laboratories	18,444	18,444	17,172	25,440	19,080
Media Centres	43,248	43,248	43,248	43,248	43,248
Computer Centres	47,064	47,064	47,064	47,064	47,064
School Halls	64,872	64,872	64,872	64,872	64,872
Sanitation	32,368	32,368	32,368	32,368	32,424
Fences	58,194	45,792	45,792	45,792	43,884
Electricity	6,837	6,678	6,678	6,678	6,678
Water					
Kitchens	45,156	45,156	44,520	44,520	44,520
TOTAL	**468,451**	**455,890**	**453,982**	**449,900**	**440,702**

Table 16: Financial Matters - Continued

CATEGORY	2015/16	2016/17	2017/18	2018/19
Classrooms	83,600	39,140		
Administration Blocks	55,332	55,332	55,332	53,424
Laboratories	19,080	19,080	19,080	24,168
Media Centres	43,248	43,248	43,248	35,616
Computer Centres	47,064	47,064	47,064	47,064
School Halls	64,872	64,872	64,872	64,872
Sanitation	32,424	2,800	2,800	3,584
Fences	43,884	33,390	16,218	
Electricity	6,678	4,929	2,544	477
Water				
Kitchens	44,520	44,520	44,520	44,520
TOTAL	**440,702**	**354,375**	**295,678**	**273,725**

6.4. Systems and Processes

The issue of payments cuts across other sections within the Department. The accounting standards utilised is the generally prescribed ones in terms of the Public Finance Management Act (PFMA), Division of Revenue Act (DORA) and others. The payments are recorded and signed for at every stage to ensure that they are carefully tracked. Documents related to payments are further filed so that they are available for reference purposes. Annual Reports are produced and these capture, among others, issues related to infrastructure provisioning.

Data on infrastructure is currently kept in the form of School Profiles (Spread Sheet) that are used to identify schools that need facilities. The information obtained from the spread sheet is complemented by the data from the EMIS component of the Department. The EMIS section had secured the service of SETA to establish the Geographic Information System (GIS) for the Department. The tool provides valuable information around planning. Furthermore, there is LOGIS utilised for procurement purposes and BAS for payment purposes. Data from the two systems can be compared and a decision made regarding what steps need to be taken. The Department of Public Works has developed the Project Management Information System (PMIS). The system is to be shared in that it will be readily available on a server at implementation. All the systems used concurrently provide a wealth of data that can inform decisions.

The Resource Planning component is faced with a challenge of the quality, reliability and adequacy of the data kept in the School Profile. The data changes every time and thus not reliable for planning purposes. It has previously been mentioned that such data is inaccurate as every verification exercise comes up with fresh information.

The infrastructure data in the form of School Profiles is kept in Excel format for manipulation and analysis purposes. The software assists to determine the needs of the different schools but is ineffective because the information provided is not of high quality. The information as used is normally collected during the time of Snap Surveys and updated when the Annual Surveys are submitted and captured.

The absence of a formal system to manage infrastructure provision implies that no formal project ranking system exists. This has an impact on the decision to be made regarding which projects are to be taken on board in the Infrastructure Plan. A point allocation method will in the interim be utilised to close this gap.

7. Plan Improvement and Monitoring

The performance measures regarding the quality of planning should not be viewed in isolation. There is a clear linkage between the Strategic Planning of the Department. Flowing out of the Strategic Planning process is the CAPS Model. The CAPS model captures the strategic objectives the Department has itself to achieve. For the provision of infrastructure reference is made to the submission dates of which the Infrastructure Plan is to be submitted. The Individual job description and the subsequent performance measurement are measured on a quarterly basis. The developmental nature of Performance Measurement also means that visible improvement must be registered on all aspects of the performance of the official and planning is one of them. The quality of planning implies that the Infrastructure Plan must be submitted on time. Over and above this, the planned projects must be implemented on time thus meet the delivery targets. The reduction and eventual eradication of variances between what is planned and what finally is constructed on the ground depicts the improvement of the quality of planning.

The challenges experienced during the implementation of projects are not viewed in isolation but are linked back to planning. Should it happen that the root cause of the challenge lies in planning then the matter is revisited to ensure that there is no recurrence of the same challenge. The open communication that exists between the Planning and Facilities components of the Department is an advantage because the feedback obtained is worked into the planning stage.

It cannot be overemphasised how negatively the absence of NEIMS affect planning. This system is urgently needed in order to sharpen planning. The summaries that have been provided do not assist planning in any sense. The Province may have to consider employing the services of a Service Provider to put up a system for the Province. This will enhance better data and management thereof. The target date to commence with this arrangement is around June 2008.

There are monthly reports that are received from the department of Public Works regarding the performance of infrastructure. The monthly reports will flag problems raised by planning that need attention for future. The Infrastructure reporting Model (IRM) while it reports on the progress on sites can also be used a tool to measure the performance at the planning stage. Projects that get stuck at the implementation level need to be traced to the planning side. The discussions that take place at the level of the Programme Operations Management Meetings (POMM) between the officials in the Departments of Education and Public Works reflect on the planning and ensure that corrective measures are taken. The Joint Operations Committee meetings are also to be revived in order to serve as a conduit for issues raised between the tow Departments. Further meetings take place in the Social Service Cluster committee Meetings where the Department reports on its performance. Issues regarding planning that are raised in these meetings are percolated down through the line function to ensure improvement and synergy in planning.

Peer group review takes place in the meetings as indicated above. This may have to be extended to have the Provincial Treasury play a major role regarding this activity and feedback cascaded on time to allow for improvements to be worked in during the planning process. There are, however, Annual Reports that are sent out by the department wherein the performance of infrastructure, among others, is interrogated. Working in close proximity with the Planning component of the Department of Public Works will further strengthen this audit. Public Works has employed officials and these are stationed at the Regions. The close working relationship to be forged at this level will improve planning tenfold.

8. CONCLUSION

The purpose of this Infrastructure Plan was indicated as being to review the facilities that were previously provided and plan ahead. The study that goes with the provision of facilities is critical in order to provide facilities correctly and where they are needed.

The vision of the MDoE was indicated as "Providing quality education and training towards a better life for all". It is this vision that guides the provision of facilities to the communities within the Province. The mission and the strategic goals that are the vehicles to reach the vision have been unpacked including the legislative requirements that go with them.

The key elements of the plan have been covered as the provision of buildings, that is, new and additional classrooms and other facilities like the laboratories and libraries / media centres. To enhance the dignity of the school community and meet the Constitutional mandate, the provision of toilets, electricity and water is also on the cards. The provision of kitchens to Primary Schools to ensure that the health standards are kept in the preparation of food is also catered for.

The schools that need facilities are identified through the statistics that are obtained from a plethora of documentation. The facilities that are in existence serve as a starting point to determine the gap that may be there. Other factors need to be considered as alternatives to the provision of brick and mortar structures. It has been established that on the whole the Primary Schools do not need additional facilities when considered globally. The Secondary Schools, on the other hand, showed needs across the Province right from the onset.

The demand and forecast of the Infrastructure Plan indicates whether the population that is considered for the provision of resources is a growing or shrinking one. Based on this observation the number of resources to be provided to the communities within the Province was then unpacked.

Another area that has come with the introduction of the Infrastructure Plan is the Infrastructure Maintenance Plan. Previously schools would be constructed and be utilised without any further attention to them. The new scenario demands that all new schools that have been constructed should captured to indicate the amount of money that will be spent on them for day-to-day maintenance with an indication of when major renovations will take place. The existing schools are also captured onto the same plan for their lifespan upkeep.

The person power needed to deliver the programme was alluded to. Finally the financial summary is given indicating the total costs that will be spent in this Infrastructure Plan.

7. REFERENCES

References

Arends, F & Paterson, A 2003. Report on the Mpumalanga Five Year Public Schools Facilities Needs Survey (2004 – 2008) – Draft Report. HSRC – Mpumalanga Department of Education.

Department of Education. November 2001. Physical Resources Planning Manual.

Department of Education, School Register of Needs.

Department of Education. June 2003. Education Statistics in South Africa at a Glance in 2001.

Department of Education. November 2006. Education Statistics in South Africa at a Glance in 2005.

Development Bank of South Africa 2005. Mpumalanga Province Socio-Economic Profile, March 2005.

Mpumalanga Province. Provincial Growth and Development Strategy (PGDS) 2004 – 2014.

Municipal By Laws. Municipalities within the Province.

Republic of South Africa. 1996. Constitution of the Republic of South Africa.

Republic of South Africa. 2006. Division of Revenue Act.

Republic of South Africa, Municipal Systems Act.

Republic of South Africa. 1996. National Education Policy Act.

Republic of South Africa, 1998. Occupational Safety and Health Act.

Republic of South Africa. 1996. South African Schools Act.