



GCRO PROVOCATION

#08



GOVERNING THE GCR PROVOCATION SERIES
**DISPLACED URBANISATION OR
DISPLACED URBANISM?**

RETHINKING DEVELOPMENT IN THE PERIPHERIES
OF THE GAUTENG CITY-REGION

Authors: Ngaka Mosiane and Graeme Götz

April 2022



GCRO

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DISPLACED URBANISATION OR DISPLACED URBANISM?

RETHINKING DEVELOPMENT IN THE PERIPHERIES OF THE GAUTENG CITY-REGION

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[to provoke: to stimulate, incite, stir up, challenge, irk, exasperate, vex]

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Acronyms and abbreviations

BRT	bus rapid transport
CCCC	China Communications Construction Company
CD:NGI	Chief Directorate: National Geospatial Information
CGB	Cape-gauge-based (railway)
GCR	Gauteng City-Region
GCRO	Gauteng City-Region Observatory
GDRT	Gauteng Department of Roads and Transport
GTAC	Government Technical Advisory Centre
GVA	gross value added
NDT	National Department of Transport
PRASA	Passenger Rail Agency of South Africa
PUTCO	Public Utility Transport Corporation
SANRAL	South African National Road Agency Limited
TOD	transit-oriented development

Governing the Gauteng City-Region

– a Provocation series

The idea of the city-region is growing in international prominence. This is because the form has been hailed as a means to promote a range of agendas, including boosting economic competitiveness; fostering integrated development; building partnerships between state and non-state actors; and solving urban growth challenges by offering ways to think differently about mass infrastructure provision, environmental sustainability and the like.

A growing amount of academic and policy work is being done on the issue of city-region governance, with many arguing that the burgeoning of thinking and practice represents a dedicated 'process of scale building' (Harrison and Hoyler, 2014; Jonas, 2006; Scott and Storper, 2003; Brenner, 1999). Brenner in fact argues that the rise of regional governance can be understood as a process of 'state reterritorialization' or 'state rescaling', and that the specific form of the city-region reflects 'state spatial selectivity'. In other words, this scale has been specifically chosen or assembled by the state to facilitate various processes such as economic agglomeration or competitiveness (Brenner cited in Wu, 2017, p. 1135). In other contexts, the scale has been asserted as a way to mitigate the negative effects of inter-locality competition (Wu, 2017).

Regardless of the deliberative processes behind this 're-scaling', the city-region is not a straightforward site in which to organise governance. As Storper (2014) points out, governance at this scale necessarily involves many large, contested and intertwined issues that arise as a result of strong interdependencies and cleavages combined with fragmented geographies and overlapping implementing agencies. This means that the issues that become the object of regional governance are not amenable to a 'solution' so much as a haphazard muddling through. Similarly, Wu (2017) interprets the state's spatial selectivity of the city-region form less as a proactive model to manage social provision or promote democratisation but rather as an attempt to manage intractable crises.

The Gauteng City-Region (GCR) is increasingly recognised in official and other discourse. That said, the acknowledgement of something that can be described as a city-region has not resulted in consensus on what this means, or should mean, for planning, public investment or governance.

This series of GCRO Provocations examines different aspects of governance of and in the GCR. Taken together, they hope to trigger debate and dialogue on various complexities of the issue and signal a series of priorities for consideration in thinking about the future and the fortunes of the city-region.



Moloto Road, Kwaggafontein. Photograph by Same View Pictures © GCRO

Abstract

This Provocation attends to a feature of the Gauteng City-Region (GCR) – its periphery – that continues to receive very limited public and private investment yet remains home to many hundreds of thousands of largely poor people. The extended GCR has a complicated social, economic and spatial structure due to the legacy effects of apartheid. That system's laws against free movement frustrated the urban aspirations of the African population, forcing them to stay in the extended cheap labour pools of economically unviable bantustans, many in proximity to but removed from burgeoning city centres.

This system has not unravelled with the formal arrival of democracy. The GCR remains a complex functional space whose edge is not defined by the boundary of the Gauteng province. Tens of thousands of commuters routinely flow across the northern boundary of Gauteng each day to work, shop, trade goods or seek employment in Pretoria and other Gauteng cities. This flow, and the lasting social, economic and spatial dislocation effects of apartheid it reflects, has come to be symbolised by the R573 Moloto Road, colloquially named the 'road of death' because of the staggering number of traffic accidents it sees each year.

The question of what should now be done with the still underdeveloped zones of what has historically been termed 'displaced urbanisation' on Gauteng's periphery, has occupied the state, amongst other actors, for almost three decades. Focusing on the efforts to conceptualise and plan for massive transport infrastructure along the Moloto Development Corridor as a key solution to the problem, this Provocation reveals a set of unresolved divergences within the South African state. Differences of opinion and policy approach – which pivot on whether it would be better to facilitate the continued, but safer, mobility of peripherally located commuters through massive rail development, or to encourage population relocation to Gauteng's core – have meant that development efforts have so far remained largely uncoordinated. In turn, the gains that a negotiated process around a broadly common agenda could potentially yield have remained constrained.

This Provocation contends that coordination through a strategy of mutual engagement remains absent because the relevant actors lack a shared 'concept of development'. Both sides of the debate miss the significance of the day-to-day actions of residents, formal and informal traders, civil society, traditional leaders, and other actors, who are not waiting to be moved, or developed by transport investment, but are striving to transform the zones of 'displaced urbanisation' they occupy into vibrant spaces of 'displaced urbanism'. We argue that this 'displaced urbanism' – the innovative co-existence of formal and informal land uses and activities; innovative acts of self-realisation by local residents trying to survive and pursue their aspirations; and, in turn, dynamic local economies from below – needs to be taken much more seriously on its own terms.

1 Introduction

It is estimated that some 40 000 passengers commute daily by bus between Tshwane¹ and the areas making up the former KwaNdebele homeland (NDT, 2014). This excludes a significant number of commuters travelling with minibus taxis and private motor vehicles. Return daily commuting takes up to seven hours, costing travellers about a third of their incomes (NDT, 2014; Maharaj et al., 2011).

Much of this commuting occurs along a narrow regional road, the R573, more commonly known as the Moloto Road. The Moloto Road has come to be dubbed the 'road of death' by the public, with about 20 road accidents reported per month between 2012 and 2014, 39% of which involved pedestrians (SANRAL official, pers. comm., 2016). The costs of the Moloto Road – time, income, injuries and even lives – are behind proposals from some quarters of the South African state for a massive development of this route, the so-called Moloto Development Corridor (see Figure 1).

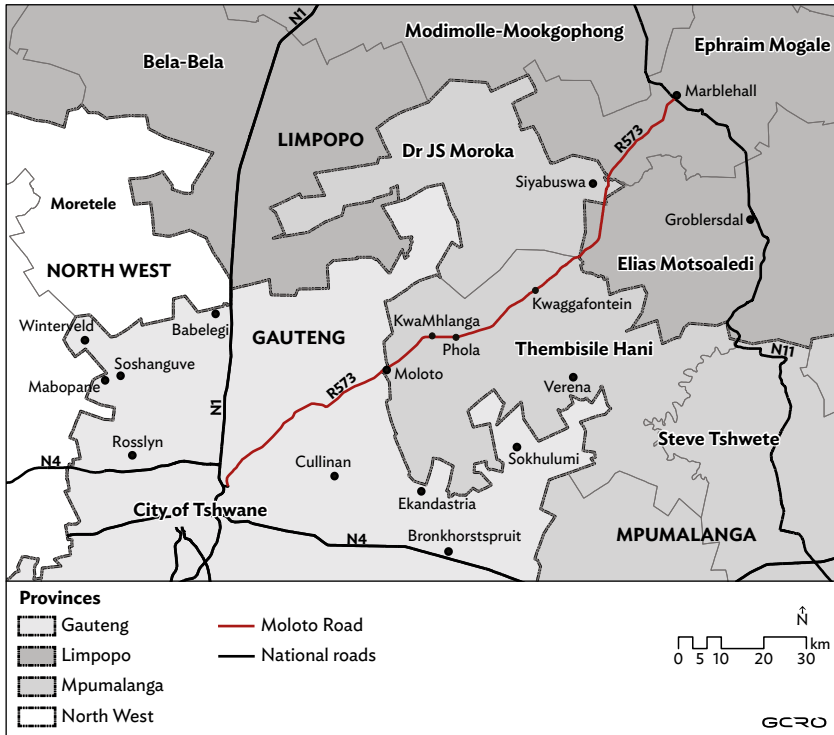
This Provocation provides an analysis of divergent state imaginaries – notably between the National Department of Transport and the National Treasury – around the development of the Moloto Corridor. It focuses on how the proposed Moloto Corridor, strongly supported by some but opposed by others, reveals contradictions within the state's approach to addressing one of the key spatial legacies of apartheid, that is, the underdevelopment of vast areas of peripheral urban settlement in former homelands and 'independent' bantustans. These internal contradictions turn on a tough policy choice between making large-scale infrastructural interventions regardless of their price tag, or only making investments whose benefits clearly exceed the costs. The tensions revealed by the Moloto Corridor process so far appear hard to resolve because of the existing divergence within the state, between the state and non-state actors, as well as among various non-state actors themselves.

The first part of this Provocation provides the context of the former KwaNdebele homeland as part of an extended Gauteng City-Region (GCR), highlighting both its connectedness to metropolitan areas but also its stark relative underdevelopment. It reviews how, even though Gauteng is regarded as the economic heartland of the country, there remains a significant deficit in economic, employment and other opportunities on the province's edge. Former bantustans and other areas on the GCR's northern periphery hold millions of people in poverty, whose location and socio-economic status – 28 years after democracy – still reflect the legacy of apartheid spatial strategies that led to the phenomenon of displaced urbanisation.

1 The name Pretoria is used in this Provocation to refer to the pre-1994 municipal boundary of the former white residential and commercial areas, while Tshwane is used to stand for the City of Tshwane Metropolitan Municipality. Note that Pretoria continues to be used as the place name – as opposed to the name of the municipal area containing it – for the urban extent that is South Africa's capital city, the seat of the executive arm of government.

Figure 1: The R573, one of the anchors of the imagined Moloto Development Corridor

DATA SOURCES: CD:NGI; MDB (2018); map by Mncedisi Siteleki, Jennifer Murray and Ngaka Mosiane



This intractable uneven development situation cannot be endured and prompts the need for urgent action. But recognising that ‘something must be done’ does not answer the question, ‘What should we do?’ How exactly do we go about unravelling the apartheid settlement pattern of displaced urbanisation?

The second part of this Provocation outlines how arguments for and against the full development of the Moloto Road, as a possible approach to address this underdevelopment, have played out. In particular, it examines the divergent approaches to the proposed Moloto Development Corridor by the state at various scales and by local organisations, communities, businesses and other role-players. The Provocation seeks to answer the questions: What are the different approaches to the Moloto Development Corridor by various actors? Why do these actors express their development actions the way they do? And what are the development implications of these various approaches?

The third part of this Provocation argues that, caught in their contradictory positions, the state and other actors have overlooked a key facet of how best to facilitate the development of the peripheral area in question. This missing factor is the latent development energy – an internal ‘will to development’ – inherent in the many people inhabiting this apparently marginalised area. The Provocation elaborates this idea by developing the concept of ‘displaced urbanism’ as distinct from ‘displaced urbanisation’, with examples of the actual development already happening spontaneously along the R573 Moloto Road. It is argued that this alternative way of thinking about development along the R573 helps to bypass the stalemate position inherent in a state divided within itself on whether to bring large-scale infrastructural development to the periphery or not.



A bus and truck crash on the Moloto Road. Photograph by Isaac Mahlangu / Sowetan

2 Displaced urbanisation in the Gauteng City-Region

This section positions the discussions to follow by giving an overview of the development context of the GCR's northern periphery. It draws on a range of quantitative and qualitative sources of data and information, most notably a 2019 Gauteng City-Region Observatory (GCRO) household survey conducted in selected areas of Mabopane, Soshanguve, Rustenburg and former KwaNdebele (GCRO, 2019a). The survey samples were specifically drawn from areas around the major shopping malls and complexes in former KwaNdebele areas (KwaMhlanga, Phola Park and Kwaggafontein), from areas around mining shafts and hostels in Rustenburg (Lefaragatlha and Freedom Park) and from areas around Mabopane Station (Soshanguve and Mabopane). The survey instrument matched that of the GCRO Quality of Life Survey V (2017/18) (GCRO, 2019b), and so comparative analysis can be done between responses from the 2019 peripheral areas survey, and the Quality of Life Survey focused on Gauteng. Various other datasets have also been used, including:

- the StepSA mesozones dataset (CSIR, 2018);
- the Municipal Demarcation Board's 2018 local municipality boundary dataset (MDB, 2018);
- a World Bank spatial dataset on South Africa's roads (World Bank, 2017);
- the 2020 and 2013–14 national land-cover datasets supplied by GeoTerra Image (Pty) Ltd² (GTI, 2020, 2015);
- the 2011 census community profile dataset (StatsSA, 2014); and
- multiple data layers provided by the Chief Directorate: National Geo-Spatial Information (CD:NGI) in the Department of Agriculture, Land Reform and Rural Development.³

In addition, a range of qualitative interviews were conducted, extending to state officials (at different levels) as well as to farmers and farmworkers in north-eastern Tshwane. Those interviews centred on agricultural and livelihood activities, the Moloto Corridor proposal as well as the Mabopane Station and Rustenburg masterplan projects.

These surveys, datasets and interviews were gathered from August 2017 to December 2019, mainly for the larger GCRO project on 'Landscapes of peripheral and displaced urbanisms' (Mosiane et al., forthcoming).

² <https://geoterraimage.com/>

³ <http://www.ngi.gov.za/>

Gauteng City-Region context

Figure 2 shows the distribution of urban centres within a 175 km radius drawn from the centre of the Gauteng province, following an earlier exercise of mapping wider population concentrations at this radius (GCRO, 2013). It uses a grid of equally sized polygons called ‘mesozones’ (each some 50 km²) created by the Council for Scientific and Industrial Research (CSIR, 2018) in order to assist spatial analyses such as the one made here. Each mesozone is shaded to indicate the score of that polygon on an urban-core index. To generate an urban-core index, the proportional share for each of the following urban features was calculated per mesozone: urban land-cover; population size; road length; gross value added (GVA) for finance, insurance, real estate and business services; GVA for manufacturing; GVA for transport, storage and communication; GVA for electricity, gas and water; GVA for general government and community, social and personal services; and GVA for wholesale and retail trade, catering and accommodation.⁴

The urban-core index was then calculated by dividing the percentages contributed by each mesozone on each of these attributes by the total number of attributes, to arrive at an average percentage per mesozone. The urban-core index value per mesozone can be thought about as that mesozone’s average share of all the urban-core elements in and around Gauteng. The mesozones with the darkest shading have an urban-core index value of between 1.5% and 2.8%. Those with the lightest shading – the majority – have an urban-core index value of less than 0.04%, meaning their contribution is miniscule (less than a twenty-fifth of a percent of the region’s total urban features). Further analysis is provided by Mosiane and Murray (2021).

While the overall urban-core index shows a high concentration of urban features in particular locations, specific components of the index reveal different patterns that are obscured in the aggregated picture. Figure 3 shows one attribute of the urban-core index, namely the share of total population of the entire area contributed by each mesozone. The map confirms that mesozones in the centre of Gauteng contribute a disproportionately large share of this urban feature, as with the aggregated index as a whole. However, the map also reveals that the edges of Gauteng’s metropolitan areas are characterised by relatively large concentrations of people. Significantly, Figure 4 shows that there are many mesozones to the north, north-east and north-west, just inside and outside of the Gauteng boundary, that have a greater share of the region’s population than they do of the share of other urban attributes, notably economic activity.⁵

4 Components of GVA excluded from the urban-core index are the primary industries of agriculture, forestry and fishing, and mining and quarrying.

5 See Mosiane and Murray (2021) for a focused discussion on the spatial relationship between population and economic activity.

Figure 2: Urban-core index per mesozone in Gauteng and its peripheries

DATA SOURCES: CSIR (2018); World Bank (2017); GTI (2015); map by Yashena Naidoo and Jennifer Murray, with Graeme Götz

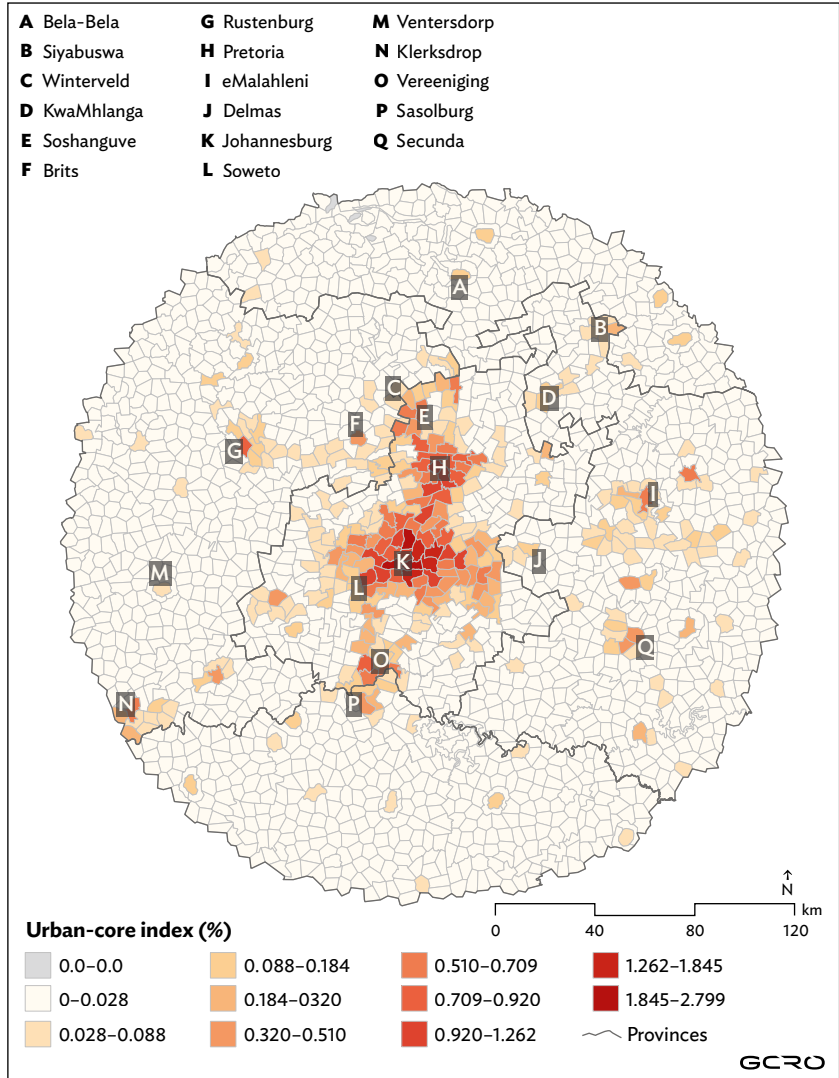


Figure 3: Contribution of each mesozone to the total population in Gauteng and its peripheries

DATA SOURCE: CSIR (2018); map by Yashena Naidoo and Jennifer Murray, with Graeme Götz

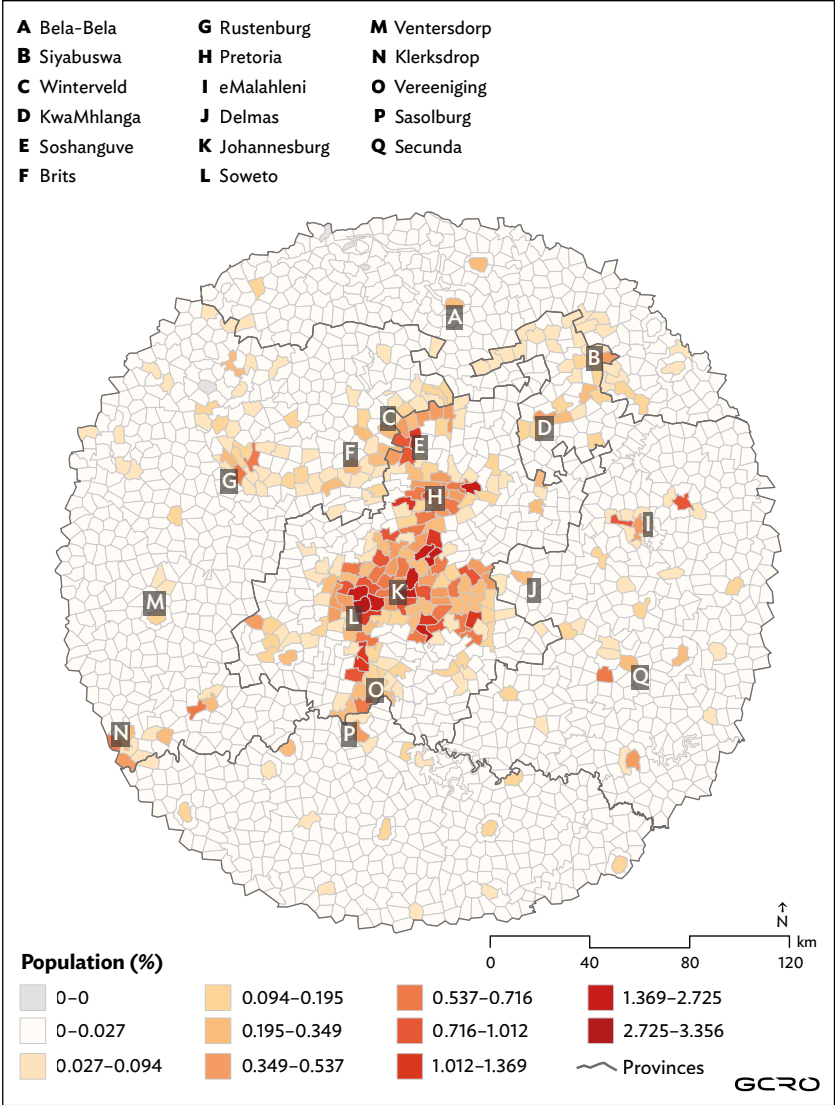
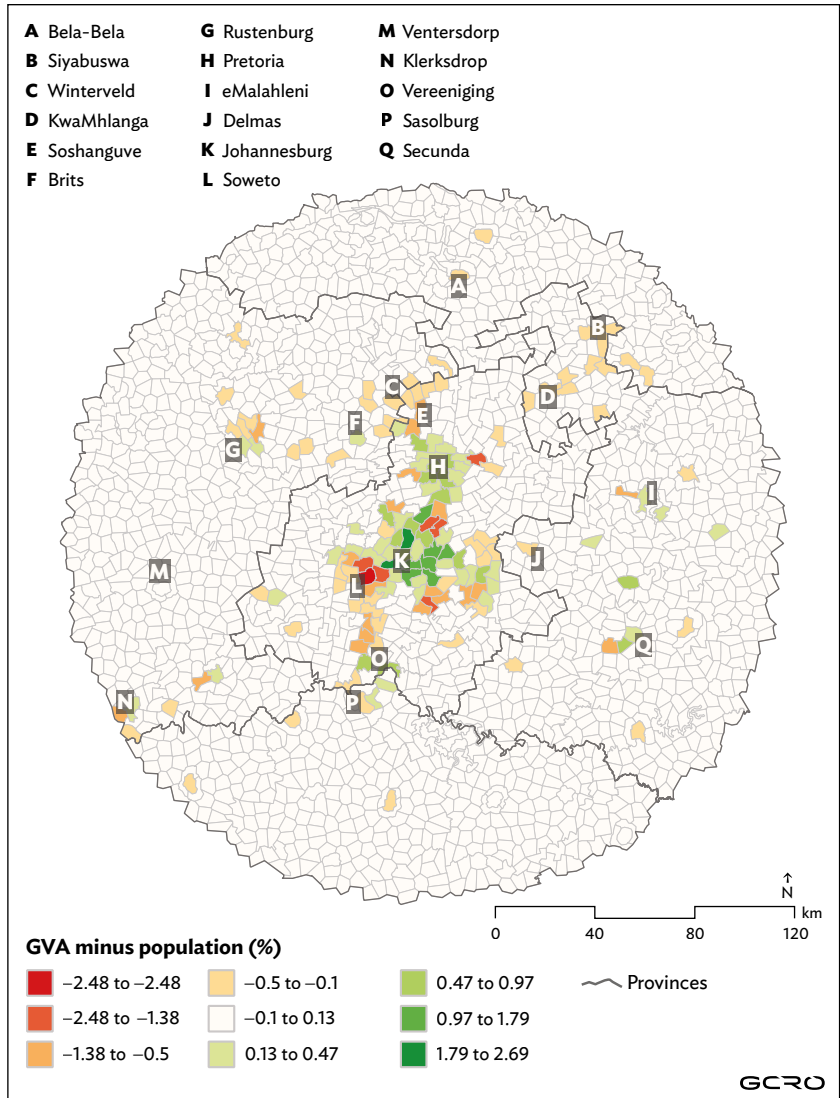


Figure 4: Share of the economy against share of the population per mesozone**DATA SOURCE:** CSIR (2018); map by Jennifer Murray, with Yashena Naidoo and Graeme Götz

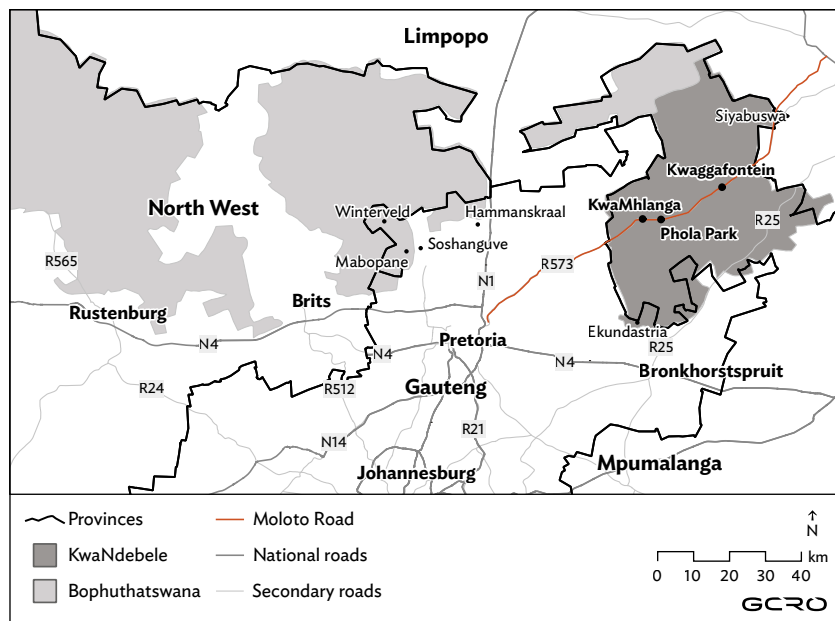
Displaced urbanisation

Comparing the maps of the overall urban-core index and population distribution, it is clear that the region's population is relatively more disbursed than other urban features, and that there are significant shares of its population located in areas that do not show up prominently in a plotting of the urban-core index as a whole. As such, these maps offer a contemporary representation of the enduring legacy of what in the South African context has historically been termed 'displaced urbanisation'.

'Displaced urbanisation' refers to human settlement development that would have gravitated to the traditional urban core were it not for apartheid. Apartheid boundaries and restrictions on mobility forced millions of African people with urban aspirations to build homes and livelihoods in homeland areas as close as possible to – but nonetheless still at some distance from – the economic opportunities in the urban centres reserved for white residents (see Figure 5).

Figure 5: Former KwaNdebele within contemporary South African provincial borders

DATA SOURCE: CD:NGI; map by Jennifer Murray and Ngaka Mosiane



There has been a long history of scholarship on displaced urbanisation, and it is worthwhile referencing two extracts (Lemon, 1991, p. 21; and Hart, 2002, p. 68, respectively) in explanation of this unique South African phenomenon and its development impact:

Others were forced to settle even further from the cities, most dramatically in the KwaNdebele bantustan. Characterised by Mabin (1989, p. 9) as ‘no more than a recent and growing assemblance of land bought by the state and turned over to newly fashioned “tribal authorities” who maximise income by renting residential sites’, KwaNdebele grew from a minimal population to 255,000 people in 1988 (Chapter 10). Similar growth occurred in Botshabelo, near Bloemfontein, on land newly allocated to the South African Black Trust (Chapter 7). Widespread informal urbanisation has also occurred in bantustan locations far beyond even the most broadly defined urban functional regions, as in the Nsikazi district of Kangwane, near Mmabatho in Bophuthatswana (Chapter 11), and in districts of Lebowa near Pietersburg.

Massive agglomerations of population within former bantustan borders, produced by farm evictions and removals from freehold land, defy conventional rural and urban categories. Simkins (1983) euphemistically called them ‘closer settlements,’ Murray (1988) used the term ‘displaced urbanization’ as well as ‘rural slums,’ Bradford (1987) called them ‘rural ghettos,’ and Hindson (1987) coined the term ‘quasi-urban’ settlements to underscore the absence of an agrarian base. Alan Mabin (1989) makes the point that any labelling exercise obscures a wide array of conditions, some of which we touched upon in our quick tour through north-western KwaZulu-Natal: ‘They vary from places which are urban only in the negative sense that they are not primarily agricultural and have fairly high densities, to almost-urban areas with a modicum of services [...] and their geographical location varies from those in close proximity to city centres [...] to hundreds of kilometres from the metropolitan cores’ (Mabin 1989, p. 10).

In the literature, the idea of displaced urbanisation has historically been used to denote spatial forms that include dispersed rural areas, ‘townships’ and village-like settlements that are neither urban nor rural in that they do not depend solely on subsistence agriculture, nor do they exhibit classically urban functions and services. They are displaced in that they grew in spaces of deliberate exclusion from modern South African cities’ developing social, economic and built environments. While this Provocation takes it as given that the concept of displaced urbanisation still bears relevance, it further proposes that the concept has three dimensions that need to be understood in more detail. The extended zones of displaced urbanisation on the GCR’s spatial edge (1) show an increasingly diversified hierarchy of interconnected settlements; (2) remain relatively underdeveloped; and (3) most importantly, despite their continued dislocation and marginalisation, increasingly show a tendency towards ‘displaced urbanism’ rather than displaced urbanisation.

A diversity of interconnected settlements

Displaced urbanisation in the GCR context is part of a complex heterogeneity of variously positioned urban areas interconnected with one another. The GCR presents as an ‘urban field’ (Friedmann and Miller, 1965) across which jobs, goods and services are highly stratified. Urban investment, employment and amenities are clustered in the metropolitan centres, followed by places like Rustenburg, then Mabopane and KwaMhlanga, and then traditional villages such as Sokhulumu (shown in Figure 1). In very broad terms, it can be said that different urban areas of the GCR are connected to one another in hierarchical relations of mutual interdependence. For example, Groblersdal, Middleburg, Marblehall and eMalahleni contribute to the sustenance of the former KwaNdebele areas. That said, many of the GCR peripheral areas such as Mabopane, Soshanguve and former KwaNdebele continue to be sustained by the Tshwane metropolitan centre. While these peripheral areas are dependent on this centre, they also contribute cheap labour on which the metropolitan economy depends. Similarly, the mining operations in Rustenburg in North West province contribute vital economic outputs (such as platinum group metals) to some Gauteng metropolitan centres but are in turn dependent on various inputs located there (including financial investment, specialised services, tooling supplies, and top-level management and coordination).

Figure 6 plots the share of the GVA of mining and quarrying per mesozone and illustrates the relative location of mining operations across the GCR. Figure 7 is drawn from data on the daily sourcing and transporting of a large volume of mining production inputs⁶ from Gauteng to the Rustenburg mining operations. It shows how dependent the peripheral areas are on the supply of key materials from the urban core.

Traditional villages and agricultural areas, although not urban, are also constitutive elements of the GCR’s hierarchically interconnected distribution of urban areas. Figure 8 illustrates the location of settlements on land under traditional leadership in the northern reaches of the GCR.

6 The mining production inputs include steel plate, grouting cement, consumable drilling steels and bits, commercial explosives, spray paints, mine safety equipment, chemicals for the mine and mine plant, once-off consumable spares, shaft cages and cage ropes and accessories, ventilation pipes, cleaning equipment, hostel food, drinking water and bulk stationery (Rustenburg mining company official, pers. comm., 2019). Platinum bars are also sent to Gauteng from Rustenburg mine refineries.

Figure 6: Share of mining GVA per mesozone, calculated from the total mining GVA generated in all mesozones of the map

DATA SOURCE: CSIR (2018); map drawn by Yashena Naidoo and Jennifer Murray, with Graeme Götz

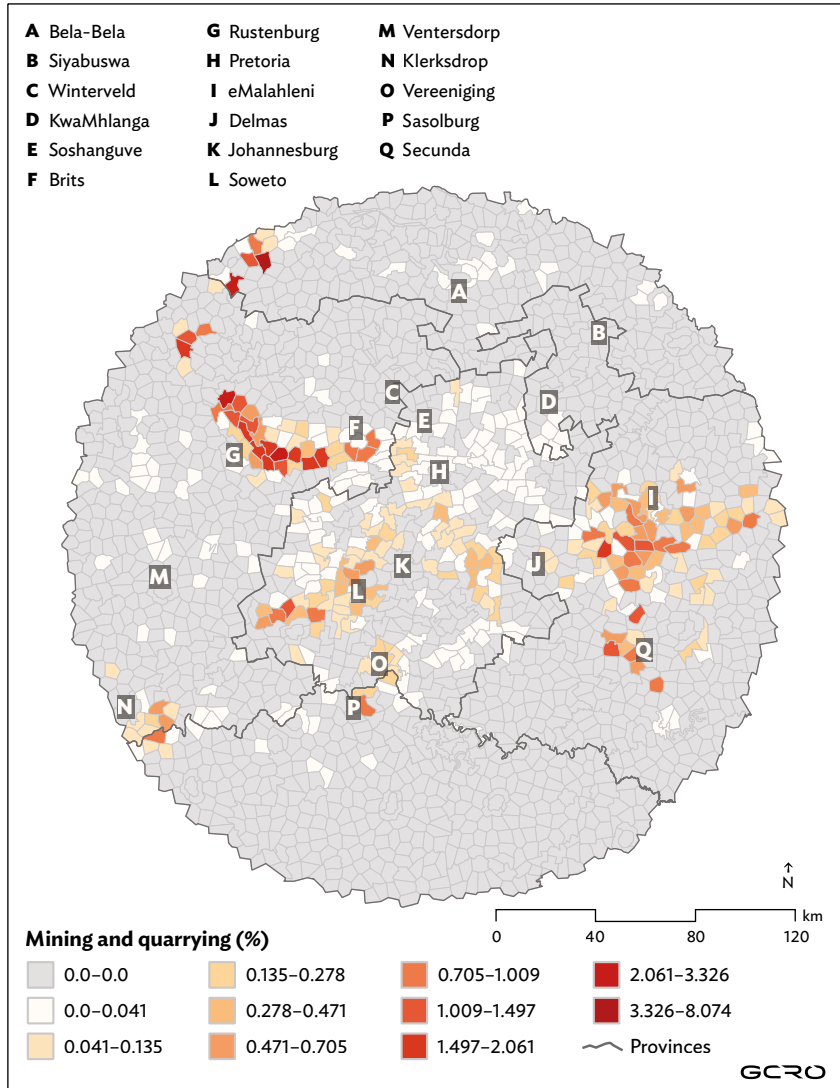


Figure 7: Supply of key material inputs to selected mining operations in the western limb of the platinum mining belt

DATA SOURCE: Platmin South Africa (Pty) Ltd and authors’ research; map by Jennifer Murray and Ngaka Mosiane

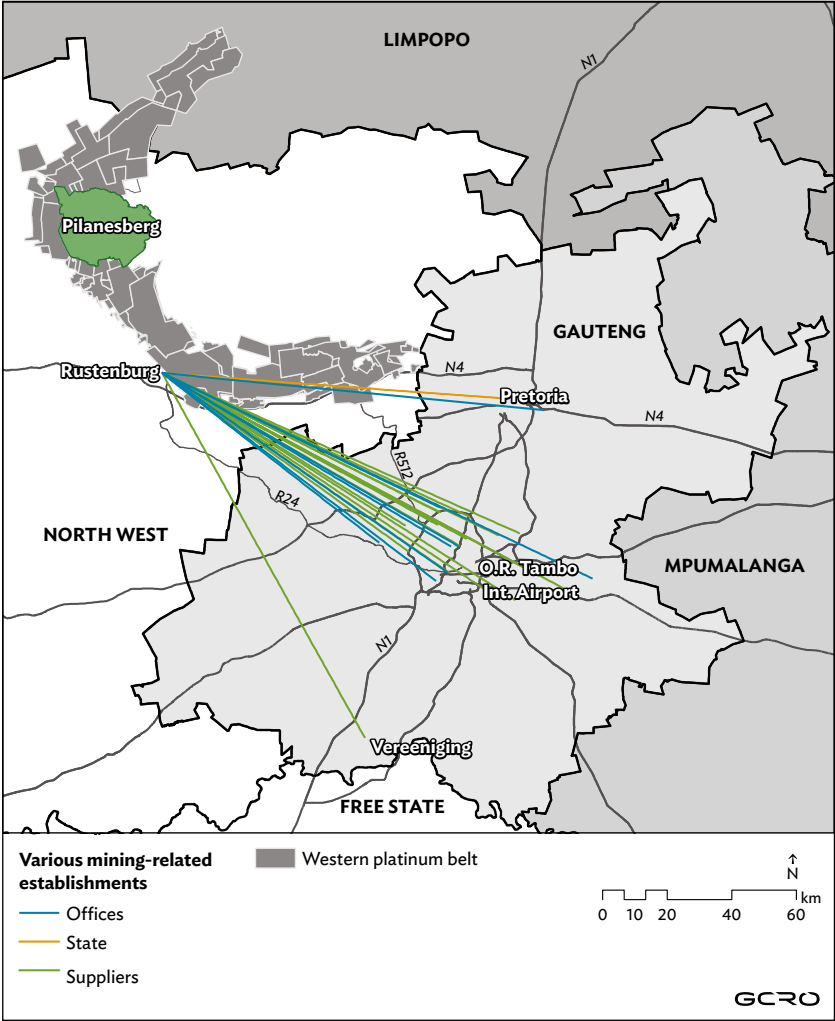
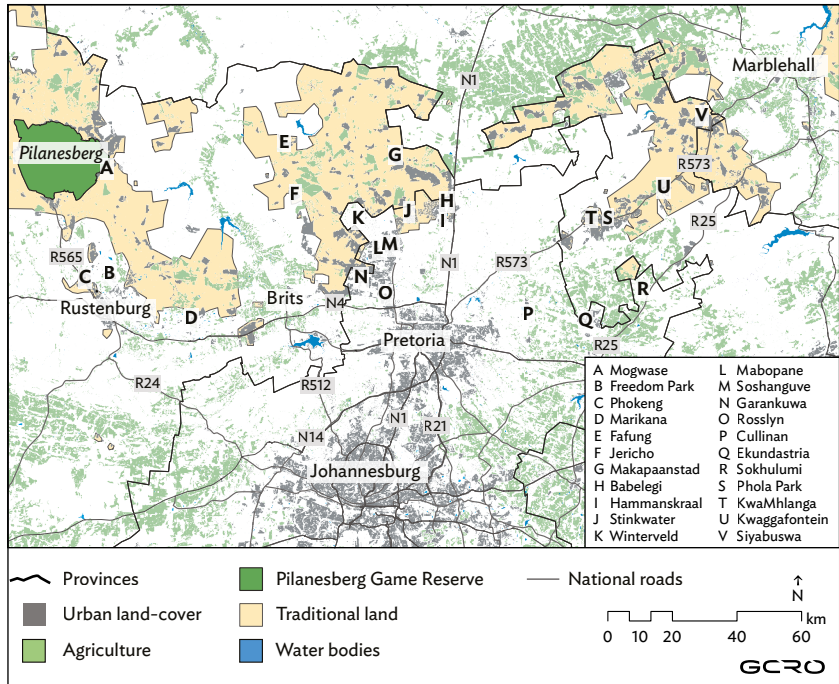


Figure 8: Urban land-cover, traditional villages and agricultural land in the northern part of the GCR**DATA SOURCE:** CD:NGI; GTI (2020); map by Jennifer Murray, Mncedisi Siteleki and Ngaka Mosiane

Traditional villages and agricultural areas, although not urban, are constitutive elements of the GCR's hierarchically interconnected distribution of urban areas

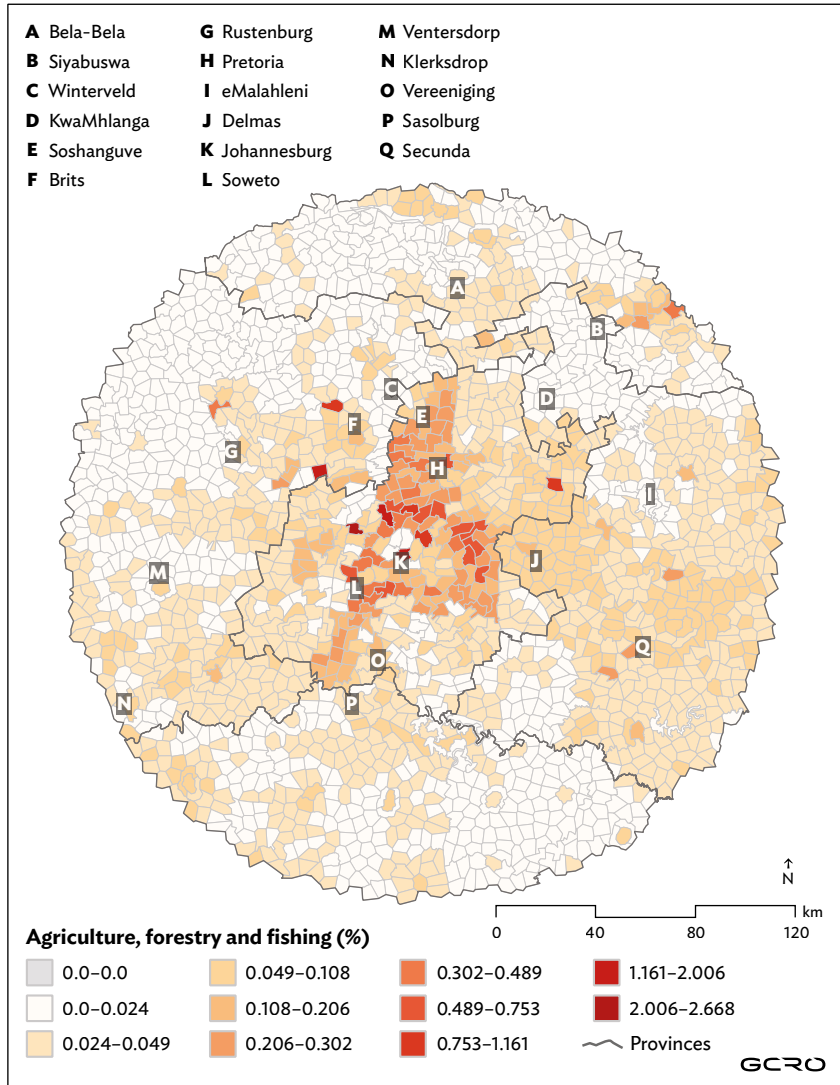
The idea of uneven urban-core and rural-periphery relations has a long intellectual tradition. For example, in 1826 Johann Heinrich von Thünen, in his concept of an ‘imaginary isolated state’, suggested that agricultural land use (growing fruit, wheat, timber or raising livestock) was defined by the relationship between the cost of the land and the cost of transporting agricultural products to the city-based markets (Haggett, 1965). Similarly, Walter Christaller’s 1933 ‘central place theory’ sought to explain the size and spatial distribution of human settlements across southern Germany in a system ranked from the largest to the smallest. Such settlements functioned as ‘central places’, providing services to surrounding areas. Meanwhile, the ‘surrounding areas’ provided agricultural goods, raw materials and labour to their central places (Haggett, 1965). This tradition continued in the work of the dependency theorists, and more recently in analysis such as that by Mitchell (2002), who showed in the context of Egypt how the law and modern mechanisms of surveying, titling and counting delivered subsistence farmers’ land to powerful property interests. These processes broadly served to create a national space economy ‘imagined to have its location [in] the city’ (Mitchell, 2002, p. 96).

The uneven distribution of opportunities, and the tendency for value gains produced in peripheral areas to be realised in core areas, typically means the reproduction of relative wealth in the urban core and relative poverty in the periphery (Figure 9). That said, a poorer area in Gauteng’s metropolitan centre (Alexandra, for example) has better access to opportunities than one on this province’s edges. Similarly, a poorer area in Rustenburg has better opportunities than one in KwaMhlanga. The differences between Alexandra and KwaMhlanga derive from the size of their economic activity. In this sense, although the term ‘periphery’ is generally used to refer to all places of low economic development and socio-economic marginalisation, being located outside the metropolitan core areas does not necessarily equate to that condition (Peberdy, 2017). The idea and experience of the periphery has a relative dimension – a periphery may be an urban core area in relation to its surrounds. The periphery also has a temporal quality – its role can, over time, change from being a periphery to being a centre or vice versa (Peberdy, 2017). Overall, peripherality is systematically produced through state and private-sector investment and divestment. In turn, the development of peripheral areas – undoing the uneven relations that produce a regional geography of relative opportunity, wealth and poverty – is also a function of what state actors seek to achieve, in interaction with consenting or oppositional individuals, households and civil society.

*Location outside metropolitan core areas
does not necessarily equate to low
economic development and
socio-economic marginalisation*

Figure 9: Share of agriculture, forestry and fishing GVA per mesozone, calculated from the total agriculture, forestry and fishing GVA generated in all mesozones of the map

DATA SOURCE: CSIR (2018); map by Yashena Naidoo and Jennifer Murray, with Graeme Götz



Continued relative underdevelopment

Table 1 extracts data from the urban-core index used to generate Figure 1, comparing a number of representative places across the extended city-region. It shows that the share of economic activity for selected mesozones in which are located key former KwaNdebele settlements – Kwaggafontein, KwaMhlanga and Phola Park – is very limited. In 2016, their GVA shares in a 175 km radius from the centre of Gauteng were 0.063%, 0.150% and 0.017%, respectively. The economic proportion was higher in Soshanguve at 0.493% and in Soweto at 0.878%. However, the GVA share was the highest around Sandton at 3.247%, where the proportion of population was 0.557%, about the same as that of KwaMhlanga (0.493%). Notably, the population share was the highest in Soweto at 3.356%, higher than in Soshanguve at 1.288% and in Rustenburg at 0.662%.

In 2019, the GCRO (2019a) conducted a household survey of 979 adult respondents in specific localities on the northern edge of the GCR. Of these research participants, 329 were in Kwaggafontein, KwaMhlanga and Phola Park (Mpumalanga). The results from this survey are comparable to data from the GCRO's Quality of Life Survey V (2017/18) (GCRO, 2019b), as both used the same questionnaire. Comparing particular results from the two surveys gives an indication of the continued relative underdevelopment of these zones of displaced urbanisation.

Table 1: Share of population and GVA per mesozone

DATA SOURCES: CSIR (2018); World Bank (2017); GTI (2015)

Mesozone	Urban-core index (%)	Total GVA (R million)*	Share of GVA for GCR (%)	Population	Share of population for GCR (%)	Difference between GVA and population (%)
Sandton (Gauteng)	2.457	38 763	3.247	105 000	0.557	+2.690
Soweto (Gauteng)	1.028	10 879	0.878	630 000	3.356	-2.479
Soshanguve (Gauteng)	0.630	5 167	0.493	242 000	1.288	-0.794
KwaMhlanga (Mpumalanga)	0.166	1 310	0.150	92 600	0.493	-0.343
Phola Park (Mpumalanga)	0.061	285	0.017	51 800	0.276	-0.259
Kwaggafontein (Mpumalanga)	0.079	607	0.063	41 100	0.219	-0.155
Rustenburg (North West)	0.792	10 333	0.885	124 000	0.662	+0.223

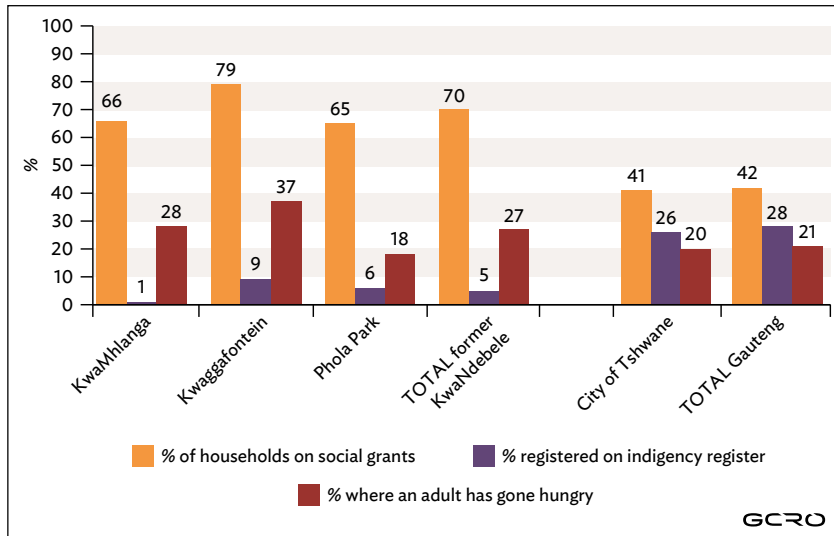
*Excluding agriculture, forestry and fishing, and mining and quarrying

Figure 10 shows responses to three survey questions that can be used to measure poverty: household reliance on social grants, access to the indigency register and food insecurity. In all, 70% of respondents in the former KwaNdebele areas as a whole said their households were on social grants. This figure rose to 79% in Kwaggafontein (GCRO, 2019a). By comparison, 41% of respondents in the City of Tshwane were on social grants, similar to the percentage for Gauteng as a whole (GCRO, 2019b).

In contrast, a very small proportion (5%) of respondents in the three former KwaNdebele areas were registered on a municipality's indigency register for rates rebates or free or subsidised services such as water, electricity and waste removal (GCRO, 2019a). This compared to 26% in Tshwane and 28% across Gauteng as a whole (GCRO, 2019b). At first glance, this might seem to contradict the picture of relative poverty provided by the indicator on social grants; however, registering for services relief from municipalities is much more challenging than accessing social grants. Of course, many municipalities do not charge for services in former traditional authority areas, but where they do, they do not always offer indigency relief, and households face difficulties associated with registration (McDonald and Ruiters, 2005; McDonald and Pape, 2002). The data therefore suggests that municipalities in Gauteng were able to offer more support than those outside the province.

Figure 10: Poverty in former KwaNdebele households compared to Tshwane and Gauteng as a whole

DATA SOURCES: GCRO (2019a, 2019b)

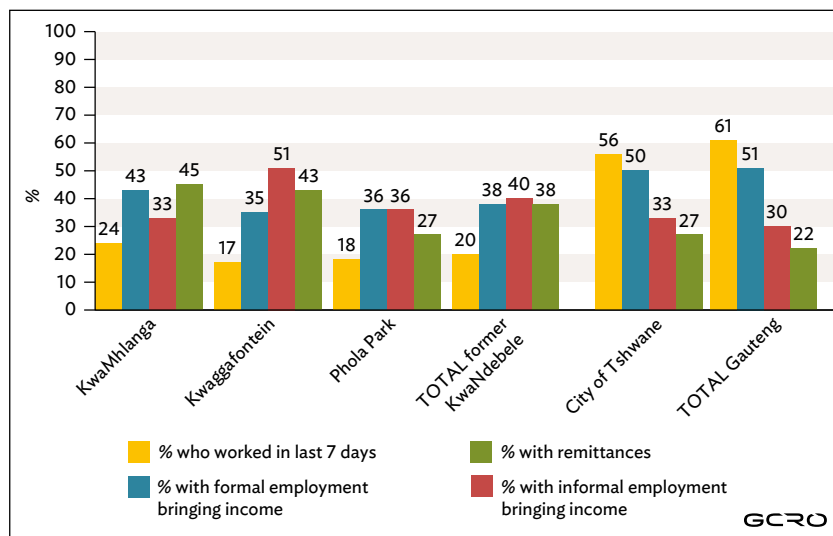


Whether a household is affected by food insecurity is also a good proxy for poverty. Overall, 27% of respondents in the peripheries household survey said that they or another adult in the household had gone hungry at some point in the previous year because of a lack of money (GCRO, 2019a). By comparison, 20% of respondents in Tshwane and 21% in Gauteng as a whole faced food insecurity in the previous year (GCRO, 2019b).

A similar picture emerges when we look at employment and unemployment. Overall, just 20% of working-age respondents⁷ in the three areas of the former KwaNdebele were employed, saying that they had done some work that brought in money in the last seven days (Figure 11). This rose to 24% in KwaMhlanga and fell to 17% in Kwaggafontein (GCRO, 2019a). By comparison, 56% of working-age respondents in Tshwane said they were employed, slightly lower than the provincial average of 61% (GCRO, 2019b).

Figure 11: Employment and sources of income in former KwaNdebele households compared to Tshwane and Gauteng as a whole

DATA SOURCES: GCRO (2019a, 2019b)



NOTE: Percentage employed is calculated for respondents in the 18–64-years working-age bracket; the other variables are for all respondents

⁷ Since the GCRO Quality of Life surveys only interviewed adults (i.e. 18 years and above), this is not a completely accurate reflection of employment in the working-age population (i.e. 15–64 years). However, it provides a reasonable proxy.

Thirty-eight percent of respondents in the former KwaNdebele areas said that formal employment (not necessarily their own) brought income into their households – compared to half of respondents in Tshwane and Gauteng as a whole. By contrast, the percentage of respondents saying their households benefitted from informal employment was higher in the former KwaNdebele areas than in Tshwane and Gauteng as a whole. While this may seem positive at first glance, it reflects that households in these peripheral areas depend on more precarious incomes than those in the urban core. Likewise, 38% of households in the former KwaNdebele areas saw income from remittances, compared to just 22% for Gauteng as a whole (GCRO, 2019a, 2019b).

The relatively low percentage of people employed in the former KwaNdebele areas is partly attributable to the share who are not looking for work, mainly because they are retired (Figure 12). Forty-three percent of respondents in the peripheries survey said they were unemployed and looking for work, compared to some 30% for Tshwane and Gauteng as a whole. A further 4% had given up looking for work altogether. In addition, 33% did not want or need to work, considerably higher than in Tshwane and Gauteng as a whole (GCRO, 2019a, 2019b).

Figure 12: Employment and unemployment in former KwaNdebele households compared to Tshwane and Gauteng as a whole

DATA SOURCES: GCRO (2019a, 2019b)



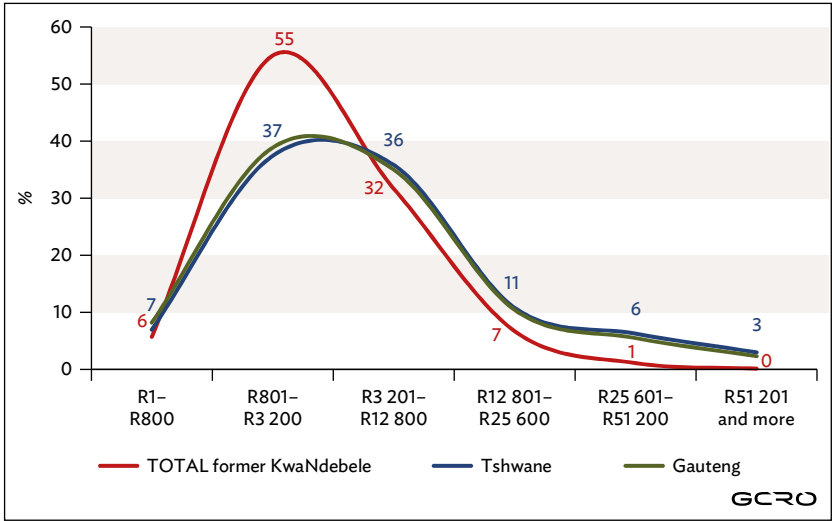
NOTE: Calculated for all respondents, not just those in the 18–64-years working-age bracket

Figure 13 shows the monthly household income distribution of 303 respondents in the former KwaNdebele areas compared to that for Tshwane and Gauteng as a whole, with the latter two being nearly identical. The former KwaNdebele areas are clearly significantly poorer. Sixty-one percent of former KwaNdebele respondents earned in the two lowest income brackets, and only one percent earned R25 601 or more (GCRO, 2019a). In contrast, some 44% of Tshwane respondents were in the lowest brackets and nearly 10% in the highest two (GCRO, 2019b).

A very small number of participants (38) in the peripheries survey said that they were currently a business owner (Figure 14). This is just over 12% of all respondents. While low, it is not significantly lower than for Tshwane and Gauteng, both at 13%. Fifteen percent of respondents said that they had previously owned a business. While slightly lower than for Tshwane, at 18%, it is noteworthy that this figure was the same as for Gauteng as a whole. Similarly, 45% of those who owned a business said that they employed at least one other person besides themselves, not far off the 46% for Tshwane and 50% for Gauteng as a whole. These three indicators are significant in that they suggest that residents of these areas are no

Figure 13: Monthly income in former KwaNdebele households compared to Tshwane and Gauteng as a whole

DATA SOURCES: GCRO (2019a, 2019b)

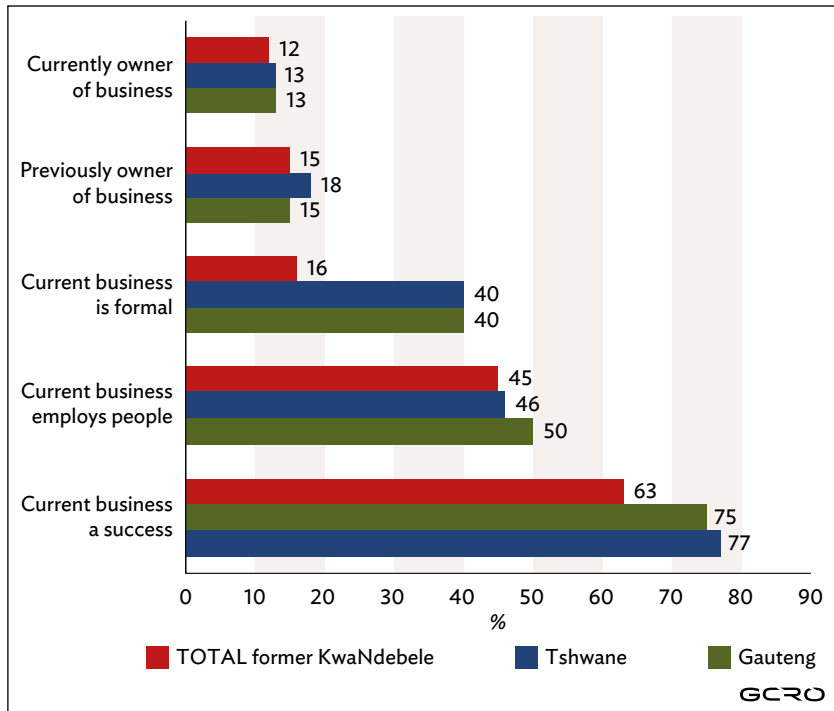


less entrepreneurial than those in Gauteng. However, the data also indicates that a far lower proportion of businesses are formal compared to Gauteng, and also that business conditions are less conducive in that 63% said their business was a success, compared to 75% and over in Tshwane and Gauteng as a whole (GCRO, 2019a, 2019b).

As this brief analysis indicates, the former KwaNdebele areas continue to be socio-economically disadvantaged, with many residents relying on social grants and the informal economy for a living. Where jobs are accessed, this is often through long-distance daily commuting to the tenuous informal and low-paying formal job opportunities available in the City of Tshwane.

Figure 14: Aspects of business ownership in former KwaNdebele households compared to Tshwane and Gauteng as a whole

DATA SOURCES: GCRO (2019a, 2019b)



Displaced urbanism

Despite the conditions of socio-economic disadvantage highlighted above, it is noteworthy that the data suggests a degree of entrepreneurial activity equivalent to that seen in the urban core of Gauteng. Although business activity is more informal and clearly vulnerable to poorer economic conditions, it is indicative of an important dimension of everyday agency, as people in this area resolutely continue to sustain themselves *in these areas* by piecing together some kind of livelihood, often in the process connecting them to nearby towns or cities. Residents also continue to make significant investments that imitate the city's material and symbolic objects, for example by constructing suburban-style houses (while maintaining a deep connection to land, tradition and custom in their design) in what may be regarded as a predominantly rural context. Hence, in the face of the continued underdevelopment of displaced urbanisation, residents of the peripheries are developing their own forms of urbanism in ways that fuse modernity and tradition, poverty and relative well-being. The unique forms of this innate dynamism are discussed in more detail in a later section.

What must be done to promote development in these peripheral areas that still bear the apartheid legacy of displaced urbanisation's relative underdevelopment but are nonetheless knitted together into the urban core, showing markers of a different kind of urbanism from below? The next section describes proposals for developing the Moloto Corridor as one solution to the development challenges and prospects of the GCR's edge, and then goes on to discuss the divergent opinions around this large-scale infrastructural investment.



KwaMhlanga Crossroads. Photograph by Same View Pictures © GCRO

3 Developing the Moloto Corridor

A city and its hinterlands are bound together by processes that form particular spatial, economic, political and socio-cultural agglomerations. In the context of a city-region, such agglomerations often take the form of metropolitan governance structures, the promotion of public-private partnerships, and the sharing of labour markets as well as strategic infrastructural assets (Lincoln, 2020; Mabin, 2013). The resultant spatial form may be one where social and economic assets and activities are evenly distributed across the regional space (Gill, 2010; MacKinnon and Shaw, 2010).

In the case of the GCR, however, the metropolitan areas are the preferred zones of socio-economic investment compared to those areas on the peripheries with lower concentrations of goods and services, such as those described in the previous section. This uneven distribution of investment is the result of apartheid socio-spatial engineering that deployed land expanses, mountains and ridges, railway lines and industrial areas to internally divide cities, and by extension the region, along racial and ethnic lines. The north-eastern region of the GCR is one such space, where a 50 km stretch of agricultural landholdings and other commoditised landscapes effectively serves as a boundary between Pretoria and the former KwaNdebele areas in Mpumalanga province. This boundary notwithstanding, a single labour market encompassing Pretoria and former KwaNdebele, is still sustained in 2022 by a multimillion-rand subsidy for the Public Utility Transport Corporation (PUTCO) bus service (dating back to the apartheid era), which continues to ferry tens of thousands of daily commuters across this buffer zone to work, to shop and to trade in goods and services at cheaper prices in the metropolitan core.

Road-based development

The National Department of Transport (NDT) is currently upgrading the R573 Moloto Road infrastructure that connects the former KwaNdebele homeland with the urban-core area of old Pretoria in the City of Tshwane Metropolitan Municipality. Although the R573 is one of the busiest roads in Gauteng, it responds to only 40% of the existing transport demand while also having an appalling safety record (NDT official, pers. comm., 2019). In this regard, the NDT has sought to optimise the service design of the currently contracted bus services. As noted, the state heavily subsidises PUTCO buses connecting the former KwaNdebele areas to Gauteng. In the 2014/15 financial year, this subsidy amounted to R529 million (SANRAL senior official, pers. comm., 2019). PUTCO operates some 606 buses that daily carry people between Tshwane/Midrand and former KwaNdebele (540 during peak hours and 66 in off-peak hours). Many of these either disburse or collect commuters at the key Belle Ombre bus station in the Asiatic Bazaar area of central Pretoria, which saw a major upgrade in 2017 (PUTCO senior official, pers. comm., 2019).

In the upgrading of the R573, the South African National Roads Agency Limited (SANRAL) has played a mediating role on behalf of the NDT among role-players operating at different scales.

Choreographing all the actors is by no means a simple task. By 2019, the Mpumalanga and Limpopo sides of the R573 were already transferred to SANRAL, which was then carrying out the road upgrades. In contrast, the Gauteng Department of Roads and Transport (GDRT) was still refusing to transfer its side of the R573 road to SANRAL, preventing the planned road upgrades in the Democratic Alliance-led City of Tshwane (from 2016). Judging from a conversation with an official from the GDRT, there has been speculation that part of the reason for the delay is that the road upgrades could have been perceived as a win for the Democratic Alliance in the eyes of the electorate. Another explanation is that the GDRT is faced with many other competing demands for road improvement. For example, about 22 000 cars and 500 PUTCO buses pass through the R513/R152 intersection a day, requiring the construction of a 'double-decker' (road-over-road) intersection and four lanes in each direction of the R513. Such a project would cost R4 billion to cover the land purchase, design, construction, street lighting, sidewalks, crossings, traffic circles and other elements (NDT senior official, pers. comm., 2019). Meanwhile, the GDRT would have to fund the upgrades of their side of the R573 for R2.5 billion over a five-year period (SANRAL senior official, pers. comm., 2018). It was only in November 2019, in part due to pressure caused by endless road accidents, that the GDRT transferred its section of the R573 to SANRAL for upgrading.

The upgrading of road and bus station infrastructure and the further optimisation of subsidised bus services are part of the proposed Moloto Development Corridor. However, some stakeholders have envisaged substantially more than the upgrades currently in progress. The NDT has been at the forefront of making a case for the introduction of rail transport and associated transit-oriented development (TOD) to become the backbone of future transport options and socio-economic development along the Moloto Road.



Moloto Road upgrade between Phola Park and Kwaggafontein. Photograph by Ngaka Mosiane

Proposed rail-based development

Commuting between Tshwane and the former KwaNdebele areas can take up to six hours a day (NDT, 2014). While the current road redevelopment and optimisation of operations may help, the NDT has argued that introducing rail transport could reduce this time by up to 1.5 hours (NDT official, pers. comm., 2018). The NDT further argues that rail-based development along the R573 would significantly improve the safety of commuting, saving many lives each year, and that realising the full vision of the Moloto Development Corridor would significantly contribute to the economy of former KwaNdebele (NDT, 2014).

From the late 1970s onwards, the apartheid-era planners of former KwaNdebele anticipated the future expansion of the R573, and an area of up to 500 m on each side was reserved for such purposes. This reserve has been proposed as the route of an envisaged railway line and associated TOD infrastructure. In this rail-based vision, the Moloto Development Corridor would be a 139 km stretch along the R573 from Pretoria through Thembisile Hani and Dr JS Moroka local municipalities in Mpumalanga as well as through Elias Motsoaledi and Ephraim Mogale local municipalities in Limpopo (see Figure 1). It would see the construction of 198 km of double-track railway line and 24 stations along the road reserve (20 railway stations would be in the Thembisile Hani Local Municipality) (Thembisile Hani Local Municipality, 2017). In Pretoria, the R573 starts at the intersection of the Moloto Road and the R513 (Sefako Makgato Drive) and the proposed rail would begin at the Koedoespoort train station (GTAC, 2015). This rail transportation would complement the ongoing R573 upgrade as well as the development of 240 km of local feeder roads in former KwaNdebele.

The proposed rail development has a long history, the earlier part of which is well summarised in a response to a question posed in the Mpumalanga legislature in May 2015 (Mpumalanga Provincial Government, 2015). The response reveals that the process was initiated by the Nkangala District Municipality, which conducted a pre-feasibility study into a rail link to Pretoria. The results were presented by the Mpumalanga Department of Roads and Transport to the national Minister of Transport in September 2005, who instructed that a more detailed feasibility study be undertaken. The concept for a Moloto Rail Corridor Initiative was presented to a national Cabinet Lekgotla in January 2006, and the feasibility study requested by the minister was presented to the Cabinet in 2008, where the initiative – then envisaged as a R60 billion investment – was approved (NDT, 2014). The proposal was also included in the strategic considerations of the Presidential Infrastructure Coordinating Commission.

Following the Cabinet's recommendation, the NDT approached the National Treasury for funding to initiate the project. However, the National Treasury rejected the application for funding on the basis that the feasibility study did not extensively interrogate all the possible options, in particular other road-based solutions (NDT, 2014). In 2011, recognising the limitations in the fiscus, the NDT was directed by the Cabinet to pursue the project by registering it with the National Treasury as a possible public-private partnership, and in October 2012, the NDT commissioned a set

of transactional advisors to elaborate the technical and substantial details of the earlier feasibility study (Mpumalanga Provincial Government, 2015). The work was undertaken by a consortium of experts from Plan Associates Town and Regional Planners, Deloitte and Touche, Conningarth Economists, commercial law firm Cliffe Dekker Hofmeyr and SMEC (a firm whose name is derived from Snowy Mountains Engineering Corporation). Through a multi-stage process, the consortium prepared a much more extensive feasibility study than that previously developed, which the NDT submitted to the National Treasury for approval in late 2014.

The consultants identified four major proposals for the NDT, first two road-based and then two rail-based options (NDT, 2014). A number of these options' features were cross-cutting, becoming more complex and financially costly from the first to the last.

The first road-based option was the 'base case', which would end the bus agreement that is currently renewed annually to establish longer-term agreements. The service provider would be expected to recapitalise the bus fleet at the end of the buses' 12-year operational life span. The sheer increase in the number of private cars and heavy vehicles would necessitate a massive investment in road infrastructure – the improvement of the gravel feeder roads in former KwaNdebele (240 km); the upgrade of the R573, including the introduction of a new 105 km stretch of dual carriageway along the R573 from Pretoria to Siyabuswa; and the creation of road-over-road bridges (separated junctions that cross over each other) (GTAC, 2015).



The second choice was the 'road-based, improved bus' option, adapting the abovementioned proposal. It proposed the introduction of a new 27-km-long dual carriageway for the 78-seater bus variety. This exclusive busway would stretch to Phola Park in former KwaNdebele from the Mamelodi East terminus in Pretoria, routing north-east to join – where the R573 intersects with the R628 – the 105 km carriageway referred to above. New feeder road bus stops in former KwaNdebele would also be built. Additionally, the collection of bus fares would be electronically integrated across transport modes in Pretoria.

The third option put forward to the NDT built on the first two choices by proposing the construction of a rapid railway line from the Silverton area to KwaMhlana, linking it to the Tshwane bus rapid transport (BRT) service. Additionally, a second 67 km dedicated bus lane from KwaMhlana to Siyabuswa would be developed, which together with the 105 km carriageway referred to above, would be interim steps towards future rail alignment. The third option further envisaged that 50-seater buses would transport travellers from the suburbs in north-eastern Pretoria to the Mamelodi East intermodal transport facility. Buses seating 125 passengers would feed the Koedoespoort terminus from the more central parts of Pretoria. On the former KwaNdebele side, the right of way of the carriageways would be protected, including the establishment of 38 road-over-road bridges. The busways would also see the building of bus stops with access-control facilities, efficiently rearranged into 13 locations between Siyabuswa and the Moloto Interchange Facility near the Gauteng/Mpumalanga boundary (GTAC, 2015).

The fourth option – to link the Tshwane Metrorail Network with Cape-gauge-based (CGB) rapid rail infrastructure along the Moloto Road reserve – was recommended as the preferred option. This option envisaged 117 km of dual track rapid rail being developed from Koedoespoort in central Pretoria to Siyabuswa in the north, and a further extension of a dual railway link between Koedoespoort and Hercules just east of the Pretoria central business district. The development would see the upgrading of eight existing stations and the building of 14 new stations – 13 of these on the Limpopo/Mpumalanga side of the route. The 117 km of new railway would include 67 km of line along the route from KwaMhlana to Siyabuswa, but this stretch would also see the construction of a second carriageway along the existing road to ease traffic flow. Some 240 km of local roads would be resurfaced in the former KwaNdebele area to ensure an average of 12 km of surfaced feeder routes to train stations. It was proposed that the railway line would be serviced by a fleet of 12-coach trains with a headway interval of four minutes wait for commuters. The feeder routes would be serviced by 264 buses in the Siyabuswa area and another 100 in the Tshwane area. The dual carriageway and train stations passing through urban-core areas along the route would be equipped with street lights, bus stops and non-motorised transport facilities such as bridges (GTAC, 2015). Broadly, an integrated rapid public transport network would be created, linking intermodal fare collections involving buses, Metrorail, the wider regional Passenger Rail Agency of South Africa (PRASA) rail network, the Tshwane BRT service and the Gautrain.

The submission (NDT, 2014) recognised that former KwaNdebele is a jumble of rural/urban places, supported not only by agriculture and tourism but also by retail and public services. For this reason, the proposed railway, bus stops and the upgraded Moloto Road could anchor

and connect existing land-use functions with new kinds of development, notably high-density, multi-purpose nodes offering a mix of residential, community, commercial and retail activities within a predetermined walking radius of the proposed railway stations. Further recognised ideas from the Thembisile Hani Local Municipality (2017) included: small-scale and subsistence agriculture; community tourism; light industries; and more investment in public facilities and services as well as in the taxi industry. The recommended, rail-based option submitted to the National Treasury was costed at approximately R27.5 billion in capital expenditure (NDT, 2014).

In late 2014, the concept as developed was handed over to PRASA, effectively to implement, and PRASA formally submitted a funding proposal to the National Treasury (MarketResearch.com., 2017). The project still stands as a committed initiative on the PRASA website.⁸

National Treasury's evaluation of the proposal

In evaluating the proposal from the NDT, the National Treasury used economic feasibility and, to a lesser extent, needs-and-demand analyses as litmus tests for whether or not the proposed rail-based development of the Moloto Corridor would constitute value for money. The actual evaluation was conducted by a team of experts coordinated by AECOM (an international consulting engineering firm whose name is derived from 'architecture, engineering, construction, operations and management'), in turn commissioned by the Government Technical Advisory Centre (GTAC) on behalf of the National Treasury, hereafter referred to as the National Treasury's evaluation (GTAC, 2015). The evaluation raised a number of technical concerns with the proposal. These included that the annual bus subsidy was treated as income into the development rather than as a cost to be eliminated through the project, and that the proposal failed to incorporate an anticipated recurrent operating deficit in the total cost.

However, the National Treasury's evaluation ultimately came down to a judgement call on whether the estimated costs of the project to the national fiscus would be higher than the anticipated benefits of greater transport efficiency between Tshwane and the former KwaNdebele areas, as well as the benefits of permanent job creation and the upliftment of low-income/low-skills households (GTAC, 2015). For the National Treasury, the cost-benefit analysis could 'only present positive results if it [showed] that the broader welfare that emanates from the Moloto Rail Project for the community is to such an extent that it makes good for the shortfall of the projects' cash flow' (GTAC, 2015, p. 41).

The National Treasury's evaluation acknowledged the NDT's assessment of former KwaNdebele's socio-economic conditions, and that aspirations to overcome these conditions are embedded in the Thembisile Hani and Dr JS Moroka local municipalities' spatial development frameworks (2017 and 2007, respectively), as well as in the national Integrated Urban Development Framework (IUDF) (CoGTA, 2016). However, it could be argued that the National Treasury did not sufficiently recognise the NDT's attempts to enlist the departments of Human Settlements and

8 <https://www.prasa.com/Moloto%20Rail%20Corridor.html>

Economic Development to contribute towards the Moloto Corridor development efforts through their regular programmes (NDT official, pers. comm., 2018), instead narrowing its view of the project as solely a transport solution: 'All four options assessed in the DoT [Department of Transport] Feasibility Assessment attempt to resolve the issue of getting the residents in the Moloto Region from the rural areas to Tshwane' (GTAC, 2015, p. 32).

By limiting its scope in this way, the National Treasury judged that any regional benefits that the project might bring did not exceed the costs of the project, as would be borne by the fiscus, to the South African public as a whole (GTAC, 2015). In turn, it concluded the project would not do enough to contribute to the 'broader welfare [...] for the community' and therefore that 'a range of options other than only a transport option should be developed to ensure a sustainable and feasible solution for the Moloto Corridor' (GTAC, 2015, p. 26).

In its evaluation, the National Treasury proposed a number of alternative possibilities for the Moloto Corridor's development. For example, it speculated about phasing out the bus subsidy. While acknowledging that this would lead to social unrest, it proposed as a possible alternative what it called an 'equity option' – the direct provision of the current bus subsidy to 40 000 commuter-workers, over a period of time, in the form of grants (R1 100/month). Another possibility was an 'urbanisation approach'. In this scenario, the report argued, the existing bus subsidy could be used to fund significant housing and economic development in Tshwane and former KwaNdebele, in effect providing for an alternative future urban form able to accommodate large numbers of people in more central locations who would then no longer need to commute to opportunities (GTAC, 2015).

Although it ultimately stands as a rejection of the NDT's feasibility study recommendations, the National Treasury's evaluation did not completely rule out the possibility of rail development along the Moloto Corridor. While it expressed concern about the inevitability of rail infrastructure entrenching the unsustainable apartheid spatial structure represented by former KwaNdebele, the National Treasury's key recommendation to the NDT was the building of a CGB railway line up to the Moloto-KwaMhlanga node. This could even be extended to Siyabuswa, with nine TOD nodes constructed around railway stations along the route to serve surrounding communities (GTAC, 2015).

While this was in no way an acceptance of the full rapid rail solution envisaged by those promoting the Moloto Corridor proposal, it did open the door to further work on this proposition.

Subsequent developments

The National Treasury's negative evaluation of the NDT's case for a rail-based approach to the Moloto Corridor did not summarily end efforts to progress the idea. Further attempts to launch the rail component of the Moloto Corridor development continued after the National Treasury review process.

The Office of then President Jacob Zuma and PRASA saw a possible source of funding for the Corridor project in the Forum on Chinese–African Cooperation agreement and from the Export–Import Bank of China (the Exim Bank). To that end, a memorandum of cooperation was

signed by South Africa and the People's Republic of China in September 2016 (Masondo, 2017). This in turn led President Zuma to further promote the idea in his 2017 State of the Nation Address: 'We are building a road and railway along the Moloto Road for people's safety because there have been many accidents there, which have claimed many people's lives' (Zuma, 2017).

Media reports in mid-September 2017 laid bare confidential documents indicating that negotiations between South Africa and Exim had been taking place around funding arrangements for R57 billion to pursue the Moloto rail development. It is not entirely clear, however, whether this sum was for the full rapid rail vision, or just for that component the National Treasury seemed to have approved (Masondo, 2017). The media articles raised a couple of concerns. First, the negotiations appeared to be heading towards an arrangement that bypassed the country's procurement regulations, as no exemption from procurement rules had been issued by the National Treasury. Second, Exim seemed to be insisting that financing was contingent on construction by the China Communications Construction Company (CCCC) (News24, 2017), which had a history of importing Chinese labour for large-scale infrastructure projects in Africa (Gastrow, 2016).

In late September that year, PRASA hastened to 'set the record straight' by issuing a statement that it had not entered into a contract with Exim as alleged in a *Mail & Guardian* article (NDT, 2017). In November 2017, the national Minister of Transport, Joe Maswanganyi, was quoted by the *Mail & Guardian* as reasserting that no contract had been signed, but that there was a 'memorandum of understanding [...] between PRASA and China through CCCC'. The same article reported the minister as saying that the funding model to pursue the agreement was still being developed (Bendile, 2017).

Ultimately, however, these efforts to secure Chinese funding for the Moloto rail development seem to have come to nought. In a news article published in mid-2018 titled 'Lack of funding holds up Moloto Rail Corridor project', the then new Minister of Transport Blade Nzimande confirmed that construction work on the Moloto rail project, as envisaged in the 2014 feasibility study, could not commence without first securing the requisite funding (Ensor, 2018). And in March 2021, following a briefing by the NDT and the National Treasury, the Parliamentary Portfolio Committee on Transport noted in a media statement 'the official confirmation of the stalling of the Moloto rail corridor project due to lack of finances' (National Parliament, 2021). The chairperson of the committee said in the statement:

The financial position of the country is understandable and halting Moloto rail should not be misconstrued as the denial of the people of Mpumalanga where the project would bear fruits. The committee is satisfied by the fact that while there are no funds for the rail component a lot more is being done to improve the Moloto road corridor [...] This situation calls on all the leaders to think about how to make the project self-sustainable when the rail component is realised. The concerns as outlined by the National Treasury are understandable and surely should be accepted.

While this suggests that the government has 'accepted' that funding constraints will prevent the Moloto rail development from proceeding, the residents of former KwaNdebele clearly have not. A number of them camped out at the Union Buildings over the December 2020 Christmas and New Year period in protest at the fact that the long-promised project had not started (Mahlokwane, 2021). This followed earlier protests in October 2020 (Mahlokwane, 2020), and in May 2021, *SABC News* again highlighted residents' anger at the fact that the project had not been pursued after six people died when a bus caught fire on the Moloto Road (Shuma, 2021). In response, new Transport Minister Fikile Mbalula was quoted in the article as saying:

President [Jacob] Zuma in the 5th administration announced in the state of the nation that we're going to build the rail corridor. We promised those people – that is true – black and white it's there. In [h]indsight it can't be erased by the ink. I don't know even from where we did – we said we're going to build a corridor – it's like me coming here today in this budget vote and say that I'm going to bring heaven to earth. [...] At the present moment, we're investing over R2 billion on the road expansion in the Moloto Corridor that's what we're doing. Rail is something that we will explore and we're not throwing it out of the window.



Arguments for and against the full development of the Moloto Corridor

The arguments for and against the proposals to develop the Moloto Corridor are complicated. However, in essence, the differences of opinion are based on whether it is preferable (1) to concentrate public spending in city core areas where the economic prospects of future residents might appear to afford greater return on investment, or (2) to extend capital projects to peripheral urban areas that arguably should not have existed in the first place, but where, regardless, many people continue to make and remake their lives and places.

The debates between these two positions have played out in many government strategies over the years, often in ways that divide the state against itself. These arenas of debate include the national spatial development perspectives of 2003 and 2006 (The Presidency, 2006, 2003), as well as Tshwane's metropolitan spatial development frameworks over the years (City of Tshwane, 2012, 2005), which at times have proposed a long-term strategic development emphasis on Centurion, at other times on Mabopane/Soshanguve, and at yet other times on the zone in between, centred on Rosslyn.

Those who argue for large-scale investment to be concentrated in metropolitan areas contend that directing development to the periphery in effect reinforces the spatial distortions of apartheid settlement patterns, reproducing unviable settlements. In turn, they assert, however inequitable it may seem in the short run, over the long term it would be better to invest in areas closer to the urban core that can more productively absorb in-migrants. Proponents of this approach would prefer investment in the peripheries to be limited to universal basic services as well as education, skills development and access to information, which, together with relevant subsidies, would prepare and assist younger people to gravitate towards the cities (The Presidency, 2003).⁹

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9 For further discussion, see Mosiane and Mabin (2015), Turok and Parnell (2009) and The Presidency (2006, 2003).

The National Treasury's decision on the rail aspect of the Moloto Corridor reflected this position, albeit in a somewhat contradictory manner. It offered the social grant solution in former KwaNdebele and/or increased housing provision in the metropolitan core, but in the process simultaneously recommended TOD nodes in this former homeland as per the NDT's options 3 and 4 above.¹⁰

Other stakeholders contend that development should be brought to the periphery through large-scale infrastructure investments. This approach is rooted in the perspective that any postcolonial state should be deeply concerned about the political costs of urban bias and sensitive to the risks of not maintaining a careful balance when attending to the development prospects of both urban and rural settlements (Turok and Parnell, 2009). Based in this tradition, these critics contest the idea that what ultimately matters is the development potential of metropolitan areas, and that the merits of investment must be assessed on the basis of the costs to the national fiscus relative to the return on investment to the national fiscus. This view, they argue, is only relevant to cities of the global North, with their much lower socio-spatial densities in peri-urban hinterlands relative to urban-core areas. There is a crucial distinction in cities and city-regions in the global South, where colonial and apartheid histories of distorted settlement patterns mean that urban peripheries are densely populated in relation to the urban core and to sparsely settled rural villages. In turn, they claim, there is a vital development imperative to understand and address this unique settlement pattern.

Additionally, for those supporters of large-scale urban infrastructure investments in the periphery, it is deeply inequitable to think about non-core areas as only spaces for older and dependent people and where an acceptable quality of life can be maintained through universal basic services (Turok and Parnell, 2009). Only sustaining densely settled displaced zones (such as former KwaNdebele) with minimum services only serves to leave many hundreds of thousands of ordinary people to their own devices, in turn guaranteeing continued immiseration and the perpetuation of socio-economic exclusions. In contrast, rolling out large economic infrastructure projects into the periphery is to conceive of them as an integral part of the city-region and to ensure their incorporation into, or at least connection to, the urban development opportunities available across the urban field. For those on this side of the debate, this is the essence of integrated spatial and economic planning, where targeting disadvantaged and dislocated communities and building on the spatial interdependencies within cities and city-regions are part and parcel of the same project.¹¹

10 This contradiction may in part be explained by the National Treasury's own caveat that the review 'was done in a very short period and consisted of a high-level assessment [i.e. with little detail] of the [Department of Transport's] Feasibility Study, its Options Analysis and the proposed [public-private partnership]-procurement structures [...] No surveys were done and all assessments were done from the documents provided by GTAC and a general knowledge of the area' (GTAC, 2015, p. i). The consortium had only a month and a small budget, giving each of the 17 team specialists an average of 20 hours to conduct the review (GTAC, 2015).

11 See the Urban Development Framework (Department of Housing, 1997).

It is fair to say that these contrasting positions have not necessarily been openly and frankly expressed in the two-decade-long process of mobilising around, and reviewing, the Moloto rail development proposals. Nonetheless, the state has been, and remains, internally split on one or the other side of this line of debate. This divergence ultimately amounts to the uncoordinated governance of development, the effect of which is to profoundly limit the economic, social and other kinds of gains that a shared set of understandings and more concerted action around a common vision could potentially yield.

There was an implicit recognition of the need to overcome internal divisions within the state around these competing development visions in the National Treasury's review of the NDT's case for the Moloto rail project. The document posits that '[in] order to maximise the developmental impact of the Moloto Development Corridor, it would need an overarching institution that must drive the project to ensure coordination between a multitude of development agents and government departments already active in the area' (GTAC, 2015, p. 13). That institution, the evaluation suggested, would not predetermine a particular approach to corridor development. Rather, it would mediate the contending pathways that amount to stark contradictions within the state, and between the state and non-state actors. While this is useful, it still begs the question of how to forge agreement between all the actors on a common development approach when a workable shared *concept of development* for the city-region periphery is absent in the first place.



Moloto Road protesters camping at the Union Buildings, Pretoria, in 2020.
Photograph by Antonio Muchave / Sowetan

4 An alternative approach to development – emergent urbanism of self-realisation

Displaced urbanism?

While the previous section spelled out the misalignment between those for and against the full development of the Moloto Corridor, from another perspective, the proponents on both sides of the debate are aligned in their failure to see a crucial aspect of the development of the former KwaNdebele areas.

Both sides of the argument miss the point that social and economic development is already happening ‘from below’ in the actual spaces envisaged for the Moloto Development Corridor. On one hand, those in favour of massive rail development along the Corridor seem to bring to bear a modernist vision of an insulated transport tube providing faster and more efficient movement between sites of displaced urbanisation and the shops and jobs available in the metropolitan core. On the other, those against the rail development seem to envisage a future of mass relocation, where the barriers of the past finally give way to planned settlements that can absorb many hundreds of thousands, if not millions, of previously frustrated urban opportunity seekers, whose new *metropolitan* location will then equate to the realisation of a proper return of investment for the fiscus. Both positions are unified in seeing ‘the periphery’ as *only* a site of ongoing dislocation and despair. As such, both are blind to the existing agency of city-sized populations already making their lives and livelihoods in the liminal locations of former KwaNdebele that they currently occupy.

This Provocation contends that development options for the GCR’s spatial periphery could be rethought if we chose to take seriously an emergent urbanism of self-realisation – a *displaced urbanism* – that defines these places just as much as their relative distance from the urban core. Although the household survey of the peripheries (GCRO, 2019a) highlights the disadvantaged socio-economic conditions of former KwaNdebele, it also reveals that the area has some sources of income as well as notable signs of entrepreneurial activity. We argue that social payments¹² and household incomes from informal economic activities are not insignificant. These income streams represent facets of an incipient urbanism that may be strong enough on its own terms to support local economic growth, which could be fostered by appropriate investments in the areas earmarked for the development of the Moloto Corridor.

12 Ferguson (2015) recasts the ideas and practices of social security systems away from the language of safety nets to that of social payments, including municipal services (also see Mosiane, 2019; Seekings and Nattrass, 2015). Social payments constitute a fair and rightful share of a nation’s common estate – a rethinking that, for Ferguson, opens up a number of possibilities: the elimination of shame and stigma for recipients; the denationalisation of social payments; new political claim-making and mobilisation; as well as new ways of thinking about poverty, unemployment and development.

To elaborate the possibilities inherent in this displaced urbanism, this Provocation shifts focus to look meaningfully at the day-to-day processes and practices of self-development actually visible in former KwaNdebele.

Processes and practices of self-development

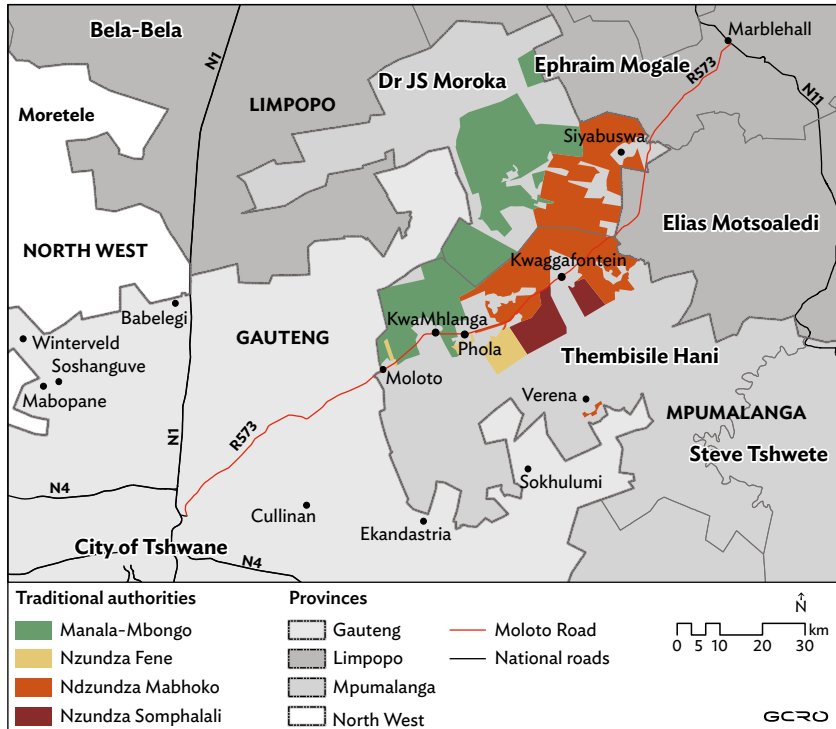
A foundation for the growing potential of the local economy was laid in the early 1990s at the height of the changes in the national political context. Along the R573, local residents started building residential homes and formal and informal businesses, and in turn developing other land uses. More formal businesses, mostly mass retail, followed suit. It is important that we are able to really see the ways in which existing shopping malls and complexes target the low-income markets in these areas, and how this market segmentation and targeting results in those shops not coping with local needs. The banking queues are long, and not all household supplies are available in shops locally, especially items needed for family functions (*umcimbi* or *umsebenzi*) and informal trading. It is for these local economic needs and potentialities that local residents still rely on Pretoria for their purchases and services.

Over the last three decades, unplanned land uses on the Moloto Road reserve areas have created a hodgepodge of formal and informal urban features and activities. This amalgam of formal and informal land uses is a focus of contestation between traditional authorities and elected municipalities over the locus of governance for local development processes (see Figure 15).¹³ It must be acknowledged that this contestation further complicates the already divergent development approaches between national government actors elaborated earlier. Certainly, there are downsides related to informality. The land allocation by traditional councils often works counter to modern conservation and land-management practices. For example, they expose ecologically fragile land to intensive land uses. Unplanned land uses under desperate conditions may also compromise their full commercial, agricultural and residential potential. For example, they may undermine chances for larger-scale township developments that could also generate local revenue through rates and taxes. Additionally, land under customary tenure can be a source of conflict due to its community and family embeddedness, which can reinforce class and gender differentiations in favour of those who can persuade traditional leaders.

13 The size of communal land in the Thembeisile Hani Local Municipality is 32 km² or 35% of the total land area, and it constitutes about half of the Dr JS Moroka Local Municipality (Thembeisile Hani Local Municipality, 2017). The state-owned land in the area is 9 282 ha, or some 93 km². In theory, under the state's land reform processes, it could also be redistributed for development purposes on similar land-use terms to that for communal land.

Figure 15: The Moloto Road (R573) passes through former KwaNdebele areas under traditional leadership

DATA SOURCES: CD: NGI; Thembisile Hani Local Municipality (2017); map by Mncedisi Siteleki, Jennifer Murray and Ngaka Mosiane



It also needs to be recognised how informal governance under traditional leadership and ordinary people's more informal residential processes and trading activities along the R573 antagonise modernist visions of government – for example in a transport-oriented grid plan for housing, commercial and retail developments as well as public facilities such as schools, playgrounds, emergency services and a vehicle testing station (Thembisile Hani Local Municipality, 2017). Those driving the development of the Moloto Corridor believe that traders, houses and other self-constructed features along the R573 will need to be removed because it is primarily a mobility road.

As part of the ongoing upgrades, the R573 is being rebuilt for higher speed mobility, with engineering and road safety standards requiring the erection of road kerbs to prevent pedestrian crossings and vehicular U-turns, and to manage road-user behaviour (SANRAL senior official, pers. comm., 2018). In the process, it is anticipated that fast-moving traffic along the Corridor will be disconnected from the local road networks and the locally oriented use of space and will thus be disabled from contributing to local trade.

Modernist development approaches misrecognise how communal land management, and the displaced urbanism that thrives on it, sustains people where they currently live. It could be argued that informal urbanism finds space in the interstices of a governance context where modern municipal land governance jostles with the institutions and practices of traditional leadership. As an example, one way in which this is already happening is in the PUTCO monopoly bus service opening space for partnerships between sections of the taxi associations and traditional authorities to create two bus companies. Today, traditional authorities participate in the transport industry through the Mahamba and Gijima bus companies, which operate 11 and 39 buses, respectively (PUTCO senior official, pers. comm., 2019).

Additionally, the downsides highlighted above – conflicts based on the community and family embeddedness of land; exposure of ecologically fragile land to intensive land uses; as well as the reinforcement of class and gender differentiations – do not outweigh the positives of a vernacular land market that facilitates a bustling local economy. The informality of this land market makes it more negotiable and affordable, and thus better suited for continued access by small, emerging businesses as well as by migrants and women. It provides opportunities for ordinary people to remake these displaced areas in their own image, for example by using officially purchased land under the ‘permission to occupy’ tenure; extra-legally purchasing it from a headman; renting it out, including to migrants and women; or even encroaching on it. In this way, these spaces become available sites in which a very large number of people can affordably pursue their aspirations, in turn engaging with the major GCR centres on terms other than either the unmet aspiration to move closer to town, or the supply of cheap labour through faster long-distance commuting.

Similarly, the expansion of shopping malls and other large and small retail activities in these areas (Figure 16) reveals prospects for local economic growth germinating in the unresolved administrative space between modern democratic government and traditional rule. By way of contrast, in the Rustenburg context, this variant of local socio-spatial change is restricted by strong land rules shaped in part by a cultural political economy in the areas governed by the Bafokeng and Rustenburg municipal administrations. The effect of this particular political and capitalist modernity is that an emergent urbanism of self-realisation is restricted to the outskirts of the city.

Figure 16: Kwaggafontein – the construction of shopping malls and other large and small retail activities reveals prospects for local economic growth

Photograph by Same View Pictures © GCRO



However, in the former KwaNdebele areas of KwaMhlanga, Phola Park, Kwaggafontein and Siyabuswa, more relaxed land controls have led to an increase in shopping malls and complexes, as well as in standalone national chain stores (Midas auto-spares, Cashbuild hardware and many others). Likewise, small and informal businesses have been able to buy land under traditional leadership at lower prices, a move that reduces input costs for their businesses. We interviewed a local businessman in Phola Park who had bought, from a traditional authority, a 20 m × 200 m plot along the R573 for a few hundred rand. He built on it an impressive family house, his business premises and other structures that he rented out to a furniture store (for R40 000 per month), a mortuary (for R25 000 per month) and a motor spares shop (for R30 000 per month). It is through these kinds of practices that communal land under traditional leadership is marketable despite being registered under 'permission to occupy' tenure rights and not as private property.

Conclusion: Long-term economic prospects ‘from below’

This Provocation has elaborated how the wider GCR needs to be seen as a complex space of differentiated relations cutting across provincial boundaries and configured in interconnected assemblages of peripheral urban areas, urban-like centres, agricultural areas and traditional villages.

The effect of this extended spatial configuration is the unavoidable fact of an evolving peripheral urbanism of self-development. The people living in these peripheral areas are neither waiting to be developed by a mobility project whose singular purpose is to enable them to devote their earnings and labour power more efficiently to businesses in the core, nor wanting to be (re)placed in a different location where they will find the development they lacked where they were previously located. Rather, they are making their own lives, their futures and their own unique urbanity where they already are, and that is what needs to be supported. Some may dismiss this development as informal, but it is real and meaningful and should be valorised on its own terms.

These emergent urbanisms of self-realisation can complement modernist planning, architecture and road safety standards, and any option chosen for intensive development in the GCR’s urban-core areas, contributing forms of long-term economic prospects ‘from below’ that will ultimately strengthen a variegated city-region.



The broader KwaMhlanga area as a hodgepodge of fashionable and humble spaces. Photographs by Ngaka Mosiane

References

- Bendile, D. (2017). Transport minister has said China rail contract will deliver SA jobs. *Mail & Guardian*, 10 November. <https://mg.co.za/article/2017-11-10-00-transport-minister-has-said-china-rail-contract-will-deliver-sa-jobs/>
- Brenner, N. (1999). Globalisation as reterritorialisation: The re-scaling of urban governance in the European Union. *Urban Studies*, 36(3), 431–451. <https://doi.org/10.1080/0042098993466>
- City of Tshwane. (2005). *Compaction and Densification Strategy*. Pretoria: City of Tshwane Metropolitan Department of Housing, City Planning and Environmental Management.
- City of Tshwane. (2012). *Metropolitan Spatial Development Framework*. Pretoria: City of Tshwane.
- CoGTA (Department of Cooperative Governance and Traditional Affairs). (2016). *2016 Integrated Urban Development Framework*. Pretoria: CoGTA. https://iudf.co.za/pdf_downloads/2016-integrated-urban-development-framework/
- CSIR (Council for Scientific and Industrial Research). (2018). *South African Council for Scientific and Industrial Research MesoZone 2018v1 dataset*. Pretoria: CSIR. http://stepsa.org/socio_econ.html
- Department of Housing. (1997). *Urban Development Framework*. Pretoria: Department of Housing. https://www.gov.za/sites/default/files/gcis_document/201409/saurb.pdf
- Dr JS Moroka Local Municipality. (2007). *Spatial Development Framework*. Siyabuswa: Dr JS Moroka Local Municipality.
- Ensor, L. (2018). Lack of funding holds up Moloto Rail Corridor project. *Business Day*, 26 June. <https://www.businesslive.co.za/bd/national/2018-06-26-lack-of-funding-holds-up-moloto-rail-corridor-project/>
- Ferguson, J. (2015). *Give a man a fish: Reflections on the new politics of distribution*. Durham, NC: Duke University Press.
- Friedmann, J. and Miller, J. (1965). The urban field. *Journal of the American Institute of Planners*, 31(4), 312–320. <https://doi.org/10.1080/01944366508978185>
- Gastrow, C. (2016). Aesthetic dissent: Urban redevelopment and political belonging in Luanda, Angola. *Antipode*, 49(2), 377–396. <https://doi.org/10.1111/anti.12276>
- GCRO (Gauteng City-Region Observatory). (2013). *Population dot density (Census 2011) 2*. GCRO Map of the Month, August. Johannesburg: GCRO. https://cdn.gcro.ac.za/media/documents/8a_GCRO_map_of_the_month_Census2011_population_dot_density_Aug_2013.pdf
- GCRO (Gauteng City-Region Observatory). (2019a). Gauteng City-Region Peripheries Survey I [Dataset]. Johannesburg: GCRO.
- GCRO (Gauteng City-Region Observatory). (2019b). Quality of Life Survey V (2017/18) [Dataset]. Version 1.1. Johannesburg and Cape Town: GCRO and DataFirst. <https://doi.org/10.25828/8yf7-9261>
- Gill, N. (2010). Tracing imaginations of the state: The spatial consequences of different state concepts among asylum activist organisations. *Antipode*, 42(5), 1048–1070. <https://doi.org/10.1111/j.1467-8330.2010.00793.x>

- GTAC (Government Technical Advisory Centre). (2015). *Moloto Corridor: Review of feasibility study and identifying other potential options*. Pretoria: GTAC.
- GTI (GeoTerra Image). (2015). South African National Land-cover 2013–14 [Dataset]. Pretoria: Department of Environmental Affairs. <http://www.sasdi.net/metaview.aspx?uuid=20c6336b75031c73041ec8b88372c3b0>
- GTI (GeoTerra Image). (2020). South African National Land-cover 2020 [Dataset]. Pretoria: Department of Environment, Forestry and Fisheries. https://egis.environment.gov.za/sa_national_land_cover_datasets
- Haggett, P. (1965). *Locational analysis in human geography*. London: Edward Arnold.
- Hart, G. (2002). *Disabling globalization. Places of power in post-apartheid South Africa*. Berkeley and Los Angeles, CA: University of California Press.
- Harrison, J. and Hoyler, M. (2014). Governing the new metropolis. *Urban Studies*, 51(11), 2249–2266. <https://doi.org/10.1177/0042098013500699>
- Jonas, A.E.G. (2006). Pro scale: Further reflections on the 'scale debate' in human geography. *Transactions of the Institute of British Geographers*, 31(3), 399–406. <https://doi.org/10.1111/j.1475-5661.2006.00210.x>
- Lemon, A. (Ed.). (1991). *Homes apart: South Africa's segregated cities*. Bloomington, IA: Indiana University Press.
- Lincoln, G.M. (2020). *Competitive regions in South Africa: A study of regional planning in the iLembe District in the Province of KwaZulu-Natal*. PhD thesis, Durban University of Technology, South Africa.
- Mabin, A. (2013). *The map of Gauteng: Evolution of a city-region concept and plan*. GCRO Occasional Paper No. 5. Johannesburg: Gauteng City-Region Observatory. https://cdn.gcro.ac.za/media/documents/gcro_occasional_paper_5_-_mabin_map_of_gauteng_july_2013_final.pdf
- MacKinnon, D. and Shaw, J. (2010). New state spaces, agency, and scale: Devolution and the regionalisation of transport governance in Scotland. *Antipode*, 42(5), 1226–1252. <https://doi.org/10.1111/j.1467-8330.2010.00800.x>
- Maharaj, B., Desai, A. and Bond, P. (2011). *Zuma's own goal: Losing South Africa's 'War on Poverty'*. Trenton, NJ: Africa World Press.
- Mahlokwane, J. (2020). Moloto Road residents intensify protest at Union Buildings over rail corridor. *Independent Online*, 22 October. <https://www.iol.co.za/pretoria-news/news/moloto-road-residents-intensify-protest-at-union-buildings-over-rail-corridor-1ee3bf34-b01e-47cb-a3a3-050710021476>
- Mahlokwane, J. (2021). Moloto residents camped at Union Buildings demand railway line. *Independent Online*, 4 January. <https://www.iol.co.za/pretoria-news/news/moloto-residents-camped-at-union-buildings-demand-railway-line-2cce0dfc-75ec-4cca-95b5-0d7ed0438398>
- MarketResearch.com. (2017). *DoT – Moloto Corridor Rail Line – Mpumalanga: Project Profile*. <https://www.marketresearch.com/Timetric-v3917/DoT-Moloto-Corridor-Rail-Line-11217742/>
- Masondo, S. (2017). China to score in R70bn SA projects. *City Press*, 10 September. <https://www.news24.com/news24/SouthAfrica/News/china-to-score-in-r70bn-sa-projects-20170909>

- McDonald, D.A. and Pape, J. (2002). *Cost recovery and the crisis of service delivery in South Africa*. London: Zed Books.
- McDonald, D.A. and Ruiters, G. (2005). *The age of commodity: Water privatization in Southern Africa*. London: Earthscan.
- MDB (Municipal Demarcation Board). (2018). Local Municipal Boundary 2018 [Dataset]. Pretoria: Department of Agriculture, Land Reform and Rural Development. <https://dataportal-mdb-sa.opendata.arcgis.com/datasets/aaba805ffd254cb7bdf985db8eb7e37f/about>
- Mitchell, T. (2002). *Rule of experts: Egypt, techno-politics, modernity*. Berkeley, CA: University of California Press.
- Mosiane, N.B. (2019). Credit, cash transfers, and distributive neoliberalism. *African Studies*, 78(1), 152–164. <https://doi.org/10.1080/00020184.2018.1495388>
- Mosiane, N. and Mabin, A. (2015). *Reflections on densities in relation to the City of Tshwane Metropolitan Municipality*. A paper written for the City of Tshwane, November 2015.
- Mosiane, N. and Murray, J. (2021). *Distribution of population and economic activity in the Gauteng City-Region*. GCRO Map of the Month, August. Johannesburg: Gauteng City-Region Observatory. https://cdn.gcro.ac.za/media/documents/August_PDF_Map_FA.pdf
- Mosiane, N., Peberdy, S., Dzerefos, C., Sithagu, A. and Murray, J. (Forthcoming). *Landscapes of peripheral and displaced urbanisms*. Johannesburg: Gauteng City-Region Observatory.
- Mpumalanga Provincial Government. (2015). Response to question by Hon RJ Sithole to the Mpumalanga Premier with regards to the State of the Province Address 2015, Mpumalanga Provincial Legislature, 19 May 2015. <http://www.mpumalanga.gov.za/media/responses/19052015.htm>
- National Parliament. (2021). Committee on Transport notes stalling of Moloto rail project due to funding challenges (Media statement, 19 March). <https://www.parliament.gov.za/press-releases/media-statement-committee-transport-notes-stalling-moloto-rail-project-due-funding-challenges>
- NDT (National Department of Transport). (2014). *Feasibility Study for the Moloto Development Corridor. (Part 0 – Needs Analysis Report by SMEC, Cliffe Dekker Hofmeyr, Deloitte and Touche)*. Pretoria: NDT.
- NDT (National Department of Transport). (2017). PRASA sets record straight regarding Moloto Corridor. *Arrive Alive*, 28 September. <https://www.arrivealive.mobi/news.aspx?i=31461&s=2&page=prasa-sets-record-straight-regarding-moloto-corridor>
- News24. (2017). Why did R70bn Chinese contracts bypass tender laws, asks DA. *News24*, 10 September. <https://www.news24.com/fin24/economy/south-africa/why-did-r70bn-chinese-contracts-bypass-tender-laws-asks-da-20170910>
- Peberdy, S. (2017). Uneven development – core and periphery in Gauteng. In S. Peberdy, P. Harrison and Y. Dinath (Eds.), *Uneven spaces: Core and periphery in the Gauteng City-Region* (Part A, pp. 21–200). GCRO Research Report No. 6. Johannesburg: Gauteng City-Region Observatory. https://cdn.gcro.ac.za/media/documents/Uneven_Spaces_report_2017.pdf
- Scott, A. and Storper, M. (2003). Regions, globalization, development. *Regional Studies*, 37, 579–593. <https://doi.org/10.1080/0034340032000108697a>

- Seekings, J. and Natrass, N. (2015). *Policy, politics and poverty in South Africa*. New York: Palgrave Macmillan.
- Shuma, P. (2021). KwaMhlanga and Moloto residents angered over Moloto rail project delay. *SABC News*, 27 May. <https://www.sabcnews.com/sabcnews/kwamhlanga-and-moloto-residents-angered-over-moloto-rail-project-delay/>
- StatsSA (Statistics South Africa). (2014). Census 2011 Community Profiles [Dataset]. Version 1. Pretoria and Cape Town: StatsSA and Data First. <https://doi.org/10.25828/6n0m-7m52>
- Storper, M. (2014). The nature of cities: The scope and limits of urban theory. *International Journal of Urban and regional Research*, 39(1), 1–15. <https://doi.org/10.1111/1468-2427.12134>
- The Presidency. (2003). *The National Spatial Development Perspective – 2003*. Pretoria: Policy Coordination and Advisory Services, The Presidency.
- The Presidency. (2006). *The National Spatial Development Perspective – 2006*. Pretoria: Policy Coordination and Advisory Services, The Presidency. https://www.gov.za/sites/default/files/gcis_document/201409/complete1.pdf
- Thembisile Hani Local Municipality. (2017). *Spatial Development Framework*. Kwaggafontein: Thembisile Hani Local Municipality.
- Turok, I. and Parnell, S. (2009). Reshaping cities, rebuilding nations: The role pf national urban policies. *Urban Forum*, 20, 157–174. <https://doi.org/10.1007/s12132-009-9060-2>
- World Bank. (2017). South Africa: Roads [Dataset]. Washington, DC: World Bank. <https://datacatalog.worldbank.org/dataset/south-africa-roads>
- Wu, F. (2017). China's emergent city-region governance: A new form of state spatial selectivity through state-orchestrated rescaling. *International Journal of Urban and regional Research*, 40(6), 1134–1151. <https://doi.org/10.1111/1468-2427.12437>
- Zuma, J.K. (2017). State of the Nation Address by Jacob G Zuma, President of the Republic of South Africa on the occasion of the Joint Sitting of Parliament Cape Town. Pretoria: The Presidency. <https://www.gov.za/speeches/president-jacob-zuma-2017-state-nation-address-9-feb-2017-0000>

About the Provocations series

[to provoke: to stimulate, incite, stir up, challenge, irk, exasperate, vex]

The Gauteng City-Region Observatory's Provocations are an ongoing series of thinkpieces that give a platform to cutting-edge thinking on current issues of the day, written and presented in non-academic style and format. Each Provocation is offered by an academic or practitioner for reading by a wide audience, with the hope of shedding light on key topics relevant to researchers, policy-makers, business people, activists and members of the public. The series aims to challenge conventional understandings, stimulate new thinking, stir up debate and incite readers to respond with interpretations of their own. At times, the thoughts offered will exasperate, perhaps even anger. Each piece goes through rigorous editing, but the analysis, views and opinions presented are solely those of the authors.

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