

PUBLIC TRANSPORT AS A DRIVER OF ECONOMIC AND SOCIAL REVITALISATION IN CENTRAL BUSINESS DISTRICTS: THE CASE OF PINETOWN, eTHEKWINI

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ABSTRACT

Public Transport in its various forms is the most widely used form of transportation by commuters within South Africa. It caters for the travel needs of up to 70% of commuters, and therefore plays a significant role in contributing to the economic vibrancy of the country.

Within the South African context, public transport has significantly contributed to the progression of urbanisation. Major cities across South Africa depend on public transport to convey commuters to the urban centres daily, ensuring that these urban areas are easily accessible and well connected to their associated outlying regions. These urban centres have also been shaped by the presence and operation of public transport. A booming industry that has emerged is the informal trade sector, who depend on the public transport industry and patrons for their livelihood. In this way public transport plays a vital role in moulding the character and culture of urban areas. Over the past two decades, urban areas have been in a state of decline. Factors such as overcrowding, poor maintenance, delays in the provision of new roads and buildings infrastructure, among other factors, has resulted in dilapidation of infrastructure, pollution, crime, traffic congestion, all working together to make urban centres extremely chaotic and unattractive environments to be in. As a result, major businesses pull out of the urban areas, urban areas become progressively more dysfunctional, becoming a greater financial burden to government departments. In spite of this, there are still thousands of commuters who use public transport to travel to these urban centres for their livelihoods. Public Transport therefore has the potential to be a conduit to derive economic and social revitalisation in such urban areas. The Pinetown CBD within eThekwini Municipality serves as an example of a once-thriving node which has significantly degenerated. As part of the urban decay, the public transport infrastructure within the Pinetown CBD also became severely dysfunctional and is in need of major reform. Through a public transport study undertaken by the eThekwini Transport Authority's (ETA), the solutions that were identified not only provided an improved service and infrastructure response to the public transport sector, but had the potential to provide revitalisation for businesses within the CBD, as well as to bring reform to the informal trade industry. By presenting the findings from the Pinetown study, this paper will demonstrate the way in which public transport can drive economic and social revitalisation in CBDs.

1. INTRODUCTION

Urban reform and regeneration are an increasing concern and priority of cities around the world. Whilst urbanisation has caused major cities to boom in population and infrastructure, poor maintenance and management systems have resulted in deterioration of infrastructure, diminishing levels of law enforcement and compliance monitoring, proliferation of anti-social behaviour and urban decay. Whilst decentralisation may result as a consequence of such urban decay; the proliferation of new city centres cannot be sustained and are not feasible. Measures to bring about urban revitalisation must be pursued.

South African city centres, also known as Central Business Districts (CBD), were once the nerve centres of Cities in which they carried out significant commercial, civic, political, entertainment and social interactions. However, it is evident that they are degenerating and a significant number of activities are being relocated to other areas of the cities. Consequently, the CBDs are losing their attractiveness and vibrancy and gradually becoming defunct (Das, 2019). Common challenges being experienced include: poor regulatory frameworks and maintenance of infrastructure, lack of land-use management controls, deterioration of the quality of civic services and infrastructure, unsafe environments, and the list goes on.

As with most of the major cities of the world, inextricably linked to the life of CBD's in South Africa is its Public Transport services and infrastructure. They occupy major portions of the CBD's and transport the majority of the city patrons. As an integrated element of the city fabric, as the broader city spectrum has degenerated, so also has the PT services and operations. Infrastructure provided is over-saturated and in a state of disrepair, PT services operate chaotically, and there is little to no active law enforcement. Whilst South African cities need to be regenerated, their dependency on public transport is still considerably high. Therefore, there should be priority focus on transforming the state of public transport services and infrastructure within CBDs.

This paper will present the findings from the Pinetown CBD Public Transport study to demonstrate the way in which public transport can drive economic and social revitalisation in CBDs.

2. STUDY AREA – PINETOWN CBD

The Pinetown CBD is an important node within the eThekweni Municipality (EM) which is made up of residential, industrial, commercial, civic, community and retail land-uses. It is served by a number of transport mobility routes which allow the CBD to be linked to other local, Provincial and National business centres and major nodes.

The CBD contains prominent civic and social infrastructure. It also serves as an important operational node for local government, contains historical sites, and has all the necessary bulk services, amenities and environment to sustain the livelihood of the population.

It has a strategic public transport interchange facility within the centre of the CBD from which PT services route to other regions within the Municipality. It is also a strategic centre for the City's IPTN system, serving as an endpoint for one of the nine BRT corridors, and a culmination node for at least three IPTN corridors. It is currently serviced by minibus-taxi, rail, bus and tourist services, making it one of the most accessible nodes within the Municipality. Figure 1 shows the study area for Pinetown.

Study Area : Regional Context

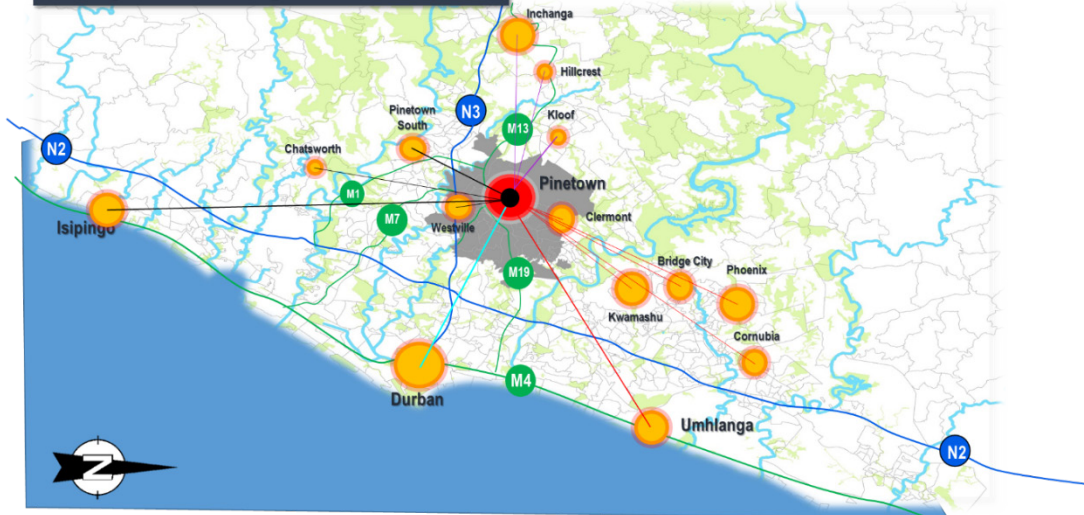


Figure 1: Study Area

Study Area : Local Context

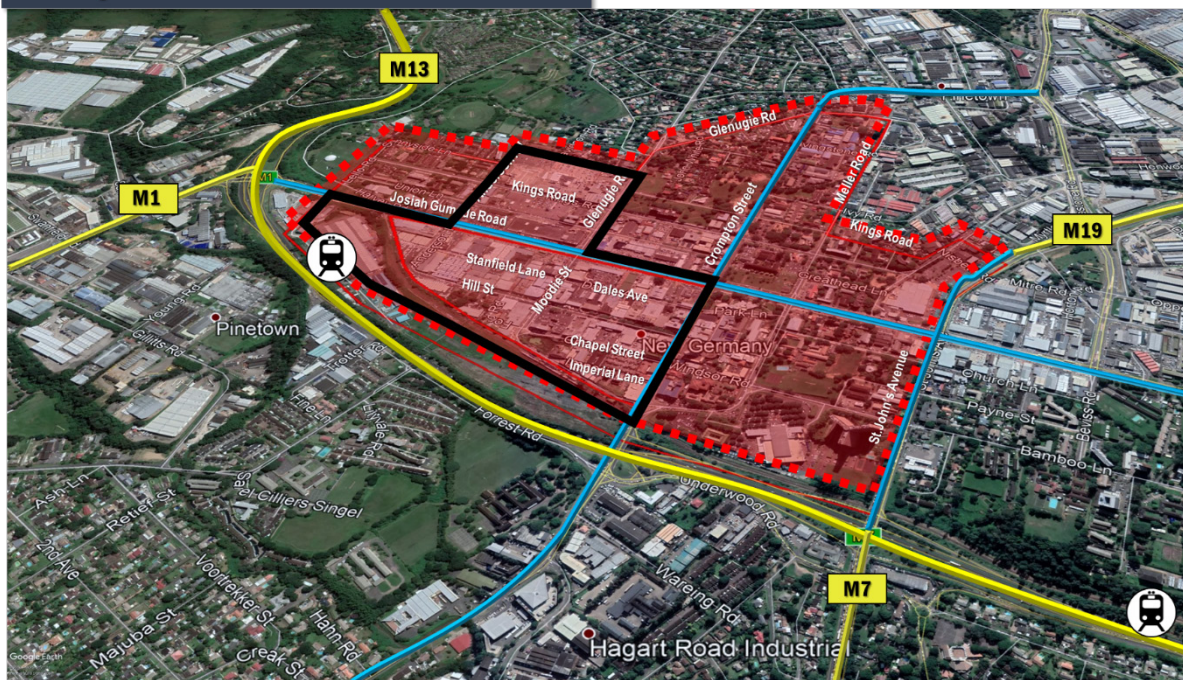


Figure 2: Study Area – local context

3. PREVAILING CHALLENGES WITHIN PINETOWN

Pinetown was once a vibrant central area which performed crucial urban functions that included commercial, social, entertainment, civic, transport and residential. It also provided places that epitomise arts, culture, sport, music, politics, social cohesion and commercial activities. The CBD has unfortunately fallen into a severe state of decay due to poor maintenance, lack of law enforcement, illegal use of buildings, lack of improvement and upgrading of infrastructure has resulted in:

- Buildings becoming dilapidated and illegally used occupied.
- Conventional public transport infrastructure and pedestrian facilities have fallen into extreme disrepair.
- General public realm degeneration.
- Grime.
- An increase in criminal activities, rendering the CBD unsafe.
- A proliferation of anti-social activities.
- Illegal use of roads and associated infrastructure (e.g. illegal loading and parking, illegal use of sidewalks for informal trade, etc).

Due to the scale and magnitude of public transport services and infrastructure within the Pinetown CBD, the overall decay that has occurred is linked considerably to the decay that has occurred with the PT sector and its associated entities.

Due to these factors, a considerable number of businesses, industries and residents have moved away from the Pinetown CBD.

The EM has the task of bringing urban reform to the Pinetown CBD by addressing the respective challenges articulated above. Noting that urban reform depends heavily on the reform of the PT sector within Pinetown, the ETA set out to address the reform of the PT sector in Pinetown in such a way that the proposed solutions would also catalyse further reforms for the Pinetown CBD.

4. PLANNING THEORY INFLUENCING THE PLAN

The plan to revive and rejuvenate Pinetown was based on attributes that contribute to reviving CBDs. A 2016 study by Dr. Dillip Kumar Das serves as a useful reference document that captures key considerations to be addressed to bring about urban revitalization. These attributes were considered within the context of the Pinetown CBD to frame a responsive solution to achieve revitalization.

In Das' 2016 study, entitled *Images of Central Areas: A comparative analysis between South African and European Cities*, it was found that an image of a central area of a city (CBD) depends on a set of attributes and associated elements. These attributes and elements are grouped under four urban design principles underpinning the planning and design of central areas of the cities. These attributes are:

4.1 Availability of Visual and Physical Elements

Pinetown is a historical city with a number of historical, architectural buildings like the Civic centre, library, Magistrate court, post office, churches, police station, Pinetown rail station, Hill Street PT facility and other historical buildings. The challenge though is that these buildings do not show splendour and grandeur because of the decline of the area and the lack of maintenance. Night life in this area is not existent although the area has shopping centres and limited dining areas. Public transport is available but is only functional during the day. There are lots of pedestrians and walking during the day but is not prioritized. The area is in disarray and highly neglected.

As part of the way forward there is no need to build new CBDs but rather to capitalize on the richness of the visual and physical elements within Pinetown.

4.2 Liveability

The attribute under livability is to evaluate comfort, safety, vibrancy and walkability. Currently people do not feel comfortable to walk through, sit, stand, play, talk, read, or just relax and contemplate within Pinetown. The area has limited socio-cultural and commercial activities gathering people to interact which can bring vibrancy to the area. Pinetown in its current form is non inviting and people only use Pinetown as a means to an end where they come to work and are forced to shop at nearby shops before taking public transport home. The fear of criminal activities persists. Individuals feel afraid whilst walking in secluded places. The roads are heavily congested and are not completely safe for walking or riding bicycles (TOD Principles).

4.3 Social and Cultural Elements

The attributes of socio-cultural elements include cosmopolitan and openness, social cohesion, art, music and lifestyle. The positiveness of Pinetown is that people from different cultures and ethnicity are existent in the area however not much social and community feeling is experienced and there is a distinct shadow segregation especially around the PT areas. There are no socio-cultural activities such as art and music. Pinetown has many schools, worship sites and a sports centre but all these are not synchronized to bring about social cohesion.

4.4 Productivity and Sustainability

The attributes used for evaluation of productivity and sustainability are enhancing, connectedness, diversity and endurance. Sadly, Pinetown does not depict the image of respecting the needs and aspirations of the people of the community that live and work in the area. The built environment is physically, visually and functional appreciable however the area does not portray any unique characteristic that creates a sense of place and identity. They are all well connected to the surrounding areas, job locations, schools, shops, facilities and services but only by vehicular mode and public transportation is limited. The area is not completely represented of the past, the heritage of a place and with the community and its culture.

5. THE IMPACT OF PUBLIC TRANSPORT ON THE FOUR URBAN DESIGN PRINCIPLES

5.1 Principle 1: Availability of Visual and Physical Elements

The visual and physical elements such as PT ranks, sidewalks and opens spaces have degenerated due to illegal and improper use by public transport operators and elements linked to the public transport sector, such as the informal trade sector.

Public Transport infrastructure as old as 30 years has not been upgraded. All existing formal infrastructure is operating well over its existing capacity.

Pedestrian sidewalks have been taken over by informal traders. Pedestrians walk on the roadways, creating a very chaotic and unsafe scenario within the CBD.

Informal trade services such as mechanics use land and road reserves illegally. Due to the lack of space, public transport vehicles park on roadways, make use of on-street parking, and illegally use open spaces and properties to hold. Due to the illegal parking activities by minibus taxis, private cars also perform illegal parking activities. Goods and delivery vehicles are forced to perform illegal activities as their bays are used by public transport vehicles.

5.2 Principle 2: Livability

Consequent to the degeneration of visual and physical elements described above, the Pinetown CBD has declined in its appeal as a livable node due to the chaotic environment which has been enhanced by the current public transport context. The volatility linked to the public transport industry and its associated elements further contributes to the decline in livability within Pinetown, as people do not want to be within a node that is tense and associated with the possibility of danger and violence.

5.3 Principle 3: Social and Cultural Elements

Though the Pinetown CBD has much to offer in terms of social and cultural opportunities, there has been a severe decline in the use of these opportunities. Through the decline and inadequacy of public transport infrastructure, the area has become congested, chaotic and associated with a high level of crime. The CBD also does not have a night life as people are afraid to venture into the CBD after dark. It is also evident that the areas where public transport vehicles operate are polluted and have become a festering ground for a host of anti-social activities.

5.4 Principle 4: Productivity and Sustainability

The strength of Public transport within the Pinetown CBD is that the CBD serves as a major PT interchange within the metropolitan area. This renders the Pinetown CBD as a well-connected node within the municipality. Considering that most of commuters within Ethekwini Municipality depend on PT (up to 60%) the Pinetown CBD is well placed to serve as a TOD node to facilitate the establishment of extensive mixed use development, and therefore contains massive potential to create employment.

However, due to the decline of the state of public transport services and the degeneration of public transport infrastructure, the node as a whole has lost its appeal as a desirable node for undertaking business and sustaining investments.

5.5 Summary and Conclusion

The above assessment of the impact of public transport on the four urban design principles as it relates to the Pinetown CBD obviated the fact that to achieve urban regeneration within the Pinetown CBD, a significant effort would need to be invested in bringing reform to the public transport sector. This would in turn lead to further revitalization within the CBD. To this end, a public transport plan was developed to respond to the achievement of the four urban design principles.

6. DEVELOPMENT OF PUBLIC TRANSPORT PLANS

6.1 Project Approach and Scope

With the objective of achieving revitalisation of the Pinetown CBD by improving the state of public transport, the ETA undertook a project to address the current public transport challenges, including challenges being experienced by other sectors due to public transport. This was premised on the notion that by addressing public transport challenges, this would catalyse the improvement of other elements within the CBD.

There were two major thrusts to the project. Firstly, the long term public transport context needed to be conceptualised for Pinetown so as to ensure that interim solutions could be transformed over time to achieve the long term solution. Thereafter, the solutions to address current challenges were developed.

The scope of the project was set out as follows:

- Status quo investigation.
- Stakeholder engagements and data collection.
- Development of the long term public transport framework.
- Development of interim solutions to address current challenges within the CBD.
- Economic Study.
- Development of an implementation strategy.

6.2 The Long Term Public Transport Framework for Pinetown

The long term plan was conceptualised based on a long term land use plan for Pinetown which contained land uses that comprised a mix of: revitalisation of existing land uses, inclusion of new land uses which depend on public transport and a mix of uses to provide social services and which are economically lucrative.

A major objective was to establish the IPTN corridors of eThekweni's Go!Durban system as a primary connector within the CBD as well as a connector of the Pinetown node to the wider metropolitan area.

A concept was achieved which required minimal infrastructure, essentially making use of the IPTN infrastructure that has already been implemented within the Pinetown CBD. In terms of the infrastructure and service arrangements linked to the long term public transport framework, in the long term potential has been created for significant employment opportunities in terms of operating the long term public transport services and maintenance and operations of the long term public transport infrastructure and support services.

The long term framework also enables a vibrant industrial component to be revitalised within Pinetown. Due to the level of connectivity that the Pinetown CBD will have in the future and the provision of new and improved civic and social services and facilities, there is great potential for the CBD to be socially revitalised.

Figure 3 provides a snapshot of the proposed long term land use and public transport outlay for the Pinetown CBD.

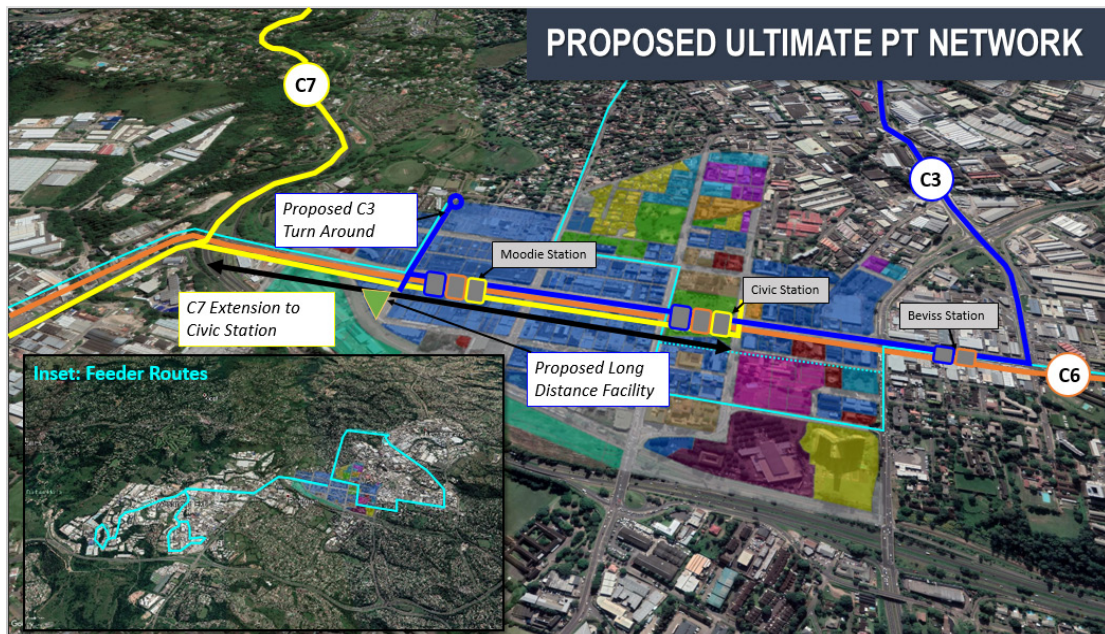


Figure 3: Proposed long-term (Ultimate) PT framework

6.3 Interim Solutions to Address Current Challenges Within the Pinetown CBD

Immediately implementable solutions needed to be developed within the framework of the long term plan to address current challenges and to bring economic and social revitalisation to the Pinetown CBD.

In addressing the current challenges as described in previous sections, it was found that by addressing the most prominent challenge first, that being the current state of public transport services and infrastructure, the knock-on effect would be that the associated challenges would begin to remedy as well, with minimal further effort to rectify the latter.

Addressing current public transport challenges was therefore given major focus in the development of interim solutions for the Pinetown CBD.

6.3.1 PT Ranking and Holding Facilities

Within the Pinetown CBD a major challenge was the over-saturated state of PT ranking facilities and the lack of holding facilities. A greater challenge was the non-availability of land within the CBD to provide new ranks and holding facilities. The surveys that were conducted at the time indicated that approximately 400 minibus-taxi bays were required to accommodate the spill-over of MBT's from existing ranks. This meant that existing ranks also served as holding facilities with a shortfall of 400 bays needing to be resolved. After assessing all available sites and conducting exhaustive stakeholder engagements, an assessment of the parking utilisation of existing buildings within the CBD was undertaken. It was discovered that many buildings had large amounts of residual parking bays. Five buildings were identified which contained the combined total number of bays required to accommodate the excess MBT vehicles. Through a City-led consultation process with the building owners, the City and the property owners agreed to enter into an arrangement to use the residual parking bays as temporary holding facilities. This had a two-fold benefit of assisting the properties to bring feet to their businesses whilst the City was able to deal with the shortage of PT infrastructure. Conceptual designs for re-configuring these facilities were prepared which demonstrated that the facilities could be used as holding facilities. The proposal was discussed and shared with the Public Transport Industry operating in the area and the concepts were accepted by them.

6.3.2 Revised PT Operations Within the CBD

Linked to the provision of the temporary holding facilities a revised operational plan for MBT services within the Pinetown CBD was developed. The revisions include alternative PT routes so as to avoid and alleviate congestion, and new loading/off-loading locations.

6.3.3 Provision of Ancillary Services for Public Transport Operators

The proposed temporary holding facilities will contain ablution facilities, rest rooms and wash bays for the MBT vehicles. These services can be rendered in a formalised manner whilst vehicles are holding during the off-peak periods

The interim solutions also addressed the following activities that were identified as being either caused by or linked to Public transport operations within the CBD:

- Informal Trade:
As part of the proposed temporary holding facilities, provisions will be made to host informal traders for the provision of business offerings such as food stalls, grocery shops and other consumable products. As part of the broader plan, new locations will be identified where informal traders may continue trading, but without the chaos and worry of crime. Sites have also been identified within the temporary holding facilities for motor mechanics to set up their operations to continue servicing the MBT industry. Discussions between the Economic Development, Business Support and ETA units of the City have already begun to provide further development within the node to further improve informal trade and to formalise business operations that are currently being undertaken illegally.
- Illegal Parking:
As a positive outcome of resolving the current challenges with PT operations and infrastructure, parking bays within the CBD will become available again. The parking bays will be restriped and re-marked to indicate their use for private vehicles and loading vehicles.
- NMT Infrastructure:
By providing alternative sites for informal traders to function, a large amount of pedestrian paths and sidewalks will be won back for their initial purpose. Furthermore, with the movement of the excess PT vehicles into the proposed holding vehicles, areas where sidewalks were illegally used by PT vehicles can be rehabilitated and restored to its proper use. New NMT links will be built to provide improved and safer linkages between PT facilities and points of interest within the CBD. This will be supplemented with improved way-finding information, upgraded road marking and new road signs.

7. SUMMARY – ACHIEVING THE FOUR URBAN DESIGN PRINCIPLES THROUGH IMPROVED PUBLIC TRANSPORT

Whilst the proposed public transport plan responds to current and future public transport requirements for the Pinetown CBD, it also contributes to the achievement of economic and social revitalisation within the Pinetown CBD in the following ways:

- By developing a long term PT plan in a collaborative manner with the respective City units, the ETA has ensured that a clear trajectory for transforming traffic and transportation for Pinetown has been set. This is of paramount importance as it safeguards against poor planning, abortive implementation and wasteful expenditure.

- The plan has achieved a situation in which the private sector, PT industry and local government are willing to enter into a negotiated and agreeable relationship in which all parties both contribute and derive benefit.
- By allowing support services to be provided within the temporary holding facilities, opportunities have been created for small business entities and informal traders to provide services, get a better profit for their services and ultimately be given recognition as formal business role-players.

Subsequent spin-offs to the above are that:

- The City can derive a rates from these revitalised and re-activated buildings and business operations.
- All role-players will be motivated to keep their business offerings in good standing, resulting in the respective infrastructure being maintained.
- The opportunity for crime to occur will be greatly reduced, and there will be a resulting general public realm improvement and an environment in which people can enjoy business, civic and social activities and services.

8. CONCLUSION

Urban regeneration in terms of economic and social revitalisation is a major priority of cities around the world. South African cities are currently in a state of degeneration, and efforts are now being made to bring transformation across the country. There are many factors that must be addressed if this revitalisation is to be successfully achieved. Within South African cities public transport plays a vital role in the life of its cities. It is evident that a deteriorating CBD is also directly related to a deteriorating public transport sector within that city. Therefore, a successful attempt to bring urban regeneration must include exerted efforts to bring reform to the public transport sector within that city.

In this paper, four urban design principles were articulated which were incorporated in a public transport study undertaken for the Pinetown CBD. It was demonstrated that by using these principles as key objectives of the project, plans could be developed that have the potential to achieve economic and social revitalisation within the CBD over time. While the effectiveness of the proposed solutions can only be measured once they have been implemented, a critical first step that has been achieved is a collaborative working relationship between governmental departments, the private sector and the public transport industry. In so doing, interventions have been identified which will provide benefit to all participants and users; the collaboration will ensure that funding can be shared and used productively. Through the model that has now been established, confidence can be reinstated within the CBD to attract businesses to the node again, thus promoting the provision of employment opportunities. These reforms have already begun taking place. The City has also begun embracing this approach in other major nodes across the metropolitan area.

9. REFERENCE

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