



TUMI INITIATIVE'S TRANSFORMATIVE STORIES

LUSAKA, ZAMBIA: LOW COST INTERVENTIONS TO IMPROVE ROAD SAFETY FOR SCHOOL CHILDREN

Zambia has a very young population and its capital city, Lusaka, faces the challenge of getting its learners safely and affordably to school each morning. The School Area Road Safety Assessments and Improvements (SARSAI) program aims to create safe walking conditions in a radius of about 200 meters around each school, reducing road fatalities amongst school children and making the streets safer for other citizens who walk or cycle. With its high percentage of commutes on foot and a new national strategy for non-motorized transport (NMT), Lusaka has the potential to inspire other cities pursuing low carbon mobility.

ABOUT LUSAKA

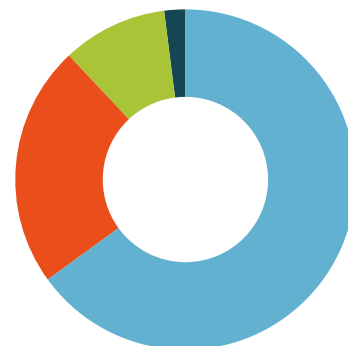
Lusaka is the capital of the landlocked country of Zambia, located strategically at a junction of major highways that connect it to its neighbors, the Democratic Republic of the Congo (DRC), Tanzania, Malawi, Zimbabwe, Namibia and Angola. With an annual population growth rate just shy of five percent, it is considered one of the fastest growing cities in Southern and Central Africa. Part of the reason for its rapid growth is Zambia's high rate of unemployment, which drives people from surrounding rural areas to the city in search of economic opportunities. Zambia has one of the world's highest fertility rates and its **population consists of a very high proportion of young people** – around 46% are under the age of 15. With a primary school enrolment rate of around 88%, vast numbers of learners make their way to places of education each day, many of them by foot. **Lusaka faces the challenge of getting these children safely and affordably between their homes and schools**, and a number of initiatives are underway to improve facilities for NMT that will benefit them directly.



Population (2010 estimate) 14,747,152
Land area: 320 km²
Density: 4,853.2 persons/km²

MODAL SPLIT

- 65% Walking
- 23% Public Transport
- 10% Private Cars
- 2% Cycling



Source: Comprehensive Urban Development Plan Report, 2009

MOBILITY IN LUSAKA

Relative to other cities in Africa, Lusaka has one of the highest numbers of pedestrian commuters. With low average incomes, the majority of the population cannot afford motorized transport or bicycles, and have little option but to walk from A to B. However, **walking is made difficult and dangerous due to a lack of dedicated pedestrian infrastructure, poor stormwater drainage and inadequate lighting at night.** Transport related investments have tended to focus on meeting the needs of motorists, which is contributing to the increased adoption of private cars.

Without dedicated walking and cycling infrastructure, it is no surprise that **road traffic injuries and fatalities are high, particularly amongst pedestrians and cyclists** who have no choice but to share the road with fast-moving cars. The World Health Organization (WHO) estimated that there were 3,586 fatalities on Zambia's roads in 2014, with 37% of these being pedestrians and 12% cyclists.

Minibus taxis are the most widely used shared transport mode in Lusaka due to their relatively low cost per journey. However, overcrowding is common and the vehicles are often not roadworthy. All buses in Lusaka are privately operated, and the larger buses tend to provide connections to other cities rather than within Lusaka itself.

Car ownership in Lusaka is low by international standards, with only 10% of the population commuting via private car. Although a significant number of cheap second-hand cars are imported, **car ownership remains prohibitively expensive for the majority of the population.** However, many aspire to buy their own vehicle as travelling by foot or bicycle is associated with being poor. Despite the low car ownership rate, severe traffic congestion is commonplace, which makes living and working in the city difficult. The use of second-hand vehicles (many over 10 years old) contributes to airborne emissions and safety risks for road users.

IMPROVING ROAD SAFETY AROUND SCHOOLS

In the absence of safe NMT facilities in Lusaka, the School Area Road Safety Assessments and Improvements (SARSAI) program aims to support road safety for children by establishing safe zones with a radius of about 200 meters around educational institutions. While the main objective is to reduce road traffic injuries amongst schoolchildren, the **zones also improve safety for the general population in the surrounding area.** Since 2017, the SARSAI program has been implemented at four schools by Amend, an international road safety NGO, in partnership with a local NGO called the Zambia Road Safety Trust (ZRST).

The SARSAI approach to improving road safety starts with identifying schools that have the highest risk of road traffic injury, and conducting a road safety assessment to identify the challenges. Learners are surveyed to find out



where they travel from and via which modes of transport, and studies are conducted on pedestrian movement and traffic conditions in the vicinity of the school. The results are used to create **low-cost interventions to improve safety**, including elements such as:



- footpaths and bollards to protect pedestrian zones from vehicles
- speed bumps and rumble strips to slow vehicles down
- pedestrian crossings to provide designated safe crossing areas
- re-positioning of pedestrian gates to encourage use of the pedestrian crossings
- road signage to alert drivers to the presence of the school and traffic calming measures

These interventions are then **implemented with the permission and collaboration of the relevant government authorities**. Their support, along with that of the schools and other stakeholders, has been critical to the success of the program thus far. Aligning proposed interventions with local engineering guidelines and standards has also helped to improve their chances of being approved by authorities.

Although Lusaka's SARSAI projects have not yet been formally assessed, the impact of the same program in Dar es Salaam showed a **statistically significant reduction in road traffic injuries among school children**. Interviews with schoolchildren and teachers at the beneficiary schools indicate positive results, and there is anecdotal evidence of reductions in injury rates.

PROMOTING NMT IN LUSAKA

It is hoped that safe school zones can be implemented at all schools in Lusaka to promote safer walking environments, despite the fact that dedicated funding for NMT investments such as these is scarce. The locations of some schools also present a challenge, and **better land-use policies and urban planning is needed** to ensure that future schools are located on roads that can accommodate safe school zones.

Lusaka's ability to support safer walking and cycling is hindered by a lack of NMT strategy and policy. However, the Ministry of Transport and Communication, in association with UN Environment and other stakeholders, is drafting the 'Zambia Non-Motorized Transport Strategy', which is due to be completed in 2019. The recent National Road Safety Policy and Action Plan (2017-2020) has been useful in promoting the safety of road users, and civil society groups have called on Government to focus the upcoming Lusaka Decongestion Project on improvements to walking and cycling infrastructure.





"We need to protect vulnerable road users such as children, and this means improving road safety – especially around schools."

Hon. Chilando Chitangala
Deputy Mayor of Lusaka

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ACKNOWLEDGMENTS

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Icons: Gregor Cesnar and Google /
Flaticon.

ADDITIONAL READINGS

Poswayo et al., 2018: School Area Road Safety Assessment and Improvements (SARSAI) programme reduces road traffic injuries among children in Tanzania

The [Transformative Urban Mobility Initiative \(TUMI\)](http://transformative-mobility.org) enables leaders in developing countries and emerging economies to create sustainable urban mobility. It offers technical and financial support for innovative ideas. In TUMI the German Federal Ministry of Economic Cooperation and Development (BMZ) has brought together some of the world's leading institutions working on sustainable mobility with city networks and think tanks to implement projects on site where they are needed most. Partners include ADB, CAF, WRI, ITDP, UN-Habitat, SLoCaT, ITDP, ICLEI, GIZ, KfW and C40. transformative-mobility.org

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