CHAPTER 3

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3.0 Delivering the plan

3.1 Changing the way we do things

Effective implementation of the SIP will require fundamental changes to the way infrastructure in the province is currently planned and delivered.

Over the past few decades there has been a global trend towards greater participation of the private sector in the provision of infrastructure and services. This trend has to a large extent been driven by the need to become more efficient in terms of both cost and service delivery. Globally this has

resulted in the formation of government agencies and parastatals with varying degrees of operational autonomy.

In South Africa, too, over the last decade government's role in the provision of infrastructure has shifted from one of striving to plan, develop and deliver everything itself to one of engaging other spheres of society, particularly in terms of delivery. In South Africa the shift towards involvement of the private sector has in part also been driven by the post-apartheid governments' objective of promoting broader participation in the economy. The shift was initially evidenced through the emergence of relatively autonomous agencies and parastatals. More recently there have been an increasing number of public-private partnerships (PPPs) with varying degrees of operational autonomy. In addition, all spheres of government in South Africa have moved towards engaging the private sector in infrastructure and service delivery through partnerships and contracting arrangements aimed at addressing capacity constraints within the public sector and increasing cost and service efficiencies.

Thus increasingly today the government's role in infrastructure provision is focused on facilitating and directing infrastructure delivery, rather than directly executing all functional components. Nevertheless, government clearly needs to maintain a significant and direct role in providing the infrastructure that underpins economic and social transformation through the delivery of key community services requirements. This would include bulk infrastructure for indigent communities and priority functions such as health and education.

While the above shift is already happening, a further shift still needs to happen in respect of maintenance. Historically, the focus has been on developing infrastructure. This is understandable given the tremendous backlogs inherited by the post-apartheid government. However, it has resulted in resources being applied in planning and building, rather than addressing ongoing maintenance and servicing requirements. The public service budgeting approach has probably also contributed to infrastructure being developed, but not effectively maintained, particularly when operational funding has been constrained. In this regard the SIP places a special emphasis on the need to provide for the ongoing maintenance of existing and planned infrastructure.

The SIP attempts to establish the broad long-term priorities for the province and thus guide the development of strategic infrastructure priorities that best meet the provincial government's objectives. In order to achieve this, there will need to be a major shift in the way infrastructure and service delivery is approached in the province.

Key components of the changes required in the way government and the parastatal sector operate include the following:

- a coordinated and integrated approach towards delivery ensuring cohesion between the three spheres of government, other government agencies (including parastatals), and state-owned entities. This requirement in turn implies the need for:

    - fostering a culture of co-operation within all spheres of government;
    - alignment of the strategic objectives of government agencies with those of the province, and development of a culture of openness and working together;
- fostering cross-functional (cross-departmental) integration and coordination, moving towards a culture of managing across portfolios, rather than within portfolio-based silos;
- providing or mobilising resources for maintaining and operating infrastructure, rather focusing only on the capital requirements of establishment only;
- prioritising infrastructure requirements on the basis of real needs which are aligned with clear provincial objectives, national objectives and the requirements of communities, and that are based on the PDSF triple bottom-line principles;
- promoting partnership approaches between the spheres of government in the delivery and operation of specific development and infrastructure projects so as to ensure efficiency, capacity and appropriate funding approaches.

In addition, government needs to form effective partnership with the private sector and non-governmental organisations (NGOs) to enable efficient and effective application of available resources, whether monetary, skills or other. The SIP provides the framework which should enable the different stakeholders to develop a common understanding of the overall provincial infrastructure priorities.

3.2 Evaluation and priorities

3.2.1 Strategic level

The objective of the SIP is to ensure that future infrastructure investment is directed to sectors where it will yield the best overall returns to society. In this regard the strategy should contribute to the overall development objectives of the province, as discussed in more detail below.

This section describes the screening of development projects according to their relative benefits, costs, risk of implementation failure and, and alignment to SIP strategic priorities or 'thrusts'.

The **benefits** of projects were measured on the basis of a set of guidelines that include the objectives of SIP, the MEDS guidelines, and the PSDF. In order to attain consistency and a degree of objectivity, an evaluation group established for this purpose conducted the evaluation across all thirteen infrastructure sectors.

The **costs** of projects mainly refer to the total direct project costs. Since most identified projects are in the conceptual phase, this only reflects a tentative indication of costs according to the rough guidelines of low, medium and high.

As noted elsewhere, the **strategic five thrusts** for the SIP are:

- an efficient public transport system;
- basic sanitation to all;
- effective and timeous asset maintenance and management;
- training, education and research; and
- sustainable resources.

3.2.2 Background to measuring benefits

The relative merits of the individual projects were evaluated in terms of the four overall factors namely, benefits, costs, risk of implementation failure and alignment to at least one of the five SIP strategic thrusts.

In ascertaining the benefits the PSDF triple bottom-line approach was adopted, providing for three over-arching objectives of sustainability, namely:

- ecological integrity (Planet): sustainable growth;
- social justice (People): spiritual, physical and emotional wellbeing, thus addressing poverty and reducing economic, social and geographic inequality; and
- economic efficiency (Prosperity): creation of employment and economic growth.

Table 1 summarises the key criteria and sub-criteria applied in the evaluation, indicating the relationship with the three pillars of sustainability and the six key objectives of the SIP.

Table 1 Summary of criteria applied in the benefit evaluation

Three pillars of sustainability (PSDF)	Six key objectives of the SIP	Main criteria
Economic efficiency (PROSPERITY)	Growing prosperity	Employment (temporary & permanent; direct & indirect)
		Financial impact
		Potential mobilisation of private funds
		Expansion of globally connected infrastructure (e.g. airports, harbours)
		Agglomeration advantages in targeted growth sectors as identified in MEDS
		Support to small business sector development and building connections between 2nd & 1st economy
		Support to potential growth areas, as identified and defined by the PSDF
		Linkages and co-ordination
	Fostering creativity	Development of film, television, audio visual and digital content
		Increased internet usage
		Development of cluster of excellence
Social justice (PEOPLE)	Improving well-being	Quality of life (life expectancy, health and skills)
		Safety (road, work and community)
	Building communities	Black economic empower (BEE) (addressing legacy of the past)
		Basic needs programmes in rural areas (e.g. housing, water,)
		Addressing absolute poverty through e.g. food security
	Expanding opportunities	Support land reform goals
		Skills development
		Primary and secondary education
		Tertiary education
		Change the apartheid structure of urban settlements
Ecological integrity (PLANET)	Attaining sustainability	Conserve and strengthen the sense of place through conservation of important cultural landscapes, artefacts and buildings
		Minimise pollution of ground and surface water
		Minimise impact on air pollution
		Minimise the consumption of scarce environmental resources
		Water-saving potential
		Potential to mitigate disaster risk
		Minimise waste and promote re-use and recycling of materials
		Develop and manage waste, wastewater and cemeteries

The scales of intensity used to measure each criteria range from -2 (very negative), through 0 (neutral) to 2 (very positive)

3.2.3 Presenting the relative benefits

The following approach was followed in the first screening of projects:

- A high-level economic analysis was undertaken. The idea was not to 'score' projects overall and then rank them in terms of a single numeric

outcome, but rather to inform the decision-making process by positioning projects in terms of the triple bottom-line objectives;
- The evaluation team, in discussion with the respective sector specialists, ascertained priority areas in the respective sectors. In some cases the original form of the projects was expanded or changed somewhat.

The 25 projects listed below were identified in the sector reports and subjected to the first screening process. While most projects were still at a conceptual phase, co-funding of the Construction Centre of Excellence at the University of Stellenbosch was at an early planning phase and pilot studies for asset management had been conducted in selected municipalities. The asset management programme for the rest of the Western Cape will largely be based upon the pilot studies.

The 25 projects which were screened and the sectors to which they relate are:
- Development: Provision of bulk infrastructure and road elements to facilitate the private Heartlands development;
- Education and training: FET recapitalisation to provide doubling of capacity;
- Energy: Solar water heating for low-income households;
- Energy: Renewable energy research project;
- Environment: Waste disposal and recycling project;
- ICT: Management of ICT system to ensure lower costs of communication;
- Justice: Integrated justice system (including the physical investment in information technology hardware and software);
- Transport: Integrated public transport system (pedestrian, cycle, mini-bus, bus, rail, etc);
- Community services: Provision of basic sanitation to all;
- Community services: Building capacity at local government level to maintain water quality assurance systems through the supply of web-based information;
- Community services: Development of an asset management implementation strategy which covers municipal services assets as well as provincial assets;
- Community services: Expanded public works programme;
- Community services/education: Co-funding of the Construction Centre of Excellence at University of Stellenbosch;
- Community services: Housing project (5000 units);
- Tourism: Tourism survey;
- Tourism: Development of Cape Agulhas as most southern point;
- Tourism: Provision of required beach amenities for Blue Flag status;
- Tourism: Development of cycling and walking plans to create an integrated network in rural and urban areas;
- Arts and culture: Redevelopment of Athlone Power station;
- Sport: Provision of basic sporting facilities at schools;
- Disaster risk management: Development of mechanisms to ensure the implementation of risk-assessment analysis for projects in the Western Cape;
- Health: Integrated primary health care asset management, maintenance and quality management system;

- Health: Human resource-related infrastructure auditing project;
- Health: Decentralised training and coordination project; and
- Health: Decentralised medical practice exchange forum.

In addition to the largely sector-specific projects identified above, an additional five cross-sectoral projects were identified as very relevant for the SIP. These were:

- Amathuba: A mixed land-use project in Driftsands close to Khayelitsha, providing mixed-income housing (5000 plus units), along with social and commercial precincts, while maximizing the economic opportunities and protecting the sensitive wet land area;
- N1 corridor project:
- Oude Molen development: A project aimed at redeveloping an 18,8 ha site to provide a mixed land-use development with mixed-income housing integrated in commercial and social precincts in an environmentally sensitive and sustainable manner;
- Cape Flats Canal: A canal linking False Bay and Table Bay and integrating the disadvantaged communities of the Cape Flats, drawing from the Canal Midi experience in France.
- Karoo Dinosaur Museum: An interest centre based on the rich archeological landscape of the Karoo with its unique dinosaur finds, drawing from the Atlantic Way/Eden-type projects in Europe.

The five projects are at various stages of development. Both the N1 Corridor and Amathuba projects are already at early design and costing stages. The proposed Valkenberg development is also at an early design phase. The Canal and Dinosaur Museum are at very early conceptual phases and were therefore not evaluated. Nevertheless, both were considered important enough initiatives to be listed and described in the SIP.

The 30 projects were sub-divided into two main groups, namely physical infrastructure projects and policy support projects. The latter cover aspects such as subsidies, research, capacity building and co-ordination.

Physical infrastructure projects

Table 2 summarises the evaluation of the physical infrastructure projects in terms of triple bottom-line benefits. During the evaluation process the projects were assessed against the triple bottom-line criteria as follows:

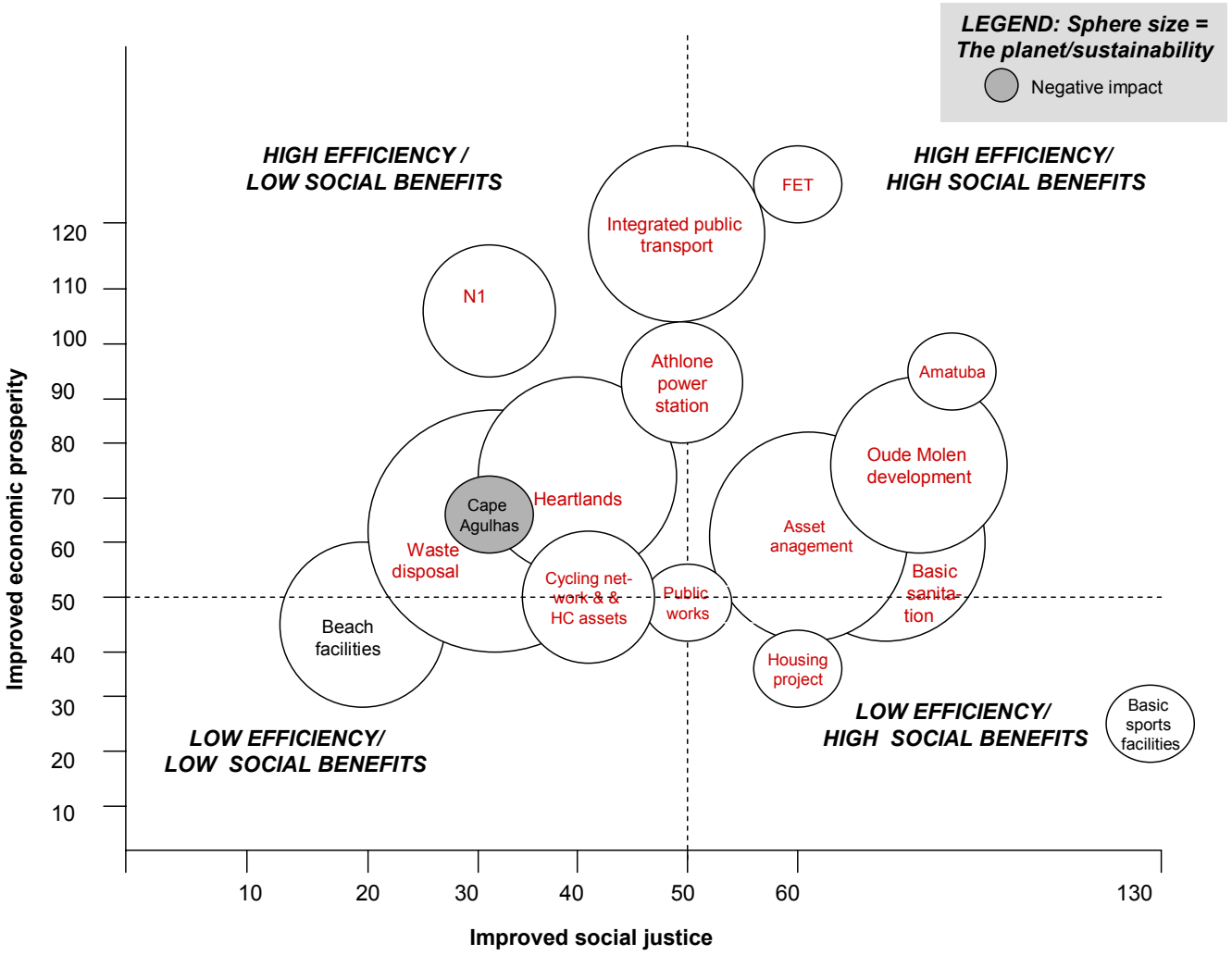
- Prosperity: Eleven sub-indicators were considered to determine the relative score for each project. With a maximum score of 2 per sub-criterion the highest score that a project could obtain under prosperity was (2*11)/11 * 100 for an index value of 200.
- People: Ten sub-indicators were considered to determine the relative score for each project. With a maximum score of 2 per sub-criterion the highest score that a project could obtain under people was (2*10)/10 *100 for an index value of 200.
- Planet: Eight sub-indicators were considered to determine the relative score of each project. With a maximum score of 2 per sub-criterion, the highest score that a project could obtain under people was (2x8)/8 *100 for an index value of 200.

Table 2 Evaluation of physical infrastructure projects

Project	Prosperity (index=100)	People (index =100)	Planet (index = 100)
Integrated public transport system	109	50	55
Basic sanitation	64	70	63
Heartlands	55	40	63
N1 corridor project	100	30	25
Waste disposal	45	30	88
Asset management	64	60	75
Housing project	36	60	0
Primary health care asset management	45	40	25
FET	127	60	0
Athlone power station	82	50	13
Development of Cape Agulhas	55	30	-12
Provision of beach amenities for Blue Flag status	36	20	40
Cycling and walking network	45	40	25
Basic sport facilities at schools	27	130	0
Amathuba mixed land-use project	109	80	0
Oude Molen development	64	70	50
Expanded public works programme	45	50	0

The diagram which follows presents the merits of the 17 physical infrastructure projects in a bubble-chart format that enables all three elements of the triple bottom-line to be considered simultaneously. The y axis measures the prosperity element, the x axis measures the people element, and the size of the bubble reflects the planet aspect. Thus projects with a large bubble size and lying towards the top right of the chart yield high benefits in terms of the triple bottom line, while projects with a relatively small bubble size and lying in the bottom left would be considered as yielding low benefits. The shaded area indicates the benefit zone, while projects highlighted in red denote projects classified as ones that are expected to yield high benefits overall. .

GRAPHIC PRESENTATION OF BENEFITS



The projects within the shaded area with very high benefits include:

- Oude Molen development;
- Asset management;
- FET recapitalisation to provide doubling of capacity;
- Amathuba mixed land-use development;
- Integrated public transport system;
- Redevelopment of Athlone Power station;
- Provision of bulk Infrastructure and road elements for the private Heartlands development; and
- Basic sanitation.

Other projects within (or close to) the shaded area with large bubble sizes that can be classified as projects with high benefits include:

- Expanded public works programme;
- Housing project;
- Waste disposal and recycling project;
- Cycling and walking network;
- Primary health care asset management system; and
- The N1 corridor.

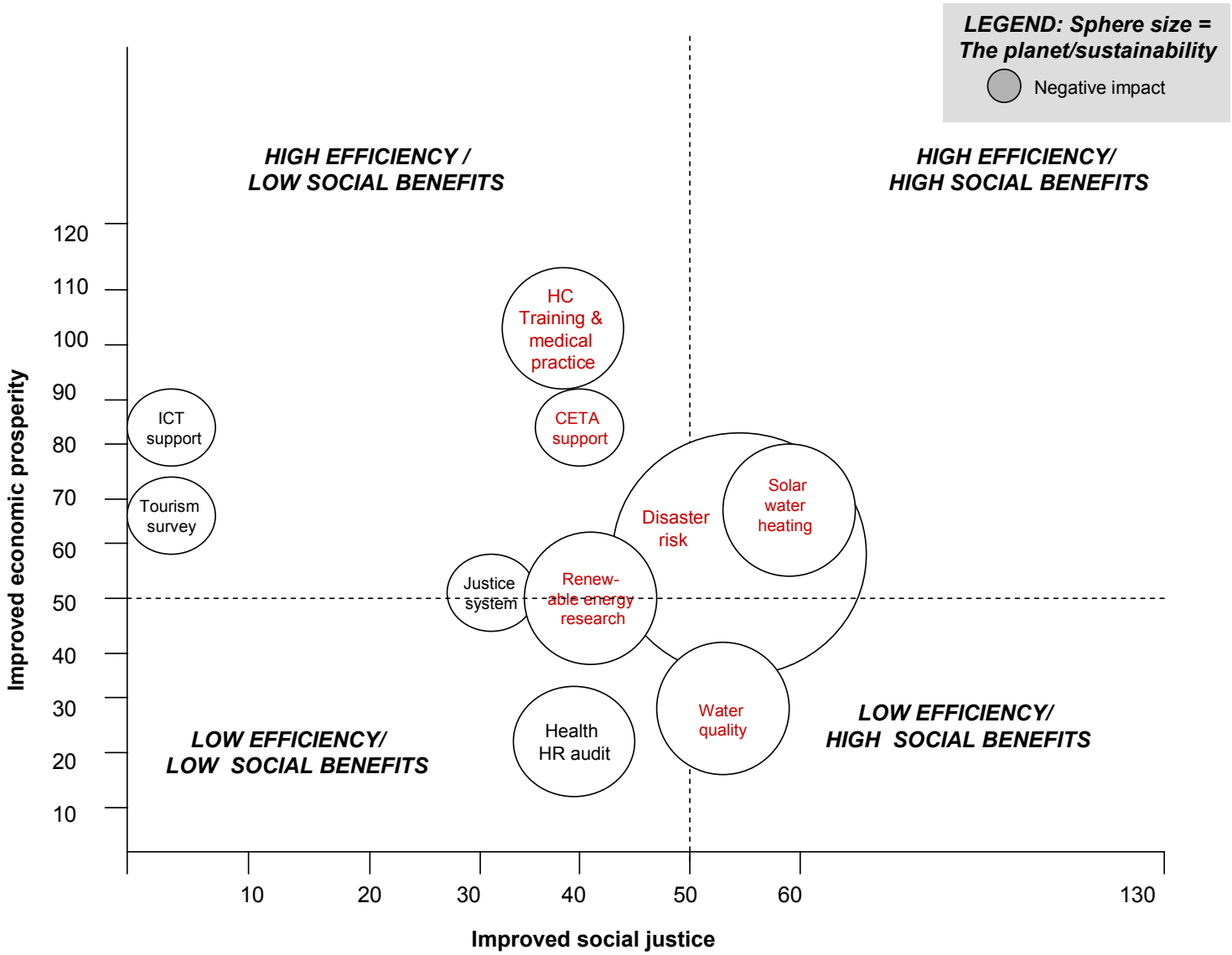
Policy support projects

Table 3 summarises the evaluation of the policy support projects in terms of triple bottom-line benefits.

Table 3 Evaluation of policy support projects

Project	Prosperity (index-100)	People (index =100)	Planet (index = 100)
Solar water heating	70	60	25
Renewable energy research project	45	40	25
ICT management	82	0	0
Integrated justice system	55	30	0
Water quality assurance	27	55	25
CETA support	73	40	0
Integrated tourism survey	64	0	0
Mechanisms for disaster risk analysis	45	50	88
Health human resource infrastructure audit	18	40	13
Decentralised training in healthcare	82	40	13
Decentralised medical practice	82	40	13

The diagram which follows presents the merits of the 11 projects above in the bubble-chart format.


LEGEND: Sphere size = The planet/sustainability
Negative impact
HIGH EFFICIENCY / LOW SOCIAL BENEFITS
HIGH EFFICIENCY/ HIGH SOCIAL BENEFITS
LOW EFFICIENCY/ LOW SOCIAL BENEFITS
LOW EFFICIENCY/ HIGH SOCIAL BENEFITS
HC Training & medical practice
CETA support
ICT support
Tourism survey
Disaster risk
Solar water heating
Justice system
Renew-able energy research
Water quality
Health HR audit
Improved economic prosperity
120
110
100
90
80
70
60
50
40
30
20
10
10
20
30
40
50
60
130
Improved social justice

The projects within the shaded area showing very high benefits are:
Solar water heating for low-income households

- The development of mechanisms to ensure the implementation of risk-assessment analysis for projects in the Western Cape
- Healthcare project: Decentralised training and coordination project
- Healthcare project: Decentralised Medical Practice Exchange Forum

Projects within (or close to) the shaded area with large bubble sizes that could be classified as projects with high benefits are:

- Co-funding of the Construction Centre of Excellence;
- Renewable energy research project; and
- Water quality assurance

3.2.4 Project costs and other factors

This section takes the evaluation process one step further by giving a qualitative indication of the benefits of the different projects in respect of other factors, namely project costs, risk of implementation failure and the project's alignment to the SIP strategic thrusts. In respect of costs, due to lack of information, only tentative indications of project costs were possible. Project costs were thus categorised as low (less than R10m), medium (between R10m and R100m) and high (more than R100m). The 'benefits' columns in the tables below summarise the size and position of the projects in the bubble-charts.

Physical infrastructure projects

Table 4 summarises the evaluation of the physical infrastructure projects. The grey shading highlights the relative merits of the individual projects in terms of the four overall evaluation criteria, i.e. benefits, costs, risk of implementation failure and alignment to one of the five SIP strategic themes.

Table 4 Expanded evaluation of physical infrastructure projects

Project	Benefits	Project costs	Risk of implementation failure	SIP Strategic thrusts
Heartlands development	Very high	Medium	Low/medium	No
FET	Very high	High	Low (link with industry demands)	Yes
Waste disposal	High	Medium	High. Depends on political will	Yes
Integrated public transport system	Very high	High	High. Need to solicit buy-in at a high level	Yes
Basic sanitation	Very High	High	Low	Yes
Asset management strategy	Very high	High	Low	Yes
Expanded public works program-me	High	Low	Low	Yes
Housing projects	High	High	Low	Yes
Develop Cape Agulhas	Low	Medium	Medium. Need approval from National Parks	No
Provide beach amenities for Blue Flag status	Low	Low	Low	No
Cycling and walking network	High	Medium	High. Crime levels could act as restraint	No
Athlone power station	Very high	Medium	Medium. Good planning required	No
Basic sport facilities at schools	Low	Medium	Low	No
Primary health care asset management system	Very high	Low	High	Yes
Amathuba mixed land-use project	Very high	High	Low	Yes
N1 corridor project	High	High	Medium	Yes
Oude Molen Development	Very high	Medium	Low	No

The projects can be divided into the eight categories.

Category A consists of projects that meet all four criteria, i.e. they are the projects that are likely to have favourable benefit: cost ratios, a low risk of implementation failure and are in line with the main SIP strategic thrusts. These projects are:

- Asset management strategy;
- Expanded public works programme;
- FET project;
- Amathuba mixed land-use project; and
- Basic sanitation.

Category B projects have possible favourable benefit: cost ratios, a low risk of implementation failure and are in line with the main SIP strategic thrusts. Only the housing project falls in this category.

Category C projects are likely to have favourable benefit: cost ratios and are in line with the main SIP strategic thrusts. However, these projects all tend to be associated with higher risks of implementation failure. They are:

- Primary health care asset management system;

- Waste disposal project; and
- Integrated public transport project.

Category D projects have possible favourable benefit: cost ratios and are in line with the main SIP strategic thrusts. Only the N1 corridor project falls in this category.

Category E projects are likely to have favourable benefit: cost ratios and have a low risk of implementation failure but are not in line with the main SIP strategic thrusts. The two projects that fall in this category are:
- Heartlands development; and
- Oude Molen development.

Category F projects are likely to have a favourable benefit: cost ratio but do not meet other criteria. Two projects fall in this category, namely:
- Athlone power station; and
- Cycling and walking network.

Category G projects have a low cost and low risk of implementation failure but do not score highly on other criteria. Only the provision of beach amenities for Blue Flag status falls in this category.

Category H projects meet only one of two criteria, namely low cost or low risk of implementation. The provision of basic sports facilities at schools has a low risk of implementation failure but does not score highly on any other criteria and thus falls in this category.

Policy support projects
Table 5 summarises the expanded evaluation for the policy support projects.

Table 5 Expanded evaluation of policy support projects

Project	Benefits	Project costs	Risk of implementation failure	SIP strategic thrust
Solar water heating	Very high	High	Medium. Risk can be reduced through incremental approach	Yes
Renewable energy research project	High	Low	Low	Yes
ICT management	Low	Low	High. Political environment and Telkom lobby	No
Integrated justice system	Low	Low	Medium/ high. Need to lobby national government to continue an earlier pilot in WC	No
Water quality assurance	High	Low	Low	Yes
CETA support	High	Low	Low	Yes
Integrated tourism survey	Low	Low	Medium. Buy-in needed from stakeholders	No
Mechanisms for disaster risk analysis	High	Low	Medium/high	Yes

Project	Benefits	Project costs	Risk of implementation failure	SIP strategic thrust
Health human resource infrastructure audit	Low	Low	High	No
Decentralised training in healthcare	Very high	Low	Low	Yes
Decentralised medical practice	Very high	Medium	Medium	No

Using the same categories as for the physical infrastructure projects, there are four policy support projects that meet all criteria and thus fall in category A:

- Water quality assurance project;
- Renewable energy research project;
- CETA support; and
- Decentralised training in healthcare.

Two projects fall in category C:

- Developing mechanisms for disaster risk analysis; and
- Solar water heating to low-income households.

Decentralised medical practice falls in category F in that it is likely to have a favourable benefit: cost ratio but does not meet other criteria.

Category H projects, that meet only one criterion, are as follows:

- ICT management (low cost);
- Integrated justice system (low cost);
- Tourism survey (low cost); and
- Health infrastructure audit (low cost).

3.3 Management of government assets

Any investment in hard infrastructure without provision for proper management and maintenance to ensure efficient operation and to prolong the useful lifetime of the asset would be a waste of limited resources. The importance of proper asset management and maintenance systems must again be stressed.

The Municipal Finance Management Act (No 56 of 2003) requires the municipal manager to:

- compile an Asset register of all assets of the municipality; and
- ensure adequate maintenance of the assets.

Assets include all movable assets (for example, vehicles, furniture, equipment) as well as fixed assets (for example, land and buildings, streets, wastewater treatment facilities, water pipelines, reservoirs, pump stations, the storm water system)

3.3.1 The current situation

The fact that the integrated development plans (IDPs) are needs-driven (and therefore generally implies new construction) combined with the ready availability of capital funding through the MIG programme inevitably leads to reduced emphasis being placed on efficient operation and maintenance and effective rehabilitation of existing assets as the latter require own sources of revenue. The MIG office estimates that Western Cape local municipalities have a backlog of more than R740

million in road maintenance and rehabilitation alone. The extent of the backlog in sub-terranean infrastructure (such as water, sewage, stormwater) and buildings is unknown and of major concern.

All assets have a particular life expectancy which can be achieved with the support of routine maintenance to address breakages and blockages and as part of a scheduled programme. If such maintenance does not take place, the life of the asset will almost always be drastically reduced. The SIP will therefore need to make adequate provision for the proper operation, maintenance and rehabilitation of both existing infrastructure as well as of the new infrastructure which is being proposed.

3.3.2 The plan

An infrastructure asset management plan contemplates tactics to manage an infrastructure network to achieve:

- a specified level of service;
- establishment of a life-cycle plan for all existing and proposed assets (typically over a 10 or 20 year period); and
- a financial plan indicating how the above is to be funded.

In addition, the plan examines, and where necessary provides for changes to, the organisation's practices to ensure that the plan can be properly implemented and managed. Practices that need to be taken into consideration include capacity, skills, processes, systems, and data integrity.

Infrastructure asset management not only ensures the optimal delivery and utilisation of services provided by government, but also ensures that the province's people enjoy the full benefit of such services for the full life of such an asset. In addition, while the creation of new infrastructure provides temporary working opportunities, operation, maintenance and rehabilitation create permanent jobs and careers.

3.3.3 Progress to date

Two pilot studies on asset management planning which were launched by the MIG office at Stellenbosch and Drakenstein are nearing its completion. A standardised approach has been followed in these pilots. Seventeen variables are assessed in compiling the register. Examples of such variables include present condition, life expectancy, criticality, and asset performance. Standard software was developed to compile the registers and to provide the outputs necessary to compile an infrastructure asset management plan. It is the intention to encourage the use of this same system across all municipalities to ensure a consistent approach. Such standardisation will also ensure that province-wide analysis can be done for all publicly owned infrastructure assets.

Another positive development is that the Institute of Municipal Engineers of Southern Africa is currently launching a South African version of the International Infrastructure Management Manual as part of the drive to provide a scientific basis for asset management in the country.

3.3.4 The proposed project

The objectives of the proposed project are that:

- the provincial government and all municipalities will have completed infrastructure asset registers by 2007;

- the provincial government and all municipalities will have completed infrastructure asset management plans by 2008;
- municipalities will include a separate chapter in their IDPs. This chapter will reflect the asset management plan, including its long-term cash flow requirements, and funding and co-funding requirements.

The above initiatives will receive financial and other forms of support from both provincial and national government. To this end a dedicated provincial infrastructure maintenance and rehabilitation fund to which local and district Municipalities can apply for co-funding of maintenance and rehabilitation projects. Applications should follow the normal MIG format and be administered and supported by the MIG office.

3.3.5 Implementation of the SIP and funding

3.3.5.1 Implementation vehicles

In order to speed up the delivery of developments, infrastructure and housing it will be necessary to improve coordination between role players and reduce the amount of red tape and consequential delays. There are a number of examples of initiatives with similar objectives in Gauteng and the City of Johannesburg which are of interest in this respect. Typically companies or agencies are created with a specific mandate and are run on private sector principles but report to the provincial legislature or City Council and comply with the Municipal Finance Management Act.

Some of the successful examples are:

Blue IQ

Blue IQ is a programme of the Gauteng Department of Finance and Economic Affairs (DFEA), is funded wholly through the Gauteng provincial budget and is accountable to the head of department of DFEA, the MEC for Finance and Economic Affairs and the Gauteng cabinet and legislature.

To make Blue IQ an easy partner for the private sector to cooperate with, it operates in a carefully constructed environment which makes it look and feel more like a private sector company than a government department. The skills required to support the management team are outsourced through a single slate tender known as the skills consortium. This eliminates delays in requiring tender approvals and allows Blue IQ to buy in the best brains in the business on an as need basis.

The Blue IQ Investment Holdings (Pty) Ltd was created via the Blue IQ Investments Holdings Bill passed by the Gauteng provincial legislature. This was created to allow for Blue IQ's exit strategy from its projects and to ensure the provincial government's continued oversight of projects once the public sector role is diminished on an operational level.

Blue IQ is delivering 11 major projects, which include the Gautrain rapid rail link, Johannesburg International Airport industrial development zone, and Constitutional Hill and Kliptown tourism projects.

Johannesburg Development Agency

The Johannesburg Development Agency (JDA) is an agency of the City of Johannesburg, which stimulates and supports area-based economic development initiatives throughout the Johannesburg metropolitan area. As development

manager JDA coordinates and manages capital investments and other programmes involving both public and private sector stakeholders.

JDA is responsible for a wide range of projects including development of historical sites for tourism, refurbishment of railway stations and taxi ranks, development of informal traders markets, cleaning of rivers, and creation of economic opportunities and building of houses. In certain cases, such as Kliptown, Blue IQ may use JDA as the implementation agent.

Joburg Property Company

City of Joburg Property Company (JPC) was established in 2000 as the property management and development arm of the City of Johannesburg and its utilities, agencies and corporate entities (UACs). It was conceived as a specific programme to streamline operations to achieve a better financial situation and service delivery for the City.

JPC provides a range of services to manage and develop the property portfolios of COJ and its UACs. The intention is to do this:

- in a socially responsible manner;
- to maximize returns; and
- To support socio-economic transformation.

It will be the responsibilities of the SIP to report on the available options in terms of implementation strategies and in the process investigate opportunities for black economic empowerment and transfer of skills.

3.3.6 Financing the SIP

(from original SIP document)

This sub-section reviews the traditional income sources for province and local government for the functions that they have to perform. It then discusses and recommends ways to fund the increasing infrastructure pressure placed on declining provincial and local government budgets. It is suggested that the answer lies somewhere between the optimisation of own revenue and planning infrastructure in a manner that does not distort the fiscal balance between investment in new build and maintenance, upgrades and refurbishment.

The provincial Department of Public Works and Transport has a deep portfolio of property and other assets that may be realised to fund activities in other areas of its work as well as to assist other spending agencies by contributing inputs to their projects. Its role is to act as catalysts for the infrastructure spend of other agencies and also to remove blockages to projects to the extent that these are within the sphere of control of the department.

The Constitution creates three spheres of government with different revenue-raising capacities. Intergovernmental transfers are intended to ensure that each sphere has sufficient funds to discharge its expenditure responsibilities. Given the provincial imbalances in income and resource distribution, South Africa's fiscal system is based on a revenue-sharing model, with seven of the nine provinces receiving more funds than they raise by way of national taxes. Similarly, except for the major urban municipalities, most municipalities are highly dependant on national transfers, though less so than provinces.

The Intergovernmental Fiscal Relations Act provides the framework in which revenue sharing between the three spheres of government takes place. The Financial and Fiscal Commission (FFC), an independent constitutional body, gives advice on the division of revenue process. Government must, when tabling the national budget, show how the division of revenue for that year takes into account the recommendations of the FFC. Government's response is captured annually in the explanatory memorandum to that year's Division of Revenue Bill and fulfils the requirement set out in section 10(5) of the Intergovernmental Fiscal Relations Act.

3.3.6.1 Provincial government finances

In terms of the 2006 Budget Review, total consolidated national government expenditure for 2006/07 is R472,7 billion, while revenue is R446,4 billion, giving a budget deficit of 1,5%. Of the total of R472,7 billion, R52,0 billion is set aside for debt service costs, and R2,5 billion as a contingency reserve, leaving R418,2 available for allocation. The reserve is for unforeseeable and unavoidable expenditure, emergencies, and also for expenditure items that are not yet included in departmental allocations.

The vertical division of revenue reflects the fact that national government's role is mainly policy formulation, with provincial and local governments delivering basic and social services, which are largely population driven. The more people in a province or municipality, the more pressure on their budgets, and the larger the share of nationally raised revenue.

Of the R418,2 billion available for expenditure, R176,7 billion was allocated to provinces – R150,8 billion in the form of the equitable share and R25,9 billion as conditional grants. Local government was allocated R26,5 billion.

The Western Cape government plays a key role in the delivery of school education, health care, welfare services and social and economic development. Most provincial functions do not lend themselves to cost recovery. As a result, province continues to rely on national transfers to execute its constitutional mandate. National transfers to provinces comprised 96.1% of their revenue in 2003/04, and are rising by a percentage point to 97.1% in 2004/05. Own provincial revenue in 2003/04 constituted around 3.9% of total provincial revenue.

The Western Cape provincial budget grows from R 18.345bn (2004/05); R 19.658bn (2005/06) to R 21.217bn (2006/07) and average growth of 9.06% over the medium term expenditure framework (MTEF) period, with a deficit forecast of R 322m in the outer year. The projected own revenues over this period is R 1.095bn (2004/05); R 1.121bn (2005/06) to R 1.177bn (2006/07). These receipts are made up of motor vehicle licences, gambling, horse racing, casino and other taxes. The rest being made up of non-tax receipts, transfers received sales of capital assets and other receipts. The income from interest on provincial reserves is declining, due to dwindling reserves.

3.3.6.2 Local government finances

Introduction

Local government plays a pivotal role in the social and economic development of communities and in enhancing democracy. Section 152 of the Constitution specifies the objectives of local government as: to provide democratic and accountable

government; to ensure the provision of service in a sustainable manner; to promote social and economic development and safe and healthy environment; and to encourage the involvement of communities and community organisations in the matters of local government.

In pursuing these objectives, the Constitution obliges local government to perform certain minimum "developmental duties". These are to structure and manage municipal administration, budgeting and planning processes, and, in doing so, give priority to the basic needs of the community and promote the social and economic development of the community. Municipalities are also required to participate in national and provincial development programmes.

The suite of legislation enacted since 1994 includes the Municipal Structures Act (1998), the Municipal Demarcation Act (1998), the Municipal System Act (2000), the Municipal Finance Management Act (MFMA) (2003) and the Municipal Property Rating Act (2004). These laws form the foundation of the new local government system, embodying the critical package of policy reforms in local government. The legislation aims to make municipalities more accountable, financially sustainable and capable of delivering essential services to their communities.

The changes brought about by the legislation include the rationalisation of municipalities from 843 to 284 and the establishment of three categories of municipalities: one-tier metropolitan municipalities (category A), two-tier district municipalities (category C) and local municipalities (category B). There has also been a reassignment of powers and functions between local and district municipalities.

The consolidation and restructuring of local government has led to rebuilding institutions, reorganising administration, establishing workable governance arrangements, relocating personnel, improving revenue management and broadening access to services and basic infrastructure.

The following pages provide an update on the trends in municipal expenditure and income published in the 2003 Intergovernmental Fiscal Review. It aims to inform stakeholders on progress in local government finances over the past five to ten years. It identifies the reform agenda under way at present and the key challenges for the years to come.

It looks at four broad areas of local government finances:

- municipal budgets and trends;
- intergovernmental transfers to local government finances;
- new trends in local government; and
- key budgetary challenges.

3.3.7 Municipal budgets and trends in 2003-04

Local government generally has more fiscal capacity than provinces, but this varies across municipalities. On average own revenue finances 90% of municipal expenditure. The remaining 10% is financed by national transfers. In 2006/07 local government will receive R18 058m in the form of equitable share, R7 000m to compensate for the abolition of the regional services council levy, and R8 474m in conditional grants. Property taxes, user charges (particularly on water, sanitation, electricity and refuse removal) form the bulk of municipal own revenue. However,

the efficacy of own revenue collection in some municipalities remains low, often resulting in deficits at the end of the financial year. The deviations between the budgeted and actual revenue in the local government sphere are of concern.

The Municipal Finance Management Act sets the legal basis for modernising budgeting and financial management practices. The Act forms an integral part of the broader local reform agenda. By placing their finances on a sustainable footing and enhancing accountability, the Act aims to enable municipalities to deliver services to all their residents and clients.

The municipal financial year starts on 1 July, three months after the financial year for national and provincial governments.

Underlying trends
The total municipal budget has nearly doubled over the past eight years. In 2003/04, it is estimated to be R86,0 billion, up 15,3% from 2002/03, including national transfers to municipalities of R12,4 billion. The operating budget constitutes 81% of the R86,0 billion.

In 2002/03, district municipalities budgeted to spend 20,7% of their budgets on capital. This increased to 48,2% in 2003/04. In contrast, local municipalities reduced the proportion to be spent on capital from 22,3% in 2002/03 to 20,8% in 2003/04.

The significant change in the proportion of operating capital budget to total budget for local and district municipalities is a reflection of the division of powers and functions announced by national government in 2003, and which took effect in the 2003/04 budget. The major shift in capital expenditure from local to district municipalities was in the water and sanitation functions.

Closer inspection of the 2003/04 budgets of six metropolitan municipalities and large local municipalities clearly demonstrated where there is the most municipal activity. Johannesburg tops the list at R12,2 billion, followed by Cape Town at R10,3 billion and eThekwini (Durban) at R9,8 billion. These three comprise nearly two-thirds of the total budget of metropolitan municipalities. However, when these budgets are compared to population figures a slightly different picture emerges. The average budget per capita for the metropolitan municipalities is R3 444. The highest is Johannesburg at R 3774, then Tshwane (Pretoria) at R3 565, followed by Cape Town at R3 543.

Changing demographics, as reflected in the 2001 census results, show that urban municipalities, mainly as a result of migration, have growing populations of poor people. Many poor families settle in informal settlements on the periphery of urban municipalities, thus presenting these municipalities with a challenge to develop sustainable settlements.

Table 6 Operating and capital budgets for Cape Town municipality 2001/02-2003/04

Municipality	Population (thousand)	Total budget (R million)			Rands per capita	
	2001	2001/02	2002/03	2003/04	2002/03	2003/04
Cape Town	2 893	9 492	9 775	10 251	3 379	3 543

Expenditure trends for Cape Town municipality between 1996/97 and 2002/03 as set out in Table 6 above demonstrate that the operating budget grew faster than the

capital budget. This trend reversed in 2003/04, with the capital budget growing by 27,5% compared to a 12,7% rise in the operating budget. This reflects an improvement in the quality of data and shift towards greater municipal infrastructure development.

Capital investments in municipal infrastructure are essential if the municipalities are to fulfil their development mandate. It has taken time for capital expenditure to feature as a significant part of municipalities' funding priority, largely owing to the series of amalgamations, insufficient capacity, and a shortage of financing options.

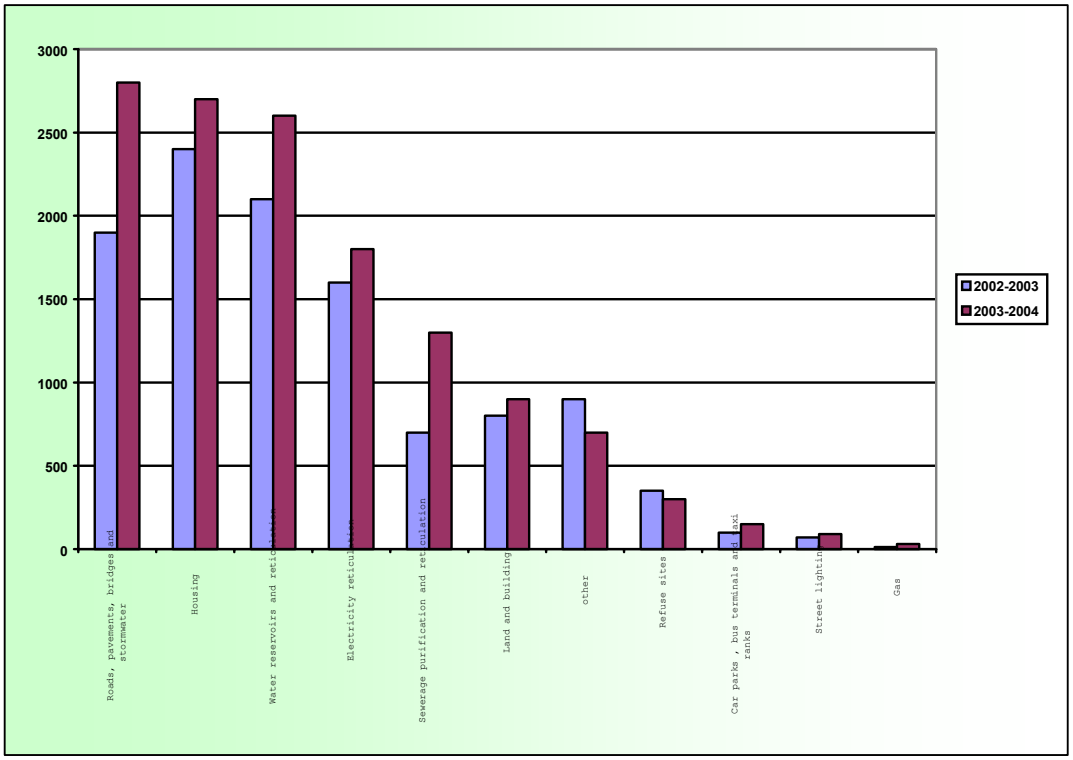


Figure 1: Local government capital budget

Similar to 2002/03, 81% of budgeted of capital expenditure in 2003/04 has been attributed to general infrastructure. Figure 1 shows that in 2003/04, the largest portion of general infrastructure expenditure was earmarked for roads, pavements, bridges and storm-water (R2,9 billion), housing (R2,8 billion) water reservoirs and reticulation (2,5 billion) and electricity reticulation (R1,8 billion). Moreover, the roads, pavements, bridges and stormwater category, and sewerage purification and reticulation category have benefited the most from real increase in expenditure between the two years at 46% and 68% respectively.

Revenue trends

Operating income consists of user charges, property rates, Regional Services Council (RSC) levies (ending in 2005/06 financial year) and intergovernmental grants. The 'other' source of funding, which is also significant, includes traffic fines, rental of housing stock, interest on investments, recovery of outstanding debt, and use of previous years' surplus funds.

User charges for providing water, sanitation, electricity and refuse removal services are the largest contribution to local government revenue. Revenue from user charges increases from R 28 billion in 2002/03 to R 31 billion in 2003/04.

Property rates account for up to 20% of local government revenue and are levied in metropolitan and local municipalities.

The new Municipal Property Rating Act will bring about significant changes to how these levies are raised. The primary aims of the Act are to assist municipalities to broaden their rates base to include previously excluded property and provide transitional rules to phase in rates in these areas, and to provide uniform national rules regarding valuable and appeals, rating policy and rate setting.

Previously, various valuation methods were used. The Act now requires valuation to be based on the market value of a property, namely land plus improvements. Each municipality will continue to set and collect property rates in a manner appropriate to its circumstances. Municipalities will need to monitor the impact of the new valuation system on different sectors, including the residential sector, to avoid exorbitant increases in rates. Should the rates base substantially increase due to the new market-based valuation roll, municipalities can reduce the rate in the rand levied. In addition, municipalities need to take into account the growth rates in budgets as determined annually by National Treasury.

Regional Service Council (RSC) levies have been an important source of revenue for metropolitan and district municipalities, making up 7%, or R5,2 billion, of total local government revenue in 2003/04. The RSC levy system consisted of two components, a regional services levy and a regional establishment levy, calculated on payroll and turnover respectively. The actual rates varied by municipality, but were frozen since 1996. The RSC levy was severely criticised as being an inefficient, inequitable and poorly administered tax instrument. The levy was abolished as from the 2006/07 budget year, with a compensatory grant being allocated from national to municipal to cover the shortfall.

Since 2002/03, budgeted capital spending has increasingly been financed from national and provincial infrastructure grants and subsidies. The bulk of this is through the consolidated municipal infrastructure programme MIG. Previously, capital spending was largely financed by external loans, own sources and other sources, such as donations and public contributions.

There is clearly scope for private sector involvement in the financing of capital projects in the local government sphere. Surveys reveal that borrowing from the private sector remains an untapped resource. National government has committed itself to assisting municipalities to do this through the development of a strong municipal borrowing market under the auspices of the MFMA. This is discussed further in the section on new trends in local government finances.

3.3.7.1 Intergovernmental transfers

National transfers
Over the past 12 years, local government has been receiving an increasing percentage of national revenue at an average annual growth rate of 15%. Although this growth is off a low base, government has recognised the need to overcome the challenges at the local government sphere to improve basic service delivery. This places strengthening the local government sphere firmly on government's list of priorities over the medium term.

Expenditure needs vary across municipalities depending on the following factors, among others:
- the extent of own revenue;
- the extent of background;
- the size of the population and, more importantly, the size of the poor population; and
- the assignment of powers and functions between spheres and tiers.

It is frequently claimed that over two-thirds of municipal activity is self-funded, though this is not necessarily the case in individual municipalities, especially in Eastern Cape, KwaZulu-Natal and Limpopo. Nationally, the highest is 92% in Bohlabela (Limpopo) and the lowest is 3% in Cape Town.

Table 7 Transfers to municipalities and metro in the Western Cape, 2003/04

Metro, consolidated district and local municipalities	Total budget	Total tranfers	Transfers as % of budget
Central Karoo (Beaufort West)	131,7	49,5	37,6%
Cape Town	10 251,2	304,7	3,0%
Western Cape	14 483,8	594,6	4,1%

There are three broad streams of national transfers, namely equitable share, infrastructure and current transfers. At present, around 55% of local government funding is through the equitable share. Table 7 shows transfers to municipalities and the metro in the Western Cape in 2003/04. The figures shown exclude indirect transfers and grants in kind. The figures suggest that transfers are a relatively less important constituent of the budget in Western Cape than elsewhere.

Equitable share
Over the past decade the intergovernmental fiscal system has moved towards greater discretion at the local sphere. Thus the unconditional equitable share grant progressively forms a greater proportion of the overall transfers to local government.

The review of the equitable share formula falls under the broader review of the local government framework. It aims to put in place a simpler, more robust, transparent and reformed one.

One aspect that is under review is the allocation of funding to nodal areas. Nodal areas have been identified according to poverty-weighted criteria. At present, there are 21 nodal areas, 13 of which are in rural areas. Figure 3 depicts the distribution of equitable share funding per poor household in each nodal areas. In contrast, the municipal infrastructure grant (MIG) allocates R181 to a municipality for every poor

household in its nodal area. The review aims to explore the most appropriate way to allocate funding to nodal areas.

Other grants
The creation of the new consolidated MIG in 2003 paved the way for the swifter delivery of infrastructure to poor communities. The adoption of MIG is intended to make it possible systematically to eliminate the backlogs in basic infrastructure over a 10-year period beginning in 2004. The Census 2001 results indicate the extent of these backlogs in water, sanitation, and electricity and refuse removal.

The capacity building and restructuring grants are the two main current transfers. They have been capped at R 750 million from 2005/06. In the two outer years of the 2004 MTEF, R550m was to be shifted from the capacity building programme to the equitable share.

3.3.7.2 New trends in local government finances
Municipalities face challenges in the delivery of public services and infrastructure. Despite the considerable achievements of the past 10 years, large backlogs remain.

Municipalities are exploring different ways to raise financing for municipal infrastructure. Investment in capital projects requires substantial resources over a considerable length of time. However, many capital projects have the ability to generate revenue. With this in mind, municipalities are turning to borrowing, in the form of loans and bonds, and to public-private partnerships (PPPs).

Borrowing
The 2003 Intergovernmental Fiscal Review noted that the main reasons for the stagnant municipal borrowing market were related to the local government transition process and uncertainty in the financial markets. Several steps have since been taken by national government to address these challenges, the most recent being the enactment of the MFMA.

A quarterly survey shows that during the period ending March 2003 and March 2004 the total borrowing by metropolitan municipalities increased form R12,1 billion to R12,5 billion, as depicted in Table 8.

Together, eThekwini and the City of Johannesburg account for around 55% of national municipal borrowing. These figures do not include the R2 billion bond issued by the City of Johannesburg, which would not have translated into an equal increase in the stock of debts as part of it was used to restructure existing debt. This bond is discussed in more detail below

Table 8 Borrowing by City of Cape Town, March 2003 to March 2004

R million	March 2003	June 2003	September 2003	December 2003	March 2004
City of Cape Town	2 093,2	2 127,2	2 714,9	2 655,6	2 653,3

The municipal borrowing market continues to be dominated by two players: the Development Bank of Southern Africa (DBSA), a public sector lender, and the Infrastructure Finance Corporation (INCA), a private sector lender. Together these institutions' loan to municipalities amounted to R11,9 billion during the quarter ending March 2004.

The DBSA has the largest market share in municipal borrowing, largely in the form of long-term loans. Both institutions have concentrated on the metropolitan municipalities, which at present receive around 65% of their total lending to municipalities. INCA's loan to municipalities has increased substantially, mainly because of the debt acquired from the Public Investment Commission.

The City of Johannesburg has become the first municipality to issue a bond under the MFMA. The first bond was 1,5 times oversubscribed with total of 14 investors buying into it. Pegged at R1 billion, the six-year bond was issued at a rate of 230 basis points above the R153 equivalent government benchmark bond. Interest on the bond will be paid biannually in arrears. The first payment fell due in October 2004. The bond is trading in the secondary market. Proceeds from the bond will go towards financing the municipality's debts and funding capital expenditure.

The second bond of R1 billion will have tenure of 12 years, 6 years longer than that of the first. The DBSA and the IFC issued the second bond at a lower cost due to the securitisation of the risk profile.

Other municipalities are expected to enter the market over the medium term.

Public-private partnerships

Public-private partnerships (PPPs) are an important component of government's strategy for service and infrastructure rollout, but their viability has to be properly tested in each case. PPPs are being considered among a range of possible mechanisms for delivery in all spheres of government.

Read together, the amended Municipal System Act and the provision of the MFMA that deals with PPPs provide the legal framework for municipal PPPs. The MFMA prescribes that PPPS must provide value for money, present an appropriate allocation of risks between the contracting parties, and be affordable in terms of current and projected budgeted.

The Act requires that a PPP regulatory framework be developed and prescribed by National Treasury. It also requires that municipalities conduct feasibility studies before concluding PPPs.

3.3.8 Key budgetary challenges

The above sub-sections have highlighted the nature of municipal finances. The following sub-section analyses some of the challenges faced by municipalities, which, once addressed, will enhance their finances, and, in turn, their ability to deliver services.

Revenue collection

The capacity of the municipality to deliver services is highly dependent on its ability to bill and collect revenue from its own sources. Poor capacity has worsened the financial distress in a number of municipalities.

The total outstanding consumer debt to municipalities has risen to an estimated R28 billion. Municipalities have often not applied the appropriate policies to address this challenge. Consequently, households and businesses have accumulated large arrears, which are preventing them from paying for current services and result in spiralling debt. Many households with large debts are poor, and there is little respect of recovering their arrears. Resolving arrears is an important challenge.

Pro-poor policies

National policies to alleviate poverty also exert significant budgetary pressures on municipalities, particularly those related to free basic services. The 2003 Intergovernmental Fiscal Review noted early successes in implementing the policy to provide free basic services, particularly water. However, of the 27 million people receiving free basic services, only 12 million were poor. The challenge remains to extend these services to poor households, particularly those without access to piped water and electricity.

This challenge can be effectively met if municipalities address four principal operational issues:

- To ensure that there is adequate infrastructure in place to provide access to basic services to all households;
- To define minimum levels and what constitutes an appropriate basket of services;
- To develop an appropriate subsidy/targeting mechanism to ensure that households in need benefit with minimum leakage to non-qualifying households; and
- To ensure that overall average revenues are able to meet average costs.

A municipal indigent policy should serve as the basic framework and should ensure that poor families are identified and receive free basic services. Moreover, an indigent policy should link to other poverty alleviation programmes implemented through other spheres of government, such as social grants and housing.

Budget reforms and the Municipal Finance Management Act

The MFMA took effect on 1 July 2004 and is spearheading the financial modernisation of the local government sphere. The MFMA is now the primary legislation governing municipal finance and supersedes provincial ordinances.

One of the important objectives of the MFMA is to develop sound financial government in every municipality. This means developing a system that clarifies the responsibilities of mayors, councillors and officials. The system must be build around accountability and oversight, which are possible only if there is a culture of

transparency and regular reporting in each municipality. The MFMA foster a greater level of co-operation across and within the three spheres of government, based on systems of mutual support, information sharing, communication and co-ordination of activities.

Municipalities progressively developed long-term integrated development plans (IDPs) following the reforms of the Municipal Systems Act in 2000. The MFMA strengthens this strategic approach by requiring budgets and reporting to be aligned with revised IDPs through the integration processes. The MFMA reinforces and builds upon the needs to engage and consult local communities, district municipalities, and provincial and national governments when setting strategic goals and budgets. A requirement for all municipalities to adopt three-year budgets will also ensure that the ongoing costs of strategies and services are sustainable in the future years.

The MFMA recognises that effective service delivery is only possible with good quality management information and through continuous and relevant performance measurement. This allows a council to set targets and goals for services delivery and management to be proactive. Linking targets will ensure targets are met and services delivered.

While considerable progress has been made in building sustainable local government, the sphere has yet to evolve into a mature and fully functioning system. There are considerable challenges ahead in ensuring sound financial management and in turn, effective and efficient service delivery.

The introduction of the MFMA and the Municipal Property Rates Act is another milestone on the reform agenda. The reforms highlighted here encourage a strong, sustainable and more accountable local government sphere, better placed to meet the emerging demands and new challenges of the different communities it serves.

3.4 Conclusion

Whilst overall budget allocations decline in real terms to national, provincial and local government for infrastructure, with the bulk of funding being allocated to social security, it is important that the right choices for infrastructure investment be made. The next chapter discusses, sector by sector, methods by which this should be done. If these methods are communicated widely and the providers of infrastructure in the province apply themselves to the issues raised, then planning, design and implementation of infrastructure could involve private sector capital and investment, which is needed if we are to overcome backlogs. This will also allow the private sector to participate in opportunities created by government so that the partnership is meaningful and beneficial for government, private sector and ultimately service delivery to the people of the Western Cape.

The opportunities created by the provincial and municipal infrastructure grants allow the providers of development finance like the DBSA and the IDC to participate in funding projects that would be too onerous for government alone. However before the providers of finance, including government, will invest there has to be security that projects are chosen on a scientific basis and that the project will be structured to ensure sustainability and delivery of services. This requires the implementing agencies to follow proven methods in project design. This is what this SIP promotes as one of the key building blocks to provision of sustainable infrastructure projects targeted at reducing poverty and hardship for citizens of the Western Cape.