



Strategic Plan: April 2010 – March 2011

Submitted to the GCRO Board

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Summary

- The Gauteng City-Region Observatory (GCRO) has been operational since December 2008, when an Executive Director was appointed; by May 2009, most of the current staff (research, technical and administrative) were in place, and a Research Director was appointed in July 2009. The Board approved a Strategic Plan for the final third of 2008/09 (December 2008 to March 2009) and a full Strategic Plan for the 2009/2010 year (April 2009 to March 2010). This Strategic Plan covers the period April 2010 to March 2011. At that stage, GCRO will have completed the first three-year funding and operational cycle, and the next three-year cycle will be ushered in with a more detailed, longer-term Strategic Plan. At that stage, both the Board of the GCRO and the Research Advisory Committee (RAC) will make inputs regarding a research agenda for the Gauteng City-Region (GCR) generally, and more specifically for the GCRO.
- As a result, **this Strategic Plan is a bridge between the building period of the first 16 months of GCRO's life, and the broader intellectual and applied programme that will take GCRO into its second cycle**, where the organisation needs a coherent intellectual programme that utilises the best academic standards and methods to assist provincial and local government; balances long-term applied and intellectual work with short-term, fast turn-around responses to policy needs of government; and ensures that we submit our work for peer review in journals, at conferences and in other gatherings where the academy (locally and internationally) can ensure that the GCRO is operating at the highest possible standards, and providing Government with outputs based on rigorous methods and data of the highest integrity.
- As such, where the theme of the 2009/2010 Strategic Plan was '*build, grow and consolidate*', the theme of the 2010/2011 Strategic Plan is '*adding substantial value to government and the academy*'. At one level, this is the *raison d'être* of the GCRO; here we mean it in a specific sense. The period December 2008 to March 2010 has seen GCRO commission major, **long-term data-gathering projects**, such as the Organisation for Economic Co-operation and Development's (OECD) Territorial Review of the Gauteng City-Region (GCR), the first-ever integrated sample survey of residents living across the entire GCR, and others. We have also put in place the necessary technological and research infrastructure; and have deployed them to serve short-term priorities of government (and society more generally) including benchmarking sub-national responses to the global crisis, the meaning of service delivery protests and their possible link to xenophobia, a colloquium on the implications of the global economic crisis, and so on.
- Now GCRO needs to **combine the already significant data resources at our disposal, apply the multiple methods that exist among the research staff members, and generate outputs that are of strategic long- and short-term importance to government – notably (but not exclusively) the Gauteng Planning Commission – as well as publishing in peer reviewed journals so that our methods and conclusions are open to peer scrutiny and review.**
- Internally, the theme is '**balancing short-term project needs with longer-term intellectual work**'. Advice from the Board will help GCRO maintain this balancing act.

Introduction

This Strategic Plan covers the financial year April 2010 to March 2011, the end of the first 3-year funding cycle for GCRO. An appendix details the work done by GCRO to date; the purpose of this document is to briefly outline the work that will occupy GCRO during the 2010/2011 financial year. This will include completing some of the long-term projects already under way (such as the Territorial Review), initiating new long-term projects that serve the needs of the Gauteng city-region, as well as short-term, fast turn-around projects that meet the policy needs of government in the city-region.

1. The Gauteng City-Region Observatory (GCRO) was publicly launched on 11 September 2008. A partnership between the Gauteng Provincial Government (GPG), University of Johannesburg (UJ) and University of the Witwatersrand, Johannesburg (Wits), GCRO is tasked with benchmarking the Gauteng City-Region (GCR) globally, as well as proactively sourcing intellectual capital to help GPG identify and/or resolve key policy problems, either current or predicted. A generous grant from GPG in the 2007/2008 financial year ensured that the GCRO has an attractive and well-equipped set of offices in University Corner, on the Wits campus. The office has the space and capacity for its own staff as well as visiting scholars and/or practitioners, as well as a powerful IT infrastructure that will be used to host and make available the GCRO's data resources.
2. During the 2009/2010 period, a national and provincial election was held, and the re-elected ruling party established the **Gauteng Planning Commission (GPC)**. The 'fit' between the work of the GCRO – international benchmarking, rapid-response research and providing a portal for government to access high-level academic resources – and that of the GPC, is clear. We look forward to a close working relationship with the GPC, where GCRO can add value through our independent, critical engaged, high-level research, international networks, and capacity to provide reliable data and robust recommendations.
3. The work of GCRO covers the following broad areas:
 - Outreach and partnerships
 - Rapid-response policy support work
 - Government/academy portal
 - Data, GIS, indicators and benchmarking
 - Longer-term applied research
 - Academic contribution
 - Fellowships
4. A **detailed progress report** is attached as Appendix A to this report, summarising the work done by GCRO in the first few months of its existence, under the headers set out above. In the following sections, we provide a brief summary of what is being done during 2009/2010 under each header, and then detail what is planned for the same area for 2010/2011. Some of the projects stretch across both years and others are time de-limited.
5. The Strategic Plan also includes a list of **possible research projects**, some short and others long-term in nature, which have been proposed by GCRO as a means of taking forward our research work, organised primarily around **key provincial priorities** including the rural/urban/migrant nexus (incorporating rural development) and how it relates to the Gauteng city-region; decent work, economic growth and industrialisation; service delivery challenges, poverty and inequality; spatial challenges of the GCR urban economy; resource sustainability; and so on.

These sit alongside the longer-term projects already underway, including the OECD Territorial Review, the Quality of Life survey, and (both feeding into) the ‘State of the Gauteng City-Region’ report. The Strategic Plan will be discussed at the next Board meeting, where we agree on the **specific research projects to be pursued**.

Building GCRO

6. We begin, however, with a brief note on **institutional and process matters**. The GCRO has a staff of 7, including 4 research staff, 1 GIS/systems analyst, and 2 administrative staff. This reflects the changed organogram endorsed by the Board.

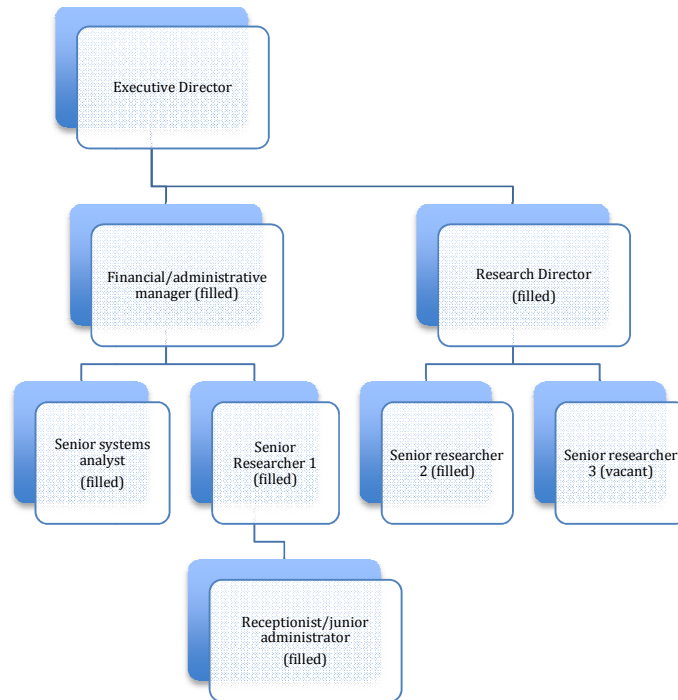


Figure 1: Organogram of GCRO 2009

7. From the outset, the aim has been to keep GCRO **small, high-qualified and flexible**. That said, the workload in our first 6-8 months has made it apparent that **we need at least one more experienced Senior Researcher**, who has both good academic qualifications and applied experience. Given that we have equity criteria to meet alongside the demands of academic qualifications and applied experience, the guidance of the Board will be invaluable in helping fill this position.
8. This touches on the **equity profile** of GCRO, which remains skewed at the top (the three senior positions are all filled by whites, 2 white males and 1 white female) although this improves considerably among the Senior Researchers (1 African male, 1 Indian female). The challenge we face – not unique to GCRO - is the need to attract highly qualified black and female researchers, but on contract (not tenured) and at salaries which are currently at the higher end of the academic scale but considerably lower than the public service or private sector (and, it seems, the non-governmental sector) can offer. Two candidates to whom we have offered positions have turned us down noting that while the work seemed exciting, they were simply unprepared to take the salary cut needed to join GCRO, particularly on a contract basis.

9. This matter has been noted by the Board, and will hopefully be resolved during 2009/2010.
10. Part of the office set-up includes the development of a **Resource Centre**, which is already both electronic and paper-based. We are developing an Access-based database that will be available via the GCRO web-site, and which will allow anyone to download key GCR documents, relevant papers and documents, datasets, statistical releases and so on.
11. Managed by Sammy Masehe, the Resource Centre is being populated and annotated, and will be fully operational during 2010/2011 (and updated on a monthly basis). This again will provide a **'one stop shop' for anyone (from anywhere in the world) to access key documents and datasets relating to the GCR**, both as it evolved over time and how it is analysed and shaped from now onwards.
12. **Financial systems** are running smoothly, under the guidance of Adele Underhay. We are accountable to both the universities and government, and the imminent appointment of an auditor – a small company that will work with us to build our own knowledge and control of our systems – will be invaluable in this regard. We hope to have an auditor appointed in the next 2 months (at the latest).

Sustainability and earned income

13. The GCRO is just a few months old, and talking about financial sustainability is premature. Nonetheless, it is important to note that **income-earning** has been built into the GCRO *modus operandi* from the outset. In the period since GCRO has been active, the organisation has earned some half a million Rand from commissioned research, as set out below. If the proposed project on municipal revenue (to be conducted with the Sociology of Work project, for the Presidency, funded by GTZ) takes place, we can safely assume GCRO will earn the better part of a million Rand in its first year.

Department of Economic Development: city responses to economic crisis benchmarking paper	R100 000
Department of Economic Development strategic framework	R100 000*
Xenophobia x2 case studies	R180 000
Xenophobia synthesis report	R100 000
Xenophobia technical support	R50 000
<i>Sub-total to date: R530 000.00</i>	
Presidency/SWOP municipal revenue project**	R150 000

* Fee not finalised

** Project being finalised, budget notional

14. Earned income will be ring-fenced in an interest-earning account, and deployed as agreed by the Board and Executive Director. As below, GCRO does undertake and pay for fast turn-around policy response work, such as the workshop and focus group dealing with **community protests around service delivery**; earned income can be used for projects such as this. It may also be used to pay for **Visiting Fellows** – which would enrich GCRO staff and work – or could pay for **post-doctoral** or other students to work for us, such as on data mapping, programming for the website, and so on.
15. On the one hand, this is a very positive development, and should signal to all partners that **GCRO is working hard to use the investment (of cash and in-**

kind support) to good effect in leveraging additional resources for the work of GCRO. On the other hand, however, we need to be alert to the fact that the earned income is all project based, which has the effect of deadline-chasing and often crowding out the possibility of careful reflection and re-assessment, the basis of solid academic work. **GCRO is not and must not become yet another research consultancy.** We need to earn some income, not least because work that is paid for – even with a notional sum – is taken far more seriously than that which is ‘free’. **But what must mark GCRO out as different and better is our high quality which derives from mixing applied methods with academic standards. And that requires time to read, reflect, take findings to our peers in academic gatherings, and so on.**

16. It will be important for the Board to help the Executive Director monitor this balancing act, and ensure that **GCRO errs on the side of quality, rather than ‘chasing the Rand’**. Over time – and needing to be elaborated in the strategic plan for the 2012-2015 funding cycle – we need to develop a clear strategy with regard to sustainability. (This could include an endowment, some core funders, and so on.) The point here is to note the energetic manner in which GCRO heeded the call to start thinking about sustainability, from the word go, and congratulate the staff for their hard work.

Outreach and partnerships

17. **GCRO is a ‘doer’ and a facilitator.** We conduct and/or commission research, but we also act as facilitator, helping forge partnerships that help advance the interests of the GCR but in which we play no substantial role. In the next section we deal with our portal function; but it is underpinned by GCRO being heavily involved in academic, research and government networks. These help raise our profile and enhance our ability to facilitate relationships and strengthen university/government partnerships. The process of meeting and forming relationships is on-going and will continue throughout the 2009/2010 and 2010/2011 years (and beyond).
18. In some cases, GCRO is involved in formal partnerships, such as a **Memorandum of Understanding (MoU) about to be signed with the Gauteng Economic Development Agency (GEDA)**, sitting on the Steering Committee that will oversee implementation of an MoU between **GEDA and the Vaal University of Technology**, sitting on the Advisory Board of the **Cape Urban Observatory at the African Centre for Cities**, and so on. We are also represented on key projects such as the Reference Group for the **Integrated Development Planning and Modelling Project** run by the CSIR, funded by the Department of Science and Technology.
19. During 2010/2011, we hope to **deepen our partnerships** with key strategic agencies at national, provincial and local level; and across government, academia, research and the private sector.
20. **Another key activity** for 2010-2011 is a continuation of our ‘road-show’ of provincial government departments and municipalities, as well as higher education faculties (not just institutions) and science councils, sector research units and so on. The point is not merely to ‘sell’ GCRO, but to deepen our understanding of challenges and problems as they appear differently, to different people in different places and sectors. Any issue may look different from local than provincial; from an academic than from a government perspective; and so on. Our task is to help broaden our own understanding, so that when we tackle issues – any issues – we

are able to see the issue in a more nuanced and complex fashion. As such, **the ‘road-show’ is a learning exercise for GCRO, not simply a marketing one.**

Government/academia portal

21. As we noted above, one of GCRO’s key functions is to **facilitate relationships between government and the academy. This** includes creating structures or processes and interventions to connect government to academic expertise, or to help academics reach decision makers if their work has policy implications – current or future – that government needs to know about.
22. GCRO will provide a **‘one stop shop’ for government to ‘find’ appropriate academic partners, and vice versa.** Already, for example, officials have called asking for expertise from economics to law, and GCRO has found a range of possible academic partners and shared these with the relevant department/officials. During 2010/2011, we will more rigorously network with faculties and departments; not just from Wits and UJ, but extending that to all the universities in the GCR, and to other research-based entities.
23. During that time we also need to **refine our own suite of offerings**, from partnerships, to facilitated engagements, to shadowing academics and supporting them so as to make their findings useful and accessible to government officials.
24. This also takes concrete form. For example, GCRO has been asked to facilitate a revised City of Johannesburg/Wits/UJ MoU on research collaboration and thereby re-invigorate the relationships between the entities. This is similar to our role in the GEDA/VUT MoU discussed above.
25. This can also lead to **partnerships and projects.** For example, part of our outreach involved meeting the Housing Development Agency (HDA) panel of experts on understanding of Priority Development Areas. They in turn raised the possibility – a project that will fall into 2010/2011 if it occurs – of exploring the application of the ‘Priority Development area’ provision through a pilot (in the Germiston city centre) and approached GCRO with a view to convening a specialist panel of academics to act as an advisory group/sounding board for practitioners.

Research Advisory Committee

26. The Research Advisory Committee (RAC) will play a critical role in this area of our work. The GCRO design included a Research Advisory Committee, comprising senior academics with some representation from other sectors (government, private sector, civil society) to help develop a research agenda for the Gauteng city-region – which GCRO will facilitate but which will include multiple sectors, universities and individual academics; provide a forward-looking perspective on policy issues and research; and help develop relationships between key researchers and their counterparts in government. The RAC will provide an **on-going, high-level conversation between government and the academy.**
27. The RAC will be finalised towards the latter end of 2009/2010, and should be fully operational during 2010/2011. This will include 8-9 meetings in the year, including 2 to 3 enlarged, thematic meetings (focusing on issues to be determined by the Board and RAC together but which presumably reflect **government’s key policy priorities or information needs**), and regular, smaller meetings of the core group, which will set up and maintain an on-going conversation about the GCR, its needs, its policy priorities, and its research needs. There is a significant budget

allocation set aside for the RAC (covering logistics more than honoraria) reflecting the seriousness of its role (see below for budget).

On-request policy support work

28. While GCRO will expend considerable energy facilitating relations between government and other academics and researchers, our core business is the **research work we do ourselves and/or commission from others**. And key amongst these is our capacity for short term, **fast turn-around commissioned/requested and/or self-initiated reports and events, focused on immediate policy concerns**.
29. This is a critical role for GCRO, since it allows us to help provincial and local government, the Planning Commission and others rapidly respond to unforeseen issues with **high-level research, brainstorm sessions, policy papers and frameworks**, and so on. For example, in response to the global economic crisis, GCRO organised a colloquium with GEDA; and then completed an international benchmarking study in 2 weeks, to give the Department of Economic Development (GPDED) a sense of the range of responses available at sub-national level; and then took that further and developed a policy framework which allowed all sector departments to signal where they were contributing to the strategic response of GPG.
30. A workshop, hosted by GCRO, Presidency, SALGA and the DBSA, in August 2009 will bring stakeholders together to reflect on the issue, and out of that we expect a longer-term, applied study of the impact of the crisis on municipal revenues, responses from the sub-national sphere, and on-going evaluation of the crisis and how we (as a country) are responding to it. If this occurs, it is safe to predict that **during 2010/2011, GCRO will continue to work on the impact of the global economic crisis at sub-national level**.
31. GCRO has also arranged a Chatham House rules session on community protests; and during 2010/2011, we will consider arranging a high-level session on how to organise and cohere the **higher education sector in the GCR** around the needs of the city-region, how to avoid duplication and fragmentation, and to line up the sector and government more closely, to focus on key challenges.
32. It is impossible to budget in any detailed fashion for this aspect of our work. Rather, we will ring-fence R160 000 on the assumption that we may have 4 such projects during 2010/2011; but there may be more, there may be fewer, some may come with funds, some without. We will report on this each quarter, as part of the GCRO financial and progress reports submitted to the Board.
33. A couple of possible short-term projects, to be discussed with the Board, appear below – more appear at the end of this document.

Mapping urban growth of the GCR using remote sensing over the past 40 years

34. **The urban growth of the GCR will be mapped over the past 40 years using satellite imagery and remote sensing analysis.** (Some work in related areas is already under way: GCRO would look to combine and commingle partners and data so that we can work across the entire GCR, rather than individual cities, or even just the Gauteng province.) Other sources such as topographical maps may be sourced to map the GCR prior to available satellite imagery (pre 1970s). This will provide an indication of the rapid development of the urban landscape and subsequent reduction in rural land and open spaces.

35. The project could be completed by a geography Masters student from Wits or UJ working in conjunction with the CSIR satellite applications centre and Chief Directorate of Surveys and Mapping. **The benefit would be a time series analysis of urban growth in the GCR and if the direction of the growth or densification is mapped, an indication of future growth may be realised and better understood to assist GPG with future spatial planning.** An envisaged time span would be 1 – 2 years with the output consisting of journal papers and conference presentations, and a very applied instrument for planners and policy-makers.

Understanding Innovation in the Gauteng City region:

36. This project looks to understand the determinants of innovation in the Gauteng city-region, what barriers or challenges there are to city-region innovation, and how to develop policy which supports dynamic economic activities in the city-region. There is an obvious link to the OECD Territorial Review, which this would support and inform.
37. City-region innovation is a significant determinant of economic performance and raises questions about the **underlying determinants of economic performance** in city-regions. It is critical to understand what kind of human capital or economic activities or infrastructural dynamics contribute to knowledge creation, knowledge transfer, with an economic impact benefit of contributing to the productivity and labour market of the city-region. The project will draw upon existing data on innovation, and also explore a range of data relevant to city regional innovative performance analysis such as port usage; patent data and so on.
38. The project will develop a relationship with key institutions involved in innovation work in South Africa, including the HSRC, CSIR, Innovation Hub, University of Pretoria, National Advisory Council on Innovation (NACI), as well as the newly appointed Technology Innovation Agency. This project could include a conference bringing together all city-region stakeholders, the relevant research community and government actors; a series of policy recommendations; and a book that critically examines city-regions, innovation and the factors which explain why/how innovation is concentrated in and around city-regions, but also how innovation is developed and supported as a means to economic growth and competitiveness for city-regions.

Medium to longer term applied research

39. At the heart of our work – where we straddle the need for rigorous *intellectual* work (which may be more or less applied) that simultaneously *meets the needs of government* – are the longer-term, more in-depth, substantive and analytically complex research projects. These may be commissioned or self-initiated. Three projects already underway will stretch into 2010/2011 – the **OECD Territorial Review** (which ends in March 2011), the **Quality of Life survey** (the data mapping and analysis will fall into 2011, the full design, data collection and tabulation phase will be completed during 2009/2010) and the **xenophobia project**, which should be published as an academic book during 2010/2011.

OECD Territorial Review

40. The **Territorial Review** is the GCRO's largest project in the short- to medium-term. It involves an 18-month research and consultation process that will deliver a comprehensive report on the challenges and opportunities facing the city-region, in comparative perspective. The local research team comprises the GCRO as well as Dr Bonga-Bonga from the UJ economics department, and Professor Alan Mabin

from Wits. The GCRO and GPG are in the process of ensuring that the institutional arrangements are designed to place the Planning Commission in a key oversight role, and thereby ensure that the Review speaks to the policy priorities and needs of the GPG.

41. There are discussions underway with the OECD to allow GCRO to publish the findings as part of a broader academic text that analyses the GCR in detail from multiple angles – the OECD report would form an appendix, the bulk of the text would be 5 to 7 rigorous critical engagements with the findings. This will allow us to add value to the work of the OECD as well as that of GPG.

Civil society and xenophobia

42. The Atlantic Philanthropies, a major donor in South Africa, commissioned GCRO and Strategy & Tactics to undertake a national study of **civil society responses to the xenophobic violence of 2008**. We are working with partners from UKZN, UWC and UJ. The study is intended to feed policy-oriented recommendations back to civil society regarding both xenophobia and the lessons needing to be learned about strengthening civil society; as well as the role of the media, the state, and others. The project consists of some 17 case studies, which will be synthesis into some 7 to 8 cross-cutting reports, and then into an academic book to be published in 2011.

Quality of Life survey

43. The Quality of Life survey, approved by the GCRO Board during 2009/2010, is the **first-ever integrated survey of residents of the GCR**, sampled across the whole of Gauteng, along the main arteries leading to the key economic nodal points in neighbouring provinces (e.g. Sasolburg, Witbank, etc.), and with a small control sample to the north where the GCR has no foot-print but tens of thousands of displaced urban residents live and commute to Tshwane on a daily basis. The survey covers quality of life, socio-economic circumstances, attitudes to service delivery, psycho-social attitudes, value-base and other characteristics of the Gauteng city-region.
44. During 2010/2011, the survey will be a key component of our dataset as we build up both the GIS portal (see below) and ensure that the top-down OECD review, which looks at high-level macro indicators, is complemented by a bottom-up reflection on the GCR by the people who live in the city-region. As we noted in the opening section of this Strategic Plan, **the first year was spent commissioning baseline data** – notably this survey – and **the 2010/2011 year will be the year during which those datasets are turned into useful policy documents**, academic articles, conference papers, books, the ‘State of the GCR’ report, and so on.

Municipal revenue

45. During 2010/2011, GCRO – led by Sizwe Phakathi – will be involved in a project commissioned by the Presidency, co-ordinated by the Sociology of Work project (SWOP) at Wits, and funded by GTZ. This is a “study from below” (ethnography) of **organisational culture, organisational dynamics, organisational structures, formal and informal procedures and rationales that impact on the functionality and/or dysfunctionality of state institutions, and therefore on their ability to deliver reasonable quality services**.
46. To a large extent, South Africa’s 15 years of democracy have been marked by **questionable service delivery, especial at local government level**. It is now widely accepted that city regions are the engines of their national economies. **The**

billing and collection of revenue for municipal services is critical to the economic performance of the city. However, there are a variety of bureaucratic, technological and organisational factors that may lead to ineffective billing and collection of revenue for municipal services in a given city – with serious repercussions on the quality of service delivery.

47. **Municipal revenue systems are a key aspect of municipal service delivery.** Unlike other government departments and agencies, other than the South African Revenue Services (SARS) itself, the relationship of municipalities to their citizens involves taxation and charging for services. This means that municipalities have a dimension of accountability that is not present for most government service delivery. Yet many municipal revenue systems face significant challenges. Municipal rates of taxation and especially municipal charges are experienced as unaffordable by many households despite free basic service programmes. Municipal debtor books are high and rising, especially in the cities. Finally, municipalities have experienced **substantial challenges in the revenue process itself – that is, the process of billing and collection of property rates and service charges.**
48. The project consists of a number of case studies. GCRO was approached to conduct a case study on the way **municipal revenue processes** work in two cities in order to provide a fresh perspective on the reasons why some municipal revenue systems apparently work well while others do not. The project will feed into a Cabinet memorandum on **service delivery** for the July 2010 Iekgotla, and also into both a journal article and a book (comprising all the case studies). Sizwe will work closely with Professor Roland Hunter from the School, of Public & Development Management at Wits; Sizwe will be the lead researcher on the project.
49. We turn now to some proposed projects (more appear later) that will be discussed with the Board.

Local government and the next round of 5-year IDPs

50. A medium-term project that we wish to initiate (at the suggestion of the Board) is linked to the end of **this current term of local government; the beginning of the next; the next round of 5-year IDPs, and related economic growth and strategy** documents.
51. We would like to link this to part of our ‘road-show’, where we will invite all metros and municipalities in the GCR to a meeting where we can jointly discuss **what research/information they need for their next phase, what is common to all, who is the best provider** (i.e. GCRO will do some and act as portal for the remainder), and then resolve issues of resource contributions and so on. In this way, we design a rigorous information project around the shared needs of the local sphere in the GCR.

Examining the legacy of FIFA World Cup 2010

52. Another possible project – again, to be discussed with the Board – is a **rigorous examination of the impact and legacy of 2010 FIFA World Cup on the Gauteng City Region.** In theory, the World Cup provides host cities with the opportunity to fast-track urban development, to improve their economic infrastructure, to promote economic development and job creation, to improve the quality of life and to present themselves on a global stage. **Will the 2010 FIFA World Cup yield the expected social and economic benefits for the GCR?** This is the key question this research project seeks to answer.

53. The literature on the economic and financial implications of hosting mega events shows that many of these events often **fail to live up to expectations**. For instance the 1976 Montreal Olympic Games were considered an economic and financial failure, leaving Montreal City in a huge debt, which was only recently settled. The 2002 FIFA World Cup held in Korea also did not meet the expectations, leaving the country with a considerable number of redundant stadiums, some of which have subsequently been demolished. In the US, host cities lost \$5.5 to \$9.3 billion instead of gaining \$4 billion as a result of the 1994 FIFA World Cup.¹ Nonetheless, evidence shows that proper planning increases the likelihood of mega events yielding expected social and economic benefits. For instance in the US income from the tourism industry increased by almost US\$19 billion as a result of the 1984 Los Angeles Olympic Games. Similarly, the Barcelona Olympic Games have been hailed a remarkable success and a model for planning a mega event.²
54. The implementation of this project will occur in the form of **partnerships** involving relevant universities and research councils in the Gauteng City Region, the University of Pretoria Department of Economics and the Human Sciences Research Council have already conducted preliminary research on the 2010 FIFA World Cup), football organisations such as SAFA and FIFA, The Presidency, host cities in the Gauteng City Region, such as cities of Johannesburg, Tshwane, Rustenburg, Ekurhuleni and Mogale City, local government and the South African Cities Network. The aim is to examine the basic position of government: “Our vision remains that of contributing to halving poverty and unemployment by 2014 and the 2010 World Cup provides a window of opportunity to fast track development towards the attainment of this vision” (Mbhazima Shilowa, Gauteng Premier, June 2007).³
55. Reviewing the impact and legacy of the 2010 FIFA World Cup will **help government ascertain the actual contribution of this mega event to halving poverty and unemployment by 2014**. The project will enable government and city leaders to manage the 2010 legacy effectively. The evaluation will present new research opportunities in areas of **sustainable urban development, international comparative assessment of the impact of mega-events on cities and the lessons learned, city development strategies, comparative assessment** of host cities over time, public perceptions and so on. Outputs would include seminar papers, a possible international conference, and journal and book publications.
56. Further, the research outputs may be used as part of the **university teaching** programme of subjects such as sports administration, sports economics, tourism,

¹ See Bass, O. and Pillay, U. (2008a). *The 2010 Football World Cup in South Africa – Can sport Drive Development in the Region?* Paper presented at the August Public Lecture Series, UNAM Department of Sociology, Namibia Institute for Democracy, Windhoek, 6 August.

² See Bohlmann, H.R (2006). *Predicting the Economic Impact of the 2010 FIFA World Cup on South Africa*. University of Pretoria, Department of Economics Working Paper Series, Mboweni, T.T. (2007). *The Benefits of Being a Good Host – the FIFA World Cup and the South African Economy*, Corporate Sport Directors’ Dinner, Johannesburg, 20 March as well as Mabugu, R. and Mohamed, A. (2008). *The Economic Impacts of Government Financing of the 2010 FIFA World Cup*. University of Stellenbosch, Stellenbosch Economic Working Papers

³ Cited in Bass, O. and Pillay, U. (2008b). *Urban Development and Poverty Alleviation – Legacies of the 2010 World Cup*. Paper presented at Mega Projects Conference, Sandton Sun Hotel, 19-20 June.

town planning and architecture and civil engineering. If approved, this project would take place between August 2010 and March 2014.

The urban space economy

57. The urban space economy is shorthand for the distribution of economic activity in space, considering at the same time the question of **how space is structured by the dynamic changes in economic activity that occurs within it, and, inversely, how economic activity is in turn structured by spatial form and fabric**. This study will start with a colloquium in which a group of selected researchers will be brought together to consider the changing urban space economy of Gauteng. Possible topics for discussion, and further research flowing out of the colloquium, might include:
- Deindustrialisation in Sedibeng
 - The rise of retail developments in Soweto
 - Second economy activities in inner city nodes
 - Patterns of commercial property investment as businesses drift from traditional commercial nodes
 - Mixed use developments such as Melrose Arch, anchored on both residential and commercial development
 - Changing supply chain connections as secondary economic activities
 - Smart industry development
 - The impact of government interventions, e.g. to foster innovation hubs, or new industrial parks in previous dormitory townships
58. The work will have both academic relevance, hopefully leading to creative ways to map and describe the way economic activities and urban space are shaped together, and policy relevance for both provincial and local economic development practitioners and planners.

Urban-rural linkages and the Gauteng City Region

59. **Rural development** has been identified as one of the key strategic priorities that will drive the Gauteng Provincial Government's programmes for the next five years. **Ironically, not much has been said about the value of rural areas to building and benchmarking Gauteng as an integrated and globally competitive city region.** The GCR concept has been narrowly viewed to be encompassing the "functional economy" or "economic linkages" within cities and urban towns making up the city region. **Rural areas do not feature in the GCR equation**, yet international literature indicates that rural-urban interdependencies play a significant role to the social and economic well-being of city regions.⁴ This project seeks to locate and situate rural areas and rural development in the GCR equation. It seeks to influence government departments, business, non-government organisations and academic institutions to raise questions about the nature, extent and importance of rural-urban interdependencies in the Gauteng City Region.

⁴ See Midgley, J., Ward, N. and Atterton, J. (2005). *City Regions and Rural Areas in the North East of England: Executive Summary*. Centre for Rural Economy Research Report, University of Newcastle Upon Tyne. See also Government Office for Yorkshire and the Humber (2007). *A Rural Strategy for the Hull and Humber Ports City Region*. Hull City Council and Humber Rural Partnership, United Kingdom.

60. If government is to realise its policy objective of **stimulating rural development and food security** by 2014, recognition of the significance of rural-urban linkages is critical – but must go beyond lip-service to forging real policy understanding, instruments and programmes. Recognising the economic significance and strengthening the beneficial effects of rural-urban linkages will increase the potential of the agricultural sector to create decent jobs as well as increase food production and distribution.
61. Additional possible projects appear at the end of this document.

Data, data infrastructure, data visualisation, indicators & benchmarks

62. Data – high quality, relevant, accurate data – lies at the heart of GCRO. If we are to provide reliable policy inputs, or accurate research papers, then data integrity is at a premium. And to attain our goal of making data accessible and available – to policy-makers, academics, students and citizens – then linking data to GIS and other tools is critical.

GIS-public access website

63. A key interface between GCRO and local and provincial government is through the GCRO website. The first phase of the GCRO website was launched in 2009 detailing the GCRO projects, news and events, staff, board membership, and contact details. The website will be continually improved and focus will shift to developing the GIS website.
64. The current site is a ‘shell’ – the second phase of development begins in late 2009, but during 2010/2011, **we will be uploading the powerful data visualisations generated by overlaying Quality of Life survey data (such as psycho-social attitudes, values and so on) against poverty data (from StatsSA) and satellite imagery, to show what we look like as a people, not merely as a topography or set of urban sites.** It is worth noting that the GIS website is directly linked to our senior systems analyst Chris Wray’s Masters thesis: “A Web 2.0 G-government solution for the GCRO”.

GIS data acquisition

65. GCRO is continually active in meeting key institutions to establish GIS data networks and obtain the latest available data. These datasets will form the basis of the mapping and analysis for the State of the GCR report and OECD Territorial Review, and have already provided input for GCR generated datasets. GCRO will continue to **break down inter-governmental data barriers to open up access to public sector information**

Key benchmark indicators

66. The aim of this project is to develop key indicators with which to measure the performance, development progress and ‘competitiveness’ of the Gauteng city region and benchmark it against city regions elsewhere in the world. The draft indicators, including an analytic paper, have been completed, led by Sizwe Phakathi. The indicators were used in the Quality of Life survey and will feed into OECD Territorial Review (i.e. to ensure local indicators tell ‘our’ story alongside global indicators).

State of the Gauteng city-region

67. The baseline data being generated, commissioned and/or gathered, will all be synthesised into the ‘State of the GCR’ report, which should appear early in the

2010/2011 year. Currently, GCRO is debating the format – a technical report is unlikely to generate much popular interest, and ideas around web-based visualisation, cell-phone transmission and the like are being discussed. The final format will be agreed to with the Board at the appropriate time.

Academic contributions

68. **Academic and other publications** are critical for an academic institution, particularly those appearing in peer reviewed journals, which are key to maintaining standards and pushing researchers to reach (and exceed) international standards. This will grow over time – GCRO has not been in existence long enough to generate enough of our ‘own’ data, and so publications tend to reflect what staff were working on prior to joining GCRO.
69. In the first 6 months of its existence, GCRO staff **published in various journals**, and more articles and books are under preparation at the time of writing. The attached progress report includes details of all these publications.
70. GCRO also intends to run a series of **seminars** in 2010/2011, and host at least one symposium in 2010. Some will be held at GCRO, others in the Humanities Seminar Room at UJ or at Wits venues.
71. GCRO staff are also active in **supervising students and teaching**, at Wits, UCT and elsewhere. During 2010/2011, it will be important to strengthen our links (in this area) with UJ, and then with other universities in the GCR.

Visitors series and international linkages

72. We envisage rolling out a **structured visits by academics or government officials/leaders to do academic work under the auspices of the GCRO**. As we noted above, this is a potential candidate for spending some of the income earned by GCRO, which can be used to fly in academics, or support government officials and/or local academics with a small stipend for a month or so while they think through, present and write up their experiences, research problematics and so on.
73. This would also involve **partnerships and outreach**. A key part of GCRO’s work – over time, and thus to be more fully operational in 2010/2011 than at present – is the need to forge partnerships with **urban observatories in other, relevant city-regions**, in order to work together on benchmarking and learning. This will include identifying key issues and themes (such as green technology, or equitable growth), and working with urban observatories in city-regions where these are successfully being implemented, in order to provide government (provincial and/or local) with policy lessons to help improve our performance (including what to do better, what traps or pitfalls to avoid, and so on).
74. Part of this will involve bringing cutting edge urban theorists to spend time at GCRO but expose them to provincial and local government via lectures, seminars, interactive sessions and so on, to share their expertise, allow them to learn from our expertise, and jointly grow and develop.

Additional possible range of projects for 2010/2011

75. The Board, with the Executive Director, will have to refine the GCRO intellectual programme and project load. Some additional projects proposed by GCRO appear below.

Mega-Estates

76. South Africa's urban areas have historically been fragmented into racially segregated settlements. Under apartheid, areas managed by white local authorities sought to capture all the **benefits of development for a minority**, and push those people who were likely to cost the tax base more than they contributed either outside the city altogether, or into ghettos within the city where they were outside the boundaries and off the budgets. In the post-apartheid era this political economy logic of apartheid has been partially overcome by the demarcation of elected metropolitan municipalities. Metro boundaries stretch to encompass both areas of development and historical underdevelopment, and so there are no limitations on the raising of tax resources in one part of the city, and spending it in another. But the tendency towards fragmentation remains.
77. Recently, a new and unique urban formation has emerged that potentially accentuates the problem. So called **mega-estates** are huge cities-within-the-city planned and developed by the private sector. In Gauteng, a number are known to be in planning phase, including Cradle City around Lanseria, the Gauteng Highlands project (previously Blue Rose City), and the Waterfall Development. All of these developments are larger than 1000 hectares, and project populations of up to 30 000 once completed. It is conceivable that government may work with developers to configure these mega-estates in ways that fit with longer range spatial plans for a more integrated and sustainable city region. But given that they are often sold on the basis that they offer safe spaces, insulated from the wider city region, and operating largely independently of its networked infrastructure, they may **dramatically exacerbate settlement fragmentation in Gauteng**.
78. This research will investigate the development of the mega-estates being proposed for Gauteng. Research will be qualitative, using interviews and document analysis to decipher the visions and intentions of developers as well as the planners and other government actors forced to engage with them. It will also be spatial, using GIS to map the extent of the planned mega-estates, and analyse their possible impact on population spread, traffic patterns, bulk-infrastructure capacity and the potential development on pre-existing commercial and residential areas of the city region. If possible the research will also be comparative, in that at least one of the mega-estates planned for Gauteng is being driven by a multinational currently rolling out **an identical city-within-the-city in the Congo**.

The transformation of Gauteng's Central City Nodes

79. The Gauteng city region has often been described as polycentric, in that it is structured around a number of primary and secondary central city nodes more or less linked by a series of transport corridors. This polycentricity has also been regarded as a policy good, worth supporting as the basis for a long term sustainable spatial architecture for the region.
80. Some research, and considerable policy work has been done on the Johannesburg inner city. But there has been **little applied research on the network of nodes across the Gauteng city-region**, either with respect to how they function as a network, or in comparative perspective to discern how each is similar or different from the others.
81. This research will examine the development of a range of **central city nodes across the Gauteng city-region**. While the Johannesburg inner city will not be ignored, the focus will fall on the **Pretoria** city centre, **Germiston** city centre, and

a range of smaller nodes such as **Randfontein, Vereeniging and Alberton**. Embryonic new nodes such as **Jabulani** will also be scrutinised.

82. The research will examine key developmental trends such as the: conversion of commercial to residential use; the economic activities that are taking root; the way the character of the node is patterned by transportation networks, property decline, and informalisation. The study will also look at government and private sector efforts to redevelop these areas. The aim throughout will be to determine how central city nodes are changing, whether this change is positive for the social, spatial and economic restructuring of the region, and what challenges (technical and conceptual) confront policy makers in steering more positive change.

Water sustainability

83. The load shedding forced on South Africa in early 2008 dramatically illustrated the negative economic consequences and crises in political confidence, that result from unexpected interruption in the networked service infrastructures that underpin 'modern' societies. Some researchers have argued that **bulk water supply will be unable to meet the demand**, from residents and industry, as early as 2014. There is currently some applied research looking at the challenge from the perspective of raw water supply, in particular in the light of growing water insecurity due to climate change. **But as yet there has been no integrated study looking at raw water availability, raw water bulk supply integrity, municipal water network development and maintenance, waste water management, and industry and mine-water pollution, through the same frame.** An integrated study should also consider the complex social and political questions raised by the demand for more free water, when considered together with the need to properly price water and introduce stringent demand management measures in light of growing water scarcity. Furthermore, it should engage the contradictory position faced by municipalities, whose financial health depends on the sale of more water, even as there is increased pressure to contain demand.

GCRO mapping application for cell phones using Google mobile maps

84. Google has developed Google Maps for cell phones that allows a user to determine their current position with or without GPS and view maps and satellite imagery on their phone. **An application could be developed to overlay GCRO GIS layers to on Google maps and imagery, to allow GCR citizens to view and query GCRO maps wherever they are in the GCR.** This would be developed in conjunction with an information engineering or software development school/dept from Wits or UJ. It would could assist government in meeting the e-government, Government 2.0 initiatives by developing simple mobile applications available to citizens to download and use on their cell phones (dependent on a 3G enabled phone and connection), e.g. search for and get directions to nearest clinic.

A traffic/ transport assessment of the GCR

85. Traffic congestion affects the daily life of every GCR citizen. The BRT, Gautrain and Sanral highway expansion projects are in the process of being implemented to attempt to alleviate congestion and decrease travel times. **A GIS analysis of traffic problems and congestion before and after the implementation of these projects would give an indication of the success of these projects.** New technology such as the Altech Netstar Traffic system (which combines vehicle tracking units and mobile phone technology) could be utilised to assist in the analysis. This would benefit the GPG and local municipalities transport planning departments to provide an indication of the success or failure of the GCR transport initiatives and assist with future transport plans.

86. This could be completed by an engineering masters or doctoral student linking in with various transport departments. A time span of 2 -3 years is envisaged with journal publications and conference proceedings publications.

Foresight work

87. The complexity and vulnerability of society has been recently demonstrated in terms of health pandemics such as the H1N1 virus; weather-related phenomena such as floods and fires or xenophobic violence. This project would focus on the GCR's **capacity for early warning, risk identification and management of crises**, with a conscious recognition of the link between human/natural disasters and development. It will engage with the National Disaster Management Framework as well as the various instruments of monitoring and evaluation at different levels of governance.

Investigation into open source GIS for government enterprise systems

88. **Government has mandated the use of open source software where ever possible/viable as a cost effective alternative to proprietary software.** Basic open source applications have reached a level of maturity but open source is not free as it requires significant investment in skills and resources - currently scarce in South Africa - to develop. Local and provincial government also make use of high level desktop and enterprise server GIS applications.
89. This project will evaluate **what enterprise GIS open source software is available and investigate the feasibility of migrating the current governmental proprietary enterprise GIS systems to open source equivalents (cost vs. benefits vs. skills analysis).** It would require GIS masters students with IT/Software engineering backgrounds and possible partnerships would involve local and provincial corporate GIS departments and link into local open source GIS initiatives from the CSIR and Meraka institute and international open source projects. The results would assist governmental GIS departments to decide on whether open source enterprise GIS are a viable option and map out how the migration could be accomplished.