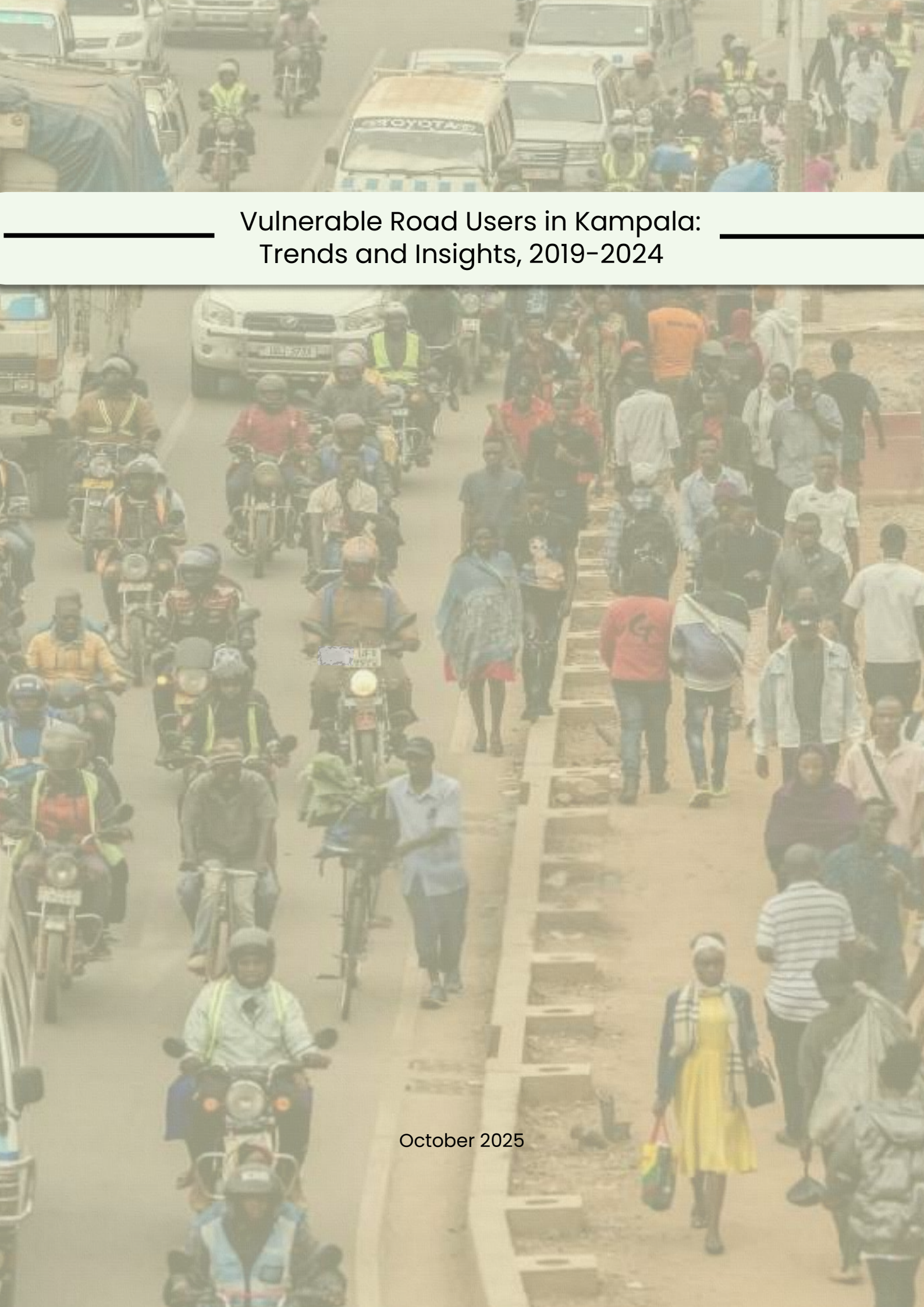
KCCA
KAMPALA CAPITAL CITY AUTHORITY
For a better City

Vulnerable Road Users in Kampala: Trends and Insights 2019–2024



Vulnerable Road Users in Kampala: Trends and Insights, 2019-2024

October 2025

Vulnerable Road Users in Kampala: Trends and Insights, 2019-2024

KCCA
KAMPALA CAPITAL CITY AUTHORITY
For a better City

In collaboration with

USANDA POLICE
PROTECT & SERVE

Contents

Foreword

Eng. Justus Akankwasa
Director of Engineering and Technical Services
Kampala Capital City Authority

It is with great commitment to the safety and well-being of our citizens that we present this report on *Vulnerable Road Users in Kampala: Trends and Insights, 2019–2024*. This report provides vital evidence on the risks and realities faced by those most exposed on our roads — pedestrians, 2- and 3-wheelers, and bicyclists — who together account for the majority of road traffic deaths and serious injuries in our city.

Kampala is a growing and dynamic city where mobility is central to economic and social life. Yet, too often, our most vulnerable road users pay the highest price in terms of injuries and fatalities. The findings in this report highlight not only the scale of the challenge but also the urgency of decisive, data-driven action to make our streets safer, more inclusive, and more sustainable.

This report is more than a collection of statistics. It is a call to action for all stakeholders: government, law enforcement, civil society, transport operators, and the private sector, to work together in building a safer mobility system for Kampala. Protecting vulnerable road users must be at the heart of our urban planning, infrastructure development, and traffic management strategies.

We extend our appreciation to the Uganda Police Force for providing the crash data on which this analysis is based, to Vital Strategies and the Johns Hopkins International Injury Research Unit for their technical contributions, and to the Kampala Capital City Authority and BIGRS Kampala team for their dedication in bringing this report to fruition.

As leaders of Kampala, we reaffirm our commitment to strengthening road safety, guided by the insights in this report. Together, we can reduce preventable deaths and injuries, enhance the quality of life for all road users, and ensure that Kampala continues to grow as a city that is not only vibrant and productive, but also safe for everyone.

Abbreviations

BIGRS	Bloomberg Philanthropies Initiative for Global Road Safety
GRSP	Global Road Safety Partnership
iRAP	International Road Assessment Programme
JH–IIRU	Johns Hopkins International Injury Research Unit
JICA	Japan International Cooperation Agency
KCCA	Kampala Capital City Authority
LMICs	Low- and Middle-Income Countries
MoWT	Ministry of Works and Transport
NHTSA	National Highway Traffic Safety Administration
NMT	Non-Motorized Transport
ROSACU	Road Safety Coalition Uganda
SDGs	Sustainable Development Goals
SWRW	Safe Way Right Way
TCC	Traffic Control Centre
UBOS	Uganda Bureau of Statistics
UNBS	Uganda National Bureau of Standards
UN-Habitat	United Nations Human Settlements Programme
URDM	Urban Road Design Manual
VRUs	Vulnerable Road Users
WHO	World Health Organization
WRI	World Resources Institute

.

Acknowledgements

This first edition of the *Vulnerable Road Users: A Status Report* draws on crash data from 2019 to 2024 to present evidence-based insights into the risks, trends, and contributing factors of road traffic crashes involving vulnerable road users (VRUs). The report primarily focuses on pedestrians and users of two- and three-wheeled vehicles in Kampala. Its goal is to inform targeted interventions, guide policy and planning, and strengthen stakeholder efforts to improve road safety and reduce injuries and fatalities among VRUs in the city.

Crash data were collected from nine police stations across Kampala's five administrative divisions: Nakawa, Central, Makindye, Kawempe, and Lubaga, in collaboration with the Directorate of Traffic and Road Safety, Uganda Police Force.

Technical support for the development of the report was provided by Vital Strategies, while the Johns Hopkins International Injury Research Unit contributed data on behavioural risk factors for road injuries.

The coordination of data collection, analysis, and drafting of the initial report was led by Stellah Namatovu, the Bloomberg Philanthropies Initiative for Global Road Safety (BIGRS) Road Injury Surveillance Coordinator for Kampala. Technical oversight during data collection, analysis, and the final review was provided by Dr. Raphael Awuah, Regional Technical Advisor for Africa on Road Injury Surveillance at Vital Strategies.

The BIGRS team in Kampala and the KCCA GIS unit supported the development of the report. Eng. Jacob Byamukama, BIGRS City Technical Lead and Deputy Director of Transport Planning and Traffic Management, and Eng. Justus Akankwasa, Director of Engineering and Technical Services, provided overall support.

Executive Summary

This inaugural edition of Vulnerable Road Users in Kampala: A Status Report, 2019–2024 presents a comprehensive analysis of severe injuries involving vulnerable road users (VRUs), with particular focus on powered 2- and 3-wheelers (motorcyclists and tricyclists) as well as pedestrians. The report draws on six years of crash data (2019–2024) sourced from police crash reports.

Vulnerable road users are disproportionately affected by traffic crashes in Kampala, bearing the brunt of road traffic injuries and fatalities. Between 2019 and 2024, a total of 2,077 VRU deaths were recorded in the city. Of these, two- and three-wheelers accounted for the highest number of deaths at 1,080 (52%), followed by pedestrians with 936 deaths (45%), and bicyclists with 61 deaths (3%). These figures underscore the urgent need for targeted interventions to protect VRUs, who continue to face risks due to unsafe road infrastructure, limited enforcement of traffic regulations, and high-speed traffic in urban environments.

The report analyzes year-by-year trends and identifies persistent challenges that must be addressed to reverse the trajectory of severe road traffic injuries. The data also reveal that deaths among vulnerable road users have remained consistently high over the years, with only slight annual fluctuations.

These findings reinforce the need to enhance protection for VRUs through safer road designs, such as segregated lanes and pedestrian crossings, stricter enforcement of traffic, particularly those related to helmet use and speeding, and increased investment in public awareness campaigns and community-based road safety education.

By providing a data-driven understanding of the risk landscape for VRUs in Kampala, this report serves as a foundational step toward improving road safety. The insights generated herein are intended to guide policymakers, city planners, law enforcement, and civil society in implementing effective, life-saving interventions for the most at-risk road users.

Introduction

Road traffic injuries remain an important global public health challenge, disproportionately affecting the most vulnerable road users. According to the World Health Organization (WHO), approximately 1.19 million people died globally in 2021 due to road traffic crashes (1). Vulnerable road users, including pedestrians, cyclists, and motorcyclists, account for more than 50% of all road traffic deaths globally, highlighting an imbalance in road safety outcomes, especially in low- and middle-income countries (LMICs) (1, 2). A higher number of people in low-income countries lose their lives due to road traffic injuries than from communicable diseases such as tuberculosis or HIV/AIDS (3).

According to the 2024 Annual Crime Report, reported fatal crashes in Uganda rose by 6.1%, increasing from 4,179 cases in 2023 to 4,434 in 2024 (4). Vulnerable road users, specifically motorcyclists, pedestrians, and bicyclists, accounted for 84% of the fatalities in 2024. Of these, motorcyclists and their passengers contributed 47% of the deaths, while pedestrians accounted for 34% (4).

Data from the Kampala Road Safety Reports (2019–2024) show that 2- and 3-wheelers (motorcyclists and tricyclists) have consistently been the most affected road users. Fatalities among this group rose from 150 in 2019 to a peak of 212 in 2021, then slightly declined to 197 in 2024. Pedestrians ranked second, with deaths increasing from 133 in 2019 to a peak of 185 in 2022, then dropping slightly to 176 in 2024. Bicyclists were the least affected in terms of fatalities, with annual deaths fluctuating between 6 and 21.

Similarly, two- and three-wheelers accounted for the highest number of serious injuries throughout the six-year period, rising from 1,540 in 2019 to 1,808 in 2024. Pedestrians followed, with serious injuries increasing from 750 to 896 over the same timeframe. Bicyclists, while least affected, remained at risk, with injuries ranging from 28 to 59 annually.

A separate research study found that road traffic crashes were the leading cause of injuries in Kampala, accounting for 50% of all reported injuries (5).

Definitions

Vulnerable road users (VRUs)

Road users who lack external protection and are therefore more susceptible to serious injury or death in the event of a motor vehicle collision. This group includes pedestrians, 2- and 3- wheelers, cyclists, persons with disabilities, and individuals with reduced mobility or orientation. In some contexts, older drivers may also be considered part of this group (6, 7). In this report, the focus is on pedestrians and 2- and 3- wheelers.

Pedestrian

Any person on foot — walking, running, jogging, hiking, sitting, or lying down — who is involved in a motor vehicle collision (8). More broadly, a pedestrian is anyone traveling on foot for transport or recreation (9). The term also applies to any individual who is not an occupant of a motor vehicle or a pedal cyclist, regardless of their activity at the time.

Motorcyclist

An individual who rides as a driver or passenger of a two-wheeled vehicle.

Tricyclist

A person who rides as a driver or passenger of a three-wheeled vehicle.

Bicyclist

An individual who rides a bicycle for transport, recreation, or sport.

Road traffic fatality

A death resulting from injuries sustained in a road traffic crash, whether occurring at the scene or within one year and one day of the incident. This definition aligns with the classification used by the Uganda Police Force.

Serious/severe injury

An injury that results in hospitalization for at least 24 hours.

Rationale for focusing on VRUs

Vulnerable road users, particularly pedestrians, bicyclists, and motorcyclists, bear a disproportionate share of road traffic injuries and fatalities, both globally and in Kampala. According to estimates, VRUs account for over half of all road traffic deaths worldwide (1). This reflects a persistent inequity in road safety outcomes, especially in low- and middle-income countries, where infrastructure and policy frameworks often fail to adequately safeguard these groups. Prioritizing VRUs in road safety interventions is therefore a matter of both public health urgency and social justice.

This status report aims to analyze trends in fatalities and serious injuries among the most vulnerable road users in Kampala between 2019 and 2024, with a focus on 2- and 3-wheelers (motorcyclists and tricyclists) and pedestrians. Using crash data from the Uganda Police Force, the report seeks to generate evidence-based insights into the disproportionate impact of road traffic crashes on VRUs.

The ultimate goal is to inform and support the development of targeted policies, safer infrastructure designs, enhanced enforcement strategies, and public education initiatives that improve road safety outcomes for these high-risk groups in Kampala.

Data sources and systems

The primary source of official road traffic crash data in Uganda is police crash records. For 2019–2023, data were extracted using an adapted version of Police Form 57A from narrative crash reports. For 2024, data were obtained from the Uganda Traffic Police digital system. Where digital entries were unavailable, the police data input form was used to manually extract information from paper-based reports.

While some records were not reviewed due to storage limitations or incomplete details, these gaps did not significantly affect the reported outcomes, which are based on the reviewed police records.

Additionally, data on key risk factors—specifically helmet use and speeding—were collected through observational studies conducted by the Johns Hopkins University International Injury Research Unit (JH–IIRU) in collaboration with the Makerere University School of Public Health.

Global and regional context

Vulnerable road users (VRUs) account for more than half of global annual road traffic deaths, with young males under 25 disproportionately affected (11). In most regions, VRUs represent the majority of fatalities, except in the European and Eastern Mediterranean regions, where occupants of four-wheel vehicles account for the largest share of deaths (1). Specifically, pedestrians make up the majority of fatalities in Africa, the Americas and Western Pacific region, while users of powered two-and three-wheelers account for the highest number of deaths in South-East Asia (1). This regional variation highlights how different mobility patterns and transport systems influence risk exposure across the world.

Globally, road infrastructure remains inadequate for protecting VRUs. A majority of all assessed roads fail to meet the minimum 3-star safety rating for pedestrian and bicyclist protection. For example, fatalities among bicyclists are rising, partly because dedicated cycle lanes exist in less than 1% of the world's roads (1). In urban areas, especially in low- and middle-income countries, pedestrians often share space with fast-moving vehicles, increasing the likelihood of severe injuries. Overall, only one-fifth of global roadways meet basic safety standards for pedestrians and bicyclists (12). This lack of safe infrastructure is particularly concerning as cities encourage walking and cycling for sustainable mobility yet fail to provide the conditions needed to make these modes safe.

In Africa, the burden of road traffic fatalities falls disproportionately on VRUs. Pedestrians account for 31% of deaths, users of motorized two- and three-wheelers for 18%, and cyclists for 4% — together making up more than half of the continent's road traffic fatalities (13, 14). The high reliance on walking, motorcycles, and informal transport means that these groups are highly exposed in traffic environments dominated by larger vehicles. Given that VRUs comprise over 70% of all road users in Africa, prioritizing their safety and accessibility is critical (15). Without targeted interventions, the continent's growing urbanization and rapid motorization are likely to worsen the risks for this already vulnerable group.

Policy and infrastructure imbalances also exacerbate the risks. Motorized vehicles often take precedence in the design, construction, and maintenance of Africa's road and transport networks, leaving VRUs as an afterthought. This imbalance results in inadequate sidewalks, unsafe crossings, and poorly enforced speed management. Weak vehicle safety standards and registration systems, which

frequently lack specific protections for VRUs, further compound these risks. For instance, many imported vehicles in Africa lack modern safety features that could reduce injury severity in crashes. Strengthening regulatory frameworks, rebalancing infrastructure priorities, and investing in inclusive road design will be vital to reducing fatalities among VRUs and achieving equitable road safety outcomes.

Existing global and regional policy frameworks on VRUs

Protecting Vulnerable Road Users (VRUs), including pedestrians, cyclists, and motorcyclists, is essential for reducing traffic fatalities and promoting safer, more inclusive mobility systems. Several global and regional policy frameworks provide guidance for advancing this agenda:

The Global Plan for the Decade of Action for Road Safety (2021–2030)

The Global Plan places the protection of VRUs at the center of efforts to halve road traffic deaths and injuries by 2030. It advocates for a Safe System Approach that prioritizes non-motorized transport through compact urban design, transit-oriented development, and infrastructure tailored to VRUs—such as sidewalks, protected cycle lanes, and traffic calming measures. The plan also emphasizes speed management, recommending 30 km/h limits in mixed-traffic urban areas, and calls for stronger vehicle safety standards that include pedestrian protection. Enforcement of laws on helmet use, seatbelts, and distracted driving is highlighted as critical. Recognizing road safety as an issue of equity, the plan stresses inclusive policies, international collaboration, and the use of high-quality data to protect socially and economically disadvantaged VRUs. It represents a paradigm shift, urging governments to place VRUs at the heart of transport and urban planning.

Sustainable Development Goals (SDGs)

The SDGs provide a holistic framework for protecting VRUs by linking road safety to broader sustainable development. SDG 3.6 targets halving global road traffic deaths and injuries, while SDG 11 promotes inclusive and safe urban planning, including pedestrian- and cyclist-friendly infrastructure. SDG 9 underscores innovation and resilient transport systems, and SDG 13 frames walking and cycling as climate-friendly transport options requiring safer environments. Gender-

responsive infrastructure (SDG 5) highlights the specific risks faced by women and girls as VRUs. Finally, SDG 17 promotes partnerships and resource mobilization for road safety. Collectively, the SDGs reinforce the need for multi-sectoral approaches that tie VRU protection to health, sustainability, and equity agendas.

The Stockholm Declaration (2020)

Adopted at the Third Global Ministerial Conference on Road Safety, the Stockholm Declaration underscores the urgent need to protect VRUs as part of achieving the global goal of a 50% reduction in road traffic deaths and injuries by 2030. The Declaration highlights the disproportionate impact of crashes on VRUs in urban areas and calls for the Safe System Approach, including lower urban speed limits (30 km/h where vehicles and VRUs mix), safe infrastructure such as sidewalks and crossings, and improved post-crash care. It also stresses stronger vehicle safety standards, promotion of active mobility, and robust enforcement of helmet, seatbelt, and impairment laws. Importantly, it links VRU protection to broader agendas such as climate action, sustainable cities, and inequality reduction. By promoting innovation, multi-sectoral partnerships, and political commitment, the Declaration aligns global action with the long-term goal of achieving Vision Zero by 2050.

The African Road Safety Action Plan (2021–2030)

At the regional level, the African Road Safety Action Plan prioritizes VRU safety within the Safe System framework. It emphasizes dedicated facilities—sidewalks, protected bike lanes, pedestrian zones—alongside speed reduction and traffic calming in urban areas. The plan also calls for stronger legislation on helmet use, speed limits, and impairment, coupled with public education campaigns to empower VRUs. Beyond infrastructure and legislation, it highlights the need for safer vehicles with pedestrian-protection features, improved post-crash emergency care, and legal support for victims. Importantly, the plan extends its scope beyond cities to include rural communities and cross-border transport corridors, where VRUs also face significant risks but often lack adequate protections. This regional plan ensures that VRU safety is integrated into Africa's broader development and transport agenda.

Legal and Policy Framework in Uganda

Uganda's legal framework for road safety and protection of VRUs

Uganda has made notable progress in aligning its road safety legal framework with international best practices, particularly in areas critical to the protection of vulnerable road users (VRUs). However, implementation gaps persist due to weak institutional capacity and limited resources. For instance, while the Non-Motorized Transport (NMT) Policy represents an important policy commitment, its execution has been inconsistent and under-resourced (16). Other key regulations and developments include:

Speed Management

The Traffic and Road Safety (Prescription of Speed Limits) Regulations, 2024 represent a significant step toward safe system-aligned speed limits(17). The regulations establish:

- A maximum speed limit of 100 km/h on highways,
- 50 km/h on urban roads, and
- 30 km/h in built-up areas, which is consistent with global recommendations for areas with high pedestrian activity.

Importantly, the regulations empower Local Governments to request context-specific speed limits from the Minister of Works and Transport. This provision promotes context-sensitive enforcement, essential for enhancing the safety of vulnerable road users in high-risk urban areas.

Helmet Use

The Traffic and Road Safety (Motorcycles and Motorised Tricycles) (Amendment) Regulations, 2023 (19) provide a robust legal basis for improving safety among two- and three-wheeler users:

- Mandatory helmet use for all motorcycle and motorised tricycle riders and passengers.
- Helmets must be properly fastened at all times when the vehicle is in motion.
- The regulation defines and references a national helmet safety standard, ensuring only certified and approved helmets are compliant.

These provisions strengthen enforcement and support behavior change among road users at high risk of head injuries.

Seatbelt and Child Restraint Use

Uganda has completed the development of a national seatbelt-wearing standard, which mandates seatbelt use for both drivers and all passengers. This standard has passed public review and is pending adoption by the Uganda National Bureau of Standards (UNBS) and gazettement by the Ministry of Trade.

Additionally, the amended Traffic and Road Safety (Wearing of Safety Belts) Regulations, 2023 (20) introduce vital child safety provisions:

- Children under 12 years of age are prohibited from sitting in the front seat.
- Age-appropriate child restraint systems are now mandatory.

The standards for child restraint systems have also undergone public review and await final adoption by UNBS and gazettement.

Road design guidelines and urban planning relating to VRUs

Uganda's National Physical Planning Standards and Guidelines (2011) emphasize that road design and urban planning must prioritize the safety of VRUs such as pedestrians, cyclists, and children (21). The guidelines call for integrating walkways, footpaths, and cycleways in all urban layouts to promote non-motorized transport.

They specify minimum walkway widths (1.5–2.5 meters depending on pedestrian volume), adequate bicycle parking, and traffic calming on lower-tier roads in residential areas. Safety features such as cul-de-sacs, safe crossings, and visibility splays are also mandated to protect VRUs and accommodate future transport needs.

Complementing this, the Geometric Design Manual (Volume 1) and Uganda Road Design Manual (2023) emphasize context-sensitive, inclusive design (22, 23). These manuals promote:

- Dedicated pedestrian and cycling infrastructure;
- Safe crossings and raised pedestrian walkways;
- Traffic calming in high pedestrian areas;
- Integration of lighting, signage, and visibility features; and
- Urban design that aligns land use with safe mobility.

Together, these frameworks aim to foster safer, more accessible, and equitable transport systems, particularly in high-growth urban centers like Kampala.

Helmet standards and enforcement mechanisms

The Uganda National Bureau of Standards (UNBS), in collaboration with the Ministry of Works and Transport (MoWT) and partners such as Safe Way Right Way (SWRW), is updating helmet standards in line with the 2016 regulations. The Safe Helmets Uganda project—funded by the Global Road Safety Partnership (GRSP)—supports this effort through the development of updated safety standards, regulatory revisions, public awareness campaigns, and improved market access for certified helmets (24).

Currently, Uganda applies US 774:2011 for motorcycle helmets and US ISO 3873:1977 for industrial helmets. Ongoing revisions aim to strengthen compliance and enforcement mechanisms to ensure widespread adoption of certified helmets.

Institutional mandates and responsibilities

The Ministry of Works and Transport (MoWT) is responsible for developing national road safety policy, including regulations on helmet use in collaboration with the Uganda National Bureau of Standards (UNBS). It also oversees speed management strategies and sets road design standards through key documents such as the Urban Road Design Manual (URDM) and the Geometric Design Manual.

The Uganda National Bureau of Standards (UNBS) plays a crucial role in formulating and enforcing quality standards for helmets. Working closely with stakeholders, UNBS ensures that helmet and vehicle regulations are regularly updated to meet safety requirements and international best practices.

The Kampala Capital City Authority (KCCA) is tasked with implementing local-level road design and urban zoning interventions aimed at protecting vulnerable road users (VRUs). This includes the construction of sidewalks, pedestrian crossings, and traffic calming measures in high-risk urban areas of Kampala.

The Uganda Police Force – Traffic & Road Safety Directorate is mandated to enforce compliance with traffic laws, including helmet use, speed limits, and pedestrian right-of-way at crossings. However, enforcement efforts—such as helmet checkpoints and the issuance of fines—are often limited and inconsistent, particularly when it comes to passengers.

Civil society organizations and advocacy networks, such as the Road Safety Coalition Uganda (ROSACU), play a vital role in promoting road safety. These groups advocate for improved enforcement, data-driven policymaking, and public awareness. URSSI also champions governance reforms and urban planning

accountability, while Safe Way Right Way has been instrumental in advancing helmet standard campaigns.

The Ministry of Local Government and Parliament are responsible for local implementation and legislative oversight. Parliamentary committees have been active in pushing for stronger road safety laws, with particular focus on children's safety, adjustable speed zones, and more precise legal definitions of safe helmets.

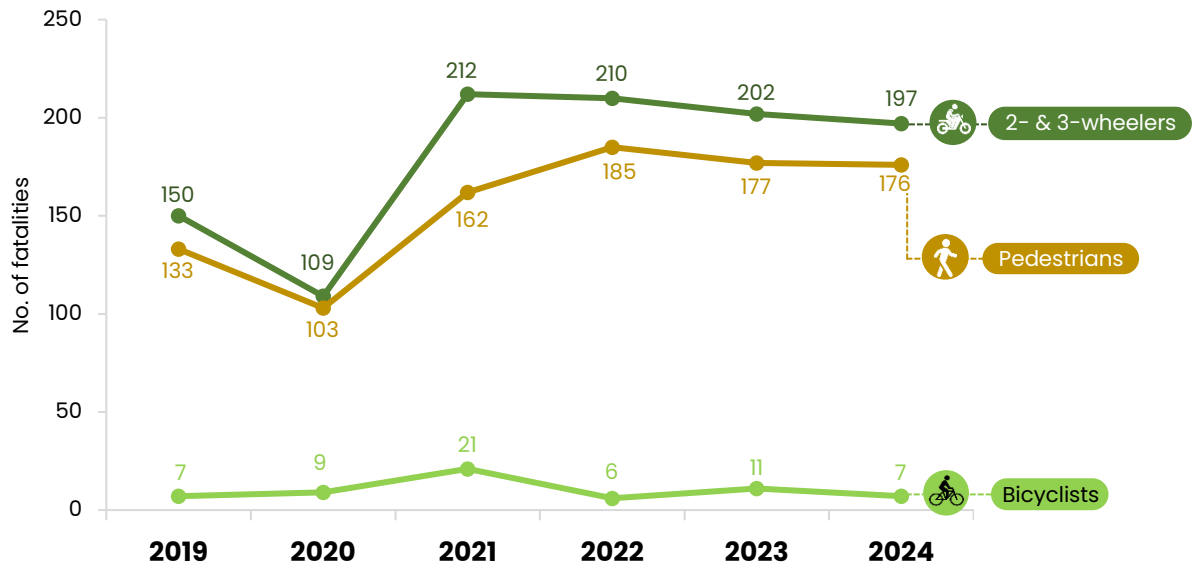
Trends in Deaths and Injuries Among Vulnerable Road Users

Fatalities among vulnerable road users

Fatalities among users of two- and three-wheelers consistently remained the highest across the years, peaking sharply in 2021 at 212 deaths before stabilizing slightly but still staying above 190 in subsequent years. Pedestrian fatalities followed a similar trend, dropping to their lowest in 2020 (108 deaths) before rising steadily to 185 in 2022 and then leveling off around 176 in 2024. In contrast, bicyclist fatalities remained relatively low throughout the period, fluctuating between 6 and 21 deaths (Figure 1).

Overall, the data highlights the disproportionate risk faced by 2- and 3-wheelers and pedestrians compared to bicyclists, with both groups accounting for the majority of road traffic deaths in the city.

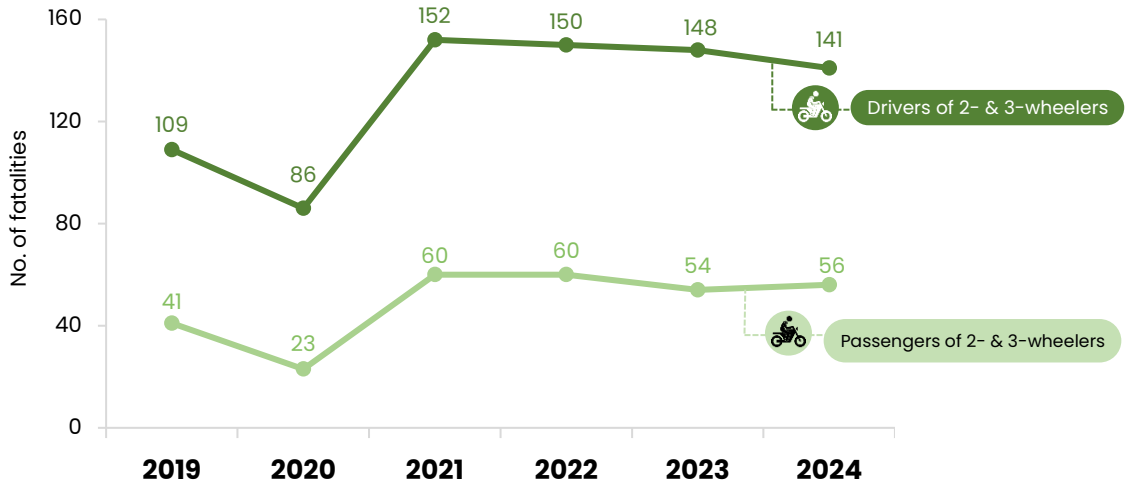
Figure 1. Road traffic deaths among VRUs, 2019-2024



Fatalities among drivers and passengers of 2-and 3-wheelers

Specifically, the data reveal that 2- and 3-wheeler drivers consistently face disproportionately higher fatality risks compared to passengers, with both groups experiencing a marked spike in 2021 before stabilizing (Figure 2). This trend highlights systemic safety challenges for powered two- and three-wheeler users. Strengthening enforcement of helmet use and other protective gear, improving rider training, and enhancing passenger safety measures should be prioritized to reduce this burden.

Figure 2. Deaths among drivers and passengers of 2- & 3-wheelers, 2019-2024

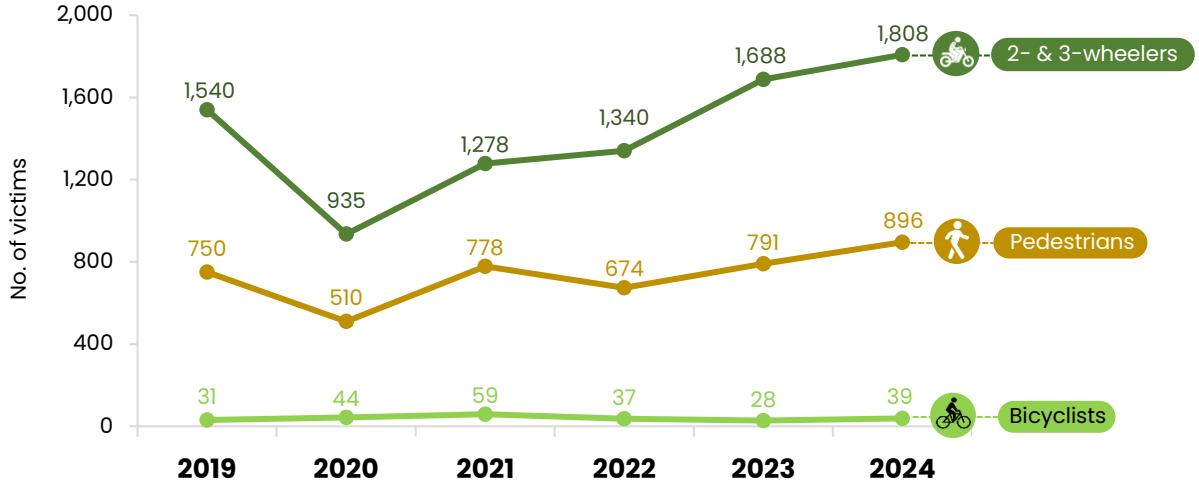


Serious injuries among vulnerable road users

Serious injuries among two- and three-wheeler users have remained consistently high, rising sharply from 935 in 2020 to 1,808 in 2024 — nearly doubling within four years. This trend reflects both increased use of 2- and 3-wheelers as well as persistent gaps in road safety measures. Pedestrian injuries also climbed steadily after a dip in 2020, reaching 896 in 2024, underscoring ongoing risks linked to inadequate pedestrian crossings, high-speed traffic, and mixed-use road environments. By contrast, serious injuries among bicyclists remained relatively low and stable, fluctuating between 28 and 59 over the same period (Figure 3).

These trends highlight the urgent need for targeted safety interventions, including dedicated lanes for two- and three-wheelers, and improved pedestrian infrastructure to reduce vulnerability and prevent further injury escalation.

Figure 3. Serious injuries among VRUs, 2019-2024

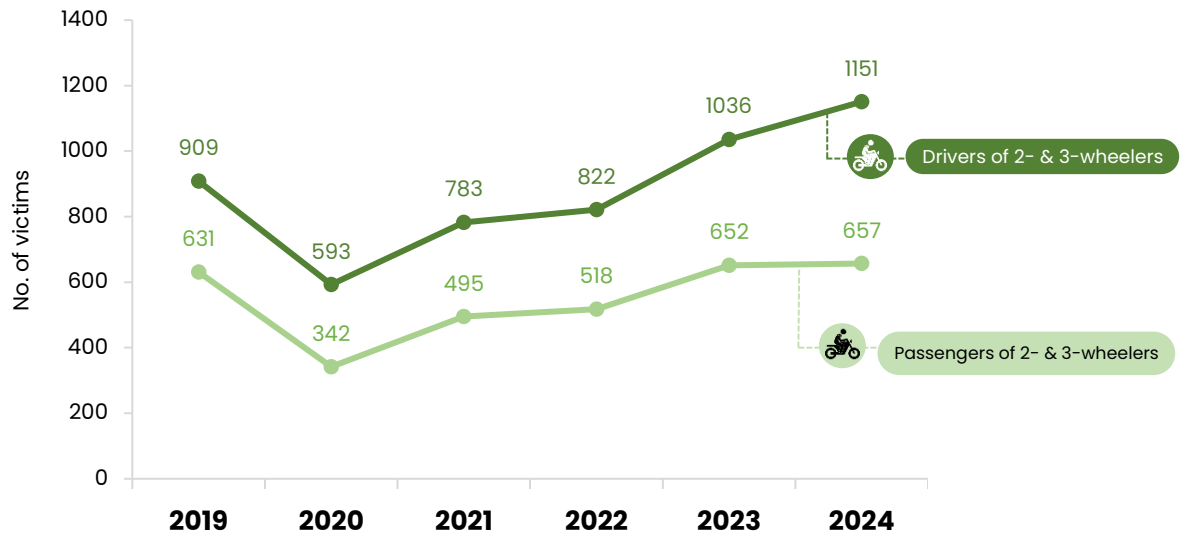


Injuries among drivers and passengers of 2-and 3-wheelers

Both 2- and 3-wheelers' drivers and their passengers experienced a dip in serious injuries in 2020, followed by a steady and significant increase through 2024. Drivers consistently accounted for a much higher number of victims, rising from 593 in 2020 to 1,151 in 2024, while passenger injuries also grew from 342 in 2020 to 657 in 2024 (Figure 4).

The sharp and sustained increase highlights growing safety risks for both drivers and passengers, suggesting that the rapid expansion of 2- and 3-wheelers use is outpacing safety measures.

Figure 4. Serious injuries among drivers and passengers of 2- & 3-wheelers, 2019-2024

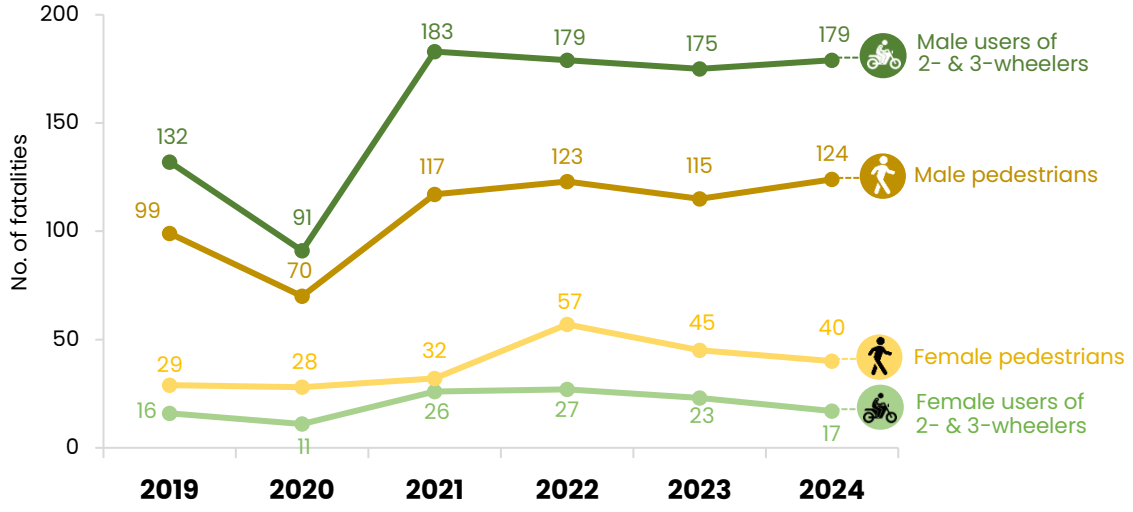


Vulnerable road user deaths by sex

Between 2019 and 2024, fatalities among male users of two- and three-wheelers remained consistently high, peaking at 183 in 2021 before fluctuating in subsequent years, while female fatalities in this group (many of whom were passengers) stayed significantly lower throughout the period. In addition, male pedestrian deaths rose sharply from 70 in 2020 to 179 in 2024 — nearly tripling in just four years — with female pedestrian deaths also increasing, though at a slower rate (Figure 5).

These patterns underscore persistent gender-based vulnerabilities on the roads and point to the urgent need for targeted safety interventions. Priorities should include behavioural campaigns directed at high-risk groups, investment in safer pedestrian infrastructure, and stronger enforcement of protective measures to safeguard both riders and pedestrians.

Figure 5. Vulnerable road user deaths by sex, 2019-2024

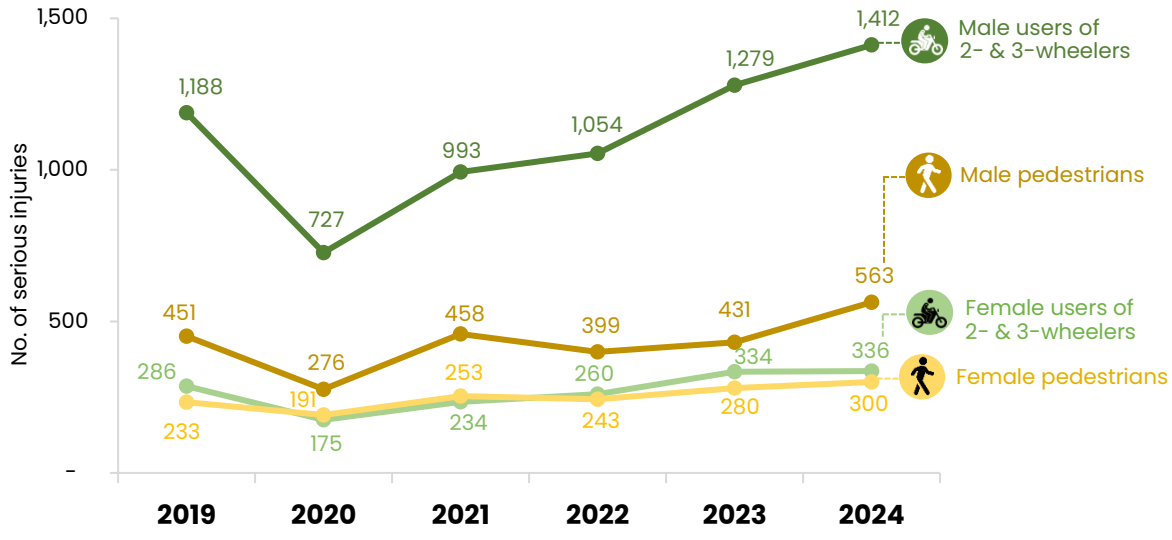


Serious injuries among vulnerable road users by sex

The number of serious injuries among male users of two- and three-wheelers remained consistently high, rising from 1,188 in 2019 to 1,412 in 2024. Pedestrian serious injuries showed a similar upward trend, with male victims increasing from 276 in 2020 to 563 in 2024, and female victims rising from 191 to 300 over the same period (Figure 6).

Reducing serious injuries among these groups is critical not only to prevent long-term disability and loss of productivity but also to ease the burden on families, health systems, and the wider economy.

Figure 6. Serious injuries among vulnerable road users by sex, 2019-2024

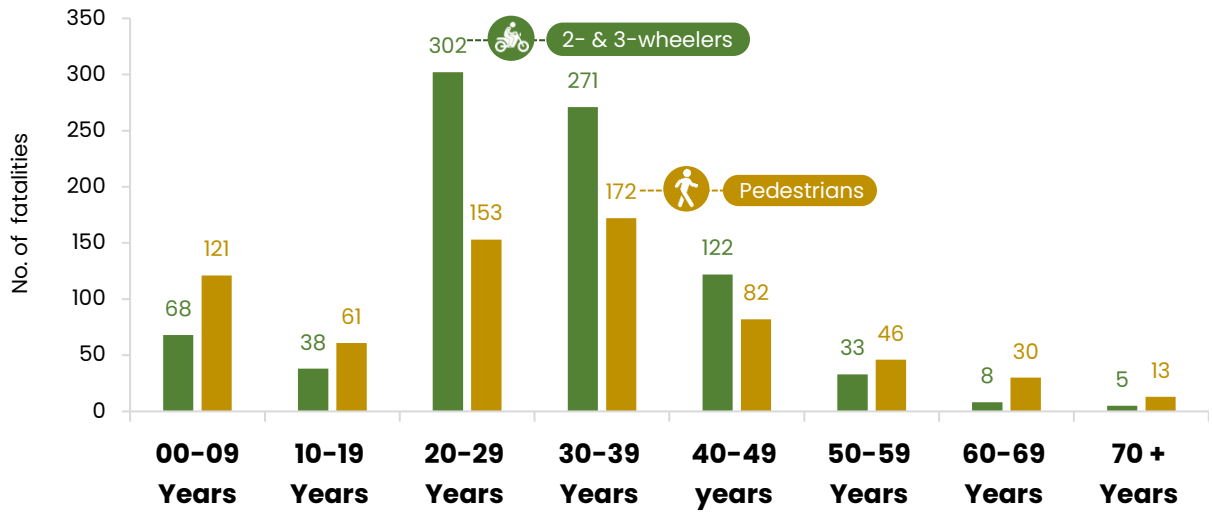


Vulnerable road user deaths by age

From 2019 to 2024, fatalities among two- and three-wheeler users were highest in the 20–29 age group, peaking at 302 deaths. Pedestrian fatalities were concentrated in the 30–39 age bracket. Notably, children aged 0–9 recorded more pedestrian fatalities (121) than those among users of two- and three-wheelers (68) (Figure 7).

Age-targeted interventions such as stronger enforcement of helmet use, speed management for young adult riders, pedestrian-focused safety measures for adults in their 30s, and enhanced protections for children and older pedestrians would be critical. Priority actions could include safer crossings, school zone protections, speed-calming infrastructure, and age-sensitive urban planning to better safeguard the most vulnerable.

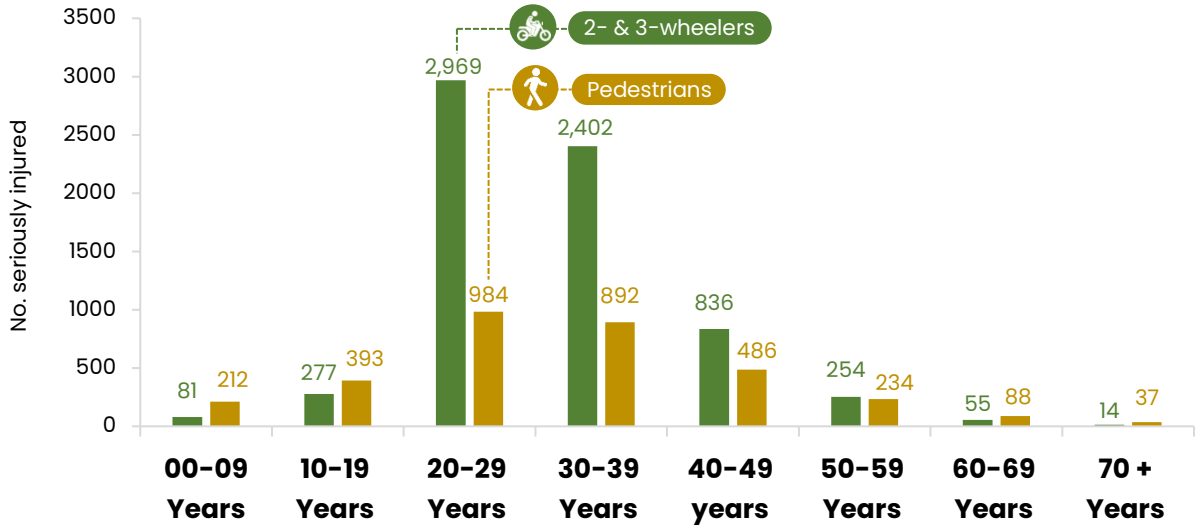
Figure 7. Vulnerable road user deaths by age groups, 2019-2024



Serious injuries among vulnerable road users by age

Serious injuries among users of two- and three-wheelers and pedestrians from 2019 to 2024 were overwhelmingly concentrated in the 20–39 age groups (Figure 8). Notably, children aged 0–9 and older adults (60+) recorded higher pedestrian injury counts compared to users of two- and three-wheelers, suggesting age-related exposure differences. Young adult riders face disproportionately high injury risks, pointing to the need for targeted safety campaigns, licensing reforms, and protective gear enforcement.

Figure 8. Serious injuries among vulnerable road users by age, 2019-2024

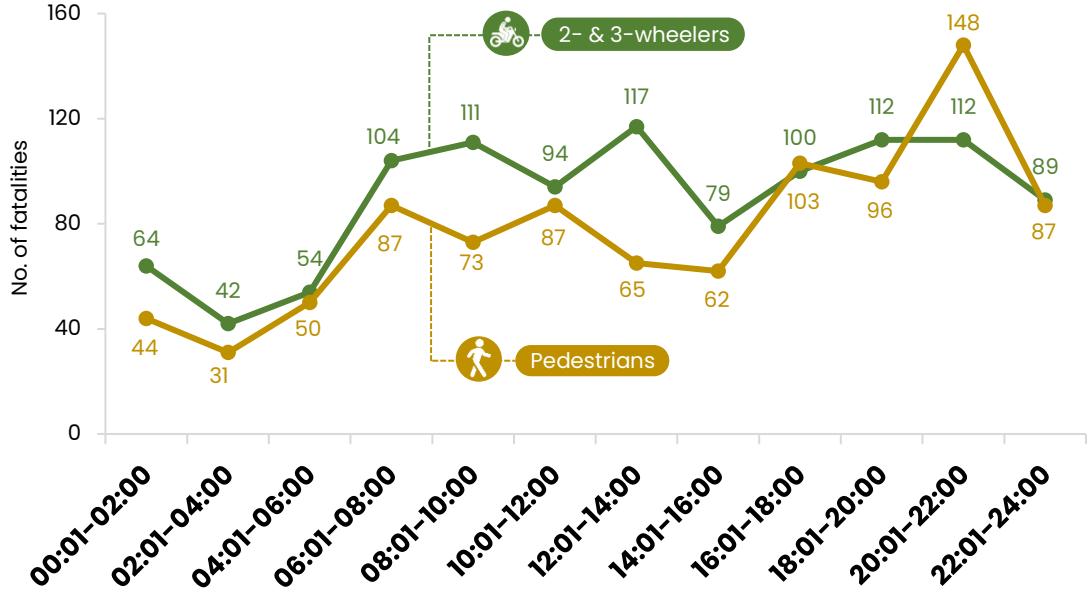


Fatal crash times among vulnerable road users

Fatalities among users of two- and three-wheelers and pedestrians varied significantly by time of day from 2019 to 2024 (Figure 8). Among pedestrians, fatalities rose steadily over the course of the day, reaching their highest point between 8 and 10 p.m. (148 deaths), while deaths among two- and three-wheelers peaked earlier, between 12 and 2 p.m. (117 deaths).

These patterns highlight the need for time-specific enforcement, improved street lighting, stricter speed control, and enhanced visibility measures.

Figure 8. Fatal crash times for 2- & 3-wheelers and pedestrians, 2019-2024

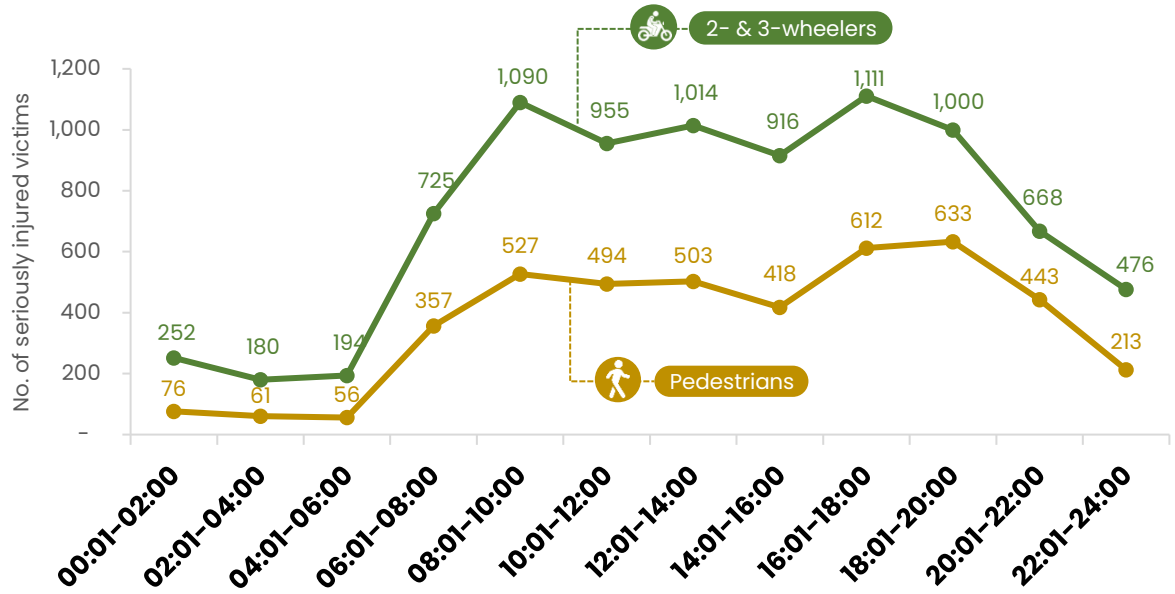


Serious injury crash times among vulnerable road users

Serious injuries among both 2- and 3-wheeler users and pedestrians show clear time-of-day patterns, rising sharply from the morning and peaking during late afternoon and evening hours from 2019 to 2024. Rider injuries were highest between 4 and 6 p.m., while pedestrian injuries peaked slightly later, between 6 and 8 p.m. (Figure 9).

These findings reveal the heightened risks during peak commuting periods and point to the need for targeted interventions, including stricter enforcement, safer road infrastructure such as dedicated lanes and pedestrian crossings, and awareness campaigns to promote safer road use during high-traffic hours.

Figure 9. Serious injury crash times for 2- & 3-wheelers and pedestrians,2024



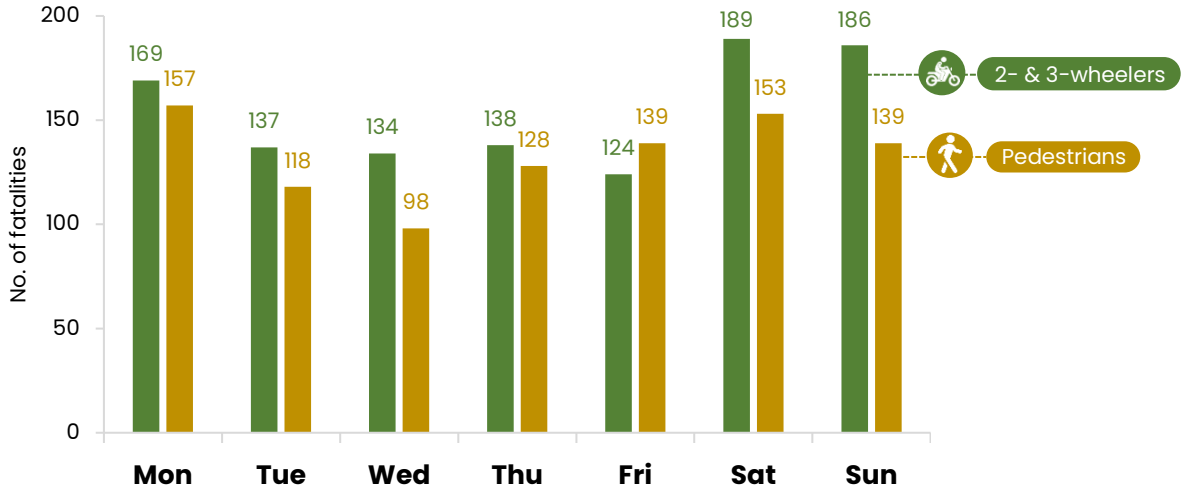
Deaths among vulnerable road users by day of week

Fatality data from 2019 to 2024 reveals a consistent pattern of elevated risk for fatalities on weekends, with Saturdays recording the highest number of deaths among both two- and three-wheelers (189) and pedestrians (153), followed closely by Sundays and Mondays. Midweek days, particularly Wednesday, show comparatively lower fatality counts (Figure 10).

These findings suggest that weekends pose heightened danger for road users, likely due to increased traffic volume, recreational travel, and mixed road use. This trend underscores the need for targeted weekend safety interventions, including

enhanced traffic enforcement, public education campaigns, and infrastructure adjustments to mitigate risk during peak periods.

Figure 10. Vulnerable road user deaths by day of week, 2019-2024

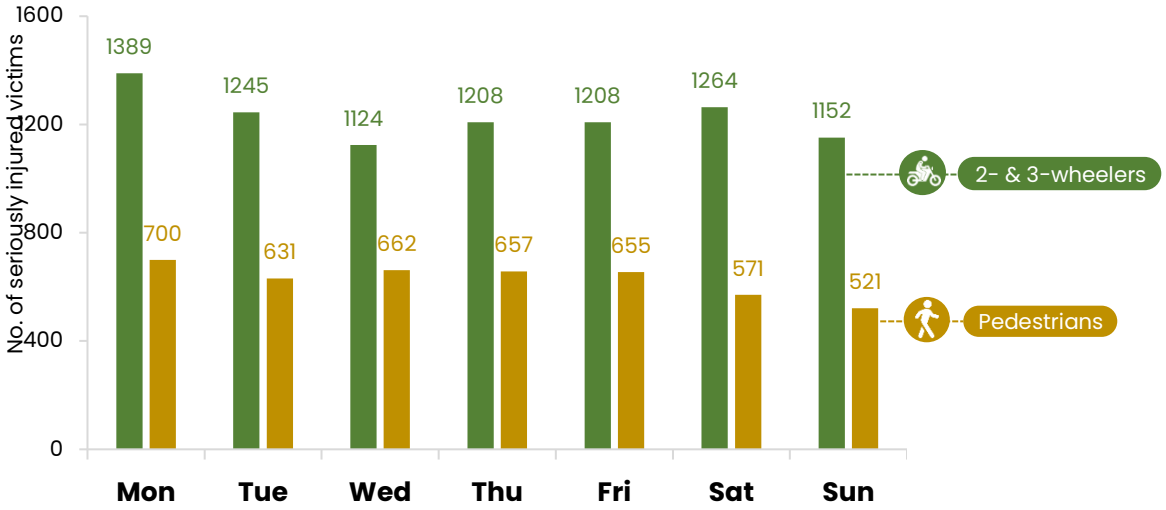


Serious injuries among vulnerable road users by day of week

Users of two- and three-wheelers consistently accounted for a significantly higher number of seriously injured victims compared to pedestrians from 2019 to 2024, with the highest figures recorded on Mondays (1,389 for riders and 700 for pedestrians) (Figure 11).

These findings indicated that the start of the week posed elevated risks for injuries for both user groups, likely due to increased commuting activity and traffic density.

Figure 11. Serious injuries among vulnerable road users by day of week, 2019-2024



Deaths among vulnerable road users by day and time, 2019-2024

Between 2019 and 2024, deaths among users of two- and three-wheelers showed a clear temporal and weekly patterns. Fatalities were highest on Sundays (209) and Saturdays (188), indicating elevated weekend risk, likely due to increased leisure travel and nighttime mobility. The most dangerous time periods were 4 p.m. to 12 a.m. on weekends, with Sunday evenings and late afternoons (54 and 44 deaths, respectively) standing out (Table 1).

Table 1. Deaths by day and time among 2 & 3-wheelers, 2019-2024

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:01-04:00	20	9	6	17	11	15	28
04:01-08:00	29	18	14	17	12	27	41
08:01-12:00	24	25	31	31	27	45	22
12:01-16:00	40	30	33	23	19	30	20
16:01-20:00	32	30	25	20	28	32	44
20:01-00:00	24	25	23	30	27	39	54
TOTAL	**169**	**137**	**132**	**138**	**124**	**188**	**209**

< 20 deaths 20-39 deaths 40+ deaths

Pedestrian fatalities showed distinct temporal and weekly patterns between 2019 and 2024. Mondays recorded the highest number of deaths (156), with peak incidents occurring during the evening hours — particularly between 4 p.m. to 8 p.m. (40 deaths) and 8 p.m. to 12 a.m. (42 deaths). Saturdays (153) and Sundays (139) also saw elevated fatality counts, reflecting increased weekend exposure for pedestrians (Table 2). This is likely due to recreational activities and mixed traffic conditions.

Table 2. Deaths by day and time among pedestrians, 2019-2024

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:01-04:00	15	8	9	7	8	16	12
04:01-08:00	27	22	8	17	18	27	18
08:01-12:00	17	24	19	21	29	25	25
12:01-16:00	15	15	15	20	20	13	18
16:01-20:00	40	21	23	27	25	31	30
20:01-00:00	42	28	24	26	38	41	36
TOTAL	**156**	**118**	**98**	**118**	**138**	**153**	**139**

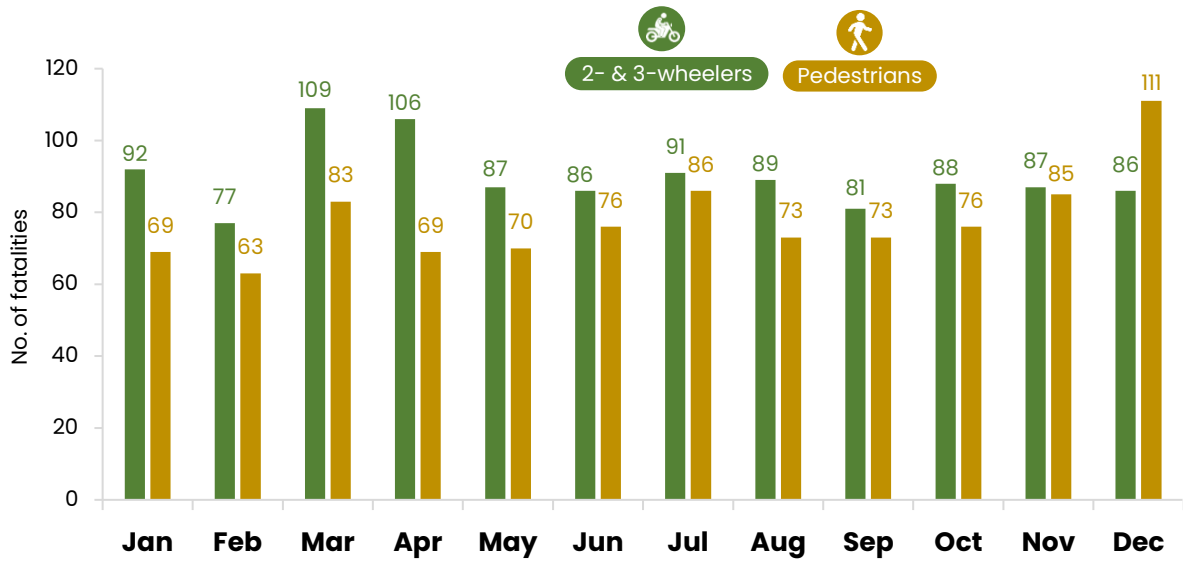
< 20 deaths 20-39 deaths 40+ deaths

Deaths among vulnerable road users by month

Between 2019 and 2024, fatalities among users of two- and three-wheelers and pedestrians demonstrated seasonal variation, with rider deaths reaching their highest levels in March (109) and April (106). Pedestrian fatalities remained generally lower than those of riders throughout the year, except in December, when they peaked at 111, surpassing rider deaths. Overall, fatalities for both groups remained relatively steady across most months, though periods of increased mobility, particularly in March, April, and December, were associated with higher numbers of deaths (Figure 12).

These findings suggest that periods of heightened mobility and traffic activity pose increased risks, underscoring the need for seasonal enforcement strategies and road safety campaigns tailored to high-risk months.

Figure 12. Deaths among vulnerable road users by month, 2019-2024

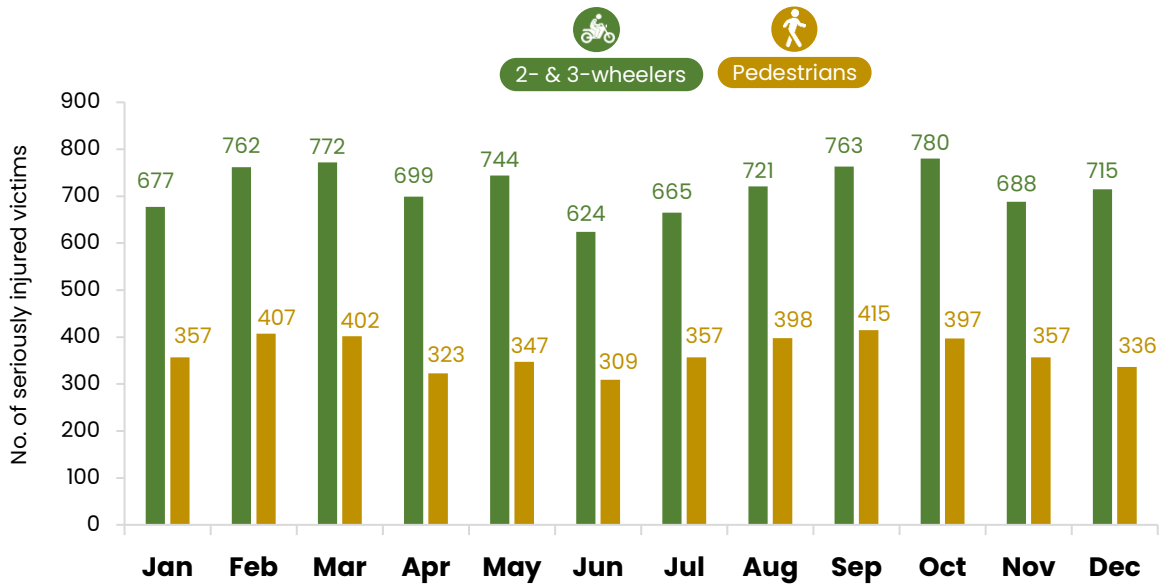


Serious injuries among vulnerable road users by month

Serious injuries among users of two- and three-wheelers remained consistently higher than those among pedestrians across all months of the year from 2019 to 2024. Injuries among riders peaked in October (780), while pedestrian injuries reached their highest level in September (415). The lowest numbers for both groups occurred in June (624 riders and 309 pedestrians) (Figure 13).

These trends reinforce the evidence that risks fluctuate with seasonal patterns of travel and activity.

Figure 13. Serious injuries among vulnerable road users by month, 2019-2024



Vulnerable road user deaths and colliding vehicle

Between 2019 to 2024, 38% of pedestrian collisions involved cars and pickups, whereas the 2- and 3-wheelers were most frequently injured in crashes involving other 2- and 3-wheelers (35%). Bicyclists, though the least affected group, still faced notable risks from interactions with motor vehicles, particularly cars and goods vehicles. The relatively high number of crashes categorized under "unknown" colliding vehicles highlights persistent gaps in crash reporting (Table 3).

Table 3. Vulnerable road user deaths and colliding vehicles, 2019-2024

	Colliding vehicle							
Victim	Car/ pickup	Bus /minibus	Goods vehicle	2- & 3-wheeler	Bicycle	Single vehicle crash	Un-known	Total
Pedestrians	339	147	90	121	3	0	198	898
2- and 3-wheelers occupants	170	131	143	328	1	84	75	932
Bicyclist	9	3	8	2	7	3	16	48
Total	**518**	**281**	**241**	**451**	**11**	**87**	**289**	**1878**

High-risk crash locations among vulnerable road users

Using geolocated crash data from the six-year period (2019–2024), Tables 4 and 5 highlight the top ten high-risk fatal crash corridors for two- and three-wheelers and pedestrians, respectively. These spatial patterns are further illustrated through heat maps, offering a visual representation of crash concentrations. Identifying these high-risk locations provides a robust evidence base for prioritizing road infrastructure upgrades, intersection redesigns, and targeted enforcement strategies—each aimed at reducing fatalities and improving safety for vulnerable road users.

Table 4. Top 10 high-risk fatal crash corridors for 2- & 3-wheeler users

#	Name of corridor	Number of deaths	Length of corridor (km)	Deaths per km
1	Jinja Road	36	6.5	6
2	Kibuye-Natete Road	31	4.5	7
3	Bombo Road	31	3.9	8
4	Ggaba Road	30	7.5	4
5	Busega–Namugoona roundabout (Northern Bypass)	24	5.1	5
6	Masaka Road	23	1.9	12
7	Entebbe Road	21	1.8	12
8	Gayaza roundabout (Kalerwe)–Kyebando Police Post (Northern Bypass)	19	2.0	10
9	Hoima Road	15	3.2	5
10	Kissasi-Nalya Roundabout (Northern Bypass)	15	1.6	9

Figure 14. Distribution of 2- & 3-wheelers fatal crash locations, 2019-2024

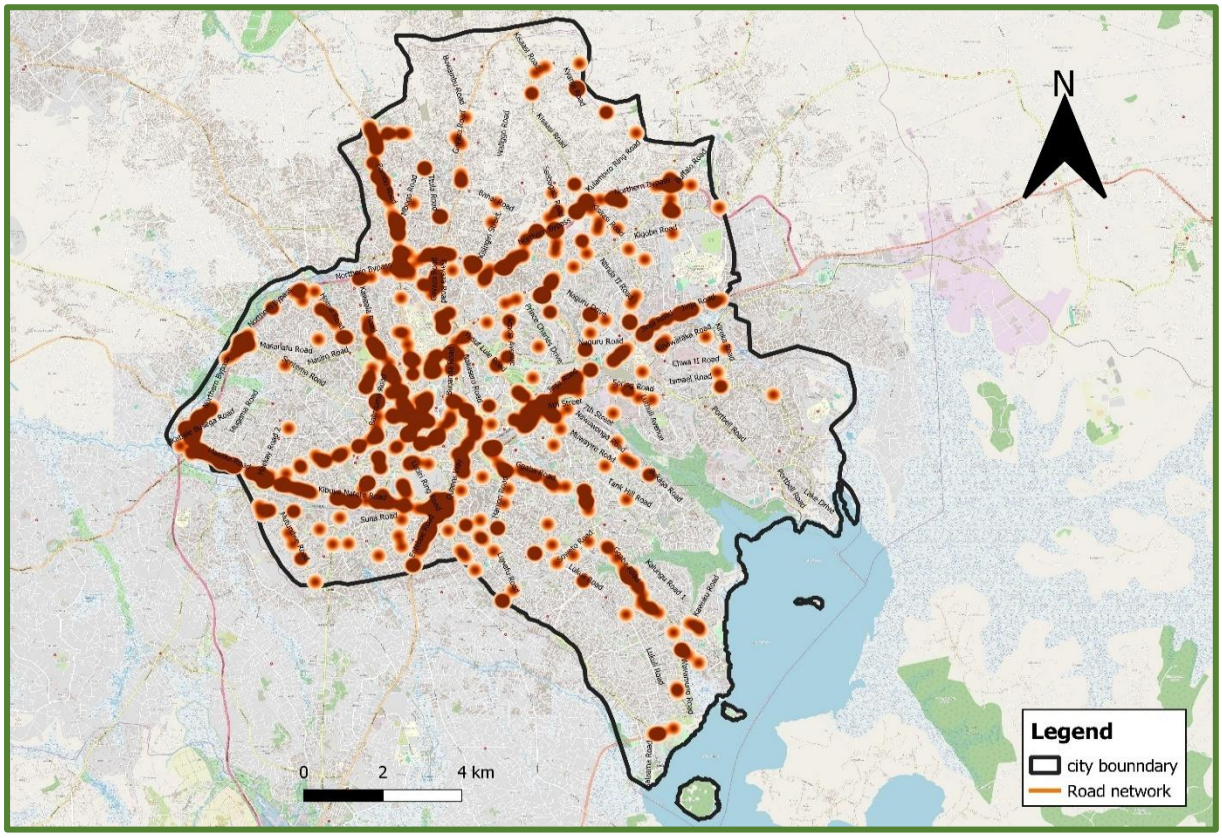
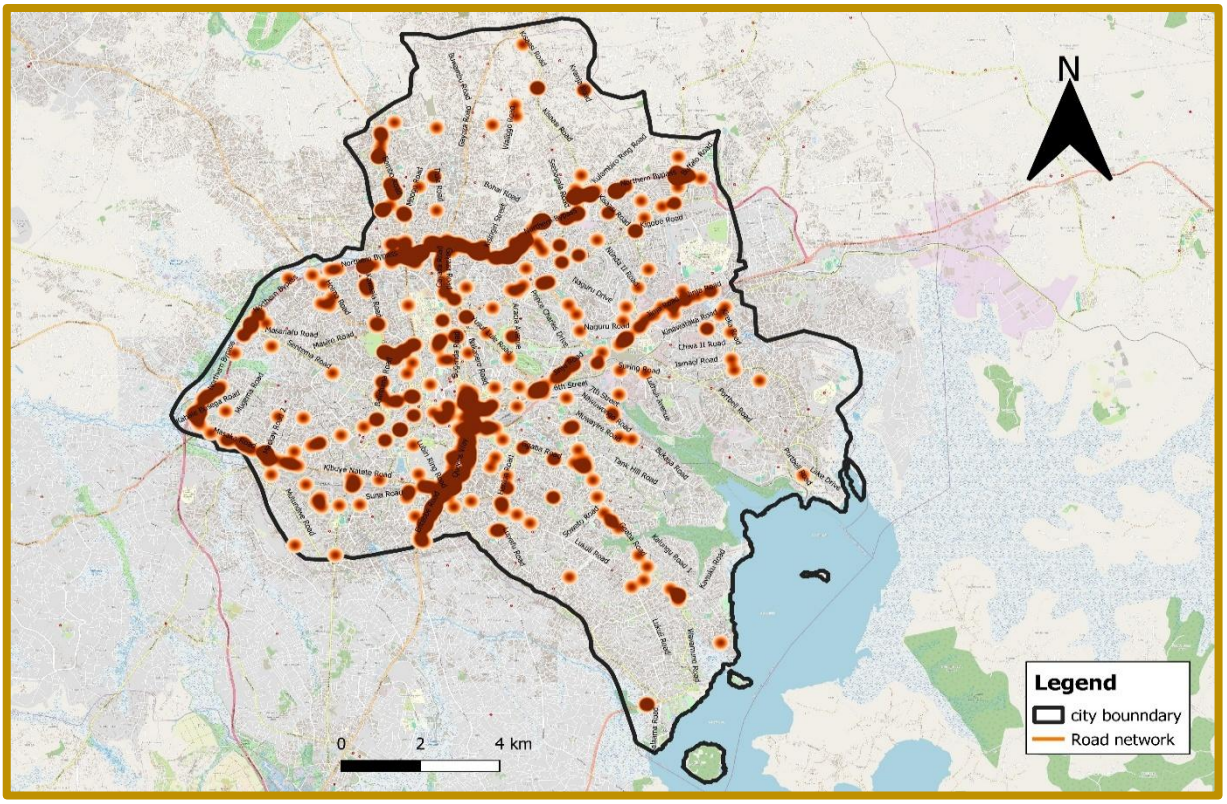


Table 5. Top 10 high-risk pedestrian fatal crash corridors

#	Name of corridor	Number of deaths	Length of corridor (km)	Deaths per km
1	Gayaza roundabout (Kalerwe)–Kyebando Police Post (Northern Bypass)	53	2.0	27
2	Entebbe Road	50	1.8	28
3	Kissasi–Naalya roundabout (Northern Bypass)	33	3.5	9
4	Jinja Road	29	6.5	5
5	Bombo Road	20	3.9	5
6	Busega–Namugoona roundabout (Northern Bypass)	16	5.1	3
7	Ggaba Road	17	7.5	2
8	Hoima Road	15	3.2	5
9	Queens way	15	1.6	9
10	Gayaza Road	10	6.0	2

Figure 15. Distribution of pedestrian fatal crash locations, 2019-2024



Trends in vulnerable road user behaviours and risk exposure

Background

Vulnerable road users remain disproportionately exposed to road traffic risks in Kampala. Despite ongoing interventions, risky behaviors such as speeding and low helmet use persist, hindering progress toward reducing road traffic injuries and fatalities. Analysis of observational data reveals key citywide patterns that can inform targeted interventions.

The Johns Hopkins International Injury Research Unit partnered with Makerere University to conduct roadside observations between February 2021 and February 2025. Observation sites were randomly selected, conditional on the safety of observers. There were 16 observation sites per risk factor, and a standardized protocol was used with vehicles selected for observation in a systematic quasi-random fixed sequence. Observations were performed on both weekdays and weekends.

Speed

Speeding remains one of the most critical risk factors for VRUs in Kampala. In February 2025, 6% of vehicles were observed exceeding the posted 50 km/h speed limit (Figure 16). However, the average speed among speeding vehicles was 57 km/h, a level that significantly increases crash severity and fatality risk.

Speeding was most prevalent on arterial roads and specific locations such as Mackay Road (18%), Entebbe Road near Polo Boutique (9%), and Naguru Drive (9%). A special study on Jinja Road recorded a substantially higher prevalence of speeding—32% of vehicles, with an average speed of 60 km/h.

Although only 6% of vehicles exceeded the legal limit, 67% of vehicles on local and collector roads travelled above the globally recommended 30 km/h threshold, significantly increasing pedestrian injury risk (Figure 17).

Buses (12%) and SUVs (11%) recorded the highest speeding prevalence, while motorcycles showed a lower proportion (4%) but maintained high average speeds under free-flow conditions (Figure 18).

Among motorcycles, 65% exceeded the 30 km/h global safety threshold on local and collector roads, exposing both riders and pedestrians to elevated injury risk in the event of a crash.

Collectively, these findings indicate that while compliance with posted speed limits appears relatively high, actual operating speeds — particularly on local roads — remain unsafe when measured against international standards. This underscores the urgent need for speed management measures, including traffic calming, enhanced enforcement, and improved infrastructure design to protect pedestrians and other VRUs.

Figure 16. Trends in speeding prevalence

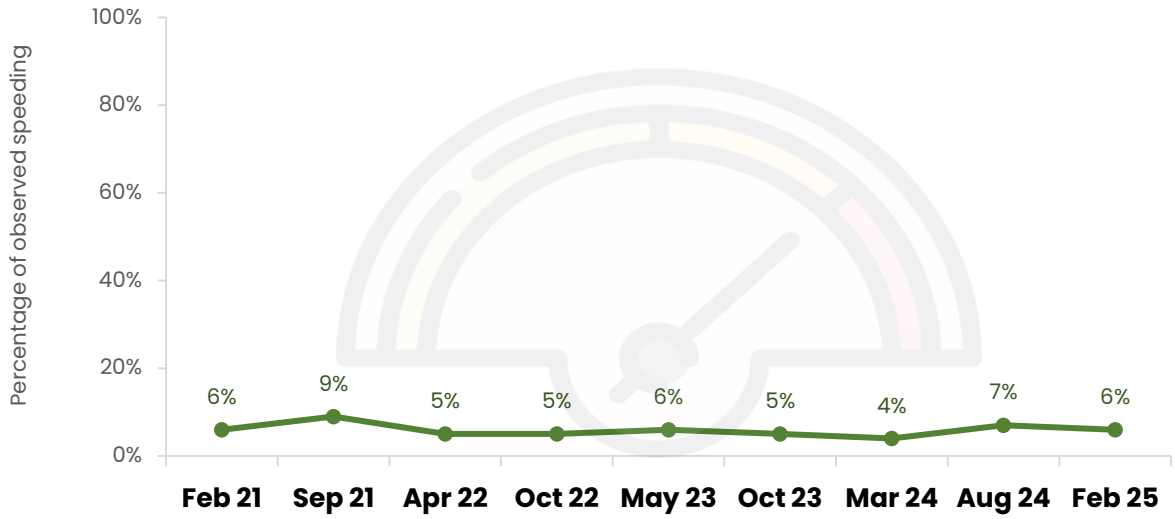


Figure 17. Prevalence of speeding by road type, 2021-2025

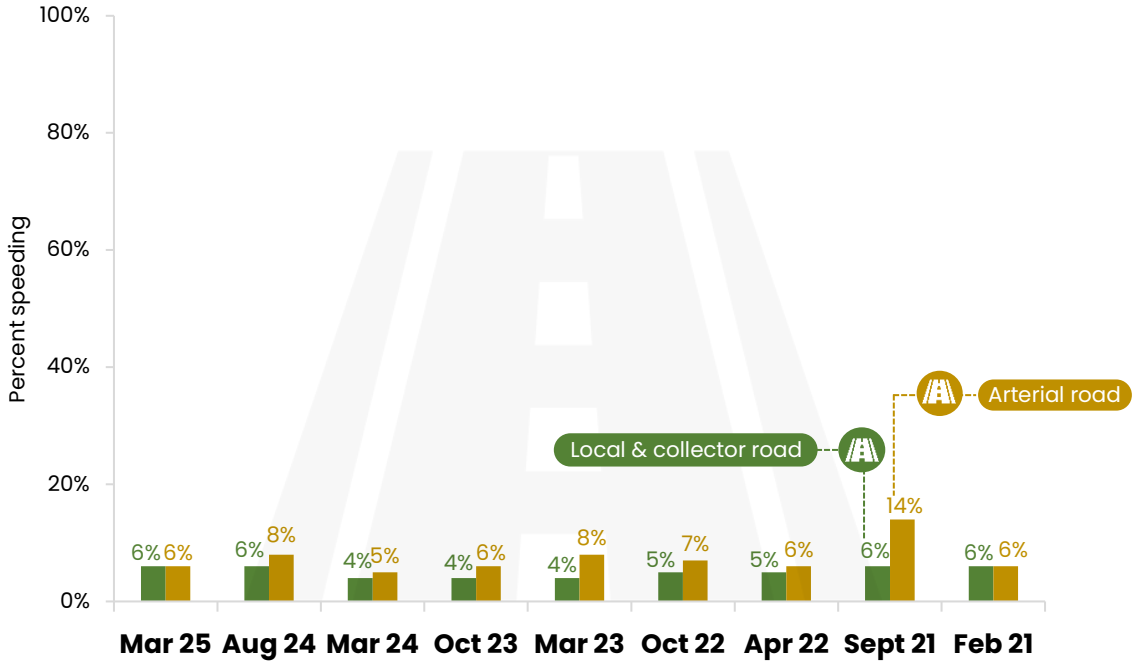
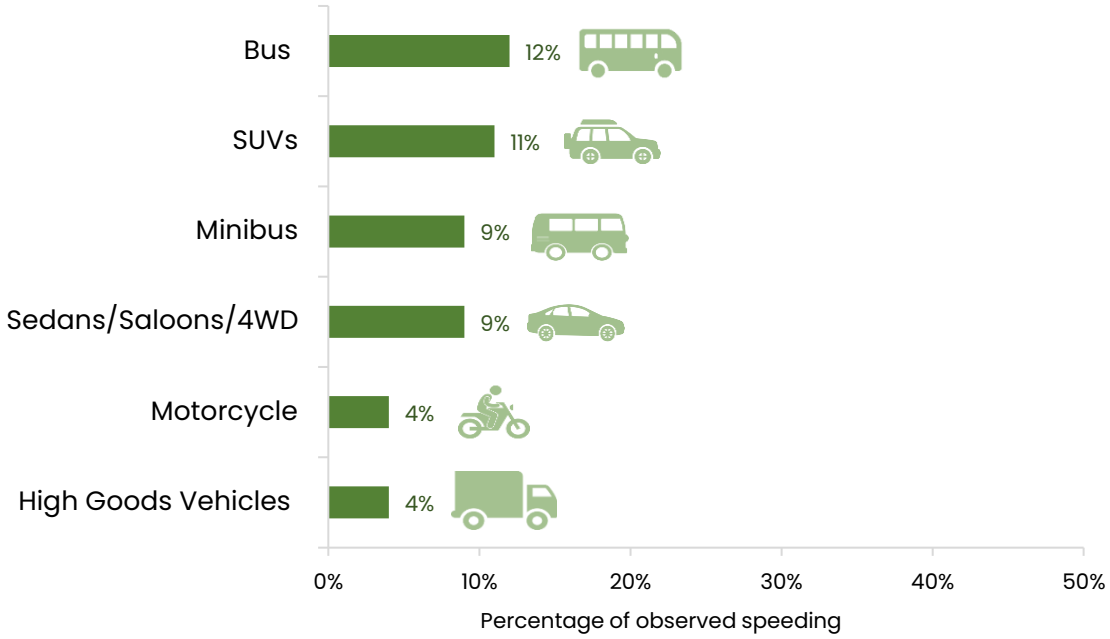


Figure 18. Prevalence of speeding by vehicle type, February 2025



Helmet use

Helmet use among motorcyclists in Kampala remains alarmingly low, particularly among passengers, despite helmets being one of the most effective protective measures in reducing the risk of severe head injury and death in the event of a crash.

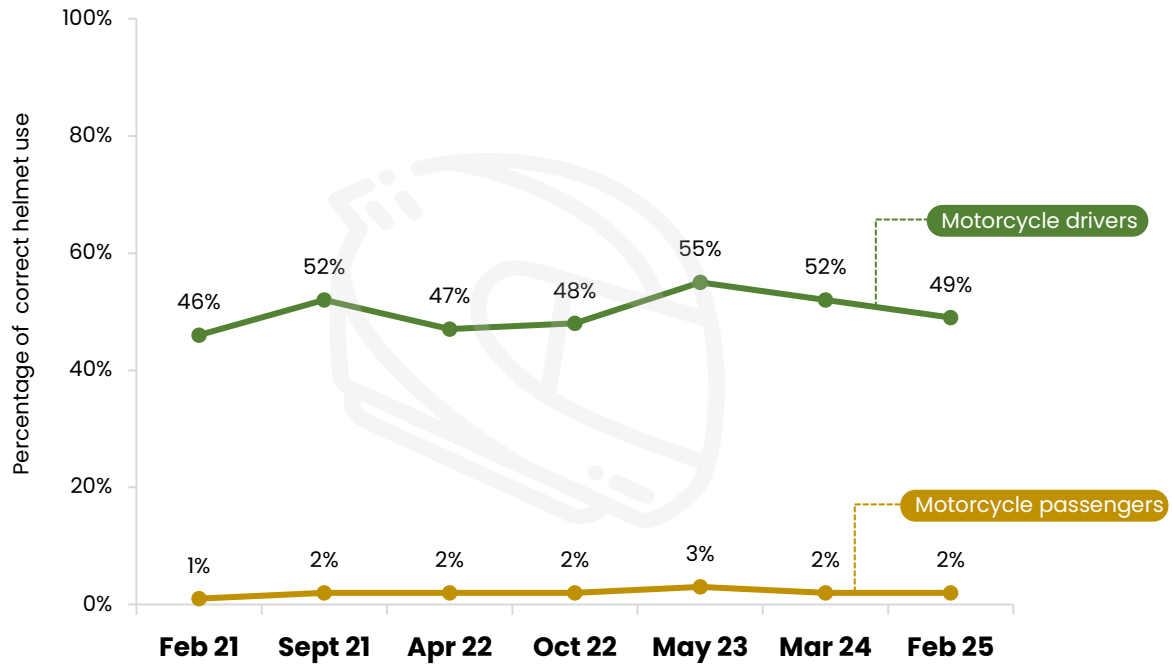
Of 134,832 motorcyclists observed between February 2021 and February 2025, 40% were recorded wearing helmets, but only 34% wore them correctly — meaning the helmet was both strapped and of an appropriate type. Helmet use among drivers stood at 58% overall and 49% correct, while passenger helmet use was critically low at 2% for both overall and correct use, regardless of age or sex. Notably, trends over time indicated a decline in correct helmet use — from 38% in April 2023 to 34% in February 2025 — raising concerns about the sustainability of behavioural change and enforcement (Figure 19).

Correct helmet use among drivers remained relatively stable across weekdays and weekends, with minimal variation by time of day. Compliance was slightly higher on arterial roads (36%) compared to local and collector roads (33%). The analysis further revealed that helmet use was strongly associated with motorcyclist type, vehicle ownership, and road type. Females, passengers, and riders on local roads were significantly less likely to wear helmets correctly.

These findings underscore persistent behavioural and enforcement gaps that continue to expose motorcyclists and their passengers to preventable harm. To address this, the following actions are urgently needed:

- Strengthened enforcement of helmet laws, particularly targeting passengers and low-compliance groups.
- Sustained behavioural change campaigns emphasizing helmet safety, correct use, and the shared responsibility between riders and passengers.
- Infrastructure and enforcement reforms on local and collector roads to improve compliance and deter unsafe practices.
- Data-driven interventions to target high-risk locations and prioritize vulnerable road users' safety in citywide planning.

Figure 19. Correct helmet use among motorcycle drivers and passengers



Actions to Improve Safety of Vulnerable Road Users in Kampala

Improving the safety of vulnerable road users in Kampala is a critical priority, given the high risks faced by pedestrians, cyclists, and motorcyclists in the city's rapidly growing transport environment. This section outlines key actions to address these challenges, focusing on practical measures and policy interventions that can reduce injuries and fatalities.

Safer road infrastructure development (2019-2024)

KCCA upgraded and rehabilitated several city roads, incorporating designs that prioritize the safety of VRus. These improvements included the construction of walkways, pedestrian crossings, and signalized junctions. Key roads enhanced under this initiative were Kulambiro Ring Road, Najjera Link, Nakawa–Ntinda, Kabusu–Bunamwaya–Lweeza, and Lukuli Road.

Key actions

- Constructed continuous pedestrian walkways along newly built and rehabilitated roads.
- Installed signalized junctions to facilitate safe crossings and regulate traffic flow.
- Introduced street lighting to improve nighttime visibility and pedestrian safety.

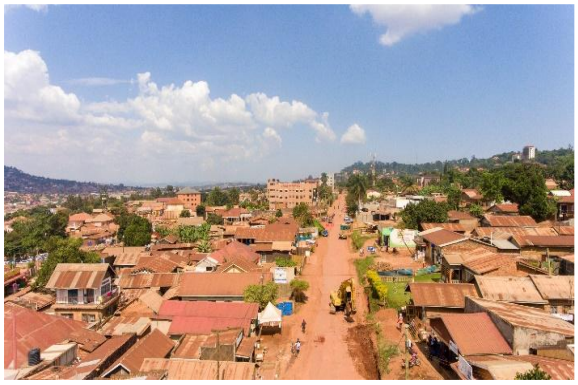
John Babiiha Avenue

Before

After

Lukuli Road

Before *After*



Signalized Junctions: Junctions along the new roads were also signalized to guide traffic flow on the respective roads.

- 5 junctions along John Babiha Avenue,
- 5 junctions along Nakawa–Ntinda Road,
- 2 junctions along Lukuli Road
- 1 junction on Kasubi Road
- 3 junctions along Kabusu–Bunamwaya–Lweeza Road

Signals along Nakawa–Ntinda Road

Pedestrian Road Safety: Walkways were prioritized on the newly constructed and rehabilitated roads.

Walkway construction on Ntinda II road

Walkway construction on Wamala Road

Signalized junction on the Speke Road-Nile Avenue intersection

Road safety mapping, training & strategic planning (2020–2024)

The World Resources Institute (WRI) collaborated with KCCA to map safety infrastructure relevant to VRUs, including protected walkways, bike lanes, and hazard points such as open manholes and drainage channels. WRI also conducted training sessions on the Safe System Approach and supported the development of the Kampala City Road Safety Strategy (2021–2030).

Impact

- Strengthened the capacity of city engineers and planners with modern, safety-first design principles.
- Guided targeted interventions in high-risk areas for pedestrians and cyclists.

School Zone Assessments & Safety Improvements (2021–2024)

Between 2021 and 2024, KCCA and WRI conducted safety assessments around 20 school zones, identifying high child-pedestrian risks. Interventions were later implemented at priority schools.

Key actions

- Installation of raised pedestrian crossings
- Construction of sidewalks and walkways
- Speed-calming measures such as humps and rumble strips
- Improved road signage and markings

Results

- Pre- and post-assessments using iRAP star ratings indicated substantial improvements in school-zone safety.

The school zone around Mbuya Church of Uganda Primary School.
Photo credit: WRI/ Tolga Imamoglu

The after photo of the school zone around Mbuya Church of Uganda Primary School. Photo credit: Jemima Nalumansi

Road without the walkways around a school zone in Naguru.
Photo credit: WRI/Emmerentian Mbabazi

Road with the walkways around a school zone in Naguru.
Photo credit: WRI/Emmerentian Mbabazi

Repainting of faded zebra crossings in the city

Road safety inspections and audits (2021–2024)

Beginning in 2022, several major corridors—including Kinawataka Road, Ggaba Road, Kampala Road, Wakaliga Road, and Kyebando Ring Road—underwent inspections focused on the safety of vulnerable road users (VRUs).

Improvements targeted

- Reduced pedestrian exposure to high-speed traffic.
- Enhanced crossing points to facilitate safer movement.
- Identified and addressed infrastructure-related hazards

Promotion of cycling and non-motorized transport (NMT) (2022–2024)

To support safer cycling, reduce vehicle dominance, and promote sustainable mobility, KCCA, in partnership with WRI, piloted cycling initiatives.

Actions

- Piloted a bike-share program along the NMT corridor.
- Installed bicycle lane signs and wayfinding signage.
- Organized Car-Free Days (2022 & 2024) to raise awareness on walkability and cycling.

Speed management Interventions (2022–2024)

Speeding remains a major risk factor for VRUs. KCCA and WRI introduced several measures focused on reducing speeding, especially where motorized traffic mixes with pedestrians. Kampala Capital City with support of the World Resources Institute under the Bloomberg Philanthropies Initiative for Global Road Safety developed and published the City Speed Management Plan. The guide is a critical tool for enhancing road safety, reducing traffic-related injuries and fatalities, and improving the overall liveability of the city.

Key actions

- Designation of 30 km/h speed limits in high-risk areas.
- Speed calming measures installed on rehabilitated corridors.
- Inspections showing speeds as high as 57 km/h even in maintenance zones justified urgent interventions.

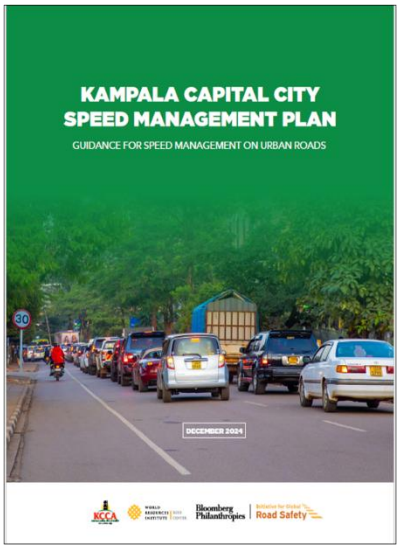


Photo credit: WRI/ Ndani Africa Films

Installation of traffic signals & smart traffic control (2023–2024)

With support from JICA, KCCA upgraded 20 of the planned 27 junctions to modern signalized intersections, improving pedestrian crossing safety and reducing conflict with fast-moving traffic.

Key components

- Introduction of the MODERATO traffic signal control system
- Construction of a new Traffic Control Centre (TCC) for real-time junction management

The newly upgraded Mulago signalized junction

The newly constructed Kampala Traffic Control Center for KCCA

Communications and public awareness campaigns (2023–2024)

KCCA intensified communication campaigns targeting speeding, boda-boda safety, and pedestrian protection.

Key actions

- City-level Speeding Kills—Slow Down campaign
- Engagements with media and community groups
- Billboards placed along known crash hotspots
- Outreaches focused on motorcyclists, a high-risk VRU group

Kampala Mayor, Erias Lukwago, during a media Interview

NATIONAL NEWS

PEDESTRIANS, CYCLISTS ACCOUNT FOR 94% OF KAMPALA ACCIDENT DEATHS

HELMETS AND SEAT BELTS

Between 2019 and 2024, Kampala made significant progress in improving the safety of vulnerable road users through targeted infrastructure upgrades, strategic planning, behaviour-change campaigns, school-zone improvements, and speed management. Collectively, these actions strengthened the city's commitment to the safe system approach, aligning with global best practices and contributing to safer, more inclusive streets for pedestrians, 2- and 3-wheelers.

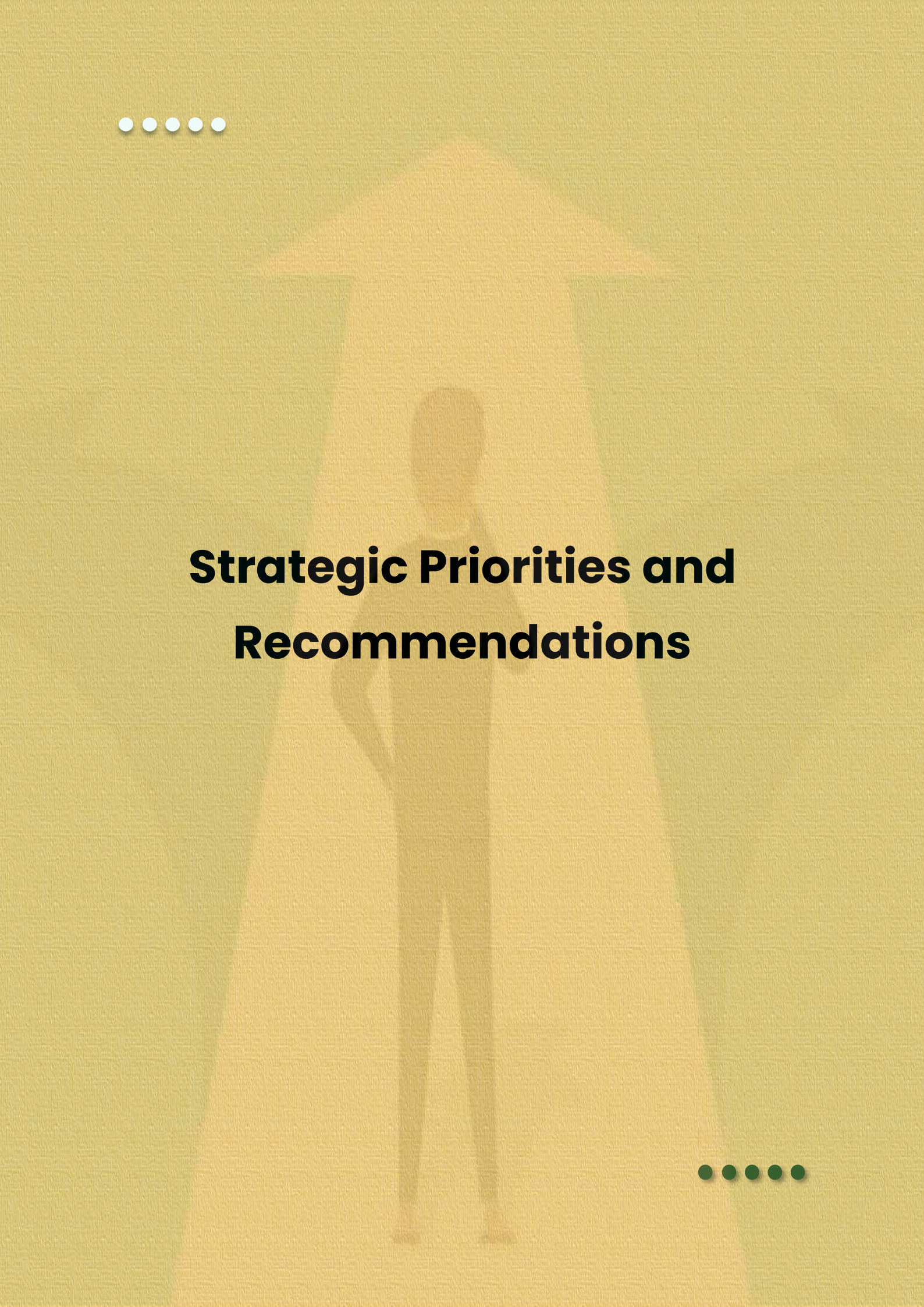
Planned activities

Kampala City recently won a Bronze Award in the inaugural *Speed Challenge*, presented by the Bloomberg Philanthropies Initiative for Global Road Safety. Beginning in December, the Kampala Capital City Authority (KCCA) will use the award funds to further prioritize the safety of vulnerable road users through targeted infrastructure upgrades.

The interventions will focus on Saddler Way and School Lane, key access roads serving a school zone. Planned improvements include:

- Raised pedestrian crossings to enhance child visibility.
- Speed-calming measures to reduce vehicle speeds.
- Refreshed road markings to guide both motorists and pedestrians.
- New signage, including enforcement of a 30 km/h speed limit in this high-risk school zone.

These actions underscore the city's commitment to creating safer environments for children and other road users through context-specific, evidence-based road safety improvements.



Strategic Priorities and Recommendations

Prioritized actions for key stakeholders

To effectively reduce road traffic injuries and fatalities among vulnerable road users, coordinated and targeted interventions are required across multiple sectors. The following prioritized actions outline the key responsibilities of major stakeholders involved in road safety in Uganda. These actions are aligned with global best practices and the Safe System Approach, focusing on legal reforms, infrastructure improvements, enforcement, standardization, public awareness, and legislative support to create a safer road environment.

- Ministry of Works and Transport (MoWT): Revise the legal framework to incorporate Safe System principles, mandate 30 km/h speed limits in urban and high-risk areas and ensure that VRU-friendly infrastructure is mainstreamed into road design manuals and planning processes.
- Kampala Capital City Authority (KCCA): Redesign high-risk road corridors to enhance safety, implement traffic-calming measures such as speed humps and raised crossings, and install pedestrian crossings and adequate street lighting.
- Uganda Police Force: Strengthen enforcement of helmet use and speed limits by scaling up checkpoints and deploying automated enforcement technologies; ensure consistent penalties for non-compliance.
- Uganda National Bureau of Standards (UNBS): Maintain strict helmet certification protocols and conduct regular market surveillance; support the rollout of helmet subsidy or incentive programs to improve access to certified helmets.
- Civil Society and NGOs: Lead community engagement initiatives, distribute certified helmets, raise awareness through behaviour change campaigns, and advocate for improved protection of vulnerable road users.
- Parliament: Enact amendments to the Traffic and Road Safety Act to grant stronger enforcement powers, institutionalize 30 km/h zones, and embed VRU safety in national road safety policy and legislation.

Recommendations

The following recommendations are aimed at strengthening enforcement, infrastructure, and community engagement to ensure safer mobility for vulnerable road users.

1. Speed management
    - Enforce 30 km/h limits in mixed-traffic areas, in line with the Global Plan for the Decade of Action for Road Safety.
    - Introduce traffic-calming measures (speed humps, raised crossings) in high-risk corridors for vulnerable road users.
    - Expand automated speed enforcement using cameras in hotspots like Jinja Road and Ggaba Road.
2. Helmet use
    - Enforce UNBS-certified helmet use for both riders and passengers.
    - Conduct sustained helmet checkpoints and link enforcement with public awareness campaigns.
    - Provide incentives for compliance (e.g., subsidies for quality helmets).
3. Infrastructure and urban planning
    - Adopt Safe System–aligned road design, prioritizing sidewalks, cycle lanes, pedestrian crossings, and lighting.
    - Pilot "VRU Priority Zones" in high-risk areas (e.g., Gayaza Road-Kyebando corridor).
    - Integrate VRU safety audits in all new road projects.
4. Enforcement and institutional coordination
    - Strengthen multi-agency enforcement (Police, KCCA, MoWT) for speed and helmet use.
    - Improve crash and risk factor data systems for real-time policy response.
5. Behavioural change
    - Run mass education campaigns targeting helmet use for passengers and safe pedestrian crossing behaviour.
    - Engage boda-boda associations to champion helmet compliance.
    - Use data-driven campaigns during high-risk months.

Action matrix for protecting VRUs

The table below outlines a set of coordinated, high-impact actions designed to reduce road traffic injuries and fatalities among VRUs. These actions reflect a multi-sector approach, assigning clear leadership and support roles to agencies. By strengthening collaboration across ministries, local authorities, enforcement bodies, and civil society, the actions aim to create safer urban environments, address key risk factors, and improve protection for VRUs.

Action	Lead Agency	Supporting Agencies
Establish and enforce 30 km/h speed zones in urban and high-risk areas	MoWT	KCCA, Uganda Police Force
Deploy speed cameras and automated enforcement in crash hotspots	Uganda Police Force	MoWT, KCCA
Enforce mandatory helmet quality standards and certification	UNBS	MoWT, Uganda Police Force
Conduct regular helmet checkpoints with emphasis on passenger compliance	Uganda Police Force	
Upgrade VRU infrastructure including sidewalks, crossings, and lighting	KCCA	MoWT, Development Partners
Strengthen data sharing and integration on crashes and risk factors	MoWT	Uganda Police Force, KCCA, UBOS
Design and implement VRU-focused road safety awareness campaigns	MoWT and KCCA	NGOs, Media, Civil Society Organizations

Strategic action timeline

The table below presents a time-bound framework outlining priority actions needed to improve safety for VRUs. Organized into short-, medium-, and long-term horizons, these actions reflect a progressive approach that begins with immediate enforcement measures and awareness efforts, advances toward infrastructure redesign and technological enforcement, and culminates in systemic reforms that embed road safety into planning and policy. Together, these phased interventions provide a clear roadmap for agencies and partners to coordinate efforts, allocate resources efficiently, and achieve sustained reductions in road traffic injuries and fatalities.

Term	Actions
Short-term (0–1 year)	Helmet checkpoints, enhanced speed enforcement, VRU-focused safety campaigns, improved data integration and sharing among agencies.
Medium-term (1–3 years)	Implementation of 30 km/h speed zones; redesign of high-risk road corridors; introduction of helmet subsidy/incentive programs; phased rollout of automated enforcement technologies.
Long-term (3–5 years)	Full integration of the Safe System Approach into urban and transport planning; comprehensive legal reforms to support adaptive speed management; institutionalization of VRU safety audits in all new road infrastructure projects.

References

1. World Health Organization. (2023). *Global status report on road safety 2023.*
2. Damsere-Derry, J., Palk, G., & King, M. (2017). Road accident fatality risks for "vulnerable" versus "protected" road users in northern Ghana. *Traffic Injury Prevention, 18*(7), 736–743.
3. World Health Organization. (2020). *The top 10 causes of death.*
4. Uganda Police Force. (2024). *Annual crime report 2024.*
5. Kobusingye, O. C., Guwatudde, D., Owor, G., & Lett, R. R. (2002). Citywide trauma experience in Kampala, Uganda: A call for intervention. *Injury Prevention, 8*(2), 133–136.
6. European Union. (2010). *Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of intelligent transport systems in the field of road transport and for interfaces with other modes of transport.*
7. Toward Zero Deaths Steering Committee. (2014). *Toward zero deaths: A national strategy on highway safety.* Retrieved from http://www.towardzerodeaths.org/wp-content/uploads/TZD_National_Strategy_2014.pdf
8. National Highway Traffic Safety Administration (NHTSA). (2014). *Traffic safety facts 2014 data.*
9. Noland, R. B., Sinclair, J. A., Klein, N. J., & Brown, C. (2017). How good is pedestrian fatality data? *Journal of Transport & Health, 7*, 3–9.
10. Uganda Bureau of Statistics (UBOS). (2014). *National population and housing census 2014.*
11. Fernando, D. (2018). More than eight deaths per day on our roads… and rising. *Sri Lanka Journal of Forensic Medicine, Science & Law, 9*(2).
12. Badre, B. (2015, March 25). Road safety is an issue of equity for the poor. *World Bank Blogs.*
13. Africa Transport Policy Program (SSATP), African Union Commission, & World Health Organization. (2025). *Africa status report on road safety 2025.*
14. Rosen, H. E., Bari, I., Paichadze, N., Peden, M., Khayesi, M., Monclús, J., et al. (2025). Global road safety 2010–18: An analysis of global status reports. *Injury, 56*(6), 110266.
15. United Nations Human Settlements Programme (UN-Habitat). (2022). *Walking and cycling in Africa: Evidence and good practice to inspire action.*
16. Osuret, J., Namatovu, S., Biribawa, C., Balugaba, B. E., Zziwa, E. B., Muni, K., et al. (2019). State of pedestrian road safety in Uganda: Are interventions failing or absent? *bioRxiv*, 736488.
17. Ministry of Works and Transport. (2024). *The Traffic and Road Safety (Prescription of Speed Limits) Regulations, 2024.*
18. Ministry of Works and Transport. (2023). *Traffic and Road Safety (Prohibited Drugs and Alcohol Limit) Regulations, 2023.*
19. Ministry of Works and Transport. (2023). *Traffic and Road Safety (Motorcycles and Motorised Tricycles) (Amendment) Regulations, 2023.*
20. Ministry of Works and Transport. (2023). *Traffic and Road Safety (Wearing of Safety Belts) (Amendment) Regulations, 2023.*
21. Ministry of Lands, Housing, and Urban Development. (2011). *National physical planning standards and guidelines (2011).*
22. Ministry of Works and Transport. (2010). *Geometric design manual.*
23. Ministry of Works and Transport. (2023). *Road design manual: Volume VI – Urban roads.*
24. Safe Way Right Way. (2023). *Safe Helmets Uganda Project (SHUP).*