

Infrastructure Stimulus Package – Development Outcomes

Setting the Scene

Presentation to the Infrastructure Dialogue

18 November 2010

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Agenda

- Introduction
- Background - The developmental state
- The national infrastructure programme
- Key issues - The nature of infrastructure development

Introduction

- The objective of this presentation is to introduce a debate (not necessarily to provide any easy answers!) ...
 - How do we understand the “developmental state” with respect to infrastructure?
 - How are we performing as a country in respect of infrastructure and developmental outcomes?
 - How do we balance the tension between the primary mandate and developmental objectives of infrastructure development?

- This presentation offers a high-level introduction - the other speakers will offer insight from some real examples in the South African context

Background - The Developmental State

Defining the Developmental State

- Concept of the “developmental state” evolved from an analysis of East Asian states, led initially by an assessment of Japan’s post war reconstruction and reindustrialisation
 - Characterised by the “plan rational state” ...
 - Determined to influence the direction and pace of economic development by directly intervening in the development process rather than relying on the uncoordinated influence of market forces to allocate economic resources
 - Establishing substantive social and economic goals to guide the process of development and social mobilisation
 - Key success factors ...
 - Competent bureaucracy dedicated to devising and implementing a planned process of economic development
 - Need a pilot agency (e.g. classic case of MITI in Japan)
- Significant debate about the developmental state and its current relevance ... but Beeson (2003) amongst other argues that ...
 - The historical record is strong in favour of the developmental state and notes the central role played by states in all countries that have experienced successful economic development (including the UK and US);
 - The debate about the developmental state is misconceived: *all states are* developmental in the sense that government policy is designed to encourage economic growth; the perennial question remains about the best way to achieve this, especially for economies that are ‘under-developed’;
 - Even the World Bank in its *The State in a Changing World*, highlights many of the potential positives of state intervention: accelerating targeted economic development through industry policies, subsidies and effectively monitored business-government relations, and by investing in basic social services and infrastructure.

Source: Beeson (2003)

Background - The Developmental State

The Developmental State in South Africa

- Arguably the “developmental state” in South Africa can be traced back to the development strategy was first articulated in the 1994 *Reconstruction and Development Programme (RDP)* programme ...
 - Aimed to link growth, development, reconstruction, redistribution and reconciliation into a “unified program” held together by a broad infrastructural programme that would focus on creating and enhancing existing services in the electricity, water, telecommunications, transport, health, education and training sectors.
 - Put emphasis on programmes to meet basic needs and enhance human resource development, placed a major emphasis on social infrastructure and development programmes that address poverty and inequality.

- Vision continues to be pronounced in various policies and initiatives ...
 - “Balance between social development and sound economics” , Minister Manuel, 2004
 - “Accelerated and shared growth”, AsgiSA 2006
 - “A South African developmental state ... whilst acting effectively to promote growth, efficiency and productivity, it must be equally effective in addressing the social conditions of the masses of our people and realising economic progress for the poor”, Commission Report of the ANC National Policy Conference of 2007
 - 2010 Outcomes approach being driven by the Presidency

The National Infrastructure Programme

Accelerated and Shared Growth Initiative for South Africa

- Despite relatively strong economic growth between 2002 and 2007 (an average of 4.7% per annum) and the development of an expanded welfare net, large scale unemployment and poverty remains a dominant feature of the South African economy ...
 - As the DBSA notes, “the challenge is to shape public investment programmes in ways that support both sustained growth and a more inclusive economy ...”

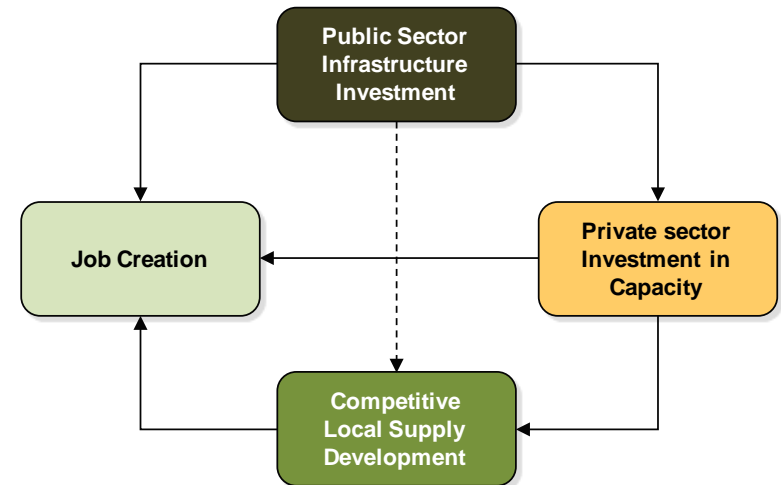
- Against this background government launched the Accelerated and Shared Growth Initiative for South Africa (AsgiSA) in February 2006:
 - Speeding up delivery and economic growth
 - More rapid and equitable distribution of opportunities and benefits
 - Based on 2003 Presidential Growth and Development Summit investigations and independent research ...
 - Indicated a growth rate needed to achieve social objectives around 5% on average between 2004 and 2014
 - Additionally social objectives require an improved environment and opportunities for more labour-absorbing economic activities

The National Infrastructure Programme

Planned Expenditure & Objectives

- The national public sector infrastructure programme in the latest MTEF is estimated at R 845.6 billion between 2010 and 2013 (R 1467 billion cumulative since 2006/7)
- The importance of this programme extends beyond the primary mandate of infrastructure development and encompasses a range of developmental outcomes ...

- Basic infrastructure service delivery
- Economic infrastructure in support of economic growth
- Opportunities for localisation
- Opportunities for job creation



- Government views the public sector investment programmes as key vehicles for accomplishing the goals of the Accelerated and Shared Growth Initiative for South Africa (AsgiSA) and achieving GDP growth
- Government also expects the significant investment in infrastructure to substantially contribute to job creation and poverty reduction as well as the development of competitive local industry

The National Infrastructure Programme Expenditure – Current and Planned

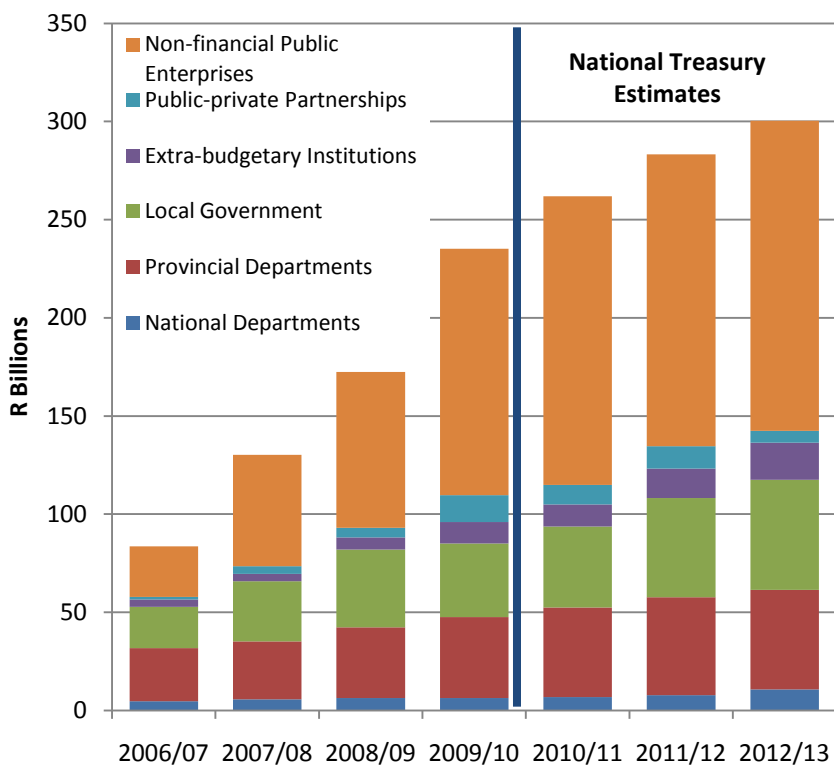
Description	2006/07			2007/08			2008/09			2009/10			2010/11	2011/12	2012/13
	Budget	Actual	% Spent	Budget	Actual	% Spent	Budget	Actual	% Spent	Budget	Actual	% Spent	Estimate	Estimate	Estimate
	R Billions	R Billions	%	R Billions	R Billions	%	R Billions	R Billions	%	R Billions	R Billions	%	R Billions	R Billions	R Billions
National Departments	8.9	4.6	-48%	5.8	5.7	-2%	6.4	6.3	-2%	8	6.4	-20%	6.8	7.8	10.7
Provincial Departments	32	27.1	-15%	35.4	29.4	-17%	36.9	36.1	-2%	39.9	41.2	3%	45.6	50	50.8
Local Government	26	21.1	-19%	28.2	30.7	9%	31.2	39.6	27%	49.5	37.5	-24%	41.3	50.4	56
Consolidated Government	66.9	52.8	-21%	69.4	65.8	-5%	74.5	82	10%	97.4	85.1	-13%	93.7	108.2	117.5
Extra-budgetary Institutions	4.1	3.7	-10%	5.3	3.7	-30%	4.5	6.2	38%	7	10.9	56%	11.2	15.1	18.8
Public-private Partnerships	3.8	1.3	-66%	3.5	3.9	11%	8.5	4.9	-42%	13.9	13.8	-1%	9.9	11.4	6.1
General Government	74.8	57.8	-23%	78.2	73.4	-6%	87.5	93.1	6%	118.3	109.8	-7%	114.8	134.7	142.4
Non-financial Public Enterprises	37.7	25.7	-32%	44.7	56.8	27%	71.2	79.4	12%	119.6	125.5	5%	147	148.7	158
Annual Total – Public Sector	112.5	83.5	-26%	122.9	130.2	6%	158.7	172.5	9%	237.9	235.3	-1%	261.8	283.4	300.4
Cumulative Total – Public Sector	112.5	83.6	-26%	235.4	213.8	-9%	394.1	386.3	-2%	632	621.6	-2%	883.4	1166.8	1467.2
Annual % Increase in Budgeted and Actual Total Public Sector Spending				9.24%	55.93%		29.13%	32.49%		49.91%	36.41%		10.05%	8.25%	6.00%

Source: SPAID Infrastructure Tracker 2010

The National Infrastructure Programme

The consolidated outlook for public infrastructure spending

■ Historical and estimated public sector spending on infrastructure



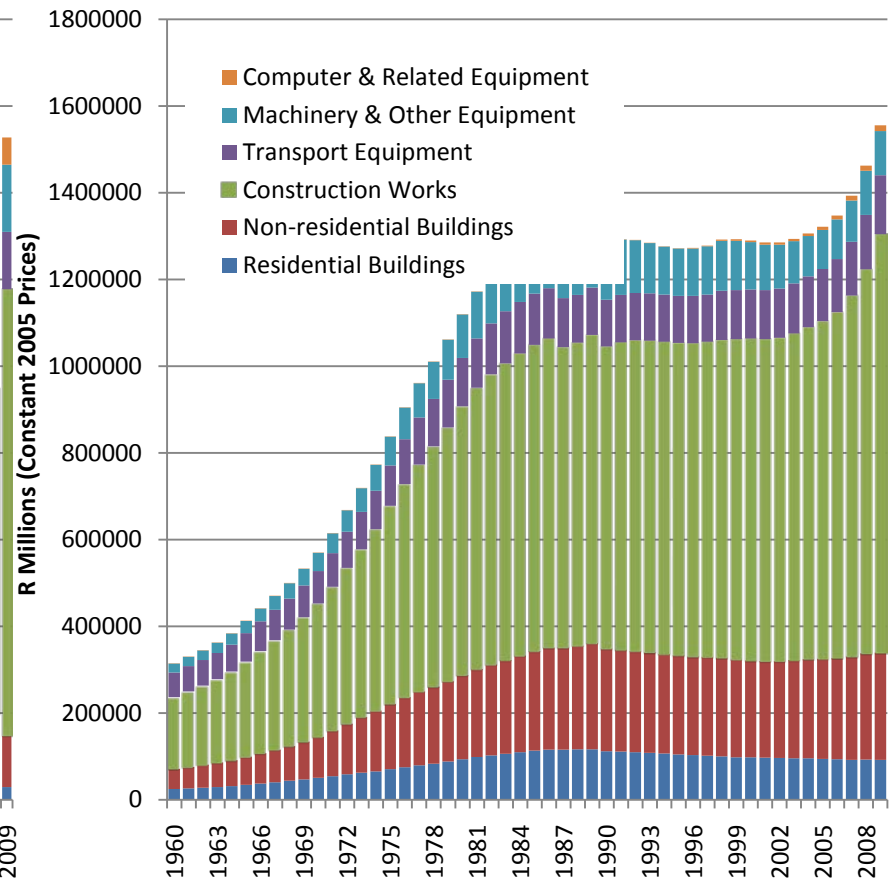
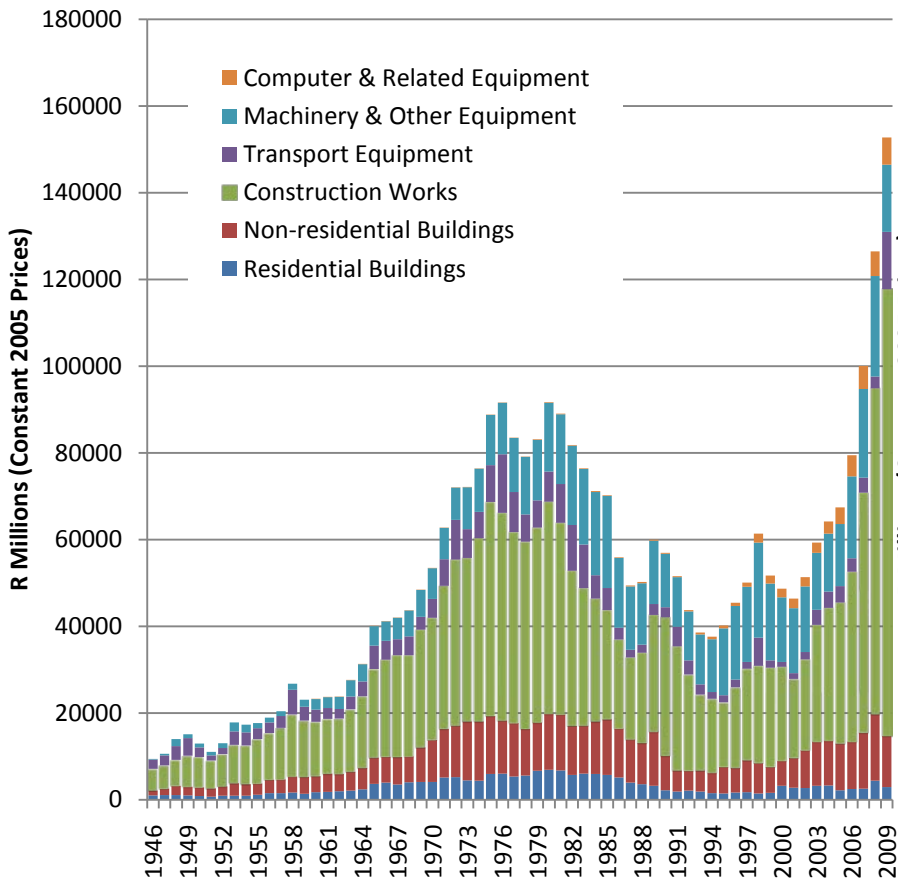
- Between fiscal 2006/07 and 2009/10, public sector infrastructure spend rose from almost R84 billion to R235 billion – an average annual increase in nominal terms of 41%.
- The outlook for fiscal 2010/11 to 2012/13 is for average growth of only 8.5% a year in nominal terms.
- Spending growth to be driven by extra-budgetary institutions (20% p.a.), national departments (19% p.a.) and local government (14% p.a.), but the value of public-private partnerships is expected to contract by an average of almost 24% a year.

The National Infrastructure Programme

Public sector capital formation trends in a historical context

■ Fairly dramatic rise in real fixed capital formation ...

■ ... but the increase in the real fixed capital stock has been less impressive

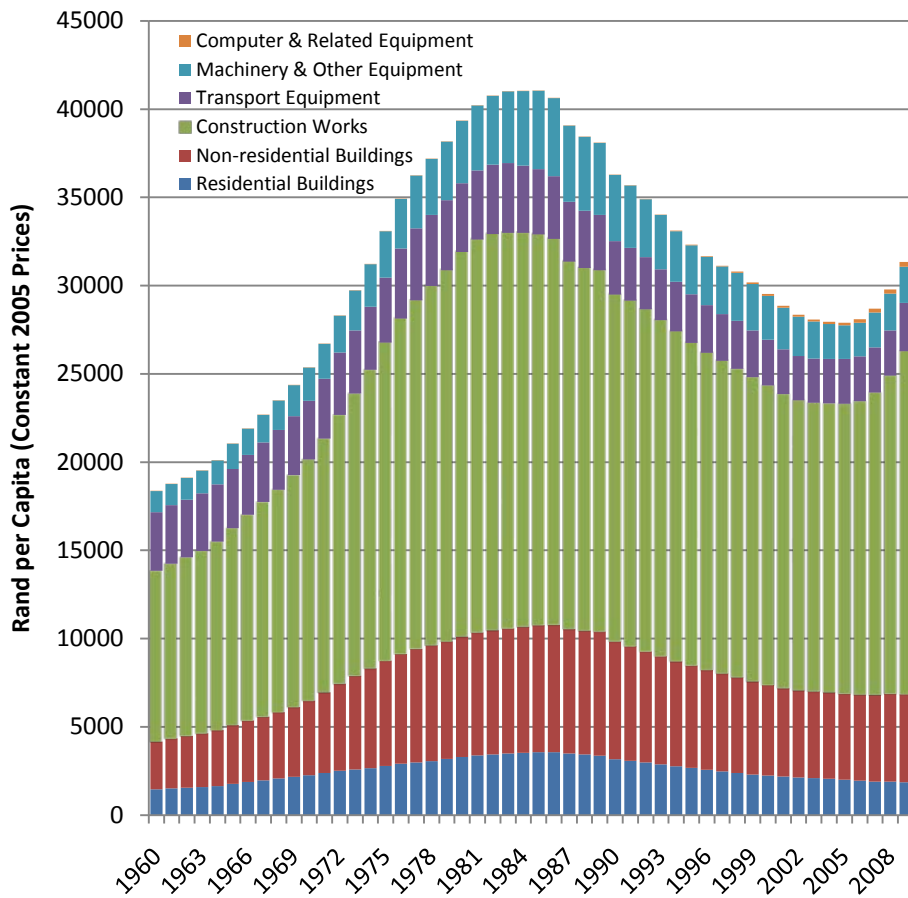


Source: SPAID Infrastructure Tracker 2010

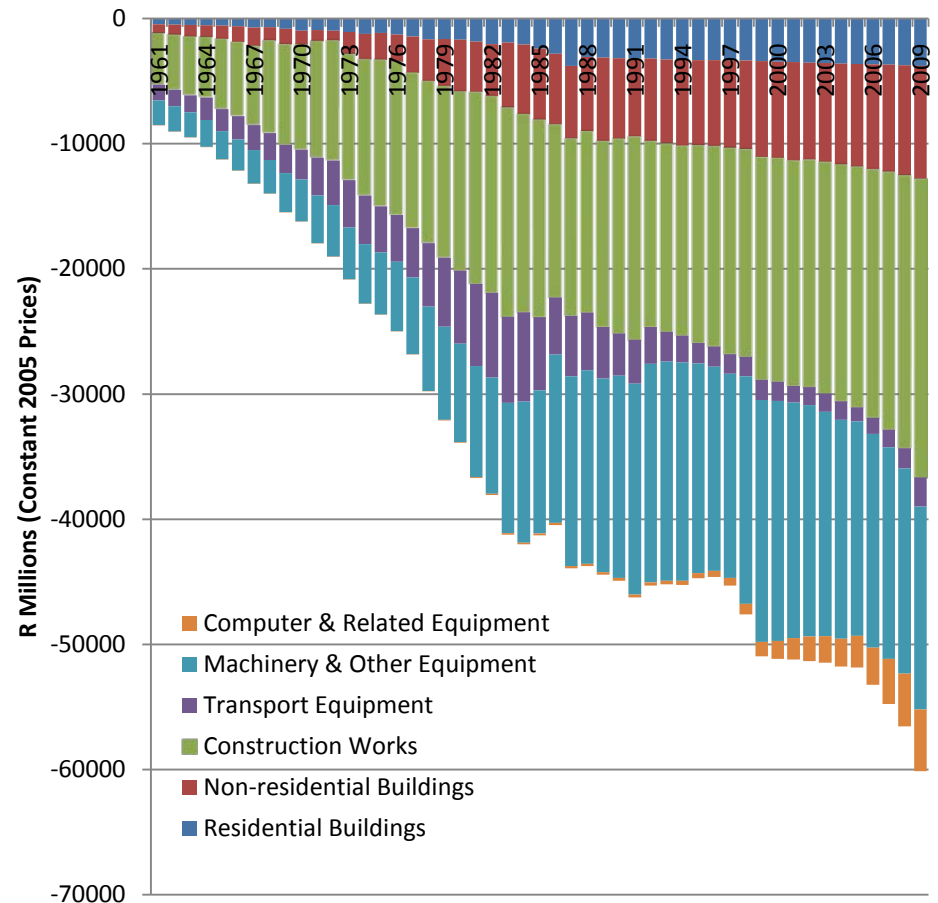
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Public sector capital formation trends in a historical context

■ On a per capita basis spending is well below the 1984 peak ...



■ ... and the public sector needs to spend around R60 billion a year just to maintain the existing capital stock

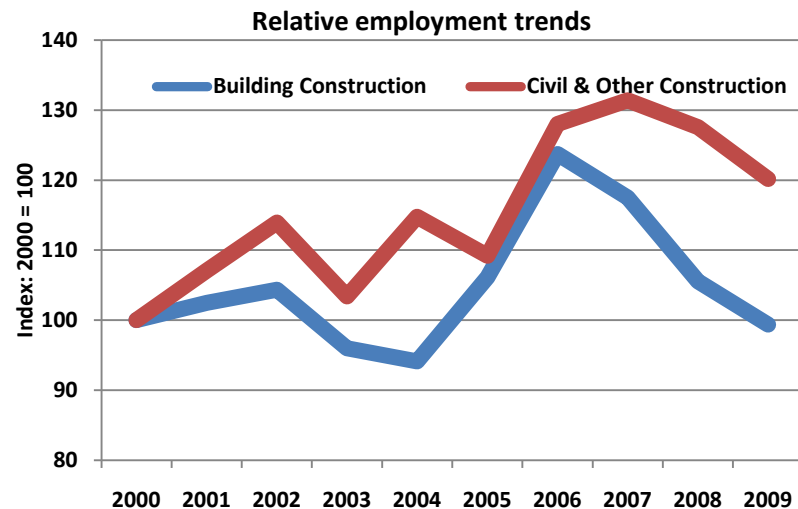
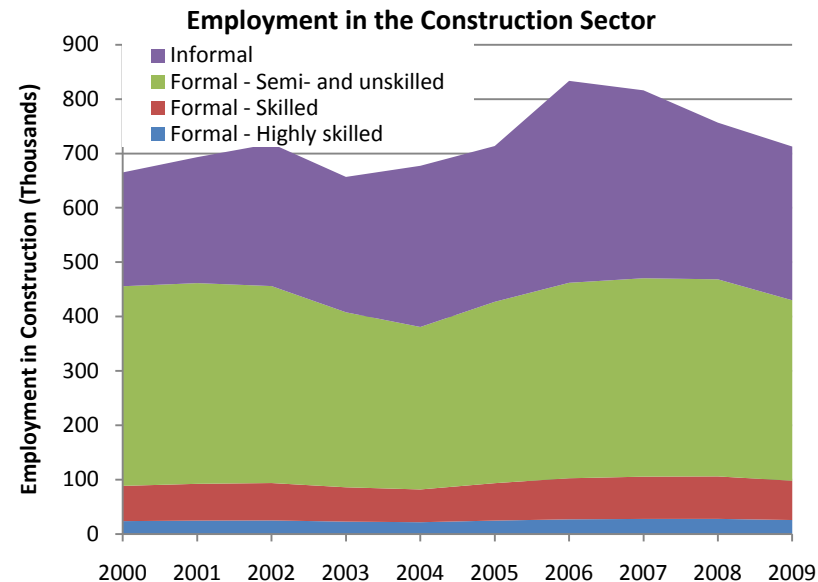


Source: SPAID Infrastructure Tracker 2010

The National Infrastructure Programme

Employment in the construction sector

- Available employment estimates suggest a decline in total employment in the construction sectors since 2006 – due mainly to significant declines in informal employment.
- The number of formally-employed semi- and un-skilled workers increased to 365,000 by 2007 before slipping back to around 332,000 in 2009. The number of highly skilled workers only increased by around 2,000 over the full period, while that of skilled workers increased by around 7,500.
- Employment levels in civil and other construction rose faster and declined less than building construction. The latter is now at the same level as 2000, while civil and other construction employment is still 20% higher



Source: SPAID Infrastructure Tracker 2010

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Economic impact

- Estimated impact on the whole economy of general government infrastructure spend in fiscal 2009/10

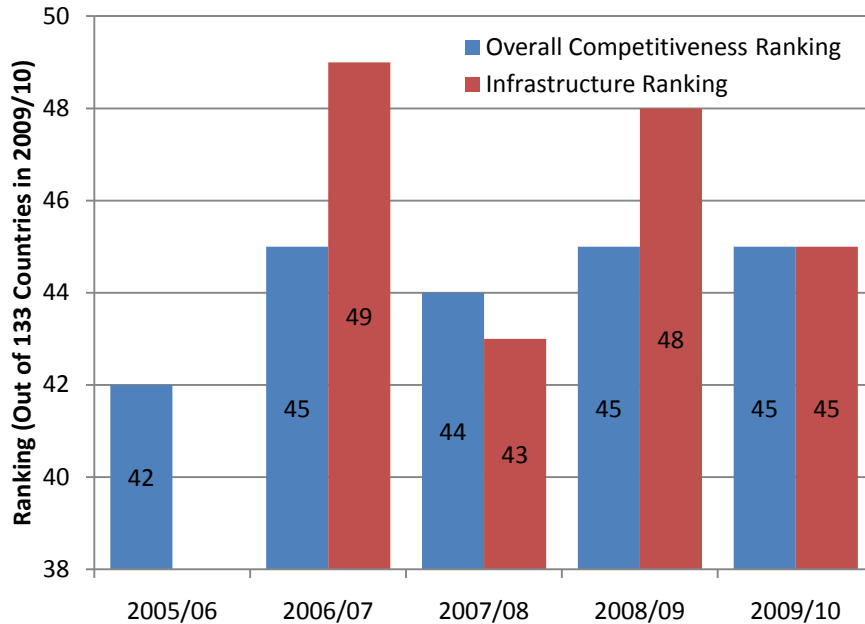
Effects Arising from Construction-related Infrastructure Spending by General Government of R51 347 million	R Million						
	Initial impact	First round	Direct impact	Indirect effect	Direct & indirect impact	Induced impact	Economy-wide impact
Sales	51,347	34,324	85,671	32,506	118,176	76,114	194,291
Gross domestic product (At basic prices)	14,437	10,246	24,682	11,413	36,095	28,681	64,776
Labour remuneration	6,849	4,300	11,149	4,652	15,801	12,212	28,012
Gross domestic fixed capital formation required (Average)	1,858	2,969	4,827	3,195	8,022	7,108	15,130
Employment (Jobs supported)	161,507	70,038	231,545	62,771	294,317	190,433	484,749

Source: SPAID Infrastructure Tracker 2010

The National Infrastructure Programme

Infrastructure and country competitiveness

Competitiveness Rankings



Year	Ranking Out of 134 Countries in Respect of:							
	Quality of Overall Infrastructure	Quality of Roads	Quality of Railroads	Quality of Ports	Air Transport	Available Seat Kms	Quality of Electricity Supply	Telephone Lines
2007/08	43	38	41		22	21		
2008/09	46	40	37	49	25	21	101	91
2009/10	43	40	40	49	23	23	100	91

- South Africa yet to see significant progress in overall competitiveness despite increased spending on infrastructure, but
 - Relative to other countries, much of the spend not completed – may be making things worse in interim
- Overall quality of infrastructure on par with country competitiveness ranking. Roads and railroads better than par – but slipping. Air transport good. Electricity and telephone lines undermine competitiveness

Source: SPAID Infrastructure Tracker 2010

Key Issues – Nature of Infrastructure Development

Infrastructure's Potential

- The contribution of infrastructure delivery to economic growth and job creation is well established. Studies point to the following benefits of infrastructure delivery:
 - **Lowers transaction costs: Infrastructure lowers transaction costs by** facilitating flows of information and goods, and interactions between markets;
 - **Creating Economic Linkages: Infrastructure investment creates the** potential for economic linkages. In particular, the ability to move goods makes investment viable
 - **Concentration of Economic Activity: The provision of infrastructure** concentrates economic activity spatially, thus supporting backward and forward linkages
 - **Responding to change: Dependent on the quality of infrastructure delivered,** economies undergoing restructuring are able to respond to shocks, competitive pressures and value-added production.
 - **Improving productive capacities: Access to infrastructure services could** improve the capacities for producing goods and services in communities
 - **Creating Wealth: Irrigation systems, transport routes and other infrastructure** outcomes hold the potential for creating viable assets and markets;
 - **Jobs: Infrastructure expansion creates jobs during construction phase, and** maintenance.
 - **Boosts Demand: Infrastructure expansion also boosts demand in the** economy, thus supporting forward linkages.

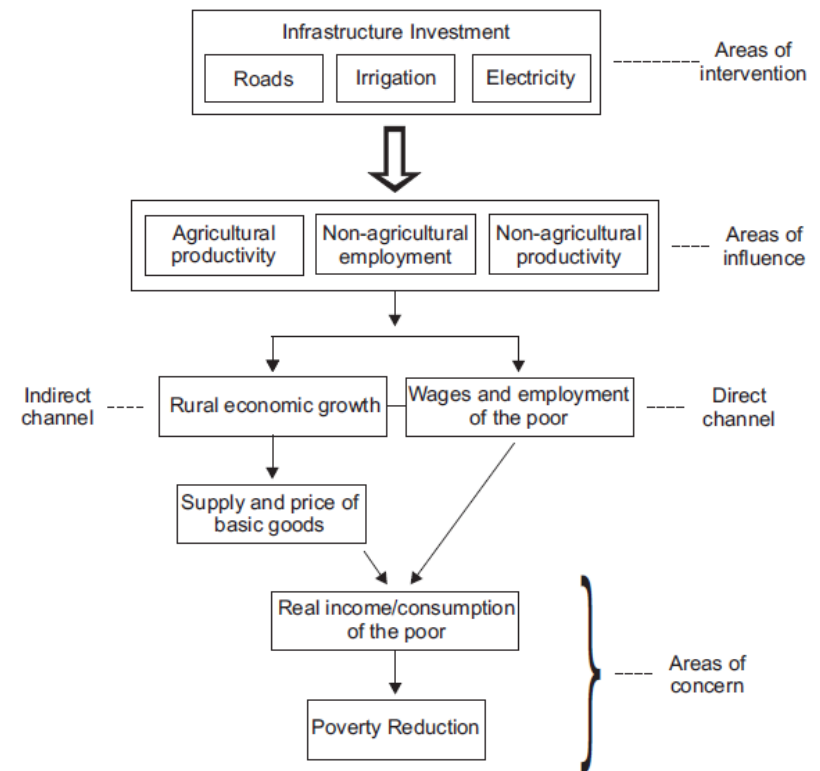
Source: Hassen 2000

Key Issues – Nature of Infrastructure Development

What do we know?

- A number of econometric and other studies reveal strong correlations between infrastructure investment and development ...
 - Significant impact of roads on poverty reduction through economic growth
 - Poverty incidence falls with GDP growth
 - Wages and employment increase
 - Irrigation contributes significantly to productivity and wages reducing poverty and income inequality
 - Electricity linked to direct increases in employment and incomes
 - Sanitation linked directly to improved health outcomes, higher worker productivity

Simple Analytical Framework Depicting the Links between Infrastructure and Poverty Reduction



Source: Ali & Pernia, 2003; DBSA 2009

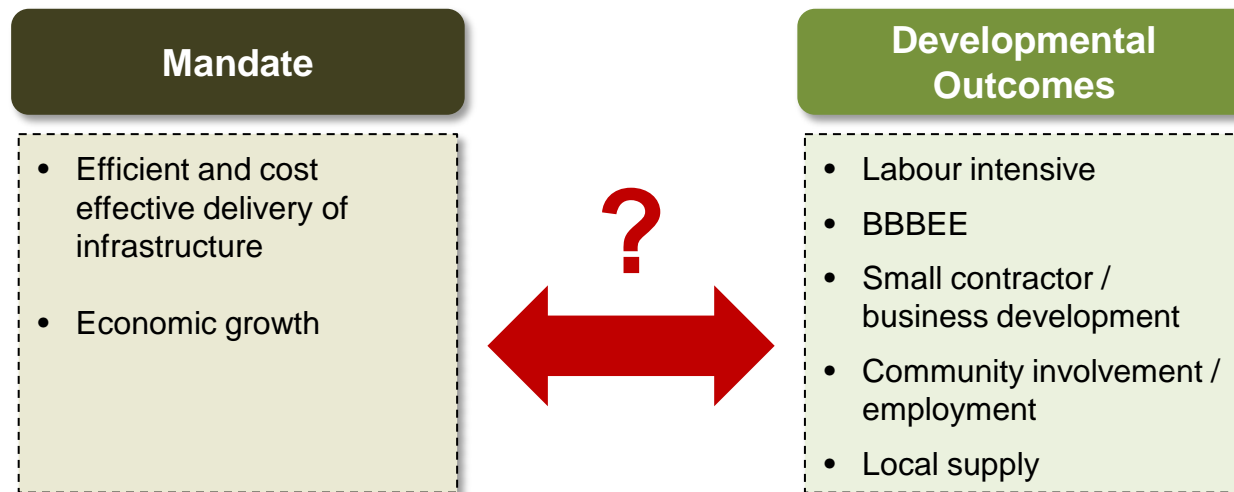
Key Issues – Nature of Infrastructure Development

Infrastructure, Economic Growth & Poverty Reduction

- While it is generally agreed that infrastructure investment contributes critically to efficiency and economic growth ...
 - Infrastructure's potential to support pro-poor growth (**downstream impact**) depends upon:
 - Creating infrastructure **assets that give the poor access** to markets and lower their production and transaction costs
 - **Maximising the use of labour-intensive technologies** to implement public investment projects by the government generally and by public enterprises
 - **Involving the poor directly in public works projects** by hiring poor people in the construction, maintenance and delivery of infrastructure services
 - Investing heavily in the **construction of social sector assets**, such as schools and health clinics, and in accessible and affordable economic services to the poor, such as housing, transportation and sanitation
 - Using the rise in government revenue – due to increased economic growth – to help establish and finance institutions that help the poor and vulnerable, such as **social security, school feeding and transportation subsidies**
 - Infrastructure development can also have significant **upstream impact**, increasing both the demand for labour and inputs ... but this is dependent on the design of programmes, in particular the choice of technologies and procurement strategies
 - Labour intensity will be different in large technology-intensive projects and small community-based projects
 - Labour-intensive methods require substantial adjustments in planning, contacting and management mechanism
 - Multiplier impact of public investment is highly dependent on the extent to which inputs are procured locally or imported

Key Issues – Nature of Infrastructure Development Mandate versus Developmental Objectives

- The direct outcomes (primary mandate) attributable to infrastructure investment do not appear to be in dispute, however ...
- There are question marks as to how to best achieve developmental outcomes such as pro-poor infrastructure development without compromising the primary mandate



- The international literature and experience does not offer much help ... but we do have some local innovative attempts: EPWP, CSDP

Key Issues – Nature of Infrastructure Development

The Challenges

- The experience of the Support Programme for Accelerated Infrastructure Development (SPAID) and other initiatives suggest that the issues of the primary mandate versus the developmental objectives is a key challenge in the South African context ... for instance ...
 - Poor delivery: Prioritising of developmental objectives (often linked political interference) at the expense of efficient and effective delivery
 - Lack of focus: Procuring contractors to deliver on multiple developmental outcomes or focusing on employment, gender and other targets as the primary metric at the expense of quality etc.
 - Proliferation of contracts / management burden: Utilising multiple small contracts with emerging contractors to deliver outputs
 - Rising costs: Facing demands for premiums from local suppliers and contractors

- The key challenges that arise are:
 - 1) How to balance and manage the mandate and the developmental outcomes?
 - 2) How do you prioritise outcomes in infrastructure projects?
 - 3) How to get the private sector to also act on outcomes as investor (especially given the size of private sector investment)?

Key Issues – Nature of Infrastructure Development

Key Success Factors

- Current experiences suggest a number of responses and key success factors ...
 - 1) A clear delivery and procurement strategy that gives effect to the balance of what you want to achieve, e.g. Limpopo infrastructure procurement strategy, SANRAL, etc.
 - 2) Setting clear objectives, targets and indicators for each outcome within a coherent prioritised broader national framework (Outcomes / RBM framework)
 - 3) Predetermining objectively verifiable performance indicators measured prior to contacting, coupled with well-defined and contracted performance targets
 - 4) Political support for a range of contracting approaches at all levels of government

Thank You !

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■ APPENDICES

Appendix 1

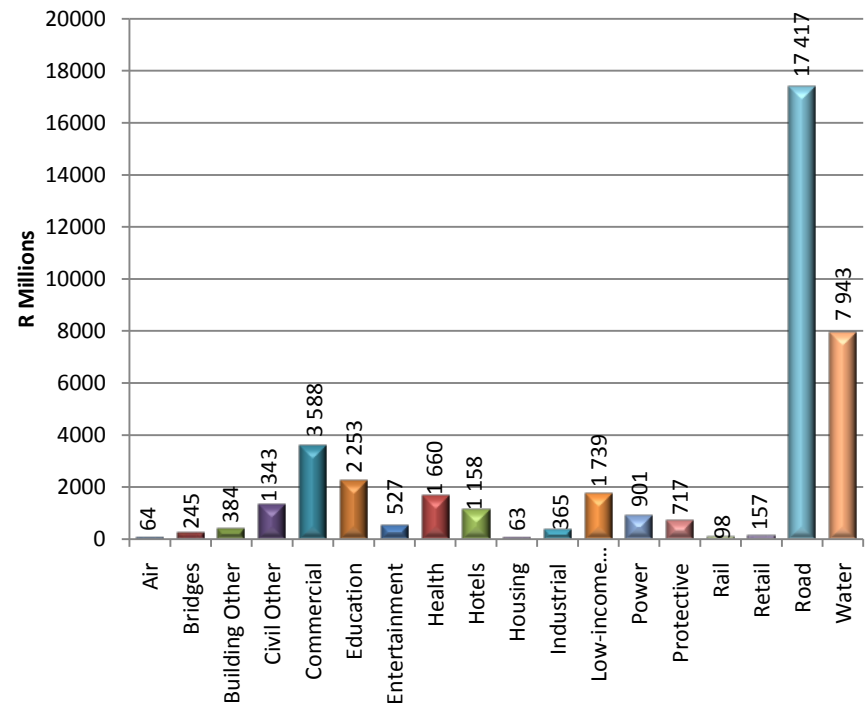
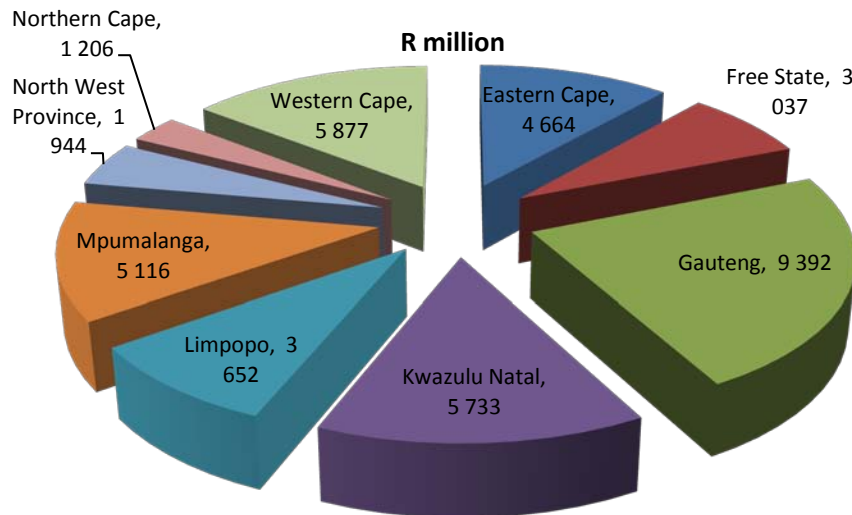
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Appendix

Public sector construction projects awarded in 2009

- Had a combined value of R40.6 bn – with R17.4 bn for roads, water (R7.9 bn), commercial (R3.6 bn) and education (R2.3 bn)
- Public sector construction projects worth R9.4 bn were awarded in Gauteng, followed by the Western Cape with R5.9 bn, Kwazulu Natal (R5.7 bn) and Mpumalanga (R5.1 bn)
- North West (R1.9 bn) and Northern Cape (R1.2 bn) had the lowest value of projects awarded



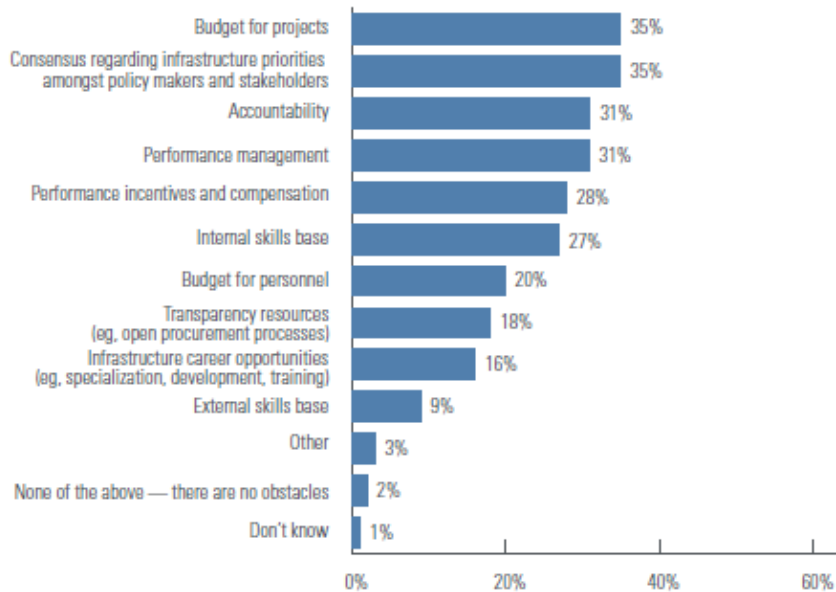
Source: SPAID Infrastructure Tracker 2010

Appendix 3

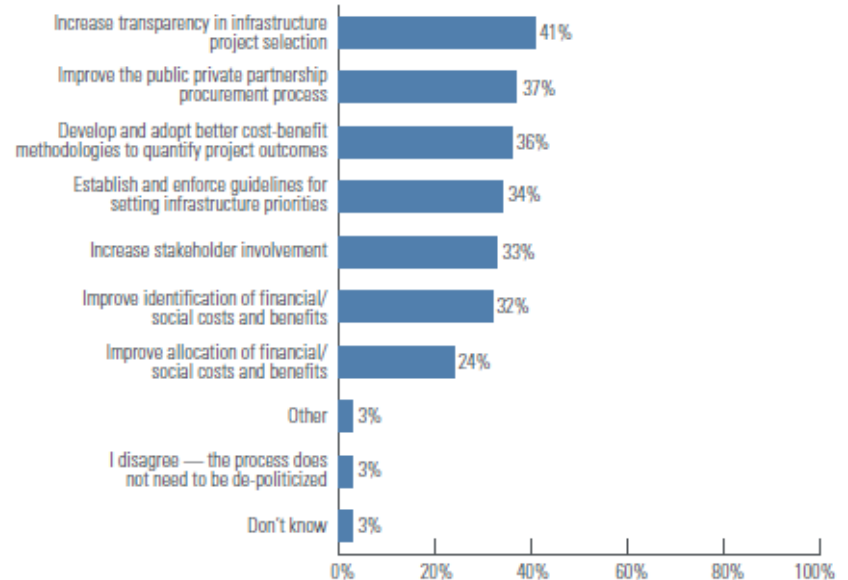
International Research

- 2010 KPMG study:
 - Private sector infrastructure providers considered politicization the greatest impediment to infrastructure investment (42%), and conversely
 - That de-politicizing the relevant policy processes was the most frequently cited method for improving government effectiveness in this area (45%)

Thinking about the jurisdiction for which you work, what are the greatest obstacles to the effectiveness of public sector management involved with infrastructure? (Select up to three)



Public Sector Suggestions for the Most Effective Ways to De-politicize Project Prioritization



Source: *The Changing Face of Infrastructure: Public sector perspectives*, KPMG International, 2010