Building safe sidewalks to save children's lives

Nairobi and other African cities expand walking and cycling

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It's inexpensive, unsurprising and incredibly low-tech, yet it can help the environment and dramatically change and save lives: the simple sidewalk. Walking is a low-carbon method of mobility that enhances urban quality and facilitates social cohesion. Enhancing the walking environment in cities, through safer sidewalks and other measures, reduces the risks of injury or death for children in particular (World Health Organization (WHO) and UNICEF, 2004), and facilitates the shift to environmentally friendly modes of transport.

We often hear that cities in the global north are increasing their investments in walking and cycling, but there is momentum in Africa too – in Nairobi especially, but also elsewhere across the continent. Smart road design – including safe sidewalks, can have a hugely positive impact.

In Nairobi, investment in infrastructure ramped up in early 2021, when Nairobi Metropolitan Services announced a plan to invest almost 1.5 billion Kenyan shillings (around EUR 11 million) in over 100 km of new paths for pedestrians and cyclists. This followed Nairobi's 2015 decision to reserve 20% of its transport budget to improve walking and cycling infrastructure. This was the first such policy in the region.

These new changes come in response to a dramatic problem. Road traffic accidents are the leading cause of death for people aged 5 to 29 (WHO, 2018). Globally, they kill more people than HIV/AIDS or tuberculosis – although no statistic can truly measure the impact of grief on a family that lost a child. More than a quarter of deaths in road traffic accidents are pedestrians and cyclists. And many of those deaths could be prevented with better design of sidewalks.

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Because of their small size, children are most at risk from road traffic. It can be difficult for children to see vehicles, or for drivers to see children. Compared to adults, children also have more limited social and cognitive development, and they have softer heads, making them more susceptible to serious head injuries. Children also absorb 30% more black carbon from exhaust fumes than adults, because their height places them lower to the ground and closer to the pollution source.



Transport is critical in the daily lives of children and caregivers, as they need to move around to access schools, play spaces, healthcare, childcare and food. When they feel unsafe walking or cycling, the result is a vicious circle: more people choose to drive, adding to traffic and the sense of danger for others, and worsening public health through greater air pollution and lower levels of exercise.

In a May 2021 report, the Institute for Transportation and Development Policy (ITDP) and UNEP point out that streets designed for walking and cycling also help to reduce greenhouse gas emissions and improve climate resilience. The more people walk or cycle instead of using motorised transport, the more emissions are saved. Walking and cycling infrastructure also complements well-designed public transport systems – for longer journeys across a city, it is more attractive to use public transport when access points such as bus or tram stops are easy to reach on foot or by bike.

Involving communities in road design

But just as critical is a shift in mindset. Children and caregivers are usually overlooked in the process of designing roads and sidewalks. Roads are often built through communities without consulting residents about their needs.

Influencing how governments think about the challenges and solutions is a long-term task. The UNEP Share the Road Programme is currently working with city governments in Rwanda, Zambia and Ethiopia to build stakeholder consultation into the design and planning processes.

The UNEP Global Outlook Report on Walking and Cycling (UN Environment, 2016) recommends five ways for cities to approach the introduction of design standards in consultation with citizens so that streets are more child-friendly, reducing air pollution and keeping babies and toddlers safer from traffic.

The WHO has identified enhancing road infrastructure as one of ten strategies for keeping children safe on the road (WHO, 2015). The United Nations target of a 50% reduction in the number of road traffic deaths by 2030 cannot be achieved without large-scale, rapid action.

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We need to prioritise simple, low-cost solutions to design and build safe and comfortable sidewalks, in consultation with local communities. These solutions can transform neighbourhoods and entire cities, while increasing climate resilience.

The impact of well-designed streets can also be wonderfully positive for early childhood development – providing healthy spaces to play and run, clean air to breathe and time to connect and be social with other children and adults. And a street that's safe for a child is safe for everyone.

The UNEP Global Outlook Report on Walking and Cycling recommends five steps for prioritising walking and cycling:

- Take the first step Introduce a national or city walking and cycling policy to set the vision and showcase commitment.
- Budget for walking Invest in designing and building good-quality, comfortable and safe sidewalks rapidly and at scale.
- Measure the miles Set quantifiable and measurable goals, then collect the data needed and evaluate progress and impact.
- Work together Access and mobility affect everyone, so include diverse stakeholders in your planning and implementation. Ask users where they walk or ride and what they need. Pay particular attention to more vulnerable users, such as women, children, older people and those with mobility challenges. Don't try to replicate what other cities or countries do without taking your local context into account.
- Do as you say Political will is not only about developing and implementing policies, but actively championing walking and cycling as modes of equal status to private cars. For as long as active mobility is seen as a low-status alternative, it will not receive the road space, budget and attention it deserves.

(UN Environment, 2016)

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