# CHALLENGES OF TRANSPORT PLANNING AND SPATIAL DEVELOPMENT IN THE EASTER CAPE PROVINCE

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#### INTRODUCTION

Whilst there is a perception that the people's Government of South Africa, in 1994 inherited the best transportation systems in Africa, the realities (especially in the former homelands areas) indicate extreme disparities between the former RSA white man's enclaves and areas predominantly occupied by historically disadvantaged individuals. The current Government also and inadvertently inherited irritating transportation planning, management, and operational problems. Nowhere in the new South Africa, are the legacies of transportation systems underdevelopment during apartheid more pronounced than in the Province of the Eastern Cape. Seven years after the democratic elections there is still a rupturing backlog of unsurfaced roads in very poor conditions. A field trip in the Province will bring you face to face with budding symptoms of deterioration and mismanagement that are threatening to cripple existing infrastructure facilities and rolling stock just like in other Africa countries, which got independence many years before South Africa.

Politically, the Province of the Eastern Cape is unique because it is probably the only province, which is now composed of two adjoining former homelands, and a part of the former apartheid South Africa. Consequently there is an immense pressure on the politicians to deliver essential public services in all areas of the province. The Executive Council of the Province is facing increasing demand for public services like education, housing, health, employment, public transport, and food. All these services are competing for decreasing financial resources.

Given a background of increasing demographic/spatial demands versus decreasing financial resources, there is a creeping turbulent environment in which planning, management, and functional performance of various transportation systems in the province, especially in the major urban areas, are going to be stretched beyond elasticity points. In other words, the Provincial transportation systems face a gloomy future unless cost effective remedial measures are urgently undertaken to reverse the deterioration trends back to 1994 base year standards. Easier said than done. Why can't the Province first priority be to maximise utilisation of existing facilities before embarking on grandiose capital intensive projects?

At the moment, the planning process is muddling through national legislation policies. Since 1994 several legislations, and policies have been promulgated by the National Department of Transport and imposed upon the Province to implement. Whilst one can live with the national legislation promulgated so far, the national policies/requirements/guidelines have raised more questions than answers in the Eastern Cape Province. First of all, the National Transport Policy white paper/TPG's/TPR's have tend to over specify most of the key performance indicators e.g. the 80/20 (public transport

vs. private car work trips) modal split goal. Secondly, the entire transportation planning process in South Africa has preoccupied itself with the supply dimensions without addressing the demand dimensions of transport planning process. How does one promulgate qualitative supply legislation/policies without having quantified demand for the services? This paper will briefly examine two simple planning principles; quantity vs. quality controls; and demand vs. supply. Thus should the Provincial Government be preoccupied with quantity or quality transportation policies? Furthermore, is up-to-date and accurate demand data available for the Provincial Department of Transport to understand travel demands even at an aggregate scale?

Combined institutional problems present the biggest challenge to transportation planning in the Province. Although there exists a provincial policy white paper, land use/transportation planning process in the Eastern Cape is characterised by a lack of clear and demand responsive policies; legislated fragmentation of responsibilities for developmental planning, management, operation, and regulation amongst different government departments and agencies. Above all, there is now a growing lack of enforcement emanating from institutional deficiencies and inefficiencies. Local authorities, responsible for provision, operation and maintenance of transport infrastructure facilities have fallen or are falling behind their capital and recurrent expenditure programmes for; constructing new roads or links in the road networks; road sand junctions improvements; maintenance; road safety; and public transport services.

In the conclusion, it is stated that there is readily available prescription for the land use/transportation planning problems of the Eastern Cape. It is argued that there is an urgent need to review promulgated policies and realign them to the realities in terms of the identified shortcomings; and the new directions, which should be followed to overcome these challenges. Thus the land use/transportation planning task should become one of defining and evaluating sequences of project activities through time in accordance with the achievement of demand vs supply specified policy parameters. It is further concluded that national policies should take cognisance of geographical problems and socio-economic differences in order to bridge inherited gaps.

#### THE LAND USE-TRANSPORT PLANNING CHALLENGES

Many of the problems experienced in the Eastern Cape are complex and not altogether obvious. There is a wide divergence of opinion on how to overcome transportation problems given the diminishing financial resources.

Whilst politicians have political solutions to planning problems, and planners are preoccupied with transport planning models, there seems to be no solutions to the rugged and imposing physical features in the province. Transportation planning in the Province is compounded by poor planning between transportation demands and settlements sprawls-planned and unplanned land uses. Inherited and continued shortage of qualified, experienced, and skilled manpower continues to adversely hamper the required institutional capacities to undertake analytical transportation planning.

Transportation planning, as a professional discipline or activity, can be justified to the community only if problems and solutions are considered in a rigorous way, including a detailed analysis of all relevant parameters. This part of the paper briefly examines the above challenges and their impacts on the fundamentals of transport planning. It further proposed that there is a need to understand how a comprehensive and cost effective land use/transportation planning is a prerequisite to the socio-economic development of the Province.

## Political challenges-legacies and transformation

Nowhere in the new South Africa, are the apartheid legacies more pronounced than in the Province of the Eastern Cape. Its composition of; two former homelands of Ciskei and Transkei; and parts of the apartheid South Africa provide extreme political disparities between the white man's enclaves and the predominantly rural settlements of poor black people.

The 1994 democratic elections fuelled the rural urban migration as the historically disadvantaged individuals moved to the urban areas in search of employment and a higher quality of life. This rural urban migration has inadvertently created untold strain on the urban areas' public services.

At the same time the politicians have been placed under increasing pressure to deliver on their pre-democracy promises. In order to deliver, politicians in the Eastern Cape are increasingly advocating for equitable use of the land, access to economic markets, and community participation in transportation issues to ensure socio-economic development. Consequently, the current mood of political and technical concerns over uncontrolled urban development and purely reactive transportation planning along with demands for open and community participatory decision-making have combined to strain the normal planning process beyond its technical tolerance. Recent municipal boundaries demarcation process has aggravated political pressure on the need to maximise land use and other existing and available resources in various urban and rural areas.

The problem of choice among synoptic regional plans has increasingly become a matter of concern to transportation planners in the province; and occasionally it is accepted as a challenge without solutions in sight. The more aggressive, strategic intervention into various land use activities that the politicians are seeking calls for a higher level of both analytical knowledge and decision making wisdom than the current planners in the Province of the Eastern Cape are accustomed to deliver. In the frustrating struggle with political challenges, there is a hidden tendency for transport planners to simply dump some developmental projects on the communities and their political representatives on the assumption that the elected council member and the community at large will come up with demand responsive and cost effective solutions. To this effect, the involvement of the community reflects a desire to open up the planning process, strip it of its mysticism and encourage greater community participation, although in reality this political approach represents a deliberate abandonment of data organisation, analysis, and evaluation. It also detracts planners not only from good planning but also from any productive results that a more open process of government is capable of achieving.

Some of the problems experienced in the increased community participation approach can be readily identified even if their resolutions are not clear. The simplest approach of addressing problems in the Eastern Cape is to politicise the inherited apartheid ills. The difficult part is to find and own the solutions.

Because the problem of choice is itself inherently complicated, there is no simple resolution. However, a start can be made if planners and model builders in the Eastern Cape would recognise that individuals and political bodies will continue to operate through vague goals and pre-emptory policy decisions, and that a strong case can be made for the efficiency of this approach. Planners must, therefore, accept and interpret the new South Africa political activities and then organise technical studies and solutions in a manner that most efficiently uses the information on values and goals that comes from political

activities, while providing to the public cost effective planning alternative solutions to the existing environment of nation building. To attempt otherwise, to mold the political decisions to technical needs is dangerous; and may lead to reverse roles where politicians are doing planning while the planners are doing the politics.

## **Physical features**

There is a tourist saying that God must have gone off duty on Saturday before completing stone crushing in the Eastern Cape because of the unique rugged physical features synonymous with the Eastern Cape sight line. Horizontal alignments have sharp and dangerous curves. Vertical alignments have very steep gradients. As a result it is a nightmare to plan or establish route alignments to various population centroids especially those located in inaccessible valleys and mountains. A classic example is the kilometers difference between the 230kms N2 Road from East London to Umtata and the 358km of a contour built and winding railway line completed in 1906. Attempts to revitalise the line for high-speed railway service are underway but still one has to overcome sharp corners and steep gradients. Vertical alignment of the railway line within the Kei cutting drops by approximately 400-460 meters within a distance of 22kms along the horizontal alignment from Komga to the Kei Rive Bridge, and a drop of 580 meters within a distance of 30kms from Ndabakazi to the Kei river railway bridge.



Physical features and ruggedness provide formidable challenges

#### Land use

The land use pattern in the Eastern Cape is relatively easy to describe at a general level but difficult to describe in detail. Those activities, which have the most influence on the pattern of land use, include agriculture in all its forms, extensive grazing, forestry, and tourism (currently in embryo stages). Other important activities, although not requiring such large areas of land, include urban activities and fishing. Whilst extensive commercial farming is not evident in the province, local historians have been noted to suggest that the Eastern Cape used to grow pineapples for both domestic consumption and the export market.

However, nobody is willing to tell you what went wrong to make the province highly dependent on food importation from other parts of the country.

According to the Statistics South Africa (Stats in brief 2000) there were approximately 6,7million people living in the Province of the Eastern Cape. The Province is sparsely populated with approximately 60% of the population living in the rural areas. Because of the sparse population distribution, provision of transportation facilities is justified on accessibility and administration goals rather than on demographic demands.



What went wrong in food production in the province?

Whilst there are notable signs of formal land use planning in the former CPA, unplanned settlements are on a rapid increase in the former homelands of Transkei and Ciskei. Unplanned settlements place unsolicited demand on transportation planning. This is compounded by planning legislation and legal jurisdiction overlapping amongst several Government Departments.

Effective land use planning requires recognition of the two-way interaction between infrastructural programme design and existing land uses. Transportation and communications programmes have immense effect on land use patterns in the Eastern Cape. Presently, the Government's policy is to develop a multi-modal transportation infrastructure network, which will improve all weather access between farms and markets. Informal transportation corridors like the East London to Umtata; have provided the base for land use patterns and will very likely continue to do so. It is for this reason that future transportation development should be integrated with other land use plans.



Effective land use planning requires the two-way interaction between infrastructures programme design and existing land uses

## Transportation legislation and policies

Pre and post 1994 transportation policies are best described as cumbersome and counterproductive. The pre 1994 legislations simply favoured the white population and provided sub standard planning controls in the former homelands. The post 1994 legislations and policies are over ambitious and unrealistic. For example it is not easy to explain why the National Land Transport Transition Act 2000, which took so long to prepare, was then promulgated in 2000 without some sections. This is probably the most complicated and resources wasting aspect of the transportation planning process.

The national legislation and planning policies are not easily understood in the Province. The National Transportation Policy White Paper is to say the least so ambitious that the National Department of Transport itself has been unable to achieve its key performance indicators like the famous 80/20 code formula. The Transport Planning Requirements (TPR's) and Transport Planning Guidelines (TPG's) produced by the National Department of Transport have been overtaken by events, suspended, withdrawn, or simply ignored because of their unrealistic expectations and key performance indicators. Above all, the role of both the National and Provincial Governments is not easily understood in the transportation planning corridors. For example, should the Government be directly involved in the operations of public transport or be involved in creating an enabling environment for a free market economy? Why should both national and provincial government be preoccupied with quantity control and not quality control policies whilst promoting public private partnerships?

Until recently, national and provincial planners have focused on supply quantity regulations without any attempts to quantify demand. Demand vs Supply is a universal planning philosophy that transportation planners in this country have tended to flout with disastrous results. Conversion of area permits to route permission, and taxi re-capitalisation are classic examples of unrealistic policy- decisions that cannot be easily implemented in the Province. For many years some of us have advocated for the provision of appropriate technology to replace bakkies for public transport in the rural areas without any success. We now understand that the National Department has now set up a national task team to examine ways and means to legalise the use of bakkies for public transport in the rural areas especially in vast rural areas of the Eastern Cape.

The role of rural public passenger transportation in the country's rural areas development and the consequent rural transport policies are responsive to different circumstances of rural economic growth and development. Not only do the rural passenger policy needs vary according to different stages of rural development, but also so does the process through which the national policies are planned and implemented. The policy solutions to existing and potential public transport difficulties are complex and more than matters of engineering and finance. They involve decisions and activities in areas of jurisdiction, planning, finance, institutions and operational management, and last but not least politics. Public transport policies for rural areas are, therefore, affected by specific legal, financial, and institutional frameworks which, together constitute the policy making process for rural passenger transport services. These frameworks are dynamic. While they affect public transport policies, they can also be changed in response to particular policy demands, which are a function of different circumstances of rural areas growth and development.

Regulatory Policy Process as a rationale of state intervention in the public transportation has great impacts on transportation planning in the Province. Before 1994, the bus industry was highly regulated as a rationale of state intervention in the industry. The regulatory policy process was spiced with the apartheid political connotations of operation and confinement.

To this effect, the stipulated Government policies were that:

- The number of bus permits issued for an area/a route be controlled by the then Government in order to minimise over-trading, and were based on the same average occupancy rates as are used to estimate fare rates;
- Bus services be available to all where demand is sufficient, at a price which does not exceed that required to sustain safe and sufficient operations, with a reasonable load factor and an acceptable rate of return on investment;
- The rural bus fare rates for passengers be controlled to reflect the actual operating costs, including an acceptable rate of return on investment, and shall be reviewed once annually;
- Government shall promote the development of road passenger transport as may be needed and possible, for example through training and other assistance to the operators. Where needed, Government intervention or direct subsidies be considered in order to ensure an acceptable level of service, especially in urban areas.

After attaining democracy in 1994, the regulatory policy has hardly changed because the instruments of state intervention in the industry have not been abolished or replaced with the free market instruments. Officially, the Government still retains:

- Quantity control of entry into the public transport industry,
- Quality control and capacity of equipment,
- Control of fares,
- Control of safety regulations

The Government still makes direct payments of subsidies in the form of (tax free) grants to state contracted or owned Mayibuye Transport Corporation without extending such a financial facility to privately owned taxis companies. This has created an uneven playing field with moveable goalposts, resulting in a current suspicion and frustration in the taxi industry. We all know that the existence of regulations automatically affect the action of the regulated, although the quantification of the effects of the regulation is by no means an easy task. This is the prevailing state of affairs in the rural passenger transportation industry in the Province. No one really knows the behaviour of the industry and whether it is possible to maximise profit under current quantity control regulations or under quality control regulations in a free market economy.

Control of entry in the public transport as an instrument for state intervention has had mixed impacts on the industry in many other places in Africa. Main purposes of controlling entry on the grounds of stabilising the industry were and are still, pursued with particular zeal in urban areas to protect unquantified side effects of a free market economy, and to provide state protection of inefficient and non-enterprising incumbents who readily object to new applications on the pretext that the routes are adequately served and any additional supply will erode profit margins of existing operators. It is a well-known fact that certain permit and contract holders do not own buses and are exploiting potential operators, and the Provincial Government.



The provincial government still pays direct subsidies to a state owned corporation despite deteriorating levels of service in rural areas.

Problems of the quantity regulatory policy process are several. Attempts to relate existing quantity regulatory policies and the instruments of state intervention to desired state transportation planning objectives and/or goals run into compounded conflicts. For example, it is not possible to ensure an efficient transport system of adequate quality standards to all parts of the province at the lowest cost or using the most cost effective criteria through a restrictive policy, which controls entry into an industry in which available capacity is way below perceived demand. It is also not possible to achieve maximum utilisation of existing resources in an atmosphere where regulatory policies are not demand responsive, and lack a coherent rationale of enforcement. To this effect, existing quantity regulatory policies have failed to force operators into deep rural areas because operators believe that it is very expensive to provide services in the rural areas, and that rural areas passengers cannot afford economic affairs.

Quality Regulatory Policy options offer the only known demand responsive and cost effective rationale of state intervention in the public passenger transport industry operating within a free market economy. First of all one must clear an existing misconception that deregulating urban, interurban and/or rural public transport services means abolition of all rules and regulations, and an introduction a free for all environment. Quality Regulatory Policy options for the industry simply means abolition of quantity controls or control of entry measures which restrict effective competition through discriminatory or restrictive licensing rules and regulations. By shifting from quantity controls to quality transport planners are able to simultaneously maintain and enhance quality of service controls whilst implementing any exogenous and endogenous changes required to obtain/acquire qualitative performance of the industry.

In removing quantity regulatory policy options, emphasis will be placed on quality controls, e.g. scheduling/timetables, regular vehicle inspections to enhance vehicle roadworthiness, market responsive route coverage, on monetary incentives, economic life ages of public service vehicles, free entrée in the market by private operators, etc., which create healthy competition in a free market economy. Thus quantity deregulation implies that any qualified operator (i.e., holding an operator licence) can operate at his own initiative on any route and at any frequency without meeting any further permit requirements. This competition will in turn increase efficiency and economic and affordable fares for all thereby increasing revenue. Above all, quality competition in a free market economy will

stimulate innovations and produce quality services better matched to consumer demand than the current bureaucratic and counterproductive quantity control measures.

It is my submission that the current national and provincial quantity control policies are a set of unrealistic objectives and/or goals made by both the National and Provincial Governments' transportation professionals divorced from realities required to stimulate free and sustainable entry into the market by potential public transport operators. It is not easily understood why one should impose quantity measures on an industry whilst it is widely accepted that:

"the South African transportation system is inadequate to meet the basic accessibility needs(to work, health care, schools, shops) in many developing rural and urban areas" (see pp3 White Paper on National Transport Policy, Sept. 1998)

The question is why should the Provincial Transportation Planners be preoccupied with quantity controls in a state without adequate transport instead of quality measures that will stimulate provision of quality transportation to desired levels of services in both urban and rural areas? How can you spent a lot of resources regulate what you do not have in place rather than spending the meager resources to attract increased community participation in the industry?

However, there are a few major problems that must be overcome if tangible results are going to be realised in the future. These include:

- a. Lack of mandatory interaction between various development and planning policies. For example, the Department of Land Affairs, White Paper on Spatial Planning and Land Use 2001, the department of Provincial and Local government White Paper on Local Government, the National Department of Transport White Paper on National Transport Policy 1996, Moving South Africa the Agenda for Action 1999, and the Provincial White Paper on Transport Policy 2001, greatly overlap causing a considerable and confusing institution jurisdiction in the spatial planning process. Current legislative and procedural framework of spatial planning and implementation is extremely complex and to an extent that it is not possible to crystallize common quantity or quality control measures needed to stimulate free entry in the market by potential private transport business individual and/or company operators especially in rugged geographical rural areas without adequate public transport services. Rural areas of the Eastern Cape Province are typical areas where quantity controls have not been able to stimulate adequate provision of quality transport services. Hence, the continued subsidies and to an extent a waste of the meager financial resources on a few contracted bus operators that have continued to provide substandard services in the rural and sometimes very remote areas. In reality, the present practice has perpetuated a fraudulent dependence on the Governments' financial handouts without any substantial returns in the quality of services.
- b. Whilst we are currently pre-occupied with integrated rural development, there is an urgent need for clear and responsive economic investment incentive policy for the rural areas to address the macro policies on rural/urban vs urban/rural migration in order to locate employment and other public services in the various population centroids. That is employment generation in rural areas will cut down trip lengths from the rural areas to urban areas. The enhancement of employment in the population centroids will ultimately maximise utilisation of other public services like

health, education and public transport desperately required by both planned and unplanned settlements in rural areas. In other words there is a need for an incentive policy to attract private sector investment in the provision of quality transportation services in the rural areas of the Province without depending on government subsidies.

c. Existing preferential subsidization policy in favour of buses and not taxis must be rationalized within a given timeframe if an increase in quantity and quality of services is to be realised in the near future. To this effect, there is an urgent need for a uniform policy on subsidization of all modes of public transport in the Province.



Employment generation in rural areas will cut down work trip lengths and encourage urban/rural migration

d. Institutional constraints, in the Eastern Cape are primarily two-fold. First institutional constraint is the jurisdictional overlap amongst several government institutions. Second constraint is the lack of qualified and experienced personnel capable of understanding the demands of land use-transportation planning process.

A factor in overcoming poor land management and consequently poor land use is the institutional set up and its administration mechanisms. Land use planning and management methods are activities that various institutions have always been very cautious about because of their political sensitivity. In case of the Eastern Cape Province, land use planning can be carried out at any one or more of several levels including different levels of authorities and in different Departments like Agriculture, Housing and Local Government, Education, and Health. The liaison and political co-operation required when dealing with these different levels and Departments is very difficult.

Institutionally, integrated land use planning requires the commitment and co-operation of many government agencies, and Departments. More often than not this is proving difficult to achieve because of different interests and goals of the various stakeholders. The biggest problem, however, is the one of common understanding the need for comprehensive and integrated land use planning. Different planners attach different meanings to the term land use planning, and at the same time find it difficult to enforce any agreed upon land use plans.

In brief, land use planning, and management is simmering with a host of problems and will likely continue to do so for a few more years to come. It is critical for various land use conflicts to be recognized, and for the planners to appreciate the various social and economic consequences, which arise or might arise from remedial measures that may be applied to these conflicts. The greatest difficulty lies within establishing a good jurisdictional framework for integrated land use planning must be related to decision makers in real and meaningful terms, commitment must be made, and qualified personnel must be available at all levels of planning and implementation of land use plans. Above all there is an urgent need to find a single home for spatial planning in the Province.

#### **CONCLUSIONS**

Whilst there is nothing much one can do about natural constraints attributed to the rugged features of the Eastern Cape, positive aspects of all the identified challenges can be utilised to harmonise nature with demands for an effective land use/transportation integrated planning. Post 1994 political awareness and commitment at different levels has recognized the need to make the transportation planning process more sensitive to changing conditions in the Province, as well as responsive to changing goals and policies. This recognition can be used by politicians to review and/or institute developmental policies that would enhance nodal development whilst maximising environmental conservation. This would ensure that illegal settlements do not take place in environmentally sensitive terrain or areas.

Policy planning is primarily a political exercise, relating directly to long-term challenges and legislative actions. It is of a general nature and provides the contextual setting within which specific transportation alternatives may be considered. Thus policies designate who is to act and how and within what limits the action is to be carried out. They deal with constraints, both financial and legal affecting the authority, powers, and criteria that are to be followed in transportation development. In the case of the Eastern Cape, there is now an urgent need to identify and apply a more definitive set of policy controls to unplanned settlements, especially in ecologically sensitive areas.

The land use/transportation integrated planning process must be a more open exercise, allowing all stakeholders affected by the development to make tangible inputs. There is a continuing desire on the part of the population for effective participation in the planning process, and an effective co-ordination and integration between land-use planning and transport planning. It is hoped that increased community participation in the planning process will resolve various land use conflicts in the Eastern Cape. To this effect, planners must identify those areas of the Province, which are capable of supporting new agricultural developments without destroying valuable catchment protection systems, or other land uses.

There is a need to review the national transportation planning legislation requirements, and guidelines in an effort to make them demand responsive and pragmatic. One does not need a sledgehammer to kill a fly. Certain parameters and their key performance indicators are counterproductive. Besides legal aspects, there is a need to carefully reexamine the rationale for state intervention through quantity vs quality regulations in a free market economy environment.



A need for policy controls on unplanned land settlements is critical

There is equally an urgent need to find a home for integrated spatial planning in the Eastern Cape Province. Current jurisdictional fragmentation and overlaps are detrimental to the planning process. However, one must accept that a home without qualified, experienced and skilled planners is useless. Consequently, there is an urgent need for the relevant departments to fill critical positions as soon as possible if there is any hope to have an effective land use/transportation integrated planning process.

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