



Tshwane City Central

Taxi transfer terminal and market.

0.1 Introduction

0.1 Background

In the next hundred years urbanisation of the world population will increase from 60,1% to 80%. Tshwane is no exception to this. By 2025 the city's population is estimated to increase by 30% from 2000 population levels (GTS2000). This steady immigration of rural people to Tshwane has amplified demand on all existing infrastructure services and especially transportation. Be it private vehicle or public transport, people must be able to commute within the city.

During 1995 to 2003 Tshwane had experienced rapid economic growth of 4,6% per annum. This eight year period resulted in an increase in peoples ability to purchase vehicles. Due to the unattractiveness and inconvenience of public transportation, more people bought their own vehicles inevitably leading to greater congestion on roads. (City of Tshwane, Strategic Public Transport Plan:35)

A lack of vacant urban space and financial resources makes it a near impossibility to continue addressing the congestion problem through the building of more roads. Government's focus will have to shift to developing public transportation as a viable alternative for commuters.

In recent years, facilities for public transport have deteriorated, and funding for operating security and maintenance of existing public transport facilities is difficult. Currently, Tshwane alone uses 30% of the national transportation subsidy(City of Tshwane, Strategic Public Transport Plan:35), thus emphasising the need for facilities to produce enough income to maintain themselves and ensure their future.

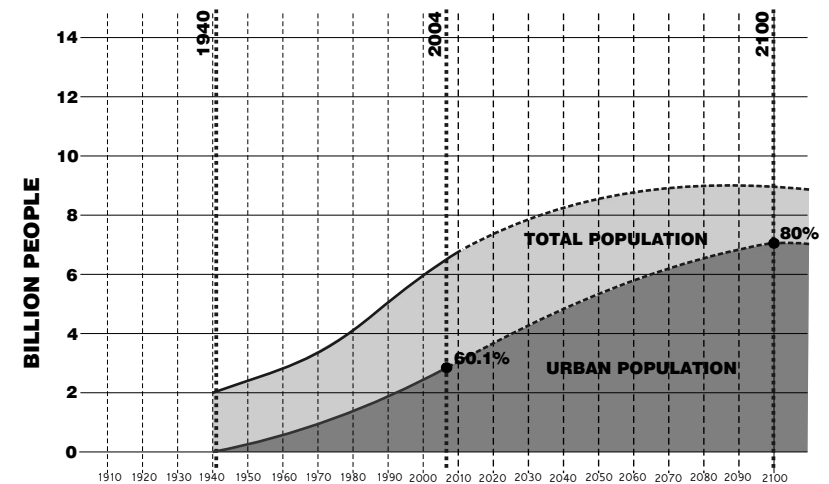
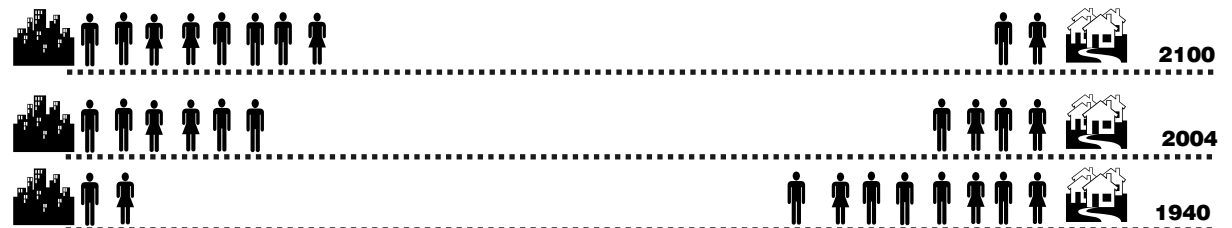


Table 0_01 Urban population projections by the United Nations



0_03 Urban population projection ratio

0.2 Future Developments

New opportunities and developments have recently emerged, aiding the upgrading of the public transportation infrastructure.

Gautrain

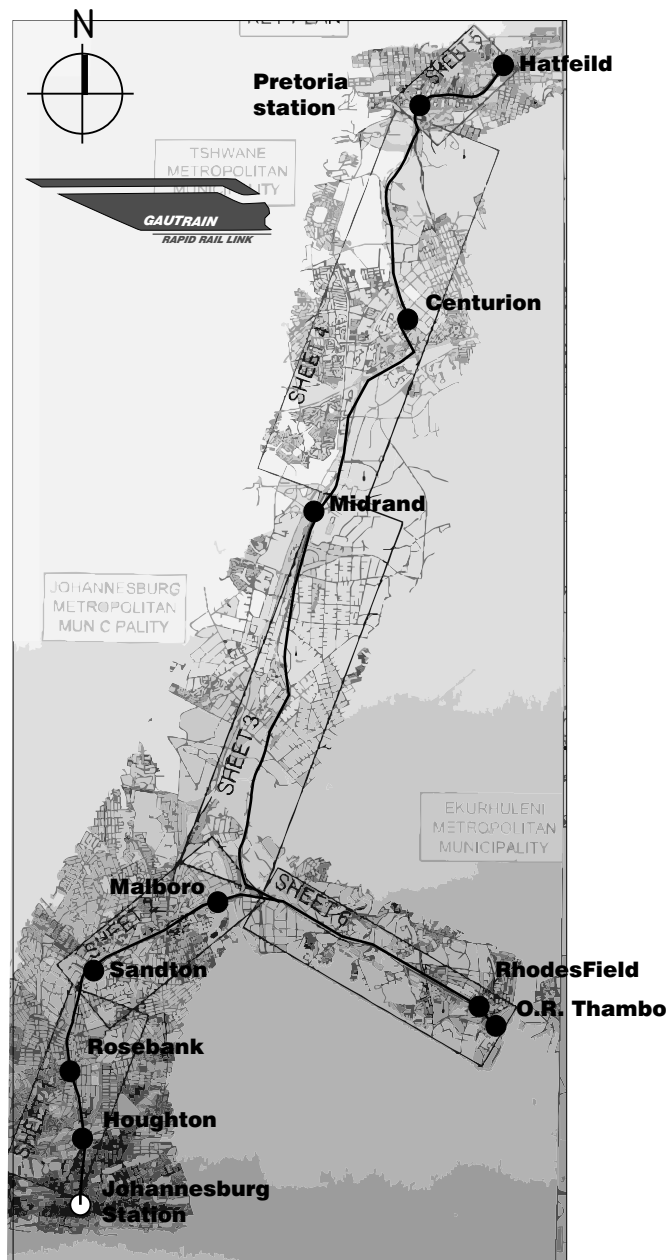
The introduction of the Gautrain will improve the perception of public transport being only for the poor. It is a modern high speed light rail that links O.R Tambo International Airport with various stations in Johannesburg, Midrand, Centurion and Pretoria (Vide figure 0_04).

Taxi Recapitalisation Programme

Using a R7,7 billion incentive programme, through which central government intends to modernise the taxi industry by purchasing old taxi's for R50,000 each. This will assist operators in obtaining new vehicles, and removing old unsafe vehicle off the road (www.engineeringnews.co.za).

FIFA World Cup 2010

R3,5 billion has been budgeted for large scale improvements on roads and public transportation systems. The upgrade will accommodate an estimated three million international visitors to South Africa for the football tournament (www.fifaworldcup.co.za).



0_04 Gautrain rapid rail link key map



0_05 Taxi driving



0_06 FIFA world cup logo

0.3 Socio - economic trends

The Tshwane Municipality is in most, if not all, aspects the model Apartheid city, split in two components. The first one is a powerful economic power house, located in the centre. The second component is poor and under-developed peripheral townships, where a deprived workforce dwells. These townships have little job opportunities and even less amenities. (TSDS:02)

Everyday workers are required to commute into the cities, some even wasting three hours on traveling to work. The unemployed, living in these dissociated townships, are evidently removed from any economic opportunities and are unlikely to find any jobs or even to succeed in casual trading (TSDS:18).

The *Tshwane Spatial Development Strategy: 2010 and Beyond* (TSDS), has identified these economic inequalities. The TSDS states that Tshwane's developments should focus more on the immediate areas around Pretoria, rather than scattered investment following the current socio-political trend.

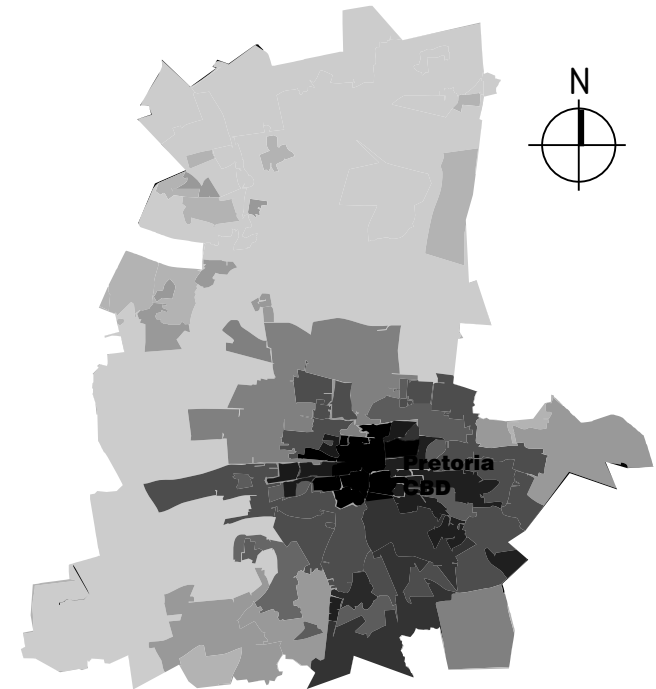
The TSDS argues that splitting investment equally to all the previously disadvantaged sectors will result in only a partial development of these areas. Such approach would hinder economic sustainability and would eventually cost Tshwane more in transportation and unemployment subsidies.

The TSDS strategy aims to restructure the current demographic displacement, (*Vide* figure 0_07) and promote a hypothetical scenario as graphically shown in figure 0_06, assuming no racial separation was imposed.

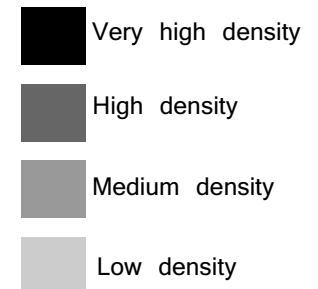
In this scenario, high density residential developments would be intensified within a 10km radius of Pretoria, infrastructure can then be concentrated and travelling distances reduced. The result would be a more sustainable city.



0_07 Current population densities in Tshwane



1_06 Hypothetical population densities of Tshwane if racial segregation had not occurred.



0.4 Dissertation aims and objectives

The aim of this dissertation is to promote public transportation by creating an effective terminal facility accessible to all commuters and creating an identifiable landmark within the city. The facility must have adequate services to support users, such as taxi operators, commuters, tenants, traders and the general city dwellers.

Construction of the terminal will be funded by government's budget allocated to upgrading of public transport. The facility will subsequently generate an income through rent from shops, kiosks, hotels and other commercial activities, allowing the terminal financial sustainability. It must promote safety and convenience to the commuter thereby improving comfort.

The terminal must offer a public transport infrastructure that will be more advantageous than private transportation, eventually encourage medium and high income population sectors to start using public transportation. Sustained flow of passengers will increase economic opportunity to traders.

The methodology for the research of this dissertation will be based on the grounded theory. Factual information will be gathered from similar projects that have been built in recent years and are located around the country.

These terminals have allowed South African culture to adapt itself to these types of interventions. Through a qualitative analysis, This dissertation will reveal findings, concepts and hypotheses, that will form a base for the philosophy and finally the design of an integrated commuter centre.

Project: Taxi terminal
Client: Government
User: Taxi operators
Commuters
Traders



O_09 Informal traders at work



“Picture this: by 2014, South Africa’s crime rate will plummet, affirmative action won’t exist, townships will become suburbs, and more than 50% of the adult population will own a business”.
(Guy Lundy: January 2007)

This is the scenario painted by futurists and the country’s planners on what South Africa will look like in seven years when voters go to the polls for its fifth democratic general elections.

(Futurists paint a picture of health by 2014, Sunday Times, 28 January 2007)



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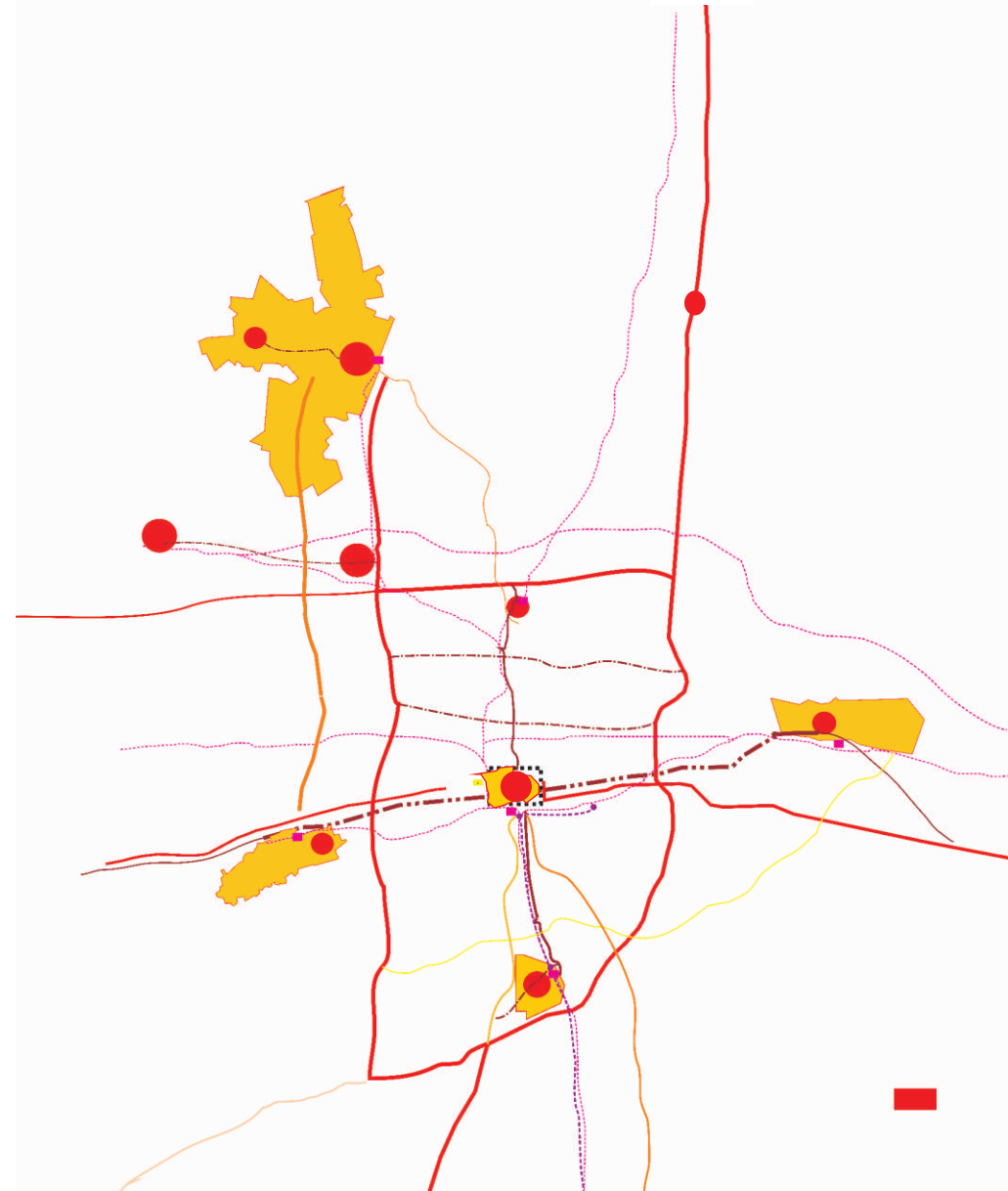
Taxi transfer terminal and market, applying architecture to socio-economic development.

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0_01 Highlighted road system of Tshwane.

Preface

South Africa's growing economy is contributing to an increase in individual wealth allowing for private vehicle ownership, which has resulted in escalating demands for the construction of additional roads. However, a shortage of area and funding is forcing government to increase its attempts at upgrading public transportation facilities. Thus public transport is strongly viewed as a viable alternative.

Approximately a sixth of public transportation is reliant on the mini-bus taxi industry, therefore formalisation of this mode of transportation is necessary. This can primarily be achieved, through the construction of new facilities, such as junction terminals and other interfaces between commuters and taxis. This will improve customer convenience and enhance the reputation of the industry.

An increased number of commuters will require added conveniences such as retail and food stalls. The newly given opportunity will allow informal traders to capitalise on this escalation. (*Vide Annexure A*).



0_02 The trader.



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Definitions

Tshwane: Greater municipality of Tshwane

Pretoria: Central business district of Tshwane

Taxi: Mini-bus Taxi including operator

Trader: An informal trader or hawker, operating on the street selling goods to pedestrians, for an income.