

Improving local school route safety inspires widespread road safety efforts in Zambia







AROUND THE WORLD, communities are committing to eliminating traffic fatalities and serious injuries, often as part of Vision Zero Initiatives. A growing group of these cities is focused on improving safety on school routes and other places where children and youth walk and bicycle. In some places, youth are actively working with cities and other partners to effect this change.

Vision Zero for Youth recognizes that starting with youth can be the catalyst to build community support for Vision Zero, that Vision Zero should include a focus on youth, and that youth voices can play an important role in creating safer streets.

Vision Zero for Youth supports a Safe System approach to reaching zero serious injuries and deaths on roads. The Safe System approach is a shift away from a focus on the behavior of individual road users to a focus on changing the system to provide safer environments for all road users. Equity and consideration for underserved communities is a part of each of the key components of Vision Zero for Youth:

- to calm traffic, improve crossings, and provide safe spaces for all users.
- POLICIES AND PROGRAMS focused on core issues, such as slowing vehicle travel speeds.
- Use of crash **DATA AND PATTERNS** to identify problems, assess risk factors, and apply solutions in a systemic way.
- PARTNERSHIPS with education, transportation, law enforcement, local safety and health organizations, community members, elected officials, and advocates.
- **ENGAGEMENT** of the community around a culture of road safety, with an emphasis on youth empowerment.

LUSAKA, ZAMBIA: 2023 INTERNATIONAL VISION ZERO FOR YOUTH LEADERSHIP AWARD RECIPIENTS

The purpose of the International Vision Zero for Youth Leadership Award is to both recognize and highlight noteworthy road safety practices and inspire other cities to take bold steps to reach zero traffic deaths among children and youth. It is presented by the Vision Zero for Youth initiative, led by the National Center for Safe Routes to School with support from the FIA Foundation.

Cities recognized with the International Vision Zero for Youth Leadership Award have taken impressive action to improve walking and biking safety for their children and youth with the goal of building safer, healthier communities for everyone.

Past recipients are Fortaleza, Brazil; Addis Ababa, Ethiopia; Bogotá, Colombia; and Pleiku City and Gia Lai Province, Vietnam.

To learn more about the International Award, visit: www.visionzeroforyouth.org.



is a challenge, and the methods for finding those solutions can vary widely from country to country. In Lusaka, Zambia, the capital and largest city in the African country, officials spent years engaging strategic partners and raising awareness to improve safety for pedestrians, particularly for kids walking to the city's schools.

Multiple entities, including the office of the mayor of Lusaka, local and national agencies, safety advocates, nongovernmental organizations (NGOs), and corporate sponsors, collaborated on a thorough, multipronged approach to address pedestrian safety concerns in Lusaka. Starting in 2017 and 2018, they launched infrastructure improvements and education campaigns to create a safer built environment for students walking to three schools, with impressive results. Once they gained this momentum in improving school route safety, Zambian officials kept it going by implementing a 30-kilometer-per-hour speed limit in school zones and on urban streets throughout the country.

Photo source: FIA Foundation/Chongo Sampa

Reducing speeds in school zones and urban streets saves lives because it creates more space in places where children — and people of all ages — are walking. And getting all interested parties to work together to improve pedestrian safety in Zambia reflects a larger trend toward utilizing a Safe System approach to address road safety problems, which involves taking a holistic view of the road system that prepares for human mistakes and keeps energy impact on the human body at tolerable levels.

These unique efforts and successes earned Lusaka, Zambia, the honor of being named the 2023 recipient of the Vision Zero for Youth International Leadership Award. Led by the National Center for Safe Routes to School in the USA with support from the FIA Foundation, the Vision Zero for Youth International Leadership Award recognizes cities that have taken bold steps towards stopping traffic deaths among children and youth in their communities.

11

Children can't just be taught road safety – they need a safe environment to and from school.



Photo source: FIA Foundation/Chongo Sampa

Focusing on the problem, then building a road safety plan

The road safety crisis in Lusaka, especially around schools, was not tenable. In 2015, more than a third of the 3,586 people who died on Zambia's roads were pedestrians, and many were in the capital city of Lusaka. In 2018, 181 children under 16 died in crashes in Lusaka. Lusaka's Northmead Primary School alone reported that two of its students died in crashes, and 12 students sustained road traffic injuries, in 2017 and 2018. Sober numbers for a country where walking to school is the norm; data from the Zambia Road Safety Trust (ZRST) shows that more than 70 percent of school-age children in Zambia walk to school.

Advocates looked for ways to sound the alarm and engage the right partners to do something about the unsafe routes to school in Lusaka. For example, Daniel Mwamba, founder of ZRST, raised awareness by writing multiple opinion pieces in Zambian publications. Mwamba knew that improving safety meant tackling the issues on several fronts, saying in a 2023 interview, "Children can't just be taught road safety – they need a safe environment to and from school."

Power mapping, a visual tool to identify which entities to engage to promote causes like transportation safety, was also used to forge connections between Lusaka's pedestrian-safety-focused ZRST to the Lusaka mayor's office and city council, and then to the Ministry of Transport and Logistics and the Ministry of Health.

Once the national ministries took notice and got involved, concrete actions to improve walking routes for students in Lusaka began in 2017. That year, the Mayor of Lusaka, Wilson Kalumba, started working with the national ministries, the Partnership for Healthy Cities, and other safety groups to launch improved pedestrian safety around schools. Also in 2017, Mayor Kalumba signed on to the Child Health Initiative's "Declaration to Every Child's Right to Safe and Healthy Streets," confirming a commitment to protect children as the most vulnerable road users across Zambia. From there, other organizations joined the cause, including the Zambian police, the FIA Foundation, FedEx, the World Health Organization, and more.



The Lusaka City Council accepts the 2023 International Vision Zero for Youth Leadership Award. Photo source: FIA Foundation/Chongo Sampa





Justin Kabwe Primary School before (left) and after improvements (right). Photo source: Amend

Starting with one school

Road safety NGO Amend worked with the city of Lusaka, FedEx, and ZRST to implement Amend's School Area Road Safety Assessments and Improvements (SARSAI) program at Lusaka's Justin Kabwe Primary School, where four student road traffic injuries were reported in 2016. The SARSAI program involves evidence-based interventions that include infrastructure improvements, behavioral education, and advocacy. It had already been applied successfully in other places, such as Dar es Salaam, Tanzania.

Amend employed its SARSAI program by launching a technical road safety assessment. Following this assessment, Amend recommended several road safety improvements including the installation of footpaths, raised zebra crossings, rumble strips, a dedicated pedestrian gate for the school, new safety signage, and bollards. In addition, students received road safety education.

After the enhanced pedestrian safety infrastructure was built around Justin Kabwe Primary School, Amend evaluated the impacts. Reducing vehicle speeds where people are walking near or on roads is a vital component of road safety, especially for children, so it was encouraging to see that speed surveys showed average speeds around the school decreased by more than half. Also, student responses to knowledge retention surveys showed an increase in understanding of school route safety measures.

As a result of these safety improvements, Justin Kabwe Primary School's International Road Assessment Programme (iRAP)² Star Rating for Schools score went from one-two star to five stars.³

Star Rating for Schools is an evidence-based tool for measuring, managing, and communicating the risk children are exposed to on a journey to school. In the rating system, one star is the least safe and five stars is the safest.

The school safety conversations continued when, in November 2017, ZRST hosted the Safer and Healthier Journeys to School Roundtable. The event brought together luminaries including Mayor Kalumba, representatives from Amend, the FIA Child Health Initiative, FedEx, and other organizations. A key part of the event was highlighting the Star Ratings for Schools app, created by iRAP in collaboration with Amend.

The success at Justin Kabwe Primary School was just the beginning. In 2018, through a grant through the Partnership for Healthy Cities (which Lusaka had joined in 2017), and working again with Amend, in addition to Bloomberg Philanthropies and Vital Strategies, Lusaka went to work on improving safety for Northmead Primary and Northmead Secondary schools, two other schools where most students walk to class. Amend's SARSAI system was employed for another road safety assessment identifying recommended improvements. In September 2018, then Deputy Mayor Chilando Chitangala unveiled the infrastructure improvements - like at Kabwe, they included raised zebra crossings, rumble strips, footpaths, bollards, and new signage - at the Northmead schools. Because of these safety improvements, the iRAP Star Rating for Schools score for the Northmead schools increased from one star to five stars.



Children enjoy safer walking route to Northmead Secondary School. Photo source: FIA Foundation/Chongo Sampa

Results beyond just the numbers

The tangible benefits of the school safety improvements became clear. Like at Kabwe, speeding data collected in the Northmead school zones before and after the interventions showed that average vehicle speeds dropped from 38 kilometers per hour to 12 kilometers⁴ per hour at one school, and from 22 kilometers per hour to 18 kilometers per hour at the second school. Schools with improved safety reported increased attendance. But most importantly, no more school route traffic deaths were reported.

But the positive effects went beyond what can be measured by data. Morgan Kasela, Head Teacher at Kabwe, said, "The project for the road safety improvement at the frontage of the school has added value to the road users and the community. This facility ... also brought sanity [to] the manners [of] crossing of the road." Kasela added, "This has brought positive change to the learners and the community in [the] manner they use the road when crossing. There is also a change in behavior on the part of drivers. Those who could not notice the pupils when crossing the road are now able to. The drivers have become conscious when approaching the zebra crossing, and caution is there, too. As a school, pupils and the community at large are really thankful and appreciative for this road safety improvement project."

The response to safety measures implemented at the two Northmead schools was similar. Northmead

Primary School student Tumelo Shalala said, "When coming to school every day, it was quite challenging to cross the road because some drivers in the morning could not give [a] chance to the pupils and community to cross immediately." Further, "Both road safety infrastructure and road safety education will really save us from the dangers of being hit by speeding motorists and our future dreams from being shuttered."

Did safety efforts stop there? No, they were just getting started.

Zambia continues its commitment to kids and beyond

Safety for kids walking to schools in Zambia has become a priority of the Ministry of Transport and Logistics, so safety improvements continued after the

first few schools. In 2019, ZRST worked with the Lusaka mayor's office to install more safety infrastructure improvements⁵, such as zebra crossings, at additional schools. Increased safety signage has been installed, or is being planned, at dozens of additional school zones in the city.



Photo source: FIA Foundation/ Chonao Sampa



New signage shows the updated speed limit. Photo source: FIA Foundation/Chongo Samp

But while the safety environment around Lusaka's schools was improving, pedestrian safety around Zambia continued to be a problem. In February 2019, Mwamba wrote in another opinion piece in the Zambia Daily Mail that "Road crash fatality data reveals

that approximately 70 percent of road deaths in Zambia are pedestrians and cyclists." Mwamba called for "the implementation of car-free pedestrian zones, clearly marked zebra crossings, footpaths on both sides of all streets, pedestrian and cycle traffic lights, intersection modifications, cycle streets, cycle lanes, and cycle paths in order to save lives."

Thankfully, since they had momentum from improving pedestrian safety for students, Zambian safety officials did not want to stop there. Safety advocates had been pushing for a national speed limit of 30 kilometers per hour around all Zambian schools. Through the continuing advocacy work of ZRST, in coordination with the office of the mayor of Lusaka, the Ministry of Transport and Logistics, the Ministry of Health, and other organizations, that goal was superseded. In December 2019, a 30-kilometer-per-hour speed limit became a regulation on all urban roads across Zambia⁶.

The work in Zambia reflects the global trend toward using the Safe System approach to road safety. A Safe System aims to eliminate fatal and serious injuries for all road users through a holistic view of the road system. In Zambia, this approach was applied by first acknowledging that humans, especially children, are vulnerable and make mistakes, that safety must be proactive, and that improving safety involves a variety of different partners bringing various perspectives to the table. Rather than just relying on one method, such as a public safety awareness campaign, officials in Lusaka realized that a multidimensional plan involving infrastructure improvements, speed management, community engagement, and other considerations was essential for success.

While much of this work was put on hold during the COVID-19 pandemic, road safety efforts in Zambia are still a priority. For example, according to an April 2023 article in Think Global Health⁷, now Mayor Chilando Chitangala said, "Drunk driving is one of the biggest problems. We need to work on that. Another is to make sure that [people] driving public transport [are] fully licensed in a proper way. Those are some of the challenges we're still facing."

Moving forward, Mwamba said Zambian officials and road safety advocates are exploring new road safety initiatives, such as expanding child passenger safety. They are also planning to work with Zambian police on enforcing compliance with traffic safety laws around schools, as well as on campaigns and education that focus on safety around schools.

Citations

- ¹ Declaration of Every Child's Right to Safe & Healthy Streets, Child Health Initiative: https://www.childhealthinitiative.org/connect/publications/declaration-of-every-child-s-right-to-safe-healthy-streets
- ² Star Rating for Schools, iRAP: https://irap.org/project/star-rating-for-schools/
- ³ School Area Infrastructure Improvements, Zambia 2017, FedEx/Amend: https://drive.google.com/file/d/1oQF_XfplwdCW_6su8kvpPZRiyIU3EimH/view
- ⁴ Lusaka: Reducing speeding near schools, World Health Organization: https://www.who.int/news-room/feature-stories/detail/lusaka-reducing-speeding-near-schools
- ⁵ Lusaka: Reducing speeding near schools, World Health Organization (report): https://cdn.who.int/media/docs/default-source/urban-health-documents/lusaka road-safety-case-study.pdf?sfvrsn=ddb77877 5
- ⁶ 30km/ph in Urban Areas Across Zambia, Global Alliance of NGOs for Road Safety: https://www.roadsafetyngos.org/events/30km-h-in-zambia/
- ⁷Road Safety in Lusaka, Think Global Health: https://www.thinkglobalhealth.org/article/road-safety-lusaka



VISION ZERO FOR YOUTH is an initiative of the National Center for Safe Routes to School supported by the FIA Foundation and UNC Highway Safety Research Center.