

The Three Pillars of Sustainable Human Settlements

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Abstract

The paper explores the challenges involved in creating more sustainable human settlements in South Africa and makes the case for a more focused and coordinated approach. It argues that the three essential pillars are economic development and work, homes and services, and affordable public transport. They should be planned together to realise the synergies of integration and to avoid dysfunctional outcomes. This is best done at the city level, with support from other government spheres. The paper considers the reasons for the lack of progress to date in integrating the dispersed form of urban settlements, and examines the differences between cities in terms of their broad spatial structure. It concludes by discussing the improved prospects for spatial transformation with the devolution of additional levers of control over human settlement planning to city governments.

The Three Pillars of Sustainable Human Settlements

“Glaring apartheid spatial patterns persist and are being perpetuated ... poor people continue to be forced to live in dysfunctional and disjointed settlements with limited social and economic infrastructure” (Treasury, 2011a, p.216).

Introduction

The need to integrate and densify South African cities, and thereby create more liveable and sustainable human settlements, has been a government objective since 1994. However, there is general agreement that little tangible progress has been made to date (National Planning Commission (NPC), 2011a, 2011b; SACN, 2011). It is widely understood that the sprawling, fragmented form of urban areas is inefficient and inequitable. It demands high levels of mobility, requires large public transport subsidies, contributes to high carbon emissions, consumes costly bulk infrastructure, reinforces social divisions and creates poverty traps on the periphery. Despite this, the spatial patterns inherited from the past continue to be reproduced and entrenched through current investment decisions.

Many explanations have been offered for the country's inability to transform the dispersed trajectory of urban development. They include the short-term costs of densification, ratepayer resistance to new residential patterns, opposition from private developers and their financiers, lack of political appetite for spatial transformation, pressure to deliver large numbers of RDP houses and associated services, weak municipal capacity for strategic planning, environmental objections to developing vacant land within cities, and poor alignment of built environment functions between the three spheres of government (e.g. Harrison et al, 2008; Berrisford, 2011; NPC, 2011b; Treasury, 2011a; Turok, 2011).

Part of the problem appears to be uncertainty about the priorities for urban integration and the core elements of sustainable human settlements. In the context of scarce state resources and constrained institutional capacity, it is vital to be clear about the fundamentals on which to focus, and the best way to coordinate implementation. Ignoring the principles of sound spatial planning and urban design is likely to mean delivering housing, sanitation, transport and other public services in convenient administrative silos that fail to create liveable and functional places. The recent furore over open toilets in the veld is a perfect example of what can happen with disembedded delivery. Alternatively, a lack of focus can overload human settlement planning with a comprehensive agenda that is unwieldy and impossible to implement.

The argument put forward in this paper is that a more focused and coordinated agenda will help to create more sustainable human settlements. The three essential pillars of a coherent approach to integrated urban development are: (i) economic development, work and income, (ii) homes, services and liveable places, and (iii) affordable, reliable and safe public transport. These are vital structuring elements to create viable communities within resilient cities. They need to be planned together to manage the tensions and trade-offs, to realise the synergies of coordination and compaction, and to avoid dysfunctional outcomes. This is best done at the city level, although not independently of other government spheres. National government also has important supporting roles to play, ideally framed by an urbanisation policy.

The next section looks more closely at the challenges involved in developing sustainable human settlements. The following section considers the differences between cities in terms of broad spatial structure, and the final section discusses recent policy shifts to devolve more of the levers of control over settlement planning to city governments.

Problem diagnosis

There are five underlying weaknesses in the way that South African cities have been planned and managed since 1994.

1. Economic development

The changing structure and spatial distribution of the urban economy have not received the attention they clearly deserve. Economic growth has lagged behind urban population growth and there has been a widening skills gap between business needs and workforce competences. Growth has proved fragile having been driven by consumption and services rather than investment in production (EDD, 2010; Treasury, 2011b). Many new commercial, retail and business park developments have located on the urban edge or in high income suburbs poorly served by public transport, thereby worsening the spatial mismatch between jobs and population. Meanwhile, large swathes of the inner city have been written off by private investors, reinforcing a spiral of economic decline and physical decay. At the same time, the potential contributions of informal enterprises and township economic development have received scant attention. As a result, levels of unemployment, poverty and inequality have continued to rise to exceptional levels by international standards (Treasury, 2011c).

Figure 1 compares the main sources of income for households in cities and rural areas in 2002 and 2010. Two-thirds (66%) of households in the cities secured their main income from employment in 2010, down from 71% in 2002. In rural areas the proportion was only just over two-fifths (42%) in 2010, down from 46% in 2002. This wide economic gap helps to explain the strength of rural-urban migration. Meanwhile, a third of rural households relied mainly on social grants in 2010, up from a quarter in 2002. Only one in seven households (14%) in the cities relied mainly on social grants in 2010. Urban economies are clearly stronger and more self-sufficient than rural, although conditions have deteriorated recently with the failure to create enough jobs to keep pace with urbanisation.

{figure 1 around here}

More robust and inclusive economic growth is fundamental to the viability of cities and to citizen well-being. Basic services can improve living conditions, and social grants can relieve severe hardship, but creating more paid work is the only sustainable and dignified pathway out of poverty. Faster growth increases the tax base to finance better community services. Growth is also needed to transfer resources to poorer rural areas, through household remittances and government programmes. Yet public investment in urban economic infrastructure has been neglected for decades, resulting in bottlenecks, ageing systems and inadequate water and energy capacity to accommodate faster growth and employment (Treasury, 2011a; NPC, 2011a, 2011b). Environmental and planning regulations have also obstructed private investment through complex procedures duplicated at provincial and municipal levels (Treasury, 2011a). And local education and training systems have not adapted fast enough to the changing labour market to give people the capabilities required to access emerging opportunities. Young people have been the biggest casualty. Only one in eight people aged 15 to 24 have a job (12.5%), compared with an adult employment rate more than four times higher (54%) (Treasury, 2011c).

2. Housing

The government's bold promise to provide everyone with a free, fully-serviced house has created enormous societal expectations which are proving impossible to meet. Housing backlogs and informal housing in the cities are higher than ever, despite high levels of building (SACN, 2011; Sexwale, 2010). Furthermore, investment in physical structures ('bricks and mortar') has not been embedded in a broader process designed to create viable settlements. Pressure to economise on the land costs has resulted in building on the urban outskirts far from jobs and amenities, which perpetuates disadvantage (NPC, 2011a). Sterile, mono-functional townscapes have been created that lack vitality and tie people to fixed assets that they can't sell or rent out even if their circumstances change. Many poor households and communities have become passive recipients of government delivery, and less-inclined to contribute to their own solutions (NPC, 2011b). Alternative approaches are needed that satisfy popular expectations while building active citizens and ensuring fiscal viability. The 'Delivery Agreement' between the Presidency and Human Settlements Department stated that a more varied housing policy would be developed:

"The current approach with a focus on the provision of state subsidised houses will not be able to meet the current and future backlog and there are questions related to its financial sustainability. We need to diversify our approach to include alternative development and delivery strategies, methodologies and products including upgrading of informal settlements" (Presidency, 2010).

Informal settlements have expanded in size and multiplied in number, with around 2700 shack areas countrywide accommodating about 1.2 million households (SACN, 2011). Many urban shack areas serve an important function as reception areas for migrant populations, offering cheap entry points to gain a toehold in the urban labour market – a low cost, accessible location to search for work and to acquire skills and contacts (Cross, 2010). Many municipalities take a tough stance in preventing such areas emerging and containing the growth of existing settlements. This makes it more difficult for people to move to cities, and often results in poor people occupying 'hidden spaces' such as backyard shacks and invaded buildings in inner cities. Instead of reducing overcrowding, these policies increase the vulnerability of the poor and worsen their living conditions in the city.

Municipalities have been more successful in extending basic services to the poor than in reshaping urban spaces or building local economies (SACN, 2011; Treasury, 2011a). Yet communities have become increasingly frustrated at the apparent slow pace of delivery. Many service protests are happening in cities where the pressures of in-migration are greatest. Social stresses are exacerbated by the occupiers of RDP houses having to pay for their electricity and water charges, and meet the social expectations of living in formal housing. They face indebtedness, disconnections, and sometimes even loss of their homes. The prescriptive model of 'delivering' housing 'to' communities has often produced inflexible and unaffordable facilities, rather than vibrant places where people can access the amenities and opportunities to thrive.

3. Transport

In the absence of spatial transformation, the transport system has been under enormous pressure to accommodate rising demand for travel and long distance commuter flows from outlying settlements. Trip distances can be three times those of the average trip in countries with denser cities (Treasury, 2011a). However, transport policy is centralised and unresponsive to the high travel costs and journey times facing poor communities (van Ryneveld, 2010).

Transport policy has also been overly-concerned with the convenience of private motorists. Public transport has suffered from historic under-investment, much of the rail and bus infrastructure is worn-out, and it cannot cope with the growing demands upon it. Over 90% of government funding is allocated to the provinces and to separate national entities such as the Passenger Rail Agency of SA and the SA National Roads Agency, which are remote from the local travel realities of poor communities.

With disjointed institutions and separate funding streams, transport responses to urban sprawl have been piecemeal. In fact, transport subsidies (worth nearly R7 billion a year) tend to sustain the fragmented urban form instead of promoting integration. Unreliable and congested transport networks also impede agglomeration efficiencies and hold back economic growth. There has been no attempt to reorganise urban transport systems, or to align transport and land-use policies to raise residential densities in well-located areas (van Ryneveld, 2010). The role of municipalities has been marginal, despite travel patterns being predominantly local.

There have been important recent initiatives in developing transport, funded by a sizeable increase in public investment associated with the World Cup. However, these new systems are poorly integrated with each other and with other built environment functions. Gautrain, freeway improvements, and to a lesser extent Bus Rapid Transit schemes, tend to stand alone and serve contradictory purposes, rather than combine to create an integrated transport network offering efficiency, reliability and affordability (SACN, 2011).

4. Land-use planning

There has been no coherent approach to the planning, regulation, management and development of land. Responsibilities are dispersed across different agencies of government, sowing the seeds of confusion and conflict over scarce sites, and making it difficult for any single institution to act strategically to promote a more coherent urban form (SACN, 2011; Treasury, 2011a). Lacking powers to acquire and swap scarce land parcels, municipalities struggle to meet growing demands for land from different users. They also lack the technical skills and political will to capitalise on the rise in land values and windfall profits to land owners that result from strategic investments in infrastructure. This is symptomatic of a more general failure to leverage wider economic spinoffs and development opportunities from investment in public infrastructure.

Spatial planning has little positive influence over development patterns on the ground. The planning system is geared to respond to development applications, not to play a constructive role in designing new possibilities, let alone to help revive run-down places. Part of the problem is that planning is still governed by the pre-democratic laws designed for social control and segregation (Beresford, 2011). Current proposals for change may help to consolidate out-dated frameworks and zoning schemes, but without creating the tools to help shift urban development patterns by promoting densification, mixed-use development and public transport. There is no consistent policy within cities and towns towards the use and development of vacant and under-used land and buildings, which perpetuates neglect and dereliction. The separate system of Integrated Development Plans revolves around the budget, is hampered by the fact it is externally audited, and is too short-term to take on board structural challenges such as spatial transformation.

5. City government

A series of governance problems have inhibited effective settlement planning. Overlapping roles and responsibilities between government spheres have created uncertainty, delayed development and weakened accountability. The provinces are responsible for investment decisions in housing and transport, and for environmental regulation, but municipalities and households have to bear the costs of poor location decisions (Treasury, 2011a). Many municipalities lack the technical capacity, managerial stability and political leadership to pursue long-term strategies (COGTA, 2009, 2010; SAPRU, 2009). They have also been slow to develop the sense of shared purpose and the culture of partnership with external stakeholders that would probably be required to implement complex spatial restructuring proposals. They have been slow to encourage popular participation in community planning and to channel the energy of frustrated groups in constructive directions through involvement in practical projects of lasting value to their communities (SACN, 2011).

Many municipalities are preoccupied with short-term operational problems and fire-fighting (COGTA, 2009, 2010; SAPRU, 2009). More stringent national procedures for managing and regulating municipal affairs have reduced their flexibility and discretion to respond to local needs and priorities. A growing culture of compliance has diverted resources from front-line delivery into back office administration. Pressure to avoid a negative audit has restricted the creative thinking and innovation required to tackle complex spatial problems. Greater procedural complexity has also made it slower and more difficult for municipalities to invest in infrastructure and other capital projects. It is not surprising that under-spending on municipal capital budgets increased from 14% in 2008/09 to 25% in 2010/11 (Treasury, 2011b).

Differences within and between cities

The low average residential density of SA cities is reasonably well-known (see e.g. Berthaud and Malpezzi, 2003; Turok, 2011). However, the extraordinary variation in densities within each city is less well understood. It is more appropriate to characterise SA cities by their highly uneven population distributions than their low average densities. For example, Cape Town's average population density is 39 persons per hectare, but this varies between 100-150 in the shack areas and 4-12 in the former white suburbs (City of Cape Town, 2009). This enormous imbalance presents a far greater challenge for human settlement planning than uniform low density, especially as different neighbourhoods are spread apart rather than contiguous. Uneven density is a source of inefficiency and injustice because it obstructs the workings of the labour and housing markets, and transport networks. It also makes it extremely difficult to distribute public services fairly across the city.

Middle- and high-income households generally live in low density suburbs that are costly to service with public transport and other infrastructure, and are geared to car-based commuting. Major highway construction since the 1960s has contributed to the separation of work, leisure and home-life. Elsewhere, the poor majority of households are confined to townships and informal settlements that are often overcrowded, with over-burdened schools, clinics and other community facilities, and vulnerable to the spread of shack fires and communicable diseases. The pressure on housing land in these areas complicates the installation of bulk infrastructure, municipal facilities, public spaces and formal economic activity. Many shack areas are poorly sited in relation to flood hazards and unstable land, and remote from livelihood opportunities and amenities, which compounds people's disadvantage.

South Africa's dispersed urban configuration also differs widely between cities. The varied spatial form of cities reflects their unique physical topographies, major transport axes, social/cultural composition, and the rate and character of economic development and demographic growth. Historical policies are also important, including how strictly apartheid planning principles were applied, and what other planning ideas were influential, such as the separation of land-uses associated with 'modernist' ideas. Some cities have a reasonably compact built-up area, while others are much more fragmented. Some have one or more poor townships located well beyond the periphery that was imposed through forced removals or 'displaced urbanisation'. Others have a range of outlying informal settlements which have grown without approval as a result of in-migration, often since the demise of apartheid, such as Diepsloot north of Johannesburg (Harber, 2011).

It is vital to understand these differences in order to tailor settlement policies appropriately. A useful way to start thinking about these differences is through three-dimensional density maps (figures 2-5). There are four examples provided in this paper. They convey a powerful sense of the socio-spatial inequalities of each city. The height of each column on the map represents the population density of that particular zone of the city. The area of the base (or 'footprint') of each column is the geographical extent of that zone. Consequently, the volume of each column reflects the total number of people living in the zone. The colour coding reflects different density levels – green is very low while red is very high.¹

In order to interpret the patterns shown in each map in a systematic way, it is important to identify the essential features that distinguish one city from another. Table 1 provides a initial framework to pinpoint key differences in spatial form. These distinctions also help to understand some of the strategic challenges facing each city, including where major investments in transport, housing and jobs might be located to reduce some of the most glaring inefficiencies, and what kinds of transport system may be most appropriate in different situations. The framework is a considerable simplification of reality, but it helps to contrast the distortions of the archetypal apartheid city with cities elsewhere that have evolved in a more organic way without extreme state control. Apartheid cities were shaped by policies of (i) strict social segregation to keep races apart and (ii) separation of economic and residential zones to keep commercial and industrial activities out of non-white areas. This denied black townships the chance to develop an economic base, and greatly increased the need to travel within cities.

Table 1: Basic differences in urban form

	Ordinary city	Apartheid city
Main built-up area of the city	Contiguous	Fractured
Variation in density levels across the city	Smooth gradient	Highly variable
Areas of low density in central locations	Few	Many
Areas of high density in peripheral locations	Few	Many
Tendency to separate or mix land-uses	Mixed land-uses	Separation of land-uses
Distance between poorest residential areas and main economic centres	Typically short	Typically long

¹ The population data is drawn from the 2001 Census and the spatial units used are 'sub-places'. Although the 2001 Census is now out-of date for some purposes, this is less of problem for the basic form or configuration of cities, which does not change greatly from year to year.

What follows is a very preliminary assessment of the spatial form of each city, with some observations about the challenges they pose. Further research is required to provide a more detailed analysis of each pattern, to understand how it came about, and to assess the strength and impact of contemporary spatial trends. It should include a quantitative analysis of the changing distribution of employment as well as population, a detailed assessment of the demographic and housing characteristics of each area, and information on the daily flows of people across each system. This is a precondition for exploring the scope for alternative policy interventions to address the problems faced. We start with the cities that have relatively straightforward spatial forms and move on to those with more complicated issues. Smaller cities are likely to have lower overall densities, to be less complex and to have shorter commuting distances.

Mangaung

Within the Mangaung metropolitan area, the city of Bloemfontein (Figure 2) has a fairly conventional and compact urban form, without any extremely dense zones. The variation in density levels across the city also seems lower than in South Africa's other cities. The main residential areas are reasonably accessible to the central business district, which is the dominant employment centre. The most unusual feature of the wider Mangaung area is the large population concentration at Botshabelo (a former Bantustan) located about 50 km away. This large 'township' has a sizeable share of the metro population but lacks any significant economic base of its own, so people are forced to commute to Bloemfontein for work at considerable personal and financial cost. They may also be forced to travel there for major consumer purchases and for high order public and private services. This is a classic example of displaced urbanisation and it probably represents the biggest single long-term challenge for planning sustainable settlements in Mangaung.

{figure 2 around here}

Looking ahead, there may be scope to develop one or more economic and service nodes in Botshabelo because of its population size and distance from Bloemfontein. The large combined spending power of local residents coupled with the available labour supply and potential savings in transport costs offer advantages for local economic development. Over time there may also be opportunities for further residential densification in and around the central city area of Bloemfontein given the relatively low current density of some of these zones and the value households attach to proximity to centrally-located jobs and amenities. In the meantime, efficient and affordable transport connections are vital for people from Botshabelo to access jobs and amenities in Bloemfontein.

Buffalo City

Buffalo City (Figure 3) comprises a reasonably compact contiguous built-up area and a few disconnected settlements further afield. The residential density of the central city is very low. There are at least two notable features that appear to represent acute strategic challenges for the metro. First, there is a particularly large concentration of population in Mdantsane, some 20 km from the city centre, with no significant local economic base. Second, the residential densities in and around Duncan Village are extremely high. There are also some smaller, remote settlements in the hinterland, such as King Williams Town and Dimbaza.

{figure 3 around here}

Looking to the future, efficient high capacity transport connections between Mdantsane and East London seem essential and feasible given the size of the township and the moderate distance involved. Mdantsane may also have the potential to develop a stronger economy of its own in view of its population size and its distance from central East London. The area in and around Duncan Village appears to have opportunities to develop multi-storey formal housing because of its reasonably central location, provided a viable financial formula can be devised. Residential densification in and around the city centre would bring people closer to opportunities and make central services more viable by increasing the consumer base.

eThekwini

eThekwini (Figure 4) appears to have a more fragmented spatial form than most cities. There is no single dominant contiguous area of medium-high population density. Instead there are three large, separate residential zones of medium-high density: (i) the central city and inner western suburbs, (ii) the northern townships including KwaMashu, Inanda and Lusaka, and (iii) the south-western group of townships around Umlazi. Each of these zones includes localised areas with particularly high density. The rest of the metro seems to consist of low density suburban sprawl, traditional rural areas, and about eight quite separate outlying moderately-sized settlements of medium density, such as Flamingo Heights in the north and KwaNdengezi in the south-west. eThekwini's fragmented character partly reflects the regional topography of undulating hills and valleys which complicate coherent physical development.

{figure 4 around here}

Future challenges include building up the local economic base of the northern and south-western groups of townships identified above, and strengthening the transport connections between the main settlements and emerging employment centres in the north of the metro, such as Umhlanga and the new King Shaka airport. Rail and road connections have been improved recently between KwaMashu and Durban city centre. There is also scope for residential densification around the central city and in the inner suburbs to improve access to opportunities and to boost demand for city centre services.

Gauteng

The three metros of Johannesburg, Tshwane and Ekurhuleni are combined together in figure 5 because of their proximity and interdependence. The map reveals an exceptionally fragmented settlement pattern. Gauteng bears very little resemblance to an integrated metropolitan area or a monocentric city-region. Like eThekwini, there is no single dominant contiguous area of medium-high population density. The map also reveals the sheer scale and density of Soweto's population and its separation from central Johannesburg. Midrand, Sandton and Rosebank are shown to be insignificant in residential terms. Population densities in Alexandra and parts of Johannesburg city centre are exceptionally high. The scale and density of Tembisa and the long distances between Pretoria and its major displaced townships, Soshanguwe and Mamelodi are also apparent. The isolation of Orange Farm in the south is also very clear.

{figure 5 around here}

One of the reasons Gauteng developed a dispersed form was the lack of immediate constraints on urban growth at the time of rapid expansion of the mining industry and in a context of large

sparsely populated and generally infertile tracts of land (van Ryneveld, 2010). The contemporary splintered structure of Gauteng and the separation between residential communities and employment nodes implies a need for high levels of movement across the region. There is a compelling case for efficient transport connections between the main settlements (which tend to be in the south) and the areas of employment growth and private investment (which tend to be in the north). Improved accessibility and connectivity are crucial to releasing the region's agglomeration potential, including enabling the labour market to function more efficiently and reducing the costs of congestion. Over time, the spatial form may also be made more coherent and functional through carefully-targeted residential development, infilling and densification. Some of the undeveloped parts of Johannesburg and Ekurhuleni visible on the map are former mining areas that are unsuitable for housing, but there is scope for densification in other well-located areas. The broad Johannesburg-Pretoria transport corridor is a good example, along with the inner suburbs of Pretoria. Finally, the major outlying settlements in places such as Tokoza, Vosloorus, Nigel, Wattville, Chris Hani, Tembisa, Mamelodi, Saulsville, Soshanguwe and of course Soweto may be capable of supporting stronger local economies given their scale and distance from established economic centres.

To summarise, promoting greater integration of each city is important to improve efficiency and fairness. Fragmented settlements need to be knitted together more effectively through strategic investments in transport, housing and economic development. There is scope for residential densification in and around most central cities. Bringing more people to live in well-located areas would be beneficial for accessing work and social amenities, strengthening city centre economies, and reducing transport congestion. It might require a combination of state sponsored redevelopment, incentives and controls on private house-builders, and more creativity and innovation on the part of developers and planners.

Devolving built environment functions to the metros

Within the last two or three years there have been several important policy developments which strengthen the role of city governments in relation to the built environment:

- **Housing:** A commitment has been made to speed up the accreditation of metros to manage public housing programmes without the need for provincial approval. A new urban settlements development grant has also been created to fund large municipalities to develop informal settlement upgrading schemes by subsidising the cost of acquiring and servicing land (Treasury, 2011a).
- **Transport:** The National Land Transport Act (2009) gives municipalities a leading role in planning and regulating all public transport services in cities. Public Transport Integration Committees will be set up in each city to facilitate the incremental transfer of responsibilities from existing transport planning and regulation authorities (SACN, 2011).
- **Spatial planning:** A Constitutional Court judgement in 2010 on the Development Facilitation Act established that municipalities have principal responsibility for land-use planning and management. This helps to reduce the duplication and confusion that existed hitherto. Revisions are also being made to the land-use management legislation to reinforce this decision and strengthen municipal spatial planning (NPC, 2011b).
- **Electricity:** Government proposals to form regional electricity distributors were withdrawn in the face of local opposition, thereby emphasising the role of municipalities in providing basic services.
- **City support:** The Treasury is starting a programme with several other departments to help cities manage the built environment in a way that promotes economic and

employment growth, access to services, environmental sustainability and public accountability (Treasury, 2011b, p.39). Fiscal and organisational incentives will be put in place to improve municipal performance in these respects.

- Local business tax: The Treasury is considering proposals for a local business tax to diversify municipal revenue streams and replace the old RSC levy. Another advantage would be to strengthen the interactions between municipalities and the business community and improve external accountability.

These policy shifts are significant in creating the possibility for cities to manage urban growth more effectively and to support the transition to a cleaner, more inclusive and more prosperous future. There are limits to municipal powers in relation to economic growth and social inequality, but the built environment sits squarely within its domain. Devolving additional functions to the metros should make it easier to start reconfiguring the urban environment, increase densities and reduce sprawl: “Empowering cities to perform these functions will support integrated planning and spatial development, as well as ensure greater accountability to communities” (Treasury, 2011a, p.214).

Devolution to the metros will be an incremental process rather than a single event. The transfer and clarification of responsibilities should bring about several general benefits for policy-making and implementation. It should help to improve the responsiveness and accountability of these functions by bringing decisions closer to households, communities and businesses. Being closer to the ground should raise decision-makers’ awareness and understanding of spatial considerations. The scope for coordination and integration should be improved by decisions being made in a single institution, where it is easier to balance consideration of the economic, social and environmental implications. A broader span of responsibilities should enable people to think more strategically about competing investment priorities and focus on those that will generate most value and impact. Opportunities for external collaboration and partnership-working with civil society and the local business community should also be enhanced by decentralised decision-making.

One of the more specific benefits could be to stop building free, fully-serviced houses in marginal locations. The metros will have scope to support better located new settlements built at higher densities. They will have discretion to shift the funding from new housing for the few to settlement upgrading for the many. Greater focus on informal areas will help to improve personal safety and security, increase local amenities and strengthen livelihoods. More creative thinking and flexibility in public investment decisions should mean more opportunities for local job creation and community capacity building. Municipal control over public transport systems should permit improvements in reliability, safety and through-ticketing between trains, buses and taxis. Stronger links between transport, land-use, infrastructure and housing functions should enable densification around transport hubs and corridors. Greater control over these policy levers will strengthen the position of municipalities in negotiations with investors, and facilitate mixed-use, mixed-income projects to be developed in appropriate places.

Devolution will probably not be sufficient on its own to achieve many of these benefits. It will need to be accompanied by improvements in municipal leadership, institutional capabilities and external relationships. Greater political stability, determination and strategic vision will be required to make the policy and procedural changes necessary to drive spatial transformation. The metros will need to improve their skills and competences in negotiating deals with landowners, developers and investors to maximise the social and economic benefits of public investment in infrastructure. They will have to develop the knowledge and assemble the teams of skilled planners, surveyors, engineers, architects, environmentalists and other professionals

who can work together creatively to reconfigure urban infrastructure networks, redesign service delivery systems and start shifting physical development patterns. And they will need to create robust partnerships with developers, investors and local communities to bring forward imaginative new projects and schemes that can help to stitch together the urban fabric and create viable and valued places where people want to live, work and socialise. Careful planning and sequencing of such initiatives could just possibly set in train a self-reinforcing dynamic of greater confidence, innovative thinking and bold action that will generate meaningful change on the ground.

Achieving this kind of momentum will be strengthened by national cooperation. It is important for the government to resist the temptation to shift all responsibility for built environment functions to the metros and remove their own obligations. Central government has unique financial, regulatory and symbolic powers required for human settlement restructuring. These include control over the vacant and underutilised land holdings of government departments and state owned enterprises. Influence over the investment decisions of entities responsible for electricity, skills training, freight transport, telecommunications, etc are all important to strengthen the economic pillar of sustainable settlements. An explicit national urban policy framework would help secure support across government for integrated city development strategies. Metros with proven capabilities and integrity should be given greater discretion to experiment and innovate with this challenging agenda by relaxing some of the stringent procedures that restrict their flexibility. Additional responsibilities could be devolved in due course, such as environmental regulation. National legislation governing spatial planning and land-use management needs comprehensive modernisation. Above all, national government needs to work hand-in-hand with the metros to raise the investment funds required to develop, maintain and upgrade the infrastructure essential for urban transformation.

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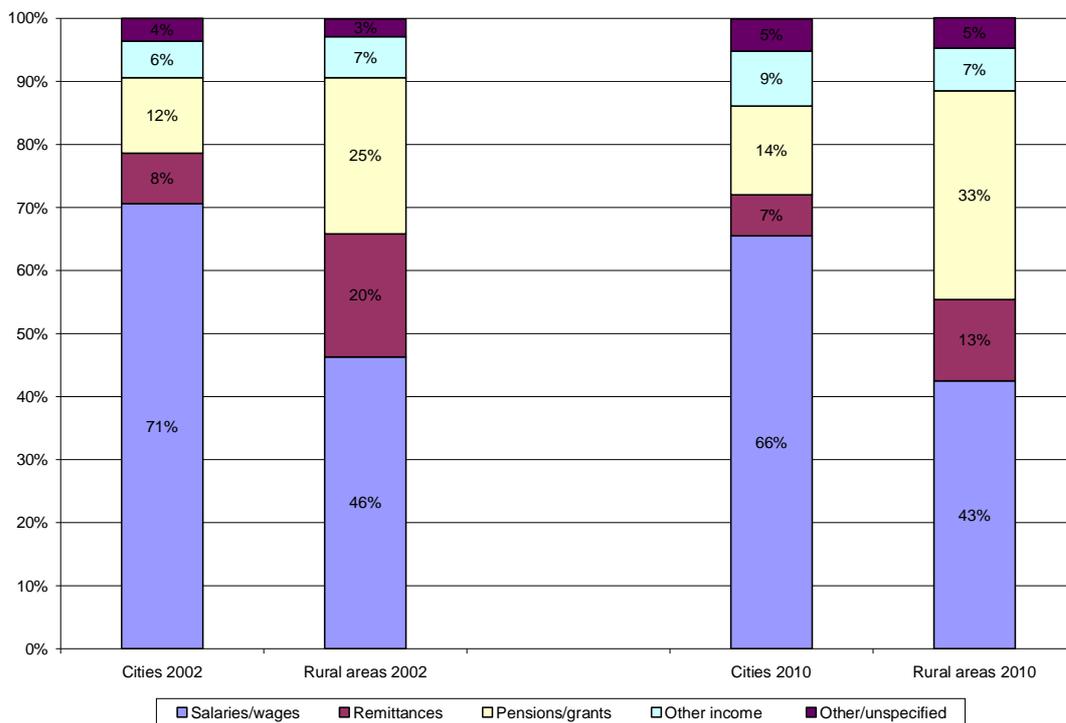
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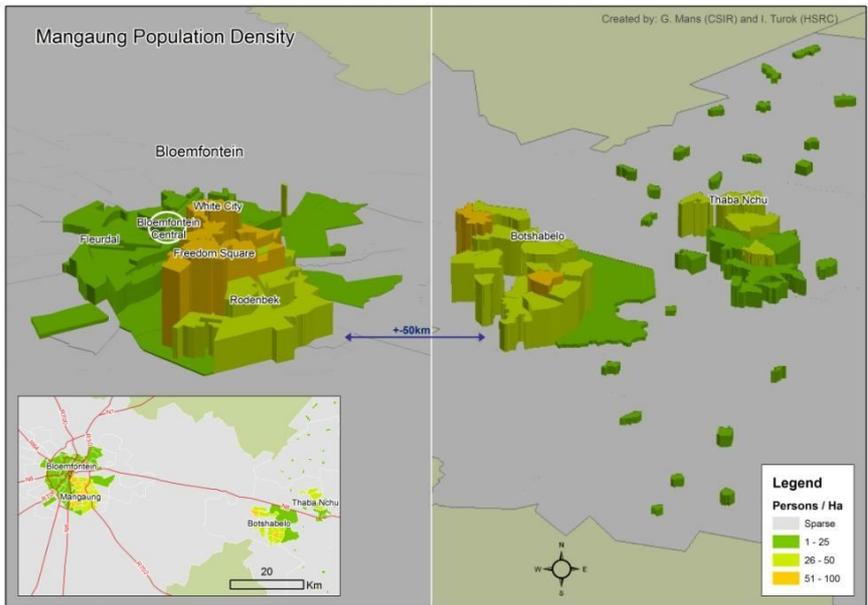
Acknowledgements: To follow

Figure 1: Main source of household income, 2002-2010



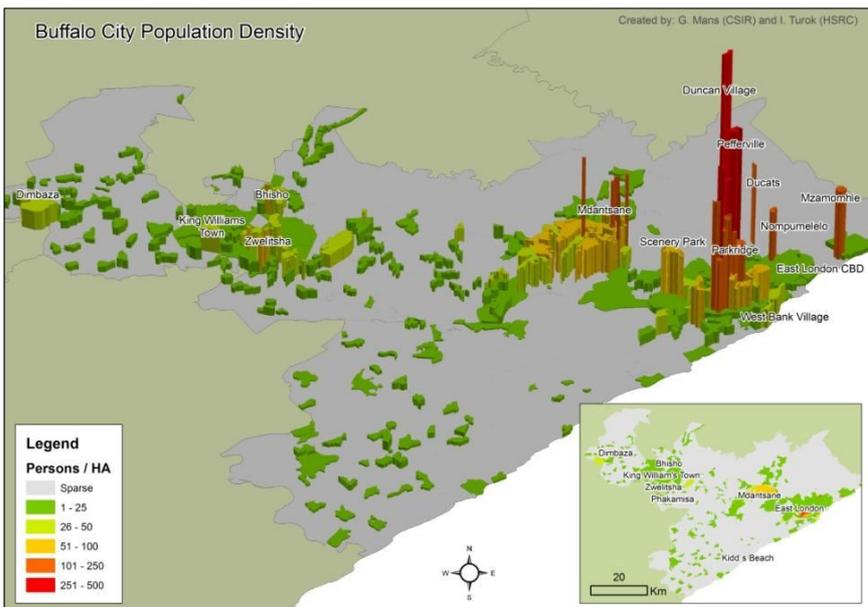
Source: Author's calculations from General Household Survey, 2002 and 2010

Figure 2: Mangaung



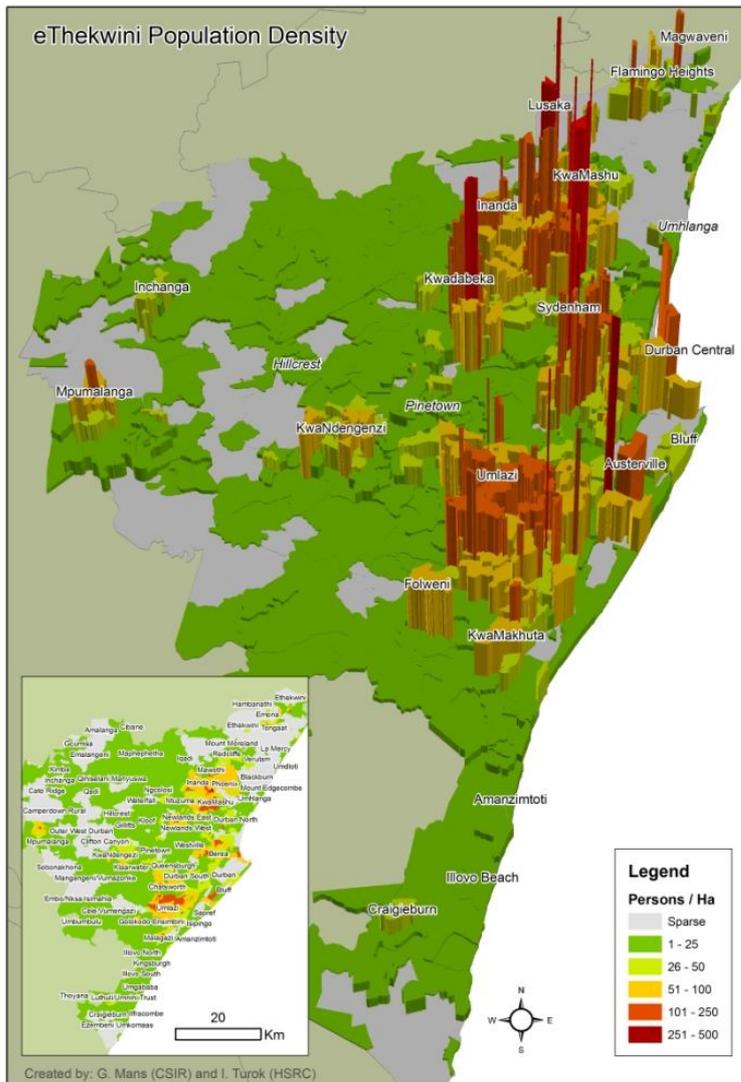
Source: SACN, 2011

Figure 3: Buffalo City



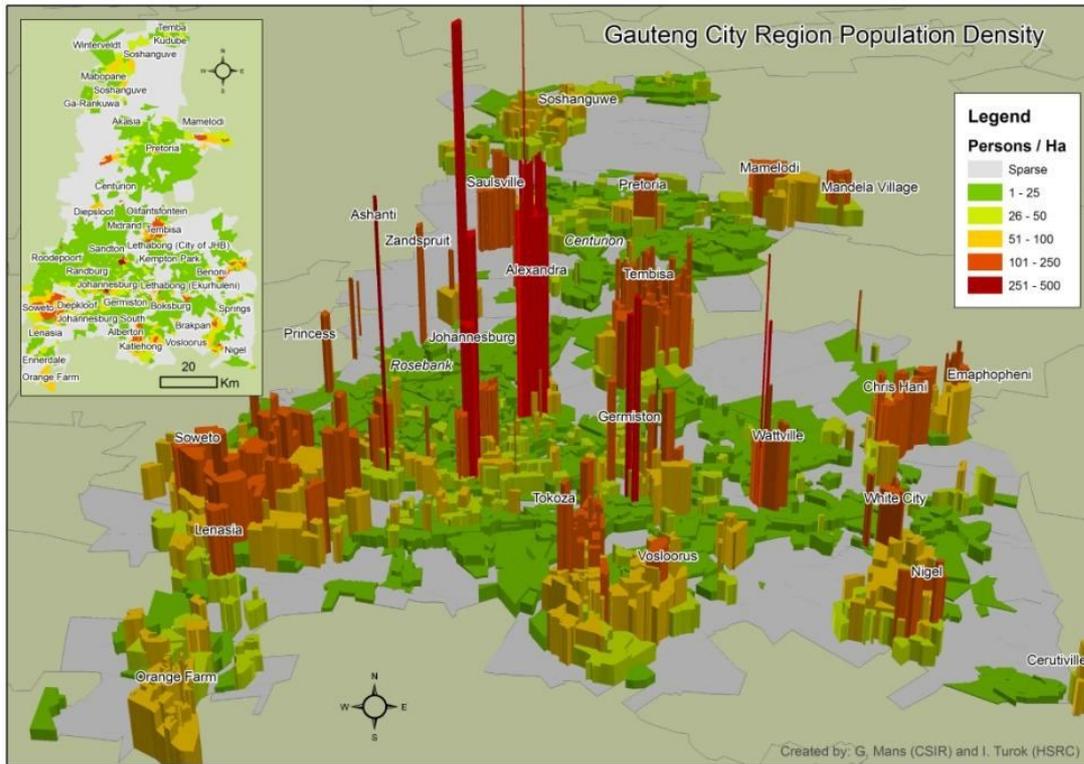
Source: SACN, 2011

Figure 4: eThekweni



Source: SACN, 2011

Figure 5: Gauteng



Source: SACN, 2011