# PLANNING TOOLS FOR EFFECTIVE IMPLEMENTATION OF THE PLANNING REQUIREMENTS OF THE NATIONAL LAND TRANSPORT TRANSITION ACT NO. 22 OF 2000 AND ITS IMPLICATIONS FOR LOCAL GOVERNMENT

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#### **ABSTRACT**

Cities and local governments in South Africa have been affected by the revolutionary change in legislation. In the field of transportation, the National Land Transport Transition Act (NLTTA) 22 of 2000 provides a framework for the restructuring and transformation of the national land transport system. Its planning framework specifies a number of statutory plans that planning authorities must compile in order to guide land transport.

In terms of its planning requirements, there is a shift from infrastructure development to public transport oriented developments. The implications of the shift in focus calls for specific planning tools and policies to effectively implement the requirements of the NLTTA.

Cities need to develop these planning tools and policies to gradually reshape transport in line with social and economic expectations. In this paper a number of statutory requirements of the NLTTA and their implications for local government are reviewed. Furthermore, planning tools for effective implementation of the NLTTA, which includes land use controls, provision of infrastructure, finance and community participation has been examined.

#### 1. INTRODUCTION

The impacts of apartheid policies on the lives of South Africans are well documented. Urban transport was used as both a tool and a victim of the system. It served as a tool for segregation of land uses and population groups. The effects of the policies resulted in rising cost for transportation as the average commuting distances lengthened in response to the forced relocations, influx control and increasing urban development on the edge of the city (Cameron and Maeder, 1996).

The transport system was largely characterized by government ownership of transport infrastructure, government regulating the system and a program of increasingly expensive subsidies aimed at supporting the movement of workers. Provision for public transport was largely inexistent and where provision was made it was of low quality and depended on costly subsidies from national government.

Furthermore, until recently, a simple view that urban transport existed to enable people and goods to move between various places in the city to where they needed to be was taken by most people. Transport was believed to serve the city and the particular methods of transport used were a question of what people were willing to pay for. If demand appeared to increase, there was an obligation to meet demand, otherwise the needs of the city would not be provided for.

In South Africa, this viewpoint is being transformed through the revolutionary change in legislation. In the field of transportation, the National Land Transport Transition Act (NLTTA) No. 22 of 2000 provides a framework for the restructuring and transformation of the national land transport system. Its planning framework specifies a number of statutory plans that planning authorities must compile in order to guide the transformation.

In terms of its planning requirements, there is a move from infrastructure development to public transport oriented developments. The pendulum is now shifting from economic perspective to social and environmental perspectives in urban transport provision. The implications of the shift in focus call for specific planning tools and policies to effectively implement the requirements of the NLTTA.

Cities need to develop these planning tools and policies to gradually reshape transport in line with social and economic expectations. In this paper a number of statutory requirements of the NLTTA and their implications for local government are reviewed. Furthermore, the planning tools for the effective implementation of the planning requirements and its related aspects and the challenges for local government are examined.

### 2. THE NATIONAL LAND TRANSPORT TRANSITION ACT NO. 22 OF 2000

The NLTTA, No. 22 of 2000 provides a framework for the transformation and restructuring of the national land transport system. Its purpose and scope is to provide measures necessary to transform and give effect to the national policy in the transition to new transport system. The Act also prescribes policies, principles, requirements, guidelines, frameworks, norms and standards in terms of section 146 (2) of the Constitution.

The Act emphasizes a shift from transport infrastructure development to public transport orientated development. The implications of such a shift require the development of specific planning tools and policies to effectively implement the requirements of the Act. It is no doubt that the planning requirements of the NLTTA are facilitating the shifting of the pendulum from economic perspectives to social and environmental perspectives in the formulation of policies for the provision of transport. The challenge lies in the development of tools and policies that will gradually shape land transport to meet the social and economic expectations.

#### 2.1 Planning Requirements of the NLTTA

## 2.1.1 Transport Planning

The NLTTA states that the effective functioning of the cities must be enhanced through integrated planning of land use, transport, bulk services and transport operations.

In order to ensure that priority is given to public transport, development needs to be approached in an integrated manner so that transport planning forms part of the Integrated Development Plans (IDP). To ensure that this happens, the NLTTA has defined a framework for a set of transport plans.

In terms of section 18(1), Part 7, land transport planning must be integrated with land development process and the transport plans required for the purpose by this Act are designed to give structure to the function of "municipal planning" as stated in Schedule 4 of the Constitution, and must be accommodated in and form an essential part of Integrated Development Plans, with regard to section 84(1)(a), 84(2) and 84(3) of the Municipal Structures Act No. 117 of 1998.

Section 18 (1) (b), outlines the transport component of the IDP and includes the plans outlined according to section 19 (1), namely: a National Land Transport Strategic Framework, Provincial Land Transport Framework, Current Public Transport Record, Operating Licences Strategy, Rationalization Plan, Public Transport Plan, and an Integrated Transport Plan. These plans are expected to be prepared in sequential order with clear guidelines to inform each level of planning. To ensure effective implementation, the NLTTA makes provision for the different spheres of government.

At local government level, a number of statutory plans that will guide the restructuring and transformation of land transport to in order to meet social and economic expectations have been specified by the Act. This requirement is one of the key challenges facing local government because this function was not previously by this sphere of government. A summary of some of the statutory plans that form part of the transport component of the IDP include:

## 2.2 Operating Licenses Strategies (OLS)

In terms of (section 24 (1)), every planning authority must prepare an OLS. The main aim of the operating license strategy is guide in disposing of operating licenses in order to achieve a balance between public transport supply and utilization. The strategy must eventually be part of the planning authority's public transport plan.

The Operating License Strategy must contain and set our policy and strategies to include: a note of each public transport mode, preferred road based mode, use of public transport facilities, conditions to be imposed by the board in respect of operating license. In the absence of a public transport plan, a planning authority must ensure that the OPLS is updated on a continuous and consolidated at least once a year.

## 2.3 Rationalization Plan

A planning authority that has subsidized public transport service (mainly bus) contracts or concessions must prepare a Rationalization Plan. The Plan should include changes to routes and route networks, scheduling, capacity and policies for structuring contracts and concessions.

#### 2.4 Current Public Transport Records

In terms of section 23 of the NLTTA, No. 22 of 2000, every planning authority must prepare a Current Public Transport Record which must become part of the Public Transport Plan and should constitute the basis for the development of Operating Licences Strategies (OLS), Rationalization Plans (Ratplan); Public Transport Plan and Integrated Transport Plans.

The Public transport Record must include:

- changes necessary in all scheduled and unscheduled services that are operated, taking into account the services to and from the areas of the adjacent planning authorities;
- all facilities and infrastructure in place and utilized for the purposes of or in connection with public transport services, as well as facilities and infrastructure being developed.

The Public Transport Record must be updated annually and in this process, the planning authorities must record changes in supply of public transport services.

#### 2.5 Public Transport Plans

Public transport plans must be prepared annually and must include the content of the Operations Licenses Strategy and the Rationalization Plan, as well as the vision, goals and objectives for public transport.

## 2.6 Integrated Transport Plans (ITP)

Planning authorities, core cities and specific municipalities must undertake ITPs annually. The ITP should include a Public Transport Plan and must be linked to the Integrated Development Plan (IDP).

## 2.7 Transport Authorities

Planning authorities, core cities or municipalities are allowed to form a transport authority if the wish to do so. A transport authority will assist in integrating urban land use and infrastructure planning with transport system and network including the development of and production of a strategic planning framework for transport and land use. It will also be useful for the integration of planning, policy, and regulation, pricing of various transport modes. The Transport Authorities are also important for integrating implementation and enforcement of regulations.

### 3. CHALLENGES FACING LOCAL GOVERNMENT

The interactions between transport and the nature of the city complicates the task of defining the function of transport. In defining the function of transport, one is driven back to the question of what kind of city we want, what size and for what classes of people. Currently cities are developing as a result of many unconnected decisions without a vision, planning and understanding.

The revolutionary change in the legislative framework through the NLTTA by providing a framework for restructuring and transformation of the land transport is bringing a new perspective on the provision of urban transport. Its shift in focus from infrastructure development to public transport related development is bringing new challenges for local governments. This approach helps to correct the past urban development distortions and is a move towards equitable provision of resources including transport.

## 3.1 Policy Development

The effective implementation of the NLTTA will require the development of tools and policies that will assist in determining the interrelationship between private and public transport as well as the reassessment and prioritization of the most cost-effective form of public transport system.

In addition to local government systems operating within a context of high levels of poverty and limited resources, the formulation of the urban transport policy is now faced with two sets of serious challenges, namely:

## Rapid Urbanization

The impact of the past imbalances and distortion of the urban settlements is being exacerbated by rapid urbanization and the growth of informal settlements. The rural – urban migration has serious implications on the provision of transport. Rapid urbanization has resulted in rapid development of development of dense informal settlements outside public transport corridors and on the periphery of the city. The number of commuters and claimants of transport subsidies is increasing rapidly. Subsidized transport is, therefore, becoming more and more expensive. In this context, there is a need to ask what kind of transport should be provided?

## • Shift in Policy Direction

There is tension building around the shift from two extreme schools of thoughts, namely, a market / demand driven approach vs the social/equity approach to the provision of urban transport. The pendulum is now shifting towards social and environmental perspectives from the economic perspective that has dominated transport provision for decades and in South Africa was manipulated by apartheid planning policies. The emphasis is on promoting people-centered development and the achievement of a higher quality of life. Some of the characteristics of the two opposing views are shown below:

# PRIVATE TRANSPORT

### Market/ demand driven

- Focus on road and freeway construction
- Private Car Movement
- Economically Active Groups

# **PUBLIC TRANSPORT**

## **Social / Equity Issues**

- Focus improving public transport
- Redress past imbalances
- Use transport as tool for social integration
- Urban poor
- Inefficient use of subsidy for public transport

With regard to the provision of private transport, demand for cars is linked to economic growth. Increase in economic growth and prosperity leads to greater purchasing power and greater use of cars. As long as the economic well being of individuals stays strong, there is little chance of reducing the number of cars. The challenge for policy development is to ask what needs to be done to break the link between economic growth and private car mobility. Cities all over the world are grappling with this dilemma and a number of measures to restrain and reduce car use are being examined.

One of the measures is the policy initiative is focusing on putting people first before cars and by adopting the policy of public transport first". This approach encourages the establishment of a vastly improved, extended network of public transport services that addresses the needs of the citizens and offers choices for mobility at affordable prices.

The implications of this approach is that priorities will be given to the most efficient forms of travel, walking, cycling and public transport. Road space is likely to be reallocated to these modes together with preference for measures for demand and traffic management. Investment will be directed to new efficient vehicles; new operating systems; in maintainance and upgrading of the existing network (including high occupancy vehicle lanes, providing space for pedestrians) and cyclist (city wide cycle routes). However, misunderstandings arise on the fact that public mobility is uneconomical, slow and less convenient.

Further challenges revolve around planning for pedestrians. There is a strong tendency in most urban transport policies to make no mention of pedestrians. Their focus tends to regard urban transport as a question of moving vehicles or people and goods in vehicles rather than moving people and goods.

A good transport policy should do more than design facilities to move predetermined volumes of goods and passengers. It must improve pedestrian accessibility and pedestrian facilities and make walking easier, faster and enjoyable. Therefore, pedestrian trips should be considered as a part of the transport system. Therefore, the public transport policy should aim at facilitating a balanced development program that includes roads through integrated solutions to transport problems.

#### 4. PLANNING TOOLS

In terms of the planning requirements of the NLTTA, transport planning should be integrated with other city functions. Planning should not work in isolation to shape urban areas. In terms of urban policy, there are three tools, namely, finance, provision of infrastructure and land use controls.

#### 4.1 Land use controls

In terms of section 18(3) (a) of the NLTTA, transport plans must be developed so as to enhance the effective functioning of cities, towns and rural areas through integrated planning of transport infrastructure and facilities, transport operations including freight movement, bulk services and public transport services within the context of the general principles in integrated development plans and land development objectives as set out in section 27 of the Development Facilitation Act, No. 67 of 1995. Furthermore, in terms of section 18(3)(c) and (d) transport plans must give priority to infilling and densification along transport corridors and give priority to public transport than private transport by ensuring the provision of adequate public transport services and apply travel demand management measures to discourage private transport.

## 4.2 Regional/ Strategic Planning/Development Plans

The above-mentioned tools ensure that the relationship between transport and development are closely examined. They provide a means for examining the relationship between transport and land use planning at different levels; promoting their integration and coordination; and the reduction of the need to travel. They also provide a means to assess patterns of new development, location; areas not to be developed and travel patterns. Local authorities are expected to monitor the effects of these policies.

Local government must take actions to ensure that the planning and development sectors provide new development and redevelopment locates in mixed – use and high-density corridors to minimize trip lengths (Hall & Pfeiffer 2000). It must also develop trip reduction plans with employers, schools, hospitals and other public and private services. In cities, parking should be limited. In planning for the formal, market, demand driven sector, it is important to recognize that the car will still form an essential part of the transport system but that its impacts through new forms of restraints, regulations and good planning strategies will minimize the problems.

## 4.3 Planning for Market Segments

In terms of city planning, it is becoming more and more difficult to separate the formal and informal development. According to Hall & Pfeiffer (2000), cities experiencing this type of growth, are adopting a different form of planning which is flexible and based loose frameworks adapted to local circumstances. However, this should take place in a framework that allows progressive decentralization of urban growth at metropolitan level but concentrate it at the more local scale.

Instead of assigning activities to either the informal or formal sector, it is more appropriate to think of a continuum of activities between the two and see development as a process of slowly bringing the two together by emphasizing their relationships. Informal solutions present survival strategies and creative responses to urban crisis. They are often a sustainable and appropriate from a comprehensive planning and urban management. The trick is not to condemn them but to understand how to transform them. The informal sector has proved to be resilient in times of economic crisis or slow economic development and highly flexible in times of increasing population growth. It is indeed flexible than formal sector.

However, the planning of city functions is undertaken by separate functional departments and often in isolation. The situation is complicated by the fact that local governments are operating within a context of competing demands and limited resources. This has serious implications on planning as a field because it is likely to command low priority as it has to compete with many other more pressing national and local objectives.

#### 5. PROVISION OF INFRASTRUCTURE

Infrastructure is the basic public input into urban development for urban development. Local government is responsible for finding adequate sources of finance to provide the infrastructure of the right quality and quantity. However, it does not necessarily need to be the producer or organizer of specific investments. Development contracts with private investors offers a flexible option through different kinds of service agreements.

Previous city councils and the Metropolitan Transport Advisory Boards (MTAB) gave priority to the development of road infrastructure, mainly in the wealthier parts of the city. Public transport infrastructure was non-existent and when it was provided it was of low standard. The integration public transport was clearly a secondary concern as few investments were made in the outdated rail and bus system. The lack of investment and upgrading, neglect in maintainance, has resulted in rolling stock not being replaced and thus the aging of the public transport fleet. Replacement is costly and unaffordable for local government's own funding.

Local authorities will have to face the challenge of providing public transport facilities to accommodate large capacity vehicles (recapitalization of taxis). Furthermore they must provide facilities to accommodate passengers with special needs. If an electronic management system is adopted, it will require specific infrastructure and resources for the system to work. Local authorities, furthermore, will have to acquire more land to accommodate new facilities or upgrade existing facilities in order to accommodate the above aspects.

The distortions in land use and urban form are further being exacerbated by uncoordinated and poor responses to user demands. The separation of land uses is further being reinforced by further development of residential areas and shopping centers on the periphery of the city. Low cost housing and under-serviced areas are developing outside the public transport corridors.

Even though the NLTTA is proposing that transport plans be formulated in sequential order, there is currently no comprehensive urban transport policy at local government level to ensure coordination between commuter rail, bus, taxis and the private car. According to the National Department of Transport, the subsidies provided in these areas are currently under pressure with the increase in the number of claimants and commuters to places of employment.

#### 5.1 Coordination and the Scope of a Transport Authority

To promote the development of an integrated urban transport system, to regulate urban transport services comprising all modes of transport and to enable inter and intra-sectoral coordination, it is important that objectives, functions, processes, procedures and enforcement are consolidated.

Therefore a transport authority must ensure:

- Inter-sectoral co-ordination because urban transport must be planned as an integral part of city growth. At this level the TA must address broader policy issues with the view of improving movement of people and goods. It can take the form of a transport advisory committee.
- Integrated planning of the various components of urban transport and coordination among the various agencies. This involves overseeing policy formulation, comprehensive integrated plans and coordination of funding and finance; coordination of transport services and interdepartmental coordination; and finally
- Coordination of existing agencies and their roles and competencies in the management and execution of their strategies and policies in terms of the requirements of the City's integrated programs toward the improvement urban mobility.

#### 5.2 The Roles of Levels of Government

The coordination and implementation of transport plans and policies are furthermore, seriously affected by the overlap in political, administrative, functional and planning boundaries. The institutional framework for managing urban transport is still fragmented both within and between levels of government. A summary of the overall legislative and policy framework, roles and responsibilities is shown Table.1 below in terms of the constitutional competencies.

In terms of the Constitution, the three spheres of government have been entrusted with separate powers and functions. The powers and functions for local government are included in schedules 4B and 5B of the Constitution. In terms of section 156 (1), the municipality has executive power in respect of and has the right to administer: (a) local government matters listed in schedule 4B and 5B and (b) any other matter assigned to it by national and provincial legislation. Local governments are responsible for municipal planning, municipal public transport, municipal public works, municipal roads, and traffic and parking.

National	Provincial	Local
Regional planning and	Regional Planning and	
Development	Development	
Urban Renewal and Rural	Urban Renewal and	Municipal Planning
Development	Development	
Public Transport	Public Transport	Municipal Public Transport
Road Traffic Regulation	Road Traffic Regulation	
Vehicle Licensing	Vehicle Licensing	
	Provincial Roads and	Municipal Roads
	Traffic	

Table 1. Roles of the Levels of Government.

## 5.3 Integration of Modes of Transport

The different modes of transport are planned and operated independently by different operators and authorities. The integration of private and public transport systems should take place at three levels, namely, within the transport sector itself; between transport and land use planning as land use is the key determinant for movement and finally, between transport and development planning in order to achieve broader city development.

## 5.4 Rail

According to the National Department of Transport, the rail service has experienced under-funding for the last 17 years. No new rail lines or extension of existing ones has been built during this period, while residential development, recreational and traveling patterns have increased dramatically. The current rolling stock has no committed funding for replacement programs. Commuter rail becomes viable in corridors with 30,000 passengers per direction per day. In corridors with such densities, the strategy would be to improve and extend thee existing network. Local Governments will be faced with the implications of possible rationalization of rail services, mode optimization, whereby rail is to be used in areas of high density, the development and upgrading of transfer facilities to accommodate new measures such integrated ticket systems and combating fare evasion.

## 5.5 Taxis

According to the National Department of Transport, the taxi industry transports 60 percent of people using public transport.

However, the industry is characterized by high rates of accidents and loss of life. Successful implementation of the Recapitalization Process relies on the level and extent of law enforcement. To deliver on this mandate, there is a need for law enforcement officers to be appointed and be properly trained.

#### 5.6 Roads

According to the National Department of Transport, 70 percent of all roads in the country have exceeded their design life. Rehabilitation costs are increasing at an alarming rate. The current concerns being experienced by local authorities include: lack of integrated planning of the road network and integration with other modes, inefficient modal mix, inadequate funding for network restoration, preserving and retaining capacity and providing new infrastructure, inefficient law enforcement – no control of overloading, and lack of institutional reform.

#### 5.7 Law Enforcement

The local government will require more authoritarian enforcement of transport and traffic laws. However, it should be noted that with limited resources and competing demands at local level, law enforcement is likely to be very poorly resourced.

## 5.8 The Role of Subsidies

Subsidies are intended to improve mobility and accessibility of the urban poor. However the subsidies are not available for areas with the lowest average incomes. Subsidies are provided for selected users and areas, mainly for commuting labour. Rapid and increased migration to urban areas is putting extreme pressures on areas currently subsidized due to increase in the number of claimants. Furthermore, more and more informal developments are occurring outside public transport corridors. Those who do not qualify for subsidized transport (non-commuters, unemployed etc) have no choice but to walk. For the disabled, the old, and the young, the problem remains a serious concern.

Local governments will be faced with a number of dilemmas which includes, namely, to allow subsidies on routes where public transport is the preferred or appropriate mode, to use subsidies to be used in deserving areas or lobby for increase in the subsidy levels in order to allow it to be spread to deserving areas and how to provide for the needs of non- commutors, the young, the old, and the disabled.

#### 5.9 Supporting Legislative Framework and other Policies

Urban transport is a very important form of city infrastructure as it affects economic life of the city, requires large investments and involves shared responsibilities. The local government legislation empowers municipalities to establish specialized bodies to perform any municipal functions in terms of the requirements of the Constitution.

Municipal Systems Act 1998 (Act 117 Of 1998)

The Municipal Systems Act provides the core principles, mechanisms and processes that are necessary to enable municipalities to progressively move towards the social and economic upliftment of local communities and ensure access to essential services. It provides a legal framework for the municipality and the manner in which municipal powers and functions are exercised and performed.

In terms of section 73(1) and (2), a municipality must give effect to the provisions of the Constitution and ensure that municipal services are equitable and accessible, environmentally and financially sustainable. Section 76 (a) and (b) describes how a municipality may provide municipal services through internal and external mechanisms and how to enter into service agreements.

• Municipal Structures Act (Act 32 Of 2000)
In terms of section 12 (1), the MEC must establish a municipality in terms of the Demarcation Act. Section 33 gives the criteria for municipalities to establish committees that will assist them in undertaking their work.

#### 6. FINANCE AND FUNDING

Funding can be obtained from national, provincial and municipality level. However, the cost of unfounded functions, the cost of integration with other sectors; political will and whether transport is high on the agenda of the municipality, provincial and national government, remains a problem. In many parts of the world, local government relies primarily on property taxes to fund municipal services. According to Hall & Pfeiffer (2000), this motivates local government to encourage the development of land uses that generate surplus revenues and discourage land uses that generate low returns (low cost housing).

## <u>6.1 Dedicated/Ring Fencing of Additional Funds for Public Transport?</u>

According to Thompson (1977), the problems of public transport largely boils down to money. More capacity, services, replacement of old rolling stock, upgrading of station can be provided with stronger finances.

According to Hall & Pfeiffer (2000), worldwide, public transport is almost unable to meet its costs. In some European Union countries, a radical approach has been adopted, that is to recommend that sources for additional funding for public transport should be obtained at owners and users of private cars. eg. 50% of fuel taxes in Germany; tax on employers in France; 20 % of all urban toll road fees in Oslo, Norway; Parking fees and development levies. Should local governments start targeting additional funds from these sources for public transport instead of spreading it for other transportation matters?

## 7. COMMUNITY PARTICIPATION

Members of the communities affected by planning and development must be actively involved in the process, and this must include access to information and to comment on proposed developments. The community and user preferences expressed through the market and political processes will assist in the decision – making in the process of implementation.

#### 8. CONCLUSION

Local government is the perfect vehicle for managing people-centered development. If the locals government system is not strong, it is not going to be developmental either.

The planning requirements of the NLTTA should not be regarded a centralized approach with emphasis on injecting strong government bias in implementation of projects. Its framework, principles and guidelines aimed at facilitating the shift from transport infrastructure development to public transport oriented developments. Therefore, the implementation of the NLTTA with its emphasis on radical shift in policy from economic perspectives to social and environmental perspectives, will revolve around issues affecting the planning tools which include land use controls, provision of infrastructure, finance and funding, and community participation.

## 9. REFERENCES

- [1] Constitutional Act of 1996
- Peter Hall and Urich Pheiffer (200) Urban Future 21: A Global agenda for the 21<sup>st</sup> Century Cities, Routlege.
- [3] J M Thomson (1977) The Condition of Transport in Cities, in Great Cities and Their Traffic.
- [4] J Barat (1990) Institutional Framework for Planning Transport in Third World Cities, in Transport planning in Third World Cities edited by H T Dimitriou & George Banjo, Routledge.
- [5] B Cameron and T Maeder (1996) Evolving Urban Transport Policy: A review of Critical Issues and Emerging Policy Principles, in Urban Forum 6:2.
- [6] Municipal Systems Act No.32 of 2000
- [7] Municipal Structures Act No.117 of 1998
- [8] National Land Transport Transition Act No. 22 of 2000:
- [9] World Bank Urban Transport Strategy Review, 2001

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## **Biography**

Mrs Maddie Mazaza is a University of Cape Town trained and qualified civil engineer (Engineering Management), town and regional planner and environmentalist with background in Agricultural Sciences Mrs Maddie Mazaza is currently working as a Project Manager on the Transformation & Restructuring of Public Transport in Cape Town. As an urban manager, Mrs Mazaza has extensive experience in planning for urban infrastructure, transportation, the interrelationship of urban systems and the development of cities. Mrs Mazaza has extensive experience in coordination, integration of service delivery related processes and systems.

Mrs Mazaza has a Masters Degree in Engineering Management, a Masters Degree in City and Regional Planning and an Honours in Environmental and Geographical Science with background in Agricultural Science. Mrs Mazaza is the Treasurer for the South African Planning Institution – Western Cape Branch.