

3. Legislative frameworks and policies

3.1 Introduction

From the previous chapter, which presented an overview of relevant literature in the field, it became apparent that one needs to explore relevant legislation and policies that have a bearing on the current research. These relate specifically to the national and provincial spheres in South Africa. In this chapter, the relevant policies and legislative frameworks pertaining to the ITP and SDF are reviewed in order to develop a proper framework for this study, the chapter outline is illustrated in figure 11 below. Finally, policies and legislation pertaining to nodal and corridor development will be assessed with a view to determine how these are related to transportation and development approaches.

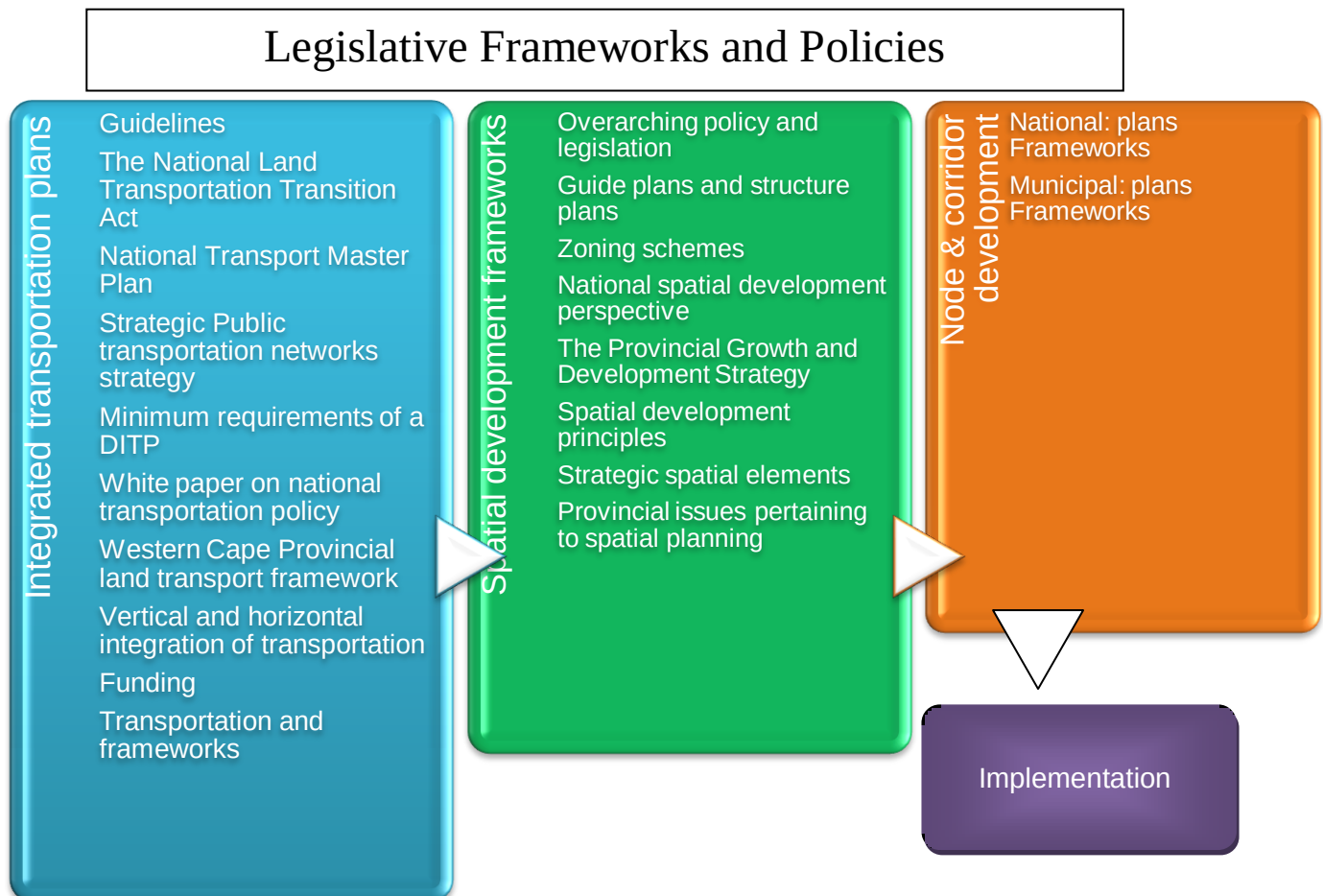


Figure 11: Graphic outline of legislative frameworks and policies chapter

Source: Own construction, 2011

3.1.1 Integrated transportation planning and development

3.1.1.1 Introduction

The policy and legislative framework for the urban passenger transportation policy has undergone a number of significant changes during the last few years. The key documents in this regard have been the *White Paper on National Transportation Policy* published by the national Department of Transportation in September 1996, the *Moving South Africa Action Agenda: A 20-Year Strategic Framework for Transportation in South Africa* produced by a Department of Transportation project team in May 1999, the *National Land Transport Act* (No. 5 of 2009), the *National Transportation Master Plan 2050*, and the *National Land Transportation Transition Act* (No. 22 of 2000) passed by Parliament in August 2000 and signed into effect by the President in December of that year (with the

exception of certain sections, including Part 7 dealing with the configuration of the proposed new transportation planning system, which were signed into effect only in June 2002).

In the new urban transportation policy framework, notable and consistent emphasis has been placed on the need to make the relationship between urban transportation planning and land use planning more coherent and systematic. At the most basic level, this involves a recognition that the socio-spatial structure of South African cities inherited from the apartheid era has placed a large proportion of the poorer African, Coloured and Indian sectors of the urban population in peripheral locations at considerable distances from the major centres of employment and higher-order commercial and social facilities (Wilkinson, 2002:4).

Transportation planning is a cooperative process designed to foster involvement by all users of the system, such as the business community, community groups, environmental organisations, the travelling public, freight operators, and the general public, through a proactive public participation process conducted by the Metropolitan Planning Organisation (MPO), the State Department of Transportation (state DOT), and transit operators.

Transportation planning includes a number of steps:

- Monitoring existing conditions;
- Forecasting future population and employment growth, including assessing projected land uses in the region and identifying major growth corridors;
- Identifying current and projected future transportation problems and needs and analysing, through detailed planning studies, various transportation improvement strategies in order to address those needs;
- Developing long-range plans and short-range programmes of alternative capital improvement and operational strategies for moving people and goods;
- Estimating the impact of recommended future improvements to the transportation system on environmental features, including air quality; and
- Developing a financial plan for securing sufficient revenues to cover the costs of implementing strategies.

A Metropolitan Planning Organisation (MPO) is a transportation policy-making body comprised of representatives from local government and transportation agencies with authority and responsibility in metropolitan planning areas (U.S. Department of Transportation, 2007: 3).

To this end, the *White Paper on National Transportation Policy* proposes a range of “key policy actions” intended “to provide for urban restructuring (densification) and efficient land use/transportation interaction”, including:

- The establishment of structures (at all tiers of government) which facilitate integrated planning of infrastructure, operations and land use in a coordinated manner;
- The regulation of land-use development at the local level so that development approval is subject to conformity with integrated land use/transportation plans;
- The formulation of land use frameworks, guidelines and policies to channel development, particularly employment-generating activities, into public transportation corridors and nodes;
- Giving development priority to infilling, densification, mixed land use and the promotion of development corridors and nodes;
- The containment of urban sprawl and suburbanisation beyond the urban limits; and
- Discouraging decentralisation which disperses employment-generating activities, except in specific cases where it is favourable in terms of decreasing total transportation costs and travel times on the basis of an integrated land use plan (Wilkinson, 2002:4-5).

When assessing the possibility that the intended operational convergence of SDFs with ITPs will be realised in practice, possibly the most fundamental problem is lodged in the configuration of the institutional framework within which this convergence is supposed to occur.

Implementing a land use and transportation strategy does not require only identifying a suitable a list of policy measures. Rather, and more importantly, it involves the integration of several processes and actions needed to realise any substantial policy – deliberation, implementation, monitoring, evaluation, identification of complementary policies; co-ordination between authorities at different levels of government; participation of private actors, citizens and stakeholders into a coherent, comprehensive and enduring framework where the single processes may reinforce one another in meeting the objectives, towards overcoming barriers to the successful output and outcome of the policy.

Indeed, although there is a great variety of urban systems, there are also several issues linking the urban agendas to common and widespread goals of sustainable mobility and urban development, and therefore a normative approach is recommended in order to link deliberation, implementation, monitoring and evaluation steps into a **policy life-cycle** (Figure 12).

Optimal policy integration requires activating this policy cycle towards organising new forms of purpose-orientated processes, and strengthening the links between different institutions with open and dynamic forms of co-operation. However, the real challenge is to maintain the global coherence of the policy cycle over an extended time period, including the different decision-makers at neighbourhood, city, regional and national levels, as well as ensuring the participation of relevant stakeholders and the civil society in the various steps of the process (Consortium Transplus, 2003:16).



Figure 12: Policy life-cycle

(Consortium Transplus, 2003:16)

Transportation and land use policies that help to create more multi-modal transportation systems and more accessible land use development may assist towards achieving equity objectives by improving accessibility for non-drivers and by making transportation more affordable to lower-income households (Litman 2010:34).

➤ The case of South Africa

“Land transport planning must be integrated with the land development and land use planning processes, and the integrated transport plans required by the National Land Transport Act (5 of 2009) are designed to give structure to the function of municipal planning mentioned in Part B of Schedule 4 to the Constitution, and must be accommodated in and form an essential part of integrated development plans, with due regard to legislation applicable to local government, and its integrated transport plan must form the transport component of the integrated development plan of the municipality” (Schoeman, 2010:21-22).

This provision, although very general and of a purely philosophical nature, should be read with the objectives as identified in the National Framework for Sustainable Development in South Africa (2008:10) that make provision for:

- enhancing systems for integrated planning and implementation;
- sustaining ecosystems and using natural resources efficiently;
- economic development via investing in sustainable infrastructure;
- creating sustainable human settlements, and
- responding appropriately to emerging human development, economic and environmental challenges.

Table 6 shows the core policy framework guiding the interface between urban planning, environmental management and transportation planning. One of the problems stemming from the interface perspective between the professions mentioned in table 6 below is related to the fact that the policy and legislative framework can be classified as complicated, confusing and incomplete. From this, a lack of a comprehensive and overarching guideline document aimed at promoting and integrating the planning and development processes can clearly be deduced (Kidd, 2008:22).

This issue is clearly discernible in the case of the interface alignment between such professions..

Table 6: Core policy frameworks and guidelines guiding the interface between urban planning, environmental management and Transportation planning

Urban and regional planning	Environmental management	Transportation planning
Reconstruction and development plan (1994) Growth, economic and redistribution strategy (1996) White Paper on South African Land Policy (1997) Urban development framework (1997) Rural development framework (1997) Green Paper on Development and Planning (1999) White Paper on Local Government (1998) National integrated rural development strategy (2000) White Paper on Spatial Planning	Global Biodiversity Strategy: Guidelines for action to save, study and use earth's biotic wealth sustainably and equitably (Published by the WRI; IUCN and UNEP in 1992) Balancing the scales: Guidelines for increasing biodiversity's chances through bioregional management, (Published by the World Resources Institute in 1996). Strategic environmental assessment in South Africa (2000) Minimum requirements for the classification, handling and	White Paper on National Transportation Policy (1996) Moving South Africa (1996) Rural transportation strategy for South Africa (2003) Draft minimum requirements for the preparation of integrated transportation plans (ITP) (2007) National land transportation strategic framework (2006-2011) (2002) (Draft) NDOT: National transportation master plan 2050 (NATMAP) (2010)

and Land Use Management (2001) National spatial development perspective (2006) Mining charter (2003) Construction charter (2005) King Report II on corporate governance for South Africa (2002) White Paper on Integrated Pollution and Waste Management for South Africa (2000) White Paper on Water and Sanitation (1997) ASGISA, 2006 National spatial development perspective (2006) Housing atlas (2006) Sustainable human settlement planning: resource book (2008) (NDoH) Area-based planning. department of rural development and Land Reform (2008/2009) Comprehensive rural development programme Department of Rural Development and Land Reform (2009)	disposal of hazardous waste (Second Edition (1998) (DWAF) Integrated environmental management guidelines series (1992) DEAT: An environmental policy for South Africa (Green Paper) (1996) DEAT (2002a) screening, information series 1, Department of Environmental Affairs and Tourism (DEAT), Pretoria DEAT (2002b) <i>Scoping, Integrated Environmental Management</i>, Information series 2, Department of Environmental Affairs and Tourism (DEAT), Pretoria. DEAT (2002c) <i>Specialist Studies, Information Series 4</i>, Department of Environmental Affairs and Tourism (DEAT), Pretoria DEAT (2002d) <i>Impact Significance</i>, Integrated Environmental management, information series 5, Department of Environmental Affairs and Tourism (DEAT), Pretoria DEAT (2004a) <i>Overview of Integrated Environmental Management</i>, Integrated environmental management, information series 0, Department of Environmental Affairs and Tourism (DEAT), Pretoria DEAT (2004b) <i>Criteria for determining Alternatives in EIA</i>, Integrated Environmental Management, Information Series 11, Department of Environmental Affairs and Tourism (DEAT), Pretoria DEAT (2004c) <i>Environmental Impact Reporting</i>, Integrated environmental management, information series 15,	
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	Department of Environmental Affairs and Tourism (DEAT), Pretoria Strengthening sustainability in the integrated development planning process (2001) State of the Environment Reporting: Draft Guidelines for Local Municipalities (2005) DEAT Information series (2004-2009) National framework for sustainable development (2008)	
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Source: Schoeman, 2010:23

To further illustrate the legislation relevant to the interface between these professions, Table 7 shows the core legislative frameworks guiding the interface between urban planning, environmental management and transportation planning.

Table 7: Core legislative frameworks guiding the interface between urban planning, environmental management and Transportation planning

Urban and regional planning	Environmental management	Transportation planning
National Building Regulations and Building Standards Act (103 of 1977) Town Planning and Township Ordinance, Ordinance 15 of 1986 Land Use Ordinance (Cape of Good Hope), Ordinance 15 of 1985 Removal of Restrictions Act 84 of 1967 The Less Formal Township Establishment Act, Act 113 of 1991 The Physical Planning Act, 88 of 1967 (Sec 6, 8 and 11) Development Facilitation Act, Act No. 67 of 1995 (DFA) Constitution of the Republic of South Africa (108 of 1996) Bill of Human Rights (1996) Physical Planning Act (88 of 1967) Municipal Structures Act (117 of 1998) Restitution of Land Rights Act (22 of 1993) Interim Protection of Informal Rights	Health Act (63 of 1977) Water Act (54 of 1956) National Water Act (36 of 1991) Water Services Act (108 of 1997) National Environmental Management Act 107 of 1998 (NEMA) National Environmental Management: Air Quality Act (39 of 2004) National Environmental Management: Waste Act 59 of 2009 National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA) National Environmental Management: Protected Areas Act 57 of 2003 (NEMPAA) National Heritage Resources Act 25 of 1999 (NHRA) Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA) World Heritage Convention Act 49 of 1999 Biodiversity Act 10 of 2004	Advertising on Roads and Ribbon Development Act (21 of 1940) Fencing Act (31 of 1963) National Land Transportation Transition Act (Act 22 of 2000)* Urban Transportation Act (Act 78 of 1977) National Transportation Interim Arrangements Act (Act 45 of 1998) Transportation Appeal Tribunal Act (At 39 of 1998) Cross Border road Transportation Act (Act 4 of 1998) Road Traffic Act (Act 29 of 1989) National Road Traffic Act (Act 93 of 1996) The South African National Roads Agency Limited and National Roads Act (7 of 1998) National Land Transportation Act, 2009 (Act 5 of 2009) and Regulations (R.1208, 2009) R. 877 National Land Transportation Act (5/2009):

Act (76 of 1995) Prevention of Illegal Eviction from Unlawful Occupation of Land Act (19 of 1998) Reconstruction and Development Program Act (79 of 1998) Municipal Systems Act 32 of 2000 Development Facilitation Act 67 of 1995 (DFA) Physical Planning Act 125 of 1991 Less Formal Township Establishment Act 113 of 1991 (LEFTEA) Subdivision of Agricultural Land Act 70 of 1970 (SALA) Removal of Restrictions Act 84 of 1967 Community Land Reform Act 28 of 1996 (CLARA) Housing Act (107 of 1997) National Land Use Management Bill (Draft 2008) Local Government: Municipal Integrated Development Planning Regulations, 2001	R.543: National Environmental Management Act (107/1998): Environmental Impact Assessment Regulations, 2010 (33306) R.544: Listing Notice 1: List of activities and competent authorities identified in terms of sections 24 (2) and 24D (33306) R.545: Listing Notice 2: List of activities and competent authorities identified in terms of sections 24 (2) and 24D (33306) R.546: Listing Notice 3: List of activities and competent authorities identified in terms of sections 24 (2) and 24D (33306) R.547: Environmental Management Framework Regulations, 2010	National Land Transportation Regulations on Contracting for Public Transportation Services.
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Source: Schoeman, 2010:24

With regard to the interface between the professions the following should be noted:

- Transportation planning considerations are equally important as need and desirability, socio-economic and physical impacts of activities as these quantify and qualify planning, development and implementation in space from a land use, environmental, and transportation integration perspective.
- Environmental authorisations only deal with the impact of activities in space and include measures to mitigate in the interest of the environmental protection. This does not imply that such approval is part of the land use rights being approved or granting of implementation rights for construction.
- All development, notwithstanding land ownership, historical practices, and sphere of government, individual, or any institution, may develop any land without environmental authorisation and obtaining the necessary land use rights. These are parallel processes with separate development requirements.
- The Constitution (1996) does not make provision for parties or stakeholders to ignore such processes.
- The current division of competencies to spheres of government in the Constitution (1996) prohibits optimal process integration.

The above-mentioned points clearly indicate the intricate nature of the interface between the roles and processes involved in statutory planning, environmental management and transportation planning under discussion.

Figure 13 shows the process relationships based in the interface between spatial planning, environmental management and transportation planning from the perspective of integrated development plans (IDPs) and IEM processes prepared or applied within the municipal sphere of government and is indicative of the complex and diverse nature of the interface between the above mentioned practices, tools and plans are considered (Kidd, 2008:29, 32, 33).

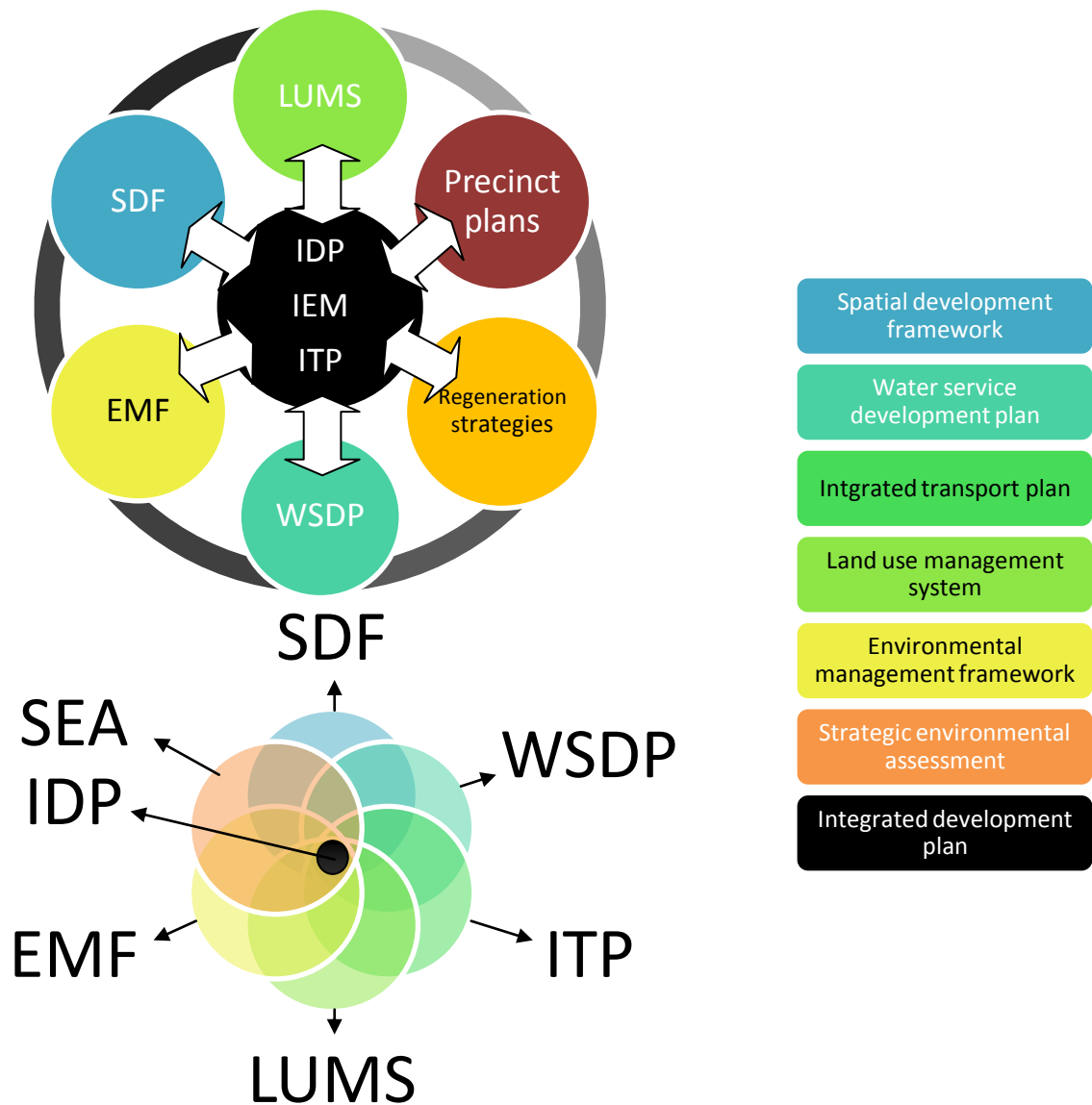


Figure 13: Collaborative practice in plan and framework integration

Source: Schoeman, 2010:29

Statutory planning constitutes one of the last outposts in the built environment required to complete the process of social, economic and spatial transformation in context to the Constitution that was approved in 1996. However, the lack of pro-active actions by the First Sphere of Government to address the issue resulted in a long and outdrawn action to finalise the Land Use Management Bill (from 2001 to 2008). Nonetheless, the Constitutional Court Ruling in 2010 related to the application of certain sections of the DFA (1995) as being unconstitutional will ensure that within a period of two years, spatial and development by all spheres of government will be guided by a new and constitutional correct legislative framework. (Refer to Van Wyk, 2010: 214-234 for the impasse on the current parallel planning mechanisms and its impact on planning and development – cf. Kidd, 2008:85-102).

The complexity of current legislation processes and procedures relating to both land use rights and environmental authorisations causes a great deal of confusion within municipalities and also increases the administrative burden of under capacitated municipalities. This makes land use decision making fragmented, and requirements of recent national policies and acts are therefore not properly reflected and articulated in land use decisions and environmental authorisations (Kidd, 2008:85-102).

To elaborate on the nature of the processes involved in the professions of urban and regional planning, environmental management and transportation planning to properly articulate land use dictions and environmental

management. Table 8 illustrates guiding principles for spatial planning and development within municipalities can be summarised as follows:

Table 8: Guiding principles for spatial planning and development within municipalities

Normative planning principles	Spatial planning principles	Environmental planning principles	General principles
Principle of sustainability Principle of equality Principle of efficiency Principle of integration Principle of fair and good governance (White Paper on Spatial Planning and Land Use Management, 2001)	Chapter 1 Principles of the DFA, 1995. Local Government: Municipal integrated development planning Regulations, 2001. Rural and urban form. Rural and urban integration. Promotion of sustainable development. Merit of the land development Promotion of economy of scale in infrastructure and services provision. Promotion of integrated development Security of tenure. Interest of various sectors (provincial and municipal). Market considerations. Spatial development framework (SDF) content. Integrated transportation plan (ITP), accessibility, mobility and movement patterns. Local growth and development strategies. Provincial SDF and transportation plans. Housing atlas (2006) Sustainable human settlement Planning (2008) NSDP (2006) ASGISA principles (2006)	Principles as contained in NEMA (1998) Economic rights and basic needs of people Framework for environmental management (EMF) Guidelines for environmental management Needs of people Sustainability considerations. Factors in sustainable development: biodiversity and ecology Integration of environmental management Environmental justice Access to resources Life-cycle responsibility Interest, needs and values. Well-being and empowerment Development impacts Transparency Intergovernmental co-ordination Conflicts and interest International responsibilities. Public interest Cost of pollution Women and youth Sensitive ecosystems.	Administrative justice Stakeholder participation Urban and rural quality Health considerations Protection of agricultural resources Protection of natural resources Life-style enhancement Heritage resource protection Quality of the built environment Improved access and connectivity Modal choice Transportation system development Corridor and nodal development Integrated transportation Movement of people, goods and services Passenger transportation services Urban form Places of residence and work accessibility Land use and Transportation integration Transportation economics System analysis Cost-effectiveness and efficiency

Source: Schoeman, 2010:28

In conclusion, the investigation of the interface between the transportation planning, spatial planning and environmental management professions and the interface between the relevant planning instruments have shown

the urgent need for integration between transportation planning and spatial development in order to achieve the best possible outcomes for the study areas addressed by this study.

3.2 Integrated transportation plans

In this section, the relevant legislations, policies and Acts will be considered as controlling factors over the integrated transportation plans and spatial development instruments. Secondly, an in-depth exploration of the integrated transportation plans and spatial development frameworks of each municipality will be conducted, after which a number of interviews with the relevant-role players will follow.

- Integrated transportation planning is a comprehensive and integrated process aimed at generating a plan relating to the regulation, provision and management of transportation infrastructure (roads, rail, stations, terminals and public transportation facilities). This planning process is also aimed at regulating public transportation operations/services and the use of infrastructure by both operators of public transportation and private travellers. Because of the spatial relationship between residential and economic activities that result in the demand for travel, it is essential that an integrated transportation plan should be developed in the context of a land use plan which is supportive of efficient public transportation. Details that must be included in a transportation plan are public transportation operations, circulation or movement and mobility needs, vehicles and rolling stock, depots/equipment and human resources (Department of Transportation^a, 2009:iii).

3.2.1 Guidelines

Guideline: a guideline is a course of action that is supposed to direct transportation authorities at all levels of government in the preparation of integrated transportation plans (Department of Transportation², 2009:iii).

- **White paper** - *The White Paper on National Transportation states that: "It is essential for land passenger transportation planning to be carried out in an integrated fashion covering all modes. This planning should be done at as low a level as possible and by the relevant transportation authority"* (Department of Transportation², 2009:2).
- **The National Land Transportation Transition Act (Act 22 of 2000)** - Section 19(2)(d) of the NLTTA reads as follows:
"Transportation authorities and all municipalities must prepare an integrated transportation plan dealing with such matters as may be prescribed by the Minister: provided that the Minister may prescribe different matters for different types or categories of municipalities"
(Department of Transportation^b, 2009:2).

Section 27 (3) further states that an integrated transportation plan (ITP), *"must be in accordance with requirements and in the manner and form as the Minister may prescribe in consultation with the MECs"*. MECs may prescribe additional content applicable in their province (Department of Transportation^b, 2009:2).

- **Minimum requirements** – the minimum requirements for the preparation of ITPs were published in the *Government Gazette* on 30 November 2007 in terms of Section 29(1) of the NLTTA.

- **National Land Transport Act, 2009 No. 5 of 2009:**

The purpose of this Act is—

- (a) to further the process of transformation and restructuring the national land transport system initiated by the Transition Act;
- (b) to give effect to national policy;
- (c) to prescribe national principles, requirements, guidelines, frameworks and national norms and standards that must be applied uniformly in the provinces and other matters contemplated in section 146 (2) of the Constitution; and
- (d) to consolidate land transport functions and locate them in the appropriate sphere of government.

(NLTA, 2009: p9)

Draft National Land Transportation Bill (NLTB) - the draft Bill sets out to provide for final transportation legislation to complete the process of transforming and restructuring the land transportation system started by the NLTTA, and to give effect to national policy as it has developed since the promulgation of the NLTTA (Department of Transportation², 2009:3).

Planning responsibilities - district municipalities can be categorised in terms of the minimum Requirements for the preparation of transportation plans as either a Type 1, or a Type 2 planning authority. Type 1 planning authorities are larger municipalities designated by the Department of Transportation to upgrade their public transportation system to a level that is car-competitive as part of the approved public transportation action plan of March 2007. These authorities have to prepare comprehensive integrated transportation plans (CITP) for which separate guidelines are available. All other district municipalities are categorised as Type 2 planning authorities and are required to prepare a district integrated transportation plan (Department of Transportation², 2009:5).

In conclusion, it can be seen that the Department of Transportation provides outlines of the expected roles that every municipality must fulfil by means of relevant policies and legislation. These roles are important with a view to achieve the required sustainability and integration between transportation plans as well as the sustainable development instruments. The following will also help to outline these important roles that the planning professions as well as the municipalities must fulfil.

3.2.2 White Paper on National Transportation Policy

“Transportation plays a significant role in the social and economic development of any country and the Government has utilised transportation as one of its five main priority areas for socio-economic development. The effectiveness of the role played by transportation is to a large extent dictated by the soundness of transportation policy and the strategies utilised in implementing the policy.”

(EDM District integrated transportation plan, 2010:ch2:7).

The following vision, goals and strategic objectives for South African transportation are defined in the White Paper:

Vision

The vision for South African transport is a system that will:

“Provide safe, reliable, effective, efficient, and fully integrated transport operations and infrastructure which will best meet the needs of freight and passenger customers at improving levels of service and cost in

a fashion which supports government strategies for economic and social development whilst being environmentally and economically sustainable.”

Goals:

Emanating from this vision, the goals are:

- To support the goals of the RDP for meeting basic needs, growing the economy, developing human resources, and democratising decision-making processes;
- To enable customers requiring transportation for people or goods to access the transportation systems in ways which best satisfy their chosen criteria;
- To improve the safety, security, reliability, quality and speed of transporting goods and people;
- To improve South Africa's competitiveness and that of its transportation infrastructure and operations through greater effectiveness and efficiency to better meet the needs of different customer groups, both locally and globally;
- To invest in infrastructure or transportation systems in ways which satisfy social, economic, or strategic investment criteria;
- To achieve the above objectives in a manner which are economically and environmentally sustainable, and minimises negative side-effects

(White Paper on National Transportation, 1996:4).

The role of Government

In the past, Government's dominant role has been that of a regulator of bureaucratic detail, a provider of infrastructure, and a transport operator, but it has been weak in policy formulation and in strategic planning. Government intends to reverse this legacy, and to focus on policy and strategy formulation which are its prime role, and substantive regulation which is its responsibility, with a reduced direct involvement in operations and in the provision of infrastructure and services, with a view to allow for a more competitive environment. Government will emphasise strategic planning and bring together key players in developing broader national strategies which could not be achieved by any single player. Government will, furthermore, retain a regulatory role to ensure unbiased regulation of safety and quality in general, to control market access for transport operators where this is necessary, and to prohibit excessive tariffs in the case of monopolies. This approach will need a national Government machine which is smaller, more focused and more skilled, and which can regulate more complex relationships with operators. The shift will affect all levels of Government - local, metropolitan, provincial, and national, and it implies a major restructuring of our transport parastatal sector (White Paper on National Transportation, 1996:8, 9).

Non-government and statutory bodies

Various non-governmental statutory bodies play key roles in the South African transport system. These include the Transnet Group (Spoornet, Autonet, Portnet, Petronet, and South African Airways), the South African Rail Commuter Corporation (SARCC), Metrorail, the Airports Company (ACL), the Air Traffic and Navigation Services Company (ATNS), Sun Air, Transkei Airways Corporation, and the South African Roads Board (SARB). Their institutional positions are currently under review as part of the process of restructuring state assets, and proposals for structural institutional and ownership arrangements have been recommended to Cabinet by a task team on restructuring of State-Owned Enterprises. A national framework agreement is also being negotiated between Government and Labour which will inform the restructuring process (White Paper on National Transportation, 1996:10).

Strategic objectives for transportation infrastructure:

- ❖ Establish sound intermodal coordinating structures;
- ❖ Maintain and develop the transportation infrastructure system, and prioritise its development in terms of sustainable economic and development needs;
- ❖ Foster a sound financial base for transportation infrastructure;
- ❖ Promote environmental protection and resource conservation;
- ❖ Enhance the competitiveness of South African industry and the quality of life of its citizens by providing protection of consumers, safety and security and meeting accessibility, reliability and mobility needs by providing transportation infrastructure to serve the purpose;
- ❖ Ensure that the transportation needs of the country's disabled population are taken into account when new infrastructure is planned and designed;
- ❖ Advance human resource development in the provision of transportation infrastructure

(White Paper on National Transportation, 1996:14).

Issues pertaining to land use and spatial development in support of land passenger transport include the following:

Issue

Land use and transport development are not integrated, owing to a fragmentation of responsibilities regarding the administration, planning and regulation of the various aspects of land use, infrastructure, operations and regulations. This fragmentation and the legacy of apartheid policies have led to low density development, spatially dislocated settlements and urban sprawl, resulting in inordinately long commuting distances and times, low occupancy levels, high transport costs and low cost recovery. The current housing approach which supports single units on single plots will not achieve the densities required, and conflicts between housing and transport policies therefore need to be resolved.

Policy

The following spatial development principles will support passenger transport policy:

- land use development proposals must be subject to a land use/transport policy framework within an agreed upon development planning process;
- the effective functioning of cities and industrial areas must be enhanced through the integrated planning of land use, transport infrastructure, transport operations and bulk services.

Policy actions necessary to provide for urban restructuring (densification) and efficient land use/transport interaction that will be promoted by Government include:

- the establishment of structures (all tiers of government) which will facilitate the integrated planning of infrastructure, operations and land use in a co-ordinated manner;
- the regulation of land use development at local level so that development approval is subject to conformity with integrated land use/transport plans;
- the development and implementation of land use frameworks, guidelines and policies to channel development, particularly employment activities, into public transport corridors and nodes;
- development priority must be given to infilling, densification, mixed land use and the promotion of development corridors and nodes;
- containment of urban sprawl and suburbanisation beyond the urban limits can be addressed through provincial spatial development plans;

- decentralisation that disperses employment activities must be discouraged, except in specific cases where it is favourable in terms of decreasing total transport costs and travel times on the basis of an integrated land use plan;
- unrestrained car usage and subsidised car parking will be contained through the application of policy instruments which could include strict parking policies, access restrictions for private cars, higher licence fees, road pricing or area licensing. Restraints on private car usage will, however, not be implemented independently of improvements in the quality of public transport.

(White Paper on National Transportation, 1996:21, 22).

3.2.2.1 Implications for this study

A number of implications for the current study emerge from the above section on the White Paper on National Transportation Policy. These are to:

- reduce existing inequalities in access to opportunity through the use of both transport and spatial development policy instruments;
- contain growth in private vehicle travel;
- encourage the provision of viable and affordable public transportation services;
- encourage the establishment of multimodal transportation services in marginalised areas;
- promote growth and stability in the public transport industry; and
- maximise energy conservation and minimise ecological impacts to achieving environmental sustainability.

In conclusion, the White Paper on Transportation illustrates the importance of establishing different modes of transportation. It also emphasises that one should conduct strategic planning and bring together key players in broader national strategies. Through the implementation of these proposed strategic plans, the White Paper implies the need for integration between transportation plans and land use frameworks.

3.2.3 The National Land Transport Act, 5 of 2009

The National Land Transportation Transition Act (NLTTA), Act 22 of 2000, requires that district and local authorities must compile a package of plans in order to give effect to the requirements and provisions of the NLTTA. In November 2007, the Minister of Transportation published the minimum requirements and regulations for the preparations of integrated transportation plans (ITP's) in the *Government Gazette* No. 30506:

To provide further the process of transformation and restructuring the national land transportation system initiated by the National Land Transportation Transition Act, 2000 (Act No. 22 of 2000); and to provide for matters connected therewith (National Land Transportation, 2009).

The purpose of the Act is:

- (a) to further the process of transformation and restructuring the national land transportation system initiated by the Transition Act;
- (b) to give effect to national policy;
- (c) to prescribe national principles, requirements, guidelines, frameworks and national norms and standards that must be applied uniformly in the provinces and other matters contemplated in section 146 (2) of the Constitution; and
- (d) to consolidate land transportation functions and locate them in the appropriate sphere of government (National Land Transportation, 2009:17).

Table 9: Responsibilities of the three spheres of government

The responsibilities of the three spheres of government are as follows:	
(a) The national sphere of government is responsible for	(i) the formulation of national transportation policy and strategy; (ii) national strategic transportation planning and co-ordination, and preparing a national land transportation strategic framework in terms of section 34; (iii) co-ordination between provinces and to address arrangements between the three spheres of government and public entities with a view to ensuring the effective and efficient execution of the land transportation function; (iv) assigning functions to the most appropriate sphere of government; (v) liaising with other government departments in the national sphere with responsibilities that impact on transportation issues with a view to coordinating land transportation; (vi) capacitating and monitoring provinces and municipalities that lack capacity or resources to perform their land transportation functions; (vii) coordinating transportation relations between the Republic and other countries and implementing international agreements; (viii) performing the functions contemplated in this Act in relation to applications for operating licenses; (ix) regulation of tourism transportation; (x) regulation of interprovincial road transportation; (xi) acting as contracting authority for subsidised service contracts, interim contracts, current tendered contracts and negotiated contracts concluded in terms of the Transition Act; and (xii) performing the other functions assigned to the Minister in terms of this Act.
(b) The provincial sphere of government is responsible for	(i) the formulation of provincial transportation policy and strategy, within the framework of national policy and strategy; (ii) planning, co-ordination and facilitation of land transportation functions in the province, and preparing the provincial land transportation framework in terms of section 35; (iii) co-ordination between municipalities with a view to ensuring the effective and efficient execution of land transportation in the province and promoting provincial legislation with a view to promoting the objects of this Act; (iv) liaising with other government departments in the national and provincial spheres with responsibilities

	that impact on transportation and land use planning issues, and bringing together key players; (v) ensuring that municipalities that lack capacity and resources are capacitated to perform their land transportation functions; (vi) building capacity in municipalities to monitor the implementation of this Act; (vii) ensuring implementation of the provincial integrated development strategy and public transportation strategy, with due attention to rural areas, with the focus on less capacitated municipalities or those that do not fulfil their responsibilities in respect of transportation service delivery, either by direct implementation or assistance under paragraph (v); and (viii) performing the other provincial functions assigned to the MEC in terms of this Act.
(c) The municipal sphere of government is responsible for	(i) developing land transportation policy and strategy within its area based on national and provincial guidelines, which includes its vision for the area and incorporates spatial development policies on matters such as densification and infilling as well as development corridors; (ii) promulgating municipal by-laws and concluding agreements, as appropriate, in the municipal sphere; (iii) ensuring co-ordination between departments and agencies in the municipal sphere with responsibilities that impact on transportation and land use planning issues, and bringing together the relevant officials; (iv) in its capacity as planning authority, preparing transportation plans for its area, ensuring the implementation thereof and monitoring its performance in achieving its goals and objectives; (v) financial planning with regard to land transportation within or affecting its area, with particular reference to transportation planning, infrastructure, operations, services, maintenance, monitoring and administration, with due focus on rehabilitation and maintenance of infrastructure;

Source: National Land Transport Act, 2009:28-29

From the responsibilities of the three spheres of government set out above, there appears to be a salient need for the integration of the three spheres as well as the integration of transportation planning, land use management and spatial development. In practice, however, these responsibilities as they exist in South African spheres of government lack integration. The figure 14 below presents an outline of the intergovernmental relations that should contribute to the cooperation between of the spheres of government.

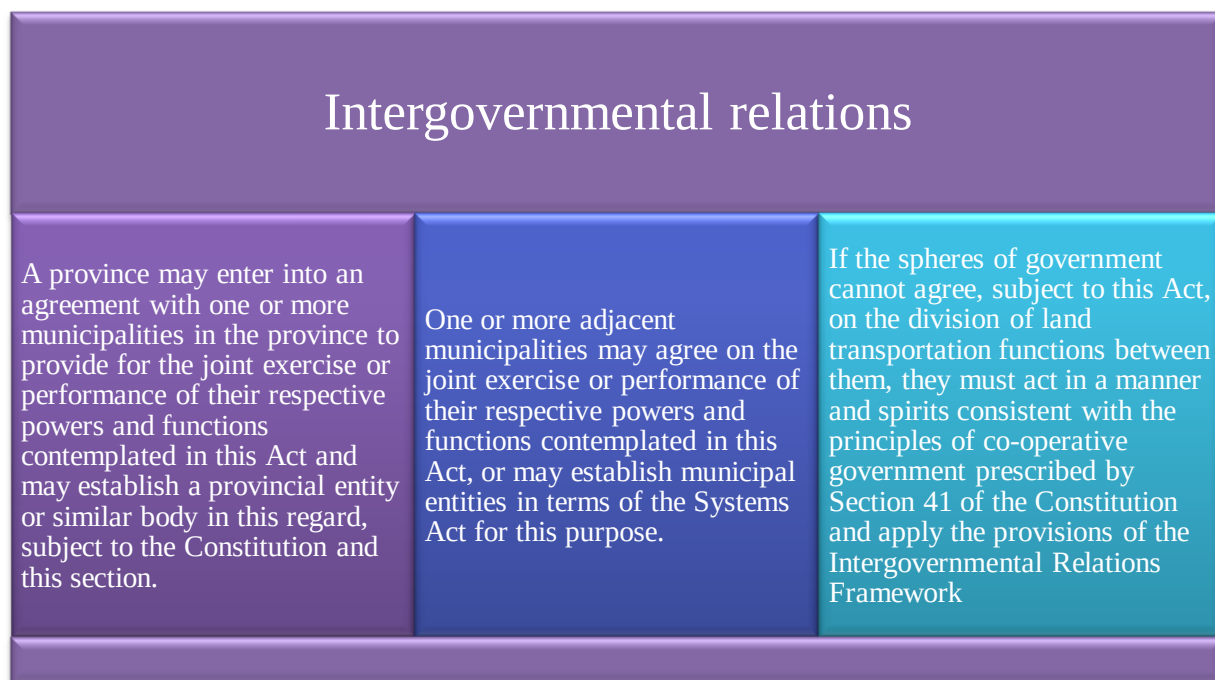


Figure 14: Intergovernmental relations as outlined in the NTLA, 2009

Source: National Land Transport Act, 2009:32

➤ Planning authorities

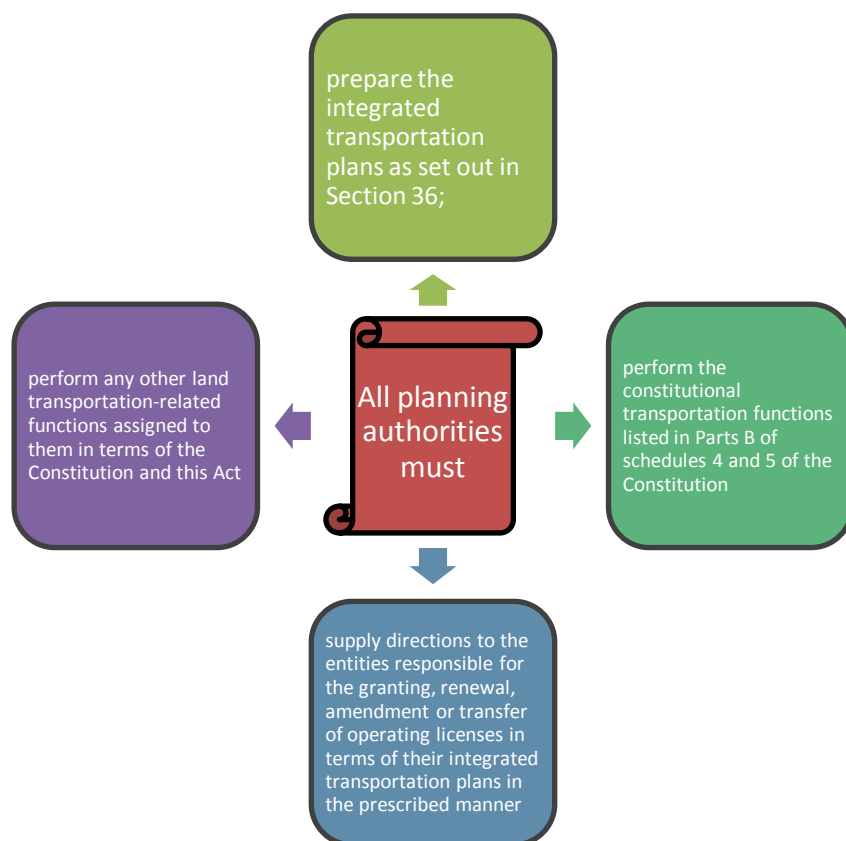


Figure 15: Duties of planning authorities as outlined in the NLTA, 2009

Source: National Land Transport Act, 2009:35

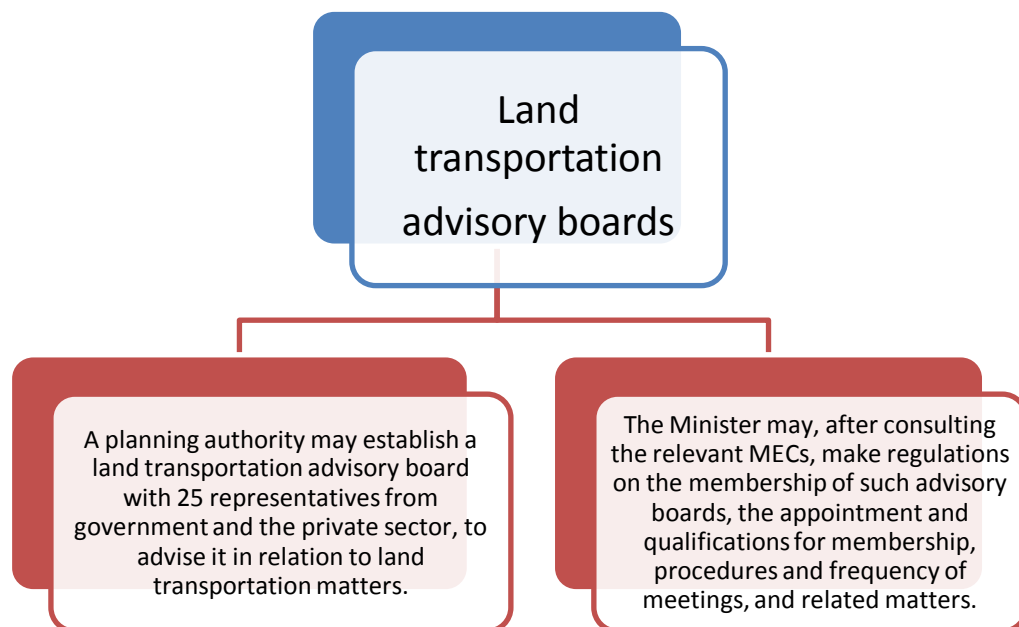


Figure 16: Land transportation advisory boards as outlined in the NTLA, 2009

Source: National Land Transport Act, 2009:35

➤ Functions of the National Public Transportation Regulator

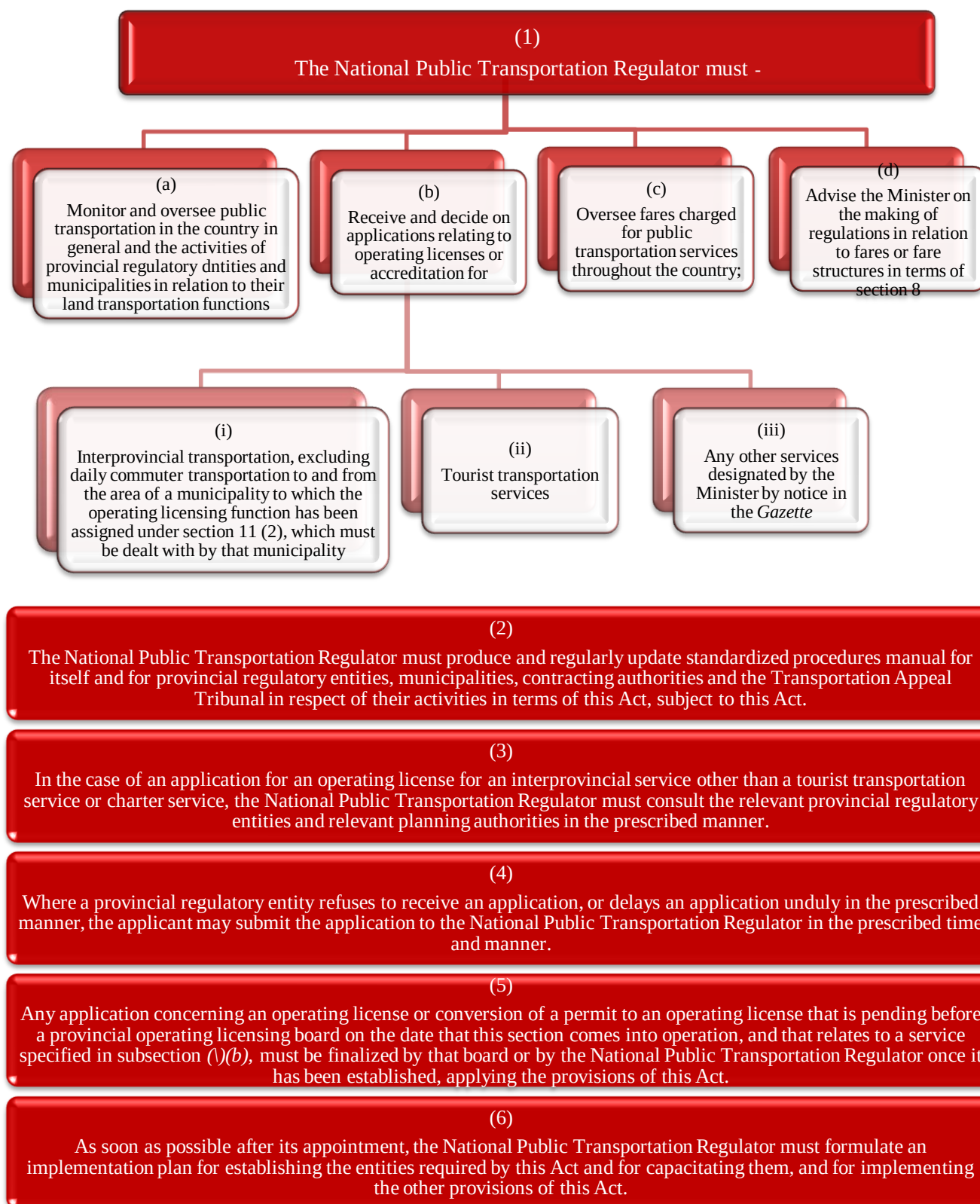


Figure 17: Functions of National Public Transportation Regulator as outlined in the NLTA, 2009

Source: National Land Transport Act, 2009:39

➤ Transportation planning

General principles for transportation planning and the integration thereof with land use and development planning must be integrated with the land development and land use planning processes. The integrated transportation plans required by this Act have been designed to give structure to the function of municipal planning mentioned in Part B of Schedule 4 to the Constitution, and must be accommodated in and form an essential part of integrated development plans, with due regard to legislation applicable to local government, and its integrated Transportation plan must form the Transportation component of the integrated development plan of the municipality (National Land Transport Act, 2009:44).

➤ For the purposes of complying with this Act, the following plans are required:

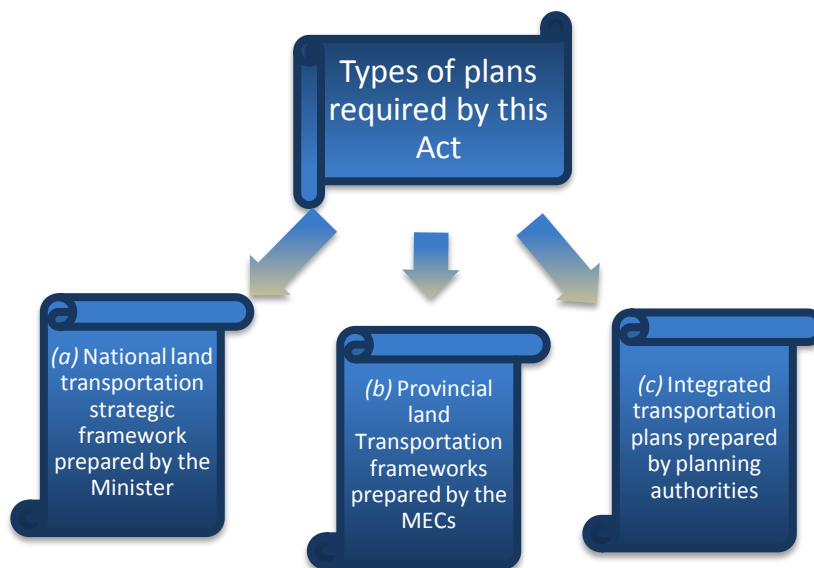


Figure 18: Required plans by the NLTA, 2009

Source: National Land Transport Act, 2009:44

3.2.3.1 Implications of this act for this study

- land transportation planning must be integrated with the land development and land use planning processes;
- intermodal planning committee must be established in order to co-ordinate public transportation between nodes; and
- intergovernmental and co-ordination between municipalities lead towards integrated decision making and contributes towards more integrated planning decisions.

After looking at the national and provincial perspective of the NLTA (no. 5, 2009), the metropolitan sphere as well as the district sphere of government pertaining to the Cape Town and Eden municipal study areas will be investigated and discussed below.

3.2.3.2 City of Cape Town Metropolitan Municipality

In May 2000, a broad consensus was reached by all role-players that the establishment of an effective transport authority and its transport executive was essential to the future economic and social development of the Cape metropolitan area. A more recent investigation confirmed this and also showed that the shortcomings originally

perceived in the NLTTA could be addressed by means of a combination of the founding agreement required by the NLTTA and recent local government legislation.

A recommendation was made to Unicom (a committee responsible for the establishment of the Unicity) that it should endorse the establishment of a comprehensive metropolitan transport authority for the city of Cape Town. It was also recommended that the interim city manager should appoint a transition manager to establish a transport authority for the city of Cape Town and that this process be guided by the following outcomes:

- rationalisation of current local government transportation-related functions;
- formalisation of existing assignments to and agency arrangements with local government pertaining to transport; and
- further assignment of national and provincial functions and powers to local government;
- the transfer of some of the responsibilities and assets of parastatal institutions to the new, comprehensive metropolitan transport authority.

3.2.3.3 Eden district municipality

Generally, an ITP is considered as a mechanism by which planning authorities can plan for, develop, manage, integrate and provide all modes of transportation in the area. For the purposes of land transportation planning, three types of planning authorities were distinguished (EDM District integrated transportation plan, 2010:2).

The specific types of ITP to be prepared by planning authorities are as follows:

- **Type 1** planning authorities are required to prepare a Cape integrated transportation plan. These authorities are the 12 cities, as well as any other planning authority designated as such by the Members of the Executive Council or Minister (e.g. George in the Eden area).
- **Type 2** planning authorities, which include all district municipalities e.g. Eden District Municipality, are required to prepare a district integrated transportation plan.
- **Type 3** planning authorities, e.g. all other local municipalities in EDM, must prepare a local integrated transportation plan (EDM District Integrated Transportation Plan, 2010:1.4).

3.2.3.4 The implications for this study are that:

- Integrated transport service delivery across functions such as planning, operations, regulation, infrastructure, marketing and monitoring in the local sphere is required;
- Integrated and balanced transport service delivery across all modes of transport (public, private and non-motorised) at the local sphere is necessary;
- Local accountability and meeting local land transport needs are essential;
- Improved use of resources and funding in the local sphere is necessary, and
- Improved transport service delivery for commuters/ customers in the local sphere would have to be in place.

3.2.4 National Transportation Master Plan (NATMAP)

The main purpose of the Transportation Master Plan is to motivate a prioritised programme of interventions with a view to upgrade the transportation system in South Africa. Its goal is to develop a dynamic, long-term and

sustainable land use/multi-modal transportation systems framework for the development of networks, infrastructure facilities, - interchange termini facilities and service delivery.

This report addresses phase 1 of the Transportation Inventory of the Western Cape Province, and it is the second report produced in the project, following the inception report (National Transportation Master Plan, 2008:xiv).

- Objectives:

From the terms of reference it can be deduced that the proposed National Transportation Master Plan 2050 aims to develop a dynamic, long-term and sustainable land use/multi modal transportation systems framework for the development of networks, infrastructure facilities, interchange and termini facilities and service delivery strategies for the RSA. The framework and strategies need to:

- be demand-responsive to national/provincial/district and /or any socio-economic growth strategy, and/or any sectoral integrated spatial development plan; and
- have a coordinated implementation schedule and/or action agenda for the whole country; and/or specific national and provincial spatial development corridors and regions until 2050.

In other words, the objective is to prepare a physical development plan, sometimes referred to as a Master Plan, as the framework by which South Africa's future state-of-the-art multi-modal transportation systems planning, implementation, maintenance, operations, investments, and monitoring decisions are to be made. It is an action plan.

The objective of the project is to identify, examine, assess, and propose the following:

- various land use/spatial development models to sustain investment in state-of-the-art multi-modal urban/rural transportation systems;
- cost-effective models for an integrated public/private sector corridor/regional economic development;
- vision, goals and objectives for each of the national development corridor and/or economic regions;
- integrated growth and development strategies for each development corridor and/or region of national importance;
- potential economic development projects and compile a comprehensive economic status map of national importance;
- integrated multi-modal infrastructure facilities development plan;
- cost effective policies promulgation, and/or changes to enhance co-ordination of transportation services;
- cost-effective institutional arrangements model for efficient and effective investment, planning, implementation, operations, maintenance, and monitoring; and
action agenda for the various key stakeholders, based on the preferred development strategy and integrated development plan (National Transportation Master Plan, 2008:1-2).

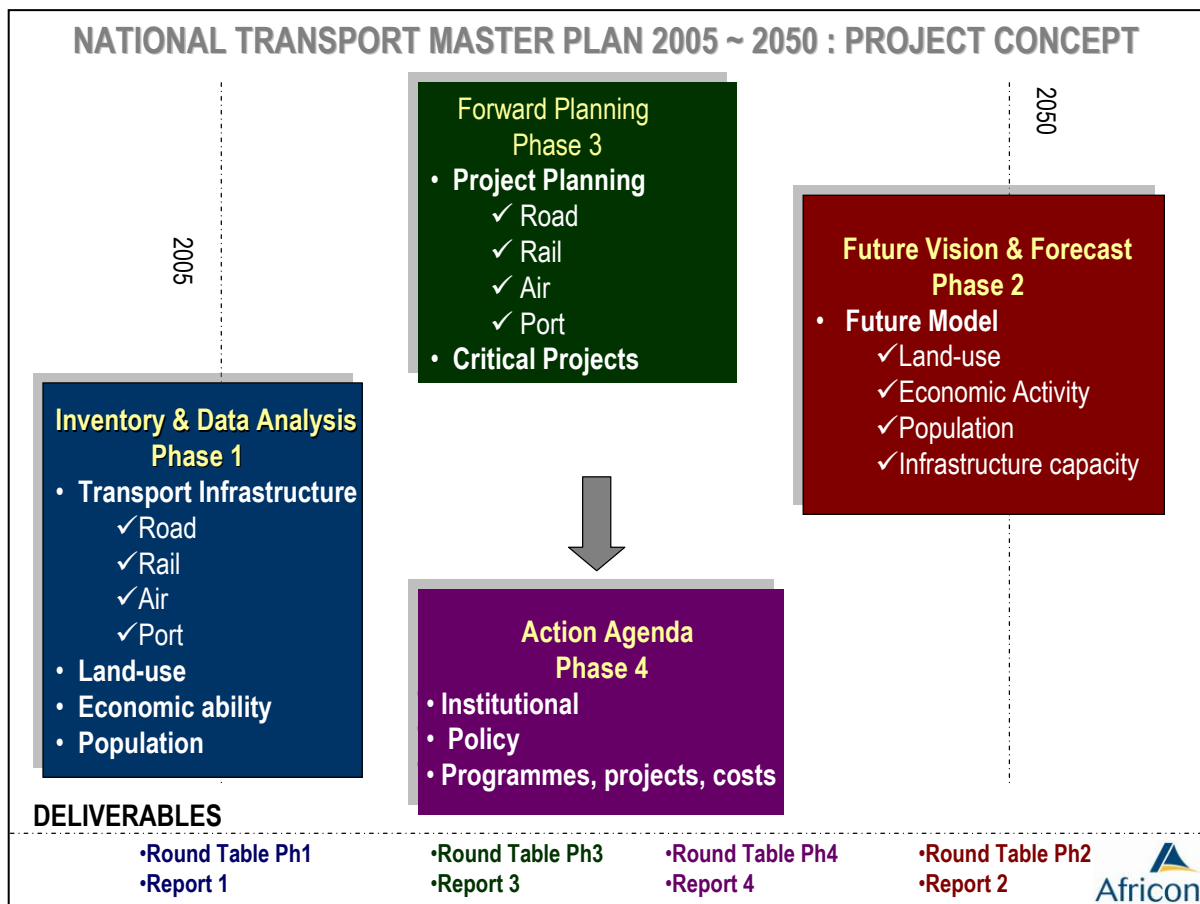


Figure 19: Structure and outputs and subsequent phases

Source: NATMAP, 2008:4

3.2.4.1 Implications for this study

The following implications arise from the figure above:

- Promotion of the use of integrated transportation planning and corridor development is necessary;
- Promotion of the use of a integration of multi-modal infrastructure and co-ordination between transportation services would be essential;
- Promotion of a dynamic, long-term and sustainable land use/multi-modal transportation systems framework is necessary.

In conclusion, the NATMAP implications will be compared against the empirical findings of each of the study areas to measure the level of implication of the guidelines outlined within NATMAP towards the integration between transportation and spatial development.

3.2.5 Strategic public transportation networks strategy

The strategic public transportation networks strategy (SPTN) must be integrated or incorporated into the transportation infrastructure strategies and plans as well as with the provincial and municipal SDFs, the Western Cape PLTF and municipal ITPs. Any upgrading of road and rail networks, as well as implementation of new roads and railways will require the SPTN to be adapted as and when these are implemented. New transportation technologies proposed in the infrastructure chapter need to be incorporated in the strategic public transportation networks strategy.

Institutional and legal implications: The National Land Transportation Act of 2009 (NLTA) provides for the operating licensing and regulating of the SPTN and for a National Public Transportation Regulator which is responsible for inter-provincial public transportation.

Provincial regulator entities are responsible for intra-provincial services within a province. It is proposed that the initial focus of the SPTN should be on the inter-provincial SPTN, and once this is established and functioning, the intra-provincial SPTN can be established through the Western Cape Provincial Regulator. Tourist transportation services are regulated by the National Public Transportation Regulator, which will form an important component of the SPTN.

In terms of the Act, the SPTN is typically an “integrated public transportation network”, which integrates public transportation between modes in an area, with through-ticketing and other mechanisms in place in order to ensure seamless travel between origins and destinations. The authorities who need to plan, design and implement the SPTN are:

- The DoT need to coordinate all aspects of the SPTN, similar to the IRPTNs of the 12 cities;
- The National Public Transportation Regulator must regulate the inter-provincial public Transportation;
- PRASA is responsible for passenger rail and Autopax bus services;
- ACSA and SAA will be responsible for air travel; and
- The Western Cape Province and the Provincial Regulatory Entity need to be responsible for interprovincial mini-bus taxi and bus transportation

(National Transportation Master Plan, 2010:ch6, 60)

3.2.5.1 Implications for this study

The following implications arise from the discussion above:

- Improved integration of public transportation between nodes in an area;
- Co-ordination with development-orientated transportation;
- Promoting the integration/incorporation with provincial and municipal SDF's; and
- Improving seamless travel between origin and destination.

In conclusion, the strategic public transportation networks strategy contributes towards the need for integration between transportation modes and with the provincial and municipal spatial development frameworks, thus enhancing the need for proper integration of transportation and spatial development.

3.2.6 Minimum requirements of a DITP

According to the regulations in terms of section 29(1) of the NLTTA, the following principles apply to the preparation of CITP and, where applicable, to DITPs and LITPs. The minimum contents are illustrated below in Figure 20. Although these requirements are from an earlier legislation the relevance of these is still paramount in the present as well as for the implementation of these in the future.

Transportation plans must be developed with a view to:

- Enhance the effective functioning of cities, towns and rural areas through integrated planning of transportation infrastructure and facilities, transportation operations including freight movement, bulk services and public transportation services within the context of those integrated development plans and the land development objectives set in terms of section 27 of the Development Facilitation Act, 1995 (Act No. 67 of 1995) or, where applicable, land development objectives of that nature set in terms of replacing legislation or relevant provincial laws;

- Direct employment opportunities and activities, mixed land uses and high density residential development into high-utilisation public transportation corridors interconnected through development nodes within the corridors, and discourage urban sprawl where public transportation services are inadequate;
 - Give priority to infilling and densification along public transportation corridors;
 - Give higher priority to public transportation than private transportation by ensuring the provision of adequate public transportation services and applying travel demand management measures in a manner that provides incentives for sustainable mobility management;
 - Enhance accessibility to public transportation services and facilities, and transportation functionality in the case of persons with disabilities;
 - Maintain and further develop road infrastructure in order to improve travel by all road-based modes of transportation where appropriate;
 - Address adverse impacts on the environment; and
 - Support / stimulate economic growth and development.
- (EDM District integrated transportation plan, 2010:ch1, 6, 7)

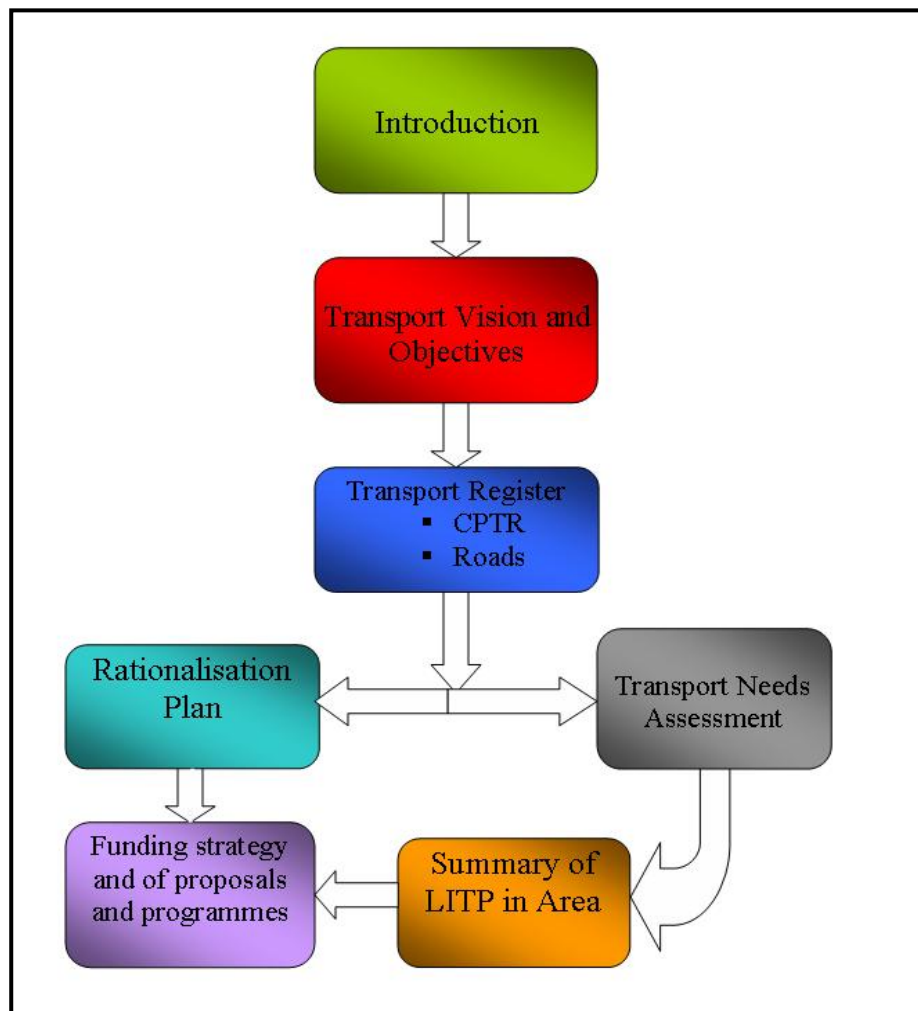


Figure 20: Minimum contents of a district integrated transportation plan

Source: EDM District integrated transportation plan, 2010, ch1: 8

In addition:

- plans must pay due attention to the development of rural areas, and transportation for special categories of passengers must receive specific attention.
- transportation plans should acknowledge and, where necessary, plan for the role of appropriate non-motorised forms of transportation such as walking and cycling.
- transportation plans and transportation programmes must be synchronised with other planning initiatives and must indicate how they are integrated into the municipal integrated development plans, the land development objective processes and the municipal budgeting process.
- the preparation of a transportation plan or transportation programme must include consultation with and participation of interested and affected parties required for the preparation of integrated development plans in terms of Chapter 4 and section 29(1)(b) of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000) or replacing legislation.

(EDM District Integrated Transportation Plan, 2010:ch6,75).

Transportation plans must:

- Ensure integration:
 - With other plans, in particular with the IDP process;
 - With land use, to the extent that transportation can be provided efficiently and effectively; and
 - Between modes, identifying the optimum role of each mode including non-motorised transportation;
- Pay due attention to the development of rural areas;
- Give priority to public transportation and give specific attention to transportation for special categories of passengers; and
- Must be planned together with the community

(Department of Transportation^b, 2009:5).

3.2.6.1 Implications for this study

The following implications arise from the above discussion:

- enhancement of effective functioning of cities, towns and rural areas;
- enhanced accessibility to public transportation for persons with disabilities;
- addressing adverse impacts that transportation has on the environment;
- consultation with persons of interest and affected parties; and
- ensuring integration between transportation and spatial development instruments.

In conclusion, these requirements emphasise the importance of integration between transportation plans and spatial development instruments as well as the importance of environmental management and protection.

3.2.7 Western Cape provincial land transportation framework 2004

The Western Cape provincial transportation's vision, mission and objectives are:

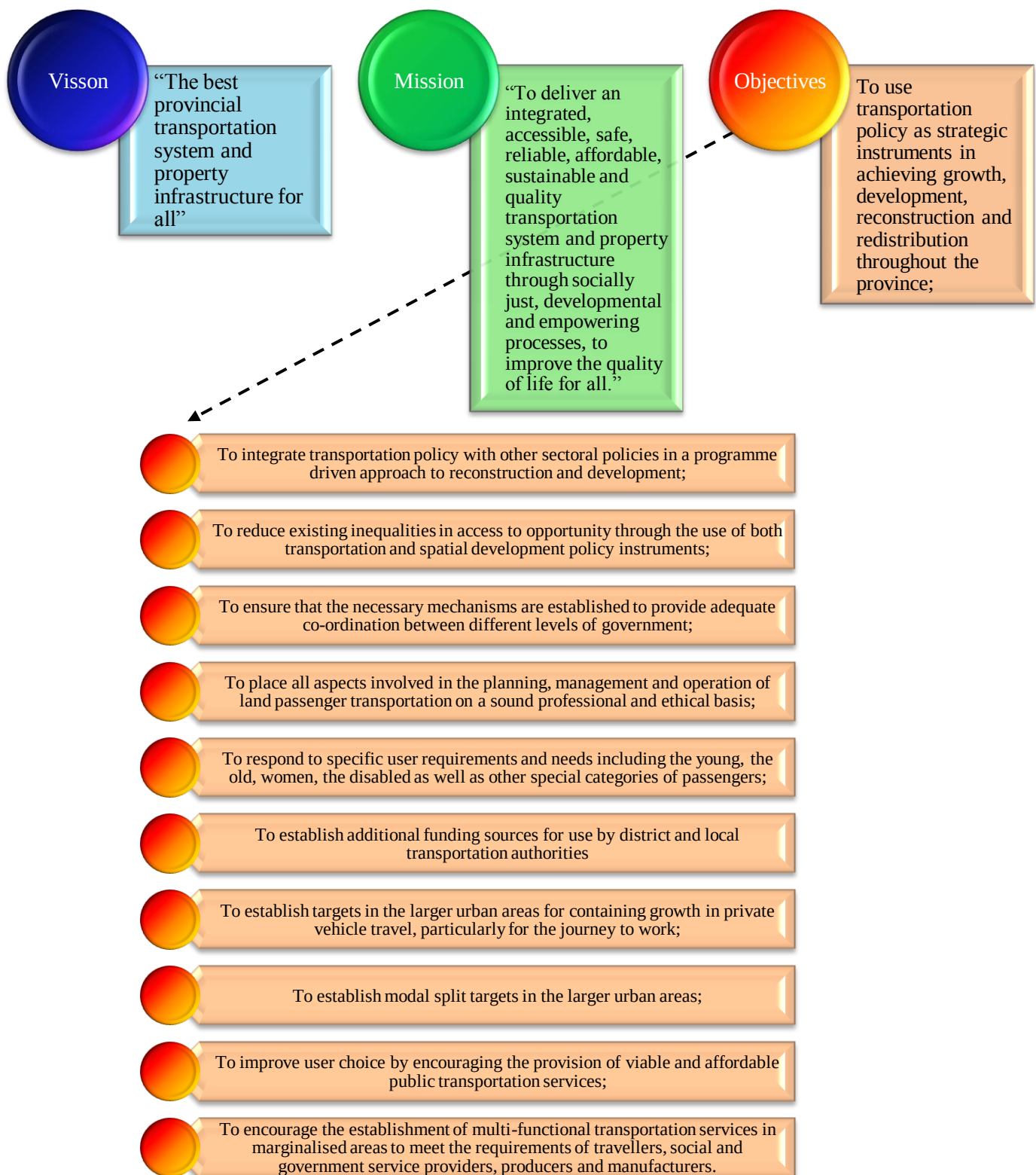


Figure 21: Western Cape provincial transportation vision, mission and objectives

Source: EDM District integrated transportation plan, 2010:ch2, 10-11

3.2.7.1 Implications for this study

A number of implications for the current study emerge from the above section on the Western Cape Provincial Framework 2004. These are:

- Reduction of existing inequalities in access to opportunity through the land use of both transport and spatial development policy instruments;
- Containing growth in private vehicle travel;
- Encouraging the provision of viable and affordable public transportation services;
- Encouraging the establishment of multimodal transportation services in marginalised areas;
- Promoting growth and stability in the public transport industry; and
- Maximising energy conservation and minimising ecological impacts with a view to achieve environmental sustainability.

3.2.7.1 Sources of funding

The local municipalities are responsible for funding of public transportation infrastructure. If local funding is not possible, they need to apply for funding from all available sources. It is expected that funding for the implementation of the various projects will be sourced from the following institutions, on an annual basis, before the budget of the subsequent year is finalised:

- **Provincial government of the Western Cape** – it is expected that funding for specific projects will be sourced directly from the Department. Funding directly from national government may also be channelled through the province for specific projects. (The available budget from this source is discussed in the next section.)
- **National government** – for specific projects of national importance, the responsible district and local authorities must apply for funding which may become available from this source.
- **District municipality** - it will be the responsibility of the district municipality to drive the implementation processes through its own budgetary process.
- **Municipal infrastructure grant (MIG)** - some of the projects identified will, however, have to be funded through MIG. Transportation is one of the identified municipal services for which funding are available from this source.
Registration of these transportation projects for funding purposes must therefore commence in due time.
- **Development Bank of South Africa** – municipalities in other parts of the country have utilised loans from this institution to upgrade and maintain infrastructure. It is certainly a source that can be utilized, although it is loans that need to be redeemed over a period of time.

(EDM District integrated transportation plan, 2010: ch8, 1)

3.2.7.2 Public participation

It is a requirement that the preparation of ITPs must be subject to a thorough public participation process involving all stakeholders. Various guidelines exist on this topic. The process followed should preferably be summarised in the DITP.

Public participation could, however, be time-consuming and costly and such processes should be combined into the larger IDP public participation process where possible (Department of Transportation², 2009:36).

The purpose of the ITP document is to assist managers of municipal departments who are responsible for the transportation function in that particular municipality to guide the preparation of integrated transportation plans (ITPs) by either the officials in that department, or by outside consultants appointed for the task. The municipal feedback process is outlined in Figure 22 (Managerial and technical transportation planning guidelines, 2009: slide 26).

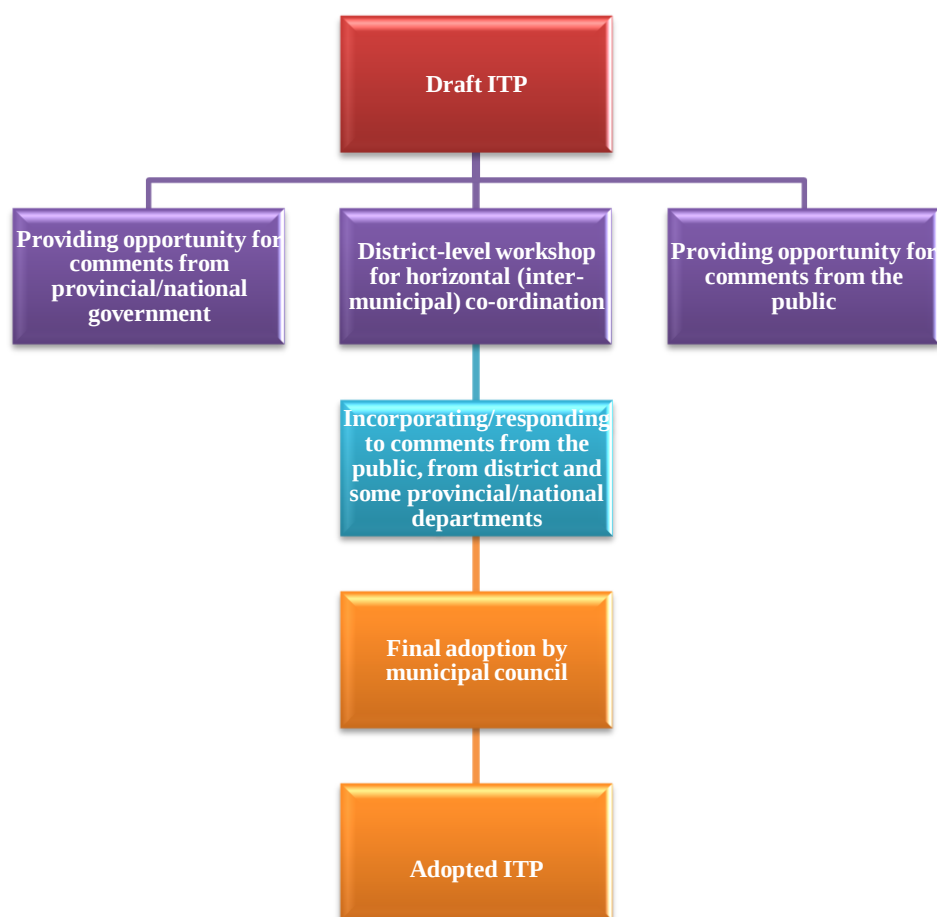


Figure 22: ITP Feedback process

Source: Department of Transportation^b, 2009:39

3.2.8 Transportation and frameworks

Transportation plans and frameworks must be prepared by all three levels of Government. Figure 23 shows the inter-relationship between the national planning framework (NLTSF), the provincial planning framework (PLTF) and the different types of ITPs. Each municipality (planning authority) prepares an ITP. As previously mentioned, each type of ITP must inform the relevant authorities' integrated development plan (IDP) (Department of Transportation², 2009:6).

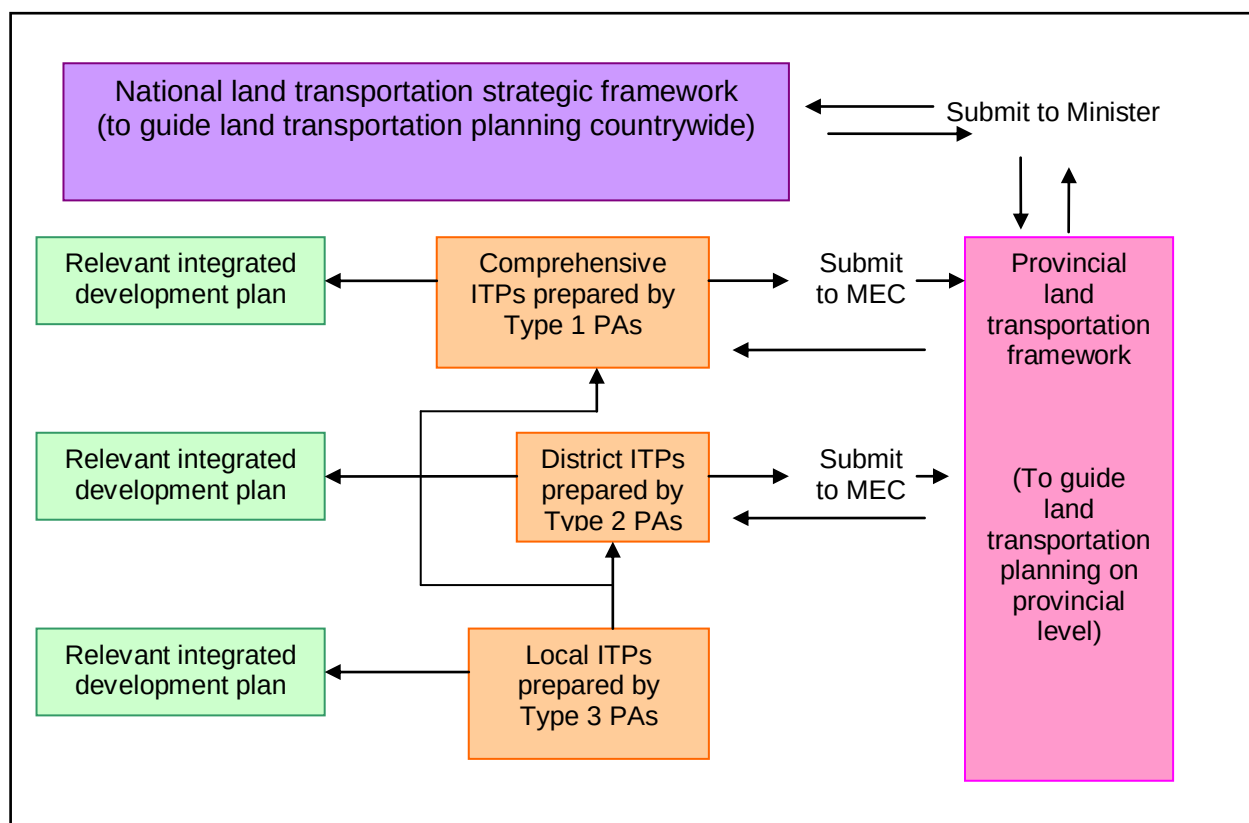


Figure 23: Inter-relationship of transportation plans and frameworks

Source: Department of Transportation^b, 2009:6

Below is a summary of relevant documents (South African and international) regarding guideline documents on transportation planning. Comments made by the Department of Transportation of the 2009 status of the policy's and guidelines are discussed within table 10 to further build on the legislative framework of this chapter

Table 10: Summary of South African and selected international policy's and guideline documents on transportation planning

SUMMARY OF SOUTH AFRICAN AND SELECTED INTERNATIONAL GUIDELINE DOCUMENTS ON TRANSPORTATION PLANNING		
Title of document & date	Author/publisher	Contents of document / comments on current status
TRANSPORTATION POLICY		
White Paper on National Transportation Policy, 1996	Department of Transportation	Policy statements on: public transportation, transportation infrastructure, airports Official national transportation policy
Moving South Africa	Department of Transportation	Land transportation strategies, maritime, aviation, freight etc. Part of strategic response to White Paper policies.

Land Transportation Strategy for the Drafting of the National Land Transportation Bill, 2007	Department of Transportation	Review of transportation policy to provide input for the drafting of the National Land Transportation Bill (NLTB) Most recent policy review
National Land Transportation Transition Act (Act 22 of 2000), (NLTTA)	Government Printer	Planning and regulation of Transportation. Institutional arrangements Current transportation law – probably to be replaced by NLTB
National Land Transportation Bill (NLTB), 2008	Government Printer	Planning and regulation of Transportation. Institutional arrangements Draft Bill to replace NLTTA when promulgated
Minimum requirements for the preparation of provincial land transportation frameworks, Regulation Gazette No 7421, No R1004, July 2002.	Government Printer	Current statutory requirements on the preparation of PLTFs
Minimum requirements for the preparation of integrated transportation plans, 2007	Government Printer	Statutory regulations on transportation planning Current requirements – may have to be updated if NLTB becomes law.
TPG 11; Policy Guidelines for National Land Transportation Demonstration projects, 1998	Department of Transportation, on behalf of the committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Guidance to authorities on the requirements for a project to be considered a national demonstration project Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas still relevant.
TRANSPORTATION PLANNING		
Guidelines and requirements for the preparation of an urban transportation plan, TPC 4/80, July	Department of Transportation	RSA's first official urban transportation guideline – follows much of the methodology of NITRR Research Reports. Useful for contents of a transportation plan. A little pedantic about objectives

Guidelines and requirements for the preparation of an urban transportation plan, Draft UTG, First amendment, 1988.		Urban transportation guidelines As above
Transportation planning research reports 1. A planning framework for South Africa. 2. Definitions of urban transportation planning terms. 3. Preparing a study proposal. 4. Developing goals and objectives. 5. Conducting an inventory. 6. Scenarios and long-term planning. 7. Sketch planning tools. 8. Specialised forecasting procedures and data collection for sub-area project planning. 9. An evaluation procedure for short-term planning – utility analysis. 10. Public participation	CSIR, South Africa	Useful for process and early methodology. Definitions are good and universal.
Guidelines for the preparation, adjustment, revision and implementation of regional passenger transportation plans. September 1992.	Department of Transportation	First introduction of public transportation planning into urban planning in SA for RSCs
TPG 4: Guidelines on the contents of a proposal for the preparation of a transportation plan, 1997.	Department of Transportation, on behalf of the Committee of Land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas are still relevant.
TPG 1: Guidelines for the preparation of an integrated transportation plan, 1998.	Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas are still relevant.

TPG: Guidelines for the monitoring and review of integrated transportation plans, 1998.	Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas are still relevant.
TPG 3: Guidelines on the status quo data inventory for integrated transportation plans, 1998	Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas are still relevant.
TPG 6: Guidelines for preparing the public transportation plan: a component of the integrated transportation plan, 1998	Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas are still relevant.
TPR 1: Requirements for the preparation of a provincial land transportation framework, 1998	Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas are still relevant. Replaced by <i>Regulation Gazette</i> No 7421, Minimum Requirements for the Preparation of PLTFs
Guidelines for developing urban transportation strategies, 1995	Institute of Highways and Transportation, United Kingdom	Useful ideas on process and content
Guidance on the methodology for multi-modal studies, March 2000	Department of the Environment, Transportation and the Regions, United Kingdom	Still the basis of work on multi-modal studies. Comprehensive and useful
Guidelines for a process to identify and prioritise community projects, 1993.	TRC for ORMET	Useful techniques, but this type of approach was logical and mechanistic but found no political favour. Decision-makers do not like to be tied down by objective-driven priority processes.
TPR2, Current public transportation record, 1998	Department of Transportation	Replaced by NLTTA:TPR4, Non-metropolitan CPTR
NLTTA:TPR4, Non-metropolitan CPTR, April 2001	Department of Transportation	Most recent guideline on the preparation of a CPTR. In need of review and update
NLTTA:TPR7 Public Transportation Plan, April 2001	Department of Transportation	Useful reference on traditional public transportation planning
NLTTA:TPR6, Rationalisation plan, April 2001	Department of Transportation	Useful reference on planning for subsidised public transportation services

INTEGRATED PUBLIC TRANSPORTATION NETWORKS AND BUS RAPID TRANSIT

Source book of material for planning and design: IRPTN in South African cities, 2008	Department of Transportation	Contains a summary of BRT guide material on operations, infrastructure and design principles for BRT Available to municipalities as a reference book to guide BRT scoping, operational and infrastructure plans
Bus rapid transit planning guide, 2007	Institute for Transportation and Development Policy	Comprehensive guidelines on the planning, design and implementation of BRT Highly recommended
PUBLIC PARTICIPATION		
TPR 9 Guidelines and requirement for the implementation of the NLTTA public participation 2000	Department of Transportation	Useful guideline on public participation principles, guidelines and requirements
ECONOMIC EVALUATION		
Guidelines for conducting the economic evaluation of urban transportation projects, Second edition, December 1995	Cape Town Met	Useful for the economic evaluation of urban transportation projects
RURAL MOBILITY		
Guidelines for the enhancement of rural mobility, final report, September 1997.	Department of Transportation	Some useful material
PUBLIC TRANSPORTATION INFRASTRUCTURE		
Bus terminals and bus stations planning and design guidelines, September 1985	Department of Transportation	Bus design vehicle, station layout, geometric requirements, amenities Good South African reference; in need of updating
Guidelines for the design of mini/minibus-taxi facilities, February 2006	Department of Transportation	Minibus-taxi design vehicles, layout of stops and termini, geometric requirements, amenities Most recent South African reference
Bus Rapid Transit Planning Guide, 2007	Institute for Transportation and Development Policy	Comprehensive guidelines on the planning, design and implementation of BRT Highly recommended; very comprehensive and a useful general reference

Guidelines for bus operation in urban areas, 1982	Greater Glasgow Passenger Transportation Executive	Dated but some useful dimensions and layouts
TPG 13; Guidelines for transportation of the disabled, 1997	Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas still relevant.
ROADS AND PARKING		
Parking standards – (second edition), PG3/85	SA National Department of Transportation	Parking provision requirements and geometric standards for on-street and off-street parking including parking garages. Good South African reference; in need of updating.
National guidelines for traffic calming, March 1996.	SA National Department of Transportation	Useful but super ceded by new TDM material and material on the website of Todd Litman.
SA trip generation rates, second edition, 1987	SA Department of Transportation	SA peak hour and daily trip generation rates for most land uses Good South African reference; in need of updating
UTG 12 – pavement management system: standard visual assessment manual for flexible pavements in urban areas	National Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Details on how to undertake a visual assessment of the condition of a road or pavement
TRH22, pavement management systems, 1994	National Department of Transportation, on behalf of the Committee of State Road Authorities (CSRA)	Deals with all aspects of the development of a pavement management system
Highway capacity manual, HCM 2000	Transportation Research Board	Discusses the capacity calculations for all the elements of a transportation system – from walkways to freeways Remains one of the definite sources for any capacity calculations

National guidelines for road access management. Oct 2005	Committee of Transportation Officials	Provides guidelines and standards for land use and Transportation integration and includes <i>inter alia</i> chapters on road classification, benefits road access management, traffic control and implementation RAM Very useful and necessary document
Technical guidelines for traffic impact studies of enclosed neighbourhoods, 2003	Ekurhuleni metropolitan municipality	Guidelines for the evaluation of enclosed neighbourhoods from a traffic point of view.
Transportation and land development, second edition, V G Stover & F J Koepke, 2002	Institute of Transportation Engineers	Discusses <i>inter alia</i> site planning, traffic impact analysis, functional circulation systems, intersection design, access location and design and parking area layout. An excellent document for understanding the impact of development traffic on road infrastructure.
NON-MOTORISED TRANSPORTATION (NMT)		
Pedestrian and bicycle facility guidelines, Draft 1.0, August 2003	Department of Transportation	Engineering manual to plan and design safe pedestrian and bicycle facilities Most recent South African reference
TRANSPORTATION DEMAND MANAGEMENT (TDM)		
TPG 9: Guidelines for travel demand management, 1998.	Department of Transportation, on behalf of the Committee of land transportation officials (COLTO) and coordinated by the Land transportation co-ordinating committee (LTCC)	Part of the evolutionary history of transportation planning in RSA. Some techniques and ideas still relevant.
Modelling transportation, third edition, 2005 – J de D Ortúzar & L G Willumsen	John Wiley & Sons (Ltd)	Discusses all aspects of the 4-step modelling process Any transportation modeller's handbook.
Guidelines for the transportation system management process, draft UTG 9, January 1991	Committee of urban transportation authorities	Useful overview and techniques – somewhat dated
A strategic framework for travel demand management implementation; “Potential for mobility management in the RSA – guiding principles” CSIR, 2006.	Prepared by F J J Labuschagne for the Department of Transportation	Not a recipe book. Provides general principles. Details of TDM schemes and techniques can be downloaded from Todd Litman's website
FREIGHT		

Guidelines for off-street loading facilities October 1983.	National Transportation Commission, DoT, Land Transportation Directorate	Useful material, but dated
SPATIAL PLANNING COMPONENT OF AN ITP		
Guidelines for human settlement planning & design.	Sub-chapter 5.2 Public transportation - red book and dept of housing red book revision	Useful for greenfield planning, i.e. township layouts sympathetic to the provision of public transportation in communities
Guidelines on the spatial planning component of a transportation plan, third draft, July 1998.	VKE Engineers & Plan Assoc for the Gauteng Transportation Co-ordination Committee, Working Group 2	Useful for those uninformed about town planning aspects impacting on transportation planning

Source: Department of Transportation^a, 2009: Appendix C-1

The end result of transportation planning should be that the existing transportation systems become more efficient. This would imply that the transportation cost to the economy (which in the case of South Africa is double that of the developed countries) should be reduced and people's quality of life should, concomitantly, improve.

The ITP has to identify projects and compile project proposals which specify the:

- objectives and indicators for achieving these objectives;
- project outputs, targets and locations;
- project tasks / activities, responsible agencies and timing; and
- project costs, including budget estimates and sources of finance.

(Managerial and technical transportation planning guidelines, 2009, slide31)

3.3 Spatial development instruments

Pinson (2007:1) notes that urban and regional planning instruments encompasses a set of social activities aimed at anticipating, representing and regulating the development of an urban or a regional area. It includes intellectual activities of study and prospective, of social and economic forecasting with more concrete activities such as infrastructure programming, land reservation and land use regulation. The author further postulates that planning operates at different scales: neighbourhood, city or region. Litman (2010:3) points out that:

“Planning refers to the process of deciding what to do and how to do it. Planning occurs at many levels, from day-to-day decisions made by individuals and families, to complex decisions made by businesses and governments.”

The basic purpose of the SDF, as illustrated in Figure 24, is to indicate the spatial implications of an SDF, and to lay down strategies, proposals and guidelines for the future spatial development of the area to which it relates. These include, but are not limited to, development objectives, proposals for land reform, urban renewal, reconstruction, integration, environmental planning, Transportation planning, infrastructure planning, and urban design so that the general well-being of the particular community and order in the area are promoted in the most effective manner.

The Physical Planning Act, 1991 (Act 125 of 1991) has been repealed (except for a sunset clause maintaining the old guide plans until individually replaced - the reason for this being the holding-action value that especially the nature-area and government-land designations of those plans had and still have), and national policy is being given weight through the National spatial development perspective (NSDP) and the Development Facilitation Act, 1995 (Act 67 of 1995- DFA). However, new policies and legislation reflecting the new desired strategic changes are much less fully developed.

There are also cases where national legislation has only been partially adopted in the Western Cape. For example, only the principles of the DFA have been adopted and contained in the PDA. The remainder of the PDA contains legislation that is unique to the Western Cape although it addresses issues of common national concern (Western Cape Provincial SDF, 2005, ch5:1).

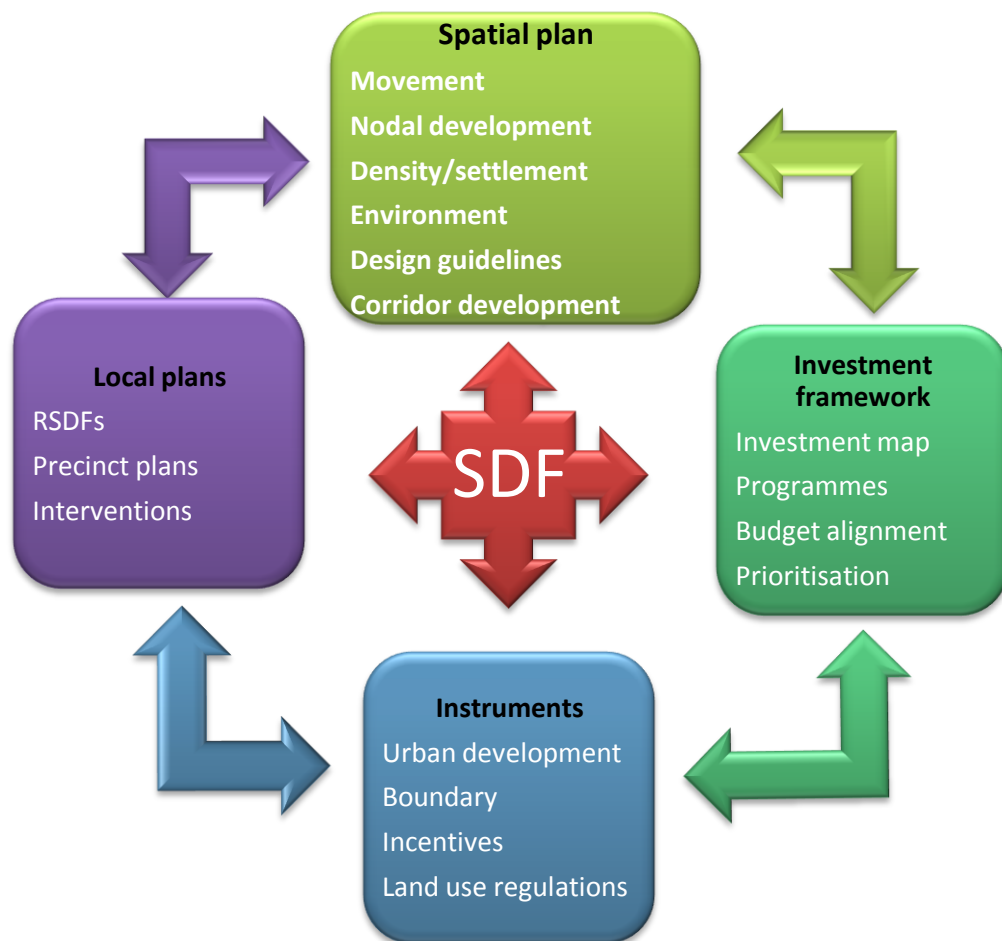


Figure 24: The spatial plan

Source: Johannesburg Budget, 2004, ch8:7

Spatial policy planning in the Western Cape is currently in a state of flux. As with many laws and the regulations governing their implementation, it reflects, in a rather untidy fashion, changes from the previous apartheid regime to the current democratic dispensation.

Three levels can be identified with respect to spatial planning, namely:

- i. Overarching policy and legislation;
- ii. Spatial development frameworks and structure plans; and
- iii. Zoning schemes.

In general, higher levels of planning policy and legislation give form to the strategic direction that development should take spatially with less emphasis on the detail of implementation, while lower levels emphasise implementation more and place far less emphasis on strategic direction.

Government's plan

The White Paper on Spatial Planning and Land Use Management (20 July 2001) states that:

The Minister of Land Affairs ...proposes to introduce new legislation to parliament that provides a:

“Uniform, effective and efficient framework for spatial planning and land use management in both urban and rural contexts. This legislation will clear up the extraordinary legislative mess inherited from apartheid in this area of governance. The most dramatic effect ...is that it will rationalise the existing the plethora of planning laws into one national system that will be applicable in each province, in order to achieve the national objective of wise land use.”

3.3.1 The Land Use Management Bill

The Land Use Management Bill

The LUMB is meant to give legislative effect to the policy objectives of the White Paper by means of:

- A uniform, effective and efficient framework for land use management (LUM);
- Repealing / aligning numerous land use management and related laws in the country management country; and
- Defining roles and responsibilities of each sphere of government in respect to LUM sphere

(NATMAP, 2008:23-23).

Objects:

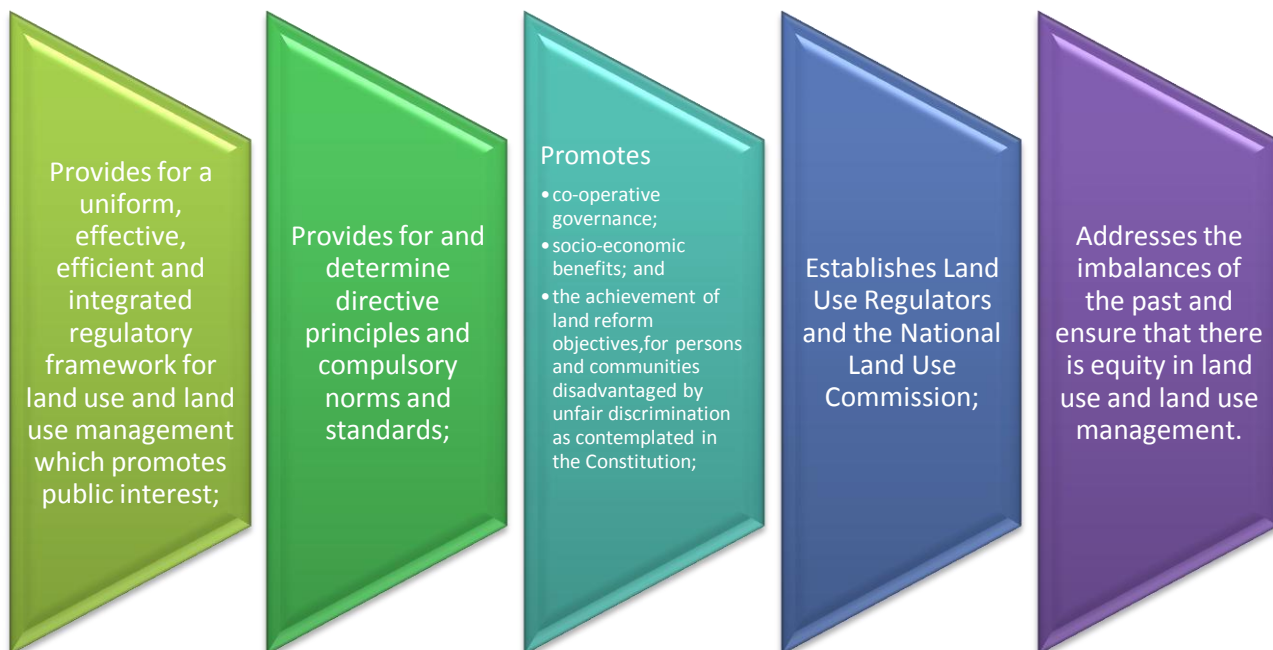


Figure 25: Objective outline as in the LUMB, 2008

Source: Land Use Management Bill, 2008:6

Alignment of land use schemes

A district municipality and the local municipalities within the area of the district municipality must align their spatial development frameworks and land use schemes in accordance with the framework for integrated development planning referred to in section 27 of the Municipal Systems Act.

A land use scheme must give effect to national spatial development perspectives, strategies for provincial growth and development, provincial frameworks for spatial development and similar instruments.

Figure 26: Alignment of land use schemes as outlined in the LUMB, 2008

Source: Land Use Management Bill, 2008:17

3.3.1.1 Implications for this study

A number of implications for the current study emerge from the above section on the Land use management Bill. These are to:

- Improve the coordinated decision-making and policy formulation;
- Promote the correction of past spatial imbalances;
- Promote the conservation of natural and built environment; and
- Promote coordination between governance.

In conclusion, the LUMB (2008) indicates the importance and need for coordination in the decision-making process that can lead to improved integration of transportation planning and land use management. In turn, this can yield socio-economic benefits and better coordination between different levels of governance.

3.3.2 National spatial development perspective

The ultimate purpose of the NSDP in the South African setting is to fundamentally reconfigure apartheid spatial relations and to implement spatial priorities in ways that meet the Constitutional imperative to provide access to basic services and economic opportunities to all, and also to alleviate poverty and inequality.

In order to contribute to the broader growth and development policy objectives of Government, to examine the spatial dimensions of social exclusion and inequality, and to lift the burden that unequal and inefficient spatial arrangements place on the state (e.g. high transport subsidies) and communities (e.g. high commuting costs), the NSDP has proposed a set of five normative principles:

- **Principle 1:** Rapid economic growth that is sustained and inclusive is a prerequisite for the achievement of other policy objectives, among which poverty alleviation is key.
- **Principle 2:** Government has a constitutional obligation to provide basic services to all citizens (e.g. water, energy, health and educational facilities) wherever they reside.
- **Principle 3:** Beyond the Constitutional obligation identified in Principle 2 above, Government spending on fixed investment should be focused on localities of economic growth and/or economic potential, in order to

gear up private-sector investment, stimulate sustainable economic activities and create long-term employment opportunities.

- **Principle 4:** Efforts to address past and current social inequalities should focus on people, not places. In localities where there are both high levels of poverty and demonstrated economic potential, this could include fixed capital investment beyond basic services to exploit the potential of those localities. In localities with low demonstrated economic potential, Government should, beyond the provision of basic services, concentrate primarily on human capital development by providing education and training, social transfers such as grants and poverty-relief programmes. It should also reduce migration costs by providing labour-market intelligence to give people better information, opportunities and capabilities, to enable them to gravitate - if they choose to - to localities that are more likely to provide sustainable employment and economic opportunities.
- **Principle 5:** In order to overcome the spatial distortions of apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or that link the main growth centres. Infrastructure investment should primarily support those localities that are likely to become major growth nodes in South Africa and the SADC region with a view to create regional gateways to the global economy.

The NSDP principles are specifically aimed at focusing Government action and investment, avoiding the so-called 'watering-can'-approach and at enabling the developmental state to achieve maximum social and economic impact within the context of limited resources (NADP, 2006:5-6).

The NSDP provides the following spatial guidelines for infrastructure investment and development:

Pg 22 **Normative principles** reads as follows: *"In order to overcome the spatial distortions of apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or linked to the main growth centres."*

Pg 25: "Government spending should not be in localities that would ultimately become 'poverty traps'. As far as possible, this investment should occur in localities that display dynamic social and economic growth (mainly in the larger urban and industrial areas, areas with tourism potential, areas with mineral potential and some technologically advanced agricultural sectors)"

Pg 35: The National Spatial Development Vision reads as follows: "South Africa will become a nation in which investment in infrastructure and development programmes support Government growth and development objectives.

Government growth and development objectives have been formulated as follows:

- Focusing economic growth and employment creation in areas where this is most effective and sustainable;
- Supporting restructuring, where feasible, to ensure greater competitiveness;
- Fostering development on the basis of local potential; and
- Ensuring that development institutions are able to provide basic needs throughout the country (Umdoni IDP. 2008-2009 Reviewed: 68-69).

3.3.2.1 Implications for this study

A number of implications for the current study emerge from the above section on the national spatial development perspective. These are to:

- develop opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres;
- ensure that activity corridors should provide sustainable economic opportunities;
- promote the provision basic services to all citizens needs to take place;
- implement and foster of development should take place on the basis of local potential;
- ensure that development institutions are able to provide basic needs throughout the country; and
- ensure that future settlements and economic development opportunities are channelled into activity corridors and nodes that are adjacent to or linked to the main growth centres.

Although this section focuses on the national perspective of spatial development, there are specific spatial implications that are salient to all three study areas. In conclusion, it is believed that the implementation of the NSDP (2006) will give rise to improved integration of transportation planning and spatial development in the metropolitan, district and local areas.

3.3.3 Western Cape Planning and Development Act, No 7 of 1999

The current research focuses on areas that are situated within the Western Cape province, which means that this Act has an influence on each of these areas. This Act is also indicative of the importance of other spatial planning instruments, namely the integrated development frameworks and sectoral plans. The Act reads as follows:

“To replace racially based planning and development legislation; to establish a system for development planning in the province and consolidate legislation in the province pertaining to provincial planning, regional planning and development and urban and rural development into one law...”

- General purpose of and special provisions regarding integrated development frameworks and sectoral plans include

1
(a) The general purpose of an integrated development framework shall be to lay down strategies, proposals and guidelines, including development objectives and implementation plans by means of development planning so that the general principles contained in Schedule IV of this Act are promoted.
(b) The general purpose of a sectoral plan, as part of an integrated development framework, shall be to lay down detailed strategies, proposals and guidelines for the specific sector, element or subject for which it is prepared.
(c) (c) The general purpose of a spatial plan, as part of an integrated development framework, shall be to indicate the spatial implications of an integrated development framework and lay down strategies, proposals and guidelines for the future spatial development of the area to which it relates (including, but not limited to, development objectives, proposals for land reform, urban renewal, reconstruction, integration, environmental planning, transport planning, infrastructural planning and urban design) so that the general principles in Schedule IV and the general well-being of the particular community and orderly planning of the area are promoted in the most effective manner.
2
The authorisation regarding decision-making on rezoning by a council in accordance with

the development guidelines included in a structure plan, shall lapse on the date of commencement of this Act.
3
An integrated development framework or sectoral plan shall not confer or take away any right in respect of land except to the extent that subsections (4) and (6) may require further approvals for development.
4
(a) When approving an integrated development framework in terms of section 4(6)(b), the Provincial Minister may, in consultation with other provincial ministers and municipalities concerned, prescribe specific measures only applicable to that integrated development framework with regard to provincial or regional interest, including measures which require approvals by a particular authority prescribed in terms of this Act or any other law to be consistent with the integrated development framework or which require further approvals by a particular authority for a specified type of development. (b) When approving a sectoral plan in terms of section 4(10), a council may- (i) prescribe specific measures applicable to a sectoral plan that determines the consistency of development proposals or other plans drafted at a lower level with the sectoral plan with due regard to aspects of national, provincial or regional interest, and (ii) determine the manner in which the sectoral plan is to be implemented.
5
The measures as prescribed in terms of subsection (4) or (6) shall bind the state, unless the Provincial Minister exempts the State from it in a particular case or category of cases, subject to the conditions imposed by the Provincial Minister.
6
The Provincial Minister may make regulations and issue guidelines with a view to attaining any objective of this Chapter, including regulations and guidelines relating to: (a) the contents and manner of preparation, review or amendment of integrated development frameworks; (b) the manner in which and stages at which interested and affected parties should participate in the process; (c) the obligation of municipalities to draft integrated development frameworks or sectoral plans within prescribed periods, and (d) measures that require further approvals by a particular authority for a specified type of development or measures regarding the consistency of development approvals with an approved plan.

(WCPDA, 1999,:14-16)

3.3.3.1 Implications for this study

A number of implications for the current study emerge from the above section on the Western Cape Planning and Development Act, No7 of 1999. These are to:

- Promote the indication of the spatial implications to further orderly planning
- Promote integrated development frameworks with other spatial development as well as transportation planning
- Implement sectoral plans to lay down detailed strategies, proposals and guidelines for the specific sector, element or subject for which it is prepared

In conclusion, the use of sectoral plans that are inclusive within the integrated development frameworks will help to achieve proper integration of transportation and spatial developments and will also assist towards improvement of future planning projects.

3.3.4 Guide plans and structure plans

The guide plans of the Western Cape Province SDF remain the only statutorily approved plans in the province, apart from a small number of structural plans.

In many instances, development continues to be guided by provisions in documents approved under the former Physical Planning Act, 1967 (Act 88 of 1967). An example of this is the fact that the guide plans are still in place, notwithstanding their roots in the apartheid era.

There have been a number of initiatives aimed at replacing these guide plans, but these have not yet been approved for various reasons. For example, some district municipalities have produced spatial development frameworks but these have remained at the level of guidelines as they do not have statutory force. As a consequence, such frameworks tend to be used expediently; they referred to when their provisions are supportive of a development proposal, but dismissed as unapproved when they do not. This situation continues with structure plans approved under sections 4(6) and 4 (10) of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985 - LUPO) where the intention has been to replace these with spatial development frameworks (SDFs) as part of integrated development plans (IDP's) and approved in terms of the Municipal Systems Act, 2000 (Act 32 of 2000 - MSA). However, at the time of writing, if they are separated from the IDP process and statutory status is required, these plans must be approved in terms of LUPO (Western Cape Provincial SDF, 2005, ch5:1, 2).

Another example of a useful guide plan is NATMAP 2050. This plan was discussed in the transportation section of 3.2.4 in this chapter and the implications thereof were pointed out.

3.3.4.1 Land Use Planning Ordinance, 1985

The most detailed level of planning guidance occurs with zoning schemes that are promulgated in terms of LUPO. This is where real rights are conferred that impact significantly on the value of properties as a result of it stipulating the activities that are allowed on them. In many instances, zoning schemes reflect an outdated vision of how settlements should develop; these ideas are rooted in the late 1940s and early 1950s. For example, the city of Cape Town zoning scheme was first promulgated in 1948. This vision has become increasingly redundant as problems associated with modernist thinking are reflected in the isolated pavilion approach to urban form (one building sited in the middle of the plot); also, the unconstrained use of the motor car and the sensitivity towards environmental and heritage factors have come to the fore as pressing aspects in more recent thinking.

LUPO did make an effort to address this contradiction through section 14(2)(a) (zoning rights revert to the current use) but this clause has never been enacted. There are currently a number of municipalities in the process of rationalising their zoning schemes - including the city of Cape Town. The province has also produced a set of model scheme regulations for use by municipalities should they require them. These generally do not attempt to rationalise or impact existing rights, but rather to standardise different designations for the same use. Where possible, these scheme revisions also set out to address current issues that have become apparent since the original zoning schemes were promulgated, particularly with respect to the environment and heritage (Western Cape Provincial SDF, 2005, ch5:2).

3.3.4.2 Implications for this study

A number of implications for the current study emerge from the above section on the Land use planning ordinance, 1985. These are to:

- contain growth in terms of private vehicle travel through better zoning;
- promote conservation of the environment; and
- promote attempts to address apartheid-based development issues.

In conclusion, it has been shown that through the use and implementation of guiding plans and zoning schemes, many of the current transportation and development integration problems can be addressed as a future solution.

The SDF is also guided by policy documents and legislation providing spatial strategic guidelines to include, amongst others:

- The National Spatial Development Perspective;
- The Development Facilitation Act (DFA);
- The Housing Act and White Paper;
- The National Environment Management Act (NEMA);
- The White Paper on South Africa Land Policy;
- The Green Paper on Development and Planning; and
- The Provincial Growth and Development Strategy.

3.3.5 The Provincial Growth and Development Strategy

Municipal planning should obviously be guided by planning initiatives undertaken by higher order spheres of government. Previous IDP's made reference to the Provincial Growth and Development Strategy which was approved by the Provincial Cabinet in July 1996. It has been reviewed and is set out in a document entitled "*Provincial Growth and Development Strategy Summit 2004*". It provides strategic guidance in order to release economic growth and ensure sustainability. It consists of five programmes, some of which contain elements relevant to the SDF.

Programme 1: Good governance requires the preparation of municipal spatial development frameworks and the implementation of municipal land use managements systems. It emphasises the need for inter-governmental co-ordination and co-operation, particularly with regard to service delivery to avoid duplication. It advocates the use of a GIS system for capture of data, and the use of e-Governance (websites) as a way of bringing government service to the people of the province.

Programme 2: Competitive investment provides strategies for industrial development identifying the need to consolidate, develop and diversify the province's manufacturing and agricultural bases and the need to develop a sustainable and competitive tourism industry.

Programme 3: Local economic development is concerned with support of local business. Areas where these can be promoted need to be identified.

Programme 4: Sustainable communities include the provision of appropriate and sustainable housing. It is envisaged that all slums should be cleared within the next six years. Land reform and development processes therefore need to be expedited.

Cross-cutting strategies of a spatial nature include **Environmental management** and **Integration** with surrounding local authorities and the district municipality frameworks (Umdoni IDP, 2008-2009 Reviewed: 69).

An SDF informs investors where development opportunities exist in the short and longer term. It will offer predictability, because once it has been approved, it will constitute the basis on which city officials decide on new development proposals (City of Cape Town^a, 2009: 1)

3.3.5.1 Implications for this study

A number of implications for the current study emerge from the above section on the Provincial growth and development strategy. These are:

- improvement of environmental management;
- integration with local authorities and district municipality frameworks;
- implementing sustainable communities; and
- promoting competitive investment.

In conclusion, these implications promote competitiveness between investors that will, in turn, improve the level of investment in development and improved transportation planning. This cycle will lead to the improvement in integration between local authorities that will lead to the improved integration between spatial development instruments and transportation planning.

3.3.6 Spatial development principles

The following principles underpin national legislation (particularly the Development Facilitation Act/DFA) and international and national best practice for successful city planning and management. They should be used to guide future development:

- The city should work to accommodate all, especially children, the elderly and disabled.
- The public good should prevail over the private good.
- All residents should have equal protection and benefits, and no unfair discrimination should be allowed.
- One should work in harmony with nature; this means that one should aim to reduce the city's ecological footprint; and introduce sustainable disaster risk reduction measures.
- One should adopt a precautionary approach to the use of resources; this means one should switch to sustainable patterns of resource use and mitigate against negative development impacts.
- One should encourage local, national and international connectivity.
- One needs to improve urban efficiency, and align planned growth with infrastructure provision.
- One should offer maximum access to the city's opportunities, resources and amenities, and redress spatial imbalances in this regard as far as possible.
- Also, one must be responsive to the basic needs of communities by providing a stronger link between regulatory processes (zoning schemes) and spatial plans and policies.
- One should aim to create safe, high-quality living environments that accommodate a range of living environments and lifestyles, and offer a vibrant mix of land uses.
- Finally, one should promote cross-sectoral planning, budgeting and growth management approaches.

(Cape Town Spatial Development Framework, 2009:3)

3.3.6.1 Implications for this study

A number of implications for the current study emerge from the above section on the spatial development principals. These are to:

- Promote the predominance of public good over private good;
- Implement the harmonious work with nature to reduce the cities ecological footprint;

- Promote cross-sectoral planning, budgeting and growth management approaches; and
- Create safe, high-quality living environments that accommodate a range of living environments and lifestyles, and offer a vibrant mix of land uses.

3.3.7 Strategic spatial elements

The spatial plan is based on seven strategies that address a more sustainable urban environment with inherent savings as a result of greater efficiencies. Although these aspects are presented here in separate sections, they are inter-related and impact on one another. The elements are:

- The movement system;
- Nodal development;
- Sustainable neighbourhood development/densities; and
- Environmental management

(RSDF, 2003:38)

The first two elements are all that will be discussed within this study.

• The movement system

The SDF has a range of policy guidelines developed to support the city's current and future transportation needs. An integrated transportation plan (ITP) is being developed for the city that will consider a much wider base of transportation issues in detail.

An effective movement system can:

- Support public transportation;
- Promote accessibility of communities to employment, recreation and social opportunities;
- Promote protection of mobility function of major arterials and roads; and
- Ensure that the movement system directly links with, and is supported by, strong high-intensity nodes and higher density residential development.

The movement system is regarded as one of the key structuring elements within the urban area. Cities are, to a large extent, “movement economies” and the efficiency of the urban system is, therefore, directly related to the efficiency of the movement system. Three main strategic issues are at the core of the strategy:

- Changing from a predominantly private vehicle transportation system to an appropriate public transportation system over the long term;
- Ensuring that the mobility function of major roads is retained and enhanced; and
- Ensuring that the movement system links directly with, and is supported by, strong high intensity mixed-use nodes and higher residential densities

(RSDF, 2003:38).

The above-mentioned movement systems are further illustrated in Table 11 where movement systems, their developing components, land use and its function and design are shown.

Table 11: Movement systems

Development component	Land use	Function and design
MOBILITY SPINES A mobility spine is an arterial structure along which through traffic flows with minimum interruption (optimal mobility), whilst development abutting the spine is in terms of specific policy criteria relating to the type of land use to be accommodated and to level of access. Mobility spines can be sub-classified into higher or lower order roads. The shift from one order to the other will depend on the intensity of activity and subsequently the need for the provision of more or less accesses.	Nodal development Higher density residential	• Mainly for inter regional mobility • Standard of vehicle intersection spacing tends to be lower • No direct access • Access from side roads or service roads • Consider pedestrian movement and public transportation services. • Provision of pavements for pedestrians • Restrictions on frontage access—controlled access • Provide public transportation facilities • Ensure pedestrian access
MOBILITY ROADS A mobility road carries mainly intra-regional traffic, i.e. traffic of a local nature. The focus here is on mobility along the route. It is of a lower order than a mobility spine. It often connects mobility spines or neighbourhood nodes.	Local nodal development Higher density residential	Shorter distance distribution • Link between the urban main road system and neighbourhoods • Limited direct access • Ensure pedestrian access • Provide public transportation facilities • It has a collector function • On-site parking must be provided • Provision of pavements for pedestrians
ACTIVITY STREET An activity street is a local street where access to the activity along the street is of paramount importance. Mobility is compromised in favour of the activity.	Residential Business Retail All uses to be of a local and fine grain nature	• Accommodate pedestrian intensive uses • High level of (direct) access • Speed calming • Provide public transportation facilities • Activity preferably one block/erf deep
LOCAL RESIDENTIAL STREET A residential street is a local road that serves primarily local traffic accessing the served area.	Residential uses Low intensity non-residential uses, as per	• Provides direct access to residential property • Facilitates mixed traffic within neighbourhoods safely and at low speed

	sub-area tables	• Provision of pavements for pedestrians • Feeds into arterial road
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Source: RSDF, 2003:39

From the above mentioned movement systems it can be seen how the special elements of the SDF achieve integration with the integrated transport plans within the urban context. Thus the movement systems could be seen to address some of the transportation problems in the future.

3.3.8 Provincial issues pertaining to spatial planning

- Duplication of planning and environmental legislation that delay development is a problem in that it protracts applications and duplicates procedures;
- The need to lodge three appeals through the Environmental Conservation Act, 1989 (Act 73 of 1989), the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985) and the Municipal Systems Act, 2000 (Act 32 of 2000) often causes lengthy and unnecessary delays in the processing of development applications;
- The regulations promulgated in the National Heritage Resources Act, 1999 (Act 25 of 1999) make it obligatory for almost all applications to obtain heritage authorisation. These problems experienced with regulations are exacerbated by the fact that the provincial authority is understaffed, which causes major delays in the processing of development applications;
- The need to consolidate and integrate different zoning schemes to facilitate certainty when making development choices;
- Lack of character and sense of place that characterise newer developments; this leads to sterile and even hostile environments;
- Lack of political will to ensure urban integration and densification; and
- Control is required for areas with the greatest potential for urban settlement and management is required for stagnating and declining areas (DEA&DP 2003) (Western Cape Provincial SDF, 2005, ch5:9).

3.4 Nodal and corridor development

The Constitution of the Republic of South Africa provides for three spheres of government, namely national, provincial and local, each of which is granted a set of powers and functions. In broad terms:

- *National government* is responsible for policy formulation, the setting of national standards, the establishment and funding of delivery programmes;
- *Provincial government* is responsible for delivering province-wide services and the monitoring and regulation of municipal planning and implementation processes and the building of local capacity; and
- *Local government* is responsible for the promotion of social and economic development through integrated development planning, local economic development and needs-driven infrastructure provision.

In addition to these powers and functions, each of the spheres has certain legislative competencies. In some cases, these competencies are the domain of a particular sphere only, while in others the national and provincial spheres have concurrent powers. A summary of the competencies of each sphere with specific relevance to corridor planning and development is provided in Table 12

(Integrated urban corridor assessment and strategy development, 2001, ch4:43).

Table 12: Summary of legislative competence of the three spheres of government with regards to the planning, financing and development of corridors

Sphere of government	Legislative competence
National	Concurrent legislative competence with provincial governments over: • Airports other than international and national airports; • Housing; • Industrial promotion; • Environment; • Public transportation; • Public works only in respect of the needs of provincial government departments In the discharge of their responsibilities to administer functions specifically assigned to them in terms of the Constitution or any other law; • Regional planning and development; • Road traffic regulation; • Tourism; • Trade and trading regulations; • Urban and rural development; • Welfare services; • Building regulations; • Municipal airports; • Municipal planning; • Municipal public works only in respect of the needs of municipalities in the discharge of their responsibilities to administer functions specifically assigned to them under the Constitution or any other law; and • Municipal public transportation.
Provincial	Concurrent legislative competence with the national government over the areas as specified above. Exclusive legislative competence over: • Provincial planning; • Provincial roads and traffic; • Municipal roads; • Street trading; • Street lighting; • Traffic and parking; • Markets
Local	The making of by-laws with regard to the following: • Building regulations; • Local tourism;

	• Municipal airports; • Municipal planning; • Municipal public transportation; • Municipal public works only in respect of the needs of municipalities in the discharge of their responsibilities to administer functions specifically assigned to them under the Constitution or any other law; • Trading regulations; • Markets; • Municipal roads; • Street trading; • Street lighting; and • Traffic and parking.
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Source: Integrated urban corridor assessment and strategy development, 2001, ch4:44-45

While it is true that the spheres have distinct powers and functions, it does not follow that they are independent entities that can pursue their own agendas without considering or consulting the other spheres. In terms of the Constitutional requirement of "cooperative government", the three spheres must co-operate with each other and jointly pursue objectives that will improve the well-being of all the people of the country. This of course also goes for the planning, financing and development of urban corridors that have the improvement of the wellbeing of the residents of urban areas in mind.

The task roles of the three respective spheres would, of course, differ in the case of urban corridors. For instance, national and provincial would primarily be responsible for promulgating the laws and policies that would facilitate the development of corridors, while the local sphere would use these laws and policies to do the actual corridor planning and development. In addition to that, the provincial sphere would also be responsible for the monitoring of corridor projects that effect more than one municipality. As far as financing is concerned, this would in most cases come from all three spheres of government, with the functional type (e.g. road construction, special housing subsidy or export incentives) and the scale of the required expenditure/intervention determining the specific involvement of each sphere.

A substantial number of national acts, policies and strategies are discussed under sectoral headings. The following executive summary table (Table 13) captures the key elements of relevance to corridor projects contained in each of these frameworks/documents (Integrated urban corridor assessment and strategy development, 2001, ch4:43, 44, 45).

Table 13: Summary of natural laws, policies and strategies that propose regulate and/or support corridor initiatives

Name of Act, policy or strategy	Relevance for corridor projects			
	Proposes and/or supports corridor projects	Regulates corridor project	Sets out principles or guidelines to be adhered to in corridor planning and implementation	Prescribes plan or framework In which corridor projects have to be included
Overarching/multi-sectoral				
Reconstruction and Development Programme, 1994	X		X	
Growth, Employment And Redistribution Strategy (GEAR), 1996			X	
Transportation				
White Paper on Transportation Policy, 1996	X		X	
Moving South Africa, 1997-1999	X		X	
National Land Transportation Transition Act, 2000	X	X	X	X
Spatial development and land				
Development Facilitation Act, 1995	X	X	X	X
Urban Development Framework, 1997 (2009)	X		X	
White Paper on South African Land Reform, 1997			X	
Green paper on Development and Planning, 1999	X		X	
Draft White Paper on Spatial Planning and Land Use Management, 2011			X	
Land Use Bill, 2008		X	X	X
Local government				

Local Government Laws Amendment Act, 2008.	X	X	X	X
White Paper on Local Government, 1998	X		X	
Municipal Systems Act, 2000	X	X	X	X
Environment and tourism				
Amendment Environmental Conservation Act, 2003	X	X	X	
White Paper on the Development and Promotion of Tourism, 1996			X	
White Paper on the Conservation and Sustainable use of South Africa's Biological Diversity, 1997	X		X	
Amendment National Environmental Management Act, 2008	X		X	
Housing				
National Housing Act, 1997 / Social Housing Act, 2008	X		X	
Water				
White Paper on Water Supply and Sanitation, 1994			X	
White Paper on a National Water Policy for South Africa, 1997			X	
Water service Amendment Act 2004			X	
Energy				
Draft White Paper on the Energy Policy of the RSA, 1998			X	
Public works				

White Paper Public Works into the 21 st Century, 1997			X	
Trade and industry				
Integrated Small Business Strategy, 2003			X	
Spatial Development initiatives			X	X
Industrial Development Zones			X	

Source: Integrated urban corridor assessment and strategy development, 2001, ch4: 46, (edited by the author, 2011)

The above table shows strategies, policies, and laws and illustrates the relevance for corridors within proposing and/or supporting corridor projects, regulating corridor projects, sets out principles or guidelines to be adhered to in corridor planning and implementation, and prescribes plans or frameworks in which corridor projects have to be included. Within most of the sectors the laws and policies focus on the setting out of principles/guidelines in corridor planning, and also on the proposition/support of corridor projects.

In conclusion, these laws and policies promote the implementation of corridor development through spatial development instruments and transportation plans that, in turn, work towards enhanced integration of development and transportation.

3.4.1 Municipal: plans/frameworks

Corridor proposals need to be part of the integrated development plans (IDPs)/land development objectives (LDO's) of municipalities if they are to receive any budget from this sphere of government. The corridor proposals constitute one component of an IDP of which a corridor forms part, and which will play a major [re]structuring function in the spatial development framework. In addition to this, and in accordance with the National Land Transportation Transition Act, 2000, the transportation planning components of a corridor proposal need to be included in an IDP. It is important to note that this should not suggest that a corridor proposal be developed by a small group of technocrats and then given the veneer of public approval by "slotting" it into an IDP. Both the corridor proposal and the IDP must be prepared with maximum stakeholder involvement. The corridor proposal must also be part of a broader debate on spatial form and urban restructuring which is an essential part of an IDP. (Integrated urban corridor assessment and strategy development, 2001, ch4:76).

3.4.2 Nodal development

The objective of the nodal policy is to ensure that the urban structure is sufficiently robust to allow these urban opportunity areas to adapt to market and demographic changes (see Appendix A).

Nodal management serves to:

- Ensure the clustering of various activities at appropriate locations;
- Support viable public transportation;
- Create opportunities for people to manufacture, trade and provide services (e.g. establishment of markets);
- Maximise opportunities and diversity at accessible points;
- Support inner city focus;
- Combat / manage investment leakage and degradation of nodes; and
- Ensure that re-investment, rather than flight to a 'new' node serving the same or similar purpose, occurs (RSDF, 2003:40)

3.4.3 Implications for this study

A number of implications for the current study emerge from the above section on nodal development. These are:

- Responsible for making the laws and policies that would facilitate the development of corridors;
- Monitoring of corridor projects that effect more than one municipality;
- The use of laws and policies to do the actual corridor planning and development;
- Promote the building of local capacity; and
- The promotion of social and economic development through integrated development planning, local economic development and needs-driven infrastructure provision.

In conclusion, the laws and policies that facilitate corridor and nodal development as seen in the section above, make up part of the current spatial development instruments and transportation plans that in turn (through the implementation of corridor and nodal development) promote the integration of development and transportation. Nodal and corridor development plans and strategies can address many of the problems found in this integration.

3.5 Conclusion

The legislation frameworks and policies have been explored in this chapter and the implications of each of them for this study have been identified. In Table 14 below, the implications of each policy and legislation category have been put together.

3.5.1 Main results of the legislation and policy review process

The table is divided into three categories:

- i. Transportation planning
- ii. Spatial development, and
- iii. Node and corridor development

The table below presents the results of this process together with the implications of what these policies and legislation hope to achieve once they are implemented properly.

Table 14: Summary of policy and legislative implications for this study

Policy category	Implications for this study:
Transportation planning	- Will reduce existing inequalities in access to opportunity through the use of both transport and spatial development policy instruments - Could contain growth in private vehicle travel - Will encourage the provision of viable and affordable public transportation services - Will encourage the establishment of multimodal transportation services in marginalised areas - Will promote growth and stability in the public transport industry - Will maximise energy conservation and minimise ecological impacts to achieving environmental sustainability - Land transportation planning must be integrated with the land development and land use planning processes - An intermodal planning committee must be established in order

	to co-ordinate public transportation between nodes – Intergovernmental co-ordination between municipalities will lead towards integrated decision-making and contribute towards better integrated planning decisions – Integrated transport service delivery must be achieved across functions such as planning, operations, regulation, infrastructure, marketing and monitoring in the local sphere – Integrated and balanced transport service delivery across all modes of transport (public, private and non-motorised) needs to be achieved at the local sphere – Local accountability and meeting local land transport needs – Improved use of resources and funding in the local sphere – Improved transport service delivery for commuters/ customers in the local sphere – Promotion of the use of integrated transportation planning and corridor development – Promotion of the use of a integration of multi-modal infrastructure and co-ordination between transportation services – Promotion of a dynamic, long-term and sustainable land use/multi-modal transportation systems framework – Improves integration of public transportation between modes in an area – Co-ordination with development-orientated transportation – Will promote the integration/incorporation with provincial and municipal SDFs – Will improve seamless travel between origin and destination – Enhancement of effective functioning of cities, towns and rural areas – Will enhance accessibility to public transportation for persons with disabilities – Will maintain the adverse impacts transportation has on the environment – Consultation with persons of interest and affected parties – Will ensure integration between transportation and spatial development instruments – Could reduce existing inequalities in access to opportunity through the land use of both transport and spatial development policy instruments – Could contain growth in private vehicle travel – Will encourage the provision of viable and affordable public transportation services – Could encourage the establishment of multimodal transportation services in marginalised areas – May promote growth and stability in the public transport industry – Will maximise energy conservation and minimise ecological impacts to achieving environmental sustainability
Spatial development	– Improves the coordinated decision-making and policy

	formulation – Promotes the correction of past spatial imbalances – Promotes the conservation of natural and built environment – Promotes coordination between governance – Development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres – Activity corridors provide sustainable economic opportunities – Promotion of the provision basic services to all citizens – Implements fostering development on the basis of local potential – Ensures that development institutions are able to provide basic needs throughout the country – The implementation of future settlement and economic development opportunities channelled into activity corridors and nodes that are adjacent to or linked to the main growth centres – Promotes the indication of the spatial implications to further orderly planning – Promotion of integrated development frameworks with other spatial development as well as transportation planning – Sectoral plan implementation to lay down detailed strategies, proposals and guidelines for the specific sector, element or subject for which it is prepared – Contains growth in private vehicle travel through better zoning – Promotes the conservation of the environment – Promotes the attempt to address the apartheid's development issues – Improvement of environmental management – Integration with local authorities and district municipality frameworks – Implementation of sustainable communities – Promotes competitive investment – Promotes the predominance of public good over private good – Implements the harmonious work with nature to reduce the cities ecological footprint – Promotes cross-sectoral planning, budgeting and growth management approaches – Creates safe, high-quality living environments that accommodate a range of living environments and lifestyles, and offer a vibrant mix of land uses
Node and corridor development	– Responsible for making the laws and policies that would facilitate the development of corridors – Monitoring of corridor projects that effect more than one municipality – These laws and policies can be used when doing the actual corridor planning and development – Promoting the building of local capacity – Promotion of social and economic development through integrated development planning, local economic development

Source: Own construction, 2011

3.5.2 Discussion of the conclusions

In light of the three categories within which the policies as set out above were discussed, one can conclude that there are many guidelines that support the foundation for this study. However, in some areas there is a lack of guidelines to fully support the needs of this study.

The following guidelines/requirements have been developed and should be addressed with a view to achieve proper integration between transportation and development planning in future:

- Promotion of equity in public transportation and development;
- Promotion of corridor development and densification;
- Promotion of integration between different spheres of Government;
- Improving the accessibility and efficiency of the communities by the means of appropriate investment in the infrastructure of DoT;
- Supporting and promoting innovations in transportation;
- Promoting integration between areas within a metropolitan municipality;
- Promotion of environmental sustainability;
- Promoting sustainable integrated transportation modes; and
- Promotion of densification management in order to curb uncontrolled urban expansion (urban sprawl).

It is a legal requirement according to the legislation and policies of South Africa that integrated transportation and spatial development planning should be integrated.

The next chapter presents the empirical study of the integrated transportation plans and spatial development frameworks of each of the municipalities.