



STATE OF CITY FINANCES REPORT

2011

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Foreword

The South African Cities Network (SACN) has established a tradition of reporting on the state of its member cities' finances over the years. Finances are important to assess their ability to deliver on developmental mandates as well as determine their general wellbeing. Recently, the SACN released the *State of the Cities Report 2011*, written under the broad theme of resilient cities. This reflected that cities, while under pressures from economic and social challenges, continued to serve as the backbone of South Africa's development. The idea of resilience is likewise aptly reflective of the financial fortunes of South Africa municipalities in this report.

Undoubtedly, the findings show collective financial pressures that the cities continue to operate under. There was a clear downturn in their economies in 2009, and although there has been some recovery, the previous levels of growth are yet to be achieved. Cash positions have come under pressure and by the end of 2010, in most cities they had weakened. City operating surpluses have been squeezed by increases in the cost of bulk purchases for electricity and services as well as increasing remuneration costs. They also still face the challenge of managing a situation where large amounts of money are owed to them. Yet South African cities are spending more than ever, especially given the recent rise in expenditure driven by infrastructure spending for the World Cup, as well as various public transport initiatives. It is also noticeable from this report that some cities are making progress in better managing their debtors.

Clearly, more challenges lie ahead. Own revenues of cities are largely stagnant in real terms, and the greater spend being registered is largely driven by national grants. Greater effort thus needs to be expended in collecting more revenue. Also, a major challenge is looming, one largely beyond the control of the cities themselves. This is the effect of massive increases in electricity tariffs and how this will affect poor and hard pressed city households.

This publication retains the tradition of reporting on these and other financial indicators, through an analysis of annual financial statements of cities. Additionally, it has expanded its reach, to include other important and topical issues with a bearing on city finances. One important one is how they can meet the financial challenge of their newly devolved roles of public transport provision. Another is the financial legacy of the World Cup. Yet another is beginning to quantify and understand how to close the emerging fiscal gap in financing city mandates, both funded and unfunded.

The SACN sees this publication as an integral part of the knowledge products that report on its member cities. Over the years, it has provided valuable insights into the financial trends of cities, and highlighted areas of focus and action. We sincerely hope it continues to be valuable in this respect.

Sithole Mbanga
CEO
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Introduction

1. Introduction

The successful functioning of city governments is vital to South Africa's social stability and economic success.

From 1995, local government was radically restructured in line with the new Constitution. The Municipal Systems Act (2000) and the Municipal Finance Management Act (2003) were among the most important acts affecting local government, introducing far-reaching changes to the way cities plan, use resources, raise revenue and manage their finances. Although the pace of change has slowed, many important developments are still under way to address persisting challenges.

This report continues the series of publications produced by the South African Cities Network (SACN) publications on the financial position and performance of city governments.¹ (See the *State of City Finances 2007* and the *State of South African Cities 2011*, both published by the SACN.)

This report reviews and updates many of the major themes examined in previous reports. It also introduces a new focus – the fiscal capacity of city governments to meet their expenditure responsibilities.

Using audited financial statements, this report provides comprehensive updates on the financial state of city governments. All charts and tables are provided in constant 2008 rand values, allowing recent performance to be compared with medium-term financial history.²

Fundamental shifts in city finances in recent years are examined, covering changes in revenue and expenditure. Revenue developments are discussed in Section 3, including property tax, Regional Service Council (RSC) levy replacement and government grants.

Section 4 looks at city expenditure, particularly electricity and public transport, and their institutional and service delivery backgrounds. Both functions represent large expenditures and are subject to shifts – or in the case of electricity, an abandoned shift – in jurisdictional responsibility between national, provincial and local government. At the end of 2010, government abandoned its plan to shift responsibility for electricity distribution from cities to new regional electricity distributors. While this initiative would have posed a financial risk to the cities, it is now incumbent on municipalities to find a way forward.

The National Land Transport Act (2009) has devolved public transport responsibilities to local government. Over time, this will have major financial implications for city governments. The potential magnitude of this shift is discussed in Section 4.2.

Overall city expenditure requirements are discussed in Section 5, including unfunded mandates and the projected ten-year costs of city infrastructure and services. The fiscal capacity of city governments to sustain such expenditures, and the question of closing the fiscal gap, are also explored.

Section 6 addresses the question of a financial agenda for South African cities.

Several important functional issues facing local government are not covered in this report. These include housing-related matters, service-delivery backlogs and the financial implications of city strategies and actions on climate change. These are areas of great financial significance for city governments and deserve full treatment in future reports.

The urban built environment is vital to national economic development and growth. Cities are centres of population, society, economy, politics, innovation and change. Their efficient functioning – largely a matter of how well the built environment is managed – is just as critical for national economic development as logistics, power, telecommunications, education and health. Ensuring that built environment functions are performed well at city

1 The city governments are the nine member councils of the SACN: Johannesburg, Cape Town, eThekweni, Tshwane, Ekurhuleni, Nelson Mandela Bay, Mangaung, Buffalo City and Msunduzi.

2 The Stats SA 'All Urban Areas' index, where 2008 = 100, was applied to the values in the annual financial statements. The nine cities' annual financial statements can be found on the SACN website www.sacities.net <<http://www.sacities.net>> covering eight financial years (2002/03 – 2009/10), and are presented in nominal terms in a significantly improved format.

level improves national efficiency, and city municipal councils should be held accountable for such performance.³

Overview of the nine cities

The nine largest cities collectively account for about 60 per cent of South Africa's national economic product and are home to 44 per cent of the population.

Table 1 sets out the estimated population and size of the local economy for each city in 2010. The dominance of the five largest cities is immediately obvious.

Table 1: Estimates of population and local economic product by city for 2010

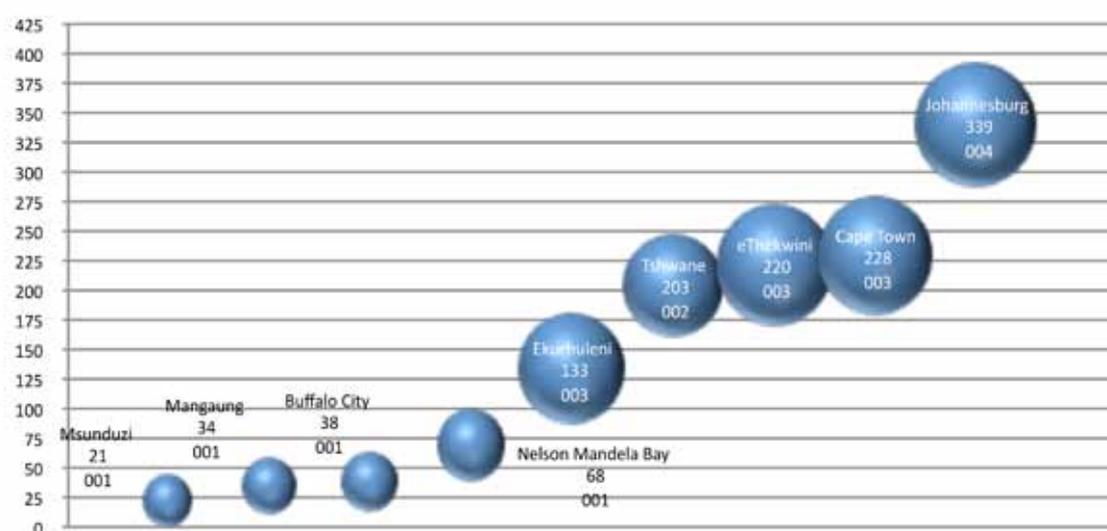
	2010 GDP-R (2008 R billion)	2010 city population (million)	2010 GDP per person (2008 R)
Johannesburg	361.2	4.1	88 349
Cape Town	238.5	4.0	59 723
eThekweni	233.9	4.3	54 382
Tshwane	202.8	2.4	86 163
Ekurhuleni	145.6	3.2	45 183
Nelson Mandela Bay	73.1	1.5	49 102
Mangaung	40.3	0.9	45 275
Buffalo City	36.3	1.0	35 651
Msunduzi	22.2	0.8	27 708
Total 9 cities	1 353.8	22.2	61 106
RSA	2 274.1	50.0	45 491
Nine cities as % of RSA	60%	44%	134%

GDP – gross domestic product

Sources: Author calculations and estimates based on original data from IHS Global Insight and Stats SA.

Figure 1 ranks cities from smallest to largest by size of city economy along the vertical axis (height above axis – first number) and population size along the horizontal axis (area of the bubbles – second number).

Figure 1: Size of city economies (2008 R billion) and populations (millions) in 2010



³ Built environment functions include planning and building control, roads and public transport, water and sanitation services, electricity distribution services, and public housing services. Effective and integrated management of these functions enable the appropriate planning and configuration of urban space, the management of movement, and the provision of infrastructure and services to support individuals, households and communities in the city. City governments should also arguably be providing comprehensive WAN access (SACN 2011).



Although eThekweni has the largest population, closely followed by Johannesburg and Cape Town, Johannesburg has the largest economy, followed by Cape Town and eThekweni. Tshwane has a relatively large local economy compared with its population – its local GDP per person is almost identical to that of Johannesburg. But the opposite is true of Ekurhuleni and Buffalo City, with a GDP per resident about equal to the national average, and Mangaung and Msunduzi, where GDP per resident is lower than average.

It is also worth comparing overall city revenue and expenditure on a per capita basis (see Section 2 for details of city revenues and expenditures). Table 2 shows the per capita aggregate city revenues for 2010 and Table 3 shows city spending per resident for the same year.

Table 2: Aggregate city revenues per resident in 2010 (2008 R)

Johannesburg	6 148	26%
Cape Town	5 087	4%
Tshwane	4 939	1%
eThekweni	4 902	0%
Weighted city average	4 884	0%
Nelson Mandela Bay	4 708	-4%
Ekurhuleni	4 358	-11%
Msunduzi	3 803	-22%
Buffalo City	3 113	-36%
Mangaung	2 456	-50%

Total city government revenues per resident varied from a high of R6 148 in Johannesburg to R3 113 in Buffalo City⁴ – a range from 26 per cent above the weighted city average to 36 per cent below. For expenditure, there was a slightly smaller range, from 14 per cent above the weighted city average (Johannesburg) to 31 per cent below (Buffalo City).

Table 3: Aggregate 2010 city expenditures per resident (2008 R)

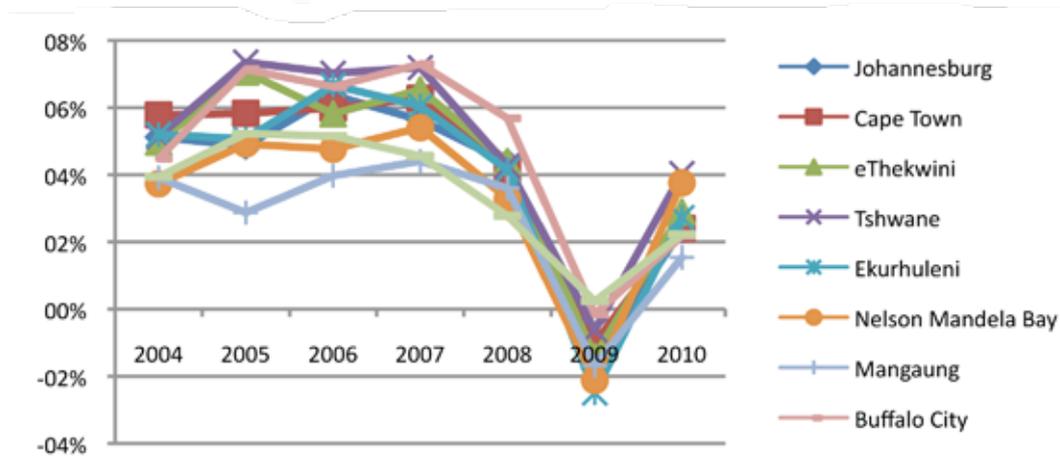
Johannesburg	6 357	14%
Nelson Mandela Bay	6 267	13%
eThekweni	6 139	11%
Tshwane	5 805	5%
Weighted city average	5 555	0%
Cape Town	5 407	-3%
Ekurhuleni	5 141	-7%
Msunduzi	4 008	-28%
Buffalo City	3 857	-31%
Mangaung	2 578	-54%

⁴ Mangaung's even lower revenue and spending figures per resident is partly because its data does not include electricity revenues and expenditures, and might otherwise show figures similar to those of Buffalo City.

These disparities reflect the differences in city GDP per capita, the effectiveness of city own-revenue administration, the workings of the equitable share formula and decisions regarding other grants, as well as the extent of city spending on transport and World Cup-related infrastructure in 2010. The disparities also raise broader issues of equity, general administrative efficiency and effectiveness, and minimum public service provision.

Economic growth rates in cities reflect national trends. This is demonstrated in Figure 2, which demonstrates the effect of the 2009 global and domestic downturn on urban economies.

Figure 2: Estimated annual economic growth rates per city 2006 - 2010 (%)⁵



City economic growth rates varied between 5 per cent and 7 per cent per year from 2005 to 2007, and slipped to between 3 per cent and 4 per cent in 2008. Growth rates were largely negative in 2009, before rebounding in 2010. The impact of the downturn varied across cities.⁶

5 Source: AHI-Global Insight July 2011.

6 See SACN (2011) Chapter 2 for a full discussion of the city economies.





Financial
performance of city
governments

2. Financial performance of city governments

This section provides an overview of the recent financial history of the city governments, including updated financial data to the end of June 2010.

The overview is primarily based on the cities' audited financial statements from 2003. Where key data is not adequately reported in the annual financial statements, other sources, such as National Treasury data, have been used.

The dataset has been maintained and updated since 2006. The full financial statements for each city, in an updated and improved format, are available on the SACN website.

The financial information is considered, comparatively and across cities, in three categories:

- **Total revenues, operating revenues, expenditures and surpluses** – The financial implications of the operations of city governments, the recurrent costs of services provided, the charges and taxes levied and grants received to cover recurrent expenses, and the final operating surplus or deficit at year end.
- **Capital expenditure and its financing** – The financial implications of infrastructure and other capital spending undertaken by a city government.
- **Cash flow and working capital** – These indicators are particularly important for overall financial health and capacity, and for effective financial management.

Together, these three sets of data are used to draw overall conclusions about trends in the financial health of individual cities and local government as a whole.

2.1 Operating revenues, expenditure and surpluses

The major own revenue sources of city governments are service charges (electricity, water, sanitation, refuse removal and so on) and property taxes. Together with operating grants (mainly the equitable share grant) from national government, service charges and property taxes make up the total operating revenues of city governments. Total revenues also include capital income, such as capital grants, which is why a city government may appear to have budget surpluses when its operations are in deficit.

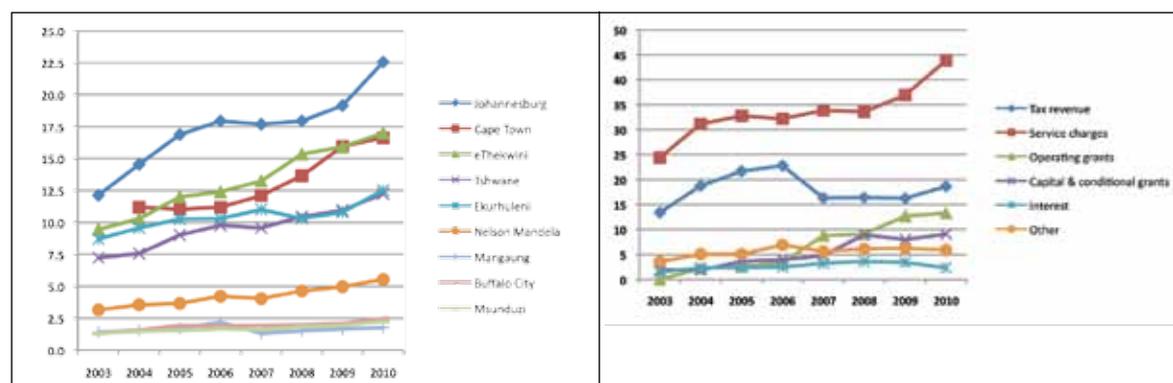
Personnel costs and buying bulk supplies of electricity and water are the largest operating expenditure items. City governments should maintain a substantial surplus of operating revenues over operating expenditures, especially in terms of cash, because this cash operating surplus is needed to fund the cost of new, expanded and refurbished infrastructure and services. These considerations guide the series of comparative assessments presented below.

Aggregate total revenues

From 2004 to 2010, the nine cities received gross aggregate revenues of R527.8 billion in 2008 values. Of this, a quarter was from tax revenues, 46 per cent service charges, 10 per cent operating grants, 8 per cent capital grants and 12 per cent from other revenues.

Johannesburg accounted for 24 per cent of the total aggregate gross city revenues received, eThekweni and Cape Town had shares of 18 per cent and 17 per cent respectively, and 14 per cent and 13 per cent went to Ekurhuleni and Tshwane. Nelson Mandela Bay, Mangaung, Buffalo City and Msunduzi collectively accounted for the remaining 13 per cent.

Figure 3: Aggregate city revenues by city and by source 2005 - 2010 (constant 2008 R billion)



Aggregate city revenues totalled R93 billion in 2010, which was 36.6 per cent higher in real terms than in 2005 (R68.1 billion). This indicates an average real increase of 6.5 per cent per year – fast by any standards. The real increase in aggregate total revenues was 11.4 per cent in 2010 alone. The growth in total revenues by city and revenue source between 2005 and 2010 is illustrated in Table 4.

Table 4: Aggregate city revenues by source (constant 2008 R billion)

	2005	2006	2007	2008	2009	2010
AGGREGATE REVENUES BY SOURCE						
Tax revenue	21.655	22.764	16.333	16.421	16.253	18.638
Service charges	32.755	32.202	33.878	33.597	36.920	43.810
Operating grants	2.661	3.305	8.773	9.063	12.690	13.270
TOTAL OPERATING REVENUE	57.070	58.272	58.984	59.081	65.862	75.718
Capital & conditional grants	3.627	3.975	4.754	8.924	7.954	9.063
Interest	2.335	2.508	3.236	3.631	3.423	2.334
Other	5.019	6.885	5.558	6.096	6.217	5.868
TOTAL ALL REVENUE SOURCES	68.051	71.639	72.532	77.731	83.456	92.982
AGGREGATE REVENUES BY CITY						
Johannesburg	16.882	17.940	17.688	17.942	19.151	22.559
Cape Town	11.036	11.190	12.102	13.661	15.950	16.628
eThekweni	12.009	12.397	13.243	15.355	15.919	16.998
Tshwane	9.017	9.778	9.578	10.458	10.950	12.251
Ekurhuleni	10.262	10.310	11.012	10.312	10.808	12.524
Nelson Mandela Bay	3.664	4.227	4.040	4.641	4.968	5.537
Mangaung	1.711	2.215	1.316	1.514	1.655	1.757
Buffalo City	1.933	1.913	1.941	2.012	2.109	2.483
Msunduzi	1.537	1.668	1.611	1.837	1.946	2.245
TOTAL 9 CITIES	68.051	71.639	72.532	77.731	83.456	92.982

It is evident that the increase in total city revenues is powered by increased service charges and capital and operating grants, rather than tax revenues. The larger cities are experiencing the most rapid increases.

Own revenues

City own revenues are revenues other than government capital and operating grants. Table 5 details these revenues by source.

Table 5: Aggregate city own revenues (constant 2008 R billion)

	2005	2006	2007	2008	2009	2010
Property taxes	15.1	15.5	15.4	15.6	14.9	16.8
Other taxes	6.5	7.2	1.0	0.8	1.4	1.8
Electricity	19.9	19.6	20.3	20.0	23.6	29.7
Water	7.8	8.0	8.5	8.3	8.1	8.6
Sewerage	2.9	3.0	3.2	3.2	3.3	3.6
Cleansing	1.9	1.9	2.0	2.1	2.1	2.3
Other	0.3	0.2	0.4	0.6	0.5	0.5
Total own revenues	54.4	55.5	50.8	50.6	53.8	63.3

(Note: Electricity revenues included estimates for Mangaung electricity from 2006)

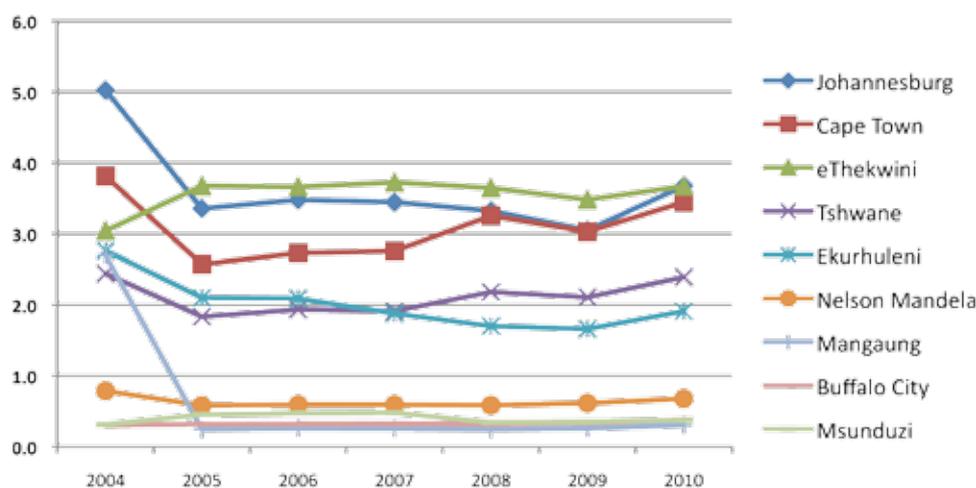
Changes in the cities' own revenue position from 2005 to 2010 are summarised as follows:

- Aggregate property tax revenues increased by 11.2 per cent
- The abolition of RSC levies resulted in a 72.4 per cent decline in aggregate other taxes
- Electricity revenues increased by 49.3 per cent (after adjusting for Mangaung electricity), driven by the sharply rising cost of bulk supplies
- Revenues from water and sanitation increased by 14 per cent
- Total own revenues increased by 16.3 per cent (after adjusting for Mangaung electricity).

Property taxes

The slowest-growing major city revenue category is property taxes. eThekweni raises the most in property taxes, but this income has been relatively stagnant in real terms since 2005. Johannesburg and Ekurhuleni were unable to sustain total real revenues raised from this source when transitioning to taxing based on the full market value of properties.⁷ In 2005, Johannesburg billed 31 per cent more for property taxes than Cape Town. While the two cities billed near-identical amounts in 2008 and 2009, Johannesburg increased the gap again in 2010.

Figure 4: Property tax revenues by city (constant 2008 R billion)



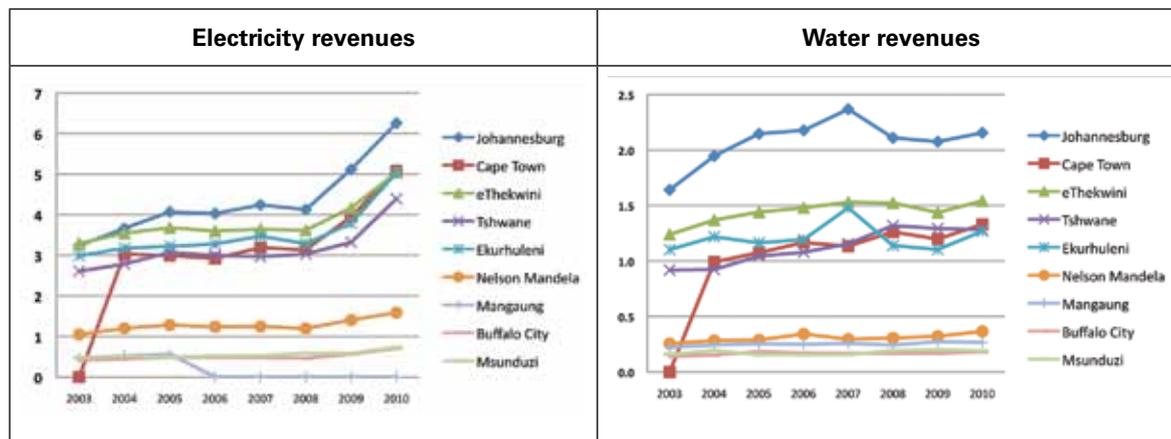
Tshwane had the fastest average growth in property tax revenues between 2004 and 2010. The city invoiced 9 per cent less than Ekurhuleni in 2005, but by 2010 it had invoiced 25 per cent more than Ekurhuleni. Tshwane's property tax revenues were 36.5 per cent higher in real terms in 2010 than in 2004. Other cities with creditable six-year overall increases were Buffalo City (29.7 per cent) and Cape Town (28.6 per cent).

⁷ This issue along with other structural changes on the revenue side of city finances are discussed further in Section 3.

Electricity and water revenues

Total electricity revenues stayed almost constant in real terms in each city until 2008,⁸ when they started to increase sharply due to tariff increases (see Figure 5). These increases were caused by the pass-through impact of Eskom's bulk supply cost increases, which are detailed in Section 4.1.

Figure 5: Electricity and water revenues by city (constant 2008 R billion)

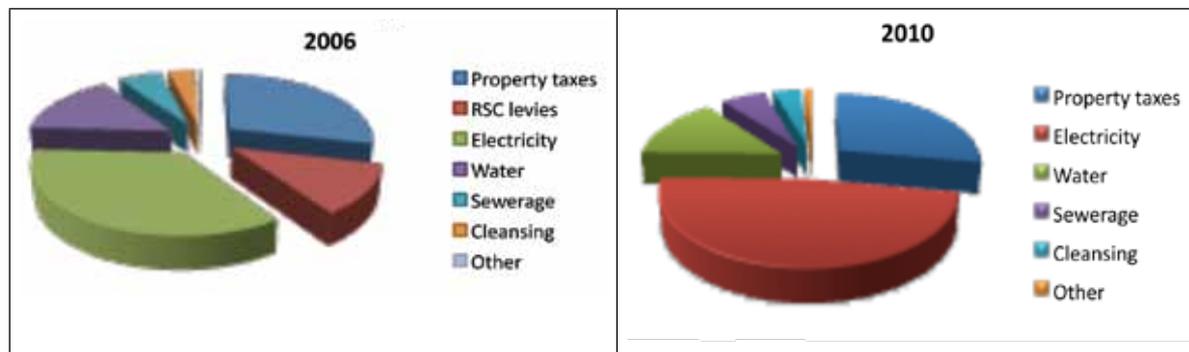


In contrast, water revenues remained relatively stagnant in real terms in recent years. Real water revenues in Johannesburg and Ekurhuleni have a similar pattern to that of property taxes: neither city has reached the billing peak achieved in 2007.

Changing revenue mix

The slow growth of property tax revenues, combined with fast-rising service charge revenues, has significantly changed the own revenue mix, as shown in Figure 6.

Figure 6: Composition of aggregate city own revenues: 2006 and 2010



Interest income

Interest income is an important own revenue source, not because it is particularly large (although it is several hundred million rand in many cities, reaching about R1 billion in Johannesburg), but because of what it shows about a city's financial position and financial management. Interest income falls into two categories: interest earned on investments (mainly financial instruments), which the city can be confident will be received as cash; and interest earned on amounts owing by debtors, which is much less likely to be received as cash because debtors are generally not a good investment.

⁸ The 2006 decline in Mangaung reflects the removal of electricity revenues from its revenues with the establishment of Centlec.

Figure 7: Interest earned on investments and on outstanding debtors by city (constant 2008 R billion)

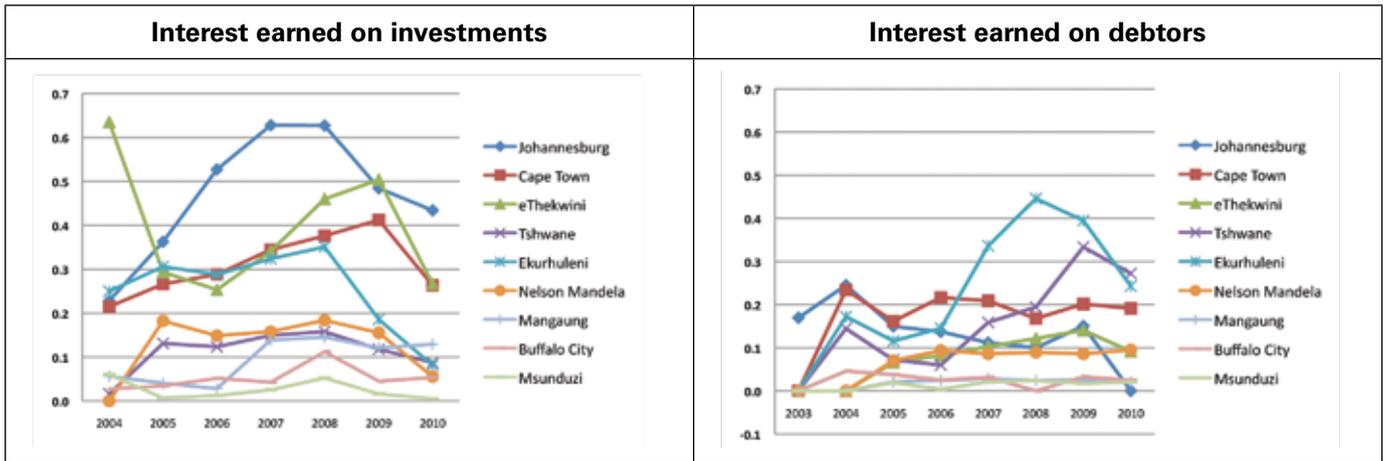


Figure 7 shows that most cities' interest earnings on investments decreased sharply between 2009 and 2010. For some, (Nelson Mandela Bay and Ekurhuleni), this trend began earlier. This is the first indication of emerging fiscal pressure, because much-reduced interest earnings generally imply that cities have been reducing their stock of short-term assets.

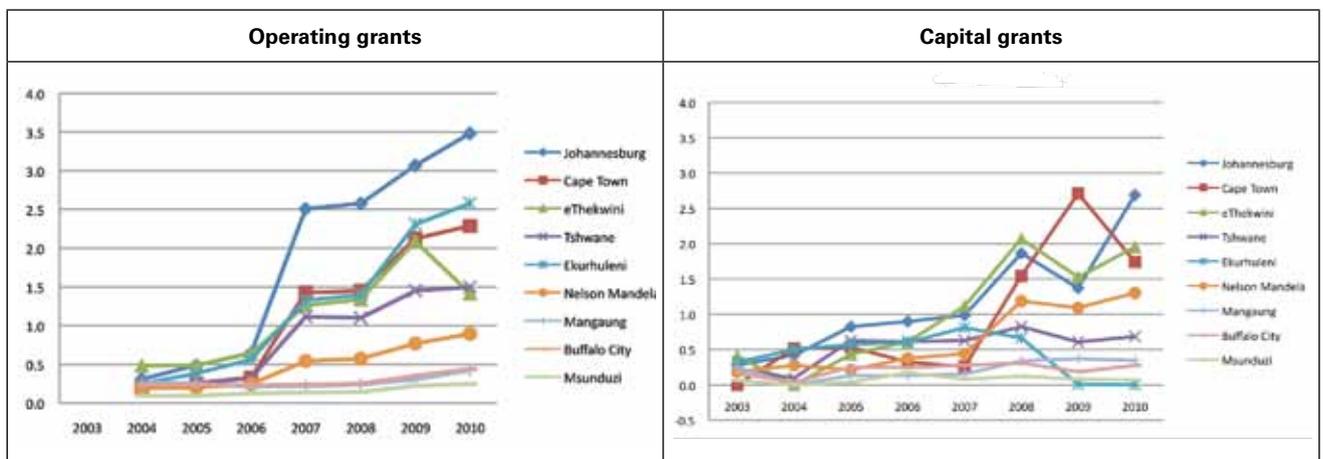
Interest earned on outstanding debtors has different characteristics, depending on the city's interest rate policy and the total value of debt owed to the city. To impose severe punitive interest rates on debts that are effectively uncollectable simply aggravates the problem, ballooning levels of debt and inflating interest revenues that are not realisable. However, interest rates cannot be so low that the debtor is in effect being subsidised not to prioritise municipal debts, and cities often regard the prime overdraft rate as fair.

A well-managed city should have a low level of debt owed to it and low interest earnings from debtors. If the debt is high, the city should not rely on that interest income. The cities have reduced or, at worst, maintained their reliance on this as a revenue source. Ekurhuleni and Tshwane have significantly reduced their reliance on interest income, which indicates improved revenue management, fiscal discipline and fiscal health.

Capital and operating grants

Operating grants, mainly the equitable share, jumped substantially in 2007 when RSC replacement grants were incorporated (see Figure 8). Capital grants increased sharply from 2007 as a result of transport and 2010 World Cup-related investments.

Figure 8: Operating and capital grants by city (constant 2008 R billion)



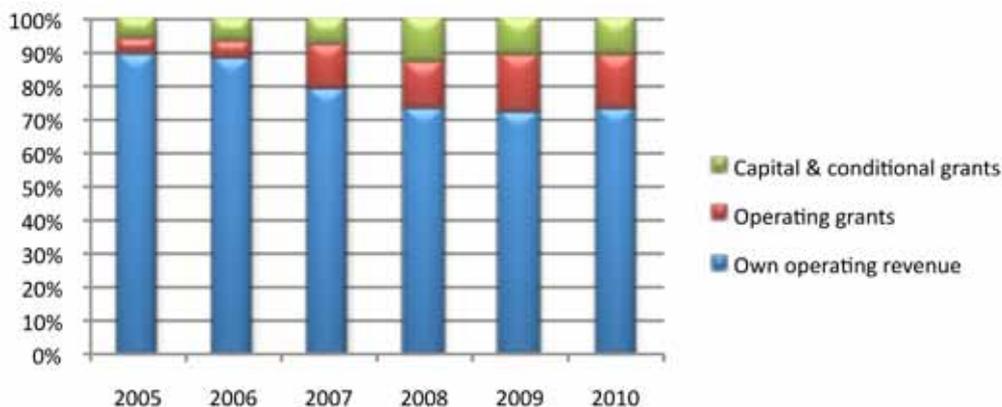
Capital expenditure funding and the broader implications of government grants are discussed in Section 3.

Share of own revenues

As own revenues have changed from property dominated to electricity dominated, the relative importance of own revenues themselves has declined due to the rapid rise in government grants to cities (see Figure 9: Aggregate city revenue composition 2005 - 2010 Figure 9).

In 2005, 90 per cent of aggregate city revenues were received by local governments from their own sources. This ratio slipped substantially to 80 per cent in 2007 with the ending of RSC revenues. Continued rapid increases in grants were thereafter counter-balanced by electricity revenue growth, and by 2010 own revenues made up 82 per cent of aggregate city revenues.

Figure 9: Aggregate city revenue composition 2005 - 2010



Aggregate city expenditures

The nine cities spent a total of R596.1 billion in constant 2008 values from 2004 to 2010. Of this, 18 per cent was capital spending, 21 per cent was spent on bulk electricity and water supplies for distribution, 24 per cent was spent on remuneration costs and 37 per cent on other operating costs.

The distribution of that spending by city closely matches the distribution of city revenues. Johannesburg spent 24 per cent of the R596.1 billion, eThekweni spent 19 per cent and Cape Town 17 per cent. Ekurhuleni and Tshwane followed with 14 per cent and 13 per cent respectively, and the remaining four cities accounted for 13 per cent of the total expenditure.

Figure 10: Aggregate city expenditure by category and city (constant 2008 R billion)

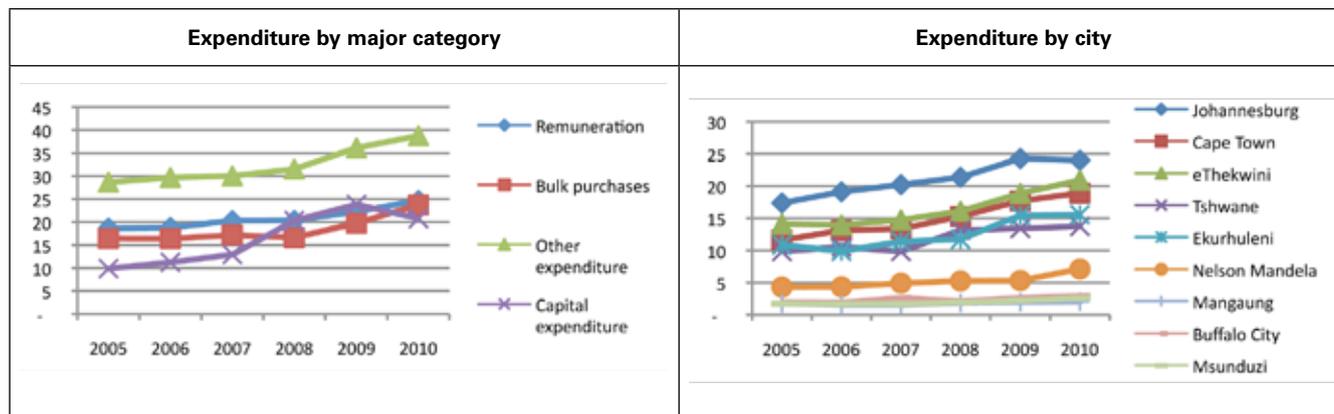


Figure 10 illustrates the growth in aggregate expenditures by category and by city. All operating expenditure categories continue to grow rapidly, while capital spending peaked in 2009 and decreased in 2010 as World Cup-related projects were completed. Total spending for most cities did increase in 2010. Johannesburg, Ekurhuleni and Tshwane were exceptions, having stabilised their total spending in real terms.

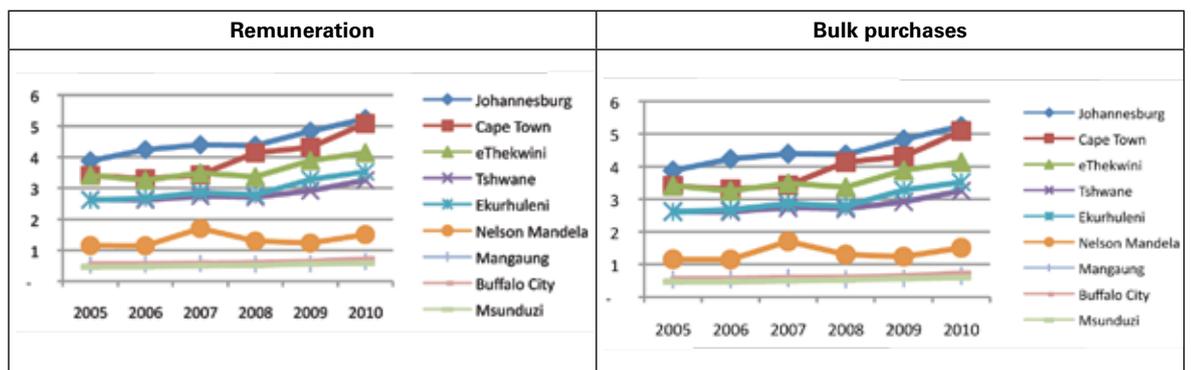
From 2004 to 2010, total city expenditure exceeded total city revenues by R68.3 billion or 13 per cent, reflecting the use of debt (and the realisation of some capital assets) to finance part of city capital expenditure. Details of aggregate city spending are provided in Table 6.

Table 6: Aggregate city expenditure by major category and city, including capital expenditure (constant 2008 R billion)

	2004	2005	2006	2007	2008	2009	2010
AGGREGATE CITY EXPENDITURE BY MAJOR CATEGORY							
Remuneration costs	18.201	18.642	18.807	20.284	20.333	22.234	24.690
Bulk purchases	12.981	16.422	16.409	17.195	16.642	19.745	23.697
Other expenditure	28.272	28.656	29.696	30.026	31.519	36.123	38.722
Capital expenditure	7.914	9.879	11.242	12.944	20.297	23.805	20.742
TOTAL 9 CITIES	67.368	73.598	76.154	80.449	88.792	101.906	107.852
AGGREGATE EXPENDITURE BY CITY							
Johannesburg	15.712	17.385	19.121	20.236	21.374	24.277	23.999
Cape Town	12.225	11.601	13.101	13.356	15.278	17.712	18.922
eThekweni	11.873	14.127	13.931	14.754	16.078	18.867	20.927
Tshwane	8.680	9.865	10.562	9.874	13.120	13.418	13.729
Ekurhuleni	9.337	10.867	9.900	11.384	11.738	15.431	15.563
Nelson Mandela Bay	4.194	4.320	4.357	4.940	5.272	5.345	7.138
Mangaung	1.799	1.744	1.574	1.551	1.869	1.971	2.039
Buffalo City	1.857	1.945	1.912	2.654	2.127	2.656	2.936
Msunduzi	1.691	1.744	1.695	1.700	1.936	2.229	2.598
TOTAL 9 CITIES	67.368	73.598	76.154	80.449	88.792	101.906	107.852

City remuneration costs, which were already increasing, accelerated sharply from 2008 onwards. As Figure 11 shows, aggregate real expenditures on bulk purchases also accelerated from 2008, reflecting increases in bulk electricity tariffs.

Figure 11: Aggregate city expenditures on remuneration and purchases of bulk supplies (constant 2008 R billion)



As cities grow, local governments must provide more services, and total real spending will also increase. Table 7 demonstrates these trends on a per capita basis. By 2010, city governments were spending R1 272 per resident on staff remuneration (23 per cent), R1 221 per resident on bulk supplies (22 per cent), R1 068 on capital investments (19 per cent), and R1 994 per resident on other costs (36 per cent). In real terms, city spending on remuneration and bulk purchases per resident stayed almost constant from 2005 to 2008, but by 2010 the cost of bulk purchases per resident had risen by 37 per cent and staff remuneration costs per resident had increased by 19 per cent.

Table 7: Aggregate per capita city expenditure by category (constant 2008 R per resident)

	2005	2006	2007	2008	2009	2010
Remuneration	1 045	1 036	1 098	1 082	1 164	1 272
Bulk purchases	921	904	931	886	1 033	1 221
Other ¹	1 607	1 636	1 625	1 677	1 891	1 994
Capital expenditure	554	619	701	1 080	1 246	1 068
Total	4 127	4 195	4 355	4 725	5 334	5 555

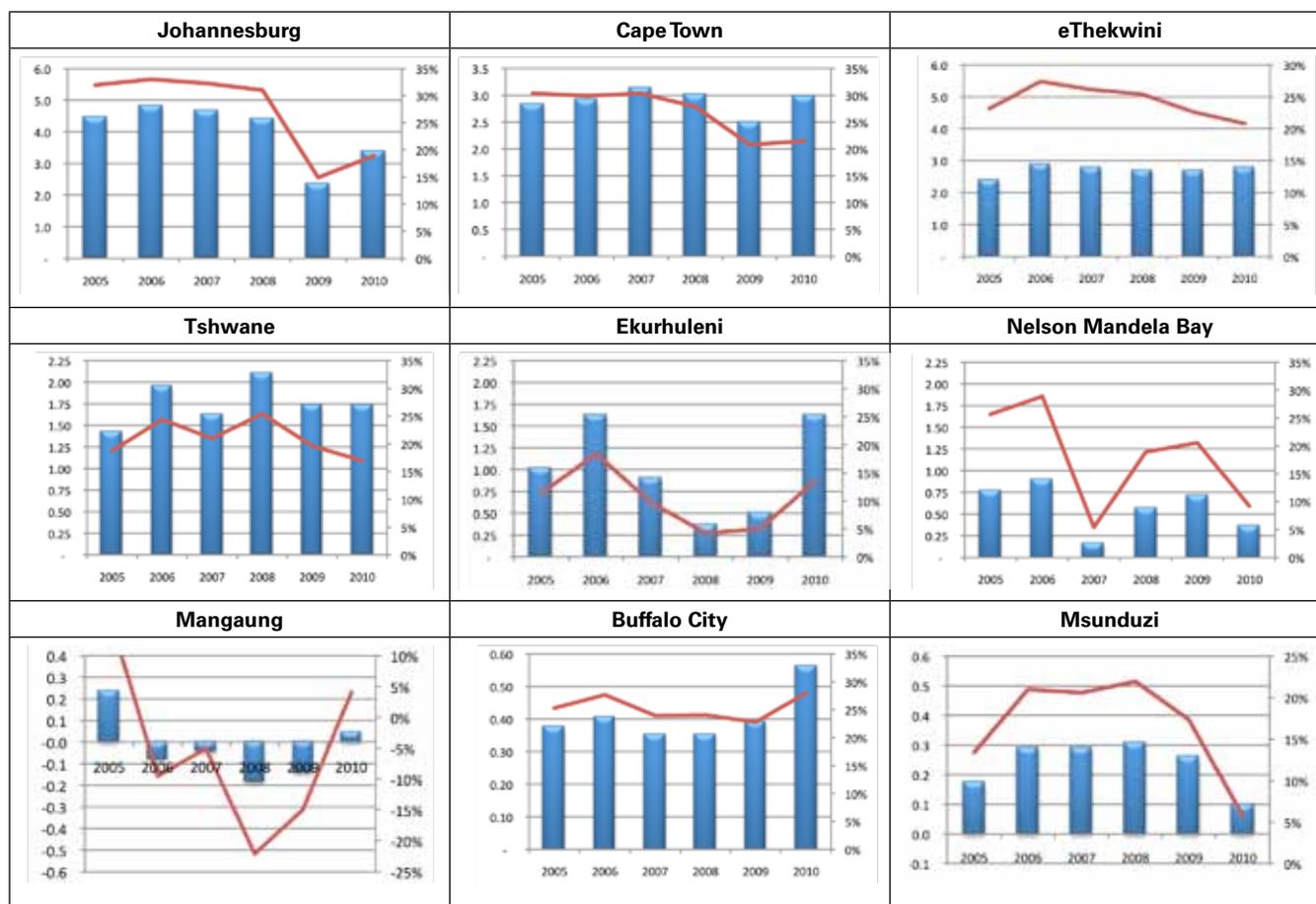
¹Other includes provisions for bad debt, repairs and maintenance, depreciation, interest expenses, and costs associated with operating offices and transport.

Remuneration and bulk purchases are not under the direct control of individual city governments. The explosive increase in bulk supply costs since 2008, in particular, is beyond cities' control, but the same also applies to city remuneration costs, which are governed by bargaining chamber agreements. Although expenditure efficiency improvements can and should always be made, these two large operating cost items must be passed on to consumers. Sharp real escalations in costs per resident are therefore reflected in tariff increases, and it is city governments that have to address the affordability of city services for end users (households and businesses). In financial terms, this problem first appears as an increase in gross debtors (see below).

Operating surpluses

Operating surpluses are shown in Figure 12.⁹ Although operating surpluses as a percentage of operating revenues is a primary indicator of financial health, it is a summary indicator, and there may be several reasons for a particular city government's performance.

Figure 12: Operating surplus (deficit) by city (constant 2008 R billion and % of operating revenue)



BARS – OPERATING SURPLUS (CONSTANT 2008 R billion - LEFT AXIS) LINES – SHARE OF OPERATING REVENUE (% - RIGHT AXIS)

⁹ See Annexure 1 for definitions of operating surplus.

In recent years, local governments have been under pressure to sustain their annual operating surpluses. Johannesburg maintained an operating surplus of about 30 per cent for four consecutive years to 2008, but this collapsed to below 15 per cent in 2009 before rising again to about 20 per cent in 2010. Similarly, Cape Town had surpluses of about 30 per cent until 2007, slipping towards 20 per cent in 2009 and 2010. eThekweni's peak operating surplus of 26 per cent in 2006 has gradually dropped to 20 per cent in 2010. Tshwane managed similar peaks in 2006 and 2008, but its operating surplus fell to 15 per cent in 2010.

The charts can be interpreted to indicate the following:

- The impact of general systemic issues, including the pressure that increases in bulk charges and remuneration costs have put on operating margins, and the consequent medium-term declines in overall operational viability (Johannesburg, Cape Town and eThekweni).
- The 2009 global financial crisis (most clearly seen here in Johannesburg, Cape Town, Nelson Mandela Bay and Tshwane).
- Stability (Buffalo City has generated operating surpluses of about 25 per cent every year, even improving in 2010).
- Internal crisis and recovery (Ekurhuleni 2006 to 2010 and Nelson Mandela Bay 2007 to 2009), and medium-term managerial unwinding (Msunduzi 2008 to 2010).
- The removal of electricity services from city finances (Mangaung).

Debtors

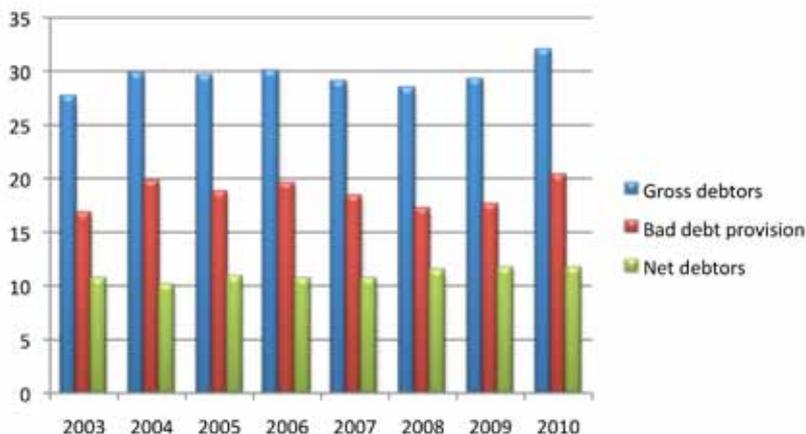
Operating surplus is complicated by the issue of debtors – the amounts owing to city governments (taxes and service charges) by corporate, household, government and other account holders. There are four separate challenges that arise from these debts:

- Rapid increases in tariffs, particularly electricity, are not always affordable for residents and businesses. This appears first of all as rising gross debt owed to the city.
- Net debt owed to the city, the most important measure, is the amount of debt remaining after provision has been made for expected non-payment of invoices.
- Interest earned on debt owed to the city – when debt is high, the interest earned can become important. But this interest, like the debt on which it is based, may never be paid.
- Gross debt owed to the city is the balance owing to the municipality for services and taxes. As long as this balance is growing, the municipality is invoicing for services and taxes, presumably in terms of official policies and tariffs, and is failing to fully collect on the invoices. The balance of gross debt owed to the city by debtors represents resources that the municipality should have at its disposal for service delivery and infrastructure development, but does not.

Gross debt owed to the city should not be thought of as a realistically collectible figure. In principle, an uncollectable debt should be written off, but municipal debts can sometimes be collected by confiscating property many years after the debt had been incurred, and to show that the debt is genuinely uncollectable and formally write it off is a lengthy process. Net debt owed to the city is therefore the critical financial indicator.

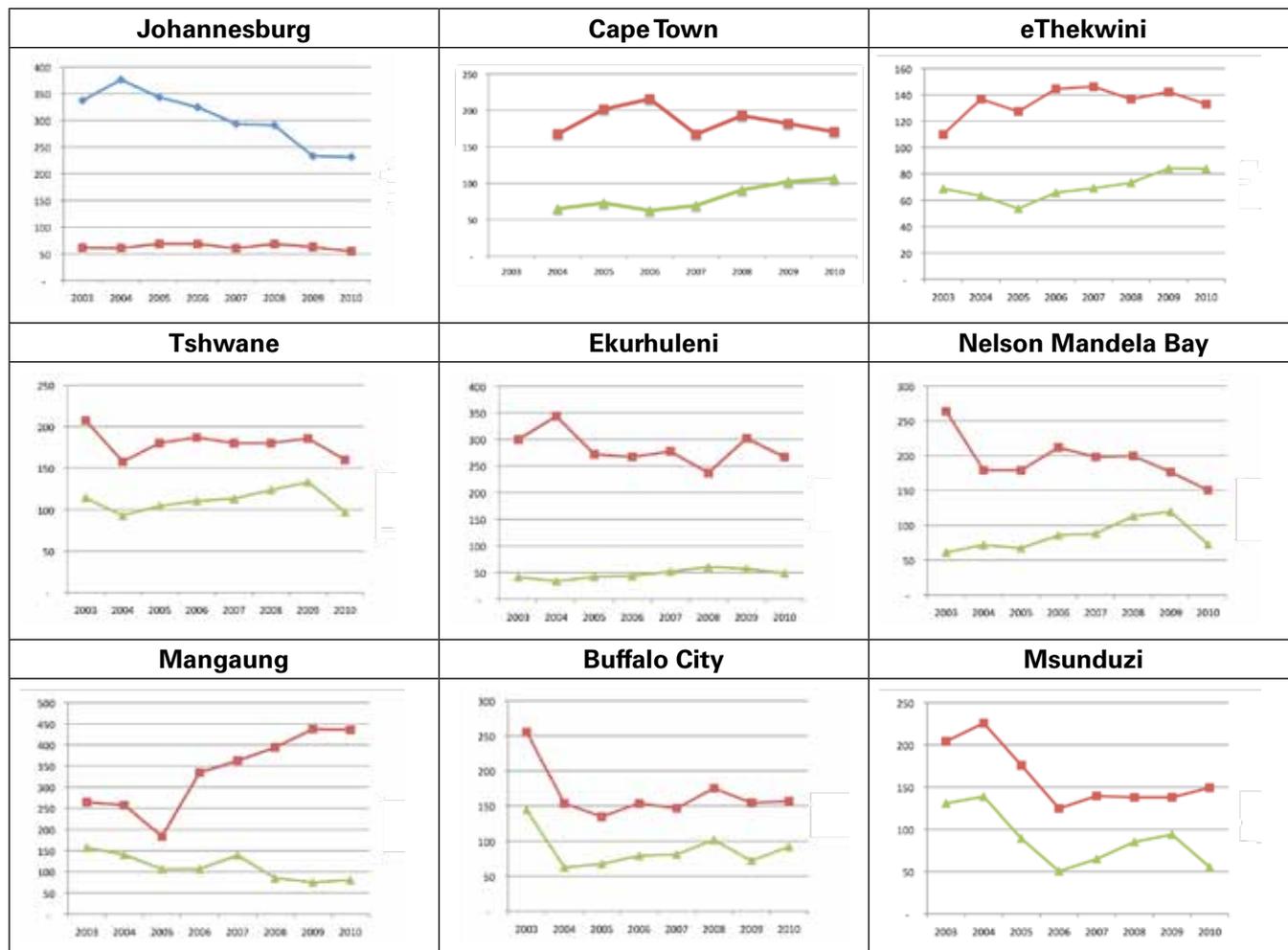
The total amounts owing to cities declined gradually in real terms from 2006 to 2008, but has been rising rapidly since then (see Figure 13). A total of 31.9 billion (2008 values) was owing to city governments at the end of 2010, against which an aggregate bad debt provision of R20.3 billion had been made, leaving R11.7 billion of net debt.

Figure 13: Aggregate city gross and net debt owed to cities (constant 2008 R billion)



As performance indicators, gross and net amounts owed to cities are measured in days: the number of day's worth of billed revenue represented by the gross and net balances. Figure 14 provides gross and net debt days by city between 2004 and 2010.

Figure 14: Debt owed to cities (gross and net debt days)



BLUE – GROSS DEBTORS DAYS; RED – NET DEBTORS DAYS

Historically, Johannesburg has been the worst performer in terms of gross debtors.¹⁰ Its gross debt days declined steadily between 2004 and 2009, due to rising billed revenue rather than declining debt, and remained at about 231 days in 2010. Ekurhuleni has followed a similar pattern, and although it never performed as poorly as Johannesburg, its improvements have been less consistent.

Most cities had about 150 gross debt days in 2010. Mangaung's chart reveals its steady financial deterioration over the years, and its gross debt performance is the worst among the cities. Cape Town, eThekweni, Tshwane and Nelson Mandela Bay have been improving over the last three years.

Table 8: Net debt days by city

	2004	2005	2006	2007	2008	2009	2010
Johannesburg	61	69	68	61	68	63	55
Cape Town	65	73	63	70	91	102	106
eThekweni	63	54	66	69	73	84	84
Tshwane	93	105	111	113	123	133	97
Ekurhuleni	34	42	44	52	60	57	48
Nelson Mandela Bay	72	67	86	88	113	120	73
Mangaung	140	107	107	139	85	75	81
Buffalo City	63	68	79	81	102	72	92
Msunduzi	139	89	50	65	85	94	55

The cities' net debt performance is more reassuring. Local governments have been systematically making bad debt provisions and have specific policies and targets. Although the recession has had a detrimental effect, three cities have less than 60 net debt days, two have under 90 days, and the remaining five have less than 120 days. However, Cape Town and eThekweni's ratios have deteriorated over the years, and Cape Town has the highest net debt days figure.

Adjusted city operating surpluses

If city governments were stricter with their bad debt provisions, their reported operating surpluses would generally be lower. Thirty days is normally allowed for payment of monthly municipal invoices, and the debt can still be paid at 60 days. When debts exceed 60 days they should increasingly be considered doubtful debts, because an increasing fraction will never be paid.¹¹ This is not an absolute standard, and different city governments might legitimately adopt different standards, such as 90 days or even 120 days. Three of the nine cities use 60 days as the standard, and some have maintained this ratio for many years, which suggests that this benchmark is not unreasonable. Ekurhuleni, for example, generally keeps its net debtors days well below 60 days.

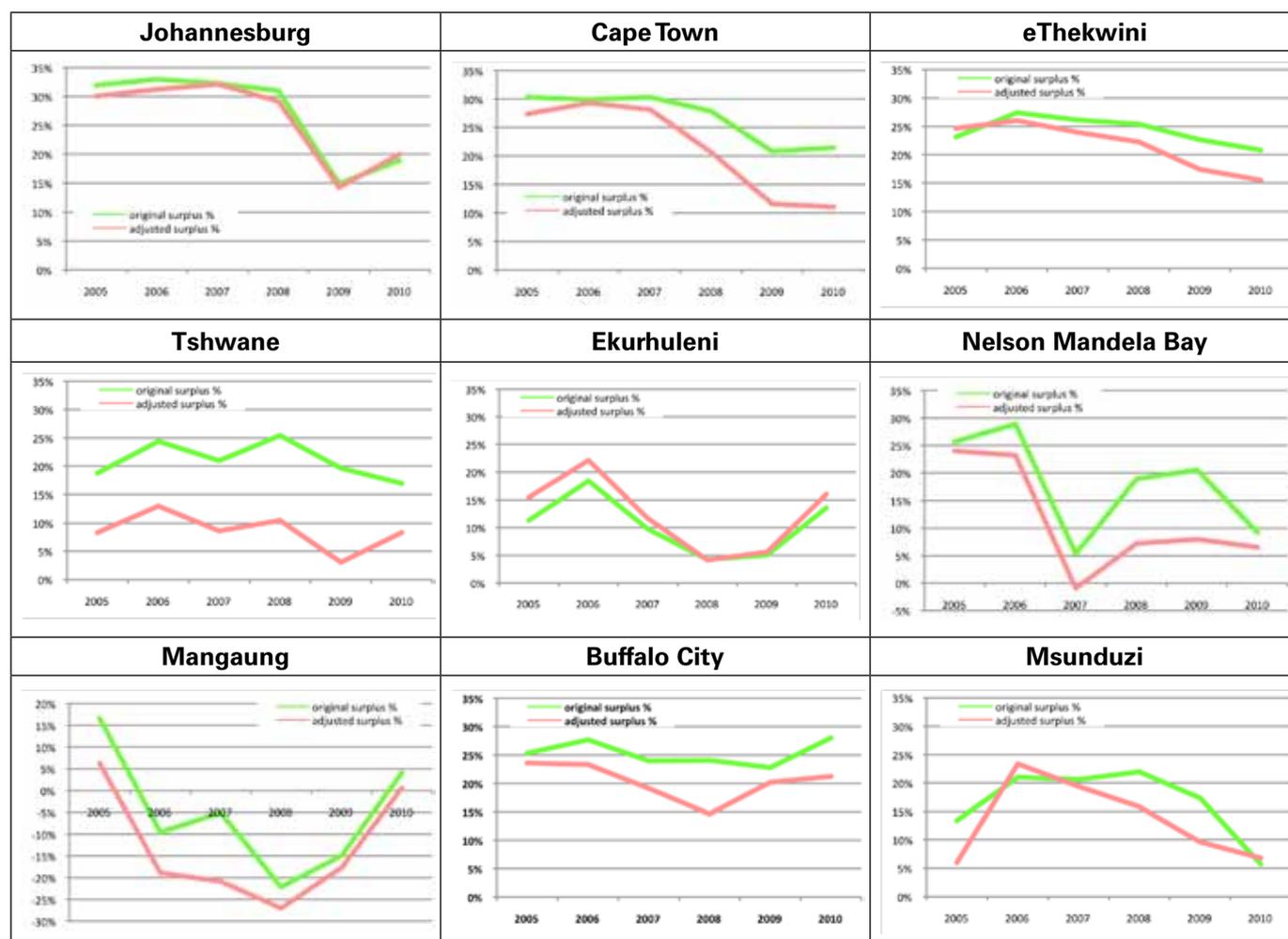
Figure 15 shows the actual reported operating surplus (green lines) and an adjusted operating surplus (red lines), which would apply if the cities were held to a performance standard that net debt days should not exceed 60 days. Most cities would have had to make additional bad debt provisions to meet the 60-day standard, and their operating surpluses would accordingly be lower.

Where the red line is higher than the green line, the city is exceeding the 60 net debt days performance standard.

¹⁰ Debtors at 365 days represents a full year's worth of billings.

¹¹ Making such provision in no way implies writing off the debt concerned; instead, it properly manages the risk that the debt will not be paid. The provisions constitute a financial judgement on the collectability of the debts.

Figure 15: Operating surpluses and adjusted operating surpluses by city (% of operating revenues)



GREEN LINE – REPORTED OPERATING SURPLUS

RED LINE – ADJUSTED OPERATING SURPLUS

For most cities, the operational performance (measured by operational surplus) is worse than it appears, particularly for Tshwane and Nelson Mandela Bay.

Table 9: Adjusted city operating surpluses (% of operating income)

	2005	2006	2007	2008	2009	2010
Johannesburg	37.1%	40.0%	39.8%	36.8%	18.3%	25.2%
Cape Town	32.7%	35.8%	34.1%	24.3%	14.5%	13.6%
eThekweni	28.1%	30.2%	27.6%	25.8%	21.9%	19.0%
Tshwane	9.7%	15.8%	10.1%	12.1%	3.7%	9.8%
Ekurhuleni	18.7%	26.7%	13.8%	5.0%	7.5%	20.8%
Nelson Mandela Bay	28.9%	28.8%	-1.1%	9.0%	10.4%	8.6%
Mangaung	7.7%	-25.8%	-28.7%	-38.3%	-26.3%	0.9%
Buffalo City	28.5%	27.9%	23.0%	17.8%	25.8%	27.6%
Msunduzi	6.5%	25.9%	21.7%	17.8%	11.6%	8.1%
TOTAL 9 CITIES	26.1%	30.0%	24.7%	21.1%	13.7%	17.7%

The medium-term decline in overall operational viability in Johannesburg, Cape Town and eThekweni is particularly evident.

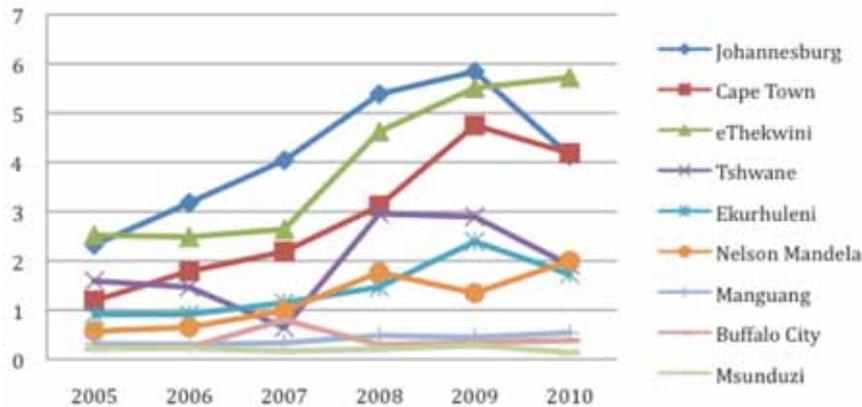
Total adjusted city operating surpluses slipped from 30 per cent in 2006 to less than 14 per cent in 2009. The first slight increase, to only just over half the 2006 level, was in 2010.

2.2 Capital expenditure and its financing

The nine cities spent a total of R106.8 billion (constant 2008 values) on capital expenditure from 2004 to 2010. Johannesburg spent 25 per cent, followed by eThekweni at 24 per cent and Cape Town at 17 per cent. Tshwane spent 12 per cent and Ekurhuleni 9 per cent, and the remaining four cities accounted for 13 per cent.

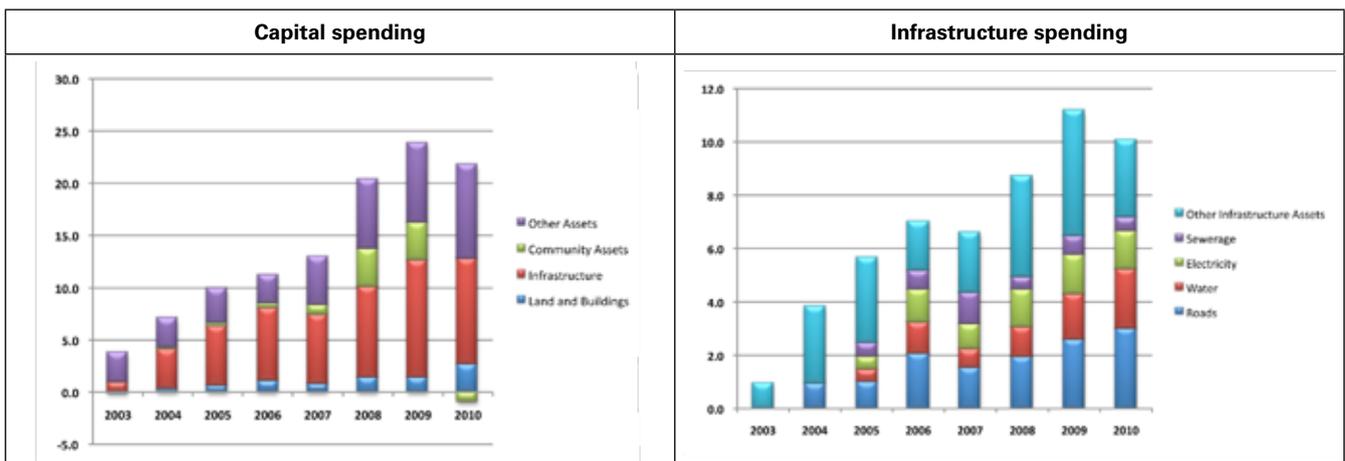
Figure 16 illustrates the rapid increase in capital expenditure that occurred between 2005 and 2009, in which the nine cities collectively spent R23.8 billion on capital, 2.4 times the 2005 figure. Total capital spending fell by nearly 13 per cent in 2010, as planned World Cup and transport-related projects were completed. eThekweni and Nelson Mandela Bay, however, continued to increase their real capital expenditure in 2010.

Figure 16: Capital expenditure of SA cities (constant v2008 R billion)



About 50 per cent of city capital expenditure over this period was spent on infrastructure assets (12 per cent on roads, 7 per cent on water, 7 per cent on electricity, 4 per cent on sewer, and 20 per cent on other), 8 per cent on land and buildings, 12 per cent on community assets and 34 per cent on other assets. As a result of improved reporting, these figures have become more reliable in recent years.

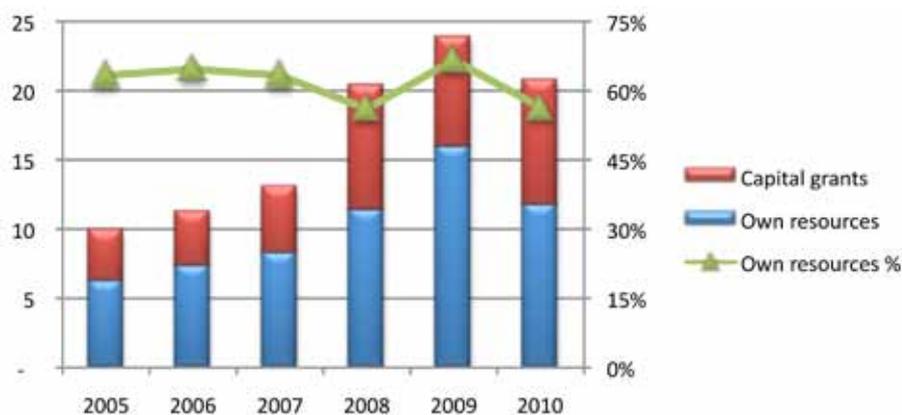
Figure 17: Composition of aggregate city capital spending (constant 2008 R billion)



Funding of capital spending

Capital expenditure is mainly funded by own resources (reserves, current operating surpluses, and borrowing) and government grants. About 38 per cent of total city infrastructure spending from 2004 to 2010 was grant funded, with the remaining 62 per cent funded by city financial resources. Figure 18 illustrates the remarkably fast growth in city infrastructure spending, which has largely been funded from cities' own resources, despite the large increase in government grants.

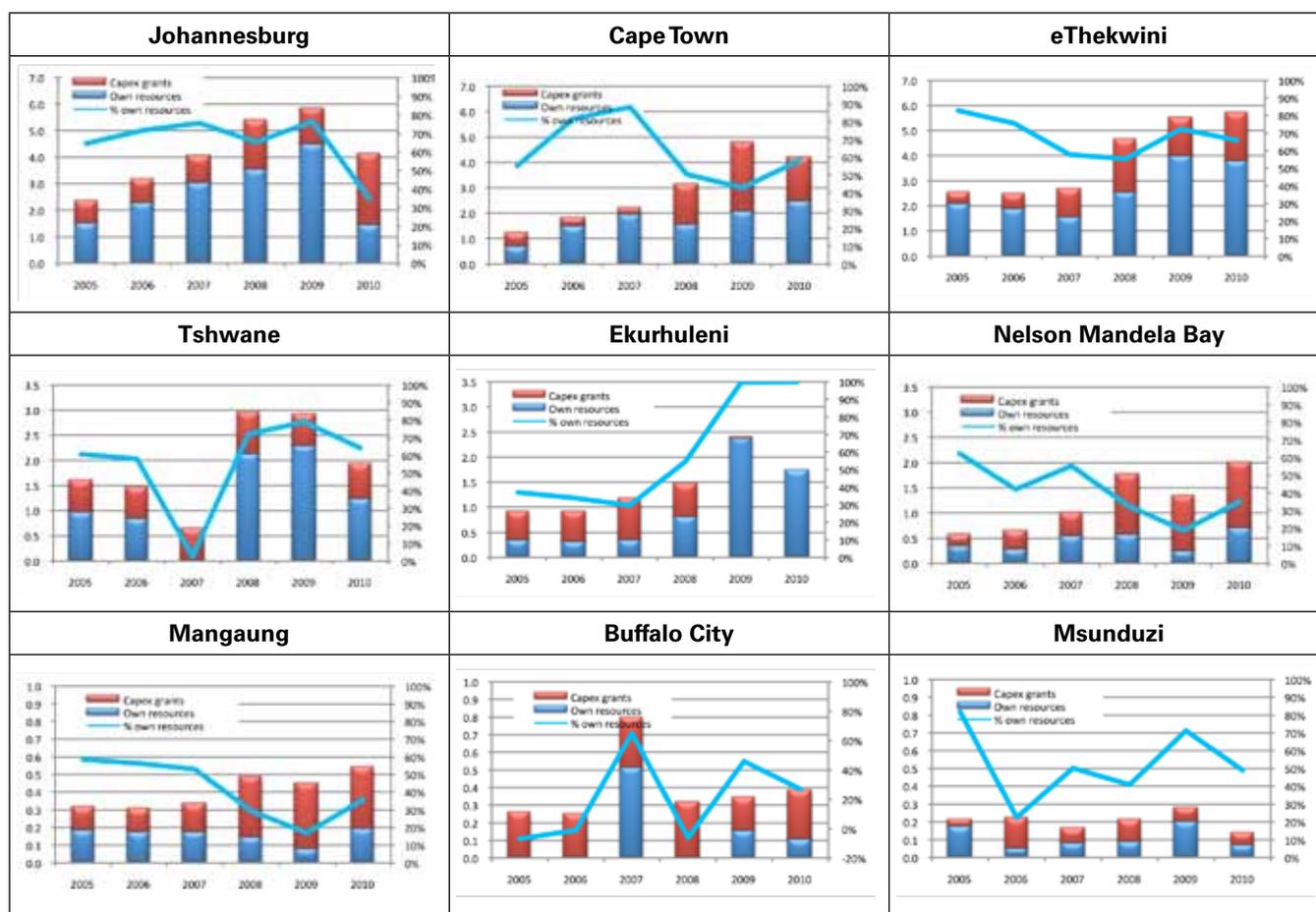
Figure 18: Aggregate funding of city capital spending (constant 2008 R billion)



The drop in both total capital spending, and the share of own resources in the funding mix, suggests that some cities, such as Johannesburg and Tshwane, are pulling back after over-extending themselves. After self-funding up to 80 per cent of its infrastructure spending up to 2009, Johannesburg scaled down its capital programme in 2010. The city now appears unable to self-fund capital spending on a significant scale.

Capital grants to cities have historically been dominated by the municipal infrastructure grant, along with provincial housing subsidies. In recent years, the three major categories have been the municipal infrastructure grant, grants for transport infrastructure and grants for 2010 World Cup investments, particularly the stadiums.

Figure 19: Funding of capital infrastructure by city (R billion and %)



BARS – FUNDING OF CAPITAL EXPENDITURE (CONSTANT 2008 R billion on LEFT AXIS) BLUE: OWN FUNDING. RED: CAPITAL GRANTS BLUE LINE – SHARE OF OWN FUNDING OF CAPITAL EXPENDITURE (% on RIGHT AXIS)

Table 10 presents a breakdown of capital grants received by the cities for 2009 and 2010. As grants associated with the World Cup declined, grants associated with public transport infrastructure have risen quickly.

Table 10: Total capital grants to cities by category (2008 R million)

	2009		2010	
	R billion	%	R billion	%
Municipal infrastructure grant	3.016	38%	2.956	33%
Public transport grants	1.255	16%	2.515	28%
2010 World Cup capital grants	2.219	28%	1.895	21%
Other capital grants	1.464	18%	1.697	19%
TOTAL	7.954	100%	9.063	100%

Borrowing

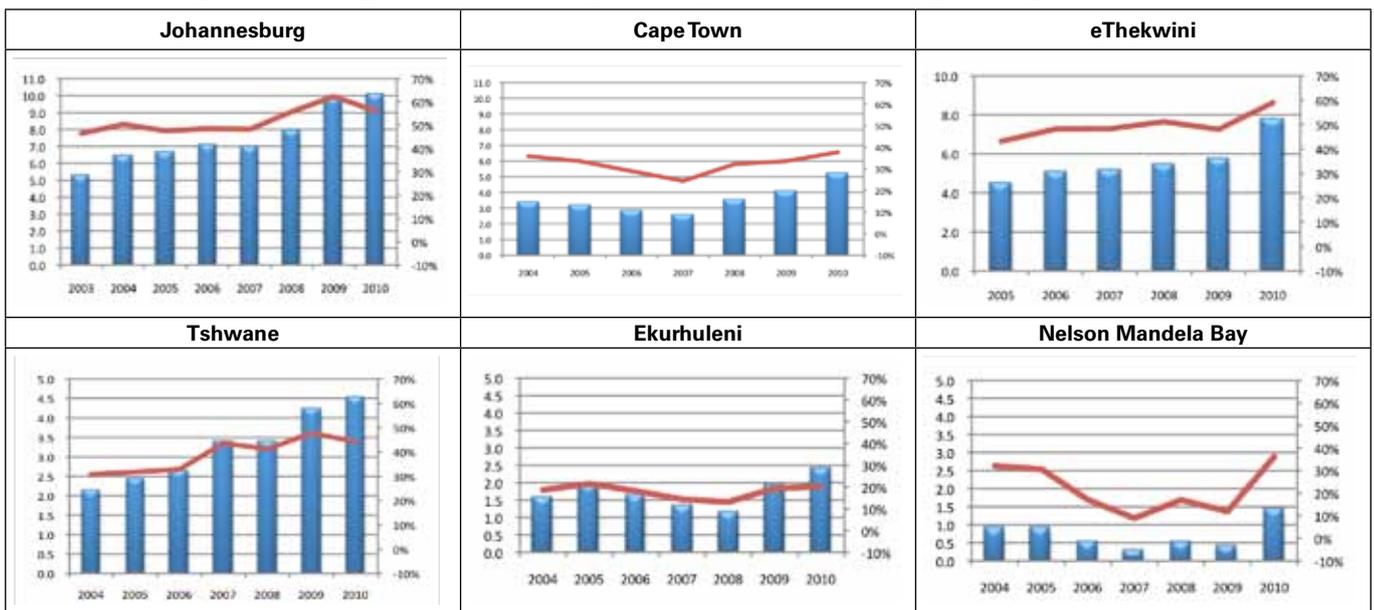
Total borrowing by city governments rose relative slowly to 2006, and decreased in 2007, but total long-term liabilities thereafter increased rapidly, by R11.8 billion or 58 per cent in the three years to June 2010 (see Table 11). The R11.5 billion accounts for 30 per cent of cities' own resources contribution to capital spending in the period. The remainder is either from current operating surpluses, or existing reserves and assets.

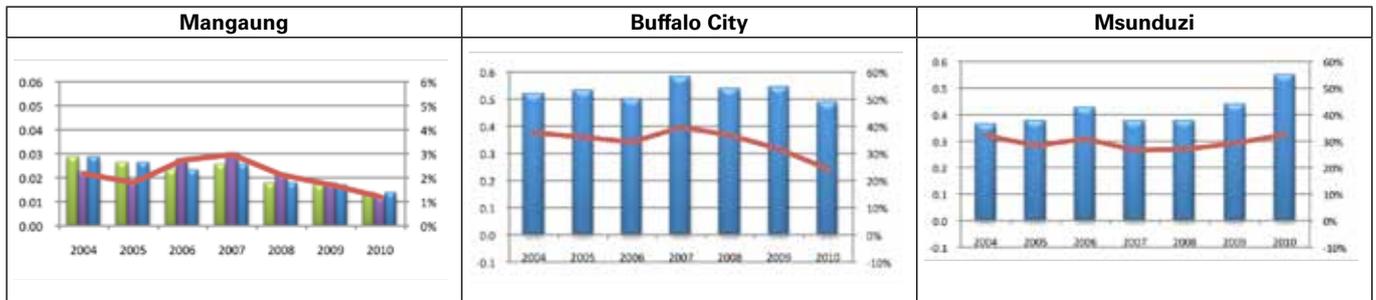
Table 11: Aggregate city borrowing 2005 - 2010

	2005	2006	2007	2008	2009	2010
Long-term liabilities (R billion)	17.897	19.513	19.318	21.077	24.537	30.206
Short-term portion of long-term loans (R billion)	2.413	1.095	1.240	1.724	2.492	2.209
Total long-term liabilities (R billion)	20.310	20.608	20.559	22.801	27.029	32.414
Increase in long-term liabilities (R billion)	0.716	0.298	- 0.050	2.243	4.228	5.385
Increase in long-term liabilities (%)	3.7%	1.5%	- 0.2%	10.9%	18.5%	19.9%
Long-term liabilities as % of operating revenue	35.6%	35.4%	34.9%	38.6%	41.0%	42.8%

The largest cities have done most of the borrowing (see Figure 20). Both Johannesburg and eThekweni are considered close to their borrowing limits.

Figure 20: Long-term liabilities (R billion) and as ratio of operating income





BLUE BARS – LONG-TERM LIABILITIES (CONSTANT 2008 R billion on LEFT AXIS)
 RED LINE – LONG-TERM LIABILITIES AS PERCENTAGE OF OPERATING INCOME (% on RIGHT AXIS)

Cape Town and Tshwane carry similar debt loads (about R4 billion) and similar debt-to-income ratios (about 40 per cent), and although both have less debt than Johannesburg and eThekweni (about 50 per cent), they are also showing a long-term upward trend. In contrast, Buffalo City has reduced its long-term liabilities over the last four years from about 40 per cent of operating revenues in 2007 to 25 per cent in 2010.

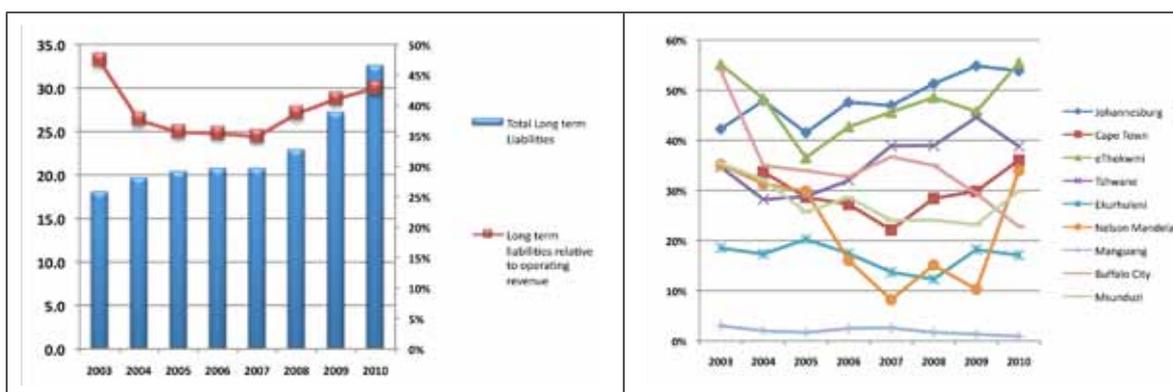
Increasing debt loads were driven by high rates of capital spending. Table 12 shows that Cape Town and Nelson Mandela Bay used debt to fund as much as 22 per cent of their capital expenditure over the three years to June 2010.

Table 12: Capital spending and increase in long-term liabilities by city 2007/08 to 2009/10 (2008 R billion)

	Capital spending over 3 years	Increase in long term liabilities over 3 years	Debt funding of capital programme %
Johannesburg	15.360	2.836	18%
Cape Town	12.047	2.701	22%
eThekweni	15.858	2.468	16%
Tshwane	7.767	0.958	12%
Ekurhuleni	5.589	0.785	14%
Nelson Mandela Bay	5.116	1.063	21%
Mangaung	1.467	-0.012	-1%
Buffalo City	1.015	-0.080	-8%
Msunduzi	0.626	0.167	27%
TOTAL	64.844	10.887	17%

Mangaung, traditionally not a borrower, continued to reduce its real long-term liabilities, which in 2010 were only about 1 per cent of operating income.

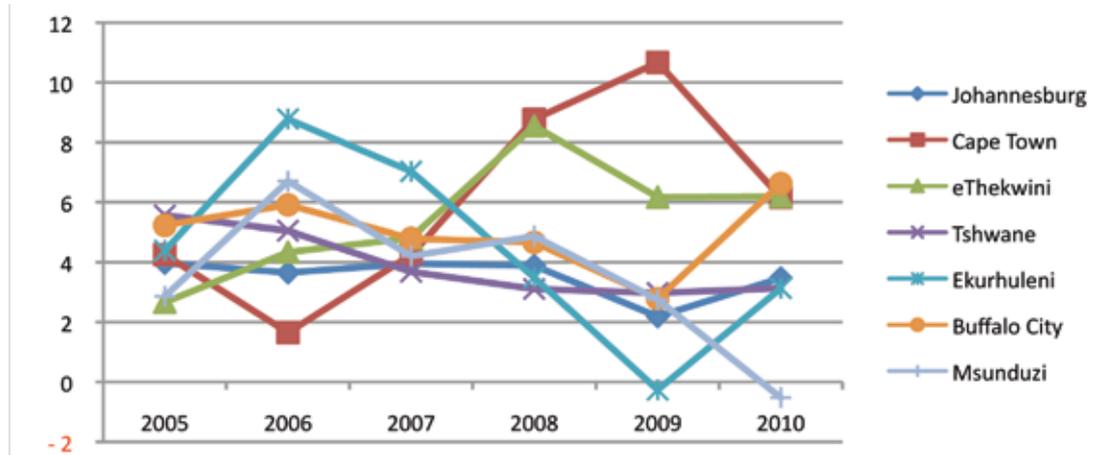
Figure 21: Long-term liabilities (R billion) and as ratio of operating income (%) (Aggregate and by city)



Debt service cover (operating surplus as a multiple of debt service costs) and interest cover (as a multiple of interest costs) are also important measures of the ability to carry debt. eThekweni has steadily improved its interest cover from 3:1 to over 6:1. Cape Town is also at 6:1, recently much higher, while Johannesburg has maintained a fairly stable ratio of about 4:1 (though only 3.5 in 2010) (see Figure 22).

Based on this indicator, Cape Town and eThekweni are stronger than they were in 2006, Buffalo City is about the same and all the other cities are weaker.

Figure 22: Interest cover by city



Debt service cover and interest cover are shown in Table 13. Again, Johannesburg is relatively heavily indebted, while Cape Town and eThekweni are in a more comfortable position.

Table 13: Debt service cover and interest cover by city 2009 and 2010

	Debt service cover		Interest cover	
	2009	2010	2009	2010
Johannesburg	1.8	1.9	2.2	3.5
Cape Town	5.1	3.1	10.7	6.2
eThekweni	4.2	4.0	6.2	6.2
Tshwane	1.3	2.5	3.0	3.1
Ekurhuleni	-0.3	3.1	-0.3	3.1
Nelson Mandela Bay	18.4	7.7	18.4	7.7
Mangaung	6.6	10.3	7.0	11.0
Buffalo City	2.8	4.6	2.8	6.6
Msunduzi	2.8	-0.2	2.8	-0.5

Financial legacy of the 2010 World Cup

The 2010 soccer World Cup was a major event for South Africa. Between 11 June and 11 July 2010, an estimated 1.4 million tourists came to the country. City governments spent considerable time, energy and resources preparing for the event. Although they reaped the rewards, they continue to bear ongoing costs.

The World Cup required significant investments in stadiums and transportation infrastructure. The costs of operating and maintaining the new infrastructure, the interest costs associated with any debt-financing of the investments, and the opportunity costs of any financial or other assets used to finance the infrastructure have ongoing financial implications for local government.

Infrastructure projects, including transport, electricity and water supply, would have been implemented as part of the government's service delivery agenda irrespective of the event, but were escalated to meet FIFA's requirements to host a successful event.

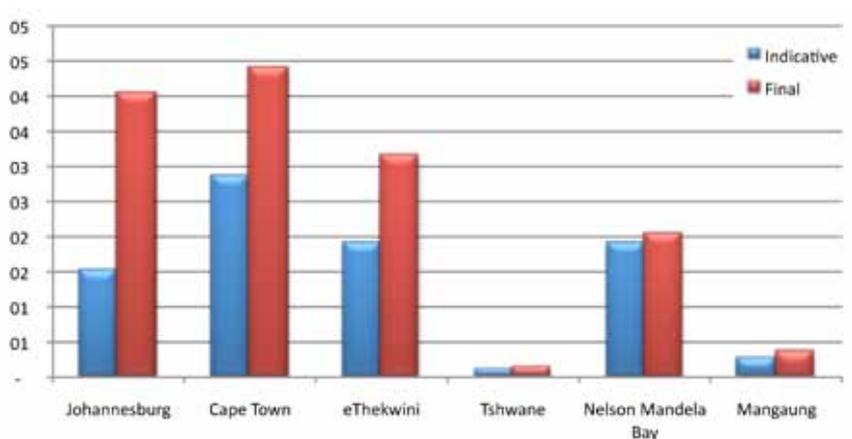
As required by FIFA, the South African government signed 17 guarantees through various government departments. These included providing a supportive financial environment, protecting FIFA’s intellectual property and marketing rights, ensuring safety and security, healthcare services, transport and telecommunications. The guarantees were delivered on primarily by the host city metro councils and certain provincial departments.

The host cities also signed agreements with FIFA requiring them to provide match stadiums, official training venues, supporting infrastructure such as electricity and water, operation of official fan parks, city beautification, safety and security, World Cup-specific bylaws and FIFA marketing guidelines.

Unlike the 2006 World Cup in Germany, the event in South Africa was funded mainly from national government resources, with the cities making up shortfalls from their own budgets. There were limited interventions by provincial governments and the private sector.

In October 2006, the Minister of Finance presented government’s 2007/08 – 2009/10 medium-term expenditure framework, in which R5.6 billion was allocated for building five new stadiums, R1.95 billion for upgrading the five existing stadiums, R586 million for providing bulk services to the stadiums, and R5.5 billion for supporting infrastructure, including R3.8 billion for public transport infrastructure.

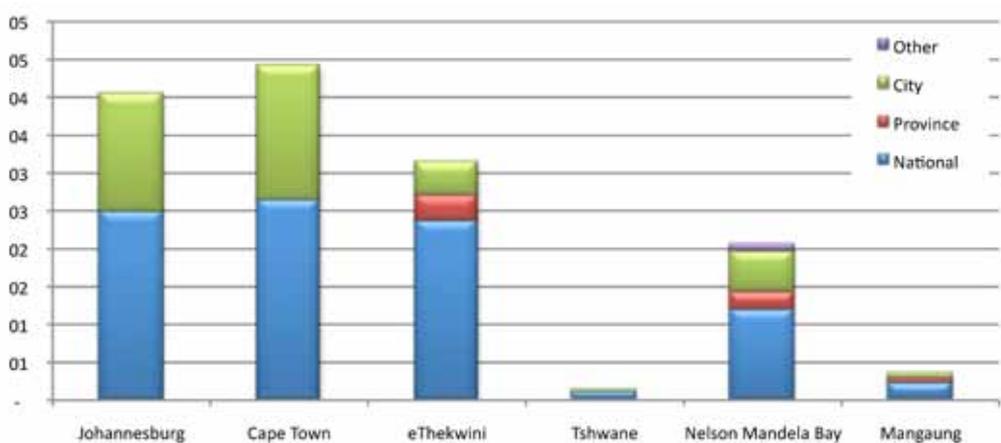
Figure 23: Initial and final cost of stadium investments (R billion)



As Figure 23 shows, the final costs were substantially higher than original projections as a result of increases in the cost of steel and other construction materials, foreign exchange rate fluctuations, changes in FIFA requirements and the 2009 international financial crisis. These escalations increased total stadium costs by about two-thirds, with Johannesburg experiencing the highest escalation by far.

The total costs for the stadiums eventually amounted to R14.1 billion, with National Treasury funding 64 per cent of construction costs, the cities funding 31 per cent, and the balance funded by provincial governments and other sources. Figure 24 shows the funding breakdown of stadium costs.

Figure 24: Contributions to cost of stadiums (R billion)



Cape Town, Nelson Mandela Bay and eThekweni built new stadiums, while Tshwane, Mangaung and Johannesburg upgraded existing stadiums. The total investments in each city are set out in Table 14. Cape Town built the most expensive stadium, measured both in absolute terms and by costs per seat, while Mangaung and Tshwane had the lowest cost per seat.

Table 14: Stadiums cost per seat (R)

	Costs (R billion)	Seats	Cost/seat (R)
Johannesburg	4.032	94 700	42 577
Cape Town	4.400	70 000	62 857
eThekweni	3.137	70 000	44 814
Tshwane	0.130	50 000	2 594
Nelson Mandela Bay	2.050	46 000	44 565
Mangaung	0.350	48 000	7 292
Totals	14.099	378 700	37 229

To ensure the commercial and operational sustainability of the stadiums, some cities have appointed management companies or operators, while others are managing the facilities within their municipalities.

The future viability of the stadiums depends heavily on their ability to attract events other than soccer and to secure anchor tenants/home teams. This presents a challenge: the design of the stadiums is not suitable for cricket tournaments, and rugby franchises already have their own stadiums. Nelson Mandela Bay is the only city that has signed up a home team for its stadium.

Can the stadiums be viable over the long term?

The stadiums were built to be multifunctional to attract other commercial events. Soccer City in Johannesburg, strategically located between Soweto and Johannesburg, hosts soccer games and music concerts, which will help secure its viability.

The location and building of the Green Point stadium at the foot of Table Mountain was a FIFA pre-condition. The management contract includes running the adjacent Green Point Park. The stadium may need to be subsidised until it becomes viable.

The Moses Mabhida Stadium in Durban, with multifunctional features such as the “big swing”, sky car, sky walk, large retail area, sport development academy and links to the beach, was designed to meet Olympic requirements. It is likely that the stadium will be sustainable.

The stadiums use a lot of electricity, and the rising cost of electricity is a concern. The sale of TV rights and minimising video system maintenance could help keep the stadiums sustainable.

There is a risk that the stadiums have been over-capitalised relative to the market potential, and they may require ongoing operating support.

Although the World Cup was a positive event for South Africa, investment in infrastructure presents local government with ongoing financial obligations, including the settling of debt with associated interest charges, continuing operational and maintenance costs, and the opportunity costs of this infrastructure upgrade programme.

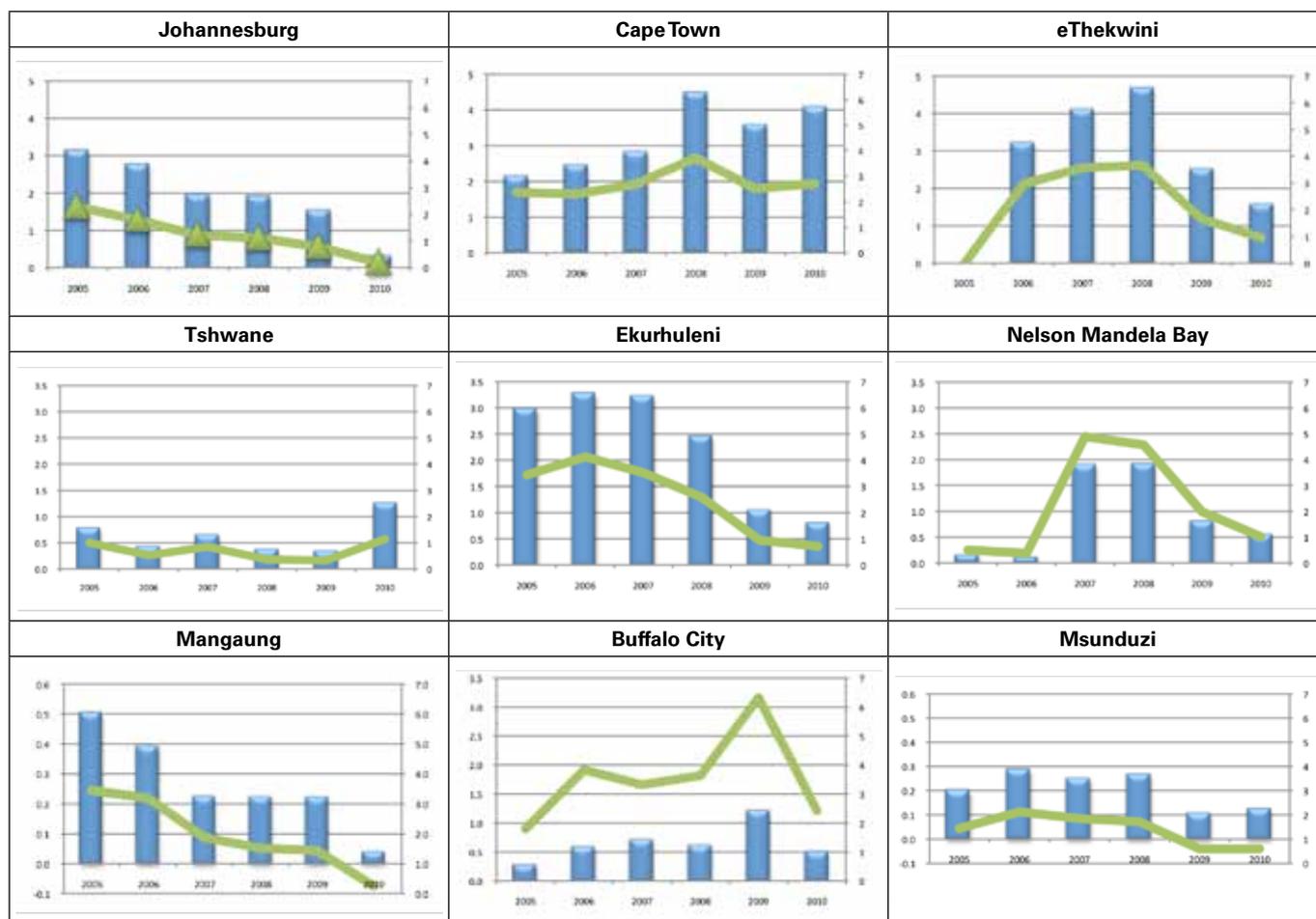
2.3 Cash flow

City governments need liquidity to operate effectively. Employees, bulk and other suppliers, and service providers and contractors must all be paid in cash. Consequently, a city's cash and short-term investments, relative to the monthly cash requirement, are important indicators of financial strength. Figure 25 shows the cash and short-term investment year-end figures for each city, in billions of (2008) rands and in months of cash expenditure.

The year-end cash position of several municipalities has weakened over the medium term. Johannesburg and Mangaung have steadily declined since 2005 (both to about two weeks in 2010), and Ekurhuleni since 2006 (to around one month in 2010).

For three years, eThekweni's cash and short-term investments remained above three months' worth of cash spending; this measure came under pressure in 2009 and by the end of 2010 had reached about one month. However, at the end of 2010 cash-on-hand had recovered to 68 days.

Figure 25: Cash and short-term investments by city (constant 2008 R billion and months of cash spend)



BLUE BARS - CASH & SHORT-TERM INVESTMENTS (CONSTANT 2008 R BILLIONS ON LEFT AXIS)
 RED LINE - MONTHS OF CASH SPEND ON RIGHT AXIS

At the end of 2010, almost all the cities had cash and short-term investments sufficient to cover one month's worth of cash expenditure.

Figure 26: Months of cash spend by city

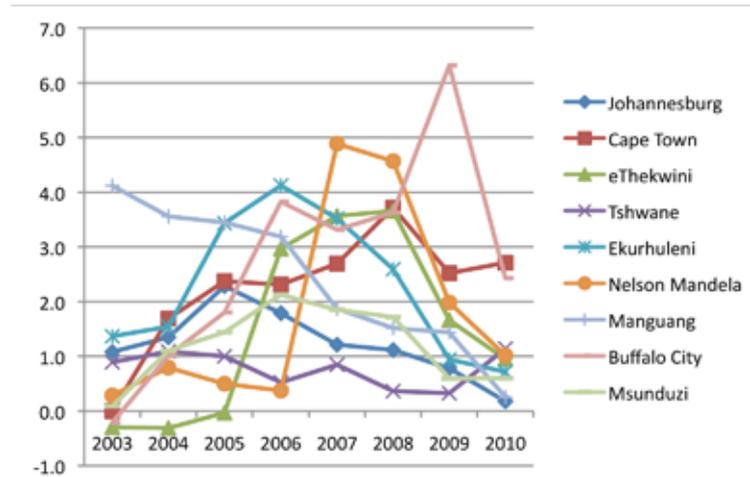


Figure 26 shows a general pattern of medium-term cash unwinding over the past five years. The exceptions to this pattern were Buffalo City and Cape Town. Buffalo City was always above three months and as high as six months in 2009, except in 2005 and 2010 when it had two months. Cape Town was the most consistent at just less than three months every year.

2.4 Credit ratings

City governments all have annual credit ratings conducted by agencies such as Moody’s and Fitch Ratings. Most of the cities have large and diversified tax bases, and strong economic growth rates. The most common challenge is the need for robust capital expenditure projects – and their financing and maintenance. The chart below summarises the credit ratings.

Table 15: City credit ratings: strengths and weaknesses

City	Strengths	Credit challenges
Johannesburg Aa3.za (2011) Outlook: stable	<ul style="list-style-type: none"> Broad tax base Budgetary control and financial discipline Committed to financial recovery 	<ul style="list-style-type: none"> Weakening liquidity Large service backlogs put pressure on maintenance and refurbishment Moderate to low GDP per capita High leverage
Cape Town Aa2.za Outlook: stable	<ul style="list-style-type: none"> Comfortable liquidity position Robust and diversified economic base Traditionally prudent financial management 	<ul style="list-style-type: none"> Lingering fiscal pressure of capital programme implementation Significant debt increase in near term
eThekweni AA- (2010)	<ul style="list-style-type: none"> Above average GDP growth Best peer debtor collection rate 	<ul style="list-style-type: none"> Capital expenditure programme most extensive in South Africa, well above operating cash flows Concomitant gearing and reduction in cash reserves Large working capital demands
Tshwane Aa3.za Outlook: stable	<ul style="list-style-type: none"> Committed to financial recovery and fiscal discipline Improved liquidity programme Large and diversified economic base 	<ul style="list-style-type: none"> Labour market rigidities High debt burden Incorporation of nearby municipalities may drive expenditure Service delivery expectations and concomitant capital expenditure programmes

City	Strengths	Credit challenges
Ekurhuleni Aa2.za Outlook: stable	<ul style="list-style-type: none"> • Satisfactory, albeit deteriorating financial fundamentals • Moderate but growing debt levels • Conservative financial management • Large economic base with industrial vocation 	<ul style="list-style-type: none"> • Weak collections with concomitant liquidity pressure • High capital expenditure requirements and expected further debt finance • Capacity shortages • Aged infrastructure
Nelson Mandela Bay Aa3.za Outlook: stable	<ul style="list-style-type: none"> • Adequate liquidity provision of an operating balance to revenue of 4.8% • Diversified and growing economic base • Lowest debt burden of all metropolitan municipalities • Adequate and improving financial management • Property revenue base growing at 12.3% 	<ul style="list-style-type: none"> • Large infrastructure backlogs
Mangaung BBB+	<ul style="list-style-type: none"> • Low debt levels despite aggressive capital expenditure programme • Anticipated announcement as a metropolitan municipality 	<ul style="list-style-type: none"> • Severe liquidity strain – cash holdings comprised of government grants • Gross debtors exceptionally high at 77% of debtors over 90 days • High tariff increases may exacerbate collections in near term
Buffalo City A	<ul style="list-style-type: none"> • Status change to metropolitan municipality • Resilient cash generation • Manageable and stable gearing 	<ul style="list-style-type: none"> • High debtors with 45% outstanding over one year • Unsustainably high water distribution losses • Poor financial controls and management leading to retarded capital expenditure programme and limited maintenance of aging infrastructure
Msunduzi (2010) BBB	<ul style="list-style-type: none"> • Large municipality with significant economy 	<ul style="list-style-type: none"> • Placed under administration in February 2010 given financial mismanagement • Entire senior management team suspended • Cash reserves depleted with severe pressure on liquidity – cash on hand is at 23 days • Gearing is trending upwards • Deteriorating debtor’s book

Several of the credit ratings assigned in recent years have been downgrades. The following chart summarises the long-term ratings assigned to the different cities over the last four years:

Table 16: Cities' long-term credit ratings, 2006-2010

	2006	2007	2008	2009	2010
AAA					
AA+					
AA	Cape Town, eThekweni	Cape Town, eThekweni	Cape Town, eThekweni, Ekurhuleni	Cape Town, eThekweni, Ekurhuleni	Cape Town, Ekurhuleni
AA-		Ekurhuleni	Tshwane, Johannesburg, Nelson Mandela Bay	Tshwane, Nelson Mandela Bay	Tshwane, Johannesburg, eThekweni
A+	Tshwane, Ekurhuleni, Mangaung, Buffalo City	Tshwane, Johannesburg, Nelson Mandela Bay, Mangaung, Buffalo City	Buffalo City	Buffalo City	Nelson Mandela Bay
A	Johannesburg, Nelson Mandela Bay		Mangaung		Buffalo City
A-	Msunduzi	Msunduzi	Msunduzi	Mangaung	
BBB+				Msunduzi	Mangaung
BBB					Msunduzi
BBB-					

2.5 Conclusion

In general, total real city revenues and expenditures have increased dramatically over the last five years, easing off only slightly as World Cup capital spending came to an end.

Electricity charges and government grants account for much of the increase in revenue, as property tax and water revenues have grown more slowly. Expenditure on bulk supplies and remuneration costs are the major contributors to city financial growth in recent years. Local government is now more reliant on grants than in 2006, particularly with the abolition of RSC levies. This, together with the surge in electricity revenues and stagnant property tax revenues, has changed the city revenue mix, reducing the relative importance of own revenues, including property taxes.

City operating margins have been squeezed between rising real operating costs and the growing problem of the municipal account's affordability for households and businesses.

The recent city capital expenditure programme has been fuelled by transport and World Cup-related spending, and financed largely by the cities themselves. Total city borrowing is 50 per cent higher in real terms in 2010 than it was just three years earlier, and some cities came close to exhausting their borrowing capacity, at least temporarily. Interest and debt service cover ratios have generally declined.

City governments were in a strong financial position in 2006, but they have come under increasing financial pressure. Operating surpluses have decreased to about half the levels of 2006. Net balances of cash and short-term investments have also fallen, as has interest income on investments.



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Changes in revenue resources:
City taxes and grants

3. Changes in revenue resources: city taxes and grants

Tax sources have changed significantly in recent years. The new Municipal Property Rates Act (2004) required all cities to implement a common property tax system based on the full market value of properties, including both land and improvement values. For some cities, this meant a shift from a system based either exclusively or predominantly on land values.

Changes were also introduced to the second general source of tax revenue, previously the RSC levies (known as the Joint Service Board levies in KwaZulu-Natal). These were abolished in June 2006 and replaced initially with a compensating grant. The compensating grant has been replaced by a share of the fuel levy levied and collected by national government and distributed among metropolitan governments based on origin. This was phased in from 1 July 2009.

The shifts in general revenue sources have been accompanied by changes to city grants, in some cases to compensate for changes in recurrent tax income, or to finance capital expenditure. Overall, there have been substantial real increases in grant revenue.

This section covers some of the key aspects of the changes in revenue sources.

3.1 Property taxes

Property tax revenue trends

The following table shows income from property taxes across the nine cities from 2003/04 to 2009/10. Most cities have experienced an increase in income from property taxes, with Tshwane recording the highest increase at 36.5 per cent. Property tax revenue in Ekurhuleni has fallen in real terms.

Table 17: Property tax revenues by city (constant 2008 R billion)

	2004	2005	2006	2007	2008	2009	2010	2004 – 2010 %
Johannesburg	3.106	3.355	3.479	3.445	3.323	3.050	3.674	18.3%
Cape Town	2.690	2.571	2.730	2.757	3.253	3.029	3.445	28.1%
eThekweni	3.043	3.674	3.661	3.725	3.646	3.480	3.671	20.7%
Tshwane	1.753	1.835	1.936	1.915	2.183	2.109	2.392	36.5%
Ekurhuleni	1.933	2.101	2.090	1.880	1.702	1.662	1.912	-1.1%
Nelson Mandela Bay	0.539	0.583	0.595	0.594	0.587	0.617	0.678	25.9%
Mangaung	0.270	0.247	0.260	0.255	0.246	0.260	0.307	13.9%
Buffalo City	0.295	0.319	0.323	0.327	0.325	0.339	0.383	29.7%
Msunduzi	0.315	0.455	0.473	0.480	0.345	0.354	0.377	19.6%
TOTAL 9 CITIES	13.943	15.142	15.546	15.378	15.610	14.900	16.840	20.8%

These figures have been volatile in recent years, as shown in Table 18, which depicts annual real changes in property tax revenues.

Table 18: Real annual percentage change in property tax revenues by city (% , 2008 rands)

	2005	2006	2007	2008	2009	2010
Johannesburg	8.0%	3.7%	-1.0%	-3.6%	-8.2%	20.5%
Cape Town	-4.4%	6.2%	1.0%	18.0%	-6.9%	13.8%
eThekweni	20.8%	-0.4%	1.8%	-2.1%	-4.5%	5.5%
Tshwane	4.7%	5.5%	-1.1%	14.0%	-3.4%	13.4%
Ekurhuleni	8.7%	-0.5%	-10.1%	-9.4%	-2.4%	15.0%
Nelson Mandela Bay	8.3%	1.9%	-0.1%	-1.1%	5.0%	10.0%



The general fall in revenues across most municipalities in 2008/09 can be partly attributed to the economic recession. However, while levels of economic activity are an important determinant of property tax revenue over the long term, they are only one factor. The most important driver of volatility over the six years was the creation of common valuation rolls, where previous municipalities were amalgamated to form a new municipality, and the implementation of the new Municipal Property Rates Act.

The electoral cycle also plays a role. The low increases in 2006/07 were at least partly attributable to the local elections in 2006. The national elections in 2009 combined with poor economic conditions resulted in lower tax increases, translating into real tax reductions in most cities. Political decisions are important – a decision on increases in one year can create a new base that affects income in subsequent years. However, as discussed below, the introduction of new valuation rolls was the central factor for some cities.

Taxing full property values

The Municipal Property Rates Act took effect on 2 July 2005, and all municipalities were required to implement it by 30 June 2009. Table 19 indicates the dates from which each city implemented new valuation rolls.

Table 19: Implementation dates of new valuation rolls in terms of the Municipal Property Rates Act

City	Valuation roll implementation date
Johannesburg	1 July 2008
Cape Town	1 July 2007 & 1 July 2010
eThekwini	1 July 2008
Tshwane	1 July 2008
Ekurhuleni	1 July 2009
Nelson Mandela Bay	1 July 2009
Mangaung	1 July 2009
Buffalo City	1 July 2009

The act required two important changes: first, all cities must levy taxes based on the full market value of each individual property, and second, sectional title units had to be individually valued. The latter condition resulted in a large increase in the number of taxable properties that had to be individually taxed and associated data demands, even though property values themselves were not affected by this shift. Requirements relating to public sector infrastructure were also a challenge to implement.

Previously, cities had taxed property largely or entirely on the basis of land values. The new legislation was significantly more demanding. All cities had data on improvement values from previous valuations, but the same rigour was not required of this data when improvements were not taxed. The new system resulted in a shift in the tax burden from certain categories of properties to other categories (“shifts in incidence”, as they are

also known). Taxes on properties with land of low value in relation to the value of the improvements increased, while those with land of high value in relation to improvements tended to decrease.

The new tax property system

The new tax property system results in shift in the tax burden from certain categories of properties to other categories.

Suppose a municipality consists of only two properties. The site value of each property is R200 000. However, the improvements value of Property A is R1 000 000, while the improvements value of Property B is R200 000. Thus the total value of Property A is R1 200 000 and the total value of Property B is R400 000.

Suppose the total tax imposed by the municipality is R1 000.

In a system based only on site values, each property will pay the same tax: R500. But in a system based on the total value – site plus improvements – Property A will pay more. In this case it will pay R750, while Property B will pay R250.

There has been no change in the total amount of tax collected by the municipality, but the incidence has shifted significantly in moving from a system based on only site values to one based on the full value of property.

Source: State of City Finances Report 2007



The new system received many objections, especially where higher-value properties were being taxed for the first time on an unfamiliar basis. Some of these cases took considerable time to resolve. Even in cities that already taxed land and improvements, the different legal basis led to uncertainty and disputes.

Taxpayers generally only object to valuations that are too high. The overall tax base on which property rates are levied falls when these objections are resolved by reducing the taxable value of the property. This fall may only be recorded a year after the implementation of the

new roll. This may require a refund of excess tax paid in the previous tax year, which leads to an artificially low total property tax income for the year in which the majority of these reversals take place. If the reduced total rates income is greater than expected, cities have to levy higher annual increases to compensate for the losses.

In some cases, cities that were introducing new rolls took the opportunity to increase taxes. The shifts associated with new values mean that tax increases differ between properties, diffusing the increases experienced. Furthermore, the rolls should capture new tax base growth for more accurate taxation, which in turn should allow a higher tax take.

In Cape Town, the new valuation roll from 1 July 2007 is reflected in an 18 per cent increase in property taxes in 2007/08 from the previous year. Tax revenues fall as objections are heard and values adjusted, which is compensated for by a higher increase the following year.

The volatility is reflected in different ways in each city, as the process is affected by a number of local factors, such as when the value adjustments are made, and when they are translated into the financial statements.

Johannesburg implemented its new valuation roll on 1 July 2008, for the 2009 financial year. The city's real property tax revenues had declined for several years due to a political reluctance to raise tax rates. In 2009, Johannesburg sought to increase its tax take while implementing the new roll. But tax revenues declined, because tax rate calculations were based on an inflated valuation roll. Many values with high assessments were appealed and reduced in the year in which the roll was introduced.

Property tax and economic growth

It is widely assumed that property tax revenue increases in line with economic growth. Table 20 provides a medium-term perspective, comparing real tax revenue growth with real GDP growth from 2004/05 to 2009/10.

Table 20: Comparison of property tax revenue growth with GDP growth over six years 2005 – 2010 (%)

	Tax revenue growth	GDP growth	Tax revenue growth as % of GDP growth
Johannesburg	18%	24%	76%
Cape Town	28%	25%	112%
eThekwini	21%	28%	74%
Tshwane	36%	31%	116%
Ekurhuleni	-1%	24%	-5%
Nelson Mandela Bay	26%	22%	116%

The table shows that some cities have increased their property tax revenues faster than economic growth, while others have done so more slowly. In Johannesburg and eThekwini, real property tax revenues increased by only three-quarters as much as city GDP increased. But for Cape Town, Tshwane and Nelson Mandela Bay, property tax revenue increases exceeded GDP increases by 12 per cent, 16 per cent and 16 per cent respectively. Ekurhuleni emerges as a significant outlier over this period, collecting less property taxes in real terms in 2010 than in 2004, despite the city GDP growing by 24 per cent.

Property tax is the most substantial source of tax revenue for the cities. Although it is a well-founded tax with a long and sustained history, if not well managed it can be seriously undermined and difficult to re-establish. With this in mind, the cities' achievements should not be underestimated – they have successfully amalgamated property tax rolls between different municipalities when the new city governments were created, and shifted from a variety of different systems to a common system based on full market value, including both land and improvement values.

Over the short term, there is tenuous link between property tax revenue growth and GDP growth. It appears that the link between the two is stronger over the long term.

3.2 After the RSC levies

Until the end of June 2006, metropolitan cities received local business taxes known as Regional Services Council levies, which were based on small levies on turnover and salaries within the municipal area. These taxes were abolished because the municipalities' administration of the tax was unsatisfactory, and there were reservations about the efficiency of a turnover tax.

A compensatory grant was used while National Treasury investigated a long-term replacement for the levy. The *RSC replacement grant*, which applied from 2006/07 to 2008/09, was based on previous RSC levy receipts. The replacement grant did not fully compensate for the previous RSC levies. At the same time, municipal property taxes were zero-rated for VAT purposes, and it was argued that the advantages arising from this should constitute part of the compensation.

From 2009/10, the compensatory grant began to be phased out in favour of a share of the national fuel levy. The available revenue was shared among the metropolitan governments based on a once-off adjustment in favour of cities whose share of total fuel sales was higher than their share of total RSC levies, while still granting other cities a 4 per cent nominal increase. In 2010/11 and 2011/12, the total allocation is calculated by decreasing weights of the former RSC levies assigned to each city, and increasing weights to the city share of total fuel levies raised. By 2012/13, the allocation will be based entirely upon fuel sales in each jurisdiction.

The following figures show how the revenue source has changed for each city over 10 years. The 2012/13 projection is based on National Treasury estimates.

Table 21: History of RSC and RSC replacements by city (current R '000)

Municipality	RSC levies			RSC replacement grant			Share of fuel levy			
	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Johannesburg	1 339	1 531	1 988	1 636	1 870	2 104	2 243	2 288	2 235	2 123
Cape Town	780	899	1 027	969	1 107	1 246	1 372	1 517	1 619	1 696
eThekweni	436	503	480	509	582	655	895	1 162	1 423	1 683
Tshwane	494	628	645	702	802	902	969	1 082	1 165	1 230
Ekurhuleni	566	609	624	637	728	820	961	1 100	1 213	1 311
Nelson Mandela Bay	194	229	269	247	282	317	360	394	415	429
Total 6 cities	3 809	4 399	5 033	4 700	5 371	6 044	6 800	7 540	8 069	8 474

Source: National Treasury database



Different cities have been affected differently by the shift. Johannesburg has been the most negatively affected and eThekweni has benefited the most.

The year-on-year percentage increase (or decrease), shown in Table 22, demonstrates this more clearly.

Table 22: Annual percentage change in RSC and RSC replacements by city (%)

Municipality	RSC levies		RSC replacement grant				Share of fuel levy		
	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Johannesburg	14.3%	29.8%	-7.7%	14.3%	12.5%	6.6%	2.0%	-2.3%	-5.0%
Cape Town	15.3%	14.2%	-5.6%	14.2%	12.6%	10.1%	10.6%	6.7%	4.7%
eThekweni	15.4%	-4.6%	6.0%	14.3%	12.5%	36.6%	29.8%	22.5%	18.3%
Tshwane	27.1%	2.7%	8.8%	14.2%	12.5%	7.4%	11.7%	7.7%	5.6%
Ekurhuleni	7.6%	2.5%	2.1%	14.3%	12.6%	17.2%	14.4%	10.3%	8.1%
Nelson Mandela Bay	18.0%	17.5%	-8.2%	14.2%	12.4%	13.6%	9.3%	5.4%	3.5%
Total 6 cities	4 399	5 033	4 700	5 371	6 044	6 800	7 540	8 069	8 474

The cities' increases in revenue between the actual amounts in 2003/04 and expected revenue in 2012/13 are as follows:

Table 23: Total growth in RSC levies and RSC levy replacement instruments between 2004 and 2013 (%)

Johannesburg	58.6%
Cape Town	117.4%
eThekweni	286.1%
Tshwane	149.1%
Ekurhuleni	131.7%
Nelson Mandela Bay	121.3%

eThekweni has been the greatest beneficiary of the shift, with tax revenue increasing nearly three-fold over the period between 2003/04 and 2012/13. Johannesburg's revenue in 2012/13 is projected to be only 58 per cent higher in nominal terms than it was in 2003/04. eThekweni's strong increases are due to the late introduction of RSC levies, which were at lower rates. They were known as Joint Services Board levies in line with the slightly different institutional arrangements implemented in the former province of Natal. eThekweni's income was adjusted upwards as the determinant of revenue shifted to the fuel levy.

Many factors have contributed to Johannesburg's low figures. As indicated above, when revenue is distributed according to estimated levels of fuel consumption, Johannesburg does not do as well as it would if the relative amounts received were based on a tax on economic activity. Johannesburg benefited unfairly from the RSC levies system, as many companies had head offices in the city and paid taxes to Johannesburg for activities that were actually occurring in other municipalities. But, the grant figures for 2006/07, which set the base for the interim grant amounts, were worked out on the basis of earlier financial years and did not take into account Johannesburg's strong growth in 2005/06.

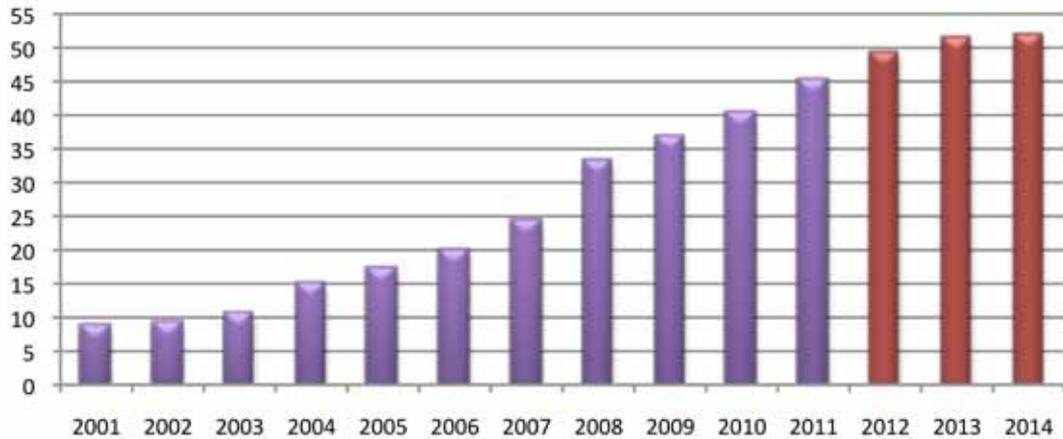
Buffalo City and Mangaung have been redefined as metropolitan councils in 2010/11. They will begin to receive a share of nationally collected fuel levies – a significant boost to the revenues of these two cities. However, as of end June 2011, the amounts to be received were not yet published.

3.3 Government grant generosity

Alongside the changes in property tax and the replacement of RSC levies, there have been significant real increases in grants from national government to the cities.

The figure below illustrates the growth in actual and projected total grants to local government, including the equitable share and conditional and capital grants.

Figure 27: Total direct transfers to local government 2001 - 2014 (constant 2008 R billion)



Total direct transfers to local government in 2000/01 (including the equitable share and capital and other conditional grants) was R5 712 billion in 2001 values, or R8 572 billion in constant 2008 values. The equivalent figure for 2010/11 is R53 610 billion in 2011 values, or R45 276 billion in constant 2008 values (excluding the share of fuel levy received by metropolitans, which has been taken out of these figures because it replaces an abolished tax). National government is currently transferring 5.3 times as much to local government each year as it was in 2001, after taking inflation into account.

The increase in total grants to local government is driven both by increased recurrent and capital grants. Recurrent grants include the equitable share, the capacity of which to finance free basic services is discussed in Section 5. Capital grants have been influenced by infrastructure grants for the 2010 World Cup, as well as a recent increase in public transport infrastructure grants.

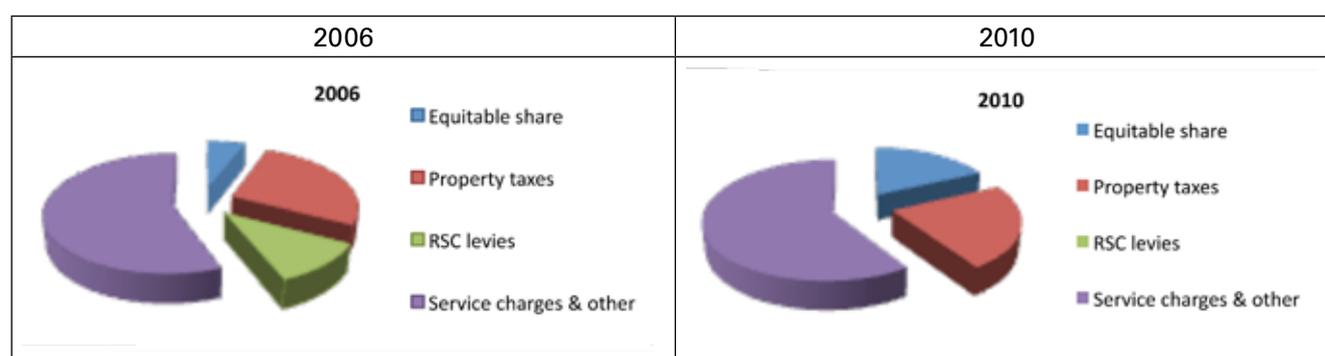
3.4 Conclusion

Cities have experienced significant changes in their non-tariff revenue sources in recent years. Property taxes have been substantially reformed; the local business tax represented by the RSC levies has been abolished and replaced by an origin-based share of the fuel levy; and grants have been greatly increased in real terms.

Figure 28 shows the shift in composition of recurrent revenue sources (excluding capital grants). Operating grants and rising service charges have reduced the share of city tax income from 38 per cent (property taxes and RSC levies) in 2006 to 23 per cent (property taxes only) in 2010.



Figure 28: Change in composition of city operating revenues 2006 to 2010 (%)



There are two key issues to consider when analysing revenue sources for municipalities: first, whether they are predictable, and second, the extent to which municipalities can increase the income they receive through either increasing the tax rate or expanding the base of the tax.

The property tax is a good example of a pure local tax. Although national legislation defines how the base is established and places some constraints on the relative tax rates that may be levied between certain classes of property, the municipalities have substantial control over identifying and measuring the base and setting the rate. Thus the revenue stream is both predictable and can be increased if the cities wish to do so, despite inevitable political resistance. The cities' management of such resistance is a key mechanism to establish accountability between the municipality and its residents. Furthermore, if cities manage their built environment well, property values tend to increase, boosting revenue.

Conversely, cities have very little control over grants. The grant system in South Africa is relatively predictable and transparent in comparison with many countries. Nevertheless, grants are generally unreliable beyond the medium term. The *equitable share grant* is more predictable than most – it is a formula-driven grant based on each city's level of poverty. However, within constraints imposed by the Constitution, it is subject to changes in the way in which the formula is calculated.

Capital and conditional grants are generally quite unpredictable. Each year, Parliament appropriates grant funds to each city for the immediate year and provides indicative allocations for the following two financial years. But legally, cities cannot rely on the indicative figures for the two outer years, as it is within Parliament's power to change these amounts in the following two years. There is no assurance of what happens beyond the three years other than the expressed policy intentions of national government.

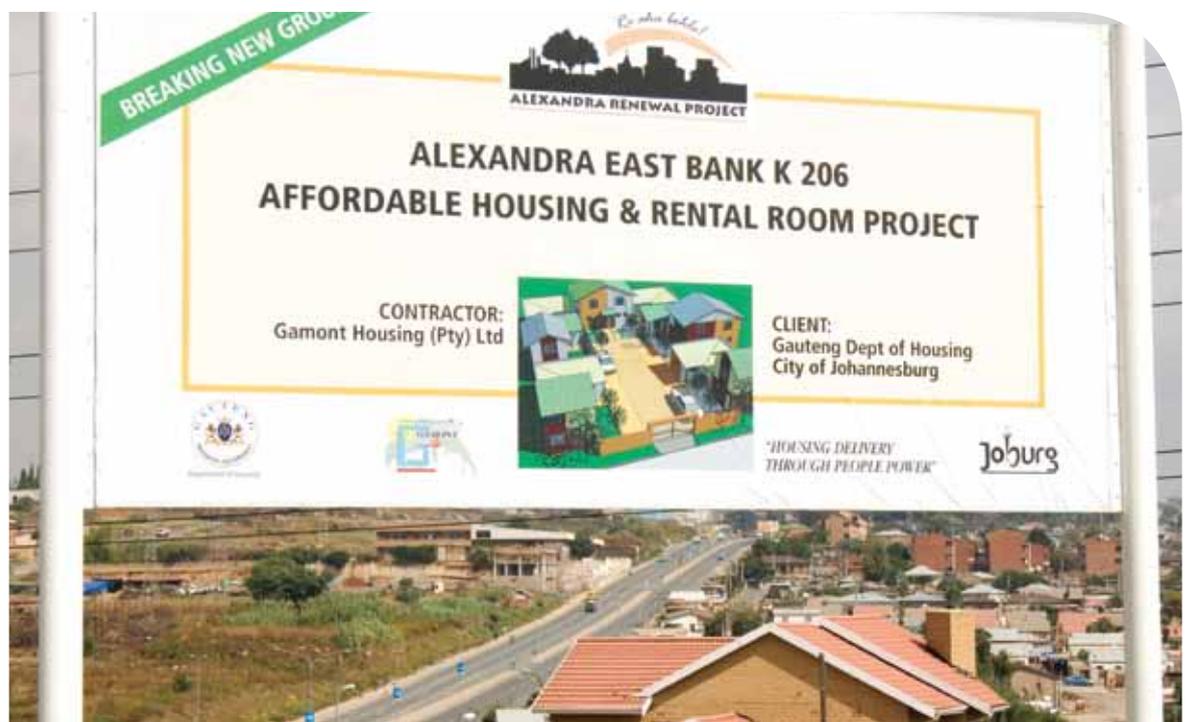
This causes a degree of uncertainty if, for example, a city seeks to upgrade its public transport systems. Such projects require substantial capital investment and can take at least 10 years to implement. Even the upgrade of a single public transport corridor within a metropolitan area takes more than one financial year. Cities face very real risks by embarking on major projects where medium-term capital grant funding cannot be relied upon. Cities that rely on ongoing operating subsidies to run public transport systems have no guarantee that this revenue stream will not be reduced in the medium to long term.

In the case of the *public transport infrastructure and systems grant*, national government introduced a clause in the Division of Revenue Act stating that allocations provided for in the outer years could be regarded as firm allocations that would not be altered downwards provided that certain commitments were met. This provides some assurance over a three-year period. If the city had its own relatively predictable recurrent revenue stream, it would be able to plan the project over a decade or more and borrow capital as required. Similarly, predictability would be substantially enhanced if cities could fund operating subsidies through their own revenue stream.

The revenue source represented by RSC levies, its subsequent compensatory grant and share of fuel levy falls somewhere in between property tax and grants. When RSC levies were introduced in the 1980s, city governments were allowed to set the rate. When the tax was abolished, cities were completely reliant on national decisions on a year-by-year basis for the amount of revenue received. Changes in levels of economic activity in their municipality had no direct effect on revenue received.

This revenue source became more predictable when it shifted away from a grant to a share of the national fuel levies. It is likely to fluctuate with changes in fuel consumption, which may become more marked with high and volatile oil prices, and the portion that national government shares with cities could change.

Cities are now more dependent on national decisions for their income, largely due to an increased reliance on capital and conditional grants. While this increased dependency may be driven by cities' increased redistributive function, there should be scope for shifting back towards greater municipal self-reliance and higher levels of borrowing. Such a shift would require increased own revenue sources (see Section 5).





PHOTOS: MEDIA CLUB SOUTH AFRICA - CHRIS KIRCHHOFF

Changes in expenditure mandates: electricity and public transport



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4. Changes in expenditure mandates: Electricity and public transport

City finances are affected by changes in functional expenditure responsibilities. This section reviews developments in the electricity distribution industry, and in public transport. Both are functional areas with very large financial dimensions and both have experienced important shifts – or in the case of electricity, an abandoned shift – in jurisdictional responsibility.

4.1 Electricity and city finances

Discontinuation of process to create regional electricity distributors

In 1999, the Cabinet approved the restructuring of electricity distribution. Under this plan, six regional electricity distributors would be created. Responsibility for distributing electricity to businesses and households would shift from local government to regional distributors. The stated goal was to pool diverse electricity distribution assets with the aim of providing a reliable, financially sustainable service. Electricity Distribution Industry (EDI) Holdings was established in 2003 to coordinate the national electrification programme and manage the regional distributors.

But the restructuring project ran into several obstacles. Significantly, the programme was opposed by both municipalities and state-owned electricity utility Eskom. The transfer of responsibility would lead to a loss of critical assets that could place serious financial strain on their operations.

In December 2010, Cabinet issued a statement that it had “decided to terminate the EDI restructuring and to discontinue the process of creating the regional electricity distributors with immediate effect”. Although EDI Holdings had already made progress, Cabinet agreed to a recommendation “that the Department of Energy takes over the programmes previously executed under the EDI Holdings mandate”. The department was to “review the whole electricity value chain with a view to developing a holistic approach to revitalise electricity infrastructure, energy security as well as the financial implications”.

This decision marks a major turning point in a process that has run for nearly two decades. For a detailed account of the regional electricity distributor project, see *The State of Cities Finances Report 2007*.

Programme to improve the electricity distribution sector

In 2008 and 2009, EDI Holdings drew up a programme to improve the electricity distribution services of the whole municipal sector, known as the Approach to Distribution Asset Management (ADAM).

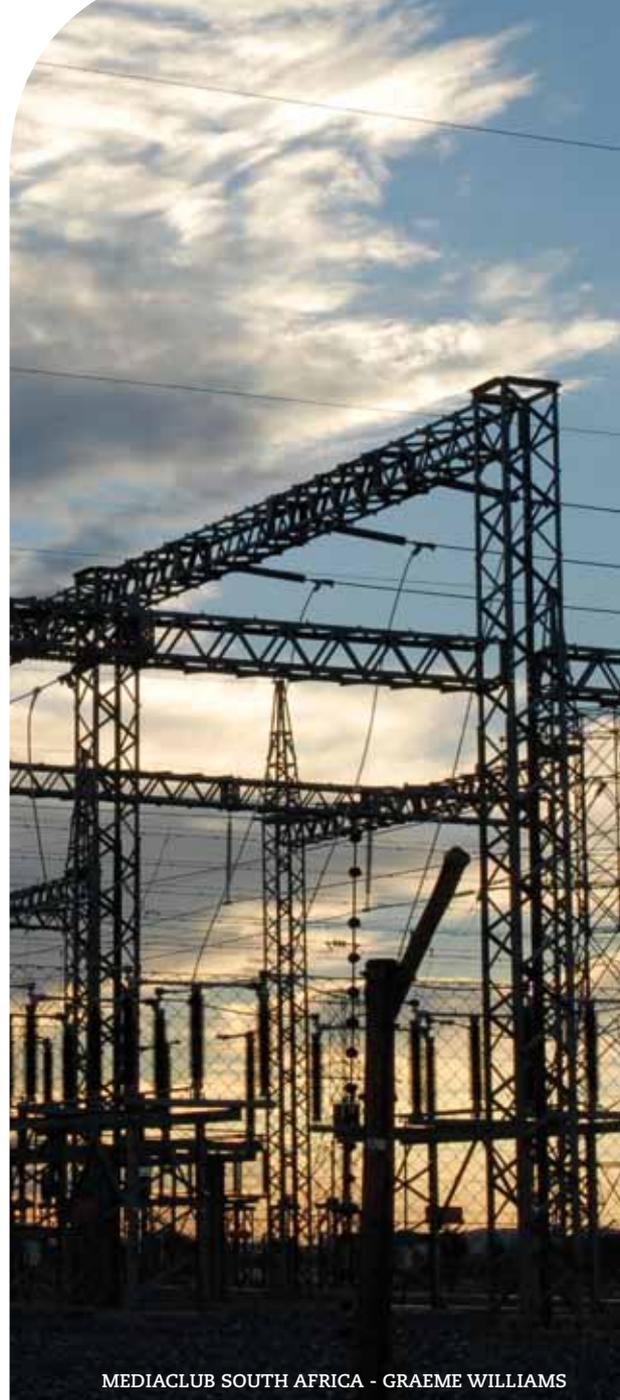
The report argued that “despite pockets of good performance the 2007 National Electricity Regulator of South Africa report on the state of electricity distribution infrastructure shows that the assets need urgent rehabilitation and investment”, and proposed a comprehensive, multiyear turnaround programme “targeted at addressing maintenance, refurbishment and strengthening backlogs”. The report argued that although generation shortages had shifted attention to shortcomings in the supply industry, much of the distribution industry was in a similarly poor state, with “aging and poorly maintained distribution infrastructure”, which required proactive intervention (EDIRC 2004). Roughly one-third of the 187 municipal electricity distributors were experiencing financial difficulties. In short, the distribution industry was in crisis – and there is no indication that this state of affairs has improved since the report was drafted.

The ADAM turnaround project was based on two linked initiatives: to drive a national programme to rehabilitate and improve the distribution industry, and to link this to the programme to establish the six regional electricity distributors. It proposed placing all electricity distribution assets into a single national holding company as an interim measure.

The programme would take time to implement “due to the widespread deterioration, the current lack of skills in the industry and the serial nature of the supply chain requiring all elements to be reliable before delivery is reliable”. The lag was exacerbated “by a long procurement cycle being further prolonged by production capacity constraints leading to delivery time of up to 50 weeks in the case of major equipment items”. The report estimated that it would “take up to three years to restore the integrity of the critical 70 per cent of the national network, from the time that sufficient funds and skills become available”. (EDIRC 2004)

The implementation and rollout of ADAM was estimated to cost R27.4 billion (2008 values). This was about 9.6 per cent of the current replacement value of the distribution networks, and 39 per cent of annual sales.

Although EDI Holdings has been closed down, this has not meant the termination of the ADAM project. Aspects of the project (the governance and restructuring elements required to introduce the six distributors) appear to have been abandoned, but the programme to restore electricity distribution assets has been taken over by the Department of



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The implementation and rollout of ADAM was estimated to cost R27.4 billion (2008 values). This was about 9.6 per cent of the current replacement value of the distribution networks, and 39 per cent of annual sales.

Energy and incorporated into its Strategic Plan for 2011/12 – 2015/16. The project will initially produce reports and implementation plans for the six original metropolitan governments, and will then expand to secondary cities and other municipalities. Table 24 summarises key objectives as stated in the Department of Energy's Strategic Plan.

Table 24: Milestones in the Department of Energy's Strategic Plan

Output indicators	Baseline	Milestone 2011/12	Milestone 2012/13	Milestone 2013/14	Milestone 2014/15
Develop a detailed report and implementation plan for each of the six metros on status of distribution infrastructure	<ol style="list-style-type: none"> 1. Problem identification report (ADAM) 2. No implementation plan 3. EDI Holdings wound down March 2011 4. R27.4 billion backlog 	<ol style="list-style-type: none"> 1. Report detailing a map of distribution assets status per metro 2. ADAM implementation and funding plan approved for metros 3. R24.3 billion backlog 	<ol style="list-style-type: none"> 1. Report detailing map of distribution assets status per secondary city 2. Update ADAM report indicating extent of backlogs 3. R21.2 billion backlog 	<ol style="list-style-type: none"> 1. Report with map of distribution assets status for 50% of municipalities 2. Update ADAM report indicating extent of backlogs 3. R18.1 billion backlog 	<ol style="list-style-type: none"> 1. Report detailing a map of distribution assets status for 100% of municipalities 2. ADAM implementation and funding plan approved for remainder of municipalities 3. R15 billion backlog
Sources: Department of Energy databases (Integrated National Electrification Plan, EDI Holdings), Eskom, Department of Cooperative Governance (<i>municipal infrastructure grant</i> database), National Treasury municipal expenditure information, ADAM report, interim, final and implementation					
Assumptions: Timely approval of funding and implementation plan; the extent that fiscal allocations do not meet needs; linear progression of milestones					
Source: <i>Department of Energy (2011) Strategic Plan 2011/12 – 2015/16</i>					

The figure of R27.4 billion in the plan corresponds with the 2008 figure contained in ADAM, and is therefore likely to be an underestimate. The plan is also unclear on how the funding for this programme will be provided. Although the details are not clear, it appears that once the reports on the various municipalities are complete, a national funding programme will be introduced.

Tariff increases to expand bulk supply

In recent years, tariff increases for bulk supply have risen dramatically. The cumulative increase in Eskom's tariffs from the beginning of 2008/09 up until the approved increase to be imposed from 1 April 2012 is 229.6 per cent. By April 2012, bulk tariffs will be more than three times as high as they were before 1 July 2008.

Table 25 shows the tariff increases imposed by Eskom since the start of 2008/09.

Table 25: Eskom's bulk tariff increases 2008 to 2012

Date	Tariff increases
1 July 2008	27.0%
1 July 2009	31.3%
1 April 2010	24.8%
1 April 2011	25.8%
1 April 2012	25.9%
Cumulative tariff increase between 1 July 2008 and 1 April 2012	229.6%

These increases change the electricity distribution environment significantly. Although distributors pass a substantial portion of the increases on to the final user, the scope for generating sufficient surpluses to renew, expand and maintain the distribution network, let alone provide for cross-subsidisation of other municipal services, is significantly diminished.

If consumption is lower due to tariff increases driven by bulk supply price hikes, the margin per unit consumed must increase for the distributor to maintain existing income levels.

Addressing the distribution challenge

For city governments, the halting of the regional electricity distributors project is a positive outcome. This project would have robbed cities of their most buoyant revenue source, their most effective credit control lever and their cash flow support. In turn, this would have led to greater dependency on national grants, which would affect credit ratings, leading to higher borrowing costs.

Yet the fact that the project has been abandoned does not represent a solution. The governance, financial and service delivery challenges in electricity distribution still need to be addressed. The municipal electricity distribution sector can only be restructured at the volition of municipalities. Local governments are primarily responsible for electricity distribution, and they must take focused action to create sustainable and effective distribution networks.

South Africa's larger cities need to focus on creating well-designed governance frameworks for their own distribution networks, improving transparency in the financial flows between electricity and other municipal services, and addressing maintenance and investment backlogs. Unsuccessful municipal networks could then be subsumed either into a functioning municipal distributor or into Eskom. There may well be scope for increased private sector involvement in the management of the sector. Potential additional resources from national government for the ADAM programme could be used to support such restructuring.

Substantial increases in bulk tariffs and the serious investment backlogs in the distribution networks place significant financial pressure on the cities. Section 2 has shown how increases in electricity tariffs and expenditure have changed the composition of city finances in recent years.

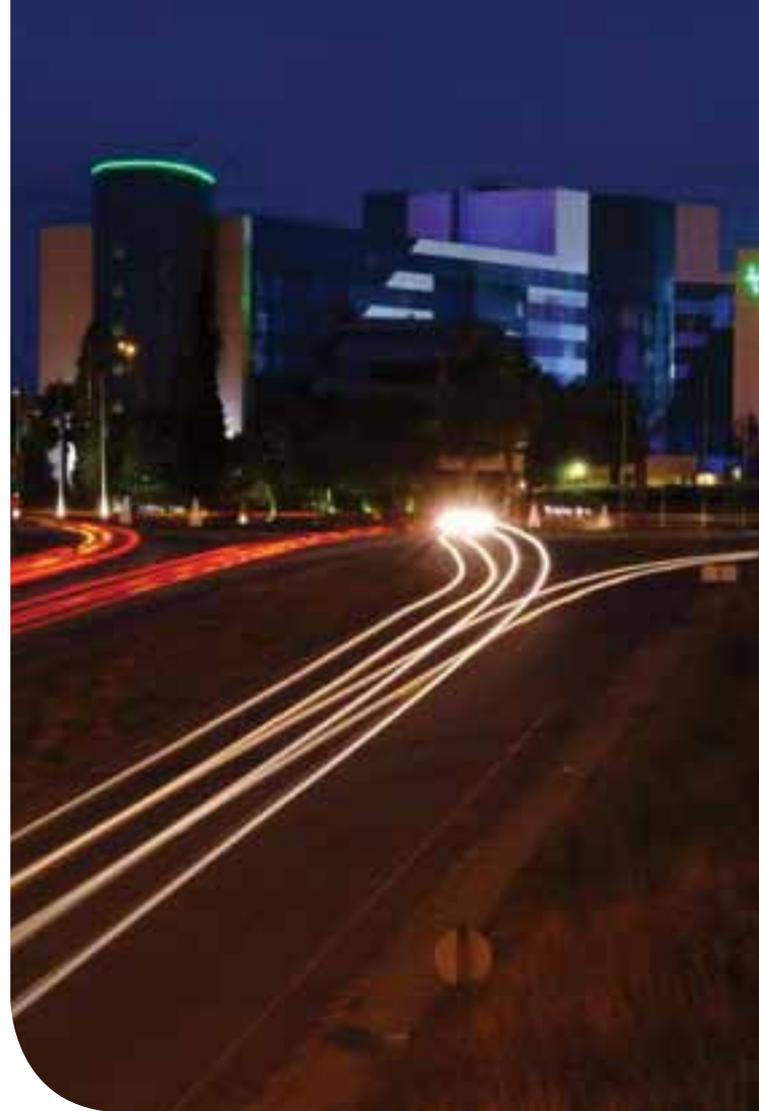
Electricity consumers have already been affected by electricity tariff increases. Further increases are expected if cities are to address their electricity infrastructure maintenance and investment backlogs. The scope for cross-subsidisation of other services from electricity revenues is greatly diminished, and likely to decline further, placing additional fiscal stress on municipalities.

It is unclear whether national government will help fund the ADAM programme.

4.2. Public transport and city finances

Devolution of the public transport function to cities

Arguably the most significant single issue facing city finances in the coming decade is the transfer of responsibility for public transport to cities. The National Land Transport Act (2009) provides for this devolution, which should result in city governments becoming primarily responsible for public transport in their areas. This is confirmed in the 2011 Budget Speech by Minister Pravin Gordhan:





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“The public transport function, including the management of rail, has been delegated by Minister Ndebele to metropolitan municipalities in terms of the National Land Transport Act. These are steps that create direct responsibilities for city councils, and open up opportunities for accelerating investment and change in the urban landscape and how cities promote their local economic development.”

The transfer of responsibility is a complex process that is in its early stages. The overall financial implications for cities will undoubtedly be substantial and challenging.

Evidence suggests that cities should expect the total turnover of public transport to be larger than electricity. Unlike electricity, however, where businesses and wealthier residential consumers account for the bulk of revenues, public transport users will be drawn predominantly from lower-income groups. Fare revenues will not be able to cover the costs of the envisaged services, and the service will need to be substantially subsidised on an ongoing basis.

The level of this subsidy, and whether it is financed with grants from national government or own revenue sources, has not been determined. Failure to adequately address these questions could place city finances at significant risk.

Cost drivers of public transport in cities

The dispersed form of South African cities was examined in detail in the *State of Cities Report 2011*. This urban form has arisen from apartheid policies, which situated black residential areas mainly on the outskirts of existing cities, combined with high usage of private motor cars from the late 1960s. This makes it extremely difficult to create an effective public transport network in most cities. Ridership tends to be low on most routes, therefore vehicle frequencies are also low. Waiting times for transfers tend to be long.

The nature of South Africa’s urban form combined with demand patterns makes providing cost-effective transport particularly challenging.

Trip distances tend to be long – often longer than the average motor car trip due to apartheid’s geographic legacy. Table 26, which benchmarks Tshwane against a selection of international cities, illustrates that long travel distances inevitably increase costs per trip.

Table 26: Urban density and average trip length: comparing Tshwane and selected international cities

Metropolitan city	Urban density (population/sq km)	Average trip length (km)
Moscow	14 626	7.7
Singapore	9 353	8.0
Tokyo	8 768	10.8
London	5 907	8.6
Tshwane car users	1 276	17.6
Tshwane public transport users	1 276	25.4

Source: Cameron, JWM et al (2005) Transport performance indicators: benchmarking Tshwane against world cities, South African Transport Conference, Pretoria, July.

In addition, passenger turnover on the routes is limited. Travel tends to be between destinations at end points of vehicle journeys, with a limited number of destinations along trip corridors. Higher passenger turnover along a route would increase the fares earned for a single vehicle journey.

Long trips and low passenger turnover are both the result of the apartheid practice of locating black townships on the outskirts of cities.

South Africa has a high ratio of peak-to-base demand for public transport services. This drives up costs, because system capacity is determined by the peak, but much of this capacity lies idle during the day. Serving the relatively low off-peak demand often means running at a loss, yet providing no service in off-peak periods is inefficient and inconvenient for users, exacerbating the high peak-to-base ratio. Many vehicles are only able to run a single trip in the morning and another in the evening due to the long distances covered.

The unusually high peak-to-base ratio is partly a result of the way subsidies have been structured. Subsidies are usually only available through a clip card if the user travels four or more days a week, and are mostly used by those with regular, full-time employment. This increases demand at conventional morning and evening peaks. Passengers who travel on an ad hoc basis, often during off-peak times, are usually unable to access the subsidy.

Most public transport users travel in a similar direction: away from dormitory townships in the morning and the reverse direction in the evening. This is sometimes referred to as a tidal flow pattern. Vehicles that make more than one trip in each peak period travel full in one direction but empty on the return trip. If there was demand in both directions, vehicles could carry twice as many passengers for the same cost. The issues discussed above drive up the cost of public transport and are exacerbated by three more factors:

- Users tend to have low incomes. For many households, public transport fares are a high proportion of their total expenditure. This limits the scope for increasing fares.
- Security concerns are a major challenge in parts of South African cities. Users are often afraid to use public transport in off-peak periods, especially at night. Walking to stations is a risk, as is travelling on public transport itself – particularly trains. This contributes to low off-peak ridership.
- Private motoring alternatives are exceptionally convenient. There has been extensive investment in infrastructure for private motorists. Apart from security concerns, the convenience of private motoring is a strong incentive for those who can afford to shift from public to private transport.

These factors all contribute to making South Africa a highly challenging environment for the provision of good public transport. It is not surprising that many are dissatisfied with current public transport services, as shown in Table 27.

Table 27: Percentage of users dissatisfied by key attributes across modes

Mode	Source of dissatisfaction	% of users dissatisfied
Trains	Crowding	71
	Security on walk to stations	64
	Security on trains	63
Buses	Lack of facilities at bus stops	74
	Crowding on buses	54
	Low frequency off-peak	51
Minibus-taxis	Safety from taxi accidents	67
	Lack of facilities at ranks	64
	Lack of roadworthiness of vehicles	60

Source: Department of Transport (2004)

City public transport

Table 28 summarises the most recent comprehensive national statistics on the different forms of transport, which were contained in the 2003 National Travel Survey (Department of Transport 2004).

Table 28: Modal share reported in 2003 National Travel Survey

Settlement type	Percentage of commuters					
	Train	Bus	Taxi	Car	Walk/cycle	Other
Metropolitan	11.2	8.1	28.4	41.0	9.1	2.2
Urban	1.7	6.2	27.0	35.5	25.6	4.1
Rural	0.5	11.6	15.1	15.8	52.6	4.4

Source: Department of Transport (2004)

It is likely that the percentage for cars has risen since then. However, the levels of motor car ownership per capita remain much lower than in industrialised countries – between a quarter and a fifth of countries such as the United States, the United Kingdom or France. If ownership levels continue to rise and commuting is based primarily on private motoring, the cities' road networks will require major expansion.

The minibus taxi industry plays an important role in South African travel, representing the second-biggest mode of metropolitan commuter transport. It is an unsubsidised service, except for a capital subsidy of R57 000 per taxi when existing taxis are scrapped and replaced with new ones meeting specified standards. In March 2010, a Department of Transport official estimated that there were about 135 000 taxis in South Africa (*Business*



Report 11 March 2010), with about 43 000 scrapping allowances granted as at end-March 2011 (National Treasury 2011).

Several factors have contributed to the taxi industry's success. As an unregulated industry, driver wages and other labour costs are relatively low and hours are long – generally extending from the start of the morning peak to the end of the evening peak. In addition, smaller vehicles are used, which are better suited to lower ridership numbers and a road network designed for private motoring. Given the infrequency of formal services during off-peak periods, minibus taxis capture a larger portion of the off-peak market, which lowers their peak-to-base ratio. This exacerbates the peak-to-base ratio of the formal services.

Minibus taxis do not run on unprofitable routes. Although the industry has effectively identified demand and opened up new routes, there are many routes or times during the day where no service is available. Competition between taxis also results in dangerous driving practices, such as taxis racing to passengers and stopping in inappropriate places.

Government has provided subsidies to formal bus services for many years. Until recently, the subsidy was provided by national government and provinces acted as agents. Subsidies were based on a formula that translated into an amount per passenger trip. As passengers increased, the total subsidy exceeded the amounts provided to the provinces. The provinces accommodated this by paying operators using money intended for future years, which resulted in a funding gap. After closing this gap with a once-off additional amount, national government restructured the subsidy into a provincial grant, known as the public transport operating grant. This made provinces directly responsible for keeping expenditure within budget and bus subsidies were to be paid on the basis of vehicle kilometres.

The passenger rail services are particularly important in Cape Town, where about half of all public transport trips are by rail. Rail services play less of a role in the Gauteng metropolitan areas and in eThekweni. The service has struggled with poor maintenance levels and other shortcomings, leading to badly compromised operations in many areas.

In 1989, national government corporatised commuter rail services through the creation of the South African Rail Commuter Corporation, with actual services provided by Metrorail, which was part of Transnet. Governance was again reconstituted in 2009 with the creation of the Passenger Rail Agency of South Africa (PRASA), which houses both Metrorail and the South African Rail Commuter Corporation. PRASA is also responsible for the long distance rail and bus services (Shosholoza Meyl and Autopax) and Intersite, which manages property assets owned by the commuter rail services.

According to the 2006 National Rail Plan, the Khayelitsha line in Cape Town was the biggest single route measured by passengers per day (338 000), followed by the Mabopane-Pretoria line in Tshwane (266 700), the core Wits network in Johannesburg and Ekurhuleni (248 410), and the Umlazi line in eThekweni (221 300).

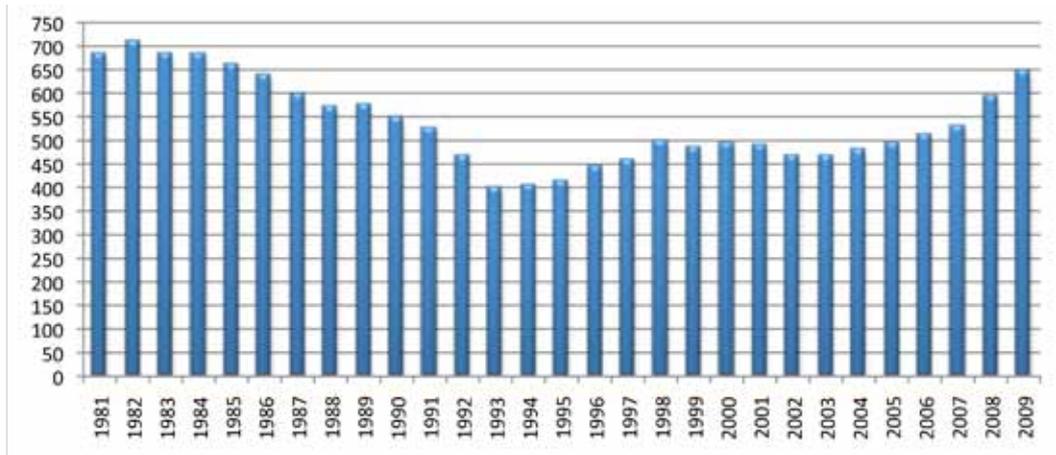
Rail commuter numbers declined in the 1980s, reaching a low point of 400 million trips per year in 1994. Figures available in 2010 (PRASA Annual Report 2010 and National Treasury 2011) show an increase to 639.4 million trips a year, which is close to the peak of the early 1980s. The most recent figure for 2010/11 in the *Estimates of National Expenditure* (National Treasury 2011) shows a decline to 503 million trips a year.

The growth in recent years is probably due to extensions made to the Khayelitsha line. The reason for the significant decline in the last year is unclear.



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Figure 29: Rail trips per year, 1980 – 2009



The *Estimates of National Expenditure* notes that rail services face “a decline in passenger numbers, deterioration in financial liquidity, and a weakened balance sheet” (National Treasury 2011).

The Gautrain is the biggest single public transport project in recent years. The link between OR Tambo Airport and Sandton was opened in mid-2010, and by August 2011 most of the lines had been opened for service. The completed project will consist of a total track length of 80 kilometres, running between Park Station in Johannesburg in the south and Hatfield, Tshwane, in the north, with a line to the airport from Marlboro Station, north-east of Sandton. The project is expected to be complete by the end of 2011, and has been widely hailed as a success.

Costs have been substantial. Total capital costs are estimated at R28.4 billion, with R12.96 billion provided by national government, matching a similar amount from Gauteng province. The Bombela consortium responsible for the project has borrowed R3 billion. The Gautrain accounted for about a third of all public spending on public transport in the country, including all publicly funded capital projects and operating subsidies from 2006/07 to 2010/11.

Table 29 shows national government spending on key public transport projects between 2006/07 and current projections in the expenditure estimates (National Treasury 2011).



PHOTO: KATHERINE MUICK-MERE. © Sunday Times.

Table 29: National government expenditure on key projects and programmes (R million)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Bus subsidies/ <i>Public transport operating grant</i>	2 460.3	2 836.0	3 840.9	3 531.9	3 863.0	4 153.2	4 360.9	4 600.7
Metrorail	3 959.9	4 806.3	5 989.1	5 884.2	4 596.6	4 817.3	5 070.6	5 336.5
Gautrain	3 241.0	3 029.4	3 266.0	2 976.7	438.4	5.3	0.0	0.0
<i>Public transport infrastructure systems grant</i>	699.3	1 174.0	2 919.8	2 421.2	3 699.5	4 803.3	4 999.8	5 563.6

Source: National Treasury (2010a, 2011)

Four of the nine network cities run municipal bus services, including Durban Transport in eThekweni and Johannesburg's Metropolitan Bus Service (Metrobus), which are the two largest municipal bus services, the Tshwane Bus Company in Tshwane and a small municipal service in Ekurhuleni.

Municipal bus services have faced significant financial and labour relations challenges in recent years.

Johannesburg's Metrobus was established as a company in 2000 when a number of service departments were corporatised. At the end of June 2010, it had 532 buses covering 80 scheduled routes and 130 school routes, transporting about 70 000 passengers daily. Johannesburg paid a subsidy of R284.5 million to Metrobus in 2009/10, which represented 70 per cent of total revenue, and the remainder was raised from fares.

The services has experienced strikes. Most recently, in early February 2011, 70 of the 500 drivers embarked on a five-week strike against changes to shifts. The whole service was halted due to vandalism and the intimidation of non-striking drivers, which severely disrupted ridership.

Durban Transport had 495 buses in June 2010, with an additional small service known as the Mynah, which runs a fleet of 21 buses. Durban Transport receives a subsidy through the public transport operating grant paid via provincial government. This is supplemented by a subsidy from Durban's own revenues. The provincial subsidy was reduced in 2009, forcing additional support from the city. On 30 June 2009, after significant service failures and strike action, the private operator running Durban Transport went insolvent and ceased operations. An interim operator was appointed from late July 2009, with reduced services due to the available budget. The operations resumed with 32 buses in August 2009 and full service was reached in March 2010. As a result, passenger journeys fell from 13.2 million in 2008/09 to 10.5 million in 2009/10, although this appears to have picked up since then. Total operational expenditure was 290.8 million in 2009/10, with fare revenue of R48.6 million. A subsidy of R120 million was received from the public transport operating grant and Durban contributed R122.2 million from its own general revenue.

The City of Durban is now developing plans for its integrated rapid public transit network. The Durban Transport Service will be put out for a long-term tender, and it is expected to bring the minibus taxi industry in as part of the vehicle operator company. Three contracts will be awarded, with total daily ridership of about 35 400 passengers for the northern service, 17 000 for the southern service and 3 700 for the central service – a total daily ridership of 56 100.

As part of its World Cup services, eThekweni introduced a "people mover" bus service in the central business district. This service, which was expanded in late 2010, uses a fleet of 23 low-floor buses circulating on a variety of routes in the central business district. There are 125 000 monthly passengers on average.

The Tshwane Bus Company has a fleet of about 150 buses, which mainly operate in the city centre. The service has recently experienced a great deal of industrial action, which has disrupted passenger numbers.

The logic of devolution of responsibility for public transport to cities

Devolving public transport to cities aims to enhance city economies by bringing synergy to the management of built environment functions.



This responsibility has been transferred with the aim of improving agglomeration economies in cities. Agglomeration as an economic concept refers to the creativity, efficiency and opportunity that is possible when there is easy access to a wide range of people and activities within a small area. This underlies the formation of cities. However, cities are often inefficient due to limited access, often arising from congestion, or weak or expensive transport services.

As discussed above, transport costs are driven to a large extent by urban form, and the practices which have developed as a result. City governments are primarily responsible for urban planning and should regulate and manage the way urban growth occurs.

In most parts of South Africa, the boundaries of city governments have been widely drawn to contain the metropolitan area, or city, within a single city government.

This is more complex in Gauteng, where three adjacent metropolitan areas create an extended urban region. Gauteng is too vast and dispersed to be run as a single metropolitan government, and most decisions crucial to making public transport work effectively are made in the

local sphere. However, there is clearly a need for coordination and cooperation between the cities and the province if public transport challenges are to be addressed.

Although cities need to be primarily responsible for their public transport systems, appropriate models are needed for the way operations are run and technology is used.

Public Transport Strategy and the National Land Transport Act

A White Paper on Transport was published in 1996, followed by a detailed policy report entitled *Moving South Africa* (1999). In 2007, national government adopted a new Public Transport Strategy and action plan. A number of new ideas were created through these processes, the most important being that the state should be legislator and regulator of public transport services, rather than a direct provider of these services. The notion of devolving responsibility to city governments was also supported, although at that stage local government was still in transition and single-tier metropolitan governments had not yet been introduced.

The National Land Transport Transition Act (2000) sought to translate these policies into legislation. However, there was little change in the first five years of the act's implementation due to a range of legal, financial and administrative challenges. Part of the problem lay in continued confusion as to whether public transport was the responsibility of city or provincial governments.

From 2005, new thinking began to develop within the Department of Transport, particularly around how to implement the new agenda. This was informed by successful examples of creatively improving public transport in some of the major cities in South America, especially Bogota, in Colombia, and some cities in Brazil and Ecuador.

The new model emphasised the need to establish comprehensive public transport networks (referred to as integrated rapid public transport networks), which are actively controlled and managed by a strong public network company linked to the city authority.

The three key implementation building blocks are:

- Integrated rapid public transport network implementation plans
- Municipal control over integrated networks
- A maximum stake for existing bus/minibus sector in rapid public transport network operations.

This new approach gives the public sector an active role in managing city-wide networks.

The Public Transport Strategy was translated into legislation in the National Land Transport Act. This act deals with a wide range of issues relating to the management of road-based public transport contracts, and emphasises the primary role of city governments in the regulation and provision of public transport.

The public transport infrastructure and systems grant

Alongside the National Land Transport Act, the crucial instrument for implementing the new national policies on city public transport has been the *public transport infrastructure and systems grant*.

Initially, the grant was focused on providing public transport infrastructure for the World Cup. However, as preparations for the event progressed, there was an increasing emphasis on the need to leverage opportunities presented by the event to place urban public transport on a new trajectory.

Table 30: Public transport infrastructure and systems grant funds, 2007 - 2014 (R billion)

	Johannesburg	Cape Town	eThekweni	Ekurhuleni	Nelson Mandela Bay	8 metros
Water Supply	4 808	11 566	6 277	2 844	4 522	58 741
Sanitation	9 144	6 548	13 423	1 747	2 097	53 501
Electricity	22 938	6 077	8 318	13 998	2 098	51 643
Solid Waste	3 042	934	923	1 801	153	6 490
Roads	11 575	22 340	10 865	12 694	6 504	89 126
Land and top structure for housing	13 392	4 040	8 110	4 068	3 251	42 623
Public services	2 766	2 184	2 169	4 111	731	11 982
Public transport	9 578	11 947	8 731	5 549	3 235	53 127
Public places	670	894	646	212	356	3 573
Economic infra and buildings	5 175	641	1 233	274	316	8 375
Admin buildings and systems	378	2 025	1 856	2 958	1 167	5 653
Total	83 466	69 196	62 550	50 255	24 429	384 833

The scale of the projected requirements is vast, totalling R385 billion in 2008 values (or R456 billion in 2011 values). Nelson Mandela Bay will need to spend an estimated R6.5 billion on roads, R4.5 billion on water supply, and a further R2.1 billion each on sanitation and electricity infrastructure. Ekurhuleni requires almost R14 billion for electricity distribution, R12.6 billion for roads and possibly another R5.5 billion for public transport (all in 2008 values).

The bus rapid transit model

Several elements underpin the bus rapid transit model being applied in Johannesburg and Cape Town.

At an operational level, these systems have key trunk routes mostly running along dedicated bus lanes in the median of the roadway. This gives the public transport system a significant travel time advantage, particularly in traffic. Running in the median causes less interference with general traffic turning left. Right-turning vehicles do have to cross the dedicated lane, but do not need to drive in it, and the public bus can be given right of way.

Fares are verified at bus stations on trunk routes, rather than on the vehicle. The buses have wide doors and a level boarding platform to allow many passengers to board quickly and conveniently. Conventional systems verify fares as passengers board, which often causes significant delays.

The bus rapid transit system facilitates transfers between routes. Users can disembark and board another vehicle travelling on a different route. As the network is built up, the system becomes increasingly convenient and efficient.

Because the dedicated lanes are in the median, the stations must also be in the median. Although users have to cross into the middle of the road to access the stations, they are only required to cross one direction of traffic. In a curb-side system, either no road crossing is required or the passenger must cross both directions of traffic to access their bus.

The bus rapid transit model provides for competition between operators in a manner that does not inconvenience passengers.

The public authority is responsible for the bus rapid transit network, and operators are paid on a vehicle kilometre basis, with vehicles controlled from a central control system. This avoids problems that crop up in the minibus taxi industry, such as the pressure to drive recklessly to reach passengers. More than one operator can run vehicles on the same route,

Johannesburg's Rea Vaya and Cape Town's MyCiTi

Both Johannesburg and Cape Town have started to implement bus rapid transit projects.

The first phase (phase 1A) of Johannesburg's Rea Vaya was completed by May 2010, with additional services added in December 2010. Phase 1A consists of:

- 25.5 km of bus-ways from Thokoza Park in Soweto, through the central business district to Ellis Park
- 33 stations (including two stations at Ellis Park and two at Soccer City)
- A temporary depot at Dobsonville
- A fleet of 143 vehicles (including provision for 5 per cent spare capacity).

The cost of phase 1A's infrastructure was about R1.9 billion, including land acquisition.

The project intended to create a company to run operations using the taxi operators displaced by the new service. Negotiations to establish the company and agree on a rate per kilometre took much longer than expected, but were successfully concluded in early 2011. During this time, services were run by an interim company with significant operating capacity from Johannesburg's Metrobus service.

Rea Vaya offers both trunk and feeder services, with about 40 000 passengers a day in phase 1A.

As this report was being completed, Phase 1B was under construction. It consists of a second trunk route from Noordgesig to Parktown, which runs north of the current route, and is expected to be completed in the first half of 2012. A further 135 vehicles are being purchased to operate phase 1B. Infrastructure costs for this phase are expected to be about R1.8 billion.

Cape Town launched its MyCiTi project in 2010. The city's initial focus was on the link between the main railway station and the new Cape Town stadium, and a service between the railway station and Cape Town airport, to be operational for the World Cup in mid-2010. A total of 43 buses were purchased, including 18-metre articulated buses and 12-metre buses.



(Photo: ELVIS NTOMBELA © Sowetan)

In phase 1A, Cape Town's main route provides a link from the central business district up the west coast to Atlantis. This route was chosen because there is no rail service in the area, and it is the fastest-growing part of the city with substantial traffic congestion along the route. Construction began in 2009, with initial services becoming operational in May 2011, using the vehicles purchased for World Cup services. In the first month of operations, weekday passenger numbers ranged between 5 000 and 8 000 passengers per day. As at May 2011, 18 stations were complete. Infrastructure spending costs up to end June 2011 were an estimated R1.75 billion, including land acquisition, control centre costs, fare system and transport management centre.

Cape Town is rolling out phase 1A in stages, which are expected to be complete by September 2013. This includes trunk services to Atlantis and to the informal settlement of Du Noon, as well as trunk links into the industrial area of Montague Gardens. The trunk service will extend to the Waterfront. Feeder services will be offered within the city centre, along with a link between the central business district and Hout Bay, and within various suburbs up the west coast.

The full phase 1A service in Cape Town will have 43 trunk stations and feeder stops at 295 locations, with a total of 590 feeder stops. Phase 1A is expected to operate a total of 310 vehicles.

Cape Town sought to introduce competition among service providers by forming two companies out of existing minibus operators and the Golden Arrow Bus Service, which provides provincially subsidised services in the metropolitan area. Agreement was only able to be reached on the basis that Golden Arrow operates independently of the two minibus taxi companies. Thus Cape Town's initial service is being operated by three different companies.

The costs of both constructing and operating rapid transit services have been higher than expected. Total costs include building trunk routes and stations, depots, the fare system, the control centre and vehicles.

Another important issue is the compensation payable to existing minibus operators where their services are replaced. In both Johannesburg and Cape Town, the cities have managed – after lengthy and difficult negotiations – to bring the minibus taxi industry into the system through the operators forming companies, which will operate vehicles and, in some cases, stations. Because the profits to be made are expected to be lower than current profits made by minibus taxi operators, further compensation has been payable. Johannesburg has incorporated this into the vehicle kilometre rate payable to its vehicle operating company, while Cape Town is seeking to do this through a once-off payment.

PHOTO: ANTONIO MUCHAVE. © Sowetan



The total estimated capital cost of Cape Town's phase 1A is an R3.9 billion, including all ancillary costs such as depots, the fare system, the control centre and vehicles, with further once-off costs (including compensation) estimated at an additional R0.7 billion.

It is evident that both cities will need significant ongoing subsidies to run the service, although the level of subsidy required over the long term is not yet clear. Cape Town's 2010 business plan estimated an operating subsidy need of between R86 million and R145 million for the full phase 1A, with subsequent evidence suggesting that the higher figure is more likely.

Cape Town is rolling out phase 1A in stages, which are expected to be complete by September 2013. This includes trunk services to Atlantis and to the informal settlement of Du Noon, as well as trunk links into the industrial area of Montague Gardens.

which means there can be competitive tendering for the market, and an award to more than one service provider, without there being competition in the market in the course of operations.

This model, which is increasingly used internationally, means that the public authority carries much of the risk of a deficit between revenue and costs. Because vehicle operators are paid on a vehicle kilometre basis, the public authority can reduce services or change vehicle routes to match services to demand. However, private vehicle operators often price their risk of underutilisation into their vehicle kilometre rate.

Creating integrated rapid public transport networks

Although the bus rapid transit projects have proven more costly than initially anticipated, they are much less costly than alternatives, such as the Gautrain, and on the trunk routes

they provide a significantly higher level of service than minibuses or conventional buses. Although some adaptations may be necessary, there appears to be widespread consensus that the trunk networks should be extended.

Existing rail services need to be upgraded and improved as part of the core network.

Urban planning approaches need to ensure that future development, including overall urban form, is much more strongly oriented to public transport. With cities now playing a key role in the development of public transport, this seems likely.

4.3 Conclusion

Cities are taking on a significant challenge with the transfer of responsibility for public transport. How can they meet the financial challenge?

The capital expenditure needed to create a well-functioning network is daunting, but not unmanageable: investment can be delayed or accelerated according to available resources. Much of the financing would have to be in the form of grants, such as the public transport infrastructure and systems grant, and this could be supplemented with local borrowing.

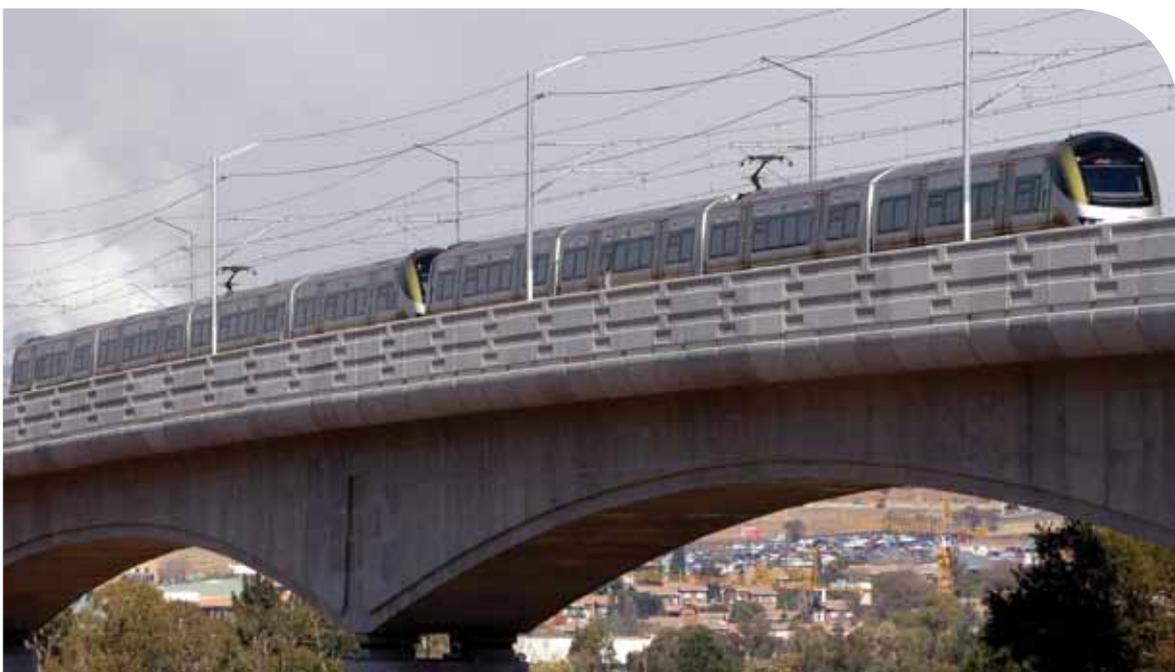
The ongoing operating costs are a greater concern. For example, early modelling in Cape Town indicated that a full bus rapid transit network would cost about R6.3 billion to run per year, with fare revenues expected to be in the region of R5.7 billion, leaving a deficit of R0.6 billion. While this is probably an overestimate for bus rapid transit alone, total operating costs of about R6 billion are undoubtedly feasible as a combined figure for public transport services in the metropolitan area of Cape Town, including rail and a completed bus network. In financial terms, this is similar in scale to Cape Town's electricity distribution industry.

The estimated deficit of R0.6 billion is similar to the current annual bus subsidy paid to the Golden Arrow Bus Service. Because PRASA is a national entity, it is difficult to identify rail subsidies for Cape Town alone, but the combined operating rail and bus subsidies for the city are likely to be about R1 billion a year.

At this scale, there is a risk that a 10 per cent increase in costs and a reduction in total fare revenues of 10 per cent could translate into an additional deficit of R1.2 billion. Metropolitan governments are comparatively large organisations, yet this is a substantial amount in relation to the financial resources recurrently available to them.

This problem requires cities to have sufficient autonomy and responsibility to seek cost-effective approaches on their own, rather than assume they will be able to rely on national government when there is financial pressure. At the same time, national government will have to share a significant portion of the risks related to the provision of public transport.

It is difficult to establish clear budget needs without sufficient understanding of the ongoing cost implications of a well-functioning public transport system. These needs will become



(AP Photo/Themba Hadebe)

clearer as services are extended and the large-scale maintenance and investment backlogs in rail are addressed.

The goal should be to fund a significant portion of public transport costs out of own city revenues, as this is likely to result in cost-effective solutions. This will require additional own revenues, because current revenue sources are insufficient to support this substantial new mandate.

Potential own revenue sources for funding public transport include a local business tax, fuel levies, vehicle licenses, parking taxes and a share of toll revenues.

Of these, only the local business tax and the fuel levies generate sufficient income to contribute substantially to public transport requirements. The local business tax may be better suited to services other than public transport, but could substitute for the revenues currently accruing to the metropolitan councils through a share of the fuel levy. This would free the share of the fuel levy, enabling it to be applied to public transport.

The scope for allowing cities to levy their own local fuel taxes is limited. Different tax levels across local government boundaries create opportunities for fraud and arbitrage. The sharing of nationally collected fuel levies, however, is in place and could be extended.

Vehicle licensing is a provincial function. There is some scope for increased licence fees, but these would have to be imposed by all provinces, as areas that charge higher fees are likely to lose registrations to other provinces. The revenue is also unlikely to flow to city systems – provinces will wish to use them to cover their own obligations.

Parking taxes have limited potential. They could be imposed on parking spaces provided by non-residential property owners, but they are, in essence, another form of non-residential property tax, and unlikely to raise substantial revenues. Parking taxes may have a function as part of a general parking strategy, which is an important part of managing urban transport.

Tolls do have potential for raising resources, but the outcry over the new tolling system in Gauteng suggests this may not be feasible. Moreover, it would be difficult to convince the Gauteng provincial government and the South African National Roads Agency Limited that this is an appropriate measure.

Using additional local revenue sources to fund city transport systems is likely to encounter significant opposition. Whether such services are funded locally or through the national fiscus with grants, the impact on the taxpayer is ultimately much the same. Cities need solutions that enhance overall levels of productivity and economic efficiency. Effective and efficient public transport systems would undoubtedly be part of such solutions.



PHOTOS: MEDIA CLUB SOUTH AFRICA - CHRIS KIRCHHOFF

The financing of city mandates over the next decade

5. The financing of city mandates over the next decade

South Africa has had a system of democratic local government for 15 years. Our current local governments have had a decade of institutional experience and development. It is therefore appropriate, in a review of the state of city finances, to re-examine one of the founding assumptions of our system of intergovernmental fiscal relations: that the city governments, once correctly restructured, and with the previous racial character of local government finance overcome, would have access to sufficient resources to adequately fulfil their constitutional and legal expenditure mandates.

Every city government can improve its own effectiveness in obtaining and using the fiscal resources available to it, and under its own administrative and political control. The extraordinary government grant generosity over the past decade also weakens any suggestion of a fiscal gap facing cities.

But national economic development depends on cities functioning well as built environments. Moreover, the functions of city governments are soon to expand to cover important, expensive functions, such as public transport and housing, and even in due course commuter rail. It is therefore legitimate and important to assess the likely future expenditure requirements of the city governments, and to consider these requirements in light of projected future revenue and fiscal capacity. An undue gap between projected revenue and expenditure would indicate that city governments would probably be unable to afford a well-functioning built environment, however well the city governments themselves perform. This would suggest the need for amendments to the current system of intergovernmental fiscal relations.

5.1 Unfunded mandates

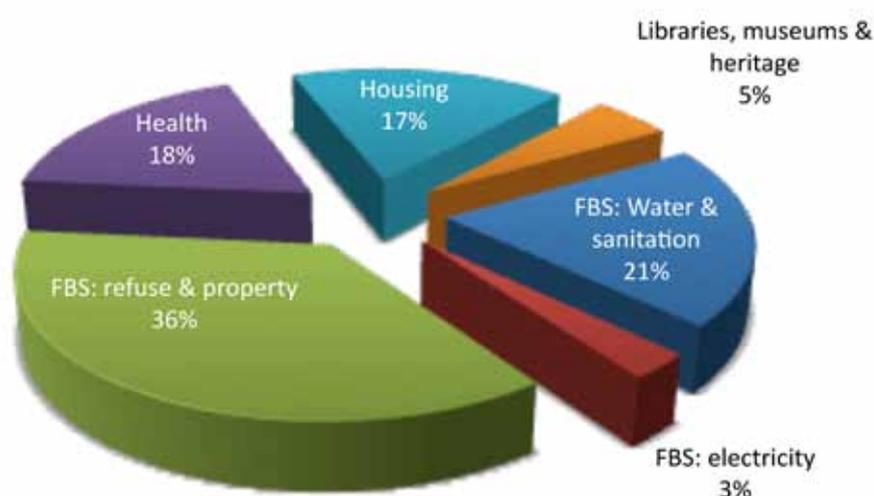
Unfunded mandates are expenditures carried by city governments on services not listed in Schedule B of the Constitution, or otherwise in excess of their constitutional and legal mandates. These include spending on health, libraries and museums, housing and hostels, and free basic services.

In some cases (libraries and museums), such expenditures are a continuation of previous responsibilities, which should have been properly taken over by other spheres of government or fully funded. In other cases (housing construction, health), subsidies are significantly below costs and city governments must make up the difference. In addition, each new subsidised housing project undermines future city financial sustainability, as residents generally cannot pay property taxes and service charges. The provision of free basic services is also an unfunded mandate (Schedule B does not list any welfare responsibilities), against which the cities must allocate their equitable share grants.

Exercises conducted by eThekweni, Ekurhuleni, and Nelson Mandela Bay provide a profile of city expenditure on unfunded mandates:¹²

¹² The Fiscal and Financial Commission is conducting a study of unfunded mandates.

Figure 30: City unfunded mandates by service



FBS: free basic services

For the three cities in total, 60 per cent of such expenditure is spent on providing free basic services, and 40 per cent on other unfunded mandates, particularly housing and health services. Only 73 per cent of this expenditure is funded by grants, including the equitable share, leaving cities responsible for the remaining 27 per cent.

This fiscal burden is illustrated in the following table, which summarises the average annual costs of unfunded mandates for the three cities from 2007/08 to 2009/10:

Table 31: Fiscal burden of unfunded mandates: eThekweni, Ekurhuleni and Nelson Mandela Bay (constant 2008 R million)

	eThekweni	Ekurhuleni	Nelson Mandela Bay
Cost of free basic services	916	832	246
Cost of other unfunded mandates	674	607	364
Minus: equitable share allocated	-917	-841	-246
Minus: service grants received	-203	-184	-260
Balance: unfunded (city funded)	471	414	104
City operating revenue	11 856	10 155	3 425
% of city operating revenue	4.0%	4.1%	3.0%

Source: IMFO survey of cities 2010

This scale of unfunded mandates requires a new perspective for assessing the operating surpluses of the city governments, as it appears that some cities' unfunded mandates are equivalent to about 4 per cent of their operating revenue and up to 50 per cent (Nelson Mandela Bay) and 39 per cent (eThekweni) of their property tax revenues. This expenditure diverts funds from essential built environment responsibilities and significantly erodes the financial sustainability of city governments.

5.2 City expenditure requirements

A more comprehensive view of future city expenditure requirements is required. The urban population is growing rapidly, as are urban economies, and household formation is often more rapid than population growth. Over 10 years, the overall increase in population, households and economic activity will be substantial, requiring equally substantial provision

of supporting infrastructure and services. Any gap between the need for and provision of services indicates increasing social, economic and personal costs, and declining economic productivity and household living quality.

City expenditure requirements over the next decade are estimated by projecting the number of households with different levels of service and the number of households added each year. Bulk, operating and capital costs can be estimated using unit consumption, operating costs per consumer and capital costs per new consumer connected for each level of service. This makes it possible to project the full capital and operating costs of necessary infrastructure services for a city jurisdiction over a decade.¹³

Table 32 presents the 10-year (2011–2020) infrastructure requirements for the eight metropolitan governments (the SACN members excluding Msunduzi), and for Nelson Mandela Bay, eThekweni and Johannesburg.

¹³ This is done by making use of the Municipal Services Financial Model, originally developed for the Development Bank of South Africa and the then Department of Provincial and Local Government. The model focuses on seven functional groupings: governance, administration, planning and development facilitation; housing; water services; electricity; solid waste; roads and storm water; and public services. Estimates presented here are based on work done by PDG for the city governments concerned during 2009 and 2010, and updated, standardised and extrapolated to eight metros, also by PDG, in 2011. Adapted to 2008 pricing and tabulated for this report by the authors.

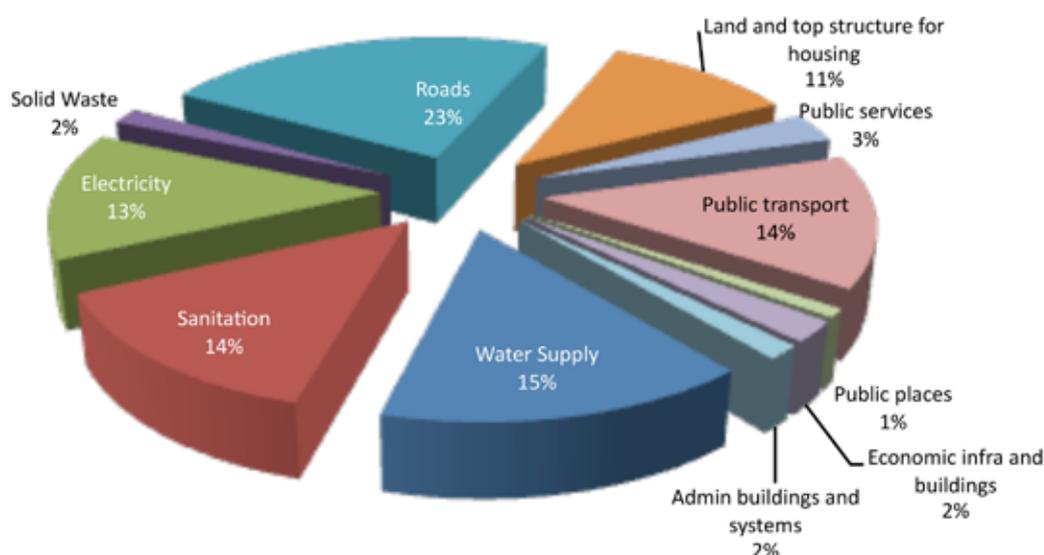
Table 32: Estimated city infrastructure requirements by service (2008 R million)

	Johannesburg	Cape Town	eThekweni	Ekurhuleni	Nelson Mandela Bay	8 metros
Water Supply	4 808	11 566	6 277	2 844	4 522	58 741
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Public transport	9 578	11 947	8 731	5 549	3 235	53 127
Public places	670	894	646	212	356	3 573
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Admin buildings and systems	378	2 025	1 856	2 958	1 167	5 653
Total	83 466	69 196	62 550	50 255	24 429	384 833

The scale of the projected requirements is vast, totalling R385 billion in 2008 values (or R456 billion in 2011 values). Nelson Mandela Bay will need to spend an estimated R6.5 billion on roads, R4.5 billion on water supply, and a further R2.1 billion each on sanitation and electricity infrastructure. Ekurhuleni requires almost R14 billion for electricity distribution, R12.6 billion for roads and possibly another R5.5 billion for public transport (all in 2008 values).

Figure 31 shows that for the metros as a group, 23 per cent of the capital requirement is for roads infrastructure, 15 per cent for water, 14 per cent for public transport, 14 per cent for sanitation, and 14 per cent for electricity. These five sectors account for 80 per cent of the total requirement.

Figure 31: Estimated eight-city infrastructure spending requirements by category (%)



5.3 City fiscal capacity and the projected fiscal gap

The 10-year fiscal capacity of the various city governments can be estimated by calculating annual projected “free” cash flows using various standard assumptions about operational costs and revenues, government grant revenues, and taking existing debt service commitments into account. The 2010 annual financial statements are used as a starting point, detailed debt schedules per city are captured, reasonable financial and administrative assumptions (such as for government operating and capital grants) are decided, and the resulting net free cash flows before new borrowing are projected over 10 years.¹⁴

Free cash flows are used to finance infrastructure, and are therefore a key indicator of the financial capacity of city governments. Infrastructure can be financed directly or geared up through further borrowing. However, it is more accurate to compare this with the total free cash flow over 10 years,¹⁵ because different cities have different borrowing capacities, and the projected infrastructure need has been calculated as the sum of a stream of annual capital costs over a decade.

Table 33 summarises the results of this assessment of Nelson Mandela Bay, eThekweni and Johannesburg. On current projected cash flows, these city governments will be able to afford between 41 per cent (Nelson Mandela Bay) and 65 per cent (eThekweni) of the projected capital expenditure requirements. These funding gaps are uncomfortably large.

Table 33: Estimated 10-year funding gap of three city governments (current R billion)

	Nelson Mandela Bay	eThekweni	Johannesburg
Free cash flow before new borrowing	16.173	65.807	76.823
Total capital expenditure need	-39.657	-101.770	-134.772
Funding gap	-23.484	-35.963	-57.949
Funding gap %	-59%	-35%	-43%

¹⁴ The model used here is a proprietary financial capacity assessment instrument developed by HvR and Afcap and applied to three cities. None of the city governments themselves are implicated in the values presented here or the assumptions and projections on which they are based.

¹⁵ To borrow is to push costs into the future. While this is entirely appropriate for long-term city infrastructure, for our present purposes (to assess city fiscal capacity over 10 years), to assume borrowing would misleadingly hide some costs in the future, by which time there will be new infrastructure needs to address.

City governments can reduce this gap and improve their own free cash flows with their own efforts. Such efforts include higher collection rates, reducing under-billing, increasing tax and tariff rates in excess of the inflation rate, making greater use of development charges and improving expenditure efficiencies that reduce cash out flows. The funding gaps can be discounted by estimating the potential of the cities' own efforts to close these gaps. Such estimates should be ambitious, yet realistic.

Each city government is starting from a different position. For example, eThekweni has operated at higher average collection rates than Johannesburg, and cannot be expected to generate as much further cash flow improvement from this source as Johannesburg.

Table 34: Adjusted 10-year funding gaps (current R billion)

	Nelson Mandela Bay	eThekweni	Johannesburg
Funding gap	-23.484	-35.963	-57.949
Minus: reduced under-billing	0.666	0.748	1.972
Minus: improved collection rates	1.882	1.503	11.139
Minus: tariff increases in excess of inflation	0.399	1.496	2.066
Minus: expenditure efficiencies	0.534	1.731	2.336
Minus: increased use of developer contributions	0.047	0.447	0.497
Remaining funding gap	-19.956	-30.039	-39.940
Remaining funding gap %	-50%	-30%	-30%

Table 34 presents estimates of the extent to which the city governments could close their respective funding gaps themselves, taking into account their different starting points. Ambitious but realistic improvement targets are applied and the 10-year cash flow improvements generated. Even after accounting for projected improvements, funding gaps of 30 per cent to 50 per cent remain.

5.4 Conclusion: closing the gap

The early post-apartheid intention was that metropolitan city governments would have sufficient financial resources at their disposal to finance their assigned expenditure responsibilities (the city equitable share grants were very small). But it is increasingly clear that this is not the case. And although national grants have recently started to play a more important role in city government budgets (even after discounting for World Cup-related and RSC-replacement grants), it is not the ideal way to close the gap.

South Africa's cities should function effectively as built environments. Accordingly, city governments should be fully empowered with built environment functions, including transport and housing. Yet local governments may be incapable of providing the built environment services that are required to support population growth and economic development. This incapacity will constrain growth and development, and worsen the living and working environments in cities. This is a key fiscal capacity challenge.

Because the cities account for such a large share of the national economic product, city governments should, with the correct revenue instruments, be able to finance their own infrastructure and development requirements.

City governments that are fully responsible for built environment functions, with revenue powers to match, will be more accountable to city residents and businesses for its performance. Cities that rely on their own revenue resources must also take care to manage that relationship correctly.

City governments should be assigned additional revenue powers, rather than additional grant funding, to close the gap between their expenditure responsibilities and their own revenue resources.



PHOTOS: MEDIA CLUB SOUTH AFRICA - CHRIS KIRCHHOFF

Conclusion:
Strengthening city
finance in South Africa

6. Conclusion: strengthening city finance in South Africa

Total real city revenue and expenditure increased rapidly over the past five years, easing off only slightly as World Cup capital spending came to an end.

Non-tariff revenue sources have undergone a large shift. City governments successfully managed the transition from a variety of valuation bases to a common system based on full market value (though real property tax revenues were stagnant). RSC levies were abolished and replaced, first by a compensatory grant, and then by an origin-based share of the fuel levy. In addition, government grants have greatly increased in real terms.

Expenditure on bulk supplies and remuneration have been the major contributors to city financial growth in recent years. City capital expenditure has been historically exceptional, particularly between 2007 and 2010. Transport and World Cup-related infrastructure spending, mostly financed by the cities themselves, has been unprecedented. Total city borrowing grew by 50 per cent over three years.

The financial position of the city governments was considerably more precarious at the end of 2010 than at the end of 2006. Households and business have struggled to pay municipal accounts due to rising bulk supply and remuneration costs, which have squeezed operating margins and eroded cash balances. The recent surge in infrastructure spending has contributed to fiscal strain in some cities. However, the cities are resilient, and some performance indicators are improving even as their overall position is worsening.

Deficiencies in the intergovernmental fiscal framework have put city governments at a disadvantage, which accounts for at least part of the financial challenges that they face. Cities carry responsibility for unfunded mandates of 3 per cent to 4 per cent of their operating revenues – significant amounts that put additional pressure on municipal finances.

Other factors placing strain on city governments include city housing programmes, the need for effective infrastructure asset management plans, and the implications of climate change and other environmental considerations. These issues have not been addressed in this report.

Estimated expenditure requirements, taking projected population and economic growth into account, along with the devolution of public transport and housing functions to the cities, make it clear that cities' fiscal capacity will not be able to sustain the necessary expenditure. The fiscal gap is both real and large (30 per cent to 50 per cent of city operating revenues).

City governments will need to work to improve their financial position through higher collection rates, reduced under-billing, increasing tax and tariff rates in excess of the inflation rate, greater use of development charges and achieving expenditure efficiencies.

Despite these efforts, a significant fiscal gap will remain. This gap will need to be closed with a new city revenue source, rather than additional grant funding. South Africa has recently taken several steps to empower city governments, but the implications of new responsibilities require a further step: assigning an additional own revenue source to city governments.

ACRONYMS

ADAM	Approach to Distribution Asset Management
EDI	Electricity Distribution Industry
GAMAP	Generally accepted municipal accounting practice
GDP	Gross domestic product
PRASA	Passenger Rail Agency of Southern Africa
RSC	Regional Service Council
SACN	South African Cities Network

ANNEXURE 1: STATISTICAL AND ACCOUNTING NOTES

1. Adjusting for inflation

Financial quantities reported in city annual financial statements and other sources were captured in nominal terms (as reported) and converted to constant 2008 values according to the following table, derived from Statistics SA's consumer price index for all urban areas, with 2008 as the base year. The annual conversion factors are specifically for June each year (financial year-end).

	2003	2004	2005	2006	2007	2008	2008	2010
CPI - June	76.9	77.8	80.0	83.9	89.8	100.1	107.0	111.5

Assuming that the equivalent index for June 2011 will be 120, a reader wishing to convert 2008 rand values into current (2011) values should increase the 2008 value by 20 per cent (multiply by 1.2).

2. Audit opinions

As the data presented derives to a large extent (especially in Section 2) from the published annual financial statements of the city governments concerned, it is important to be aware of the audit status of those sources. The formal audit opinions of the Auditor-General for the city governments for 2009 and 2010 are set out below.

	Audit outcome	
	2009	2010
Johannesburg	Audit not finalised at legislated date	Financially unqualified with no findings
Cape Town	Financially unqualified with no findings	Financially unqualified with findings
eThekweni	Financially unqualified with findings	Financially unqualified with findings
Tshwane	Financially unqualified with findings	Qualified
Ekurhuleni	Financially unqualified with findings	Financially unqualified with findings
Nelson Mandela Bay	Financially unqualified with findings	Financially unqualified with findings
Mangaung	Disclaimer	Disclaimer
Buffalo City	Disclaimer	Qualified
Msunduzi	Qualified	Qualified

The failure to finalise Johannesburg's audit is of particular concern. This report relies upon data from the draft submitted to the Auditor-General, and it is possible that material changes may occur once the audit is finalised. For the city governments that are financially unqualified, with or without findings, there should be no serious data concerns. Accounts that are disclaimed or qualified may still be broadly reliable from the perspective of the financial analysis presented here.

3. Operating surpluses

Operating revenue is defined for the purposes of this report as all revenues taxes (including property rates, RSC levies, fines, and other tax revenue) and service charges (electricity, water, sewerage, cleansing, and other service charges), as well as the equitable share and other operating grants. It excludes interest earned on investments and on outstanding debtors, capital and conditional grants, public contributions and other non-operating revenues, as these are considered to be capital revenues.

Operating expenditure is defined for the purposes of this report as employee-related costs, remuneration of councillors, provision for bad debts, repairs and maintenance, bulk purchases, and other operating expenditure. It excludes depreciation, interest and other non-operating expenditure.

The operating surplus is the difference between operating revenue and operating expenditure, and the adjusted operating surplus is calculated on the assumption that the city had made bad debt provisions equal to 60 days worth of billings, rather than the provision that was actually made.

The interpretation of surpluses posted by cities is difficult, because capital grants are included in total revenue (both in the cash flow statement and statement of financial performance). This also affects net cash from operating activities, resulting in an overstatement of operational cash surplus, as well as debt cover and interest cover ratios.

In terms of Generally Recognised Accounting Practice guidelines, once the capital item of property, plant or equipment has been constructed, the conditions of the grant have been met and the grant is then transferred to revenue in terms of Generally Accepted Municipal Accounting Practice (GAMAP 9). At the end of the financial year, a transfer is made from the accumulated surplus, equal to the grant used, to a government grant reserve. This reserve is used to offset future depreciation relating to the item of property, plant or equipment. The problem that arises when interpreting financial statements is that the transfer to the government grant reserve happens after the posting of the net surplus on the statement of financial performance. In analysing the results, this should be kept in mind, as the picture looks very different – especially from a cash flow perspective and surplus perspective.¹⁶

¹⁶ Heymans, K (2011), e-mail communication.

ANNEXURE 2: SOURCES

Annual financial statements of the nine city governments.

Cameron, JWM et al (2005) *Transport performance indicators: benchmarking Tshwane against world cities*, South African Transport Conference, Pretoria, July.

Department of Energy (2011) *Strategic Plan 2011/12 – 2015/16*.

Department of Transport (2004) *The First South African National Household Travel Survey 2003; Key results of the National Household Travel Survey*.

Department of Transport (2007) *Initial Transport Operational Plan for the 2010 FIFA World Cup*. Pretoria: Department of Transport.

Department of Transport (2008) *1st Host City Task Team for 2010 FIFA World Cup*. Pretoria.

Electricity Distribution Industry Restructuring Committee (EDIRC) (2004) *'Reform of the Electricity Distribution Industry (EDI) in South Africa: Strategy and Blueprint*.

Grant Thornton (2011) *FIFA 2010 World Cup™ Economic Impact Assessment - Executive Summary*. Johannesburg : Grant Thornton, 2011.

Gordhan Pravin (2011) 2011 Budget speech INTERNET <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=16483&tid=28773> accessed on August 18, 2011

Heymans, K (2011), e-mail communication.

IHS Global Insight (2010): *Estimates derived from Regional eXplorer 530 (2.3g): Gross Domestic Product by Region (GDP-R) Average annual growth rates (constant 2005 prices)*

Lombard I (2009) *Sustainability analysis of a newly constructed stadium for the 2010 FIFA World Cup compared to the upgrade of an existing stadium*. Pretoria : University of Pretoria.

National Treasury (2011) *Estimates of National Expenditure* INTERNET <http://www.treasury.gov.za/documents/national%20budget/2011/ene/FULLENE.pdf> accessed on August 18, 2011

Parliamentary Monitoring Group (2010) *Future of Stadiums: Host Cities, SA Football Association & SA Rugby Union briefings*. <http://www.pmg.org.za/report/20100817-host-cities-south-african-football-association-and-sa-rugby-union-fut>. August 17, 2010.

SACN (2011) *State of the Cities Report 2011*, South African Cities Network, Johannesburg, May.

Theron, Paul (ed) (1992) *Proceedings of the ANC National Meeting on Electrification 6-7 February 1992*, University of Cape Town African National Congress Department of Economic Planning: Centre for Development Studies.

White Paper on the Energy Policy of the Republic of South Africa.