PUBLIC TRANSPORT TRANSFORMATION: AN INCREMENTAL APPROACH TO DELIVERING PUBLIC TRANSPORT SYSTEMS IN SOUTH AFRICA

M MOODY, R ESSON, C VON DER HEYDEN and K LAING

Pegasys Strategy and Development, PO Box 15107, Vlaeberg, Cape Town 8018

Tel: 021 461 5476; Email: matthew@pegasys.co.za

ABSTRACT

The rollout of Integrated Rapid Public Transport Networks (IRPTNs) in 13 cities across South Africa has been a significant step forward in the provision of safe, affordable and reliable public transport services to the communities of our cities and towns. The incorporation of the existing minibus taxi operators into these systems has fundamentally changed the role of local government and the existing operators in the provision of public transport services and these changes have not come without their risks.

This paper explores some of the risks experienced by the current approach to the design of our IRPTNs and suggests an alternative approach to the transformation of public transport services in South Africa. This alternative approach attempts to build on the capacity that already exists within the public transport sector whilst still being able to deliver regular, reliable and affordable transport services without some of the institutional and financial strains currently being experienced.

1. INTRODUCTION

A quality public transport system is critical to ensuring access to socio-economic opportunities and services. In South Africa, public transport is in a state of transition and continues to be generally of poor quality. This has a detrimental effect on quality of life, especially for the poor.

For the past seven years, there has been a concerted effort to transform the country's urban public transport systems so that they better meet the needs of passengers. This process of transformation has focussed on the implementation of Integrated Rapid Public Transport Networks (IRPTNs) in large cities across the country. The networks are in various stages of development, with the most advanced being in Johannesburg and Cape Town.

The implementation of IRPTN projects has fundamentally altered the South African public transport landscape and has begun the much needed process of public transport transformation. However, there is some concern about the risks inherent to the IRPTN approach and, as a result, its appropriateness for smaller South African cities, which suffer severe resource and capacity constraints. The IRPTN approach both places a significant financial and capacity burden on local government and requires a radical change to the existing industry business model.

In this vein, Behrens & McCormick (2012: 19) argue that the "established interests of paratransit operators, and the financial and regulatory capacities of responsible government agencies present deeply embedded constraints to policy choices and path dependencies that should not be ignored".

Given the urgent needs of passengers and the limited funding available for public transport improvements, it is vital to explore how improved public transport can be achieved in a manner which is lower in risk and potentially lower in cost, but yet still effects real improvement in the daily experience of public transport passengers.

This paper suggests an alternative approach model for achieving a high quality public transport system of the type envisaged for IRPTNs and Integrated Public Transport Networks (IPTNs). The alternative approach is incremental in nature. Rather than moving towards the IRPTN 'ideal' in one leap, enhanced public transport is achieved in step-wise stages , which respond to the realities of limited Government capacity and resources and the challenges presented by the transformation of the existing industry.

By gradually introducing improvements in public transport, project teams are able to implement public transport solutions that most suit the local needs and contexts of the environments in which they are in. Some areas may require full blown BRT style systems with heavy infrastructure and the complex financial and institutional arrangements that are required for their support, others - particularly in the rural areas and smaller metros - will require formalisation of the existing transport industry to provide an integrated rapid public transport network but never progress to a BRT style system.

Therefore, the ultimate goal remains broadly the same but the method of reaching it is significantly different. This alternative or enhanced approach has the potential to lower the risk and potentially the cost of transition but still improve the quality of service for passengers/consumers.

2. THE SOUTH AFRICAN PUBLIC TRANSPORT PROBLEM

Improving public transport is about improving the daily lives of its passengers. 40 years ago most commuters used rail or municipal bus services. A rise in middle class private vehicle use saw a marked shift in investment towards road infrastructure in the 1970s to cater for rising demand. The focus of public transport services was increasingly to provide subsidised services to low income workers in far-flung dormitory settlements on the outskirts of urban centres.

With a growing focus on catering for private vehicle users and reduced transport budgets as a result of Apartheid-era fiscal and economic constraints, public transport began to suffer from a chronic lack of investment and a concomitant decline in service quality. Privately operated minibus-taxis began to play an increasingly central role in the South African public transport dynamic, providing a demand-responsive and relatively convenient service that conventional public transport services were unable to respond to effectively. Subsidised rail and bus services have continued to provide relatively stagnant low-quality, peak period, commuter services, while the flexible minibus-taxi industry has grown to be the dominant mode of public transport in South Africa.

Today, in South Africa, 70% of households do not have access to a car. The majority of South African households either walk or use a poor quality public transport to meet their daily mobility needs. Data from the National Household Travel Survey (2003) reveals that South African public transport users are primarily concerned about accessibility, safety, security and issues of comfort such as crowding and the quality of public transport facilities. In particular, minibus-taxi (MBT) passengers experience unsafe driving practices, poor quality facilities, unsafe vehicles and an irregular and unreliable service. These problems are exacerbated by the legacy of Apartheid-era spatial planning which located the poorest and most vulnerable the greatest distance from socio-economic opportunities. As a result, these individuals endure long travel times and relatively high travel costs to access these opportunities.

Transforming the public transport sector in South Africa should respond directly to these urgent and pressing needs of South Africans.

The IRPTN approach, described below, is heavily influenced by the public transport experience in Latin American and, in particular, the rapid bus systems of Curitiba, Mexico City Bogotá and Quito. Many of these cities have a long history of integrated land-use and transport planning and have built up significant capacity to regulate and manage public transport over decades. In addition, these cities have a long history of restructuring and formalising existing operators into more formalised groupings, adopting a range of approaches to achieve this. Today, these cities are held up as exemplars of public transport transformation, but it is often forgotten that their context differs markedly from our own and that the implementation timeframes have often been in the multi-decade range.

Attempts to replicate the South American experience needs to recognise that their public transport evolution took place over a long period of time. Whilst in hindsight, it is relatively easy to identify the various elements of these systems (dedicated lanes, VOCs, negotiated contracts) that made them an operational success, these elements emerged over time as a result of decision making that responded to the particular institutional, financial and technical contexts in which the systems were founded.

3. THE IRPTN APPROACH IN SOUTH AFRICA

The Public Transport Strategy and the associated Action Plan (2007) signalled a dramatic scaling up of efforts to transform public transport in the country. The ultimate objective of the strategy is to develop high quality public transport networks with the following characteristics:

- 85% of all residents within 1km of Rapid PT Network by 2020
- Upgraded modal fleet, facilities, stops and stations
- Extended hours of operations (16-24 hours)
- Peak frequencies (5-10 min) – Off-peak frequencies (10-30 min)
- Full special needs and wheelchair access
- Safe and secure operations monitored by Control Centre
- Electronic fare integration when making transfers
- Integrated feeder services including walking/cycling and taxi networks
- Integration with metered taxi services and long distance intercity services
- Car competitive PT option – enables strict peak period car use management

In practice, the rollout of IRPTNs across the country have been pursued in a broadly uniform manner, with a focus on high specification, high cost, and infrastructure-heavy Bus Rapid Transit (BRT) systems operated by formalised groupings of former taxi/bus operators, principally funded through national grants and implemented on a phased, corridor-by-corridor basis.

Commenting on this approach, Behrens & Mccormick (2012) caution that these systems, which borrow heavily from Latin American public transport models, "may not be well suited to local institutional frameworks, urban environments and resources."

While implementation of IRPTNs is a positive development for public transport in South African, the current model displays a number of significant risks for both local government, the existing public transport industry and, indeed, for passengers. These include:

- A failure to respond adequately to specific local contexts due to the application of a 'one-size-fits all' model.
- High risk and long term financial obligations for local government, without requisite funding guarantees.
- Heavy demands placed on the capacity of local government.
- A high specification, high cost system design.
- An unrealistic and complete transformation of the taxi industry and its business model.
- A costly and time consuming process of negotiation with, and compensation for, the existing industry.

A common critique of the existing approach are the long implementation timelines. This has not been caused by a failure of design (the technical designs have remained broadly constant over the project implementation lifecycle) but rather is a result of the tensions both within and between the two main stakeholder groups; government and the minibus taxi industry. As the cities that have already begun implementing their systems have shown, it has taken a significant amount of intensive engagements to make these stakeholders comfortable with the risks placed on them by the systems' design.

3.1. Government capacity and finances

Implementation of IRPTN projects across the country has begun the much needed process of public transport improvement in urban South Africa. However, from a local government perspective this approach presents a number of risks. It imposes a significant cost and capacity burden on local government and there is concern that smaller cities, in particular, may lack the capacity to successfully implement a full scale IRPTN.

Section 11c of the National Land Transport Act requires the municipal sphere of government to take on a range of land transport functions. For most municipalities outside of the largest metros, this is the first time that they have been made responsible for public transport at this scale. They often have neither the institutional memory, the funding, nor the expertise to satisfy this mandate and as a result take a lot of time to ensure that they fully understand and are in a position to mitigate the risks inherent in the new system.

The biggest risk for Municipalities is financial. The existing approach requires substantial upfront capital costs as well as ongoing operational funding. Under the IRPTN model, local municipalities as the contracting authority are liable for the full cost of the system but are able to hedge this risk by accessing national funding. The current model, which employs a gross contract, effectively requires municipalities to commit to at least 12 years of financial risk (the length of the longest contract period) for the public transport system, yet are only able to secure definite funding over the 3 years of the Medium Term Expenditure Framework (MTEF).

In addition, as is the case everywhere else in the world, these systems require an operational subsidy (the revenue from fare paying passengers is less than the costs incurred in operating the system) but there is no existing national funding available to cover these operational shortfalls. While the main metros are often able to leverage their rates base, this is simply not an option for the smaller municipalities where any politically acceptable increase in the rates bases would be insufficient to make up the annual operating shortfall of the high cost BRT-style systems. Naturally, this mismatch of liability to available funding introduces uncertainty that makes many municipalities hesitant to make such a commitment given their often already precarious financial positions.

Moreover, National policy and funding streams have primarily supported the implementation of high specification BRT systems (Schalekamp & Behrens, 2013), while relatively little attention and resources have been directed at incrementally improving existing services.

The second risk is one of capacity. Even if adequate funding can be secured, local municipalities still need to take full responsibility for a highly complex system that requires specialised skills for the planning and oversight of a range of different stakeholders. Currently, the municipalities already struggle merely with their regulatory responsibilities. The lack of capacity at a local level introduces risk at both a design and management stage of IRPTN systems implementation. For municipalities that are already straining to meet their existing service delivery responsibilities, the advent of a new transport system requires an allocation of skills and systems that they simply do not have. Without adequate capacity, the municipalities risk designing systems that are not responsive to the needs of the local community and poorly integrated with other development priorities. Furthermore, as these networks become operational, the municipalities will need to have developed the capacity to manage a range of different responsibilities, from contract management and monitoring of the transport operations, to transport and business planning. If the municipalities are unable to provide adequate capacity they risk designing, managing and implementing an expensive transport system that is ineffectively managed, leading to poor service delivery and potentially very visible failure.

Both these risks result in an apprehension by local governments to take on the new responsibilities. It takes time for them to become comfortable with the risks to the system and for them to create the financial and organisational structures necessary for them to hedge these risks. Given the way the IRPTNs have been designed with a focus on heavy infrastructure, very little can be done during this time to improve the quality of passenger services as the infrastructure builds require the authorisation of the municipalities which in turn is dependent on their acceptance of these risks.

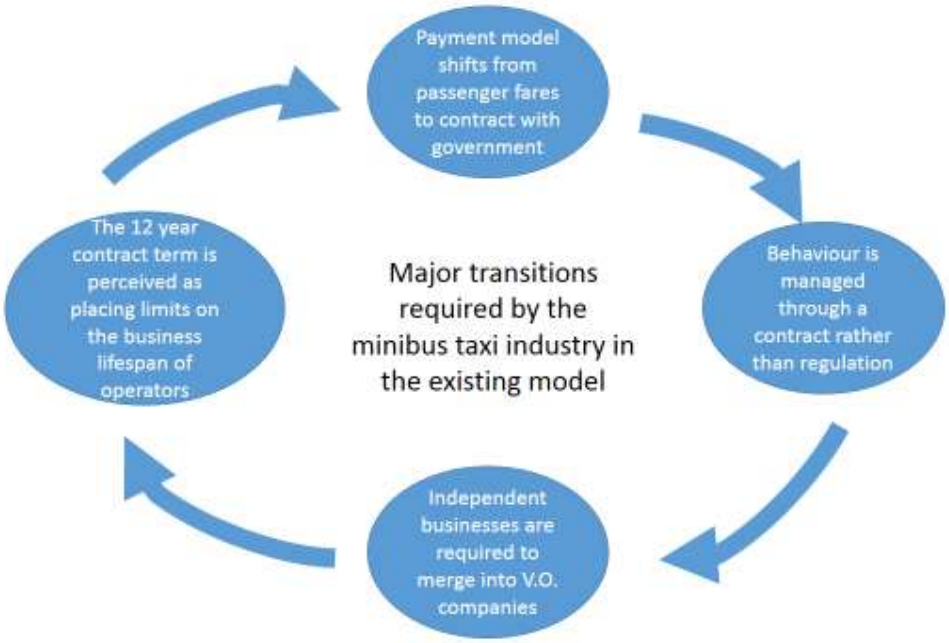
To summarise, the IRPTN model presents a number of risks to local governments that need to be addressed to achieve successful public transport transformation in South Africa. An alternative approach must take existing government capacity and resource constrains into account and respond appropriately.

3.2. Taxi Industry business model

The implementation of IRPTNs in South Africa has involved a significant transformation of the taxi industry business model. Under the IRPTN model, new services are operated by Vehicle Operating Companies (VOCs) made up of former bus and taxi operators. These companies are contracted to Government to provide new services to a higher standard. The legislation limits the duration of these operating contracts to a maximum of twelve years.

This transition process is fraught with risk for existing operators and significant resistance has been experienced from the industry. Browning (2013) argues that the current taxi industry business model is a reliable way of earning an income for operators, who are risk-averse survivalists rather than entrepreneurs. As a result it takes a lot of time to get the existing operators to become comfortable with the risks of the new system.

Figure 3.1 Major transitions required by the minibus-taxi industry



The existing model requires four major transitions for the existing operators (As is illustrated in Figure 3.1 above):

i. **Who pays them:** The VOC model requires the operators to shift from a business from which they earn money from fare paying passengers to one in which they earn money through a contract with government. This shifts their cashflow from daily receipts to fortnightly or monthly payments. This requires a shift in the way they manage and think about their businesses income, cashflow, profits and expenditure.

ii. **How their driving behaviour is managed:** Currently, minibus taxi operators exist in a regulatory environment. Their day to day behaviour is not directly monitored although they do face penalties if they are found to have transgressed the regulations. In the new system, their payment will be tied to their ability to meet the performance criteria of their contracts with the municipalities. In order to manage the transport system effectively, the municipalities will have to provide continuous oversight over the bus operations. In many cities, there already is a strained relationship between the industry and the local authorities. The industry are often hesitant to enter into a contractual relationship with the local municipalities as they don't trust that they will be treated fairly.

iii. **Who they share their money with:** Minibus taxi operators are independent businesses and, although they are loosely connected via their taxi association, they still compete with their fellow members for fares. Under the new system, the independent operators will be required to form a common shareholding with each other and to place their trust the governance structures of the VOC. This loss of independence can be a major stumbling block as the individual operators are uncomfortable with sharing the income and operational risk with their existing competitors.

iv. **How long they can participate for:** For many operators, their taxi businesses are life-long investments that are built to provide a legacy for future generations. By signing up for a contract that has no certainty beyond the 12 year period, the participants in the new system are negating this investment and this is understandably met with resistance.

The institutional models required by the industry to support the design of the BRT styled IRPTNs places additional cost and risk on the government sphere. The existing VOC-centred model requires the minibus taxi industry to make these transitions all in one single step. Given the risk adversity of the industry and its discomfort with the changes above, the transition requires an extensive and intensive engagement process to enable them to become comfortable with these risks so that government can start investing in improving the quality of a passenger's public transport experience.

A second tension that must be acknowledged is the historical relationship between minibus taxi operators and government. Perceptions about the failure of the "taxi recap" programme, and delays and dissatisfaction with the operator licencing process has often created an environment of mistrust between the industry and government. This has made it difficult for government to build partnerships with the industry for the rollout of services as the industry has often expressed its doubt that the government is acting in the industry's interests.

In many cities, government has had to pay a substantial "compensation" to incentivise the industry to participate in the system. If continued through the rest of the municipalities, the price of this compensation (based on existing compensation settlements) will run into tens of billions of Rands.

This cost is separate from the investment that government is making in the capital and operational elements of these system and as a result has no impact on directly improving passenger services.

3.3. Passenger experience

The current IRPTN approach requires both the minibus taxi industry and the local municipalities to undergo a rapid transformation in order that they can fulfil their responsibilities in providing a vastly improved public transport service to their communities. Unfortunately, because this transformation takes place in one step, it takes times for these stakeholders to become comfortable with the risks that they will take on in their new roles in the IRPTN. Only once they become comfortable with these risks are they prepared and willing to take the "leap" into the new unknown transport environment.

This delays the transformation process, and delays the rollout of improvements to the services provided to passengers on the ground. As the municipalities secure funding and develop their organisational capacity, and as the minibus industry consults with its own structures and the municipality through the negotiation process permitted by the legislation, there is little demonstrable improvement in the quality of the passenger experience. Passenger experience only improves once enhanced services begin operating, and this process can take years given the factors described above.

An alternative approach would aim to achieve a transformation in the taxi industry business model in incremental stages, reducing the risk and potentially the cost of the transition process and improving the overall likelihood of a real improvement in passenger experience in a shorter period of time.

4. AN ALTERNATIVE INCREMENTAL APPROACH

This paper builds on the incremental approach proposed by Hitge and van Dijk (2012) and Browning (2013), proposing a high-level path towards a better quality public transport system.

Researchers at UCT have cautioned against the application of a one-size-fits-all business model: "Operators' business needs and expectations may vary widely between each city, but also within the different parts of the same city and even within the same association, and play a decisive role in their readiness to be engaged on, and included in, the reform process" (Schalekamp & Behrens, 2013). These researchers (Salazar Ferro, Behrens, & Wilkinson, 2013) have also argued for the need to recognise the hybrid nature of current and future public transport systems in South African cities.

They contend that the new systems being implemented across the country are unlikely to completely replace existing paratransit operations in the near future. Therefore, the authors suggest that authorities take steps to integrate the formal and the informal. For example, formal operators may provide trunk services while informal operators may provide some feeder services through, perhaps, feeder area licencing or some type of concession (Salazar Ferro et al., 2013).

These researchers have highlighted two important areas which inform the development of the alternative approach presented in this paper, including:

1) The need to understand the unique characteristics of existing public transport operators in different contexts in order to develop an approach which is context-specific and practically implementable

2) The need to explore and, potentially, implement mechanisms for integrating formal and informal public transport. For example, some taxi associations/operators may be willing and capable of formalising rapidly, while others may not. Public transport managers need to address this disparity.

In addition, Hitge and van Dijk (2012) have proposed an alternative, incremental approach to public transport transformation in South Africa. They suggest responding directly to urgent passenger issues across the public transport network and moving towards an 'ultimate' public transport system in incremental stages rather than aiming to resolve every passenger issue and 'leapfrog' from the current, poor quality system to an ultimate one in one step. The primary benefits of an incremental approach are likely to be lower cost and risk, both for local government and the industry and the ability to learn and adjust more easily as the process of transformation progresses (Hitge & van Dijk, 2012).

The incremental approach proposed by Hitge and van Dijk (2012) is an important contribution to the South African public transport debate. The alternative approach presented in this paper is directly informed by the incremental approach, but seeks to deepen the analysis by focussing on specific measures to resolve the risks inherent to the IRPTN model.

Browning (2013) has also proposed an alternative approach to PT transformation in SA. He proposes a phased model where taxi operators form cooperatives, introduce professional management of drivers and vehicles, operators continue to own their vehicles and are contracted to Government to provide a subsidised service. Browning has highlighted the critical need to reduce risk for the taxi industry in order to achieve public transport transformation in South Africa. The alternative approach presented in this paper incorporates this principle, but also attempts to address the other risks inherent to the IRPTN model, as discussed above.

The existing approach to the implementation of our public transport transformation strategy is characterised by long design and implementation timeframes and high upfront capital, operational and compensation costs. It also places the burden for the design and management of these complex systems on the municipal sphere of government which often doesn't have the organisational or financial capacity to do so. In addition it requires an immediate and transformative change in the manner in which the minibus taxi industry organises and operates.

These factors place risk on both the local government that is required to implement and manage these systems as well as the local minibus taxi industry that is required to radically change its business model to provide the new transport services required of the system. These risks create uncertainty for both local government and the local minibus industry and increase both the timeframes and potentially the costs of the implementation process.

In responding to these constraints, the following principles are suggested as an alternative approach to the implementation of these systems:

- Introduce an incremental implementation of improved public transport services, building towards a full scale IRPTN system over time.
- Focus on passenger and not operator need
- Create flexibility in the implementation process in order that public transport interventions can be shaped according to local need.
- Focus on low cost and high impact improvements in the passenger public transport experience to build political and community support.
- Reduce risks to the minibus taxi operators by using contractual arrangements to incentivise a gradual change in their business model.
- Limit the financial and operational cost burden on government
- Facilitate an improved and sustainable relationship between government and the industry

The focus of this approach is to continually improve passenger services (both on vehicle and off board) whilst incrementally building up the capacity of the minibus taxi industry and government. At no stage will the minibus taxi industry be compelled to participate in the system, however government is able to use a series of contract packages and future changes in operating licences to incentivise their participation.

By structuring the appropriate arrangements of incentives, government should be able to facilitate the consolidation of the industry without the need for compensation, as participants will be more and more advantaged than non-participants and will have the financial and organisational incentives to create the economies of scale (vis a vis large buses vs small buses, a few single operators vs many independent small businesses) and efficiencies that the new system requires.

At the same time, municipalities should be able to ring fence their financial and operational risk according to the available funding and capacity. The flexibility introduced by this proposed approach means that municipalities should be able to incrementally introduce improvements to their public transport environment without undue burden, ensuring demonstrable and effective delivery and management of services.

5. AN INCREMENTAL MODEL

This section provides a brief but comprehensive overview of our alternative model for transforming the South African public transport environment. This conceptual model is built as a response to the institutional constraints that have been highlighted here but is yet to be tested from a technical or operational perspective.

The stages model is illustrated in Figure 5.1 below:

Figure 5.1 Stages of the incremental approach

5.1. Stage 1: Immediate improvement in the passenger experience

The focus of Stage 1 is to introduce those improvements in services that do not require a significant change in the business model or even the involvement of the minibus taxi industry. If possible, local municipalities can subsidise interventions that can reduce costs and/ or increase the income of the local minibus operators

Examples include:

- Introduction of services contracts for taxi ranks that improves security, cleanliness and lighting.
- Basic off board infrastructure along the IRPTN routes (bus stops, benches, shelters)
- Non-motorised transport interventions
- Subsidised maintenance and vehicle care for operators
- Subsidise basic IT services to allow selected operators to track and manage their vehicles

5.2. Stage 2: Introducing a contractual relationship between government and industry

During this stage, the contracting authority uses short term tendered contracts to build a relationship with industry while also implement meaningful service improvements for commuters. These contracting arrangements allow industry to benefit from participating in the new system without radically changing their business model. Local municipalities can introduce improved passenger service criteria (age and quality of vehicles, basic schedules, driver training standards etc.) without having to take on the responsibility of a full IRPTN system. It is expected that the rollout of contracts will be extended to a limited number of operators.

- Introduction of a limited number of “net” subsidised service contracts (focusing on off-peak services and along unprofitable routes that are not currently serviced paid on a fixed per km rate) leads to improved profitability of existing operators.
- Provision of business development support to assist operators in the tendering process
- Full scale ITS introduced to assist government in its monitoring and oversight responsibilities. A condition for operators who receive a net subsidised service contract is they submit their individual vehicle ITS information to government.
- Create a workable oversight / contract management obligation upon government to monitor these contracts.
- Immediate improvement of on-board passenger experience as contracted operators are incentivised to adhere to their contracted service criteria
- Introduction of passenger information systems to support the contracted services
- Ramping up regulation and enforcement so as to penalise illegal operators

5.3. Stage 3: Full system intervention:

This is the final stage of the implementation approach and allows government to move into a fully integrated rapid public transport network as envisioned by the Public Transport Strategy.

- Rollout of gross subsidised contracts across the full system to a few consolidated operating companies (with preference for companies formed by existing operators)
- Introduction of high quality vehicle specification criteria in the contracts
- Government assisted financing of vehicles
- Construction of heavy infrastructure (dedicated lanes, bus stops, depots etc) to support system efficiencies
- Full passenger information system
- Integrated fare management

The three phase approach articulated above allows government to immediate introduce an improvement in passenger services whilst incrementally moving towards a fully integrated public transport network solution over the long run.

The flexibility of this approach allows for government to respond to its existing financial and organisational constraints by only providing services that it can effectively take responsibility for. At the same time, it allows for the gradual consolidation and self-organisation of the industry as they respond to the incentives introduced by the contractual arrangements.

By following this project implementation framework, municipalities are able to design solutions that are appropriate to their local needs and contexts. Some rural municipalities may only have the skills and financial capacity required to manage the service delivery improvements incorporated into Stage 2, whilst others (particularly in the major metros) will rapidly progress to the full scale system solutions proposed by Stage 3.

6. WAY FORWARD

The improvement of our existing public transport environment is a crucial driver to more integrated cities, faster economic development and greater social cohesion. It is a clear priority of our national development planning ambitions.

In support of this, the national government already allocated billions of rands a year for the establishment of integrated public transport networks that have been designed to completely transform our public transport landscape.
While there is broad support for the end goal of improved public transport services, the existing approach to designing and implementing these systems have been characterised by long implementation time lines. The delays in implementation are largely because of the tensions within and between the two main stakeholder groups of local government and the informal minibus taxi industry.

By creating a project approach that allows for these stakeholders to incrementally take on new responsibilities in a stepwise process without forcing them into a radical departure from what they know and are comfortable with, we propose that this approach would lead to immediate improvement in passenger services whilst allowing for a faster implementation of the full network solution envisaged by the IRPTN approach when appropriate.

Our proposed approach is not without its own uncertainties and risks. The existing model for financing IRPTNs would have to be adapted to incorporate more flexibility that allows for incremental changes over time. One benefit of the existing approach is that it already has precedent in the major cities. Under-capacitated municipalities that are tasked through the National Land Transport Act (NLTA) with providing an improvement in transport services, will need to become comfortable with taking on an as yet untested approach. In addition, the operators affected by these systems, who are already uncomfortable with major change have had their expectations about compensation for formalisation shaped by the precedent in the other cities and could feel that they are "missing out" in comparison to their peers that have already undergone the transformation process.

A key motivator for developing this alternative approach is the unexplored potential it has to reduce the cost of public transport transformation in South Africa. However, the cost savings that could potentially be achieved through its implementation have not been modelled. As the alternative approach is developed further it will be necessary to conduct this exercise to determine whether or not there would be any financial saving to Government.

South Africa urgently requires improved public transport services and, therefore, it is critical that alternative approaches that build on and enhance the current process of public transport transformation in South Africa are explored, considered and debated.

7. CONCLUSION

South Africa is currently undergoing a process of fundamental public transport transformation. The IRPTN approach typifies current rounds of implementation. This approach aims to bring about a significant and lasting improvement in the quality of public transport in South Africa, however, it is not without risk; particularly for local government, the existing industry and public transport passengers.

In this paper we have argued for an alternative approach to achieve the ultimate public transport system envisaged by the Public Transport Strategy. This approach would focus on the incremental adjustment in Government capacity, existing industry business models and passenger experiences in a manner which reduces risk and potentially cost for all stakeholders whilst leading to an immediate and sustainable improvement in passenger services.