

RETHINKING MOBILITY

SPATIAL PLANNING THAT
ENABLES TRANSPORTATION
AND TECHNOLOGY IN
SOUTH AFRICAN METROS

GARRETH BLOOR



South African Institute of Race Relations
The power of ideas



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Introduction

Planning professors Peter Gordon and Harry Richardson from the University of Los Angeles note the "astounding paradox" of the "simultaneous dismantling of the command-and-control regimes of eastern Europe and the introduction of command-and-control policy approaches at the local level elsewhere in the world."¹



"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody." – Jane Jacobs, The Death and Life of Great American Cities²

Mobility: A Definition

Mobility is about more than transport. It relates to ease of movement, including travel time and the choice of how to travel. Mobility really means opportunity. It is not simply about creating transport routes for people to reach opportunity, but giving people the tools to create opportunity where they are – and where they wish to be. Mobility in this sense must include government reforms that invest the rhetoric of mobility with real freedom for individuals to maximize their mobility as they see fit in their own lives.

Historically, Master Planning encompassed in the notion of command-and-control spatial planning at the local level was used in South Africa as a tool to entrench apartheid spatial outcomes. Fresh approaches in the democratic era seek the noble end of inclusion and development, yet the overly prescriptive methodology remains, and with the same with practical flaws.

In the past, Master Planning sought to dictate much of spatial planning, a mindset that is often found in its related fields, such as urban transportation.

Definitions

Traditional Master Planning

Spatial or physical plans which depict on a map the state and form of an urban area at a future point in time when the plan is 'realised'. Planning was viewed as a technical activity, a process of developing comprehensive plans to show the projected density and intensity of various land uses and their spatial distribution.

VS

Hayekian Framework for Planning

A dynamic process by which basic infrastructure is set in place based on political will, while enabling broadly dispersed information to be incorporated dynamically into planning, in response to shifting needs, demands and ideas over time.

The cost of over-prescriptiveness by planners – leading to the exclusion of innovative ideas and enterprise – is crushing for municipalities. Government expenditure is compromised by misallocation problems as partnerships and entrepreneurial solutions are missed. Often, the higher unseen cost is unrealised growth.³

Friedrich Hayek, the Nobel Prize-winning economist, said planning was a task that should involve all members of society, not solely the government. The reason is that no government planner can know everyone's desires, predict the future or possess the collective information that resides in people and the communities in which they exercise their everyday choices. Decision-making in planning should not be confined to a choice at the ballot box once every five years, or formal processes of public participation alone, but should be enabled every day.

This dynamic approach, which includes making the most of economic opportunity and decision-making for individuals, should guide a new approach to mobility in South African cities. Transport cannot be seen simply as just another department executing its plans in a silo of municipal governance. It should rather be seen as part of a wider whole that incorporates stimulating economic development through spatial planning reforms that address the apartheid legacy still prevalent in South African cities.

The current mobility situation is ripe for an approach that recognizes South Africa's reality, and exploits new solutions in a world in which technology offers enormous opportunities not available before.⁴ Examples of such an approach can be found in the City of Cape Town, Nelson Mandela Bay and other metros. In Cape Town, for example, a focus on low fixed-infrastructure costs for bus rapid transit (BRT) – rather than investing in rail – allows for changing routes based on shifting demand over time, with lower initial capital expenditure and reduced operational expenditure over the longer term. This illustrates the scope for and benefits of responding to changing conditions as metros evolve.⁵ In this example, changing bus routes over time is much cheaper than having to move fixed railway lines, especially when existing rail can be incorporated into integrated transport systems.

Furthermore, incorporating additional *existing* solutions may be more cost-effective and efficient overall. For all the challenges involved, remarkable success has been achieved in incorporating the mini-bus taxi industry into integrated transport planning. The work in Nelson Mandela Bay is a case in point, even though conflicts have arisen. Despite its challenges, mini-bus taxis constitute a private industry that has delivered enormously in transporting millions of South Africans every day.⁶ They have done so for decades, often without the benefit of an effective partnership with government, matching the industry's resources with the public sector's stated objectives. Could we not do better in leveraging the incredible power of these and other non-governmental actors, as well as the millions in our society, by empowering people directly when it comes to improving mobility and affording them greater options?

Mobility does not exist in a vacuum. This is underscored by the Transit Oriented Development approach evident in projects such as the N8 Corridor in Mangaung and the Corridors of Freedom in Johannesburg, which view mobility as being central to development. I argue that spatial planning and mobility are intertwined, but that effective results will depend on our scrutinizing current thinking about spatial planning.

The lingering impact of apartheid-era spatial planning is often felt through current legislation that is premised on pre-1994 assumptions. Examples include restrictive zoning rules dating to an era when underdevelopment of certain areas was deliberate. Another is the lack of title deeds for residents of previously marginalised areas who still do not enjoy the full property ownership common to historically advantaged areas.

Overall, a lack of affordable, well-located residential accommodation in our cities perpetuates apartheid spatial patterns that breed a ‘divided and inefficient spatial form’, as outlined by Xolile Lembede in a research report on Johannesburg for the University of the Witwatersrand.⁷ This report, and others like it, highlights the costs imposed on those who live on the periphery of the city and must spend a lot of money (and time) commuting to job opportunities.⁸

A wider range of spatial planning tools outside the current Master Planning framework also merits consideration and will be explored in this paper.

New approaches to spatial planning can rid our society of the apartheid legacy, of which limited mobility is a fundamental remnant. Beyond the theoretical debate, the leadership and political will of decision-makers will be critical to South African metros succeeding in setting a new course. This report will also explore this aspect of mobility with regard to delivering solutions in current municipal government frameworks.

Finally, technology such as open data really has opened innovative solutions in delivering better services for residents. Easily accessible private apps are replacing government-provided timetables. Often these solutions bypass government and deliver directly to citizens. For example, public transport data for Cape Town is now available on the *WherelsMyTransport* platform to support developers creating transport services. In under three weeks, *WherelsMyTransport* mapped the city's entire informally run public transport network using a local data-collection team, unique technology, and in-house data support. It has created a toolkit to enable data collectors and mappers in other emerging cities to capture any transport network.³ Johannesburg¹⁰ and Tshwane¹¹ are among those that have also seen the emergence of apps to varying degrees.

“The problem isn’t the ideas, but often the bureaucracy as to why we can’t do them,” says Dr Geci Karuri-Sebina, Executive Manager: Programmes, SA Cities Network. “We need to do what we know, and urgently find solutions to what we don’t know. Municipal bureaucracies must realise that our context is more Jazz than Classical. Innovative, spontaneous solutions should be allowed to contribute to solving old problems.”¹²

Given the rate of urbanization in South Africa and the sharper a focus on densification¹³, the following question will be posed: Is a focus on densification of historic nodes of economic opportunity being pursued at the risk of disincentivising new economic nodes from emerging? How do we focus on new economic opportunity being brought closer to people, and not just bringing people to existing opportunities as they’ve emerged largely within pre-1994 spatial patterns?

Urbanization is a worldwide phenomenon, and South Africa’s history adds another critical dimension that must be addressed. The World Economic Forum on Africa convenes regularly in South Africa and is among a host of organizations considering issues of mobility and urban development. I would argue that, as we seek our own solutions, we can learn more from these global meetings we play host to as a country. City leaders should be as engaged as those from national government, with Mayors and other decision-makers in metros ensuring their presence is felt. Other organisations around the world working on best-practice ideas include the Aspen Institute, C40 Mayors Network – which has met twice in Johannesburg in recent years – and the 100 Resilient Cities Network. Funding, and partnerships to undertake international prototypes, are often available to test innovative ideas without the penalty of failures incurring expense at the cost of the public purse.

Section 1

THE CURRENT THINKING

The introduction to the University of Cape Town's course on urban planning observes that today's practices on the ideas of 'Modern Town Planning' are about a century old. With their origins in Europe and the United States of America, they are not suitable for our developing-country, post-colonial and post-apartheid context.¹⁴

The Limits of Master Planning: An Academic's Critique

Vanessa Watson is a distinguished academic with a record of extensive work on the limits of Master Planning in South African cities and the developing world. This report seeks to explore solutions to the challenges of Master Planning as they have been laid bare in Watson's work:

"The universalist perspectives on planning (Master Planning, urban modernism, etc.), which have nonetheless been shaped by the particular worldviews and geographical regions from within which they have originated, have impoverished and limited planning thinking and practice, and have left it open to accusations of irrelevance and of directly worsening urban poverty.

These perspectives have shaped a dominant and persistent planning rationality, which in turn sets standards of 'normality' regarding 'proper' living environments, the 'proper' conduct of citizens, acceptable ways of reaching consensus, notions of the public good, and so on.

This concept of normality is, however, directly at odds with the reality of socio-spatial dynamics and practices in cities and regions which have been increasingly subjected to particular global economic forces. These practices, which find expression in informality, in 'dis-orderliness', in 'violations' of rules and regulations, come about as people step outside of the law in order to provide themselves with shelter and income. In doing so, they render themselves even more vulnerable to political and criminal threat than they might otherwise have been."¹⁵

In the broad Master Planning tradition, local government planning includes "Modern Town Planning". It has been said in jest that "tyrannical national state governments can kill citizens, but local government can make you want to kill yourself" – an expression of the frustrations many experience when attempting to act on the creative impulse of economic agency in the face of burdensome central planning dictates and inefficiencies – much of it underscored by a lack of mobility.

Too often this frustration is experienced by the poor, as citizens, and by businesses in the informal, micro and SME sectors. Sometimes it is simply a matter of inefficiency. At other times, corruption comes into play where officials enjoy regulatory discretion. An enabling environment for mobility requires partnerships based on predictable rules set by government to ensure transparency.

SIDE BAR 1

Corruption

The risks of corruption are all the greater when a network of minor complicated rules is open to the subjective judgement of government officials. City planning laws and regulations which offer subjective discretion to officials, rather than certainty and the authority of the spirit of the law, is hugely problematic. It is another hindrance to development, compounding the overly bureaucratic rules themselves.

Automatic rights based on compliance with clearly defined rules is patently preferable to decision-making on a case-by-case basis by officials. While this paper will not tackle corruption in any detail, it acknowledges the presence of this factor worldwide and proposes reducing the role of discretion in administrative decision-making, as an extension of the Rule of Law of concept.

Local government may be the forefront of delivery to urban residents, but legislative and resource constraints make local government relatively ineffective, even when it is accessible. Too often, the resource constraint of finite budgets is a very real reason why citizens' needs cannot be met, but this can be compounded when legislation makes it difficult to bring in additional resources. For example, housing costs are unaffordable to many of the working poor, hundreds of thousands of whom languish on housing waiting lists in the larger metros. Those who fall in the "gap" segment earn just enough to not qualify for free state housing, but not enough to cover the cost of a bonded home, and so remain reliant on some state support. New measures – the introduction of a form of voucher system by national government, addressed later – are changing how that support is provided. But could changes in planning legislation not enable the release of government-owned land in the urban core to drive much more mixed-use housing in the gap market at rates affordable to those on the waiting lists?

The concept of the 'urban edge' is a tool to limit development within a confined area, usually in the name of the poor, and for sound reasons. Promoting inclusive housing, conserving the environment and keeping municipal costs down are among them – and they heavily inform the argument for densification. However, could developments beyond existing urban edges be permitted to enable the emergence of new sustainable economic nodes that incorporate affordable housing opportunities? If so, under what conditions?

South African cities, like all cities around the world, have a historical context. In South Africa's case, cities share a distinctive common legacy that is felt through decades of Master Planning of a specific type (apartheid), as well as post-apartheid approaches. In many cases, though, even sincere policy choices have replicated inherited spatial divides and challenges.

As if dispossession were not enough, millions of black South Africans were barred from moving from rural to urban areas, a worldwide phenomenon that describes one of the fundamental historical patterns of human existence. The restrictive pass system divided and hurt families deeply – tearing generations apart and separating parents and their children.

Private ownership, one of the key features of wealth creation and a basic human right according to the UN¹⁷, was obliterated. This was the case long before it was formalised under apartheid after 1948 (the year the Declaration on Human Rights was adopted), there having been several attempts to engineer racial segregation under British colonial rule.¹⁸

Without the option of ownership or wealth creation, millions lived without rights or dignity at the whim of the state. The painful history that has followed is borne out by the experiences of millions. Apartheid spatial planning was a deliberate feature in constructing a system that was declared a “crime against humanity”. Its legacy, and all contemporary policy choices that entrench it, hinder mobility.¹⁹

As noted above, the property rights dimension of spatial apartheid is important in the debate on mobility. Redress, I argue, must incorporate actively expanding property ownership and the use of state land. Attempts at mobility which ignore redress in this regard are doomed to fail in realising the economic dividends of democratic freedoms.

SIDE BAR 2

Property Rights and Mobility

The Natives Land Act of 1913, which followed incremental legislative deprivations on black land rights in various parts of the country over time, stripped black South Africans of any right to property at all. The Act was passed on 19 June 1913. The day after, Sol Plaatje lamented: “Awaking on Friday morning, 20 June 1913, the South African native found himself not actually a slave, but a pariah in the land of his birth”.²⁰

The legacy is a lived reality today. Without freedom of movement, or the right to ownership and building wealth, mobility was severely hindered. Today’s cities reflect systematic exclusion. Policies to date have not radically changed ownership, and thus not changed the spatial patterns of poverty in South Africa’s metros. In turn, mobility challenges remain, with millions having to commute long distances to work opportunities, even with more efficient transport options like new Bus Rapid Transport (BRT).

Temba Nolutshungu argues that while some progress has been made in uplifting black South Africans, “an opportunity exists today that goes beyond ameliorating the consequences of past segregationist policies”.²¹

“It is an opportunity that will address the challenges and catalyse a process of economic self-empowerment that, in turn, will result in people effectively participating in the wealth-creation process and progressively becoming wealthier.”²²

That solution is property rights and security of tenure for all who have received homes or live on land that is not securely owned. Furthermore, it requires the leverage of government land, particularly in the inner-city, to overturn the spatial divide and deepen integration.

When done effectively, leveraging all forms of partnership ensures that core municipal functions have greater cumulative budgetary resources to devote to aspects of infrastructure and service delivery that are fundamental to the Constitution – yet, when customarily considered in isolation, cannot be implemented because of insufficient budgets.²³ The South African government continues to own vast tracts of land, and millions of South Africans continue to live on council-owned land.²⁴ The land can be leveraged within metros.

continued ...

The land must be returned to the disenfranchised under a system of property-titling and private ownership. With private ownership comes the opportunities to obtain loans against what one owns in order to start new enterprises or invest in further training or education. Nolutshungu, a former apartheid-era detainee, and a contemporary of Steve Biko, argues that the democratic government's inheritance of assets confiscated by the apartheid government must be returned to the people through the privatization of failing state assets, and that the resources the state currently owns be transferred to entrepreneurs, accompanied by a structured transfer of proceeds to the poor.

While many of the actions implicit in this recommendation rest with national government, metros can play a significant role on the question of public land they own within the urban core, and in forming coalitions with a broad range of allies to deliver pro-poor changes in spatial patterns, as outlined above.

1.1 Entrenching Apartheid's Legacy of Spatial Planning is Bad News for Mobility

When the ANC came to power it also came under enormous pressure to provide homes to millions who had been marginalised, exploited and robbed under the previous system. The widespread expectation of a property on an open plot of land was clear, but delivering on the promise meant land often had to be acquired cheaply – invariably on the periphery, far from the urban core. Granting freehold title or ownership over the land is often impeded by complexities and restrictions that limit private ownership.²⁵ So, in addition to being far from existing opportunities, those who receive houses are prevented from unlocking the wealth of turning their home into an asset.

Hernando de Soto argues that the poor in developing countries do not lack entrepreneurship. From small beginnings, they often accumulate enough resources, and even money, to make early economic activity grow. However, they do not have the appropriate legal and political mechanisms that would enable them to rely on the formal property system enjoyed by the empowered. They are thus unable to generate capital and the larger-scale prosperity that comes with it, given the absence of tradable property rights or collateral to take out loans.²⁶

The ANC has delivered millions of homes since 1994²⁷, but the next stage in thinking needs to focus on unlocking the value of property through freehold title as a means of creating new growth nodes. In drawing on De Soto's work, Nolutshungu argues that when people have freehold legal title to property, that property can be used as collateral. The capital is no longer "dead". The legal status of being a property owner unleashes a spirit of enterprise and individual initiative more than any other policy measure. Thus, the development of new economic nodes is limited when property ownership does not prevail. Where greater access to property rights is achieved, metros need to carefully assess spatial frameworks and policy which might hinder new owners from using their assets effectively to create economic opportunities close to their newly acquired property.

The solution has a few components. First, an affirmation of property rights where they do not exist yet.

Second, an emphasis in government policy on locating development closer to existing opportunities is vital for mobility, ensuring government spending is maximized by using available land, and bringing in the private sector. At present, development does not happen in poor areas far from the urban core because of the absence of tradable property rights and collateral against which to raise capital either through bonds or the sale of property.

Third, spatial planning rules and frameworks must be overhauled where they continue to perpetuate apartheid patterns of underdevelopment. Many apartheid-era municipal statutes remain on the books and must be removed. Given that they presume limited, if no, development in historically marginalised areas, such statutes are inconsistent with post-apartheid spatial development frameworks.

Cape Town Mayor Patricia De Lille and the head of the Mayor's Directorate, Craig Kesson, argue that many South African cities have been affected by large-scale policy decisions since the advent of democracy which have "added to the spatial patterns entrenched in the colonial and apartheid period".²⁸

1.2 From Master Planning to Mobility: Reconsidering our methods

The criticism of Master Planning does not fit into a government-vs-private sector dichotomy. Frequently, in fact, the private sector eagerly undertakes massive development with government funding. But such development falls into the same Master Planning problems – while, at the same time, opening up or ushering in both the risk and the realities of crony capitalism.²⁹

Especially tragic is that, in the course of development – often undertaken in their name – poor people without tenure run the risk of being forcibly removed, or having access to social capital essential to their survival disrupted.

Mobility arguments include proposals for the poor to be directly empowered, as opposed to these responsibilities being outsourced to developers. The private sector operates best when it responds to people who make commercial choices every day, rather than accounting to governments elected once every five years.

Planning decisions are complex and, increasingly, politicians have sought to explicitly address the issue at parliamentary level, with the introduction of The Spatial Planning and Land Use Management Act (SPLUMA).³⁰ The Act seeks what is termed spatial justice, sustainability, efficiency and good administration.³¹ Critics argue, however, that in seeking to overturn the patterns of the past, too much discretion is given to individuals in power.³² Some opponents of SPLUMA pointed this out at the time of the law's passage through parliament. Others have noted the continuing need to consider the "onerous requirements and approvals" in the law, asking whether town-planning curricula should examine the limitations of such approaches in the dynamic environments of the developing world.³³

University of London professor Mark Pennington argues that planners are not always motivated solely by the desire to serve the 'public interest', and are too often subject to pressure from special-interest groups. Political short-termism and bureaucratic expansionism are also entrenched in the system at times.³⁴ Pennington's warning against too much power in the hands of city planners includes a warning against too much discretion being given to officials implementing those plans. For example, awarding additional land-use rights on the basis of meeting clearly defined requirements for incorporating affordable housing is preferable to rights granted on the discretion of individuals, or even committees, without as precise a criterion as possible.

Pennington's remarks are a restatement of the Nobel Prize-winning economist James Buchanan's warning that self-interest is just as much a potential factor in decision-making in the public sector as it is assumed to be in the private sector.³⁵ Those who serve in the public sector do not necessarily work in the public interest; hence the need for checks and balances against discretionary powers.

No doubt, South Africans – aware of the outright corruption endemic in so much of the public sector – may be sympathetic to these sentiments. For hard-working officials, and there are many, even a complete commitment to the public good remains insufficient if the Master Planning methodology remains.

On their own, even if they were altruistic, planners could not gather and interpret the information necessary to run an efficient land-use planning system.³⁶ The success of societies will be determined by their efficiency in using *all* the knowledge that is dispersed through the economy. The only way that this can be done effectively is through the introduction of freely set prices which indicate changes in circumstances between people who do not know each other.

Changing prices reflect changing information in the market and thus guide resources to their most advantageous use. While central planning aspires to achieve this outcome, it is unable to make use of the same price signals, and so distortion occurs.

The implications for mobility are clear: Best-practice measures must create a framework that is as flexible as possible in bringing non-governmental voices into decision-making, including the action of economically empowered citizens, civil society and the everyday decision-making of individuals who constitute "markets".

Professional planner Kestell Serfontein and Professor MC Oranje describe spatial planning in the Tshwane metropolitan area, for example, as "the deep disconnection between planning thought and the 'real, emerging' spatialities of the 21st century".³⁷ This point highlights the disjuncture between the way people *think* things are and should be, and the way things are in reality. The resistance of residents to government programmes for their "upliftment" is perhaps appropriately illustrated in the case of the Schubart Park upgrades, where the courts ruled that citizens' rights had been violated as they had not had sufficient opportunity to influence decisions made by government in their name.

How, then, do elected leaders with good intentions approach a current bureaucratic arrangement and, with the aid of spatial planning reform, re-orient South African metros as a whole towards enabling mobility solutions? Some of the considerations in this paper are followed by suggested internal management systems capable of giving effect to new approaches by local political decision-makers.

At this stage, the dominant framework for thinking can be best understood as Master Planning.³⁸ We need to consider reforms. Master Planning and its assumptions have suffered from an over-prescriptiveness that has been inadequate in radically confronting the spatial apartheid and poverty that persists, while ignoring and undercutting both the agency and ability of South Africans. Post-1994 policy has not changed spatial or ownership patterns to anywhere near the required degree.³⁹ Traditional Master Planning is a school of thought developed for an altogether different society, and, indeed, a different era, too⁴⁰. This is simply a consequence of information being available today that was not so readily collectable and usable in real-time during the decades of the 1940s and 50s. Herein lies an opportunity for South African metros.

Government planning rests conceptually on measuring what exists – or, as economist Frederic Bastiat puts it, “what is seen”.⁴¹ Unfortunately, the potential talent of individuals acting freely in society and pursuing their goals and aspirations cannot be projected or planned, only enabled. It is here that the conditions for creating mobility need to be understood. They require far more than the traditional methods used to date.

The planning-based assumptions of market economics usually assume perfect knowledge. But knowledge of everything does not exist.⁴² What is true today may no longer be the case tomorrow and planning must incorporate the flexibility to allow for change, by allowing individuals to be a part of an ongoing collective planning process.

Before assessing what such an approach looks like, consider that the success of markets (enterprise of all types, delivering jobs and development) lies in a process of discovery. Competition and the ability of some players to discover superior ways of producing goods and/or taking advantage of unrecognized resources drives development.⁴³ Those “players” need to be empowered to discover and act on new ways, by being brought into the economy. Mobility is as much an outcome as it is an intrinsic part of inclusion.

For example, the so-called informal economy, with minimum enabling government spend per opportunity created, has shown incredible power in reducing poverty, despite marginalization from the institutions of the formal economy.⁴⁴ In the City of Cape Town, the informal economy was found to have brought down poverty by 4.5%, the equivalent of pulling 186 000 residents out of poverty.⁴⁵ An enabling environment created by government in all spheres to support the eco-system and allow business to flourish would significantly lower poverty rates even further. Mobility is not simply a single government programme, but an emerging process incorporating different modes of transport within an enabling environment.

Policy reform must incorporate greater flexibility for the unknown, which includes greater flexibility for change. Amendments to policy frameworks expressed in zoning and land-use rights are often met with suspicion, particularly when they deviate from strict Master Planning approaches that set long-term transport plans. However, these so-called deviations are natural and to be expected in the course of transforming cities. As Watson points out, current notions of “normality” are at odds with the real world, often to the detriment of the poor.

The taxi industry may be the greatest display of entrepreneurial discovery in South Africa, despite massive constraints and the very real challenges still associated with it. Sixteen million South Africans received a transport option not delivered by the national government prior to our democracy, and it remains an option used by millions two and a half decades later.⁴⁶ Formalized public transit options remain unreliable and crowded, especially in the case of rail. They simply do not have the same reach.

In all forms of enterprise, entrepreneurial discovery dynamics produce future economic development that cannot be quantified – by definition – in planning decisions that consider the present, or assume to predict growth and development in absolute terms. Knowledge is ever-changing, and is decentralised.

SIDE BAR 3

A Small Entrepreneurial Illustration on Mobility⁴⁷

Sizwe Nzima, for example, starts a business that provides healthcare delivery to residents of Khayelitsha. It drastically cuts waiting times at clinics and the opportunity cost to residents who often take time off work to queue at clinics to collect their medication. Initially government opposed third parties. As simple as it is, the solution provided by Nzima's business, now backed by big capital, was never predicted by government planning.

The key to making Nzima's life easier rests in capital infrastructure, operational maintenance and legislation that allows for easy development of formalised businesses through zoning channels and property rights. It is not major once-off projects but the empowerment of millions of citizens that drives the transformation of societies.

The greatest resource is human capital and, when unlocked, many services can emerge without the direct support of governments. Where there is a lack of resources within a reasonable distance of where people live, new businesses can emerge to fill the gap and aid mobility by bringing goods, services and opportunities closer to those who need them.

Entrepreneurial ability is important because it can also help to address some challenges for South Africans hampered by a lack of mobility. Because people spend so long getting to and from work or other places they don't necessarily have time to make their way to a clinic to wait for healthcare. Thus, enabling business and entrepreneurship can provide solutions for problems caused by lack of mobility, and help address it. This is why an enabling environment for business is vital for mobility.

The "slice of the pie" grasped by the entrepreneur is newly created; because it has not been taken from a pre-existing pie, it does not "reduce the share" for others. Nzima has enabled more choice as well as savings, and created jobs in the process. This also helps relieve the burden on the public sector. The change may not be monumental in and of itself, but the collective release of potential in millions of people greatly enhances the collective improvement which governments often speak of.

What it does require is investment in basic infrastructure and services, which equates with the public sector's Constitutional mandate, the duty of all spheres of government, determined by political will, and based on the electorate's desires. Mobility will best be achieved when the full potential of citizens is realised and each is empowered to become a partner rather than remaining dependent, locked into a legacy of exclusion.

1.3 Integrated Development Plans (IDPs): An Effective Tool

One way the political will of the electorate is determined is contained in the five-year Integrated Development Plan (IDP) of each city, a relatively short-term planning document that is reviewed yearly and is legally mandated in law. The IDP is there to set out the developmental needs of the municipality. More than being merely a door-stopper that is simply a compliance matter – as I have personally witnessed in the attitude of some officials – the IDP offers an incredible opportunity for decision-makers to involve the public in ongoing planning discussions. Owing to its recognition of change, the IDP determines not only the status of identified projects for the previous year, but also whether remaining projects are still relevant and a priority.⁴⁸

Design-led thinking has been another area to encourage active participation, and was begun in earnest in the City of Cape Town in 2014. The approach looks at issues holistically and can be effectively used in workshops that bring together a range of decision-makers. The process culminated in 116 concept designs that would guide future budget allocations and spend, according to former director, Richard Perez. These included urban upgrade projects, urban agricultural initiatives, public transport interchange designs, and facilities for arts and culture and sport and recreation. There were also plans for economic development interventions, such as skills training and trading facilities.

Jane Jacobs, a theorist on cities beloved across the political spectrum, spoke of the importance of building communities, not just housing. One could speak equally of building not just transport, but mobility, which encompasses choice on where to live, shorter travel distances and opportunity.

1.4 We are all planners

Authors like Pennington and Randall G Holcombe draw on Friedrich Hayek's historic work, *The Road to Serfdom*⁴⁹, in saying that the success of societies will be determined by their efficiency in using all the knowledge dispersed through the economy. The only way that this can be done effectively is through the introduction of freely set decision-making in a system of rules which allow for changes in new circumstances. The Integrated Development Plan requires every new government to set in place a five-year plan. If used correctly, it is not a constraint but an enabler for city planning when it comes to mobility.

Changing decisions and priorities reflects changing information in the market and thus guides resources to their most advantageous use. Master Planning aspires to achieving specific outcomes, but is unable to make use of the same price signals, on-the-ground information and shifting human needs and wants. IDPs incorporate an annual review and provide for the mix of flexibility and certainty that is needed in ever-changing cities.

Economies are fluid, and logic that assumes perfect information on which to plan is therefore flawed. Knowledge is dispersed among individuals across society and not confined to planners or any other officials or politicians.

Hayek says of planning:



[I]t is not a dispute on whether we ought to employ foresight and systematic thinking in planning our common affairs. It is a dispute about what is the best way of so doing.⁵⁰

The crux is to what extent local government planning is informed by, and open to, external inputs and changing views. External opinions, here, refer to all of the public, not only those in the government and not only to processes undertaken by the government.

American political scientist James Scott⁵¹ argues that centrally planned social engineering is not an appropriate mechanism for building a better society.

Participation, in the spirit of the South African Constitution, is critical to the definition of successful local government and should be fundamental to all planning, not just in the five-year IDP construction but also in its annual reviews.

In order for our Constitutional rights to basic services to be fulfilled we need a responsive and accountable local government. We need local government that makes good decisions that will benefit communities as a whole. We need local government that addresses the right priorities, that ensures social cohesion and stability, and that involves us in decisions. To create this kind of local government it is important that you take action. Demand to participate in consultations and decision-making processes and hold your municipality to account!⁵²

Second, it is important to point out the distinction between using markets and simply leaving the status quo to the “whim” of markets, as some critics may contend.

This report focuses on the former; understanding that the use of markets must occur within a just legislative framework that actively eliminates to the greatest extent possible the legacy of past injustices. It requires active intervention for restorative justice, as Nolutshungu defines it. Besides the spatial make-up of cities, other factors that continue to perpetuate a lack of mobility should be considered.

Section 2

TOOLS FOR MOBILITY

2.1 Competitiveness

Competition, as already alluded to, is underutilised in a world where cities are playing an increasing role in human society; urban centres are a driving force in an era where the nation-state has become less relevant due to the expansion of global interactions, freed or eased by trade and technology. A relatively new industry of conferences and books underlies this theme of cities as a force to enable various iterations of the common good, not least of which is development.⁵³ Transport is a massive underlying theme.

As cities play a bigger role in the world, and the nation-state is rendered increasingly obsolete, there is a greater opportunity to facilitate mobility through a) devolution and b) consequent market reforms enabling competitiveness. However, as we have seen above, there are also the risks of overreach by local governments.

“Well-managed cities, with competitive business environments, are by far the most effective platform for development that South Africa is likely to find,” explains Ann Bernstein in a report, *Cities of Hope: Young people and opportunity in SA’s cities*⁵⁴, compiled following a roundtable. She argues that this is something policy makers do not sufficiently appreciate. “Well-run, opportunity-rich, prosperous and expanding cities could play an enormous and vital role in resolving the lack of jobs and opportunities for young people.” Urbanization is an enormous opportunity and mobility is a key component of a well-run city.

The report indicates that urbanization must be supported by designing sensible public transport systems which encourage developers to locate new structures along their routes. An important goal should be to cluster economic activity to generate efficiency and productivity gains. Policy makers should also seek to “upzone” areas (rezoning them for more intensive use) and designate special economic zones of various kinds to attract and concentrate business investment.⁵⁵ Examples of upzoning include, to varying degree, Voortrekker Road in Cape Town, the Corridors of Freedom in Johannesburg and the N8 Corridor in Mangaung. Special Economic Zones are in the domain of national government, but cities can lobby for them, as the City of Cape Town has done in the case of Atlantis, an area 40km to the north of the downtown core.

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Competition

We are a nation that knows the value of history, and we cannot ignore the historical evidence. The greatest improvements in standards of living achieved during the past two centuries have been associated with the development of personal resourcefulness and ingenuity under a system of private property rights and freedom to pursue one’s interests. It is for this reason that entrepreneurs, regardless of origin or current level of success, must be at the heart of our plan to stimulate growth within a proven policy framework. The most recent studies in economic development have identified small and medium-sized businesses (SMEs) and entrepreneurship as the underlying key to economic development and prosperity.

People create wealth and their level of creativity and innovation is inextricably linked with the legal and political system in which they operate. Lending proof to this argument is a recent study of modern China’s economic development. In *Capitalism with Chinese Characteristics: Entrepreneurship and the State*, Yasheng Huang⁵⁶ argues that China’s economic take-off in the 1980s was fueled by private entrepreneurship, which was facilitated by microeconomic flexibility, access to capital and enhanced property protections.

Though China was a totalitarian society with a history of suppressing creative entrepreneurship – in much the same way that the apartheid regime suppressed the possibility for black achievement – a change in the political framework stimulated innovation and a culture of enterprise that has brought over one million people out of poverty. In comparison to the situation China faced prior to implementing economic reforms, South Africa’s challenge is relatively small. Our already well-established first world infrastructure is ripe for expansion and integrating the informal sector. Now is the time for policy frameworks to encourage property ownership and reward innovation through the market. Externally, our relationship with the rest of the world must include strategic ties to sister cities, which is discussed later in this paper. Our once historic isolation from the world cannot be repeated.

The zero-sum game advanced by some using outdated economic assumptions that collapsed with the Berlin Wall view poverty as a consequence of some direct exploitation against which the state must step forward as supreme “custodian” of the country’s wealth. Yet the reality of underdevelopment is that it stems not from exploitation but continued marginalization from the mainstream of economic life. We require a society of ownership by the people, not the state, if we are to provide sources of capital for citizens.

Metros are where the biggest impact can be felt as South Africans increasingly urbanise in a context in which the spatial legacy of apartheid remains. Mobility plans should operate in a macro-economic framework that maximises opportunities.

2.2 Enabling the Local: Competition, an underutilised tool in land-use management & mobility

Transport consultant Terry Markham argues that the single most important requirement for economically sustainable transport is wealth and its source – economic growth. Competition is a key ingredient.⁵⁷

Competition is underutilized in land-use planning, which determines mobility as well as transportation itself. As Western nation states moved on from collectivism after the Berlin Wall fell, city and urban planning continued to be undertaken with a methodology that assumed the collectivist impulse, based on claims of superior expert knowledge applied in the name of a collective good. Competition, however, is another mechanism by which to incentivise the creation of new resources.

The Canada-based Fraser Institute's Economic Freedom of the World⁵⁸ survey demonstrates the fundamentals that lead to economic prosperity based on empirical data. Much attention has been focused on macro-economic indicators when considering property rights protections, the ease of doing business and the rule of law.

Increasingly, though, cities are being assessed for competitiveness too, as the World Bank Cities Competitiveness Reports show.⁵⁹ Mobility is an increasingly assessed aspect of competitiveness. It does not only enable competitiveness. Rather, it is competitiveness that also enables mobility and thus allows a greater range of transport options, according to Markham's assessment.⁶⁰

The driving force of markets, the entrepreneur and entrepreneurial action, which always operates in a local context, deserves a specific emphasis in delineating the limits upon which local government legislators may curb commercial action or purportedly "advance" a common good.

At present, the Competition Commission is undertaking an inquiry into the land-based public transport industry as it believes there may be a feature or combination of features in the public passenger transport industry "that prevents, distorts or restricts competition". Suggestions already indicate contradictory objectives between government policies and the promotion of competition.⁶¹ The taxi industry has complained of a distortion caused by the subsidy of some modes of transport, not others. Terry Markham argues that government spending should be "mode neutral", and afford consumers the choice of which mode they prefer. To be "mode neutral", government would spend on infrastructure, such as transit stops and interchanges, and grant permits to various modes to use it. Transport vouchers to consumers would be valid for all modes of transport licensed with the local authority, with transport providers competing to provide services.

The reality of local government dictates overriding both consumer preferences expressed in markets, and general liberties, requires closer attention if we are to unlock the underutilization of competition as a driver of growth and service delivery through markets in our rapidly urbanising world. Tuk tuks, shared private transport and using different modes of transport as part of one integrated system to which private providers can supply a service appear to feature as key indicators of where mobility is heading in future.

It also means that the spatial planning which provides the infrastructure and/or setting in which transit is delivered should be flexible enough to accommodate changes. According to Stanley and Scarlett:

Planning in the twenty-first century will need to incorporate the evolutionary and dynamic aspects of today's communities to be successful. This implies accepting and integrating the fundamental role markets play in allocating resources in a market economy. Urban planning and land-use regulations need to adopt market-oriented principles and concepts that build upon a vision of constantly evolving communities and recognize the role markets play in creating a higher standard of living.⁶²

Development economist Jodi Allemeier says that, based on current trends, metros will shift from providing infrastructure and services to creating the standards for inter-operable microgrids and private services.⁶³

Allemeier points out that telecommunications is a service that teaches us a new model – that of setting standards and allowing licensed operators to provide access directly. Telecoms, she adds, are arguably the only service to keep up with rapid urbanisation in under-resourced/highly unequal cities. Today, mobile-phone access is almost universal, with devices serving an increasing number of functions. MPESA in Kenya shows its value in unlocking economic opportunity.

I would add that, at a municipal level, the rollout of solar water heaters is an example in the energy sphere of municipalities creating the standards for inter-operable microgrids and private services, signaling a shift away from only providing infrastructure.

In the City of Cape Town, Mayor De Lille introduced standards for solar water heaters that provided a choice between the traditional electricity supply from the municipality and a private option. Residents could buy solar water heaters in the marketplace and opt out of reliance on the electricity grid. The City accredited solar water heater providers and, in turn, banks financed their purchase by residents. The cost of paying off one over two years equates to less per month than if the same amount of electricity were purchased from Eskom via the municipality. Early on, some warned that the programme would fail as there were only two solar companies who met the criteria. However, there were more than 20 providers in the market within a matter of months. The Deputy Mayor confirmed at a meeting on 1 November 2017 that he believed we were on the cusp of a major shift to models of this kind which could function at the individual house-based as well as community-based level. These shifts are not specific to sectors such as energy or telecommunications, but appear to be part of a wider trend.

Another emerging trend has been the location of more planning functions at the local level through devolvement.⁶⁴ South African metros, as we will see, have had more powers devolved to them, first shortly after 1994, and, since then, through court judgments and further devolutions.

The situation lends itself to a combination of the Rule of Law, Freedom of Association and setting limits to government action by clearly restating a few broadly liberal principles as they apply to the local sphere.

China has been devolving massive powers to cities, emphasizing such notions as “more freedom and power for local policy design”.⁶⁵ Over time, hundreds of central or provincial functions have already been devolved, though civil society freedoms remain constrained.

South African Constitutional Court rulings have led to devolvement in land-use zoning and related decisions arising from zonings. The court has ruled that the power rests solely in the domain of local government.⁶⁶ The mandate given by residents for economic development that better enables more flexible land use can result in opportunities previously unavailable for development under formerly restrictive conditions of zoning. Trust in local authorities is higher than in national governments, as are the levels of accountability, according to worldwide averages described by Benjamin Barber, a renowned theorist on cities.⁶⁷ This is an opportunity to powerfully engage in transforming cities.

Devolving powers is not sufficient for competition and mobility per se, hence the very specific focus of this report on the nature of city planning and legislation in pursuit of mobility.

Cities' political administrations must embark on a path to create an "enabling environment" instead of a top-down heavy-handed planning regime which determines even the most miniscule details (which, in addition, are usually subject to the interpretive whim of officials).

In Cape Town, reforms include some commercial rights now automatically granted, subject to certain set conditions being met, in the Single Zoning Scheme. Undertaking commercial activity does not require an application for permission. The repeal of over 300 outdated plans and policies,⁶⁸ which included those affecting the taxi industry, provides further certainty and eliminates vestiges of apartheid planning. For example, the 1977 taxi by-law of the Durbanville Municipality (now incorporated into the Metro), required taxi drivers to wear a clean white coat, approved by the municipality's chief traffic officer, before being allowed to operate the vehicle. These laws, though no longer enforced, constitute legal violations of individuals' rights, and their continuation constitutes a violation of the Rule of Law.

Most economic activity is subject to local planning laws, especially for small businesses, and, I would argue, disproportionately so at the city level when compared to larger corporations. This is as important for private transport operators as it is for private businesses.

In research on the City of Tshwane, Karen Lucas says the key mobility policy issues relate to particular aspects of public transit service failure, which are more readily amenable to relatively low cost, manageable, small-scale national and local policy interventions. For rural municipalities, in contrast, a deficit of supply is the key issue.⁶⁹ There is no deficit of supply in metros. Indeed, South Africans have a history of stepping up to the plate to provide mobility to millions in urban areas, even when it was illegal before democracy. Given the availability of transport options in metros, what sorts of policy approaches are appropriate? These include small-scale policy interventions such as upskilling existing transport providers, creating legal permits that grant rights to operate, and constructing infrastructure that different modes of transport can easily access. Given the relationship between commercial opportunity and transport exchanges, the metro can offset a range of costs for capital and operation infrastructure through outdoor advertising, for example, or land sales and rental income at transport exchanges. In other cases, infrastructure can be provided by the private sector in exchange for additional development rights.

In addition to access, existing private taxi operators and other private transport providers require upfront certainty on routings. Metros can ensure these considerations are part of the mobility plans in legislation, coordinated where required with provincial and national powers. The lack of an institutional setting for taxis in

terms of infrastructure, rights and rules is a relic of apartheid,⁷⁰ according to the findings of Karol Boudreaux. The U.S. researcher led an extensive study on the matter, together with local stakeholders in the industry. A permit is not a licence, but an affirmation of rights. I have argued they should be viewed as a type of security of tenure to operate on a route for a period. While many taxis are licensed at present for specific routes, the infrastructure on those routes is not inter-modal, but gives preference to one mode, such as buses, over another. This is a form of subsidy that the Competition Commission may consider in its current report.

2.3 Community

The opposite of government is not always the market

A framework of economic freedom is critical for development, but is not sufficient on its own. The South African Constitution presumes the active involvement of civil society, which is embodied in a broad range of NGOs, including community forums, ratepayer groups and business chambers. Thus economic improvement alone, in the absence of consultation and a recognition of rights, is insufficient for undertaking initiatives to enable mobility.

Non-commercial engagements are as important as the commercial transactions that ensure a healthy city. Moral and social arguments, far from being vague platitudes, can build strong alliances underscored by practical action and collaboration. Property rights, for example, are important not only in creating a sense of place, but in achieving the intangible yet real benefits of restoring dignity. It goes beyond economics alone.

The freedom to be enterprising and competitive is the freedom to engage in non-competitive action too; these are two sides of the same coin. In this light, projects must be vigorously debated, as Jane Jacobs alludes to in her work as an intellectual voice in urban planning. Too often, projects in the name of economic development (or improved transit) can ignore existing social bonds that are vital for well-being and not measurable by economic indicators.

In October 2012, the Constitutional Court ordered the Tshwane Metropolitan Council to meaningfully engage with the residents of Schubart Park in the CBD. The Tshwane 2055 plan included the rejuvenation of the Schubart Park housing complex in the name of spatial justice. However, residents had not been engaged, according to the court.⁷¹ The municipality's "take it or leave it" approach did not constitute sufficient engagement. In the case of Schubart Park residents, the discourse did not include the option of property ownership for units in which they'd been living for years. Instead, the presumption was that the government was the owner, with the cost of upkeep falling exclusively to the public purse.

According to Paul Berkowitz, the judgment drew broadly from other cases dealing with the property rights of the poor, hinting quite strongly that the City of Tshwane had fallen short of its Constitutional duty of care to the poor.⁷² It was also suggested that the overall approach "criminalised poverty".

Non-competitive actions – particularly at the local level – form the bonds of community that constitute a rich civic life, which serves as a bulwark against state or government overreach and enlivens the social fabric of competition.

Beyond moral arguments, community itself matters for mobility in the favours, ride-sharing and personal swaps that take place outside typical commercial transactions. Upliftment in the name of economic good should not ignore these bonds. By way of analogy, Jane Jacobs discusses security in a similar vein. Her notion of eyes on the street among neighbours looking out for each other was an effective community safety feature which risked being lost when communities were obliterated by mass projects claimed to be undertaken for their own good.⁷³

It is this Constitutional moral case that has a key role to play in the debate on land-use planning in cities, with the values underlying differing approaches to land-use management coming to the fore requiring arguments beyond utility (economic development). Arguments grounded in the benefits of freedom to pursue tangible opportunities in dynamic urban economies, of which strong competitiveness as a means of driving advances is a by-product, surely will resonate.

2.4 A new framework to improve mobility

2.4.1 Planning Mobility through Economic Empowerment for Inclusive, Growing Cities

Planning that incorporates communities and individuals must respect the Constitutional prerogative. That prerogative speaks specifically to participation in government planning, which is vital. However, planning involvement can include empowering people beyond government processes through increased daily choices, certainty of rules, direct ownership, restitution and the leveraging of private services.

Empowering individuals in the choices they make daily through economic upliftment as well as through certainty of requirements is important for the planning individuals make in their daily lives.

Economic empowerment has been covered in the form of changing ownership patterns and the spatial legacy through new urban nodes and bringing the marginalised into current urban cores as well.

2.5 Extending Ownership

What is also required is greater collaboration, especially on projects where various spheres have a role. In the case of controversial decisions on pieces of land owned by a sphere such as the city or province, the much larger land holdings of national government, too, have earned attention.⁷⁴ Such land could be released for affordable housing at a significant scale.

A case in point is government land in the Cape Town suburb of Ysterplaat, which is close to the urban core, near MyCiti taxi routes, and is three stations, or a 13-minute journey, away from the centre of Cape Town.⁷⁵ An adjacent large tract of land has been transformed into present-day Century City, with commercial operations.

Inner-city housing requires consultation, land and private sector willingness, a combination of ingredients that is not always present. Ysterplaat, one among a number of large national properties in Cape Town, is a matter of deep contention between the Western Cape Provincial Government and the National Government.⁷⁶

Other sites include Culemborg, Wingfield and Youngsfield. Land audits are difficult to come by. Yet local governments can avoid additional capital expenditure in acquiring new land through land swaps which offer the opportunity for municipalities to secure land best served for inclusive housing. Land not regarded as appropriate

for municipal use could be sold and enormous revenues generated that could be used to acquire land elsewhere. According to Leon Louw, in a submission on the Broederstroom Land Claim, no one knows what proportion of state land by value, area or locality is superfluous or underutilised. It is clear that statements, some purporting to be backed by sophisticated research, massively understate the amount.⁷⁷

Previously divided neighbourhoods where mobility was hindered can be integrated with the use of state land, advancing the goals of mobility. One such example – pointed out by Future Cape Town, an NGO with a focus on the Cape and, more recently, Johannesburg – is the site of the disused Athlone Power Station in Cape Town, once used as a tool of spatial division between Pinelands, Athlone and Langa.⁷⁸

Rethinking Housing & Mobility

Assuming land parcels in the urban core or nearby were successfully secured at meaningful scale, how would the poor best be able to enter the mainstream of economic hubs in our metros and secure their mobility? Urban density along public transport corridors is a sturdy pillar of post-apartheid urban policy. However, there is limited insight into what such ‘high density’ actually entails, according to the SA Cities Network.⁷⁹

A variety of mechanisms have been tried in different cities around the world to ensure housing is delivered inclusively.

Anthea Jeffery, Head of Policy Research at the South African Institute of Race Relations (IRR), writes that many South Africans have long urged the state to transfer the housing subsidy they spend, or outsource to the private sector, directly to the poor themselves.

The quality of houses being delivered at present is poor, as Jeffery’s housing report points out. The housing backlog (at October 2015) is bigger than it was in 1994, even with 3 million housing units having been provided by the ANC government. The backlog is 2.1 million units.

Assuming plots within the urban core are made available, residents on waiting lists can take the government’s funding in the form of a voucher to acquire their own high-density living. In order to ensure inclusiveness closer to existing nodes, government land released to the poor through a system of vouchers can propel the private sector to deliver affordable mixed-use developments, based on guaranteed demand. This could be done under a system of conditions of tender determined by the metro, including affordability, while mixed-use commercial opportunities would ensure feasibility as part of the risks and capital flowing from investment.

Those who wish to use vouchers to seek land further from the urban core, such as new economic nodes away from traditional hubs, can still do so under this system. Furthermore, those in informal settlements can receive title deeds and basic services to plots, with the right to use the voucher to construct their own homes.

FLISP, known as the Finance-Linked Individual Subsidy Programme, currently applies for buyers who earn between R3 501 and R15 000 per month, providing a once-off subsidy paid in lump sum. The subsidy is determined based on earnings within the bracket and can be given as part of a mortgage or cash purchase.

According to Anthea Jeffery: “The housing voucher system would do away with the artificial division between ‘free’ houses provided by the State to those who earn R3 500 or less, and the much smaller ‘gap’ subsidies provided through the FLISP system, to people who earn R3 501 per month or more (up to a ceiling of R15 000). It would also remove the incentive for people to keep their earnings below R3 500 per month.”

On the evidence of their existing structure, form and poor performance, (SA cities) are not simply unjust: they are also inefficient, unsustainable and virtually unlivable for many, particularly the poor majority.⁸⁰

Within the framework of planning, what is the end-goal approach? In the case of mobility, advocates may well point to Transit Oriented Development (TOD) as the basis to inform work. In the City of Johannesburg, these principles have been stated for some years in the *Corridors of Freedom* programme.

In his research report, Xolile Lembede defines them as Johannesburg's development corridors based on public transport corridors and transit-oriented development, with the potential to generate substantial compact economic and housing development around strategic points along the primary movement axes. They include the Turffontein, Louis Botha, Empire-Perth and Soweto corridors.⁸¹ Affordable housing is defined as mean housing costs being no more than 30% of a household's gross income, including taxes and insurance for owners, plus utility costs, regardless of the household income.⁸²

Transport Oriented Development reframes a view on land for the poor requiring assistance for housing by reconsidering price on land as a line item for the housing budget, and looking instead at a bigger whole. It considers infrastructure costs to service new areas over the long-term, the social cost of distance from opportunities, and, of course, the cost of mobility itself.

Housing that ensures mobility in its delivery must be located close to opportunity for those who are not yet in the market, and enable them to meet both housing and transport costs. Land should be acquired and developed close to the core as a means of providing housing within the overall social safety net.⁸³⁸⁴

Metros should not fear moves to integrate rail. It offers a massive opportunity for nearby housing and, thus, mobility. Development economist Jodi Allemeier states that the amount of land – such as station precincts – for an administration geared towards Transport Oriented Development (TOD) offers locally unprecedented opportunities for integrated development and land-value capture. In Cape Town, where it has been discussed, integrating rail could deliver land value of some R3 trillion in station precincts.⁸⁵

Capital spend has an impact on transit and should always take into account two tools in delivering socio-economic improvement: the existing assets available to the local authority, and bringing in private sector investment. Delivering such collaborative projects, which are at their most innovative and often outside the business-as-usual frame, requires a partnership incorporating critical project management and managerial skill.⁸⁶

Calls for developments around public transit interchanges can put the onus on the private sector to commercialise spaces through retail and advertising, for example, on condition of delivering transit infrastructure.

The creation of corridors in response to demand from the market and the prerogative of inclusivity is an interesting component of inclusiveness.

To unlock value in corridors, legislation must respond accordingly. In the case of the Voortrekker Road corridor in Cape Town, demand from entrepreneurs and businesses in the construction industry showed parking requirements per unit of housing were a massive cost.⁸⁷ That space could be used for an extra room. By relaxing parking requirements in line with the focus on a wider range of transport options, the metro could unlock private sector capital for allocation to transit-oriented development.

With reference to Port Elizabeth, the North and South End, Walmer's East End, and the lower Baakens Valley are all areas that could adopt such market-based interventions. Various interventions for each are already identified in the metro's IDP, with tourism and heritage economic experiences identified for Baakens Valley and East End.

Densification Debates and Mobility

The constraints of limited land within the urban core have raised contentious debates, the theory being contested in specific cases, with implications for the discussion of densification and urban mobility. So long as more land within the core is not released, prices are driven up.

The urban edge has been used as a tool for decades in limiting development to specific areas, and for good reasons. Financially, the costs for cities are lower when infrastructure spend is confined to a specific geographic space. In the mobility sphere, developing public transport routes is more sustainable when there are higher densities of users and reduced travel times.

Assuming even the full use of available land within the urban edge for developing inclusive cities – by using land close to the core for poor households – how best does one approach the issue when it comes to private sector-led development? South Africa's Statistician-General Dr Pali Lehohla says: "Government policy on urban form favours densification, yet people vote on their feet for urban sprawl."

One issue concerns providing housing to those in the "gap" market. Individuals in this segment earn above the threshold to qualify for government support. However, given that housing prices within the urban edge are too high on available private land, is private development beyond the edge suitable? Proponents argue that more land being available for housing allows for more competition and thus lower prices. Therefore, always confining development to an urban edge means providing housing options that are otherwise unaffordable.

Given the frequent link between densification and mobility, how do decision-makers consider the applications for private sector-led development beyond existing urban edges? Can such developments increase competitiveness to the benefit of citizens, given that there is a wider set of land-holdings available to meet demand? Or do such developments always result in poorer residents simply being pushed to the periphery, limiting their access to opportunity, as opponents argue?

If development is approved beyond the urban edge, what conditions should apply? Some suggest transport and bulk infrastructure should be provided by the developer as a pre-condition for the approval of applications beyond the urban edge.

Finally, do discussions on densification as a potential solution for mobility risk ignoring alternatives, notably in two ways 1) the assumption that new developments on greenfield (undeveloped) sites may not themselves be dense; 2) the assumption that existing economic patterns of land-use need to be enhanced, as opposed to competitively challenged through "creative destruction", alluded to by Schumpeter where he welcomes challenges to existing status quos through competition?

In terms of mobility, Randall G. Holcombe goes so far as to argue the following:

If left to its own devices, development will occur in a decentralized manner, which will usually lead different types of activities to be conveniently located in relation to one another. Decentralized growth will provide nodes of development. People can live close to the node where they work, allowing a more efficient pattern of two-way traffic as people travel between nodes. Decentralized development keeps commuting distances short but allows the amenities of suburban living for those who want them.

continued ...

In sum, Holcombe argues that the devolved decision-making that constitutes “the market” guides property owners in developing their property in ways that result, over time, in efficient land-use patterns. Holcombe’s assumption however, would require widespread ownership, which, as has been pointed out, is still lacking in South Africa.

Frequently, objections grounded in the language of a socio-economic conception of justice are advanced against market-led development beyond the artificial urban edge drawn by planners.

One stark contrast in urban edge debates concerns choice; decision-making by citizens in an open market versus planning as the tool of a systematic agenda grounded in overcoming a “crime against humanity”. These are totally separate starting points.

Even judged only in economic terms, South African urban sprawl counts as a failure; it was not grounded in an objective of economic development in a free economy. Instead, its primary purpose lay in a centralised concept of social engineering.

Artificial economic incentives accompanied an attempt to sustain the racial project of apartheid. When the regime ended, the consequences were laid bare. The withdrawal of subsidies from Atlantis after democracy revealed a struggling experiment in human existence.

However, can it be extrapolated from the apartheid experience that areas beyond the urban core are always doomed to failure? Might a focus on transit to current core nodes and densification *within* the new developments offer a best-practice solution in South African cities? Is one of the indictments of South Africa’s post-apartheid era the fact that “no new city has emerged”?

In the context of the “enabling environment” touted by several new governments in South African metros, economic development takes place in response to human need by using the market, driven by entrepreneurs and their investors who place capital at personal risk. Karl Popper described this as a component of the Open Opportunity Society.

Development beyond the urban edge and the pressure politicians face must be considered in light of the distortion of government land ownership, and not only an assumption of present market conditions as existing in a vacuum. If more land were released, the demand for development beyond the urban edge should lessen significantly. The challenge is especially pronounced when that land is under another sphere of government.

Nelson Mandela Bay’s current IDP explicitly uses the urban edge as a tool to intensify development and integrate urban areas, as well as protect agricultural sources. Simultaneously, the council has land to release to the market, already serviced by bulk infrastructure, within the urban edge.

Reducing commuting times and making optimum use of existing resources in established urban areas – such as bulk service infrastructure, roads and public facilities – are also identified as factors supporting the decision.

The point is to promote more efficient use of the Council’s existing land. For example, Telkom Park, the old rugby ground once known as Boet Erasmus Stadium, is being considered as the site for a mixed-use high-density development. Telkom Park is two minutes from the beach and the airport, an example of land the metro seeks to redevelop.

The Statistician-General points out that “flats have grown increasingly popular in South Africa’s cities over the last couple of years, even outstripping the construction of townhouses”.

“For every 100 plans rubber-stamped for houses in 2013, 26 plans were approved for flats. In 2016, this ratio had risen to 59.” Perhaps this is a sign that more people are responding to mobility challenges by buying flats. For this to work, they need to be attractive, which includes affordability and proximity to work opportunities, whether they be in densified existing nodes or new nodes of development.

2.6 Land Banking

Land banking is where municipalities acquire land close to planned transport routes, thus increasing the value of the land when it is sold. Rentals and advertising fetch a high price. Siting government department offices in transport nodes enhances citizen engagement by making services more accessible.

Incentives for developing land in transport zones can include an undertaking by the municipality to perform Environmental Impact Assessments prior to the sale of land. This removes from the private sector the responsibility for a process that can take years, while in turn increasing the value of the land, given its more immediate availability for development.

Continued economic activity requires certainty. Land-use legislation should not require business licensing, but set in place land-use conditions for it. If met, the right is automatically granted. This upfront certainty is important for decision-making and removes subjectivity. During the removal of over 300 outdated pieces of legislation in the City of Cape Town, the new Zoning Scheme which replaced much of it provided an automatic right to business activity on private properties subject to clear pre-defined conditions. Therefore, a lot of informal commercial activity was no longer subject to an approval for “deviation” from the zoning, but was largely incorporated into it.

Increased choice includes the option for those on the housing waiting list to be placed on lists for mixed-use developments closer to the urban core, in line with a major reform of the current model of building far from existing opportunities.

Land audits are a valuable way to increase economic activity. Making land ownership data for the metro available online can provide an opportunity to private actors to acquire land. Much of the land owned is often small in extent, near servitudes, and of no value to the city, but of high value to citizens. Making acquisition easier is important, and encouraging its development through incentives such as providing transport routes close by.

Legally, the process need not be as complicated as may be assumed. A database to ease enquiries on property could include the following process:

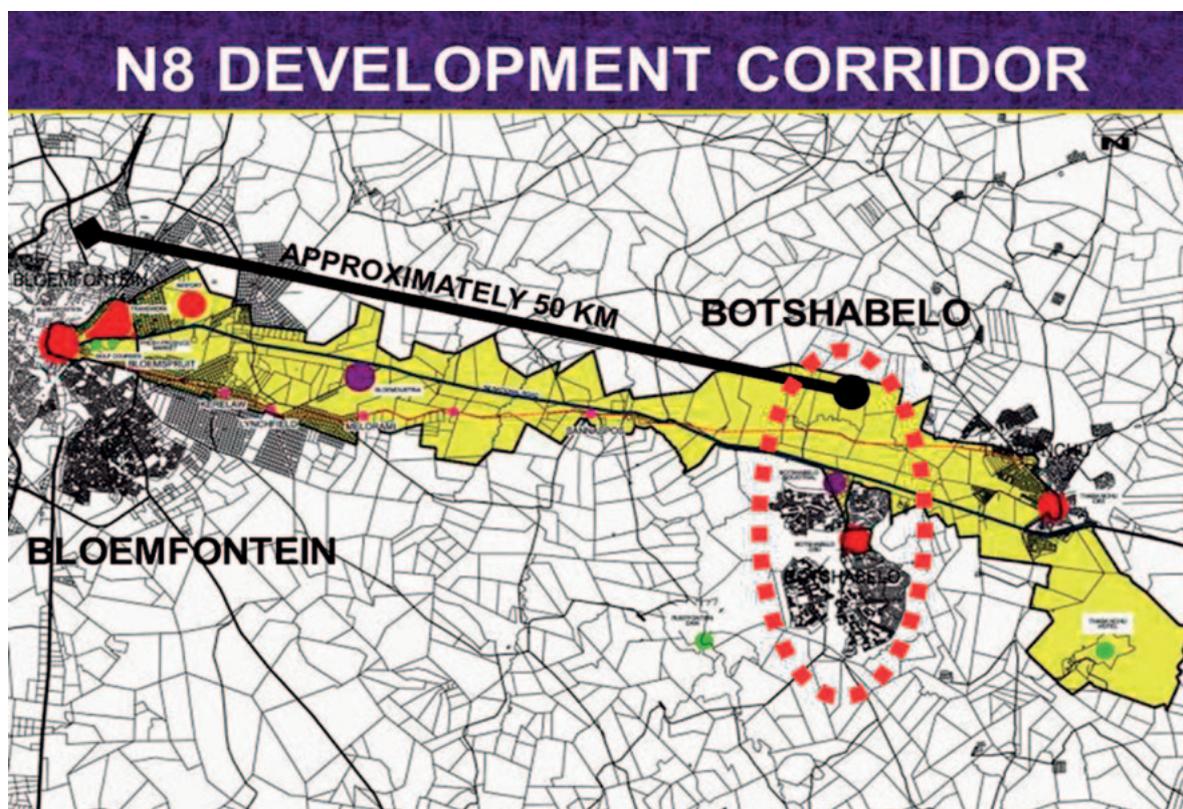
1. An enquiry is submitted
2. The city assesses the need for a piece of land
3. If the land is not required, it is made available to the private sector for the highest price. If it is required, the municipality assesses whether the function for which it is needed could be relocated to a less valuable piece of property.

Where applicable, conditions can be attached. New land could be acquired through leveraging existing property ownership as collateral by the newly empowered.

In some cases, the private sector does provide housing through the market to those who just miss the qualification for government support. In this context, urban edges should be capable of being amended in some areas, especially when doing so will ensure affordability and where developers carry the costs of additional bulk infrastructure over and above what was originally planned.

The Mangaung Metropolitan Municipality has a specific approach to the far-flung areas of Botshabelo and Thaba Nchu, which lie almost 70km east of the municipal and provincial capital of Bloemfontein. In 2014 MMC Papiki Moeng, responsible for development planning and urban management, announced the N8 development node to link Bloemfontein to these settlements,⁸⁸ a type of development corridor.

The metro has an annual commitment of R200-million dedicated to bus subsidies to move commuters between these settlements and Bloemfontein. Their transport plan includes repurposing pre-existing rail lines connecting Botshabelo and Thaba Nchu to Bloemfontein, then building facilities to support economic activity in the immediate vicinity.⁸⁹



However, the idea of a multi-modal transport system – which the metro claims it is – may be contradicted in practice by the subsidy for buses only, an issue falling under the Competition Commission’s investigation into transport. Nevertheless, in addition to taking over rail (and the land that comes with it), there are additional options for mobility.

Nelson Mandela Bay uses Integration Zones criss-crossing the poorest parts of the city to prioritise catalytic development interventions.

These Integration Zones are laid out in the latest IDP.

Nelson Mandela Bay Integration Zones

- Integration Zone 1 Khulani/ Njoli / Motherwell: This Integration Zone includes Khulani Corridor as well as Motherwell Node. It links the Inner City area and the Njoli Hub and incorporates a portion of the Khulani Corridor between Stanford Road, Njoli Square and Motherwell. It includes Secondary Hubs, Kenako/Vista and Red Location, and holds potential for urban regeneration and intensified mixed-use development along the Khulani corridor and around the Njoli Hub and Motherwell.
- Integration Zone 2 Stanford Road: This Integration Zone 2 along Stanford Road is a link between Integration Zone 1 and Chatty Jachtlakte. Environmental and spatial constraints make it a very narrow corridor with limited scope for catalytic and development intervention. These would be limited to modal interchanges along Stanford Road, such as the Cleary Park Modal interchange.

Corridors and integration zones can make use of a number of incentives. Bespoke incentives that are not outright subsidies – as in the case of those used during apartheid in Atlantis – are useful tools to support an ambitious project like the N8 Development Corridor. Atlantis benefited from a change in global markets almost impossible to predict five years earlier. As manufacturing in South Africa for Chinese supply chains became cheaper than in China (given that it cut out the shipping cost), factories established themselves as a base from which to export to neighbouring markets within the Southern African Development Community.

Atlantis, 40km from the Cape Town CBD, benefited from the offer of a guaranteed 5-day turn-around time on building plans, the waiver of a R1 million development contribution cost payable to the City, and the support of a local Investment Unit serving as an effective one-stop shop.⁹⁰

On the issue of urban mobility, in creating new nodes and bringing opportunity closer to the people, municipalities should consider a suite of incentives from one budget cycle to the next to respond to changing market conditions and the opportunities each brings.

One form of partnership that allows one to do so reasonably quickly (as opposed to the usual two years for a traditional public partnership) is made possible under Section 67 of the Municipal Managers Finance Act. It allows for establishing a special purpose vehicle that is private, but able to receive private funds as well as government contributions.

The government contribution can take the form of in-kind contributions, such as buildings or land. Often, private sector investors need skills that are not readily available. Section 67 entities can provide the costs of training that make it cheaper for a company to pay for training and invest locally, rather than relocate abroad. With the massive land holdings government has, as well as property, in-kind contributions by leveraging these assets can unlock opportunities and bring in additional funding. By accounting to portfolio committees and the full Council every quarter, Section 67 organizations combine public good and public oversight with the efficiency and processes of a private company.

The World Economic Forum has identified data infrastructure, not just the physical, as key to an enabling environment which allows citizens to participate in economic, civic and social life. In Nigeria, for example, Andela is a start-up company that trains individuals (at no cost) for high-skilled technical work, and places them – though they work remotely – with large corporates across the world. The company has private investment backing ranging from the Zuckerbergs to venture capitalists in South Africa.⁹¹ The digital economy is indeed upon us and offers new opportunities.

In this instance, the government's enablement of WiFi provision and co-working spaces can, for a relatively low cost, unlock opportunities in the digital economy and other high-growth areas.

The National Treasury is offering conditional grants – such as the Integrated City Development Grant – to qualifying city governments which can demonstrate 'spatial targeting'. In order to access the funding, the metro must declare an "integration zone", a specific area that showcases the ideal of public investment, private investment and integration, with appropriate incentives and regulation.

The Urban Development Zone (UDZ) tax incentive coordinated by SARS provides an incentive to private sector-led residential and commercial development in the urban core where public transport facilities exist. Civil society organizations such as Ndifuna Ukwazi argue that land sold to private developers must be on condition that they commit a certain percentage of any new development to affordable units. To ensure tax incentives do not become simply unwarranted subsidies, development economist Jodi Allemeier says of the UDZ incentive that if it cannot be shown to have promoted gap or social housing “then the incentive is merely subsidising profits/subsidising a market that does not require subsidisation”.

2.7 Enabling the Seeds of Existing Solutions in Transport: Using Markets and Technology in Public Transport Options

Zinzi Muthenzi rises at 4am every morning. It is a familiar story, but one that is all too real for millions. From the outskirts of the urban centre, 40km from the CBD, she makes her way by taxi, train or bus. Usually it is a mix of two.⁹² Her trip will involve some walking, too.

Taxis are the most vital form of transport, and usually the busiest, which means cramming in with others. The same is true for other forms of transport. Three hours after getting up, she finally arrives at her employer by 7am. The return leg begins around 3.30pm or 4pm.

New city initiatives on transport frequently tout Bus Rapid Transit, rail improvement and inner-city housing as three solutions. Each has a role.

However, South African municipalities face constraints in the second and third elements of the solution. PRASA runs rail and, to the frustration of metros, is unwilling to devolve the function.⁹³

Taxi reform is one option not usually considered. Yet, from the broad left to the right of the political spectrum, a minority of voices questions why new capital and operational expenditure at scale has sought to recreate, as opposed to upgrade, a segment of the transport economy that is both at scale, bottom-up in its development, and market-driven.

Terry Markham argues that in the transport sector, decision-making should be guided by this price mechanism: “the application of the ‘user-pays’ principle, an efficient, profitable private sector, competition wherever possible, and privatisation of transport enterprises to increase efficiency”.

This principle means that a higher level of economic sustainability of public transport requires that the price mechanism be introduced to ensure transport is more efficient.

Master Planning runs the risk of picking modes in the field of urban transportation for residents by setting them out in plans and prescribing specifics to the exclusion of wider options, which would often come at a lower cost. Master Planning also cannot predict new forms of transport.

“As long as public transport is subsidised, it should be ‘mode’ neutral”, says Markham. One way of doing this is channeling subsidies into transport vouchers, so that each passenger, rather than the authorities, choose which public transport to use.

Based on the argument that government spending should be ‘mode’ neutral, the implications for infrastructure give more equity to traditional minibus taxis:



“Getting back to basics requires that more emphasis be placed on making existing public transport (bus and taxi) more attractive by providing better shelters and stopping places. In addition, special bus and taxi lanes should be provided. Taxis are cursed when they ‘create’ their own lanes but often this is in places where a taxi lane could be provided at a fairly nominal cost. And yet billions are spent on BRT bus lanes.”

Echoing claims made by taxi operators, Markham says BRT systems, which are subsidised and have dedicated lanes, “compete unfairly with taxis”.

Overall, public transit must be rolled out as an integrated system that includes private and public partnerships which allow for constant change and efficiency in delivering on requirements. Multiple modes should be able to opt in to a single integrated system, using technology (as detailed in the next section of this report).

Workable prototypes or pilots can test these options and generate the involvement of different transport providers who have not worked together before. If successful, taxi operators and local government can join forces in lobbying for the allocation of railways to the local level, to ensure integrated transport. Until now, a zero sum game of one mode or the other has limited effective collaboration.

In Nelson Mandela Bay, the Integrated Public Transport Service (IPTS) is bringing in a new integrated transport system, Libhongoletu. It has undertaken a programme with the Nelson Mandela Metropolitan University’s Business School to provide business leadership to taxi operators and their staff – drivers, conductors and rank marshals from the informal to the formal sector of public transportation.⁹⁴

As pointed out elsewhere, E-hailing and mobile applications offer the chance for minibus taxis to be more efficient during peak times, and their digital accounting systems will allow them to provide other demand-responsive services such as school lifting and courier services during off-peak, says Edgar Pieterse of the African Centre for Cities.⁹⁵

“We must embrace ‘homebru’ public transport solutions tailored to our low-density, sprawled urban form,” Pieterse argues, pin-pointing an active industry that provides employment to young black men – a demographic that typically struggles to find work.

Mode neutral includes regulations that enable new modes of transport for short distances. Tuk-tuks that do short trips and easily navigate cities are popular and, in the case of Buffalo City, emerged on the strength of entrepreneurs responding to their own experience of a lack of mobility.⁹⁶ While it appears Uber has been integrated into cities to a varying extent, the same could be no less true of tuk-tuks, which have been around for far longer.

Tuk-tuks are recognised by National Government, which has passed the regulatory function to metros (though, in Gauteng, operators must also apply to the Provincial Regulatory Entity for an operating licence).⁹⁷

“Section 70(1) of the NLTA prescribes that “tuk-tuks may be used for public transport services where relevant transport plans allow for this”, according to Howard Dembovsky of the Justice Project South Africa.

“Section 70(2) of the NLTA then goes on to prescribe that where a tuk-tuk “is so used, the operating licence must stipulate the urban route, road network or area on or within which it must operate, as shown in the relevant integrated transport plan, and a maximum speed of operation”.

Municipalities can prescribe safety standards for tuk-tuks, and private companies are developing the vehicles to the highest safety standards.

How do we maximise demand for the best services, and enable choice of different modes? Vouchers have been adopted in some form by the ANC-led government in the case of housing, and the DA in the form of transport vouchers for job-seekers. Used more widely, vouchers can serve as a mode-neutral way of enabling more choice.

Assessing existing transport, the possibility of new forms, existing rail and state commitment on BRT, there are several, often complementary, policy options available.

1. Taxi routes should be regularized with licences guaranteeing security of operations on a particular route. The rights should be tradable.
2. Infrastructure development should allow multiple modes of transport to operate on the same routes.
3. Routes should be open to change, based on demand using real-time data available (addressed in the next section).
4. Existing BRT projects already under way can incorporate the taxi industry, as is happening in Nelson Mandela Bay, so as to lessen the uncompetitive behaviour currently being investigated by the Competition Commission. Incorporating new modes of transport on BRT routes to allow more than one mode should be explored via prototypes on specific routes. Such prototypes are as important for the potential technical gains as they are for building new relationships, especially between the private mini-bus taxi industry and government.
5. Government spending should not be mode-specific, but create a network which different modes can plug in to. Changing preferences over time, and spatial transformation as defined in this report, change transport demand.
6. Capital spend on infrastructure and operational expenditure can be offset by the commercial use of land, bringing in the private sector and ensuring a wider availability of funds for service delivery overall, given that transport infrastructure costs can be enormous.

2.8 Technology

Open data enables very specific opportunities in the realm of transport. Technology apps have been created using data that better serves citizens.

Full city public transport data for Cape Town is now available on the *WhereIsMyTransport* platform to support developers creating transport services. In under 3 weeks, *WhereIsMyTransport* mapped the city's entire informally run public transport network using a local data-collection team, unique technology, and in-house data support. It has created a toolkit available to data collectors and mappers in other emerging cities to capture any transport network.

GoMetro, another private company (it features alongside *WherelsMyTransport* as one of the 15 venture capital success stories in South Africa⁹⁸), shows the keen determination of private capital to fund innovative ideas in the use of data focused on mobility in cities.

South African cities provide excellent opportunities for testing ideas on data for other emerging-market cities around the world, especially in Africa. Our metros stand to be the big winners.

Open Data is not just a one-way street. City authorities themselves stand to benefit, too. GoMetro pioneered in-app data collection of mini-bus taxi operations in Cape Town in 2015. To date, the company has collected data on 800 vehicles, 125 000 km of routes and 147 000 passengers. All the data has been shared both with taxi owners and drivers, as well as the City of Cape Town authorities.⁹⁹

Other companies have followed suit with apps. SmartCity is a mobile application and web portal which allows citizens and visitors to engage all city services, not only transport, from one single application. “Citizens and visitors can log issues and request services from the municipality, such as electricity, water, gas, or private organization,” says Joao Zoio, an entrepreneur working between Cape Town and Johannesburg.¹⁰⁰

Acumen Software, the developers of the SmartCity application, will run the service at their own cost. “This service will not cost the city anything beyond their costs to integrate their systems with the SmartCity application,” says Zoio. Acumen intends to launch and run the Municipal and Emergency app services for at least 12 months before launching the private paying services, such as ‘man in a van’ services. With the risk firmly in the private sector, Acumen Software generates income – and future profits when the private services start to generate commissions.

According to the South African Venture Capital and Private Equity Association (SAVCA), mobility is an attractive space, “with automotive manufacturers, insurers, banks and technology all staking a claim in this new industry”.¹⁰¹

The great benefits of the internet cannot be limited to the few. The costs of accessing the internet to surf the web is coming down; free WiFi at public transport interchanges and other public spaces is gaining ground in many municipalities. Progressive municipalities should adopt policy to provide broad-based internet access for all. Often costs are or can be borne solely by the private sector, with a limited amount provided free per day, sometimes in exchange for completing a short survey. Advertising and add-on services usually ensure the private sector takes care of the cost.

Campaigns like the World Economic Forum’s #Internet4All are creating significant partnerships to deliver internet access on the basis that it is a human right. My personal experience with the leadership shows a keenness to work with local authorities.

2.9 Smart Phones, Smart Cities & Mobility

The shift to smart cities will be greatly enabled by open data. Data drives services such as parking, intelligent lighting and trash collection.

Smartphone devices aggregate various pieces of data, using private platforms at no cost to the government. The risks of cyberattacks have been identified by the World Economic Forum as a potential drawback. These risks are carried by the private sector when open data leaves the creation of apps to technologists and entrepreneurs.

Government is also increasingly likely to replace its census with big-data sources, according to the World Economic Forum, highlighting the value of data. The trends overall impact government.

Governments must accept that power is shifting from state to non-state actors, and from established institutions to loose networks, according to Klaus Schwab of the World Economic Forum. Today's political, legislative and regulatory authorities are often overtaken by events, unable to cope with the speed of technological change and the significance of its implications.

Schwab says what is necessary is an eco-system with more resilient frameworks that provide "maximum space for policy to emerge". He identifies policy experiments as a way in which engaging citizens and being responsive are best executed.

Section 3

WHAT SHOULD DECISION-MAKERS DO TO NEW DELIVER SOLUTIONS?

3.1 Rule of Law Certainty

The principle of the rule of law is designed to protect people against arbitrary decision-making, ensuring that set pre-defined rules are the basis for decision-making. The devolution of powers in city planning and the built environment shows cities are appreciated as being best able to shape their urban forms.¹⁰² The built environment must include the ability to move in those environments. However, devolution does not always imply democracy. Local governments can violate Rule of Law principles.

Metros can avoid this in the mobility realm of spatial planning. Zoning schemes should impart the right to work or engage in commercial activity from home in a manner consistent with the Rule of Law.

Metros should conduct audits of policies and remove those which are vague in determining decision-making through the passage of Spatial Development Frameworks and a zoning scheme that enables South Africans in metros. Flexibility and discretion for individuals that maximize their freedom should not exist in the same form as for officials, whose decision-making always impacts the freedom of others.

3.2 Policy vs Regulation

Policy is a great instrument to show intent by the municipality and is not the same as regulation. As a tool, it can provide clarity on the direction a metro is taking. In the case of driverless cars, for instance, policy can be significant in signaling whether cities embrace or resist innovation.

Autonomous vehicles are anticipated as one area of city life for which decision-makers need to prepare. While autonomous vehicles may seem today to belong to the realm of science fiction, they are a real prospect. The reputation of cities and their ability to serve citizens by enabling these innovations can be determined by their openness. Policy now can show the direction and thinking (and openness) towards new forms of mobility.

In the case of Uber, Cape Town became the first city to regularise Uber with a relationship, “a first of its kind”.

Mobility cannot be separated from broader policy issues, since, as the Aspen Institute believes, it has major implications for land use, economic growth, and community development.¹⁰³

Policy can be developed in response to prototypes and can change from time to time, based on changing conditions. A prototype in the case of mobility in Cape Town was a project to integrate taxis with rail, when rail was down. When trains were not working, the rail card was recognised by taxis and the money recouped by the taxi operator. Such initiatives allow small-scale testing of ideas, without seeking a massive top-down reform in the absence of proof of concept. Top-down reform often entails top-down, regulation-heavy aspects and doesn't allow for small changes over time.

3.3 Delivering Operationally on the Political Mandate

Politicians are far more than ceremonial figures, as was often the case with Mayors and senior council members in the past, when technocrats were left to do the delivering. Some ideas on how to execute the executive authority of today include the following:

3.4 Strategic Policy Units

Understanding the relationship of mobility to spatial planning and economic development in creating an enabling environment can be reflected in an **Economic Growth Strategy**¹⁰⁴, a market-oriented document to create opportunity for all on the foundation of a strong fiscal base.

As policy reflects key directions on specific issues, an economic growth strategy can reflect the direction of the city and be used as a measure against which new proposals and existing legislation are gauged.

A Hayekian framework cautions on two assumptions: taking existing zonings as static (therefore, no change from original apartheid spatial planning premises or more recent status quos) and failing to acknowledge the validity of political reforms led by a democratic administration with an overwhelming electoral mandate.

Existing legislation can be changed, subject to the Economic Growth Strategy, a document of the Full Council. Strategic Policy Units can play a vital role in locating best-practice thinking in the office of the executive, as opposed to within the peripheries of the larger city administration.

3.5 Clusters

Where affected departments are clustered into making important moves, and reporting back transversally, a cluster system has advantages. For Cape Town, it was achieved in the case of Atlantis, and the incentives there were providing more jobs within Atlantis, and strengthening the existing satellite core of economic activity. Multiple departments had to agree to sign off on the incentive scheme and highlight their views. Clustering collates views, sets a common direction across departments, and allows for report-backs.

Executing that strategy requires changing the culture that is often imprinted on, and, in turn, is informed by, the institutional memory of the bureaucracy. Therefore the active involvement of the political executive and the city management is vital.

3.6 New Partnerships for Mobility

3.6.1 Abroad

International partnerships, like C40 and the World Mayors Forum, offer the scope for acting in conjunction with global bodies in finding solutions to matters often seen as falling within the domain of national governments. Funding is a component of these partnerships, given the support of wealthy philanthropists like former New York mayor and founder of C40 Michael Bloomberg, and should be considered as useful resources.

Cities are using joint agreements and international forums as a way to find best practice. The City of Cape Town and Johannesburg are both already members of C40. Bloomberg's latest initiative is bringing mayors and senior city leaders from 10 cities together with industry and leading policy experts to address the many ways in which technology can solve long-standing urban challenges. Significant studies are under way, with some findings already being available online. Policy collaboration has taken place. In the case of driverless vehicles, many cities have gathered together to exchange information and set about creating policy for the advent of driverless cars through a project of the Bloomberg Foundation and Aspen Institute in the U.S.¹⁰¹

3.6.2 At home

Local government leadership, specifically Mayors and councillors, have the opportunity to forge pragmatic, strategic reforms. In seeking to break traditional moulds, proponents of more open-market approaches that unleash entrepreneurialism share common objectives with social activists committed to inclusive housing. Both can find common ground as actors either in government or civil society. What has become evident over the course of my own work in policy, and research into mobility in particular, is that this remarkable common ground on some issues transcends the traditional left-right and government-vs-private sector dichotomies. This is not to say either should compromise on principle. Yet, a combined effort from both on specific issues could exert pressure for national reforms that ensure residents enjoy their full rights as South Africans in the cities in which they live. This could also have positive impacts on our political discourse where metros show effectiveness and cooperation across divides that may be more difficult to bridge in the national sphere.

Benjamin Barber describes how the very visible realities of urban matters dispel ideological or abstract solutions that may divide people on national issues. Jane Jacobs, celebrated by many, exemplifies this crossing of divides, as it is expressed in a commemoration of her life as an activist for cities:

Her admirers and interpreters tend to be divided into almost polar opposites: leftists who see her as the champion of community against big capital and real-estate development, and free marketeers who see her as the apostle of self-emerging solutions in cities... if one had to pick out the two words in English that offended her most they would be “planned economy”.¹⁰⁶

I agree with former colleagues Mayor De Lille and Craig Kesson when they observe that the equal status of each sphere of government has, arguably, yet to be fully appreciated. New alliances locally and overseas are an opportunity to change that, regardless of who occupies the Union Buildings.

Conclusion

An enabling environment – underpinned by free markets – allows for the emergence of innovation that has real impact in the lives of people. A pre-condition for these markets must be the extension of private property rights and the application of the Rule of Law in the sphere of local government.

This report argues that land in the urban core should be made available to the poor as a non-negotiable under a system of choice, and integrated with current waiting lists. Where, before, housing was made available far from economic opportunity, those areas should be given the full opportunity to become new growth nodes through freehold title among residents and the application of spatial planning regimes that exist in traditionally affluent areas.

In the context of the Constitution and Bill of Rights, the use of markets to achieve mobility must increase the availability both of capital and opportunity to enable the realisation of these rights. Capital and opportunity must be placed directly in the hands of the poor as a first principle. Where rights are realised through the direct spend of the metro in its annual budget, the creation of wealth and newly unlocked value through extending property rights allows increased resources for service delivery. The mode of service delivery should be constantly interrogated to find greater efficiencies and partnerships, recognising that more shifts towards individual choice are under way, whether government likes it or not.

Where government spends on infrastructure and mobility that supports it, such spending must enable greater choice, not just mobility defined as a five-year plan that is either achieved or is not. Mobility as a concept must include the preferred choices of individuals, and changes in those choices over time.

Perhaps the greatest enemy of opportunity has been the efforts of planners to dictate outcomes for individuals. This way of thinking in national government has fallen as democracy has risen, but the worldview of these Modernist ideas can still be felt across local governments around the world in legislation that remains, and assumptions that go unquestioned.

More powerful than Master Planning is the power of human agency in an enabling environment. Out of it comes innovation, personal choice, and consistently better options for goods and services.

It was a foreign president who, not long ago, observed that what was wrong with South African could be fixed by what was right with South Africa. Within our metros resides much that is right by way of talent, enterprise and capital. It can very practically be unlocked to build the mobility that brings us together and moves us forward in more ways than one.

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