

CHAPTER I

INTRODUCTION



1. INTRODUCTION

1.1 Purpose of this manual

The Department of Environmental Affairs (DEA) launched the National Greening Programme in May 2010. Within the thematic area of sustainable transport, the department partnered with KFW German Development Bank and initiated the Non-Motorised Transport (NMT) programme as a legacy programme to the Greening the 2010 FIFA World Cup initiative. The programme aimed to demonstrate walking and cycling projects by:

- Encouraging integrated transport planning;
- Reviewing institutional and regulatory measures;
- Encouraging cities to undertake awareness and education;
- Promoting incentives to encourage non-motorised transport usage; and
- Researching and sharing of NMT knowledge on a national level.

It is anticipated that this manual will accelerate the promotion of NMT in the country based on the lessons learnt from the pilot cities. In South Africa, along with most African countries, walking is the main mode of transport, followed by the use of public transport in both urban and rural areas. Cycling has traditionally been a mode of transport in rural areas, although it is increasingly becoming an urban mode of transport. NMT modes serve as feeder routes to public transport. Non-motorised transport is a mode of transport in its own right.

1.2 Background

This best practices manual is based on lessons learned through the development and implementation of NMT programmes in the three pilot cities: City of Johannesburg, Ethekewini Metropolitan Municipality and Polokwane Local Municipality.

1.3 Contents of the manual

Chapter 1 of the manual begins with an introduction and background of the NMT Greening Programme. Chapter 2 captures the benefits of cycling and walking from national and international perspectives. Chapter 3 provides an overview of policy and legislation in South Africa that encourages NMT and addresses the national, provincial, district and local government roles in implementing NMT projects. The full life-cycle of NMT projects – from inception, through planning, implementation, monitoring, evaluation, marketing and campaigning are explained in chapters 3 to 9. Chapter 10 summarises the key lessons learnt. Throughout the manual, examples of best practice are provided from the pilot cities and also from local and international examples.

1.4 Scope and limitation

The promotion of safe and secure NMT facilities requires a variety of measures, such as engineering, education, promotion, enforcement, evaluation and monitoring, as well as the provision of bicycles.

Although this **NMT Best Practice Manual** includes significant information on all NMT service delivery aspects during the planning, implementation and maintenance of NMT facilities, this document is not a design guideline. The National Department of Transport (DoT) is responsible for the development of such a guideline.



1.5 NMT and promoting universal access

Persons who walk, cycle, skate, use wheelchairs or animal-drawn transport are all NMT users. When designing NMT networks, facilities and infrastructure, the capabilities and limitations of all road users must be taken into consideration. Universal design is a process that attempts to make any facility usable, safe and comfortable for use by people with the widest range of physical and cognitive abilities. This is significant for pedestrian and NMT planning. Those with special needs are defined as (Davies, 2013):

- **People with disabilities:** People with a physical, sensory or mental disability, either permanent or temporary.
- **The aged or elderly:** People over the age of 55.
- **Pregnant women:** Women in their last trimester.
- **Young children:** Children between the ages of 0-14 years.
- **Signage passengers:** People unable to read or to understand the language used on the signage.
- **Female passengers:** A group more at risk of crime and abuse.
- **Load-carrying passengers:** People carrying bags, luggage, goods or bicycles.

1.6 The three NMT pilot projects

1.6.1 CITY OF JOHANNESBURG: ORLANDO NMT PROJECT, SOWETO.

In Soweto, Johannesburg, access to public transport hubs is of particular importance as most workplaces and economic opportunities are located 20 to 50 km away, often in the north of the city.

The Orlando NMT pilot project focused on integrating NMT links with public transport, school routes and tourism. The primary objective was to establish cycling as a safe, alternative mode of transport. Many people in Soweto already walk to work, school or public transport facilities; however, there are

currently very few cyclists. The project thus provides infrastructure to encourage cycling as an alternative mode of transport in Soweto; thereby building the cycling culture.

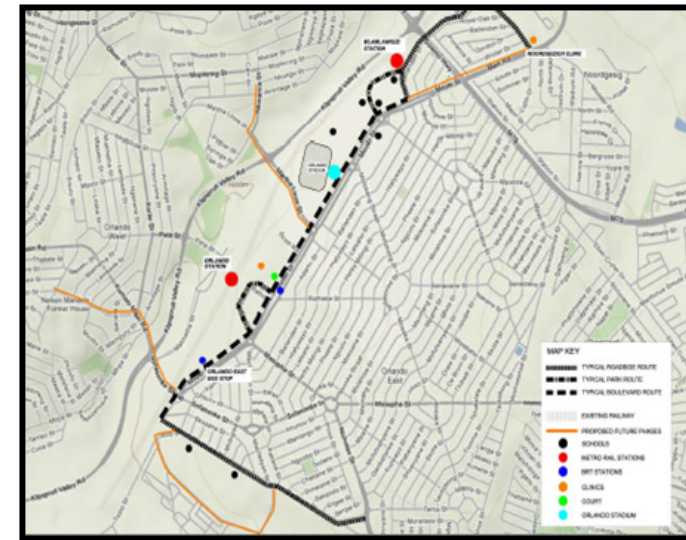


Figure 1.1 Johannesburg Orlando NMT network plan

The facilitation of improved and easy access to public transport hubs was an important aspect of the project given the reliance of the greater population in Soweto on public transport. The integration of NMT with the Bus Rapid Transit (BRT) and train stations was a priority for this pilot project. There are also 12 schools located close to this NMT network. The project also focused on the last leg of the rail commuter journey between the station and either the residence or place of work. These linkages tie into the upgraded suburban rail. The project also took into consideration environment improvements and provision of security upgrades through the installation of street lighting. This network can be seen in **Figure 1.1**.

1.6.2 ETHEKWINI: NMT CONNECTIONS PROGRAMME

The City of Ethekwini has a transport authority that is committed to NMT and has developed a Non-Motorised Transport Plan (March 2013). The modal share of trips in the municipal area consists of public transport (40.7%); private transport (33.2%) and walking or cycling (26.1%). Walking is the most dominant NMT mode for educational travel; commuters from low-income households tend to walk longer distances.

The scope of work for the Ethekwini Cycle Connections Programme is shown in **Figure 1.2** as follows:



Figure 1.2 Ethekwini NMT Connections Programme



(A) GREEN WALK-CYCLE CIRCUITS (5 YEAR PLAN)

This circuit links a series of cycling/walking routes to the city's main hotel belt and unique and exceptional natural resources adjacent to the Central Business District (CBD), including the riverine systems and Umgeni River Mouth.

(B) SCHOLAR CONNECTIONS (PHASE 2)

In partnership with several inner city schools, this project aims to facilitate commuter cycling to schools by learners through the creation of dedicated shared pedestrian and cycling routes linking high density residential nodes with the respective schools.

(C) CONNECT TO RAIL (PHASE 2)

This project focused on the final stretch of the rail commuter journey between the station and either the residence or place of work. These linkages tie into the upgraded suburban rail. The affected stations also include environment improvements and security requirements.

1.6.3 POLOKWANE LOCAL MUNICIPALITY – NELSON MANDELA DEMONSTRATION CYCLE ROUTE

Polokwane Local Municipality is the third pilot city involved in the NMT Programme. The Polokwane Local Municipality NMT Master Plan is at a draft stage. In it, Nelson Mandela Drive is a critical component of the Polokwane road network as it links residents of outlying suburbs west of the City with the Polokwane CBD. The existing shared path experiences high volumes of commuters as it provides a key NMT link to the outlying poorer communities of Seshego. The existing shared path also provides a recreational cycling facility for many citizens. Historically, prior to the construction of Nelson Mandela Drive, this corridor was heavily utilised by cyclists. Unfortunately, no provision was made for cycling during the development of the highway. The completed segregated cycle path forms a critical component in the cycle network in Polokwane, by providing a key link to other future cycle routes within the network. The completed Nelson Mandela Demonstration Route has provided an important service to the future BRT System as it has improved accessibility and mobility for the commuters utilising the BRT System by providing continuous access to NMT facilities.

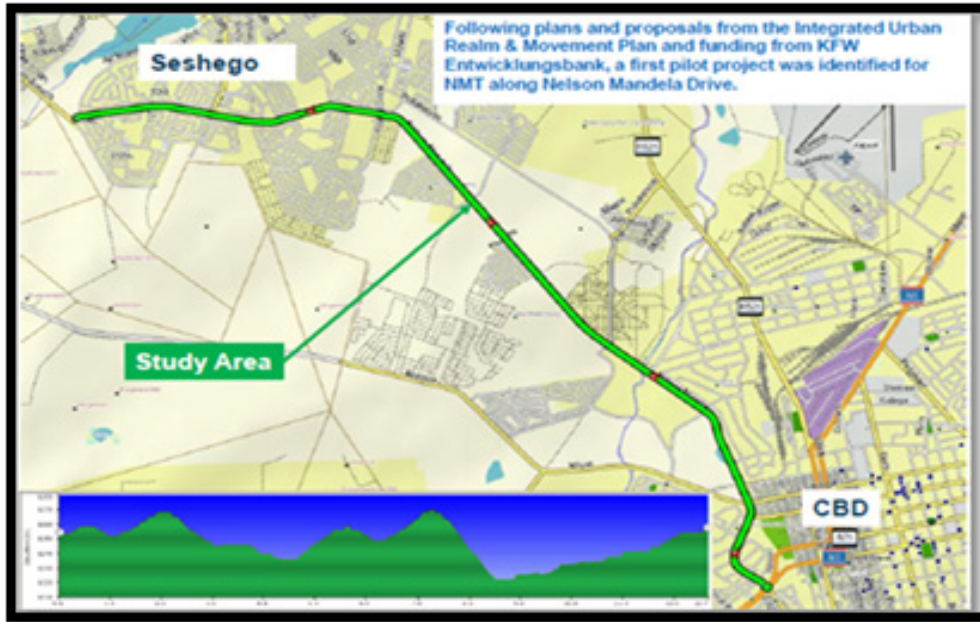


Figure 1.3 Polokwane: Nelson Mandela demonstration cycle route

1.7 Concluding comments

The NMT Best Practice Manual is largely informed by experiences in developing and implementing NMT plans in response to the hosting of the 2010 Soccer World Cup™ focusing on three municipalities, namely City of Johannesburg, Ethekewini Metropolitan Municipality and Polokwane Local Municipality. It is not intended as a design guideline, as this is the responsibility of the DoT. Such a guideline would carefully take into consideration the special needs of all NMT users and provide guidance on how to effect these in planning. Rather the Best Practice Manual vocalises the principle that in ensuring that there is universal access, the unique needs of particular users must be taken into consideration. The manual addresses the full life-cycle of NMT projects drawing on real-life experience to demonstrate and highlight best practice at each step of the way.

