South Africa's New Urban Agenda: Transformation or Compensation?

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Abstract

One of the dilemmas at the heart of the new urban agenda globally is whether population growth should be accommodated by extensive or intensive urban development. Both approaches have gained support in South Africa in recent years, albeit in different parts of government. The paper provides a critical and constructive assessment of what lies behind these contrasting agendas. It considers the positive and negative features of mega-projects and urban consolidation, with an emphasis on their implications for urban efficiency and social justice. It concludes by stressing the need to reconcile these policies in order to avoid wasteful duplication and damage.

South Africa's New Urban Agenda: Transformation or Compensation?

One of the dilemmas at the heart of the new global interest in urban policy concerns the extent to which population growth should be accommodated by enlarging urban areas or by using existing areas more intensively, i.e. by growing outwards or upwards (UN-Habitat, 2013, 2014). Outward or extensive growth can be achieved through planned urban extensions or new satellite cities and towns. More intensive growth can be achieved through infill projects on vacant land or higher density redevelopment of existing buildings. This dilemma is related to another difficult trade-off between preparing for new urban growth on greenfield sites, and revitalising older urban areas, including upgrading informal settlements.

The arguments for supporting extensive urban growth are that physical projects are more straightforward to execute on undeveloped land, innovation in urban design is easier because there are no vested interests to resist change, and a well-structured urban form can be created (Angel, 2011; Collier and Venables, 2015; Fuller and Romer, 2015). Starting from scratch in this way also means avoiding the pitfalls of congestion, pollution and overcrowding in existing urban settlements. The arguments for absorbing growth within established cities are that this is more efficient in terms of using land and other resources, it strengthens the social fabric through incremental schemes, and it addresses the issues of congestion, poverty and other problems directly (UN-Habitat, 2013, 2014). Consolidating existing cities in this way can also revitalise older urban districts and modernise worn-out infrastructure.

This tension between urban expansion and compaction is all too apparent in South Africa at present. In the absence of a national spatial plan or an approved urban policy, all sorts of competing ideas and proposals gain traction. The tendency for contradictory policies to be pursued simultaneously is linked to a series of national difficulties, including growing political impatience at the pace of social progress. Poor economic performance over many years means mass unemployment, extensive poverty, high crime and a squeeze on household incomes (National Planning Commission (NPC), 2012). Weak capabilities and mismanagement across government have resulted in coordination failures and poor implementation (Presidency, 2014). A decline in house-building and deficiencies in basic services have provoked growing community unrest, and challenged the legitimacy of the ruling political party (Bundy, 2014). Its electoral position is under particular threat in the major cities, where population growth is strongest and the demands for enhanced social provision are loudest (African National Congress (ANC), 2015).

One of the visible responses has been burgeoning interest in urban mega-projects, typically located on the metropolitan outskirts (Cirolia, 2014; GCROa, 2015; Herbert and Murray, 2015). Political leaders have announced peremptory plans with streamlined procedures to

develop a suite of major urban expansion schemes. Each is designed to accommodate tens of thousands of urban residents in better living conditions. These initiatives typically stem from the housing ('human settlements') departments of national and provincial government. They seem determined to accelerate the supply of accommodation because the government's long-established housing programme has run into the sand (SACN, 2014; Savage, 2014; Sisulu, 2015). Fiscal pressure on the state is a secondary concern, resulting in efforts to inject more private investment into human settlements.

Meanwhile, a different urban agenda has been under construction elsewhere within the government. It is based on longer-term considerations and a broader definition of efficiency. Key objectives include urban integration, compaction and densification by encouraging new housing on well-located land, and improving public transport connections between residential areas and employment centres. Proponents have been the National Treasury, department of cooperative governance (COGTA) and metropolitan municipalities (National Treasury, 2013; COGTA, 2014). The urban mega-project proposals are causing them anxiety because of the risks involved. For example, they threaten to divert scarce public and private resources away from core built-up areas, thereby compromising the viability of recent investments in bus rapid transit systems. They could also jeopardise the long-term financial position of the metros, which have to bear many of the costs of dispersed infrastructure and ongoing service delivery.

The purpose of this paper is to review what lies behind these contrasting agendas and to provide a critical and constructive assessment. It considers the positive and negative features of both approaches, including the potential implications for urban efficiency and social justice. The dilemmas that South Africa faces about the evolving form of the city are far from unique in the context of other urbanising low and middle-income nations (UN-Habitat, 2013, 2014; World Bank, 2013). It important that these countries develop policies that are grounded in the context of local realities and do not get seduced into imitating the satellite cities, flagship real estate projects and other grandiose urban models pursued by wealthier nations, such as Dubai, Songdo City, Masdar or Shenzhen.

The next section outlines the original problem that both agendas are obliged to confront, namely the social and spatial legacy of colonial and apartheid cities. Section two discusses key developments since democracy in 1994. Subsequent sections consider the proposed mega-projects and what lies behind them, followed by a discussion of the urban consolidation agenda. The question posed in the title relates to whether these agendas involve significant change in the inherited structure of urban areas, or some form of redress and recompense for the basic failure to transform urban conditions.

The legacy of segregation

For more than a hundred years under colonialism and apartheid, SA cities were subjected to draconian political processes involving stringent population controls and forced removals.

This produced highly inefficient, inequitable and environmentally-damaging outcomes (NPC, 2012; COGTA, 2014; Presidency, 2014). The ideological pursuit of racial domination and spatial segregation created a fractured urban form which diminished the economic advantages normally associated with dense agglomerations. As the population of cities grew, the costs of sprawl and a predominantly road-based transport system became increasingly apparent. Poor families trapped on the periphery had to bear the brunt of long and complex journeys to work and school. Businesses suffered from frequent workforce absenteeism, punctuality problems and disruption to production. And the state had to bear the extra costs of sprawling infrastructure networks, duplicate municipal facilities, and inefficient transport systems caused by the over-extended spatial form.

The inefficiencies for households and firms were exacerbated by the creation of a highly fragmented system of racially-based local authorities across each city (Swilling, 1991). This added to the costs and complications of public service delivery and ruled out the possibility of coherent urban planning. The insistence that each municipality was financially self-sufficient reinforced social and spatial inequalities, and undermined economies of scale in the provision of urban infrastructure. Separate education systems also deprived the majority of the population of decent education and training, thereby limiting the development of human capital and leaving another damaging legacy for the current generation.

The establishment of bleak dormitory settlements and hostel compounds for migrant workers without any kind of economic base or amenities was a further problem. There was deliberate under-investment in housing, physical infrastructure and social facilities, and blanket restrictions on self-employment and business start-ups. Many of these townships and adjacent informal settlements became concentrations of poverty and exclusion, where miserable living conditions meant hardship, insecurity and crime. For the minority of adults fortunate enough to have jobs, physical marginalisation meant burdensome commutes on unreliable transport networks. Subsequent research has shown that many workers spend between 20-35% of their income on commuting, which is exceptionally high by international standards (OECD, 2011; NPC, 2012). When the time and cost of commuting are factored into the hourly wage, the average proportion of income spent on public transport is 30% for commuters using minibus taxis, 40% for buses and 22% for trains (Kerr, 2015).

During the 1980s, grassroots political opposition increased and many of the townships become militant and ungovernable (Swilling, 1991; Turok, 2014). Residents boycotted their rent and service charges, creating a financial crisis for black municipalities. Infrastructure began to collapse and environmental conditions deteriorated. The economic distortions of separate development and the popular resistance to urban containment proved unsustainable. A general state of emergency was followed by a volatile political transition, marked by escalating civil unrest and violence. The 1994 democratic elections yielded a new government of national unity and ushered in a period of unprecedented political stability.

The urban agenda after 1994

The post-apartheid government has responded to these urban problems through separate policies and programmes rather than an integrated approach (SACN, 2014; COGTA, 2014). Macroeconomic concerns with fiscal prudence and inflation targeting have taken precedence over microeconomic policies to stimulate all-round development. The ruling party has tended to perceive cities as sites of historic privilege and less deserving of special attention than rural areas (COGTA, 2014; Turok, 2014; ANC, 2015). Until recently the National Treasury was not particularly interested in cities because their local authorities raised most of their own revenues and were more capable of spending their resources than municipalities elsewhere. A range of specific initiatives were targeted at particular townships or run-down inner cities. The focus was poverty alleviation and physical renewal, rather than economic and employment growth. Equity and redress were more pressing priorities than efficiency or transformation.

A complicated process of municipal amalgamation resulted in the creation of single tier metropolitan authorities for each major city in 2000. Their principal mandate was to tackle inherited 'backlogs' by extending housing and essential community infrastructure to underserved townships. They used reserves from the former white municipalities and revenues generated from the established tax base. 'Service delivery' became the mantra, implying the roll-out of housing, water, sanitation, electricity, roads and refuse collection to historically-deprived communities. Most of the metros were very effective at accelerating such provision, although concerns about quality, integration and location began to emerge over time (Presidency, 2014; Turok and Borel-Saladin, 2014). Municipal spatial plans advocated urban compaction and integration, but lacked the influence internally over infrastructure departments or externally over other spheres of government and the private sector to achieve this.

There was particular pressure on the provinces and metros to boost house-building, using dedicated resources from the government's RDP subsidy scheme (Harrison et al, 2008; Bradlow et al, 2011). There was much more ambivalence about upgrading informal settlements because they occupied unauthorised land and engaging these fractious communities was often difficult (Huchzermeyer, 2011). It seemed simplest to try and provide everyone with a formal dwelling on its own plot, which chimed with popular demands. Financial formulas required economising on the land costs, which meant building on peripheral sites where there was little competition from other land users. Provinces controlled the housing budgets, but municipalities were expected to pay for the bulk infrastructure and services. Under pressure to maintain a high rate of delivery, National Treasury came to the rescue in the late-2000s with a new Urban Settlements Development Grant (USDG) to cover the costs of land, infrastructure and community services that municipalities couldn't afford. Recent estimates suggest that 2.8 million houses have been constructed to date, accommodating one in five of all citizens (National Treasury, 2013;

Presidency, 2014). This is a sizeable achievement with undoubted benefits for people's living conditions and dignity.

Against this, serious limitations have also become apparent, including a falling level of delivery, inflated costs, poor quality construction, and allegations of patronage, fraud and corruption in allocating tenders and managing housing waiting lists (Savage, 2014; SACN, 2014). Urbanisation has resulted in the housing backlog continuing to grow, and community protests over housing and services have escalated (Bundy, 2014; ANC, 2015). Observers have questioned the feasibility of building millions more of these give-away houses, especially when most beneficiaries cannot afford to pay for their ongoing services, property upkeep and everyday family consumption needs (Harrison et al, 2008; Bradlow et al, 2011; SACN, 2014). According to some estimates, less than a third of RDP homeowners have a job (Turok and Borel-Saladin, 2015). Housing has been provided as physical shelter rather than part of an integrated human settlement with access to jobs, amenities and community services. This has tended to reproduce the sprawling form of the apartheid city, contrary to the policy of creating sustainable human settlements that was approved as long ago as 2004 (Presidency, 2014; Sisulu, 2014a). It has also caused considerable damage to ecosystems and made inefficient use of water, energy and other natural resources (NPC, 2012). South African cities are among very few in the world where the average population density rises with distance from the centre. This is regarded as a clear liability by international observers, and the situation appears to have deteriorated in the last two decades (Bertaud and Malpezzi, 2003; Wainer, 2015).

Transport policy has also suffered from continuity with the past, ultimately having to compensate for the lack of urban restructuring. The system of public transport is highly fragmented with different modes of travel accountable to different institutions and no integrated arrangements for passengers (NPC, 2012; National Treasury, 2013; Turok, 2014). Transport subsidies are skewed towards established bus and train operators and away from minibus taxis, which are used by most low income commuters. Average commuting times for black households have increased from 88 to 102 minutes a day over the last decade because of where new housing has been constructed and slow progress with public transport reforms (Kerr, 2015). The same study found that South Africans commuting to work on public transport spend 2.5 times longer in transit than Europeans and twice as long as Americans.

The 1996 Constitution encouraged the state to take reasonable measures to enable citizens to gain access to well-located land. This was not simply to be through the market, which disadvantages the poor. The authors of the Constitution expected the courts to be inundated with disputes over land arising from state action to provide affordable housing. However, the courts have not had a single case where the government has been challenged for expropriating private land in the public interest (Moseneke, 2014). Some observers have suggested that municipalities have been cautious about intervening in the land market

because their main source of income is from private rate-payers, whose confidence they can't afford to undermine (COGTA, 2014; Presidency, 2014). Of course this does not apply so directly to other government spheres and entities.

According to the Deputy Chief Justice, the state's timidity towards private landowners has meant that "apartheid spatial patterns remain. People in informal settlements run the risk of mass evictions ... We have not found a satisfactory solution to spatial apartheid, equitable access to land, and housing and basic services" (Moseneke, 2014, p.12, 22). A new Housing Development Agency (HDA) was established in 2009 specifically to assemble vacant stateowned land for well-located housing. However, most public entities that own such land, such as Transnet and Public Works, have proved uncooperative and the government has not required them to make their surplus land available (SACN, 2014). The human settlements department is currently seeking stronger legal powers to give it the right of first refusal when a state entity sells land so that it can acquire it at 'fair value' instead of market value (Magubane, 2015).

The upsurge in mega-projects

Since 2014, there has been heightened national interest in large-scale housing developments. It coincides with the appointment of a forceful politician with a sense of urgency as the human settlements minister following the 2014 general election, although there are other factors involved, as noted above. Mega-projects are the government's main response to the falling rate of housing delivery in the face of rising demand from an expanding urban population. They do not include the up-market, private sector led mega-projects such as Waterfall City and Steyn City (Herbert and Murray, 2015). The idea was first mentioned in Minister Lindiwe Sisulu's budget speech to parliament:

"The delivery of houses has dropped by 25% over the past five years ... (this) is very serious especially against a backdrop of increasing urbanisation and promises made. ... We will now embark on mega projects, because in this way the economies of scale will be in our favour" (Sisulu, 2014a).

She also mentioned the escalation in popular protests over housing and a growing backlog of 2.3 million households. This was followed by a new commitment to deliver an additional 1.5 million housing opportunities over a five year period to compensate for the dwindling rate of delivery. She said: "perhaps nothing short of some kind of Marshall Plan will see us survive this challenge ... Our job will be to rev the engine on high voltage" (Sisulu, 2014a). The ruling party's belief that it was politically imperative to boost housing supply was subsequently confirmed by the ANC secretary-general: "Human settlement is at the heart of mass resentment. However, it can be turned around to be the driver of improvement in electoral fortunes for our movement" (Mantashe, 2015, p.1).

Crucial details of the proposed mega-projects and the background preparatory work are hard to come by. At the time of writing (September 2015) there is still no policy framework to explain the concept and its rationale. Yet the simple logic is reasonably clear from public statements by politicians and officials. In her 2014 budget speech Minister Sisulu talked about eliminating blockages in the housing pipeline (such as access to land for development) and encouraging the banks to increase home loans. She mentioned the need to formulate a 'master spatial plan' to coordinate the provision of housing and infrastructure, and getting each of the nine provinces to:

"launch an integrated human settlement Ministerial project that will deliver a minimum of 10,000 houses and 5,000 service stands over five years. This will include 20% rental units, 20% gap housing, 30% BNG(RDP) houses, 10% social housing and 20% serviced sites for employer assisted housing" (Sisulu, 2014a).

A senior official subsequently confirmed the view that mega-projects would differ from the past in catering for different income groups and providing a mix of housing types and tenure options within the same settlement, thereby promoting social diversity (Human Settlements Committee, 2015c). Nevertheless, the Minister's overriding concern, apparent from her various public pronouncements, has been to ramp up the supply of housing. In a presentation to the housing committee of parliament in October 2014 she explained that mega-projects were much more efficient for her department to oversee than lots of smaller projects (Sisulu, 2014b). She said her department lacked technical capacity and was seriously under-spending its budget. Similar problems throughout the process of project preparation and management were afflicting many of the provinces and metros, especially in Gauteng, where the need for housing was greatest (Human Settlements Committee, 2015a). Substantial funds were also being diverted to rectify shoddy workmanship on earlier housing schemes, and community demonstrations and land invasions were disrupting many of the new projects.

Other evidence presented by her officials to successive meetings of the parliamentary committee revealed a growing crisis crippling the supply of housing and causing serious political spillovers. Outputs were declining, costs were rising, procurement processes were bogged down, assembling land was slow, and external conflict was growing (Human Settlements Committee, 2015b). The Committee in turn felt the Department should: "be more proactive, act with speed and have aggressive interventions where they were needed" (Human Settlements Committee, 2015c). Integrated planning across government seemed to be the obvious solution to the turmoil. Mega-projects were portrayed as the ideal vehicle to coordinate the activities of different spheres and agencies of government in a concerted drive to build new settlements.

During this period, Minister Sisulu said that the provinces should submit proposals for 50 mega-projects, rather than 10. She also asked the metros to prioritise mega-projects when deciding how to spend their USDG. The HDA would be tasked with preparing a "pipeline" of

projects and managing them through contractors. It would set up a 'one-stop station' in each province for private developers to air their grievances about regulatory procedures. Sisulu said that the government would "move swiftly to ease zoning bottlenecks and government red tape in a bid to woo the private sector" (Mashego, 2015). Furthermore, the mega-projects were explicitly intended for urban areas, not rural. The total price tag was expected to be a very substantial R298bn (\$25bn) over five years.

In her subsequent budget speech, Minister Sisulu repeated the 1.5 million housing target and the importance of exploiting economies of scale: "the need is so large that we cannot settle for minor projects" (Sisulu, 2015). She explained the need for greater efficiency by the fact that the cost of each RDP housing unit had doubled from R78,000 in 2009 to R160,000 in 2014, excluding the rising infrastructure cost. She also reaffirmed her department's commitment to sponsor 50 'catalytic' projects, which were "intended as game changers in the process of spatial planning in our country. They ... will shape the future of human settlements development" (Sisulu, 2015).

Interestingly, the choice of language throughout this period tends to emphasize a mechanical process of quantitative delivery, hence the references to pipelines, blockages and delivery engines. There is no mention of the opportunity for innovative urban designs, or the need for careful planning of decent and functional living and working environments for communities. There is a preoccupation with the efficiency of government processes, and little consideration given to the efficiency for households (e.g. potential travel costs and distances to work, and the knock-on effect for disposable incomes and consumption), the efficiency of the wider economy (e.g. transport costs and congestion resulting from sprawling urban development), or the fiscal implications for urban municipalities. Megaprojects are presented as a neat solution to compensate for government fragmentation, procedural complexities and capability constraints. There is no analysis of what lies behind the housing backlog, no technical or financial appraisal of mega-projects, and no apparent awareness shown that the rising demand for housing could be met in various ways besides big, risky schemes.

Provincial enthusiasm for mega-projects

Some of the provinces have responded to the mega-project promise with great enthusiasm. Gauteng has led the way, as the economic heartland of the country under most pressure to accommodate a fast-growing population, and needing some big ideas to capture hearts and minds in a contested territory. The provincial premier, David Makhura, announced a new commitment to 'modernising' and 'transforming' human settlements in his incoming state of the province address (SOPA) in June 2014. He recognised that spatial inequalities raised the cost of living for communities on the periphery, and aspired to build a "seamlessly integrated, socially cohesive, economically inclusive city-region" (Makhura, 2014). This would require transforming the apartheid spatial economy and pattern of human settlements in order to integrate economic centres and residential areas through transport

corridors. He also announced a commitment to "the building of (new) post-apartheid cities that are more connected, liveable, smart and green" (Makura, 2014). Much of this language follows the long-term agenda outlined the National Development Plan (NPC, 2012).

In his second SOPA in February 2015 Makhura reflected the new watchwords of urgency and delivery. He announced a new target of 700,000 houses to be built in the remaining four years of his administration. This was clearly to accommodate the province's proportionate share of the 1.5 million national target. He also identified about 40 locations scattered around Gauteng where new housing would be constructed. He added: "We are breaking away from the old mode of development of small projects. ... (This is a) new era in human settlements developments" (Makura, 2015a). Some of the locations would contain up to 60,000 housing units. The theme of building new cities and mega settlements was a prominent part of his speech. In addition, he talked boldly about reshaping the economic geography of the region: "we want to reconfigure the Gauteng City Region's space and economy along five development corridors that have distinct industries and different comparative advantages" (Makura, 2015a). The Western and Southern corridors were in the most economically depressed parts of the region, and would involve the "creation of new industries, new economic nodes and new cities".

In a special event held six weeks later, a few more details were provided of the new mega-projects approach. A prospectus was launched called Mega Projects: Clusters and New Cities (Gauteng Province, 2015). It described a process of moving from ad hoc housing projects to consolidate them in spatial clusters and then transition them to mega-projects or new cities. Thirteen new cities were said to be required, although there was no mention of timescales. At the same event, the provincial minister responsible for human settlements said "We are now going big and clustering human settlements projects so that the yield per mega project can be big enough to make a huge dent in getting more people into homes". Each mega-project would comprise 15-60,000 housing units, complete with amenities such as schools, parks and health facilities.

The need for an economic base for the new cities was also recognised in asserting that they would become 'economically self-sufficient'. Details of this pledge were sketchy, suggesting that shelter and liveability issues are considered much more important. The emphasis on fast-tracking delivery was clear when the Premier criticised environmental impact assessments for adding little value and taking far too long. Instead, "We have now taken a decision that you will get development approvals within three months" (Makhura, 2015b). There was no mention that municipalities have prime responsibility under the law for spatial planning and land-use control, so their approval cannot just be taken for granted. They were assigned this function following the NDP specifically to promote integrated human settlements.

Makhura also reiterated criticisms of RDP housing projects for poor planning and locating people in isolated places with no access to opportunities, thereby creating poverty-stricken

human settlements, or 'incubators of poverty'. There was a hint of other causes of social exclusion, such as the NIMBY problem, whereby existing communities use the regulatory system to resist the development of low income neighbourhoods nearby. The implication was that spatially-separate mega-projects will allow developers to bypass delays arising from social opposition in established urban areas. He indicated that: "Our goal must be to achieve diversity in human settlements by emphasising mixed income, high density human settlements that place emphasis on social and economic inclusion" (Makhura, 2015b). He revealed that it was also:

"our intention, over time, to do away with RDP housing developments. Towards this end, together with the private sector, (we are) implementing large scale, sustainable mega human settlement projects ... We believe that this approach will lead to better management of our human settlement delivery efforts" (Makhura, 2015b).

A month later tenders were issued inviting private sector developers to come forward with proposals to develop these mega-projects, with an initial provincial budget of R6 billion available (roughly \$500 million). There does not appear to have been much prior technical analysis or feasibility work undertaken, or consultation with civil society and the business community, let alone with other spheres and entities of government which have important responsibilities for regulation or infrastructure delivery.

Summing up, mega-projects are framed as a compelling response to sweeping deficiencies in the old RDP housing model. They promise to compensate for poor coordination within government, delays in project planning and land assembly, shortfalls in administrative capacity, escalating unit costs and under-spending of budgets. These big schemes are expected to deliver housing on a much larger scale, and in mixed-income, mixed-use settlements with jobs and amenities, rather than dormitory suburbs. Naturally, there are many question-marks surrounding their chances of achieving these aspirations. In the next section we focus on two overarching issues.

Question-marks surrounding the mega-projects

The renewed ambition about addressing the poor state of many urban settlements is laudable. However, the assumption that the mega-project approach is the appropriate solution needs careful scrutiny before the political momentum becomes unstoppable. First, there are many risks specifically associated with this strategy that are far less significant with other approaches. These include the chances of major cost overruns, overestimated tax revenues, undervalued environmental degradation and overstated effects on social and economic development. These are universal concerns with large-scale infrastructure projects (Fyjvbjerg et al, 2003). However, they seem particularly pertinent in this instance for the following reasons.

The objectives outlined earlier are extremely wide-ranging, in relation to both the substance of what is to be achieved and the process of getting there. These broad intentions give the impression that dilemmas have not been confronted, opportunity costs have not been considered, and explicit choices have not been made. There is a great deal of preparatory work that really ought to be done - in terms of feasibility studies, technical analysis, appraisal of different options and consultation with various public, private and civil society stakeholders - before any decisions are made. Here is an example of what can happen when even simple matters such as the timing of announcements are not thought through properly. The Gauteng Premier announced where the mega-projects are likely to be located in his 2015 SOPA. However, doing this so far in advance is bound to encourage speculation in the land, inflate land prices, complicate the site assembly process and undermine the original intention to contain costs.

Details of the institutional arrangements for designing and implementing the mega-projects are unclear, yet these are crucial if the coordination and efficiency gains are to be achieved. Reading between the lines it appears as if the very scale of these initiatives is expected to force cooperation across government, based on centralisation of control. This could undermine important safeguards, checks and balances to reduce the risk of problematic social, environmental and financial outcomes. Elsewhere it seems that a public-private partnership model is envisaged, or perhaps a special purpose delivery agency. Different combinations of public and private sector funding will have quite different implications for who the beneficiaries will be, including the proportion in social need.

There is no indication of how the balance of risks and rewards will be assigned between partners, nor how the essential skill-sets that are currently in short supply will be assembled. Transparency and accountability are vital to minimise the risks of rent-seeking and to avoid the decision-making process being captured by vested interests. Previous research suggests that a well-prepared and highly capable public sector is crucial to ensure that the burdens and benefits of mega-projects are distributed fairly (Fyjvbjerg et al, 2003). Hence, mega-projects are no quick-fix for the institutional weaknesses that exist in the country at present, and that compromise current policy and practice. In fact, given the inflated expectations and high levels of public funding already envisaged, the mega-projects could end up fuelling the current politics of mistrust and backfire on their political champions.

Location is the second fundamental concern, bearing in mind the importance of the spatial structure of cities for household access to opportunities, economic efficiency, social integration, public infrastructure costs and environmental impacts. The geography of the mega-projects is influenced above-all by the need for large amounts of cheap land that is relatively straightforward to develop in a technical sense and avoids delay caused by objections from nearby communities. The logic of economies of scale in construction implies starting from scratch on free-standing greenfield sites. Accelerating the supply of housing

and building on an industrial scale are obviously more difficult on smaller sites with fragmented ownership that are complicated to assemble.

The location of the projects announced in the Gauteng Premier's SOPA is shown in figure 1. The map was drawn the Gauteng City Region Observatory, a research centre largely funded by the Gauteng Province. It indicates the location of the proposed residential developments with a blue dot. The size represents the number of housing units envisaged. The map also provides information on the geography of economic opportunities and unemployment in order to demonstrate the spatial mismatch between the planned housing and existing jobs. The distribution of formal businesses is shown by the intensity of red shading – the deeper the red shading the larger the number of businesses per square km. The distribution of the unemployment is shown by grey dots - each grey dot represents 100 unemployed people, based on the 2011 census of population. The concentrations comprise townships and informal settlements, such as Soweto, Thokoza and Tembisa.

{figure 1 around here}

The map clearly shows that the existing economy is concentrated at the core of Gauteng, while most of the proposed settlements are on the urban periphery. The projects are much closer to existing concentrations of unemployment than to economic opportunities. This may make some sense if the principal objective is to meet the needs of fast-growing poor communities for additional housing, but not if the aim is to boost their access to jobs and incomes, and thereby lift people out of poverty. The five largest mega-projects of up to 60,000 units – in Syferfontein, Droogeheuwel, Golden High Way, Boiketlong and Sterkwater – are particularly distant from the formal economy. In addition, four of these five schemes overlap with sensitive environmental areas identified by the Province's own environmental unit and earmarked for protection (GCRO, 2015b). One of them, Boiketlong, is located within a conservation priority zone in terms of the Province's Environmental Management Framework. It appears that internal consultation has been a casualty in the pressure to pronounce.

The prospects of the mega-projects proving to be economically sustainable and useful as a source of livelihoods to the older townships nearby depend on their ability to develop a local economic base. Above all, this means externally traded activities rather than neighbourhood services dependent on local spending power. At first sight, the chances that they will achieve this seem slim. There are powerful forces promoting the concentration of businesses in central Gauteng, including risk aversion and inertia (Gotz and Todes, 2014). The experience of existing townships and new settlements is that it is very difficult to shift the pattern of private investment in industry and tradeable services (Haferburg, 2013; Mahajan, 2014). Cosmo City near Randburg is seen as a possible model for the megaprojects, but it has a taken nearly a decade for supermarkets, petrol stations and other formal retail outlets to open there, let alone tradeable activities. There is a serious danger that most of the mega-settlements will remain as predominantly residential areas isolated

from economic opportunities for decades, while people lucky enough to have jobs will have to commute even further than at present to where most of the jobs are. In other words, the mega-projects may economise on the land, but at the expense of externalising other costs onto households through higher transport charges.

A related risk surrounds the financing of parallel agendas within government and the fiscal position of the metros. Anaemic economic performance means a constrained medium-term fiscal outlook. The public sector will struggle to borrow the capital required to invest in additional bulk infrastructure. This will cause project delays and/or encourage the diversion of resources away from core urban areas, which need renewal and reinvestment. Decisionmakers have said they will look to private finance for infrastructure, but this market is undeveloped and private funds could come with unexpected strings attached. The political priority attached to large greenfield initiatives could persuade private residential and retail property developers to follow suit. This will compromise the viability of recent public investments in bus rapid transit and other urban infrastructure designed to densify existing city cores. In short, the urban consolidation agenda (see below) could be jeopardised by an impulsive approach to mega-projects. A senior planner from one of the Gauteng metros has already warned privately that several developers who were contemplating core urban projects seem to have lost interest because of the policy uncertainties. Investors require the government to have a consistent view of the future direction of urban development to give them confidence that the place in which they intend to invest will prosper.

The consolidation agenda

An alternative approach dating back several years earlier has been under construction elsewhere within the government (National Treasury, 2013; Turok, 2013; COGTA, 2014). It has a stronger economic rationale and firmer technical foundations, but a lower political profile and less apparent support from the ruling party. An important goal is to start reversing the inefficient and exclusionary urban form inherited from apartheid, through processes of urban integration, compaction and densification. Specific priorities have been to encourage more property investment on well-located vacant land, and to improve public transport connections between dispersed residential areas and places of work.

This is consistent with contemporary international thinking and evidence, which recognises that cities are pre-eminently economic entities that generate jobs, which is why people migrate to them (Storper, 2013; World Bank, 2013; Glaeser and Joshi-Ghani, 2014; Rode et al, 2014; UN-Habitat, 2014; Venables, 2015). Economic growth and prosperity in cities depend on proximity to enable intense interactions between people and firms. The efficient use of land promotes concentrated activity and therefore higher productivity, which drives growth and helps to lift people out of poverty through employment. Density reduces transport costs for people getting to work, for firms to reach markets and for suppliers to reach business customers. Density also limits the cost of bulk infrastructure and ongoing public service delivery. For all these reasons, if land is used inefficiently it undermines

national economic competitiveness and hampers social inclusion. According to the Global Commission on the Economy and Climate (GCEC), "to unlock a new wave of sustained, long-term urban productivity improvements, we need a systemic shift to more compact, connected and coordinated development" (2014, p.29).

The National Treasury has been promoting this agenda in conjunction with the department of cooperative governance (COGTA) and most metropolitan municipalities, under the rubric of inclusive growth (National Treasury, 2013; COGTA, 2014; Fuzile, 2015). They have recognised the need for the government to shift its stance towards metropolitan areas from ambivalence to explicit support. For example, the Finance Minister stated in his 2015 budget speech that it is important "to make our cities engines of growth … A new approach is proposed for cities, to support their growth and restructuring and strengthen infrastructure investment" (Nene, 2015). It has become increasingly apparent that cities are crucial to reviving the economy and improving productivity over time through resource efficiencies. Better integrated urban settlements should also improve the functioning of property markets, raise municipal revenues and cut energy consumption.

The National Development Plan (NDP) was an important milestone in taking a more positive stance towards urbanisation and making a strong case for spatial transformation in cities (NPC, 2012). It recognised the three key structuring elements of housing, jobs and transport infrastructure. These could promote urban restructuring by improving public transport to reduce travel costs, bringing housing closer to economic opportunities, and boosting job-creating investment in and around peripheral townships. The NDP also encouraged the government to undertake spatial targeting of investment in order to catalyse development in selected areas, such as neglected inner cities.

The NDP stimulated further policy work on an Integrated Urban Development Framework (IUDF). It explored the benefits for efficiency, justice and sustainability derived from coordinated investments in people and place, and identified strategic goals and 'policy levers' required to translate them into practice (COGTA, 2014). It emphasised the need for coordinated planning across the government, alongside integrated transport and other infrastructure, and efficient land management. Other themes covered inclusive economic development, empowered communities and urban governance. The draft IUDF was approved by the cabinet in 2014 followed by public consultation during 2015. A revised version should go back to cabinet in late-2015 or early-2016.

This has coincided with practical work on a Cities Support Programme led by the Treasury and aimed at the eight metros. Part of this involves efforts to align national transport, housing, planning, infrastructure and economic development policies and budgets. The larger component is to encourage the metros to devote more attention to stimulating economic growth and promoting spatial transformation. This includes providing financial and technical assistance to implement catalytic urban projects (Fuzile, 2015). These are land and real estate initiatives that typically involve higher density, mixed-use and mixed-income

development in strategically located 'integration zones'. They are intended to combine different types of public funding and use them to lever in private and household investment. These experimental schemes should test new approaches to development and thereby demonstrate the positive possibilities of urban restructuring through partnership working.

Municipalities are intended to drive the process of urban consolidation by aligning their capital investment programmes with clear plans for spatial targeting of new development. They are relatively well-placed to do this given their knowledge of local land-use conditions, spare infrastructure capacity and environmental constraints. It is important for them to do so because their long-term financial sustainability depends on them developing a better understanding of the full life-cycle costs and revenues of different spatial development trajectories. Brownfield sites are a priority for infill development, especially if they fall within strategic economic nodes and public transport corridors. This would ensure more intensive use of scarce land and improve the viability of public investment in transport and other infrastructure. Johannesburg's Corridors of Freedom initiative is a good example.

The Treasury is committed to supporting this process with expertise to help project planning, preparation and financial packaging. Specialised knowledge and skill-sets are being drawn in from international and domestic sources. The Treasury is also seeking to reduce the fragmentation of national funding streams and the long-standing misalignment between the policies of key government departments, such as human settlements and public transport. Another objective is to encourage the metros to engage more closely with potential investors. For example, a two-day conference on urban investment partnerships was organised in August 2015 at which each city presented its development strategy and specific project proposals to a group of private investors and development banks. Those involved agreed that government, cities and investors would interact more regularly to build trust and mutual understanding of the hindrances to private participation in urban investment. Interestingly, the private investors emphasised the need for a clear long-term policy framework and coordination across public infrastructure programmes to bolster confidence and reduce risk. Every municipality is responsible for preparing an integrated development plan (IDP) that is supposed to serve this purpose, but they lack the political backing and technical capabilities to achieve this (Harrison et al, 2008).

Spatial transformation is complicated because most public and private institutions are locked into established modes of operation. Higher density, mixed-use development is a novelty in South Africa, especially on brownfield sites (Seeliger and Turok, 2015). Public-private partnerships are also unusual because of many regulatory and attitudinal obstacles. There is a history of suspicion and mistrust between politicians, officials and business people, and a long way to go to build common understanding and practical cooperation. The creation of intermediary organisations may help to break down barriers and foster relationships. The prevailing economic environment doesn't help because the demand for property from households and firms is relatively depressed. Creativity and innovation are

vital to stimulate interest in new kinds of property in unconventional places from emerging consumers, and to identify new financial mechanisms and alternative investors, probably through smaller, more experimental initiatives. Higher density tends to mean more expensive living space, so there is a need to use land more efficiently, encourage taller buildings and economise on the floor space available per resident. This can be offset by a better public realm and open spaces.

Conclusion

The emergence of contradictory urban policies is symptomatic of a wider coordination problem across government. It is vital to reconcile the urban expansion and compaction approaches in order to avoid duplication of effort and dissipation of scarce resources. If both continue, it is likely that both will fail. There are some ways in which they are, or could become complementary. Some of the strengths of the mega-projects agenda are weaknesses of the consolidation approach - the sense of urgency, the political backing and the resources for housing. Many of the strengths of the consolidation agenda are weaknesses of the mega-projects, such as the technical capabilities available and long-term thinking. By bringing these processes together it should be possible to elevate the position of urban policy and give it greater traction across the government and other stakeholders. This alignment probably requires high level political endorsement to be successful, along with a strengthening of the municipal systems of spatial planning and IDPs in order to ensure that new development schemes are properly prepared.

The approach of the Treasury and the metros has been somewhat technocratic to date, with limited outreach to other stakeholders until recently. There has been an implicit assumption that if the government pursues coordinated planning, careful regulation and targeted incentives, the market will follow and urban restructuring will take place. Less thought has been given to how other crucial agents of change will come on board and promote spatial transformation themselves. Many private investors, ordinary households and political leaders need to be persuaded that denser, more compact cities are desirable and workable. The prevailing images of dense urban places in SA are not positive. They are often perceived to be hotspots of crime, congestion and overcrowding.

Along with more detailed technical analysis of alternative development paths for each city, a compelling vision extolling the virtues of proximity, convenience and diversity needs to be created in order to capture the imagination and build popular support. The new urban agenda needs to recognise and respond to drivers such as the pent-up demand for central city living from low and middle income groups desperate for the access it provides to all kinds of opportunities and amenities. Core urban areas, inner suburbs and old transport routes are full of derelict and under-utilised land, former buffer strips and run-down buildings in need of renewal and regeneration. More intensive use of these precincts would save transport costs and ensure more liveable and vibrant neighbourhoods offering a host of labour-absorbing consumer services.

There are unrivalled opportunities to rehabilitate worn-out infrastructure, to install new energy and communication systems, and to refurbish and construct better buildings. Rerouting capital flows to retrofit existing urban assets makes sense from a resource efficiency perspective. Careful procurement systems could enable further job creation by strengthening local supply chains in building materials and craft skills. Better alignment with industrial policy could assist with ideas and practical support to ensure that the real economy constitutes a major pillar of the new plan for cities. Housing policy could subsidise the conversion of empty buildings to low cost rental accommodation. It could enable municipalities to promote multi-storey, mixed-income residential schemes in unfamiliar and offbeat neighbourhoods. Surplus government land should be released for infill development to create mixed-use neighbourhoods with jobs and amenities. Transport officials need to work more closely with planners and developers to make transit-oriented development a reality.

There are some interesting models emerging that illustrate what's possible with local knowledge, ingenuity and improvisation. Niche developers, small private investors and enterprising non-profit organisations are taking small steps to transform run-down districts into decent living and working environments, with an emphasis on affordability. The Trust for Urban Housing Finance (TUHF) is a good example of an organisation that provides loans and expert advice to enterprises that provide low cost rental accommodation in the inner cities. Johannesburg's Braamfontein is an example of an emerging mixed-use precinct that meets the needs of a broad spectrum of society. Such experiences need to be amplified to generate the confidence and momentum that will have discernible impacts on the economy and form of cities. The kind of city building is the sort of endeavour with the potential to harness the energy of all sectors of society. Some kind of Marshall Plan might be helpful to galvanise widespread support, not just to build more houses, but to create better cities.

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Figure 1: Planned Mega-Projects in Gauteng

