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GCRO launches State of Green Infrastructure in the GCR

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Visualising the GCR photo-competition

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Release of city-region spatial change and history Occasional Papers

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GCRO appoints 5 new research staff

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New projects for the 2013/14 financial year

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Reinventing the GCRO's Research Advisory Committee

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Maps of the month

Two GCRO maps of the month are showcased, one on *Historical* spatial change in the GCR (1991-2009), the other on Defining core and periphery in Gauteng

News bytes

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Seth van Staden





GCRO launches State of Green Infrastructure in the GCR

On 29 July, GCRO launched the *State of Green Infrastructure in the Gauteng City-Region*, a major report researched and written over the last year and a half. The report is a multi-faceted output, focused on the issue of how green assets in the city-region can be valued, in the same way as 'hard infrastructure' like water pipes or electricity cables, as providing vital urban services.

The report includes technical analyses based on best-available digital spatial data; institutional assessments of government plans and visions; a case-study example of ecosystem services valuation; and a reflection on the role of communities and the private sector in sustaining green infrastructure. A unique feature of the report is that its analysis is complemented by a visual interpretation of the GCR's green infrastructure by Wits academic and photographer Natasha Christopher. Her photographs were on display in an exhibition – intriguingly entitled *Folly* – that accompanied the launch at the University of Johannesburg's Faculty of Arts, Design and Architecture (FADA) gallery.

The launch of the State of Green Infrastructure drew over 130 attendees from government, the private sector and academia. Following an introduction by GCRO's Research Director, Graeme Gotz, the event was formally opened by the Vice Dean of FADA, Prof Finzi Saidi. As the second GCRO-FADA collaboration, after the Visualizing the GCR photographic competition and exhibition held in April, the launch and accompanying exhibition is emblematic of the kind of interinstitutional collaboration across Wits and UJ that GCRO engages in.

Prof Saidi was followed by Wits-based artist and lecturer, Natasha Christopher. Christopher used the launch to explain the relationship between her visual work presented in the report and its more analytical dimensions.

Alexis Schäffler, lead author of the report, then presented the key findings from the research she led over the course of 2012 and 2013, working with a team from within GCRO as well as external consultants.

A substantial part of Schäffler's presentation focused on the work done by GCRO's digital mapping team. They produced a series of maps to spatially describe the physical coverage and access dimensions of green infrastructure in the cityregion (see Figure I for an example). Schäffler highlighted that the process of collating and merging different datasets into a composite picture was not without its challenges. The research found that there is an acute deficit in accurate and consistent data in municipal datasets, and uncovered major issues in the way publicly available digital spatial data is recorded across municipalities. The map outputs presented in the report therefore required innovative ways of working with available data, implicitly emphasizing the importance of more robust data collection across the city-region.

Other key insights from Schäffler's presentation were that varied, context-specific approaches are needed to value

What is Green infrastructure?

Green Infrastructure is the set of natural and manmade ecological systems that form a network, providing services in the same way as electricity lines, water pipes and other 'hard' infrastructure.

Green infrastructure includes trees, protected areas, open spaces, public and private gardens, parks, food gardens, ridges, wetlands and green corridors, amongst others. The services provided by these features are known as 'ecosystem services'. They include storm water attenuation, air purification, carbon capture and provision of food. The premise of a green infrastructure framework is that these services can be valued in the same way as those provided by hard infrastructure.

ecosystem services, and that non-government actors have an important role to play in constructing green landscapes. While a large part of the report focuses on whether government is adequately valuing green infrastructure, future value propositions will need to look at how to account for very significant private investments in green infrastructure.

The launch proceedings were concluded with a response from Rashid Seedat, Head of Department in the Gauteng Planning Commission, Office of the Premier. He noted that the insights from the report would assist in current Gauteng Provincial Government efforts to develop a long-term Infrastructure Master Plan, which needed to be based on original and innovative thinking if the resource challenges facing the cityregion are to be resolved.

The State of Green Infrastructure in the GCR report has laid a foundation for the GCRO's future work into conceptualizing infrastructure differently and valuing the services of 'unconventional' infrastructure like trees or public parks. In taking these ideas forward, the GCRO will work towards establishing a CityLab so that municipalities around the city-region can enter into a more strategic discussion about integrated green space datasets and more consistent data collation processes. This work will run in parallel to research that identifies and values the priority ecosystem services in the GCR. Over the longer term, the CityLab will provide a platform for work between the GCRO, provincial and local government, and other stakeholders, to develop a joint green infrastructure plan for the city-region.



State of Green Infrastructure in the Gauteng City-Region



Alexis Schäffler with Natasha Christopher, Kerry Bobbins, Emmarie Otto, Mduduzi W. Nhlozi, Martin de Wit, Hugo van Zyl, Douglas Crookes, Graeme Gotz, Guy Trangoš, Chris Wray, Potsiso Phasha



Alexis Schäffler (left), lead author of the report, and Natasha Christopher (right), at the exhibition of Christopher's green infrastructure photographs that accompanied the launch

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Figure 1: Planted and natural trees (GeoTerra Image (GTI) 2,5 meter Urban Land Cover, 2012)



2 Visualising the GCR competition

GCRO's photo-competition and exhibition, 'Portraits of a city-region', was a great success. The exhibition was launched on 17 April at UJ's FADA Gallery to an audience of 250 people

On 17 April 2013, GCRO announced the winners of its photo competition held in February and March 2013, at a well attended exhibition launch at the University of Johannesburg's FADA Gallery. The event attracted over 250 people, who filled the gallery amphitheatre in anticipation of hearing who the winners of the competition were. The opening also enjoyed wide media coverage, with newspapers, television and radio stations all showing interest. The exhibition ran at the FADA Gallery – which partnered with GCRO in the organisation of the photo competition and launch – until 8 May 2013.

The GCRO photo competition gave students and staff from all tertiary institutions in Gauteng the opportunity to present their perceptions of the Gauteng City-Region (GCR) through photography. Entrants stood a chance to win prizes to the value of R15 000. The competition attracted over 600 entries from 150 photographers. The judges were the renowned photographers Jodi Bieber and Roger Ballen and the Chief Curator of the Hector Pietersen Museum, Khwezi Gule. They were tasked with selecting some 60 images to exhibit and the five prize-winning photographs.

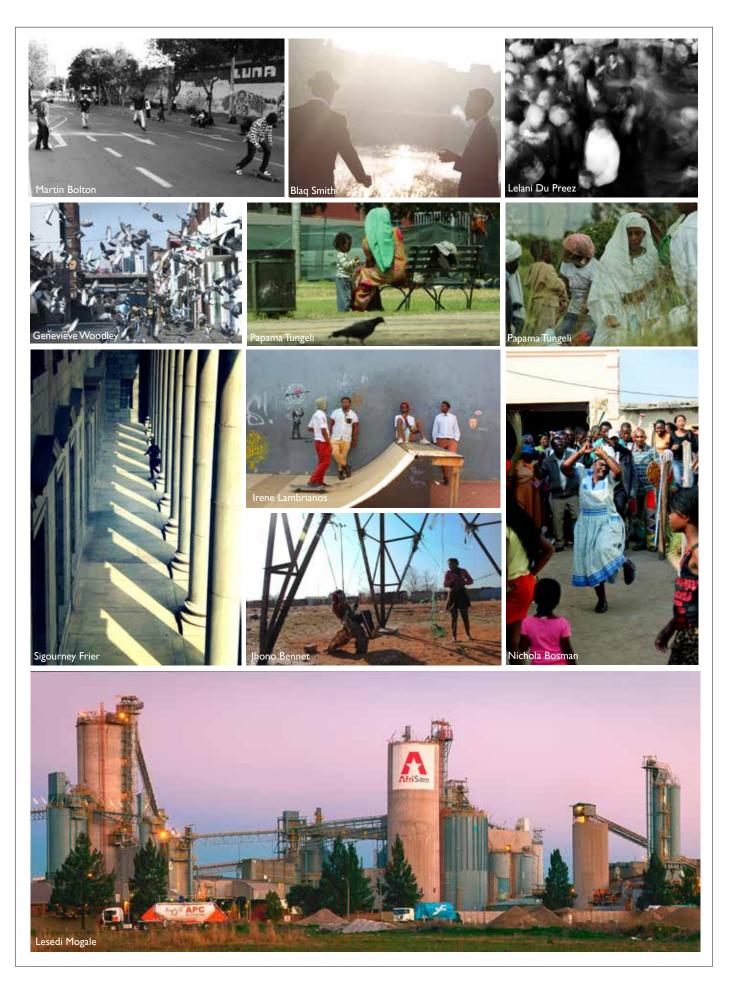
Sixty-two powerful images, all offering insights into how students and staff perceive the space of the GCR, were chosen to be part of the exhibition at FADA Gallery. The five winners were announced at the exhibition opening in the following order:

- I. Blaq Smith
- 2. Jenna-Lee Ferrer
- 3. Irene Lambrianos
- 4. Thato Nkoane
- 5. Martin Bolton

The photographs submitted and exhibited revealed the GCR to have a strong 'personality' of its own. The title of the exhibition – 'Portraits of a City-Region' – was intended to capture this, and prompt reflection on how it is not merely a space where we live, work and consume, and how we are constantly in a process of building relationships with its multi-faceted identity.









SPACE & Mobility

3 Release of city-region spatial change and history Occasional Papers

To deepen our understanding of the city region's history of spatial development and planning, GCRO commissioned two Occasional Papers from specialists in the field.

The mission of the Gauteng City-Region Observatory (GCRO) is to help illuminate trends and dynamics shaping the region of towns and cities in and around Gauteng, and also enhance understanding of the idea of the Gauteng City-Region (GCR) as a project – a different way of thinking about and governing this space. While much of the data collection and analysis work of the GCRO is focused on the present, we also consider the city-region's past and its possible futures.

A 2030 National Development Plan, crafted by the National Planning Commission, has recently been adopted. In addition the Gauteng Provincial Government, working with municipal partners and business, civil society and labour stakeholders, is drafting a G2055 long-term development plan. As our society looks forward to what sort of country and region we need to become, it is also important to look backward. Understanding the past gives us insights into how we have come to be where we are now, and so in turn what paths we should tread into the future.

The GCRO has specifically commissioned two papers to deepen our understanding of the past of the GCR. Both focus on aspects of the region's spatial past, and ought to be read together. The paper by Brian Mubiwa and Harold Annegarn, *Historical spatial* change in the Gauteng City-Region, explores the historical spatial evolution of the GCR. It examines key spatial changes that have shaped the region over a century and provides a remarkable



picture, based on satellite imagery, of regional spatial growth in the last two decades (refer to the map of the month on page 10). The companion paper by Alan Mabin, *The map of Gauteng: evolution of a city-region in concept and plan*, asks the different but related question of how the idea of a city-region found expression in various statutory planning frameworks over the course of the last century, and how embryonic city-region concepts influenced spatial decisions and developments. The papers were launched on 12 March at a Faces of the City seminar and form part of the Occasional Paper series published by the GCRO. They can be downloaded from the Occasional Paper reports page on the GCRO website.

4 GCRO appoints five new research staff

GCRO's research capacity has been significantly bolstered with the appointment of three new researchers, a contract researcher, and a senior researcher

GCRO's research capacity has been expanded with the appointment of 5 new research staff:

Christina Culwick was appointed as a researcher at the GCRO in April 2013. She has a focus on sustainability in the city-region with interests in urban environment, resilience, environmental governance and transforming the GCR towards sustainability and equality. Christina completed her BSc in Geography and Maths, and went on to do a BScHons and MSc in Geography at Wits University. Despite the quantitative focus of much of her studies, she is interested in the role of multi-disciplinary research. Her masters' thesis fed into a Water Research Commission Project investigating the impact of climate change on municipal water services. She has published her research in local and international journals, and presented at a number of local and international conferences. Her background and interest in climatology

have enabled her to work as a broadcasting meteorologist for the SABC, since 2008. Her climbing and traveling trips help to sustain her love for Joburg, where she grew up and now lives with her husband.

Dr. Koech Cheruiyot started as a Senior Researcher at the Gauteng City-Region Observatory in May 2013. He holds a PhD in Regional Development Planning from the University of Cincinnati, Ohio, USA as well as post-graduate training in urban and regional planning and human settlements and a bachelor's degree in economics. He has over 12 years of working in the field of urban and regional development planning both as a civil servant and a researcher. Prior to joining GCRO, he worked as a post-doctoral research fellow in the NRF:SARChI in Development Planning and Modelling Unit at the School of Architecture and Planning, University of Witwatersrand, Johannesburg, South Africa between



September 2011 and April 2013. During his research fellowship, he focused on modelling economic development both at the national and metropolitan level in the South Africa context. He was also involved in reviewing international and South African urban spatial change modelling techniques and initiatives. He has research interests in local and regional economic development and planning, the application of spatial analysis to model regional development issues and urban spatial change. At the GCRO, he will continue researching and publishing on these research areas. He has taught urban planning and statistics courses to undergraduate and post-graduate students. Currently, he teaches quantitative methods to post-graduate students in the property studies programme at Wits' School of Construction Economics and Management.

Guy Trangoš joined the GCRO as a researcher in April 2013. An architect by training, he completed his professional architecture masters at the University of the Witwatersrand in 2008 and recently graduated with an MSc. in City Design and Social Science from the London School of Economics and Political Science. Previously, he has worked as a part-time researcher at LSE Cities, practiced as an architect, and designed and curated exhibitions. He lectures History and Theory of Urban Design at Wits University in the Urban Design Masters programme, teaches in the planning studio and writes regularly on urban issues and architecture for various publications. His research is focussed on socio-spatial inequality, mobility, the politics of space making in the city, housing and informality.

Kerry Bobbins was appointed as a researcher in May 2013, after completing an internship at the GCRO over 2012/13. She graduated from Rhodes University with a BSc Honours degree in Integrated Water Management and an MSc in Environmental Water Management and has completed additional masters' courses in International Environmental Policy and Environment and Development from Wageningen University, in the Netherlands. Kerry's academic interests

focus in particular on how ecological considerations are factored into political and economic decision-making, the valuation of environmental infrastructure in urban and nonurban landscapes, provisioning of ecosystem goods and services, water governance and policy, mining impacts on the environment and landscape restoration. During Kerry's internship at the GCRO in 2012/13 she was a key contributor to research around valuing green assets and infrastructure in the Gauteng City-Region (GCR) and led an investigation into the impacts of GCR's mining legacy on the environment, in particular issues of environmental governance around acid mine drainage.

Potsiso Phasha has been appointed as a contract researcher at GCRO for the period May to December 2013, after completing his internship here over 2012/13. He holds an MSc degree in Development Planning and an undergraduate BSc (Honours) degree in Urban & Regional Planning. Potsiso completed his degrees at the University of the Witwatersrand where he was also a senior tutor and lecturer assistant. For his Masters dissertation, Potsiso studied the ways in which street artists and skaters appropriate and negotiate public space in inner Johannesburg using photography and film. Potsiso has worked on reviewing local municipality spatial development frameworks and has undertaken research into the National Treasury National Development Partnership Grant. He has a strong interest in urban photography and was an active member of Yeoville Studio, a participatory research initiative of the Wits School of Architecture and Planning. He has been the winner of several awards including the University of the Witwatersrand's Post-Graduate Merit Award (2010/11); the Mallows-Pintoroux Prize for academic excellence; and the South African Planning Institute Award for 'Innovative research method in understanding how urban youth perceive public space' (2010). Potsiso has also recently returned from attending the Human Cities Symposium held in Belgium, where he presented his paper titled 'Autophotography: a tool for recording ways in which street skaters and street artists have appropriated space in Johannesburg'.

5 New projects for the 2013/14 financial year

GCRO is now in the last year of its 2011-14 three year strategic plan. While bigger, longer-term projects have rolled over from the previous year, 2013/14 also sees a number of exciting new projects

In early 2011 the GCRO Board approved a three year strategic framework of research projects covering 2011/12 – 2013/14. The 3-year framework, due to end in March 2014, has seen 23 applied projects initiated. These are over and above the academic outputs of GCRO staff and the considerable work the Observatory does in direct support of government policy development, such as drafting of the 2011 Green Strategic Programme, support on the mid-term review of Gauteng's 2009-14 term of office, and ongoing research assistance to G2055.

The applied research projects vary in scale and complexity. Some have already been concluded, such as the 2011 Quality of Life Survey, the Visualising the city-region photocompetition, and the Social fabric in the GCR study into race and non-racialism. Others are about to deliver key outputs, such as the State of Green Infrastructure Report, a Governance Barometer, and Occasional Papers on modelling urban spatial change and on the governance of acid mine drainage, all scheduled for release in July and August 2013. Still



others are large, multi-year and multi-faceted projects that will see deliverables later in 2013 or early 2014.

In addition to the research already underway, GCRO has also initiated a number of new projects in 2013/14, as follows:

Quality of Life Survey 2013/14. This financial year will see the third GCRO Quality of Life Survey, results from which will provide the basis for trend analysis on key questions asked since the first survey conducted in 2009. The 2011 survey rendered 16 729 respondents across Gauteng and an error bar of 0,7%. This time round GCRO is hoping to achieve a ward-representative sample, at least in some parts of the province. A tender for the fieldwork will be evaluated in July, with the aim of going into field in August.

Political economy of infrastructure choices. In the context of an expanding economy and a growing population, water scarcity is a major issue in the current and future development of the GCR. So too is the issue of access to water at a reasonable cost for millions of poor households. Tariffing, and forms of metering like pre-payment meters, may help the region conserve water, but high prices and inappropriate application of inflexible technologies may impact negatively on the livelihoods of the poor. This project explores these competing imperatives through econometric modelling of micro-level data, sourced from selected GCR municipalities, on water tariffs, water consumption and subsidised free basic services.

The GCR and its people. This project builds on the Visualising the GCR photo-competition and exhibition, which provides a unique visual perspective on the people and spaces that make up the city-region. We aim to produce two photoessays, and accompanying analysis, of intriguing aspects of life in the GCR.

Government spatial imaginaries and capabilities for sustainable human settlements. It is commonly understood that the spatial forms and fabric of the Gauteng City-Region are highly distorted, when compared to many more rationally planned and managed cities and regions elsewhere in the world. Both apartheid policies, as well as planning decisions and lack of adequate planning controls in the post apartheid era, have left their mark. Fundamental changes in the design and composition of our settlements are needed. Whether this is possible depends in large part on the ability of various planning authorities to co-ordinate their spatial plans. Through in-depth qualitative interviews with key decision-makers, this project explores how different planning authorities envisage possible spatial futures of the GCR within their areas of control, how they understand the visions of other actors, and how they think about their ability to effect the changes they would like to see.

Later in 2013, GCRO will assess the achievements of its 2011/12 - 2013/14 strategic framework, and begin the process of formulating a five year strategic plan of new projects to kick in in April 2014.

6 Reinventing the GCRO's Research Advisory Committee

The RAC, which guides GCRO's research agenda, and advises on appropriate research for the city-region, has been reconfigured with a number of new faces

The Research Advisory Committee (RAC) of the GCRO has played a valuable role in the work of the organisation. Members of the RAC – including senior academics, researchers, public intellectuals, members of civil society and government officials with a range of different disciplinary affiliations and research interests – use their expertise to provide advice on the research work of the GCRO. Originally their work focused on helping to define the research agenda of the Observatory. Subsequently they have also been asked to peer review outputs and provide intellectual guidance to researchers formulating project objective and methods.

After nearly three years in existence a review of the way the RAC of the GCRO works and was constituted was undertaken in late 2012. The review coincided with the end of the term of appointment of the original RAC members. After consultations with the existing RAC, the GCRO Board and staff of the GCRO, it was decided to re-engineer the way the RAC works to enable members to play a more active and supportive role in the research work of the organisation. As a result of these discussions a new RAC has been appointed and meetings will be structured differently. Depending on their interests, members of the RAC are now linked to one or more themes or research pillars of the GCRO. From May 2013, RAC meetings will consist of a plenary session where crosscutting issues relating to the research work of the GCRO will be discussed. Plenary sessions will be supplemented by themed meetings where members can critically engage with researchers on specific research projects they are working on.

A first meeting of the new RAC was held on 30 May. The plenary session gave members an opportunity to respond to the latest version of the G2055 long term development plan, presented by Rashid Seedat from the Gauteng Planning Commission. This was followed by breakaway themed sessions, which saw more focused discussions on GCRO's Green infrastructure, Urban spatial modelling, Trade in the GCR, and Social cohesion projects.



The GCRO is very proud of and grateful to the people who have agreed to be part of the reconstituted RAC, which includes the following existing and new members as approved by the GCRO Board.

TITLE	SURNAME	INSTITUTIONAL AFFILIATION
Dr	ABRAHAMS, Caryn	Ahmed Kathrada Foundation, Researcher and urban planner
Prof	AHMED, Fethi	University of Johannesburg, Department of Geography, Environmental Management & Energy Studies
Dr	ALTMAN, Miriam	Human Sciences Research Council (HSRC), Distinguished Research Fellow at HSRC, member of National Planning Commission
Mr	BOLTON, Neeshan	Ahmed Kathrada Foundation, Director
Prof	DE WET, Thea	University of Johannesburg, Professor in Department of Anthropology & Development
Mr	DICKS, Rudi	Department of Performance Monitoring & Evaluation, Outcome Facilitator (Employment)
Prof	GUMEDE, William	Writer and commentator, Honorary Associate Professor at the University of the Witwatersrand (P&DM)
Dr	GWAGWA, Lulu	Lerako Investments, member Gauteng Planning Commission Advisory Council
Prof	HARRISON, Phil	University of the Witwatersrand, NRF Research Chair in Development Planning & Modelling, member of National Planning Commission
Prof	MABIN, Alan	University of the Witwatersrand, School of Architecture & Planning at the University of the Witwatersrand & Director of CUBES
Prof	MAMBA, Bhekie	University of Johannesburg, Professor specialising in water
Prof	MOHAMED, Seeraj	University of the Witwatersrand & Ministry of Trade & Industry, Professor (Economics), Director of Corporate Strategy & Industrial Dev. & Special Advisor to the Minister of Trade & Industry
Prof	MULLER, Muller	University of the Witwatersrand, P&DM, Statistician
Dr	NIEFTOGODIEN, Noor	University of the Witwatersrand, Director History Workshop
Prof	PIETERSE, Edgar	University of Cape Town, DST/NRF Chair in Urban Policy & Director of Africa Centre for Cities at UCT
Dr	PITYANA, Sipho	Izingwe Capital, Advisor to Labour Relations Council
Prof	ROGERSON, Chris	University of Johannesburg, Professor in Department of Tourism LED & entrepreneurship focus
Mr	SACHS, Michael	National Treasury, Chief Director International Finance & Development at Treasury
Dr	SEGATTI, Aurelia	University of the Witwatersrand, African Centre for Migration Studies, member of the Gauteng Advisory Council
Mr	TSELA, Mfanafuthi	Senior Researcher, Ministry of Cooperative Government & Traditional Affairs
Prof	VAN OLST, Rex	University of the Witwatersrand, School of Electrical & Information Engineering
Dr	VENTER, Christo	University of Pretoria, Department of Civil Engineering, transport focus
Ms	VETTEN, Lisa	Independent researcher, member GPC Advisory Council, and committees of the Reproductive Rights Alliance & Gauteng Network on Violence Against Women
Prof	VOGEL, Coleen	University of Pretoria, sustainability and climate change
Prof	VON HOLDT, Karl	University of the Witwatersrand, Professor (Labour Economy), Director Society Work and Development Unit, member of National Planning Commission

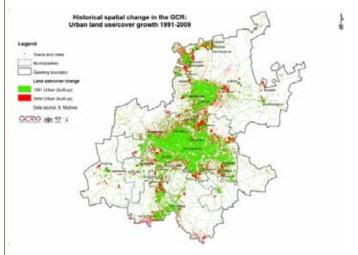


Maps of the month

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Two GCRO maps of the month are showcased, one on *Historical spatial change in the GCR* (1991-2009), the other on *Defining core and periphery in Gauteng*

Historical spatial change in the GCR (1991-2009)

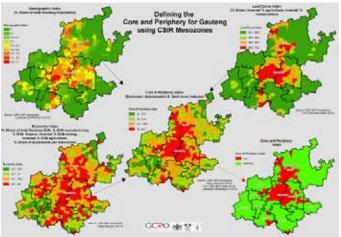


Urban land cover / land use change across Gauteng is beautifully portrayed in April's map of the month. The land cover/use layers are based on an interpretation of LandsatTM and ETM+ satellite imagery from 1991 and 2009, undertaken as part of Brian Mubiwa's PhD research at the University of Johannesburg. Urban growth and suburban sprawl are clearly evident with the percentage of urban (built-up) land cover in Gauteng increasing from 12.6% in 1991 to 18.4% in 2009. Most of the development can be attributed to the massive RDP housing projects and growth of informal settlements on the outskirts of the cities. Johannesburg is the most urbanised municipality with 58% of its total municipal area built up in 2009, followed by Ekurhuleni and Tshwane with 44% and 39% respectively.

For a complete historical review of the evolution of urban spatial development from the 1890s through to the late 1980s, and more detailed statistics and maps describing the 1991 to 2009 growth, please refer to the GCRO Occasional paper: Historical spatial change in the Gauteng City-Region.

For more information contact Chris Wray chris.wray@gcro.ac.za

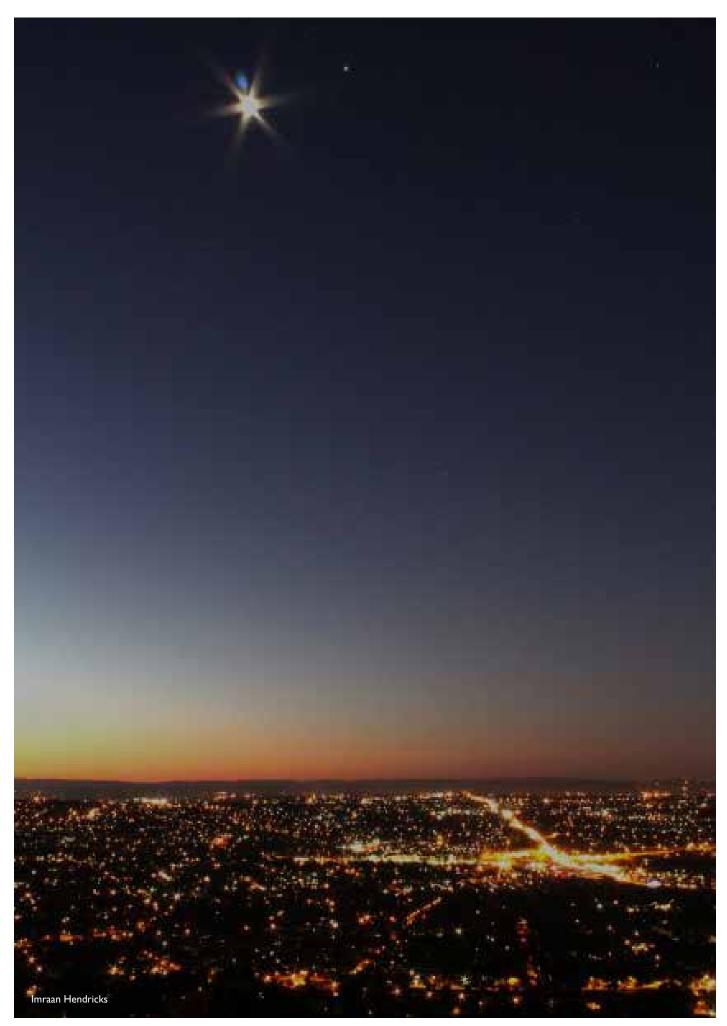
Defining core and periphery in Gauteng



May's map of the month is a composite of maps showing the process used to identify the core and peripheral areas of Gauteng for a study of peripheries in the province. The study used economic, demographic and land use indicators to create three indexes of core and periphery. The indicators for each index were used to create a final index and then a map of core and peripherality in the Gauteng Province. The indicators were derived from GVA values for CSIR GAP mesozones, Lightstone DemProKey X (2010) for population estimates, Afrigis Bizcount (2010) for data on the number of businesses, and GeoTerraImage (GTI) 2.5M (2010) land cover data. CSIR mesozones were used to map the data. Core areas are expected to be urban with lower levels of primary sector economic GVA and peripheral areas to have higher levels of primary sector activity and lower levels of urban land use. The maps show that although the core of the province includes at least parts of Ekurhuleni, Johannesburg and Tshwane, some core areas lie in the periphery while some peripheral areas sit within the core. Having identified the core and periphery, further analysis is being undertaken of demographic and socio-economic dynamics in peripheral areas of the province and the influence of South Africa's apartheid history on the location of core and peripheral areas.

For more information contact Prof Sally Peberdy sally.peberdy@gcro.ac.za









Reports and publications

- Everatt, D. (April 2013) 'Ring of fire of puff of smoke? Youth in Gauteng', in Helve et al. (ed.s) Youth and youth transitions, Tufnell Press, London.
- Nyar, A. and Musango, J.K. (2013), 'Some insights about gender-based violence from the Gauteng City-Region'. International Journal of Sociology Study Vol 1 (2).
- Mubiwa, B. & Annegarn, H. (2013) 'Historical change in the Gauteng City-Region', *GCRO Occasional Paper 4*.
- Mabin, A. (2013) 'The map of Gauteng: evolution of a cityregion in concept and plan', *GCRO Occasional Paper 5*.

Conferences, workshops and presentations

- Graeme Gotz, Alexis Schäffler and Kerry Bobbins (July 2013), 'Governing resource flows in the Gauteng City-Region'. Presented at the 19th International Sustainable Development Research Society (ISDRC19) held at Spier Estate in Stellenbosch, 3 July 2013.
- David Everatt was the keynote speaker at the ESRI South Africa Summit conference held at the Champagne Sports Resort, Drakensburg, from 8-9 May 2013.
- Kerry Bobbins (May 2013), 'Beneath the surface: investigating Acid Mine Drainage (AMD) and its governance in the Gauteng City-Region (GCR)'. Presented at the Faces of the City Seminar Series hosted by the Wits School of Architecture and Planning, 14 May 2013.
- GCRO hosted Prof Glauco Arbix for the launch of his Provocation on innovation in Brazil, on 29 April. The event was widely covered in the media as he simultaneously launched the US\$16 billion Brazilian Innovation Fund.
- Graeme Gotz & Alexis Schäffler presented, 'Conundrums of an emerging green economy in the Gauteng City-Region', at an international workshop at Royal Holloway, London, Bearing the brunt of environmental change: understanding climate adaptation and transformation challenges in African cities, 16-17 April.
- Sally Peberdy presented a paper entitled 'Who was a real white South African? The South African state, whiteness and national identity', at Whitewash I, University of Johannesburg, 19-20 March 2013.
- Annsilla Nyar presented her work on anti-Indian racism at the 'India in Africa: new frontiers in South-South relations' conference hosted jointly by the Economic

and Social Research Foundation (ESRF) in Tanzania and the Department of Political Science (Africana Studies and International Studies) at Vassar College, New York State. The conference was held on 15-17th March 2013 in Dar es Salaam, Tanzania.

- Guy Trangoš presented on 'Architecture and the City' at a Faces of the City Seminar on 2 April at Wits University. The presentation covered a selection of research he completed while studying at the LSE, and called for the increased engagement of architects in urban research and policy formation.
- Alexis Schäffler presented on 'The State of Green Infrastructure in the Gauteng City-Region', to the Gauteng Integrated Infrastructure Master Plan Workshop, on 8 February 2013.
- Darlington Mushongera participated in a training workshop on 'Micro-econometric modeling in environmental economics', hosted by Centre for Environmental Economics and Policy in Africa (CEEPA) at University of Pretoria from 7th – 9th February 2013.
- Graeme Gotz & Alexis Schäffler presented, 'Conundrums for an emerging green regional economy: The Gauteng City-Region', at the KZN Green Growth Conference, ICC Durban, 5 February 2013.

Teaching & supervision & wider academic citizenship

- Graeme Gotz presented a lecture to third year Architecture and Planning students at Wits on 'Metropolitan areas & city regions: Johannesburg & Gauteng', on 19 March 2013.
- Graeme Gotz presented two lectures to the Urban Infrastructure Design and Management Masters Programme at UCT on 7 March 2013, one on the Phiri Water Case and the other on Johannesburg's Growth Management Strategy.
- Guy Trangoš lectured History and Theory of Urban Design at Wits University in the Urban Design Masters programme while also teaching in the first year planning studio.
- Sally Peberdy has been supervising three MA students at the University of the Western Cape. All three students, Winston Jerome Harris, Kris Agbor Tabi and Lameez Eksteen have successfully completed their studies and been awarded their degrees.