







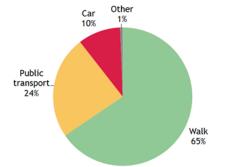


The Republic of Zambia is home to approximately 18 million people, with the population expected to grow to 24 million by 2030. The urban population is currently 7.8 million, making Zambia one of the most urbanised countries in sub-Saharan Africa. Despite a high level of reliance on non-motorised transport (NMT) in Zambian cities and rural centres, many streets are not designed for people to walk or cycle. Greater emphasis on walking, cycling, and public transport is needed to achieve a more equitable allocation of road space.

## **CURRENT CONDITIONS**

The majority of trips in Zambia are made by walking, followed by public transport, with only around ten percent of trips made by car. Despite low car ownership, Lusaka and other Zambian cities are experiencing increasing traffic congestion, making it difficult for residents to access economic and educational opportunities. Lack of urban planning and poor policy frameworks have led to a mismatch between urban infrastructure investments and population growth leading to congestion. It is therefore essential that appropriate strategies are developed in order to overcome these emerging challenges.

The city of Kitwe has made notable efforts to improve the walking environment, with new high-quality footpaths developed along President Ave as part of the Pave Kitwe project. There are some footpaths along the streets of Lusaka, but the majority of the roads lack well-designed footpaths. As in many cities around the world, streets in Lusaka are designed for vehicles and do not serve the needs of the majority. Atgrade crossings have been replaced by footbridges, making





A street in Lusaka Zambia

mobility even more difficult for persons with disabilities and those carrying loads. There is lack of pedestrian crossings and traffic signals, making movement difficult on high-speed streets. Cycle tracks are absent, forcing cyclists to ride on pedestrian walkways to avoid motor vehicle traffic.

A lack of sufficient drainage contributes to an unpleasant and unhealthy walking environment and a lack of street lighting contributes to insecurity. Many formal developments in middle and upper-income areas are lined by compound walls and the frontages are not animated. To overcome such challenges, Zambian cities need to adopt urban planning strategies and transport system interventions that promote a shift to sustainable modes, including efficient public transport, walking, and cycling.

## **OPPORTUNITIES AND CHALLENGES**



Lack of basic footpaths on many streets



Insufficient storm water drainage



High-quality footpaths in Kitwe



Footbridges limit mobility



Lack of parking regulations



Lack of cycle facilities

#### STRATEGY DEVELOPMENT PROCESS

Stakeholder engagement is a key step in the development of an NMT strategy. ITDP and UN Environment conducted various stakeholder engagement meetings in Lusaka, Kitwe, and Ndola to inform the strategy. The following agencies were consulted:

- Ministry of Transport and Communications
- Road Development Authority
- Ministry of Local Government
- Zambia Environmental Management Agency
- · Road Transport and Safety Authority
- National Road Fund Agency
- Zambia Agency for Persons with Disability
- Lusaka City Council
- Ndola City Council
- Kitwe City Council
- Zambia Road Safety Trust
- Bus and Taxi Owners Association of Zambia
- Commuters' Rights Association of Zambia
- United Nations Development Programme

An initial stakeholder workshop on the NMT Strategy was organised in partnership with the Ministry of Transport and Communications in May 2018. The event attracted over sixty participants from all over the country including senior national government officials, engineers from RDA and local authorities, public transport operators, the commuter association, UNDP, donor agencies, practitioners, civil society organisations and journalists. The workshop provided an opportunity to share information on ongoing NMT initiatives and present best practices in providing safe, sustainable, and equitable transport systems. Participants went on a site visit to downtown Lusaka, observing elements such as walkways, pedestrian crossings, and public transport terminals. The participants worked in groups to develop design solutions for the study area streets. The event was to sensitise stakeholders, create ownership, and stimulate support for the Zambia NMT strategy. The strategy was discussed in detail to gather input from the participants.

A second stakeholder workshop was held in December 2018. The workshop included presentations on sustainable transport and the revised NMT strategy. Agency representatives presented about ongoing initiatives related to NMT. Participants then formed groups and reviewed specific sections of the NMT strategy in detail. The feedback was taken into account while developing the final version of the strategy.



First stakeholder workshop

# **NMT STRATEGY PRINCIPLES**

**Safety:** Making non-motorised modes of transport viable and convenient requires rebalancing street space so that it caters to all modes of transport. The physical design of streets and the provision of sidewalks, crossings, and other walking infrastructure is crucial to creating a high-quality walking environment.

**Universal access:** Universal access is the concept of designing transport services and environments that as many people as possible can use, regardless of age or ability. Streets designed according to universal access principles accommodate assistive devices for particular groups of persons with disabilities. Accessibility to transport is only as strong as its weakest link, so the inclusive designs must cover public passage, public transport stop and boarding, vehicle interiors, alighting and passage to the final destination.

**Collaboration:** Provision of urban transport services and infrastructure is a complex task that calls for concerted efforts and participation of all relevant stakeholders. Development and implementation of the Zambia NMT strategy will be achieved through close collaboration among government departments, civil society, the private sector and other partners.

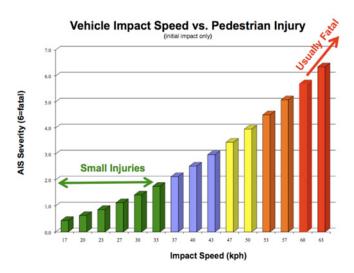
**Equity and social justice:** Transport investments will prioritise modes used by lower-income groups, including walking, cycling and public transport. The strategy also seeks to ensure gender equity by supporting the development of an integrated and safe transport system that provides access to education, work, health care, cultural and other important activities that are crucial to women's participation in the society.

**Environmental sustainability:** Prioritizing of urban transport modes that minimise emissions of harmful local pollutants and greenhouse gas emissions.

## NMT STRATEGY INITIATIVES

The strategy involves incorporating a variety of interventions ranging from infrastructure improvements to more effective street management and improved public transport services.

**Pedestrian network**: Major streets in all cities and towns in Zambia need high-quality footpaths. Well-designed footpaths provide continuous space for walking. They also support other



Speed reduction is a critical element of a safe pedestrian environment



A well-shaded footpath in Ndola

activities such as street vending and comfortable waiting space at bus stops without compromising pedestrian mobility.

The success of a footpath depends on the integration of multiple elements in a coherent design. Footpaths need to be unobstructed, continuous, shaded and well lit.

**Bicycle network**: To enhance the safety of cyclists and attract new users, Zambia cities and towns should plan for networks of dedicated cycle tracks with safe and user-friendly and convenient infrastructure. Such a network should include cycle tracks along key urban corridors and major streets with two or more lanes of traffic in each direction.

**Greenway network**: To supplement walking and cycling improvements on city streets, open spaces in the city can be developed as NMT corridors that support commuting as well as recreational uses. Greenways can provide safe, convenient connectivity to important destinations, such as schools, colleges and markets.

**Child mobility and health**: Globally, road traffic injuries are the leading cause of death for children and young adults. Specific efforts are needed to improve safety for children. As a first step, safe school zones should be developed around each elementary school to improve safety and expand opportunities for play. School zones typically include speed restrictions to 30km/h or below within a 200 m radius of the school as well as traffic calming elements to ensure that vehicles follow the speed limit.

**Intersection improvements:** Improved intersection design can significantly reduce road crashes, injuries, and fatalities while at the same time improving motorised traffic flow. Dedicated and protected space should be provided for pedestrians to safely cross the street at intersections. Vehicle traffic should be controlled through traffic signals to allow ample time for pedestrians to cross a street.

**Bicycle sharing:** Bicycle sharing can serve short trips in Zambian cities and improve last-mile connectivity to public transport through a healthy, safe and environmentally friendly means of transport. Bicycle sharing will contribute towards the roll-out of a truly integrated transport system, based on a network of high-capacity BRT and city bus/paratransit corridors.

**Vendor management**: Dedicated vending spaces on city streets should be identified and clearly marked. Some vending zones can be time-based, with streets closed to motorised traffic at certain times of the day or certain days of the week. Local authorities can issue licenses to street vendors, set standards for vending stands, and monitor the upkeep of vending areas. Local authorities should provide waste disposal bins and constant enforcement to ensure that vendors keep their spaces clean and they do not encroach on the pedestrian zone.

**Parking management:** On-street parking should be provided only after adequate provisions have been made for higher priority transport modes, including walking, cycling, and public transport. Where on-street parking is provided, market-based parking fees can help manage demand. In addition, robust parking enforcement mechanisms are needed to ensure that walking and cycling facilities, once built, remain well maintained and free of encroachments.

# **STRATEGY IMPLEMENTATION**

Zambia intends to construct 40 km of complete pedestrian facilities and 20 km of cycle tracks per year across ten key cities and towns. Local authorities are also planning to host monthly car free days in their cities to raise awareness of the importance of NMT spaces and sustainable transport. Car-free spaces will illustrate the need for more NMT facilities in urban areas while providing an opportunity for local authorities to engage in public outreach. There are plans to develop and adopt the Zambia Urban Street Design Manual, providing standards for urban streets in line with international best practices.

The Pave Kitwe walkways project is one of the most successful NMT projects in the country. Kitwe has made tremendous efforts towards improving NMT in the city. The project aims to develop 400 km of footpaths. For an initial phase along President Ave, the private sector contributed ZMW 233,000, mostly in the form of paving blocks and other building materials, while the City Council provided the required labour to construct the footpaths.





A new walkway constructed under the Pave Kitwe project

Amend and FIA Foundation are making changes on the ground by building pedestrian facilities in school areas, beginning with a pilot intervention in Chilenje, Lusaka. The project was financed by Michelin, Shell, Toyota, and Total. The project team assessed risks faced by children and designed infrastructure improvements including walkways and pedestrian crossings. The project team included GRSP Geneva, GRSP Zambia, RTSA, MOTC, RDA, Ministry of Education, Ministry of Health, Zambia Red Cross, Zambia Police, and the parent-teacher associations of the target schools.

While some efforts to develop pedestrian walkways have accompanied road expansion and rehabilitation projects, the resulting NMT facilities fall short of best practices. Many new streets, particularly those constructed under the Lusaka Decongestion Project, lack essential NMT facilities. There is a need to review the designs for ongoing projects to ensure that all planned road projects incorporate adequate infrastructure for NMT and public transport.

#### **MORE INFORMATION**

Carly Koinange Global Programme Lead. Share the Road Programme

# 预览已结束, 完整报告链接和二维码如下:



https://www.yunbaogao.cn/report/index/report?reportId=5 13924