

# MULTI-MODAL PUBLIC TRANSPORT INTERCHANGES (MMPTI'S) AS CONTRIBUTORS TO A POSITIVE URBAN LIVING ENVIRONMENT

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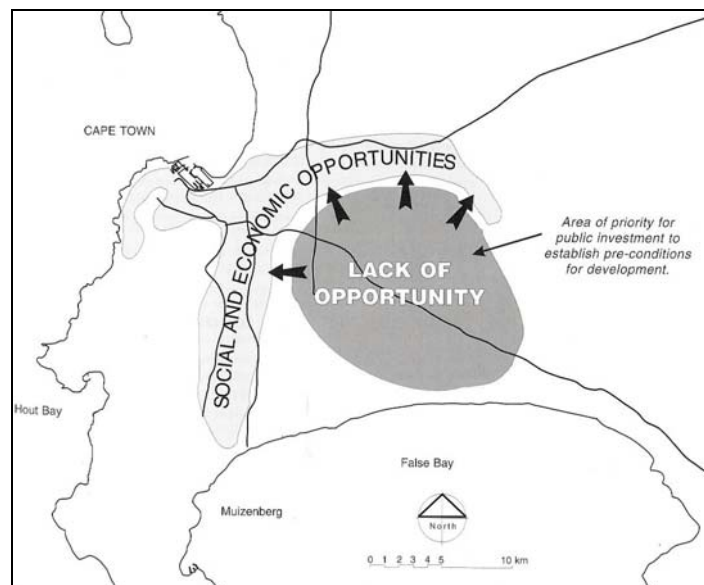
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## 1. INTRODUCTION

Due to the size and structure of modern day cities and the poor integration between land use and transport, movement is an unfortunate necessity for every day living. This can have a direct influence on the quality of people's lives in that levels of mobility and accessibility can determine the number and type of opportunities that can be reached.

Cape Town's apartheid history has strongly influenced the present day hardships experienced by the majority of its inhabitants. The relocation of Blacks, Coloureds and Indians onto the Cape Flats and peripheral areas such as Khayelitsha, Guguletu Mitchells Plain and Blue Downs has separated these people from various opportunities and inevitably given them the locational disadvantage.



(Source: City of Cape Town, 1996)

Figure 1. Area of development priority.

Though these peripheral areas have become firmly established over the years, the levels of services and infrastructure are well below the levels of quality in the more affluent and traditionally white areas. The general characteristics of these apartheid townships are low employment levels, low household incomes, high crime rates and general overcrowding. The low-income levels specifically result in low car ownerships, leading to a heavy reliance on public transport to access the wider city opportunities.

The Moving South Africa document (1999) refers to these users as the “survival” (captive to the cheapest mode of public transport) and “sensitive” (captive to the best option of public transport) customers. In Cape Town commuters that are solely dependant on public transport, represents 32% of the total population (Cameron and Kingma 2002). To place this in perspective, a staggering number of ±960 000 people in metropolitan Cape Town is thus dependent on public transport.

Therefore, it is of the utmost importance that public transport be of an acceptable standard so as to increase the mobility of the dependant population to access the available labour markets and other facilities. Public transport can further be seen as a possible window of opportunity to integrate these areas into the greater Metropolitan fabric and to attempt to redress past imbalances.

## **2. MULTI-MODAL PUBLIC TRANSPORT INTERCHANGES (MMPTI'S) AS PART OF THE PUBLIC TRANSPORT SYSTEM**

“Interchanges are where travel commences” (Vuchic 2000). An interchange is thus one of the starting points of any public transportation ride and the first point of interaction the user has with the available public transportation service. This has obvious ramifications in that it is stated in various policy documents (Moving South Africa 1999 and White Paper on National Transport Policy 1996) that in order to ensure a sustainable urban and natural environment, the majority of urban trips need to be made via public transportation. MMPTI's have an important role to play in enhancing public transportation and thus realizing the vision of sustainable cities.

MMPTI's can be seen as the gateway for those poor and disadvantaged sections of our communities to access facilities and opportunities that exist outside their immediate reach.

## **3. A POSITIVE URBAN LIVING ENVIRONMENT**

A positive urban living environment is an issue that cannot be explained by a single definition. For this it is a term that encompasses diverse aspects and it's meaning is dependent on the element being investigated.

A positive urban living environment is not only determined by its physical structure but indeed more so by the quality of the interaction between human interpretation, functionality and performance. People find different meanings in spaces or experience the same space differently. Contextual meaning (interpretation of cultural and historical contents) can further determine the character of an urban environment.

Dewar et al (1989) refers to this as urbanity: “...those positive qualities which exist in urban areas. Quality of urbanity which distinguishes rich urban environments from urban agglomerations.”

Trancik (1986) in his book “Finding Lost Space” defined positive urban space as being “found space” (as opposed to “lost space”). This type of space is characterised by the distinct positive contribution it makes to the surroundings and/or users. This positive contribution can be realised through an understanding and appreciation as to how individual city elements can contribute to a positive urban living environment and be of optimum benefit to city dwellers.

This can be achieved by exploring three possible spheres of influence to determine the extent to which a positive urban living environment is or can be achieved.

### 3.1 The Three Spheres of Influence

The three spheres referred to are:

- Movement and Access

- Special Place Creation
- Economic Generation

These can be seen as the fundamental, conceptual building blocks of a positive urban living environment and encompass any potential influences city elements (ie MMPTI's) can have on its immediate surroundings.

### *3.1.1 Movement and Access*

What has been referred to in the MSDF (Metropolitan Spatial Development Framework), as traditional sprawl is where townships were created on the outskirts far away from opportunities. These townships absorbed most of the population growth, and consequently generate huge daily movements of people from their homes to jobs. As previously mentioned, the greatest majority of the inhabitants are dependent on public transport, which makes public transport an integral part in their daily lives and which has the potential to better their quality of life.

Ensuring high quality and safe movement and access in and around the interchange precinct, is one of the ways in which the users experience is improved. Here focus should be put on not only the formal modes of transport but certainly also the pedestrians and their safety and freedom of movement.

### *3.1.2 Special Place Creation*

Many public spaces have lost their cultural meaning and human purpose because of the car. This has resulted in very few high quality public spaces in cities, because of the tendency to prioritise functionality (car orientated design) above the creation of special places.

Trancik said “the city of collective space does not exist anymore because of the emphasis being put on private investment into private buildings and spaces.” This implies huge parts of the city from which most inhabitants are excluded. Some of the preconditions for the creation of special places are in fact unrestricted access and diversity of users. Clearly, our present day cities do not promote these elements of good city form.

Special Place Creation implies a social opportunity that has the potential of changing the mono-functionality of interchanges into a space where safe social interaction can be facilitated. MMPTI's can be developed into life-enriching public spaces, which brings richness and variety to public life.

### *3.1.3 Economic Generation*

MMPTI's have the potential to become economic generators in their local area. At present informal traders are already responding to the opportunities associated with MMPTI's.

Some of these opportunities are:

- Access to a constant flow of people,
- Very low operating costs, and
- Lenient trading restrictions.

## 3.2 MMPTI's As Contributors To A Positive Urban Living Environment

The primary role of MMPTI's is traditionally seen as merely to facilitate the movement of people as fast and efficiently as possible to various destinations.

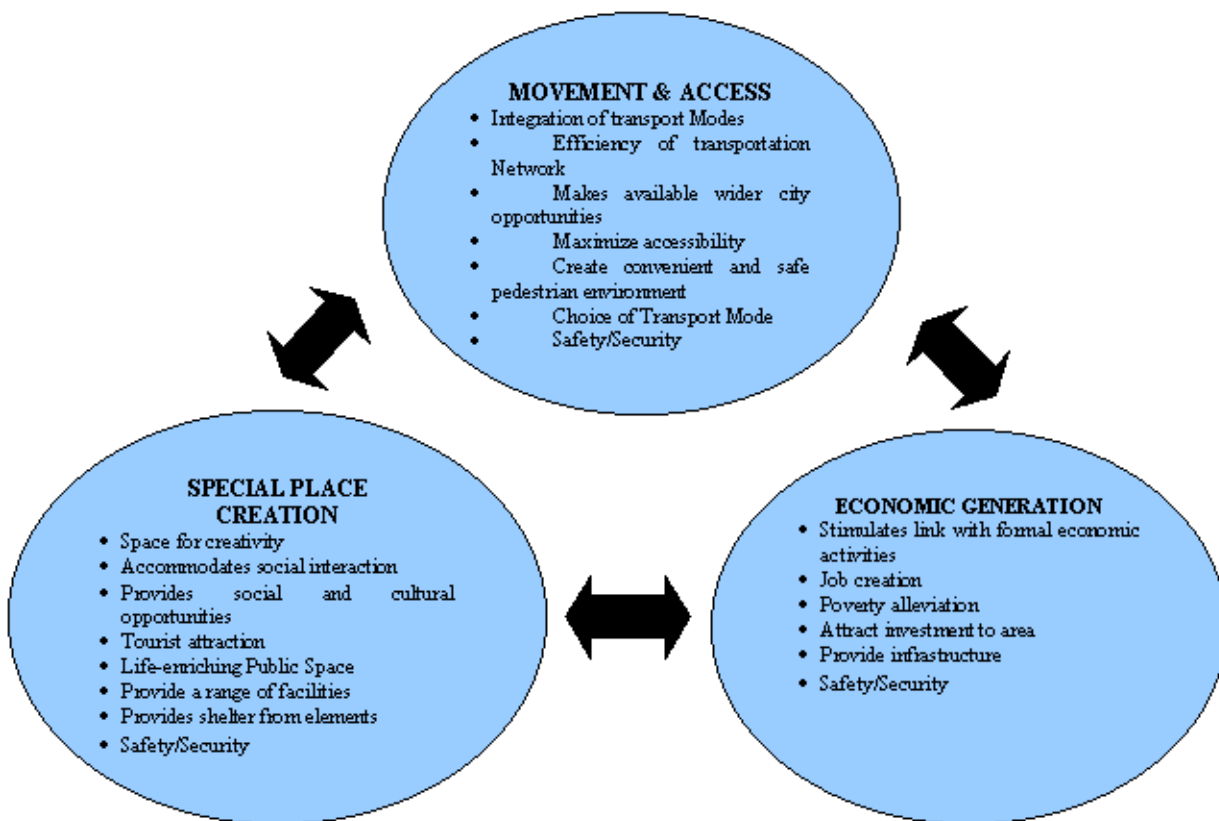


Figure 2. Contributing elements to a Positive Urban Living Environment.

At present MMPTI's thus fulfil a mono-functional role. The position taken in this paper, is that in order to be sustainable and of maximum benefit to the users, they need to be multi-functional. Limited attention is given to commercial, social and cultural opportunities in an around the MMPTI precinct.

MMPTI's are therefore not to be merely seen as a "point" of modal interchange, but a potential opportunity zone for commercial and social interaction (City of Cape Town 2000), a place to improve equity and develop a unique sense of place (Lynch 1982).

In reality, transport officials are mainly concerned with the uninterrupted flow of users and not the overall picture of what else the interchange could offer. "In an ideal world the public transport network would offer fast, direct links from everywhere to anywhere, just as (in theory) the car does, and interchanges would be unnecessary. But in practice, public transport works by concentrating passengers onto selected corridors. This inevitably shows the need for interchanges that provide linkages to opportunities within an urban area." (Good and Bad Practice, 2000)

It would take a very long time for the City of Cape Town to offer its users one-minute waiting periods (headway) as in the case in many European cities. Therefore instead of trying to shorten waiting periods (which is unrealistic for the foreseeable future) why not allow people to fill this time with meaningful and needed activities, such as doing daily shopping, paying bills, visiting the mobile library or clinic, etc.

Having Due to the physical structure of Cape Town, it would be impossible to have one mode of public transport. Therefore MMPTI's are an inescapable feature and one that has not been brought to its full potential. MMPTI's are areas that have high volumes of people entering and exiting through peak periods, and with this are generated endless possibilities for commercial and social interaction.

#### **4. CONCLUSION**

Interchanges are one of the most accessible places in the Cape Metropole. This is a characteristic that should be exploited by the relevant professionals involved in public transportation such that the potential economic and social opportunities can be realised.

The typical situation in Third World public transportation patterns, and specifically transportation in Cape Town, now strongly indicates the potential that MMPTI's have to enhance the quality of people's lives. In fact, public transportation has added to the burden facing many disadvantaged communities. Their already limited gross income is reduced further and substantially in order to reach opportunities.

MMPTI's should be seen as the gateway for those poor and disadvantaged sections of our communities to access facilities and opportunities that exist. This is an important step in achieving an equitable and sustainable city

At present MMPTI's dismally fail to make their proper contribution to the liveability of the urban environment.

#### **5. REFERENCES**

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Belinda Verster has been a lecturer in a number of subjects, in the Department of Town and Regional Planning of the Cape Technikon for the past 8 years. She has distinguished herself in her own academic studies, having passed her B.Tech degree with distinction in 1999.

Whilst proceeding with her studies for the National Higher diploma, she was employed by a private Planning practitioner and also by the Cape Technikon by the department of Campus Planning. From the very nature of lecturing at a Technikon, an extensive networking with practicing professionals has been developed.

Belinda is the first post-graduate student registered for the M.Tech degree in Town and Regional Planning, and is in fact the first in the country: neither the Witwatersrand Technikon nor the Durban Institute of Technology offer this degree. This M.Tech degree tends to differ from many university Masters in that it is a thesis programme focusing on a particular problem and its solution.

Emanating from this, a lively research initiative now complements the teaching role of the Department, and Belinda has taken on the important role of co-coordinating and facilitating impending research work and assistance undertaken by 10 post- and undergraduate students.