

# **WALK-FRIENDLY COMMUNITIES THROUGH MOBILITY MANAGEMENT PROGRAMS AT LOCAL GOVERNMENT SPHERE**

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## **ABSTRACT**

Non-motorised transport, particularly walking, takes a massive share in rural communities as a form of transport and medium of travel more than other modes of non-motorised transport or motorised transport. Primarily due to socio-economic characteristics of rural communities such as low income levels, unemployment, lack of commerce and development. The paper uses a local municipality as a case study reflecting on the pressing walkability issues in the municipality and highlights the opportunity presented by the latter to address the pedestrian challenges. It proposes mobility management programs in dealing with pedestrian challenges in the municipality and ultimately realising a walk friendly local municipality.

## **INTRODUCTION**

Non-Motorised Transport (NMT) includes all means of transport that are human powered. Non-motorised transportation includes Walking, Animal-Power and Bicycling, and variants such as Small- Wheeled Transport (skates, skateboards, push scooters and hand carts) and Wheelchair travel (Draft National Non-Motorised Transport Policy, 2008). The focal point of this paper would be on one type of non-motorised transport, that is walking which according to Litman (1997) is a fundamental human activity which provides physical fitness, enjoyment and essential mobility. Furthermore emphasising that, it provides connections between activities and modes. Non-motorised transport in most instances finds itself on the fringes of any development or recognition of significance primarily due to conventional approach found on policymaking and implementation of transport related initiatives.

Phokwane Local Municipality is made up of three main three towns namely, Jan Kempdorp, Harstwater and Pampierstad, located in the north-eastern extreme of the Northern Cape Province (IDP, 2013 /2014). According to Statistics South Africa census of 2011, the Phokwane municipality population is at 63000 and there is a large number of Phokwane Local Municipality's population that is unemployed, very poor and with low income levels; and experiencing low living standards implying that most of the population cannot afford to use any other mode of transport than non-motorised transport (LED plan, 2004). The municipality has no provision of non-motorised transport facilities for its residents who majority of them use the latter mode on a daily basis. The residents of Phokwane municipality find themselves fighting for space on the predominantly motorised streets or roads within the as they go on fulfilling their respective responsibilities such as going to work, school or essential services centres . For instance the issue of competition for space is quite a norm in arterial streets or roads that are mostly fed by collector streets. Subsequently it leads to fierce competition between pedestrians and motorised transport for space.

This paper's main aim is to propose probable solutions to the inherent challenges currently experienced by the predominantly pedestrian communities falling under Phokwane Local Municipality. My intentions are to propose options for improving pedestrian environment conditions through utilisation of mobility management programs, and a practical scenario. Furthermore ultimately realise a walk friendly communities in the municipality.

## **MUNICIPAL NON-MOTORISED TRANSPORT (WALKING) DEFICIENCIES AND CHALLENGES**

Phokwane Local Municipality's population is characterised by low income levels and high unemployment levels. Subsequently large number of people using non-motorised coming from low income communities primarily because other options of transport are not affordable to low income communities, making NMTs the only mode of transport to use (Western Cape provincial government, 2010). Thus the municipality's population depend primarily on non-motorised transport, especially walking on a daily basis to meet their duties or fulfil their responsibilities.

The population of Phokwane Local Municipality uses 69.4 % of walking as mode of travel to work or school (Statistic South Africa, 2001). The reality is that walking conditions of the roads or streets within the municipal boundaries are not favourable to pedestrians.

There is no provision of non-motorised transport facilities, more especially for walking. The following pictures show the bad conditions and pedestrian challenges found on Cwaile Avenue.



This lack of provision for non-motorised transport clearly shows a bias towards motorised transport (Mittulah & Opiyo, 2012). As result this put the majority of the residents within the municipality at the danger of being killed or injured by motorised transport because of

competition for space. The latter is as a result of lack of pedestrian facilities designated mainly for pedestrian travel (FMATS-NMT, 2012). Furthermore Mittulah & Opiyo (2012) does acknowledge the dominant position of non-motorised transport albeit indicate that, it has not aided the mode. In fact obstacles such as lack of institutional support and capacity, bias towards motorised transport in terms of ITP formulation, infrastructure development and lack of political will on the local government level inhibit the mode from moving forward primarily due to its relegation to secondary position by conventional policymakers and bureaucrats.

## **MOBILITY MANAGEMENT PROGRAMS**

Mobility management programs that improve non-motorised transport conditions, for instance for walking it involves improved sidewalks, streetscapes, security improvements or road safety campaigns, and encouragement programs (Litman,1997).These mobility management programs are appropriate for addressing the pedestrian challenges found in Phokwane Local Municipality and possibly redesign the existing roads to be able to provide safe and convenient environment for non-motorised modes of transport such as walking (Tiwari,1999). Joburg's Framework for non-motorised transport (2009) argues that:

“It is important that the infrastructure be placed in locations where there is a sufficient density and concentration of users. Whilst it is anticipated that the primary users of NMT will be young and children, levels of income and employment would also play a role in the take up of NMT”

The placement of the required facilities in the community which is characterised by low income households would adequately serve the interests of pedestrians and support other community development initiatives within the community. Cwaile Avenue would be an ideal starting point in introducing the NMTs facilities in Valspan Location of which fall under one of the main towns of Phokwane Local Municipality, Jan Kempdorp. Cwaile Avenue is the main arterial in the area, other streets feed Cwaile Avenue. Most of the travel on this avenue is on foot. The avenue comprises of and leads to the following essential facilities:

- Early childhood development centres(ECDC)
- Churches
- Primary school and high school
- Department of Home Affairs
- Clinic
- Community bakery
- Recreational facilities(e.g. Stadium and community hall)

Figure 1 shows the land use patterns of the street and connectivity to other nodal points within the neighbourhood. The street that comes from the direction of Kingston Settlement through the Cwaile Avenue till to the street that goes to Jan kempdorp should be redesigned to accommodate pedestrian facilities such as side-walks on both directions of the street to complement the flow to and from nodal points and assist in pedestrian movement (Joburg: Framework for non-motorised transport, 2009). It would aid in averting pedestrians walking on the middle of the street dodging motorized transport. In addition to the latter pedestrian crossings combined with vehicle speed reduction strategies should be integrated in the whole street redesigning process to ensure proper regulation also of the motorised transport, particularly traffic calming measures such as speed humps and other strategies.



These infrastructural developments on Cwaile Avenue would enable the street to be able to handle the pedestrian movement and support other land use patterns that are found on the street. Sound pedestrian environment would only materialise when all the affected stakeholders play an integral part in the planning and implementation of pedestrian orientated initiatives such as the introduction of pedestrian facilities and mobility management programs on the Cwaile Avenue. Since well for most pedestrians using the street, from collector streets their origin and destination is within the walking distance (Walk friendly communities, 2012).



**Figure 1: Land use patterns of Cwaile Avenue**

**Legend:**

- Recreational facilities, 
  Hair Salon, 
  Church, 
  Crèche, 
  Bakery, 
  Schools, 
  Department of Home Affairs, 
  Health facilities (Clinic), 
  Businesses.

## POTENTIAL ROLE OF NMT INFRASTRUCTURE ALONG CWAILE ROAD.

These infrastructural developments on Cwaile Avenue would have to be complemented by an extensive roll-out of road safety campaigns and encouragement programs importantly (Ice, 2000), these programs focus would be to influence behavioural patterns of users of Cwaile Avenue instead of only relating information that aims to enhance users knowledge on issues of safety and the importance of abiding by traffic rules. This extensive road safety campaign target group would be diverse in nature due to the different types of users found on the Cwaile Avenue walking to their various destinations or fulfilling their duties, the primary target places would be of the main people using the Avenue such as primary schools, high schools, driving schools, churches, and clinics (Ice, 2000).

It should be noted that the financial implications of the infrastructural developments proposed to improve pedestrian conditions for Cwaile Avenue are very minimal and more importantly the maintenance costs of the NMTs facilities are less as compared to motorised transport infrastructure (Litman,1997). The presence of sidewalks and relevant pedestrian infrastructure on Cwaile Avenue would show the significance of the mobility and safety of pedestrians whilst going to their respective destinations or fulfilling their responsibilities in a community which is pedestrian dominated. Furthermore boast efforts towards walk-friendly communities within the Phokwane Local municipality to meet the widely used mode of travel demand.

## CONCLUDING REMARKS

The dominance of non-motorised transport is quite evident in areas that are characterised by low income communities; case study on point being substantial walking prevalent in Phokwane Local municipality. This is descriptive of the socio-economic characteristics of the municipality. Furthermore this walking as mode of travel presents an opportunity for the formulation of a NMT framework for the municipality since well there has been no institutional support for the NMTs within the municipality due to conventional policymaking that tend to favour motorised transport. And further assist efforts on de-stigmatizing the NMTs as an unexciting or unsophisticated mode of travel as compared to motorized transport.

Mobility management programs that would be appropriate for the Cwaile Avenue would be sidewalks or paths on both directions of the road, zebra crossings at intersections, and traffic calming measures such as speed humps to reduce the speed of motorised transport. This paper concludes that total redesign of Cwaile Avenue is required to be able to support pedestrian facilities .Furthermore an extensive roll-out of safety campaigns to complement the latter programs, would be of utmost importance to the users of the road and community participation would play an integral part in ensuring that the interests of the entire community are satisfied.

## REFERENCES

City of Johannesburg, 2009, *Framework for Non-Motorised Transport*, Johannesburg.

Department of Transport, 2008, *Draft National Non-Motorized Transport Policy*, Pretoria.

Litman, T., 1997, *Quantifying the Benefits of Non-motorized Transportation*

*For Achieving Mobility Management Objectives*, VTPI ([www.vtpi.org](http://www.vtpi.org))

Mitullah, W.V., Opiyo, R., 2012, *Mainstreaming Non-motorised Transport (NMT) in Policy and Planning in Nairobi: Institutional Issues and Challenges*, 31<sup>st</sup> Southern African Transport conference (SATC 2012), Pretoria, South Africa, July 9-11, 2012, pp1-7.

Provincial Government Western Cape, 2009, *Draft Non-Motorised Transport in the Western Cape Strategy*, Cape Town.

Phokwane Local Municipality, 2012, *Phokwane Local Municipality Integrated development plan 2012/13(IDP 2012/13)*, Hartswater.

Phokwane Local Municipality, 2004, *Phokwane local Municipality Local Economic Development Plan (LED plan)*, Hartswater.

Servaas, M., 2000, *The Significance of Non-Motorized Transport for Developing Countries: Strategies for Policy Development, Report*, Interface for Cycling Expertise (ICE) commissioned by World Bank, Utrecht.

Statistics South Africa, *Census 2001*, viewed 03 April 2014, from <http://www.statssa.gov.za/?page id=phokwane municipality>.

Statistics South Africa, *Census 2011*, viewed 03 April 2014, from <http://www.statssa.gov.za/?page id=phokwane municipality>.

Tiwari, G., 1999. *Road Designs for Improving Traffic Flow: A Bicycle Masterplan for Delhi*, (Delhi, TRIPP, IIT).

U.S Department of Transportation, 2012, *FMATS NON-MOTORIZED TRANSPORTATION PLAN*, Fairbanks.