

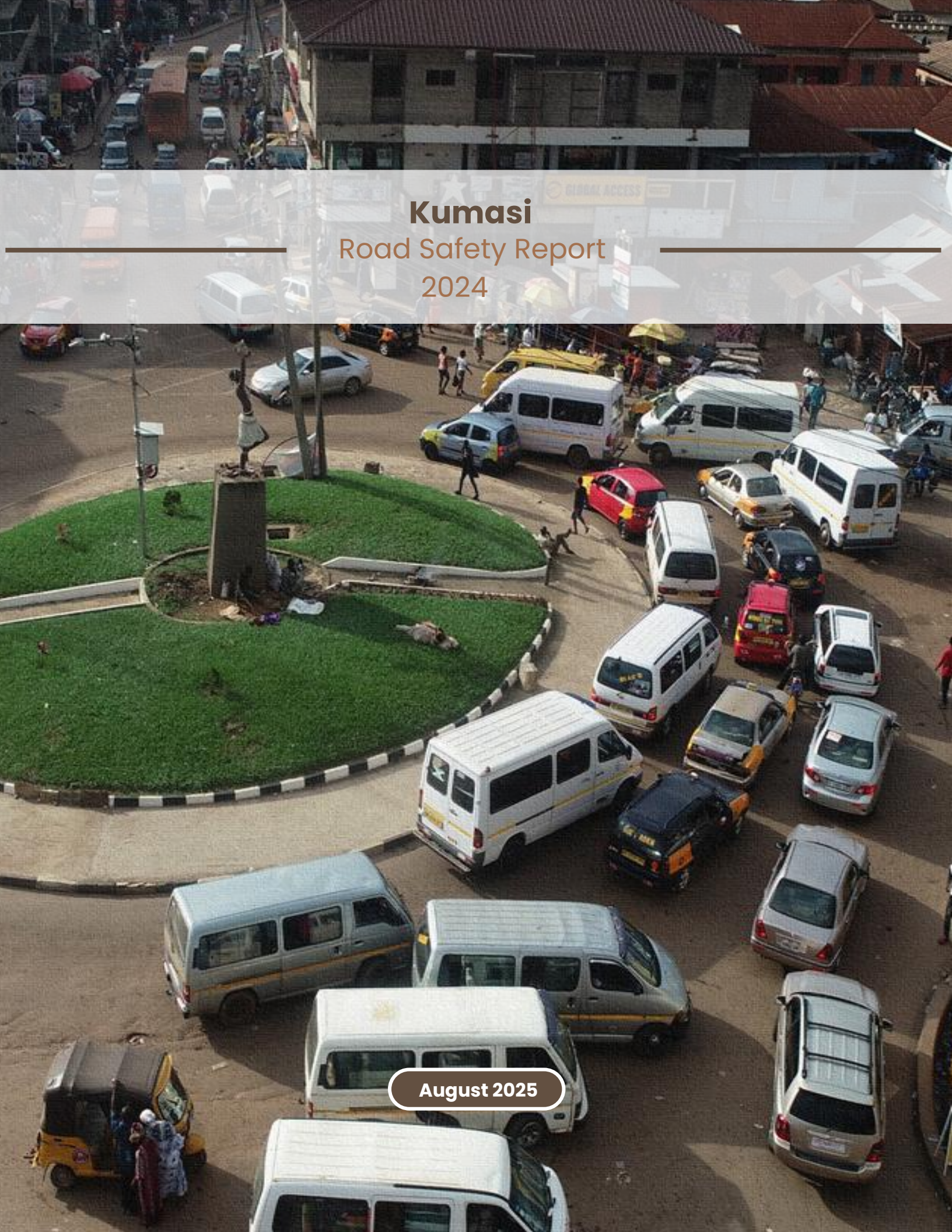


Kumasi

Road Safety Report

2024





Kumasi

Road Safety Report 2024

August 2025



Kumasi

Road Safety Report



In collaboration with



**Bloomberg
Philanthropies**

Initiative for Global
Road Safety

 **Vital
Strategies**

Observational studies by


JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

**International
Injury Research Unit**



Preface



Hon. Richard Ofori-Agyeman Boadi

Mayor of Kumasi

In 2020, the Kumasi Metropolitan Assembly partnered with Bloomberg Philanthropies Initiative for Global Road Safety to reduce road fatalities and injuries in the city through evidence-based interventions.

This report provides an update to earlier assessments on crashes, deaths, and injuries, helping stakeholders monitor trends and implement targeted solutions that address the needs of vulnerable road users, high-risk timeframes, and crash-prone locations.

I am hopeful that the ongoing efforts by the city and its partners will contribute meaningfully to the reduction of road traffic deaths and injuries and improve safety for all who use Kumasi's roads. These city-level initiatives should complement those led by the National Road Safety Authority (NRSA), reinforcing a unified and data-driven approach across governance levels.

Special thanks to Bloomberg Philanthropies, Vital Strategies, and other partners for their continued support. The city authorities remain committed to fulfilling the goals of this collaboration, and I appreciate the contributions of all local and external stakeholders working to make Kumasi's roads safer for everyone.



Supt. Evans Kwame Boadi

Commander

Motor Traffic and Transport Department,
Ghana Police Service

The Motor Traffic and Transport Department (MTTD) of the Ghana Police Service plays a central role in managing and controlling traffic, enforcing road traffic laws, and conducting thorough investigations and documentation of road crashes.

We extend our heartfelt congratulations to the Kumasi Metropolitan Assembly (KMA) on the successful development of this comprehensive report, which highlights the burden of road traffic crashes in Kumasi. The detailed insights on high-risk periods and crash-prone locations will greatly support MTTD's operational planning and resource allocation.

MTTD deeply appreciates the contributions of KMA and its partners toward strengthening the enforcement capacity of traffic officers — a vital step in reducing crashes and saving lives.

These collaborative efforts reflect the shared responsibility across sectors to create safer road environments for all. Strengthening enforcement is only one piece of a broader puzzle. Integrating data-driven planning, public education, and infrastructure improvements is essential for sustainable progress. The MTTD stands ready to continue working alongside local authorities, civil society groups, and national stakeholders to build a resilient and proactive road safety system.



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Acknowledgements

This road safety report marks the fifth edition for Kumasi and is based on 2024 crash data from police records. It contributes to the city's ongoing efforts to monitor road crash outcomes, with the overarching goal of reducing traffic-related deaths and injuries through evidence-based interventions.

Crash data were provided by the Motor Traffic and Transport Department (MTTD) of the Ghana Police Service, with support from National Service fellows assigned to the city's transport department who assisted in data collection at police stations. Vital Strategies offered technical guidance throughout the report's development, while the Johns Hopkins International Injury Research Unit (JH-IIRU) contributed data on behavioural risk factors included in the report.

Kingsley Wirekoh, BIGRS Surveillance Coordinator in Kumasi, led data collection and developed the initial draft of the report. Dr. Raphael Awuah, Regional Technical Advisor for Africa on Road Injury Surveillance at Vital Strategies, supervised the entire process — from data collection, analysis to final review and publication.

The BIGRS team — Akwasi Wireko Brobby (Initiative Coordinator), Obed Opoku-Afrane (Enforcement Coordinator), Mavis Obeng-Mensah (Communications Officer), Simon Yaw Manu (Road Design and Transportation Coordinator), and Mark Tonyemevor (Urban Mobility Analyst, World Resources Institute) — contributed content for key sections. Ing. Samuel Boamah Danquah, Senior Manager for the Road Safety Program in Ghana at Vital Strategies, provided input and supported the report's review.

Special appreciation goes to Bloomberg Philanthropies, Vital Strategies, the Regional Commander and officers of the MTTD, Ghana Police Service, and National Road Safety Authority (Ashanti Region) for their contributions to improving road safety in Kumasi.

Executive summary

A data-driven strategy is essential to avert fatalities and injuries resulting from road traffic crashes. This report offers insights into the profiles of road traffic crash victims, identifying peak risk times and high-risk locations in Kumasi, utilizing police records in 2024. Additionally, an evaluation of behavioural risk factors related to road injuries is included.

Key findings

Reported fatalities increased by 13% — **from 84 deaths in 2023 to 95 in 2024**



Males accounted for **71% of deaths** and **64% of serious injuries**



Pedestrians accounted for **64% of deaths** in 2024



26% of deaths occurred from crashes between **4 and 8 p.m.**



Individuals aged 20 to 39 years accounted for **32% of the reported fatalities**



High-risk **fatal crash spots** included:

- Sofoline station
- Anloga junction
- Santasi Oteng Nkwanta
- Silicon Hotel junction
- Santasi Roundabout



Crashes occurring over the **weekend** accounted for **51% of all reported fatalities**



30% of observed vehicles **exceeded** the posted speed limits



Acronyms

KMA	Kumasi Metropolitan Assembly
BIGRS	Bloomberg Philanthropies Initiative for Global Road Safety
BRI	Building and Road Research Institute
JH-IIRU	Johns Hopkins University International Injury Research Unit
MTTD	Motor Traffic and Transport Department
NRSA	National Road Safety Authority
GPS	Global Positioning System
QGIS	Quantum Geographic Information System
SBER	Social Behavioural and Education Research
WHO	World Health Organization
WRI	World Resources Institute

Introduction

Road traffic crashes remain one of the leading causes of death and disability worldwide, particularly in low- and middle-income countries, which account for over 92% of all road traffic fatalities^{1,2}. Between 2015 and 2030, LMICs are projected to experience economic losses exceeding \$834 billion due to crash-related deaths and injuries³. Without robust interventions, this burden is expected to grow as motorization rapidly increases across these regions³.

Africa bears the highest road traffic death rate globally at 19 deaths per 100,000 population in 2021 — compared to a global average of 15 deaths per 100,000 population⁴. In Ghana, road injury ranks as the eighth leading cause of death and disability⁵.

Reliable crash data is fundamental to saving lives. It enables policymakers, planners, and enforcement agencies to identify high-risk locations, vulnerable road users, and dangerous behaviours, informing targeted interventions that prevent injuries before they occur. Data guides strategic investments, supports progress monitoring, and allows for the evaluation of road safety measures. Without quality data, efforts risk being reactive or misaligned. Strengthening surveillance systems and fostering a culture of evidence-based decision-making are vital steps toward building safer, more resilient transport systems in LMICs and beyond.

About Kumasi

Kumasi is a vibrant city in south-central Ghana and the capital of the Ashanti Region. The city is rich in history and culture, serving as the seat of the Asantehene, the traditional ruler of the Ashanti people. The city's strategic location makes it a major transit point connecting the southern and northern parts of the country. Primary modes of transportation include private vehicles, taxis, commercial minibuses (known as trotro), and tricycles (referred to as pragia).

Purpose of report

This report presents information on fatalities and injuries resulting from road traffic crashes in Greater Kumasi, using official police records from 2024. It includes findings from spatial analyses that show the distribution of fatal and serious injury crashes across the city. The report also highlights road-user risk behaviours and outlines actions taken to improve road safety in Kumasi.

Data sources and systems

Police crash records are the source of official road traffic crash data in Ghana. An adapted version of the Building and Road Research Institute/Ghana Police Service data form was used to extract data from narrative police crash reports for 2024.

Narrative descriptions and sketches of crash locations in the police reports were used to generate crash coordinates. Quantum Geographic Information System software was used to analyse geolocation data to produce high-risk crash location maps.

Observational data on behavioural risk factors contributing to road injuries were collected and assessed by Johns Hopkins International Injury Research Unit (JH-IIRU).

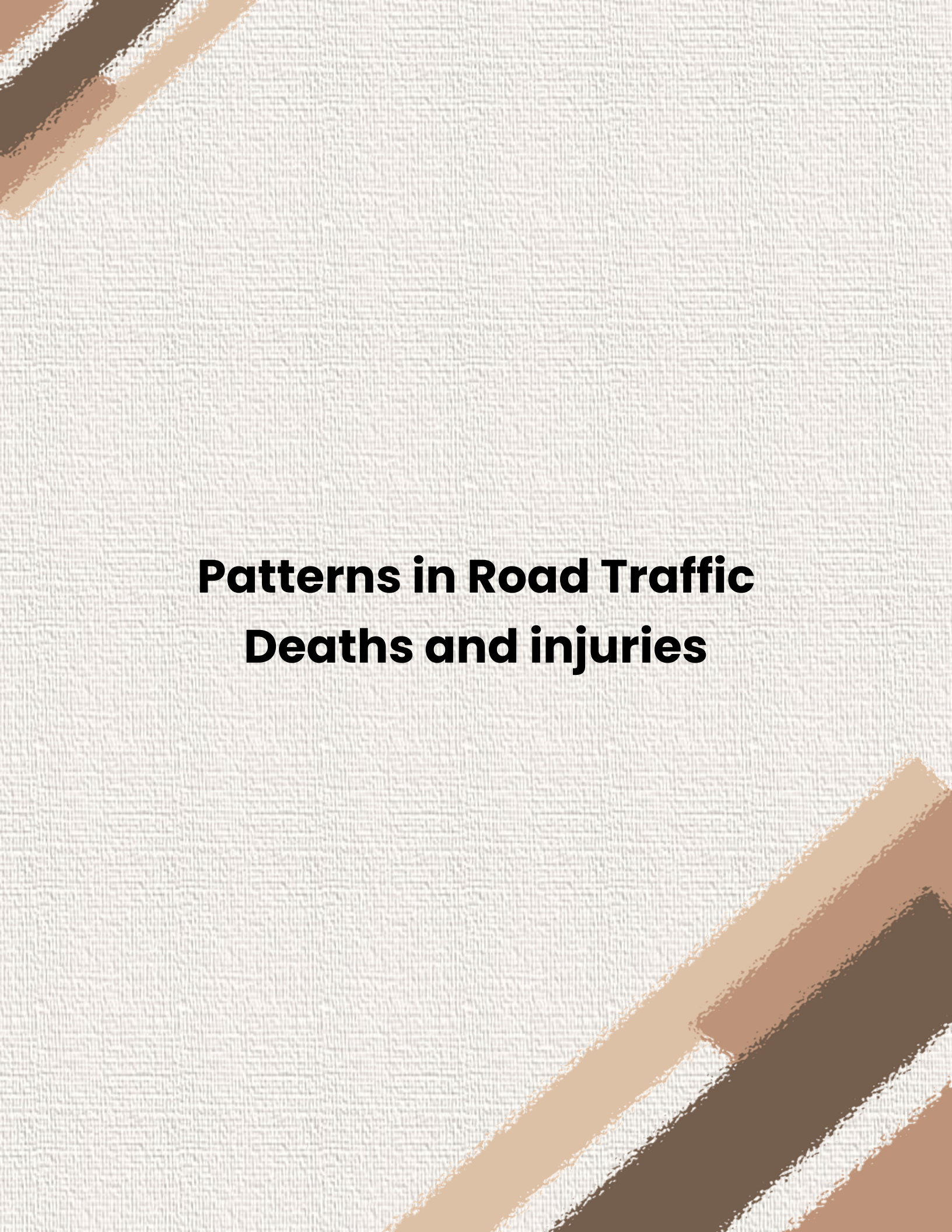
Definitions

The definitions used in this report align with those used by the National Road Safety Authority, the lead agency for road safety in Ghana.

Road traffic crash: A crash resulting in injury, death or property damage that involves at least one vehicle on a public road.

Fatal crash: A crash in which at least one person dies immediately or within 30 days of the incident.

Serious injury crash: A crash resulting in at least one person being admitted to a hospital as an inpatient for more than 24 hours.



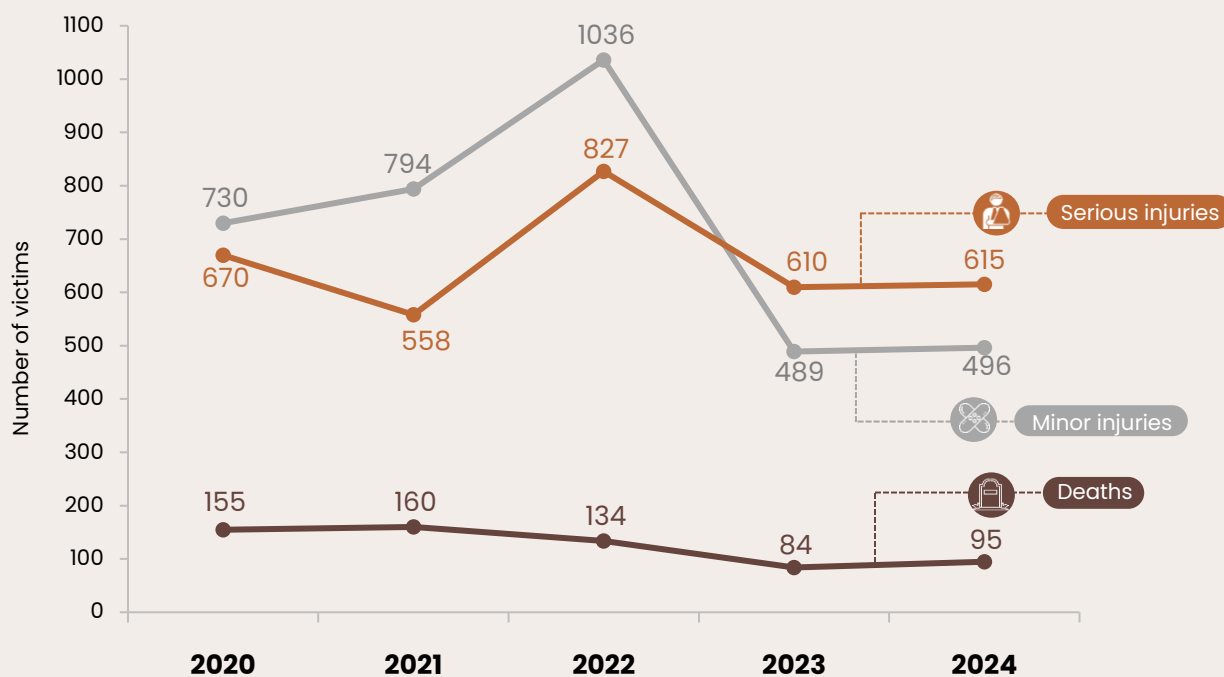
Patterns in Road Traffic Deaths and injuries

Trends in road traffic deaths and injuries

Reported road traffic fatalities in Kumasi declined consistently from 2021 to 2023, suggesting meaningful progress in crash prevention. However, this positive trend reversed in 2024, with a 13% increase in reported deaths compared to 2023. This reversal highlights the need for renewed investments in public awareness campaigns, enhanced enforcement of traffic regulations, and focused interventions in high-risk areas. On the other hand, the number of reported serious and minor injuries has fluctuated since 2020 (Figure 1).

Taken together, these trends reflect a complex and evolving road safety environment, where some indicators require urgent attention. To better understand the underlying dynamics, there is a need for disaggregated data by age group, crash type, and location. Integrating behavioural insights and spatial analysis into future planning will be important in reversing the rise in fatalities and injuries.

Figure 1: Trends in road deaths and injuries, 2020–2024

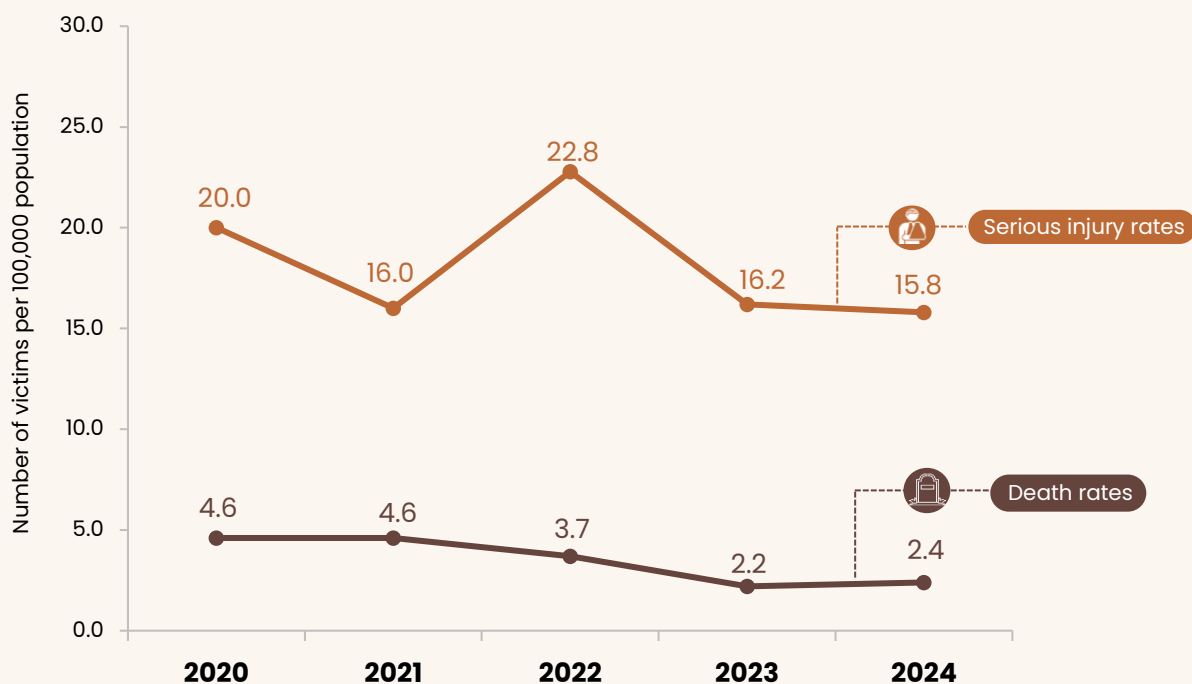


Death and serious injury rates

In 2024, the road traffic death rate was estimated at 2.4 per 100,000 population, reflecting a marginal increase from 2.2 per 100,000 recorded in 2023. This uptick, while slight, signals a concerning reversal in the declining trend observed in previous years. In contrast, the rate of serious injuries showed a modest decline, falling from 16.2 per 100,000 in 2023 to 15.8 per 100,000 in 2024 (Figure 2).

Although the decline in serious injury rate is encouraging, the simultaneous rise in the death rate suggests that crash severity may be increasing, potentially due to factors such as speeding, non-use of seatbelts or helmets, impaired driving, or inadequate emergency response times. Adopting a systemic approach – such as safe system principles that prioritize reducing fatal outcomes even when crashes occur – can help turn injury prevention progress into fewer road traffic fatalities overall.

Figure 2: Trends in death and serious injury rates, 2020–2024



Deaths and serious injuries by road user type

In 2024, pedestrian fatalities increased by 20%, reversing a steady decline observed over the previous two years (Figure 3). Deaths among motorcyclists, including both two- and three-wheeled vehicles, also rose by 10% compared to 2023. Together, vulnerable road users (pedestrians and motorcyclists) accounted for 88% of all deaths in 2024 (Figure 4), underscoring a critical and disproportionate burden. These trends reinforce the urgency of implementing targeted interventions to improve safety outcomes for these high-risk groups.

Figure 3: Deaths by road user type, 2020–2024

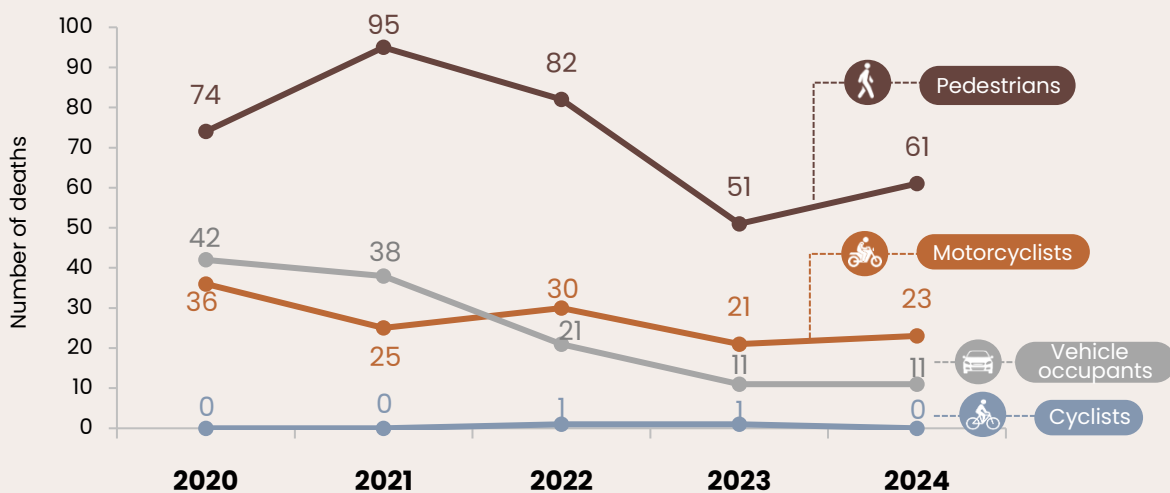
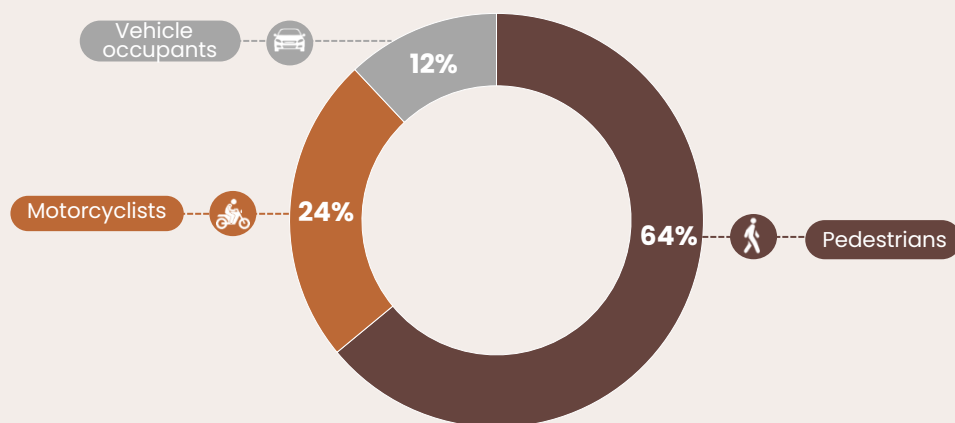


Figure 4: Percentage distribution of deaths by road user type, 2024



From 2023 to 2024, serious injuries among pedestrians increased by 11%, while those among two- and three-wheelers and vehicle occupants declined by 7% and 2%, respectively (Figure 5). Despite the overall decline, vehicle occupants accounted for the largest share of serious injuries in 2024, representing 41% of all cases (Figure 6).

Figure 5: Serious injuries by road user type, 2020–2024

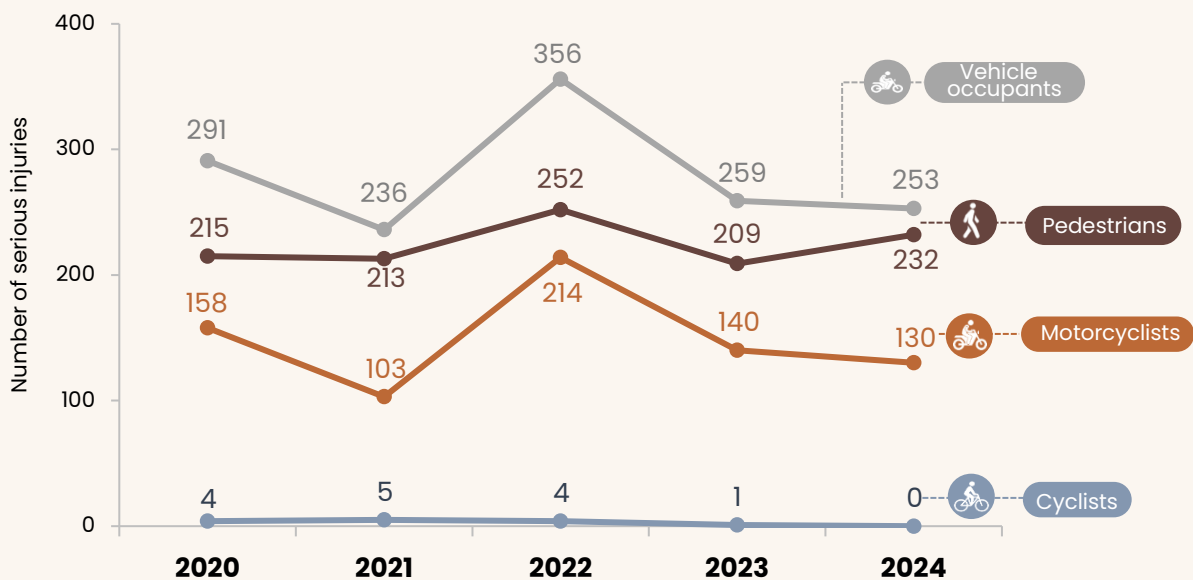
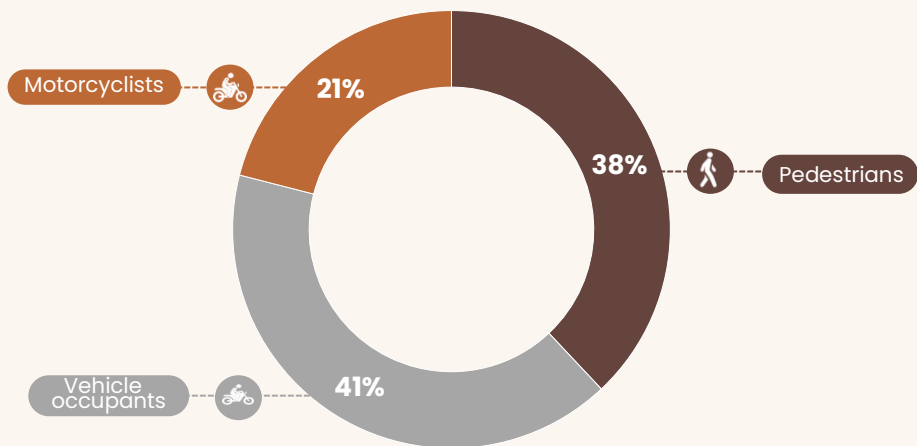


Figure 6: Percentage distribution of serious injuries by road user type, 2024



Deaths and serious injuries by sex

In 2024, males accounted for the highest proportion of reported road traffic deaths (71%) and serious injuries (64%) in Kumasi (Figures 7 and 8). These figures align with long-standing trends observed over the past five years, where males consistently represent the majority of victims in both fatal and non-fatal crash outcomes.

This persistent sex disparity reflects broader global and national patterns and can be attributed to a combination of factors, including higher exposure to traffic risks among males, particularly as drivers, motorcyclists, and commercial transport operators. In addition, behavioural risk factors such as speeding, drink-driving, lower helmet or seatbelt usage, and risk-taking tendencies are more commonly reported among male road users.

Addressing these imbalances will require targeted interventions, including male-focused road safety education, and enforcement strategies aimed at high-risk behaviours to inform evidence-based planning. Further collaboration with transport unions, motorcycle associations, and youth groups could help tailor messaging and enforcement to reduce male vulnerability on the roads.

Figure 7: Distribution of deaths by sex, 2020–2024

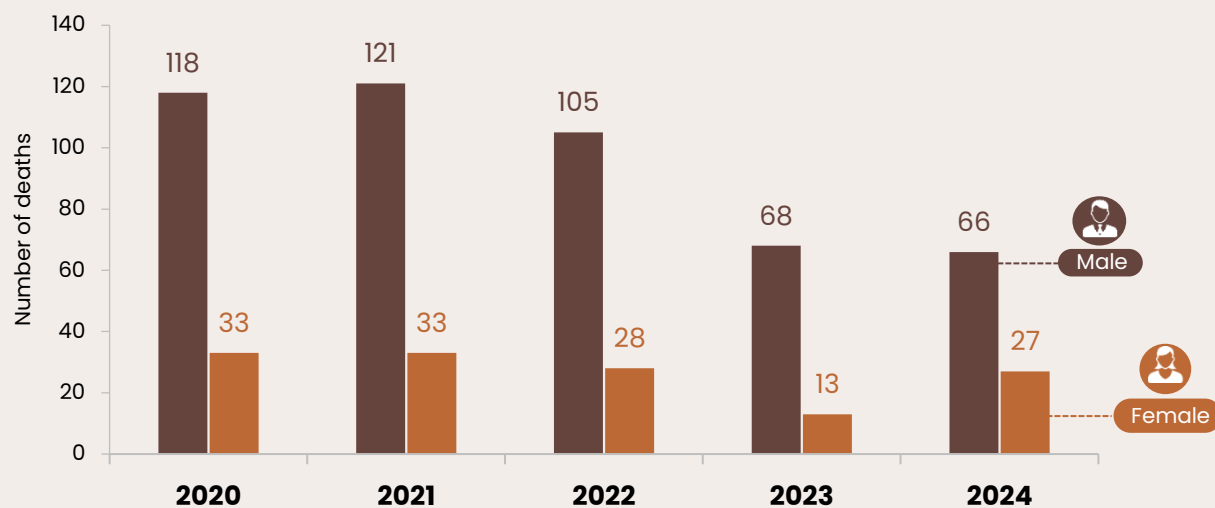
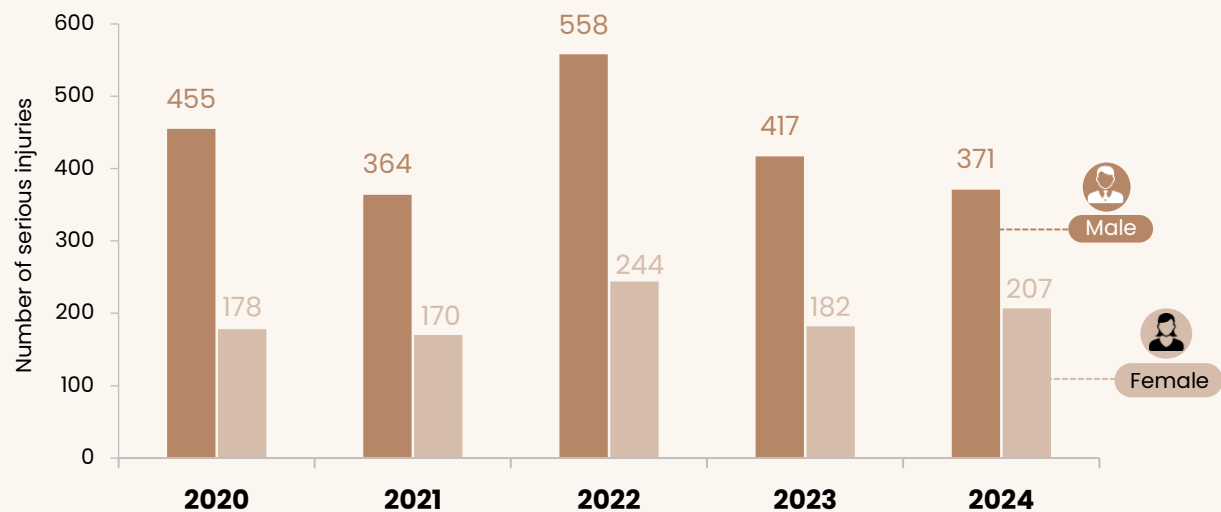


Figure 8: Distribution of serious injuries by sex, 2020–2024

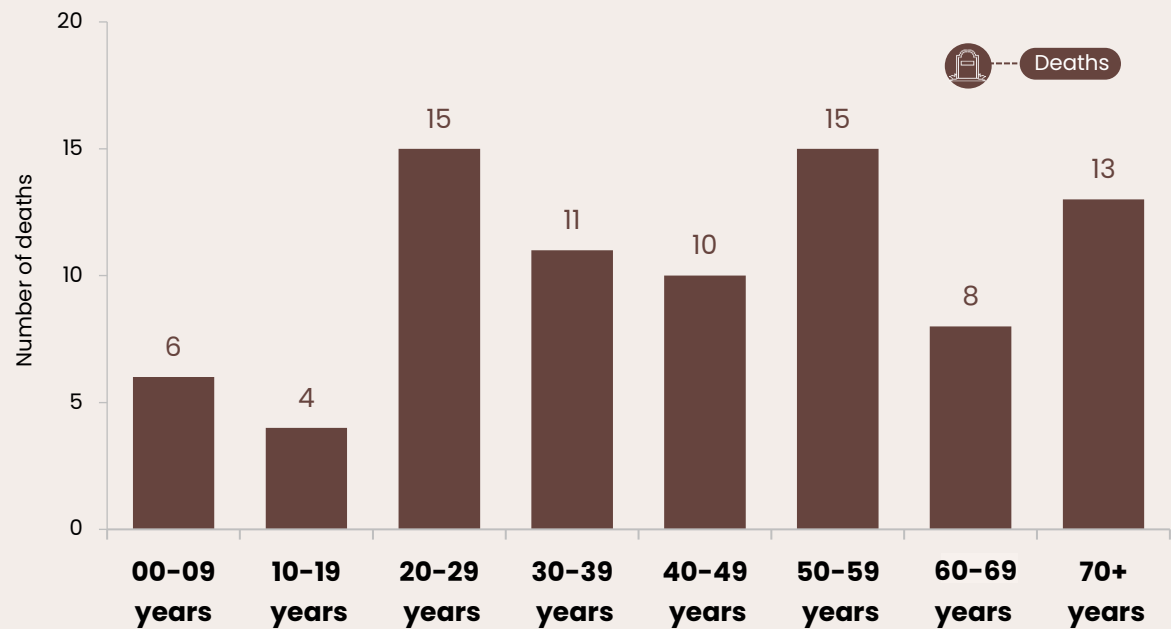


Deaths and serious injuries by age

In 2024, individuals aged 20 to 29 years and 50 to 59 years accounted for the highest proportion of reported road traffic deaths, contributing 18% respectively (Figure 9). This marks a notable shift in the demographic profile of road traffic fatalities in Kumasi.

Over the past six years, the age distribution of road crash deaths has evolved⁷, suggesting changes in exposure patterns, travel behaviour, and risk profiles among different age groups. The prominence of young adults may reflect their higher levels of mobility and engagement in riskier driving practices, while the increase among older adults could point to factors such as vulnerability to injury, slower recovery times, or increased involvement in pedestrian or motorcycle crashes. These findings highlight the need for age-specific interventions, such as targeted awareness campaigns for young drivers and enhanced pedestrian protections for older populations.

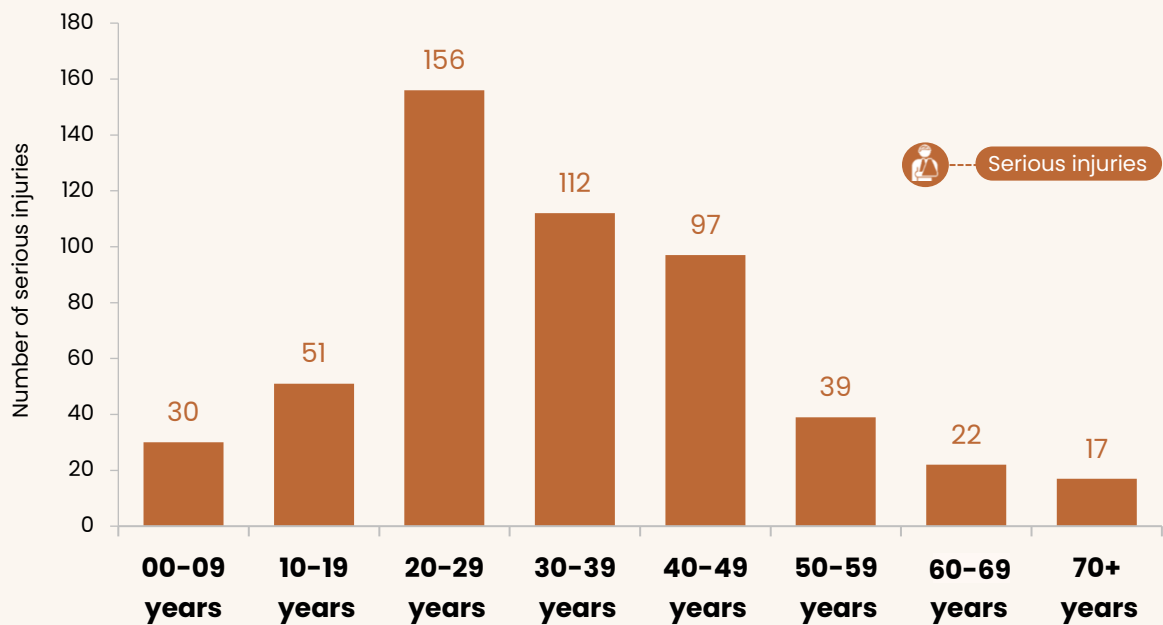
Figure 9: Distribution of deaths by age, 2024



In 2024, the highest proportion of serious injuries (30%) occurred among individuals aged 20 to 29 years (Figure 10). This age group has consistently represented a large share of serious injury cases and hospitalizations in Kumasi over the past five years.

As many in this demographic are economically active, the impact of such injuries extends beyond the individual to affect household income, productivity, and overall economic stability. Injured individuals may face extended periods away from work, leading to lost wages, while families often absorb the direct costs of medical treatment, rehabilitation, and transportation for care. These burdens highlight the urgent need for preventive strategies targeting young adults, including road safety education, enforcement of protective measures like helmet and seatbelt use, and improved access to affordable trauma care services.

Figure 10: Distribution of serious injuries by age, 2024



Deaths by age and road user type

Table 1 presents the correlation between age group and road user deaths for 2024. Pedestrian knockdowns were particularly prevalent among individuals aged 50 to 59 years, accounting for 18% of all such fatalities. The risk was even higher among those aged 70 and above, who constituted 20% of pedestrian deaths.

This pattern helps to explain the shifting age distribution of road traffic fatalities observed in recent years. Older pedestrians may be disproportionately affected due to reduced mobility, slower reaction times, and increased physical vulnerability. These findings underscore the importance of implementing age-sensitive safety interventions, such as improved pedestrian infrastructure, longer crossing times at intersections, and public awareness campaigns focused on the protection of older road users.

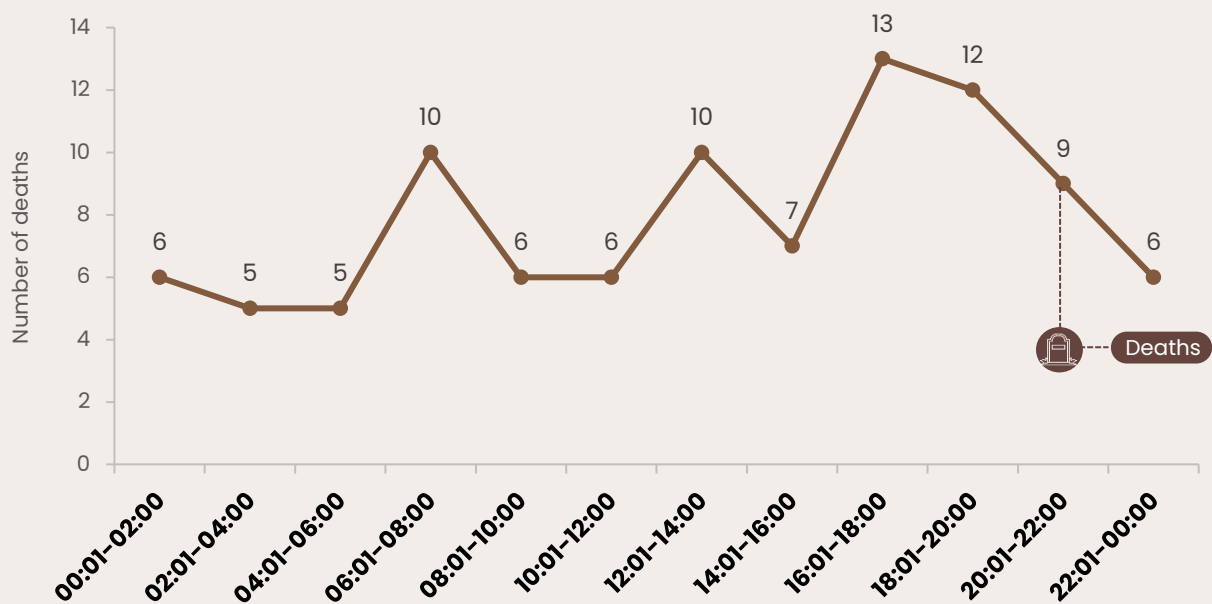
Table 1: Deaths by age and road user type, 2024

Age group	Pedestrians	2- and 3-wheelers	Vehicle occupants	Total
00–09	5	0	1	6
10–19	2	2	0	4
20–29	7	6	2	15
30–39	5	4	2	11
40–49	7	2	1	10
50–59	11	2	2	15
60–69	4	2	2	8
70+	12	0	1	13
Unknown	8	5	0	13
Total	61	23	11	95

Deaths by time of day

In 2024, a significant proportion of road traffic fatalities occurred as a result of crashes that took place between 4 p.m. and 10 p.m. (Figure 11). This trend remained consistent with patterns observed in the previous year, indicating a persistent period of heightened crash severity during the late afternoon and evening hours.

Figure 11: Deaths by time of day, 2024

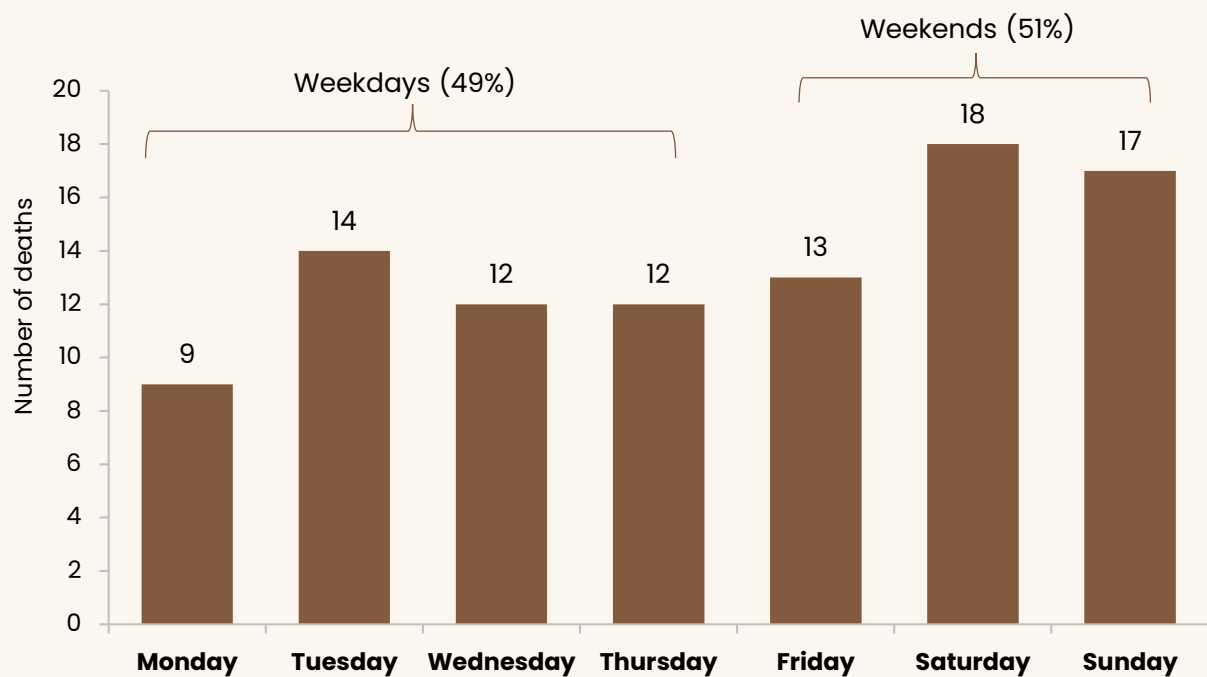


Deaths by day of week

In 2024, over half (51%) of all road traffic fatalities occurred as a result of crashes that took place between Friday and Sunday (Figure 12).

The increase in weekend-related deaths may be linked to higher incidences of speeding, drink-driving, and potentially reduced law enforcement presence during evening and weekend hours. These findings highlight the need for a data-driven approach to police staffing and operations, including enhanced visibility, targeted checkpoints, and public awareness efforts specifically tailored to weekend road use. Strengthening enforcement during these high-risk periods could significantly reduce fatal crashes and mitigate dangerous driving behaviours.

Figure 12: Deaths by day of week, 2024



Deaths by day and time

Between 2022 and 2024, the majority of reported road traffic fatalities occurred following midweek and weekend crashes that took place after 4 p.m. (Table 2). This recurring pattern underscores the need for intensified enforcement targeting high-risk behaviours during these specific timeframes.

Priority should be given to addressing key risk factors such as speeding, drink-driving, and the non-use of helmets, seatbelts, and child restraints, particularly on weekends, and midweek evenings. Aligning enforcement and public education strategies with these temporal risk patterns can help reduce crash severity and improve overall road safety outcomes.

Table 2: Deaths by time and day of the week, 2022–2024

Time	Day of week						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:01 – 04:00	5	1	5	3	4	4	3
04:01 – 08:00	6	3	7	8	2	8	4
08:01 – 12:00	5	9	7	4	10	7	10
12:01 – 16:00	4	10	9	11	5	8	9
16:01 – 20:00	11	14	14	9	11	9	12
20:01 – 00:00	5	9	8	6	7	14	11
Total	36	46	50	41	39	50	49

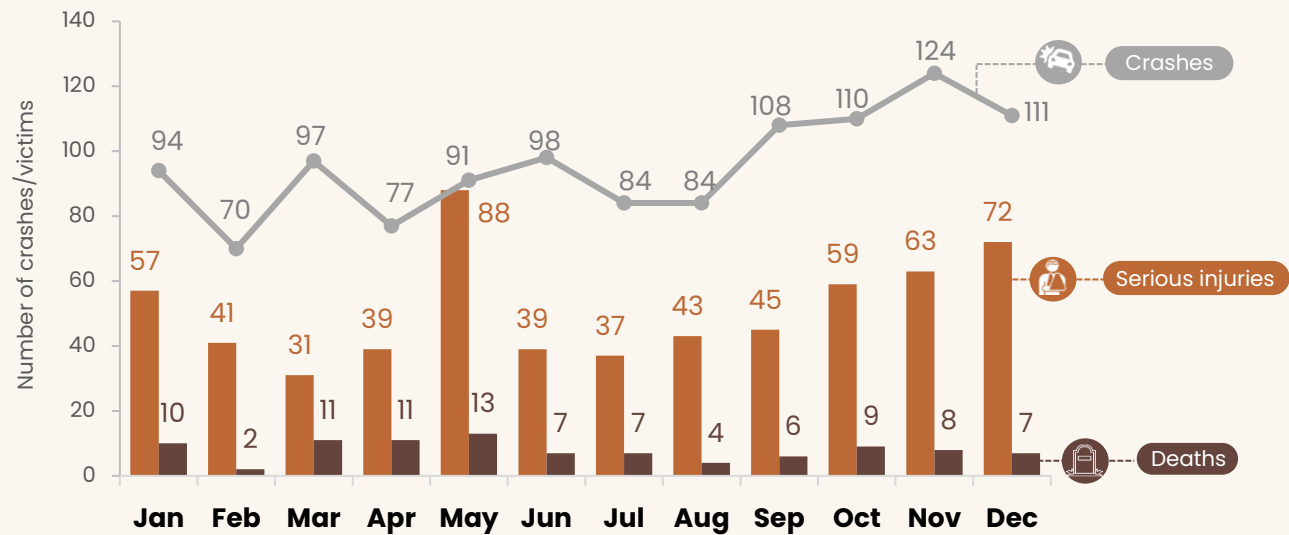
≥ 11 deaths
 6–10 deaths
 ≤ 5 deaths

Crashes, deaths and serious injuries by month

In 2024, a higher number of road traffic crashes were recorded during the last quarter of the year (October to December). However, the highest number of reported deaths and serious injuries occurred following crashes in May (Figure 13).

This seasonal variation suggests that while crash frequency may increase toward the end of the year—potentially due to higher travel volumes, festive activities, or poor weather conditions—the severity of crashes may be influenced by other factors earlier in the year. These findings highlight the need for month-specific risk assessments and seasonal enforcement strategies, particularly in months like May where the risk of fatal or serious outcomes is elevated.

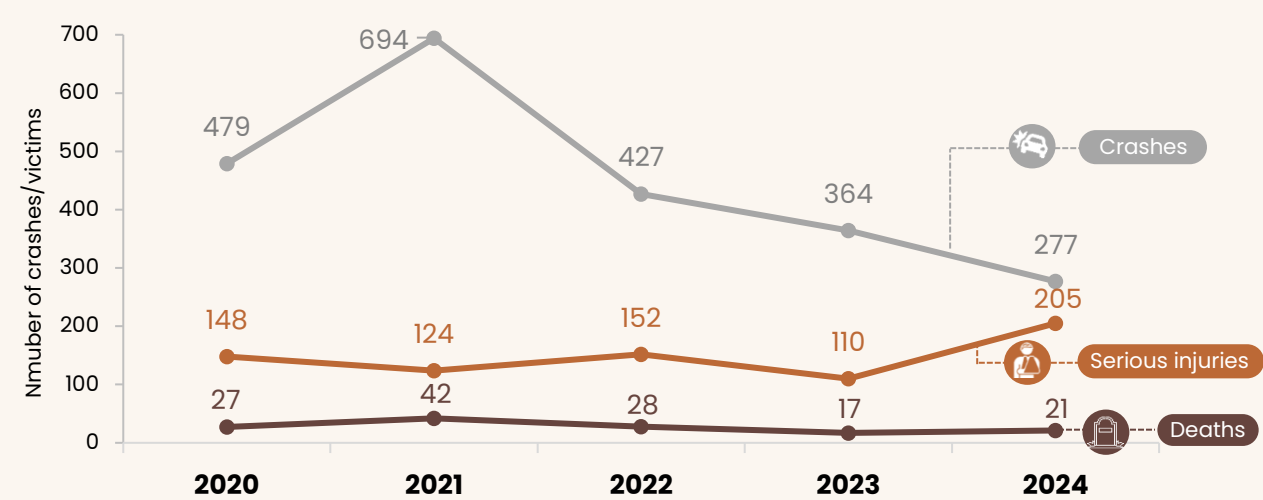
Figure 13: Crashes, deaths, and serious injuries by month, 2024



Crashes, deaths and serious injuries involving commercial vehicles

In 2024, reported road traffic fatalities involving commercial buses and minibuses increased by 23%, while serious injuries in this category rose sharply by 86%. In contrast, the overall number of reported crashes involving these vehicles declined by 24% (Figure 14). This divergence between crash frequency and severity suggests that while fewer incidents were recorded, those that did occur were more severe or involved higher-impact collisions.

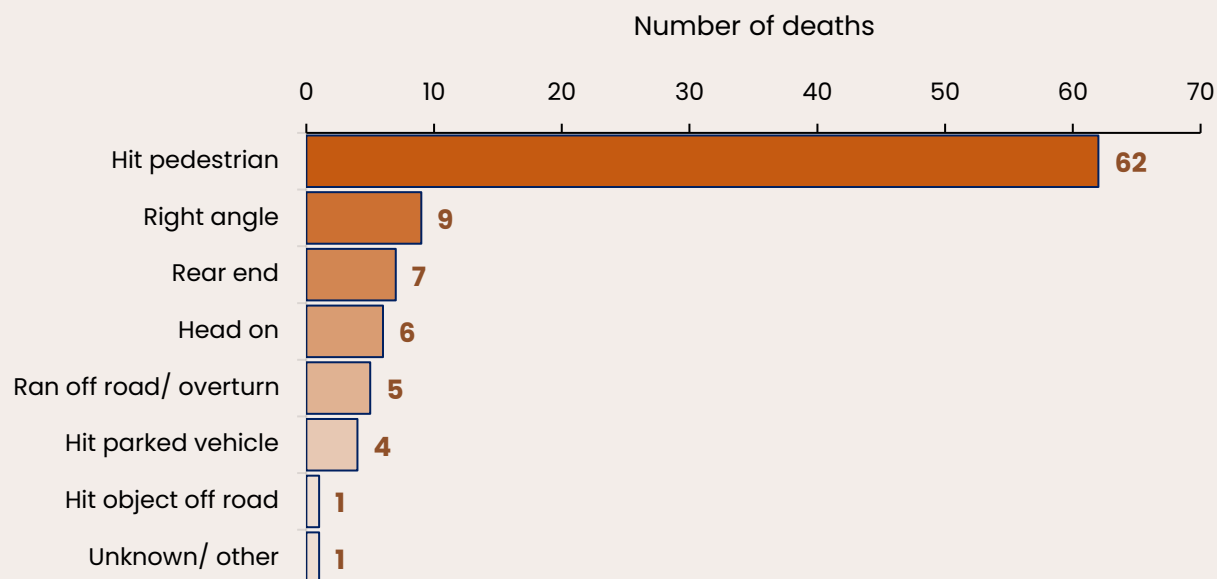
Figure 14: Crashes, deaths, and serious injuries involving commercial vehicles, 2020–2024



Deaths by collision type

In 2024, the most commonly reported type of road traffic collision was pedestrian knockdowns (Figure 15), a pattern that has persisted consistently over the past five years. This sustained trend highlights the ongoing vulnerability of pedestrians and underscores the urgent need for comprehensive safety interventions.

Figure 15: Deaths by collision type, 2024



Deaths by road user type and colliding vehicle

Table 3 presents the correlation between road traffic fatalities by road user type and the type of colliding vehicle from 2022 to 2024. Over half (51%) of pedestrian deaths during this period were caused by cars, sport utility vehicles (SUVs), or pickups, while buses/minibuses and heavy goods vehicles accounted for 19% and 16% of pedestrian fatalities, respectively.

Among motorcyclist deaths (including riders of two- and three-wheelers), nearly 47% involved collisions with other motorcycles, while 21% were the result of crashes with cars, SUVs, or pickups.

Table 3: Deaths by road user and colliding vehicle type, 2022–2024

Victim	Colliding vehicle						Total
	Saloon, SUV & pickup	Bus & minibus	Goods vehicle	2 & 3 wheelers	Single vehicle crash	Unknown	
Pedestrians	98	36	32	14	0	14	194
Saloon, SUV & pickup occupants	9	0	4	1	6	0	20
Bus & minibus occupants	1	10	3	0	2	0	16
Goods vehicle occupants	0	0	2	0	5	0	7
Motorcyclists	8	5	12	27	5	1	58
Tricyclists	3	2	3	3	5	0	16
Cyclists	0	1	1	0	0	0	2
Unknown	0	0	0	0	0	0	0
Total	119	54	57	45	23	15	313

High-risk corridors and intersections

Analyzing the geographic distribution of crashes is essential for evidence-based road safety planning. By identifying high-risk crash locations, authorities can prioritize interventions where they are most needed and likely to have the greatest impact⁸.

Using three years of geolocation data (2022–2024), the top ten high-risk points and corridors for fatal and serious injury crashes have been identified and are presented in Tables 4 to 10.

Maps showing the spatial distribution of fatal crashes (Figures 16), high-risk fatal crash corridors (Figure 17), serious injury crash locations (Figure 18), pedestrian fatal and serious injury crash locations (Figures 19), and motorcyclist/tricyclist fatal and serious injury crash locations (Figures 20) are presented below.

These spatial insights should be used to inform road infrastructure improvements, such as intersection redesigns, pedestrian safety upgrades, and the targeted deployment of enforcement operations. Prioritizing investment in these high-risk areas can significantly reduce crash severity and save lives.

Figure 16: Distribution of fatal crash locations, 2022–2024

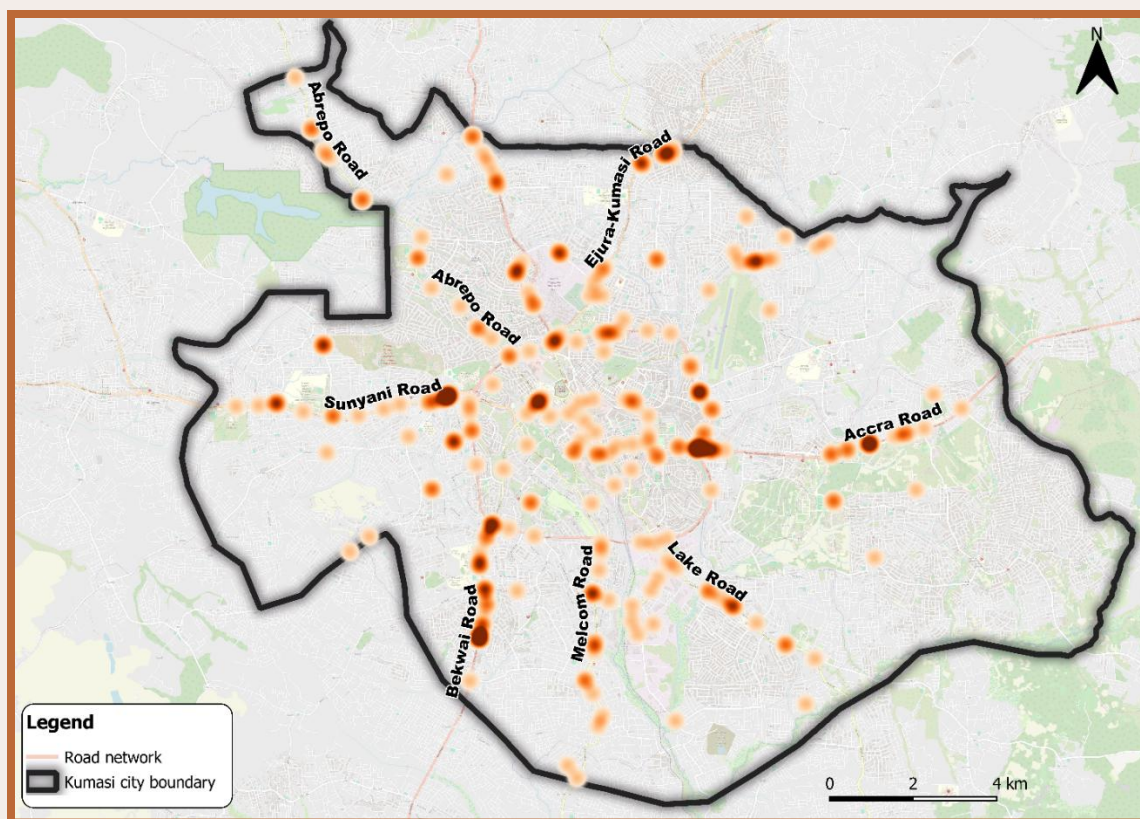


Table 4: Top ten high-risk fatal crash points, 2022–2024

No	Name of intersection/ junction/ roundabout	Number of deaths			
		2022	2023	2024	Total
1	Sofoline station	3	1	4	8
2	Anloga junction	1	4	2	7
3	Oteng Nkwanta	2	3	1	6
4	Silicon Hotel Junction	2	1	2	5
5	Santasi roundabout	1	1	2	4
6	KNUST Police Station	0	2	2	4
7	Aboabo traffic intersection	2	1	1	4
8	KATH Roundabout	0	1	2	3
9	Pankrono Methodist Church	1	0	2	3
10	Opoku Ware Senior High School	2	0	1	3

Figure 17: High-risk fatal crash corridors, 2022–2024

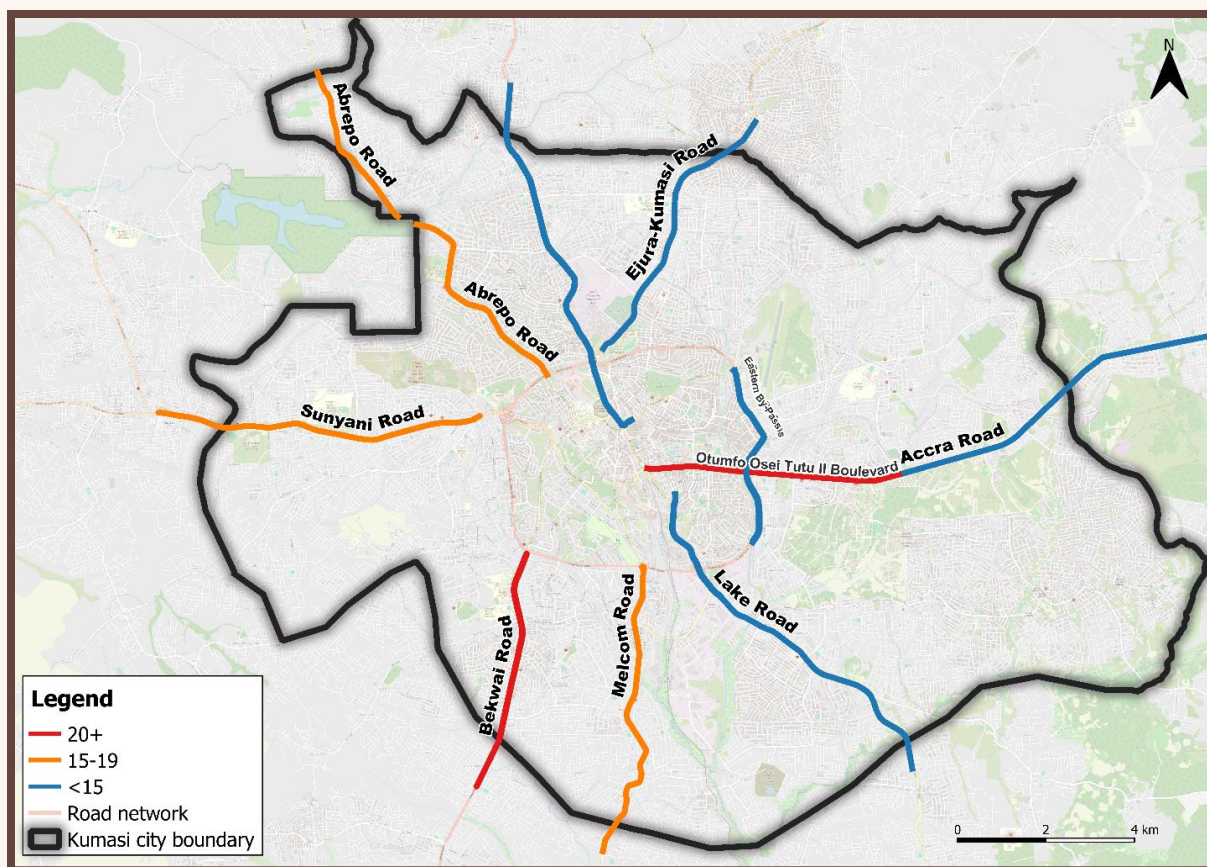


Table 5: Top ten high-risk fatal crash corridors, 2022–2024

No.	Name of corridor	Number of deaths				Length of corridor (km)
		2022	2023	2024	Total	
1	Bekwai Road	9	6	8	23	3.8
2	Otumfo Osei Tutu II Boulevard	6	7	7	20	5.5
3	Abrepo Road	7	6	3	16	9.1
4	Sunyani Road	7	5	4	16	5.1
5	Melcom Road	5	6	4	15	6.1
6	Ejura – Kumasi Road	3	5	4	12	5.6
7	Lake Road	4	5	3	12	4.9
8	Eastern By-Pass	4	2	5	11	3.4
9	Kumasi – Techiman Road	4	4	3	11	7.1
10	Accra Road	3	4	4	11	2.9

Figure 18: Serious injury crash locations, 2022–2024

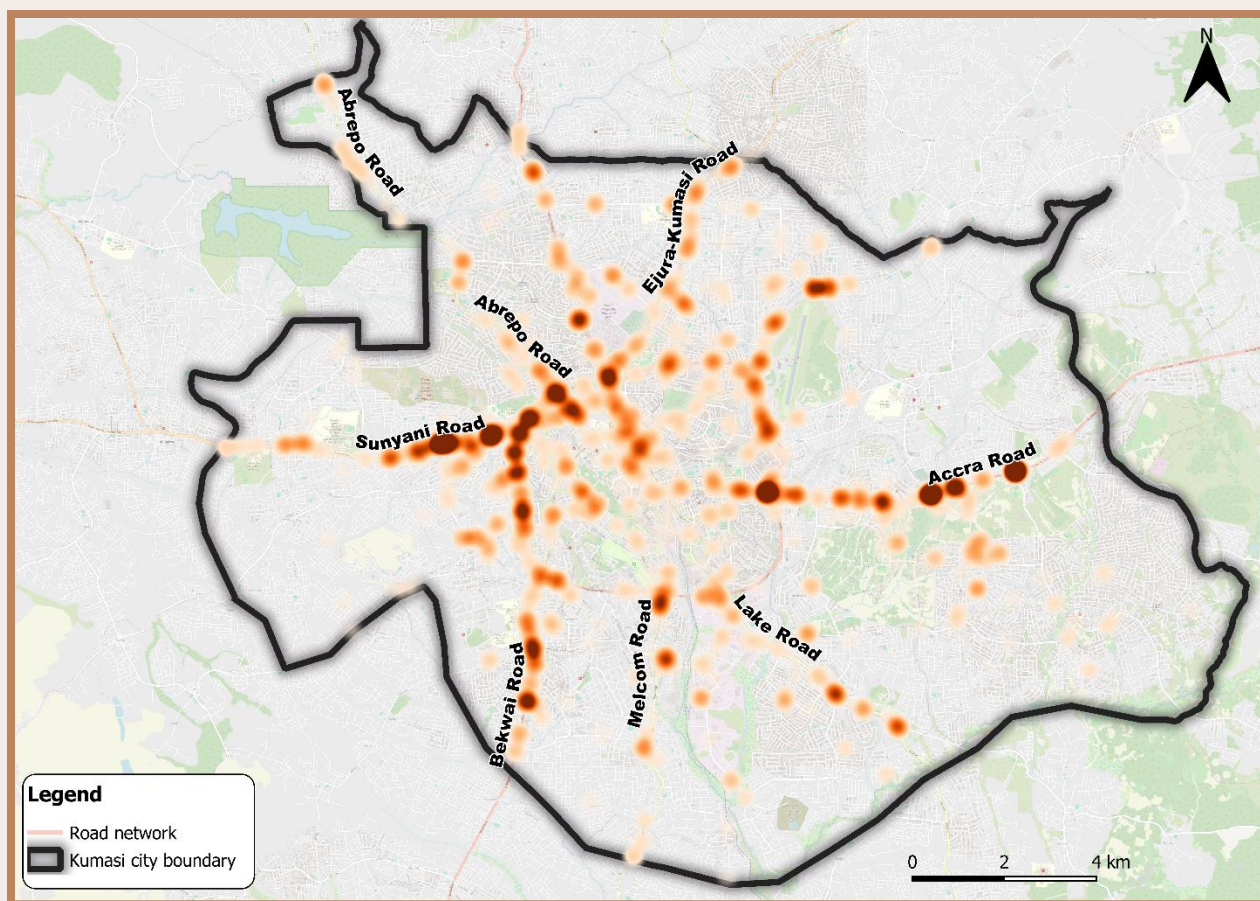


Table 6: Top ten high-risk serious injury crash locations, 2022–2024

No.	Name of intersection/ junction/ roundabout	Number of serious injuries					
		2022	2023	2024	Total	Weekday	Weekend
1	Boadi junction	10	24	13	47	20	27
2	KNUST police station	3	33	7	43	19	24
3	Siloam Junction	6	4	29	39	27	12
4	Sofoline station	11	17	11	39	26	13
5	Anloga junction	8	15	8	31	24	7
6	Silicon Hotel junction	3	14	3	20	14	6
7	Suntreso Hospital intersection	9	9	1	19	13	6
8	Sofoline Interchange	0	7	11	18	4	14
9	Abrepo junction	8	6	3	17	6	11
10	Kwadaso SDA Hospital	15	1	1	17	7	10

Figure 19: Pedestrian fatal and serious injury crash locations, 2022–2024

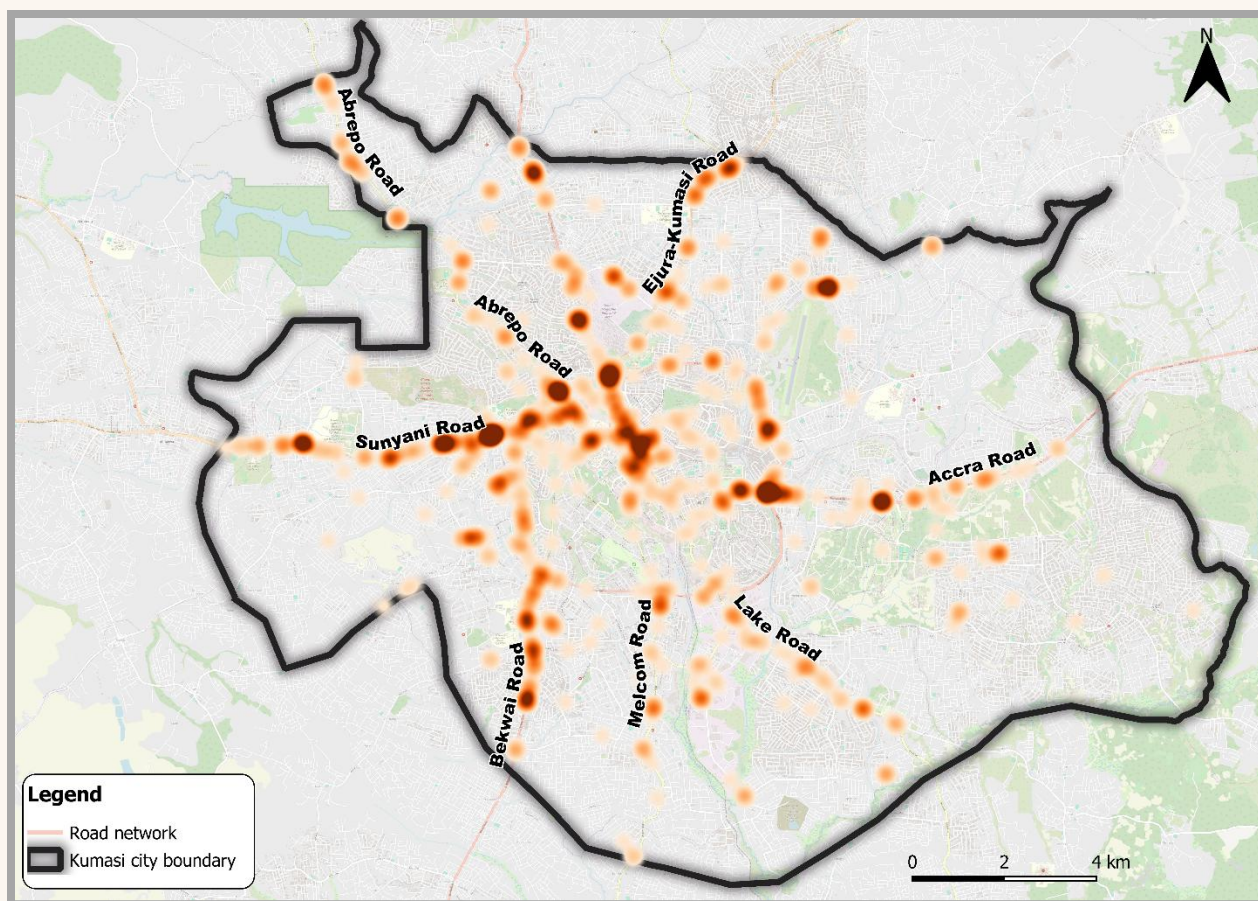


Table 7: Top ten high-risk pedestrian fatal and serious injury crash locations, 2022–2024

No.	Name of intersection/ junction/ roundabout	Number of deaths and serious injuries					
		2022	2023	2024	Total	Weekday	Weekend
1	Sofoline station	6	6	15	27	15	12
2	Anloga junction	3	10	3	16	9	7
3	Suame roundabout	5	9	1	15	14	1
4	Abrepo junction	2	6	5	13	3	10
5	Foot Bridge KNUST	1	0	11	12	7	5
6	Siloam Junction	2	3	5	10	6	4
7	Buokrom Rich City restaurant	0	9	1	10	8	2
8	Apatrapa junction	2	2	6	10	3	7
9	Oteng Nkwanta	4	3	1	8	5	3
10	Opoku Ware Senior High School	3	0	4	7	7	0

Figure 20: Motorcyclist/tricyclist fatal and serious injury crash locations, 2022–2024

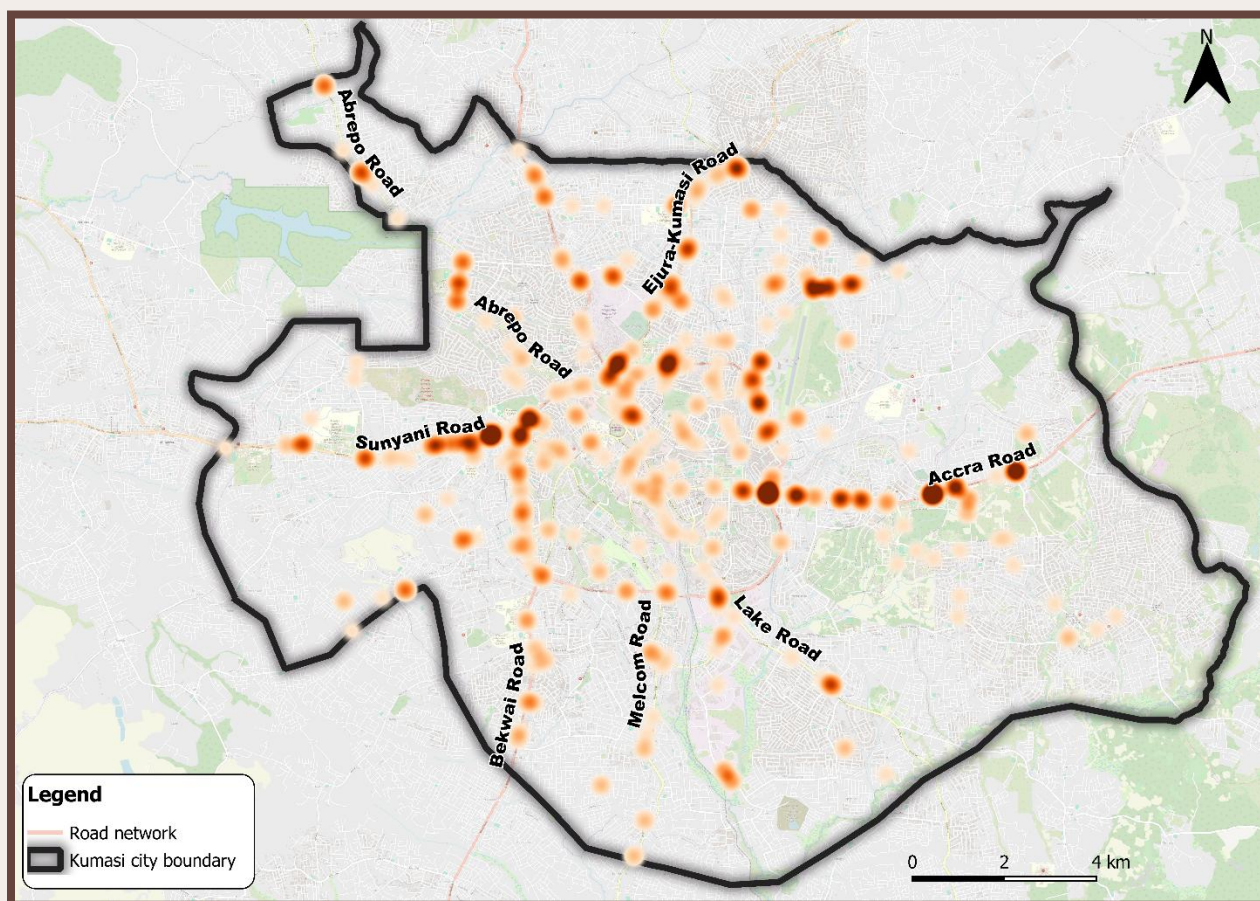


Table 8: Top ten motorcyclists/tricyclists fatal and serious injury locations, 2022–2024

No.	Name of intersection/ junction/ roundabout	Number of deaths and serious injuries					
		2022	2023	2024	Total	Weekday	Weekend
1	Anloga junction	6	1	10	17	14	3
2	KNUST police station	2	12	2	16	8	8
3	Sofoline station	7	5	2	14	8	6
4	Boadi junction	4	5	1	10	4	6
5	Suntreso hospital	3	5	0	8	3	5
6	DVLA	6	0	1	7	4	3
7	Poku Transport traffic light	0	2	5	7	5	2
8	Methodist Guest House	0	7	0	7	7	0
9	Sofoline Interchange	0	0	7	7	2	5
10	Silicon Hotel Junction	2	0	5	7	5	2



Road injury behavioural risk factors in Kumasi

Road injury behavioural risk factors

As part of the Bloomberg Initiative for Global Road Safety (BIGRS), the International Injury Research Unit at Johns Hopkins University conducts observational surveys on selected road corridors in Kumasi. These studies are designed to assess the prevalence and trends of high-risk road user behaviours, with a focus on speeding. Helmet and seatbelt usage were assessed only at the first round in 2020.

Speeding

Speeding is a well-established risk factor that significantly increases both the likelihood of a crash and the severity of resulting injuries. In Kumasi, the prevalence of speeding has shown a slight decrease, falling from 32% in February 2024 to 30% in August 2024 (Figure 21).

Among the vehicle types observed, SUVs, pickups/light trucks, and motorcycles were the most frequently recorded as exceeding posted speed limits in the observations conducted in August 2024 (Figure 22). These findings point to the need for targeted speed management interventions, including automated enforcement, public awareness campaigns, and vehicle-specific enforcement strategies, particularly for high-risk vehicle categories.

Figure 21: Prevalence of speeding, 2020–2024

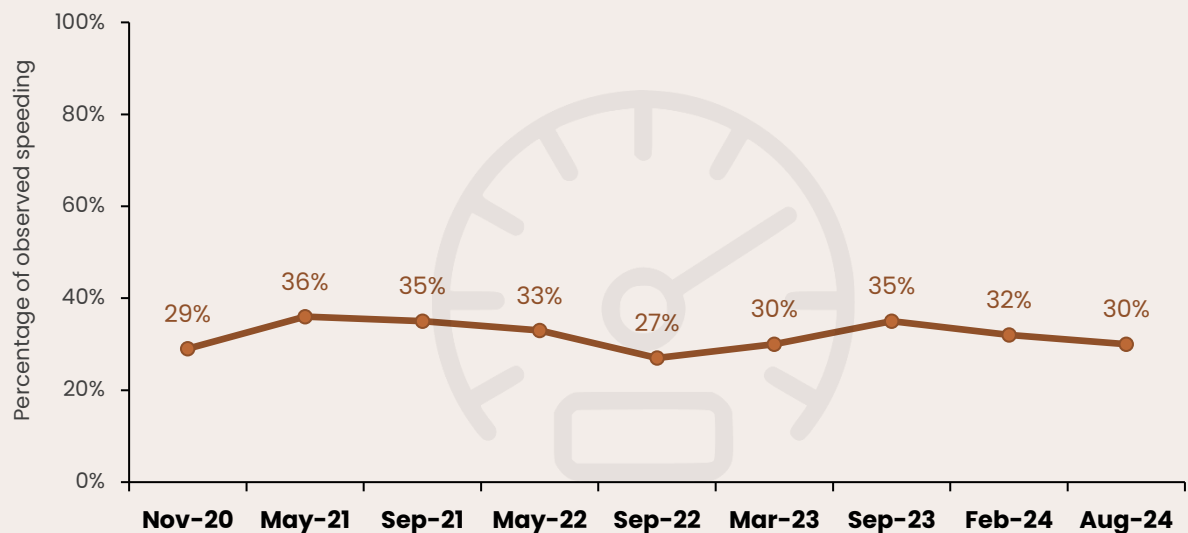
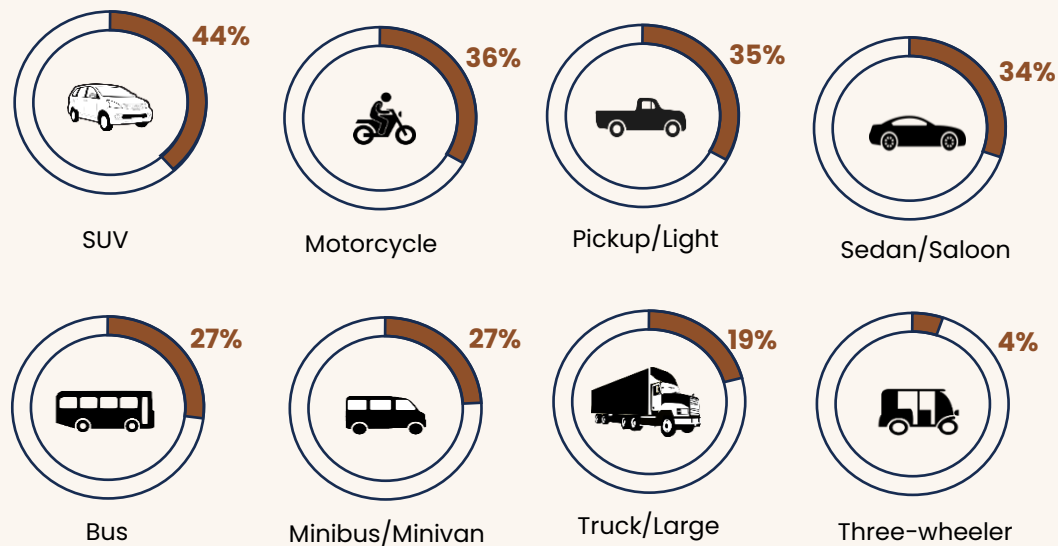


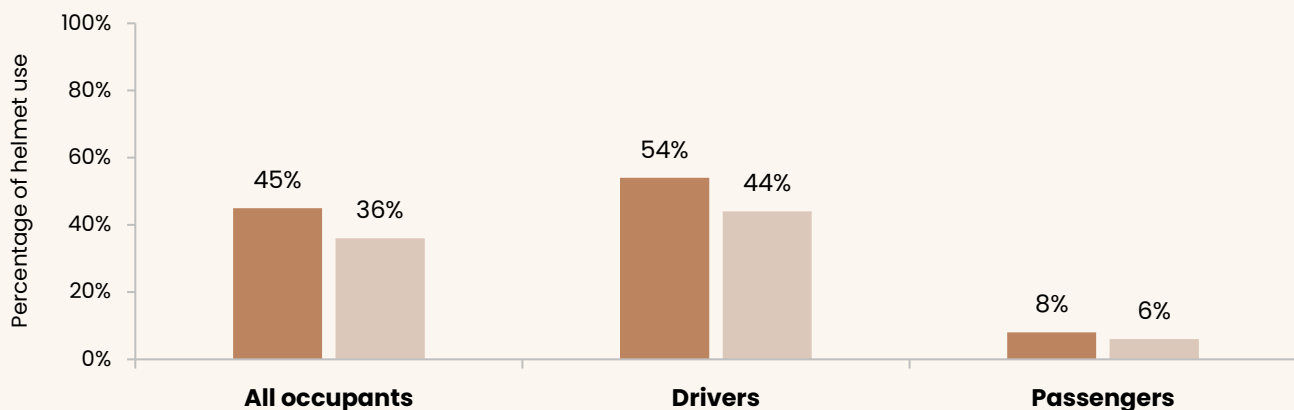
Figure 22: Speeding by vehicle type, 2024



Helmet use

The correct use of a standardized helmet significantly reduces the risk of head injuries for motorcyclists in the event of a crash⁷. Helmets that are unbuckled or loosely fastened are classified as improperly used and offer limited protection. Figure 23 presents observational data on helmet use among motorcyclists in Kumasi in 2020, capturing both proper and improper usage. These findings highlight the ongoing need for targeted education and enforcement efforts to promote correct helmet use and improve safety outcomes for motorcycle users.

Figure 23: Observed helmet use among motorcyclists, 2020

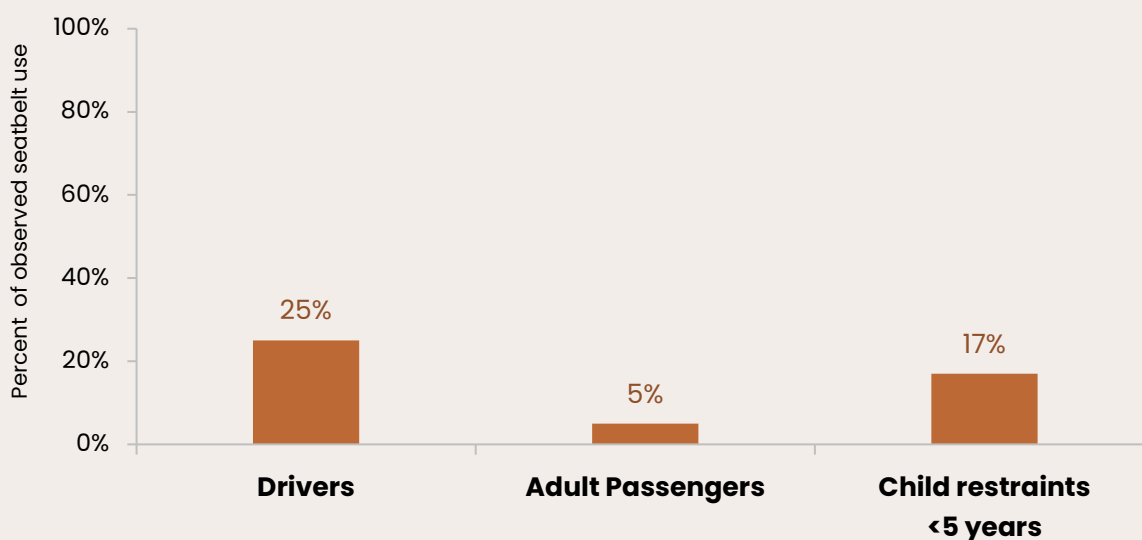


Seatbelt and child-restraint use

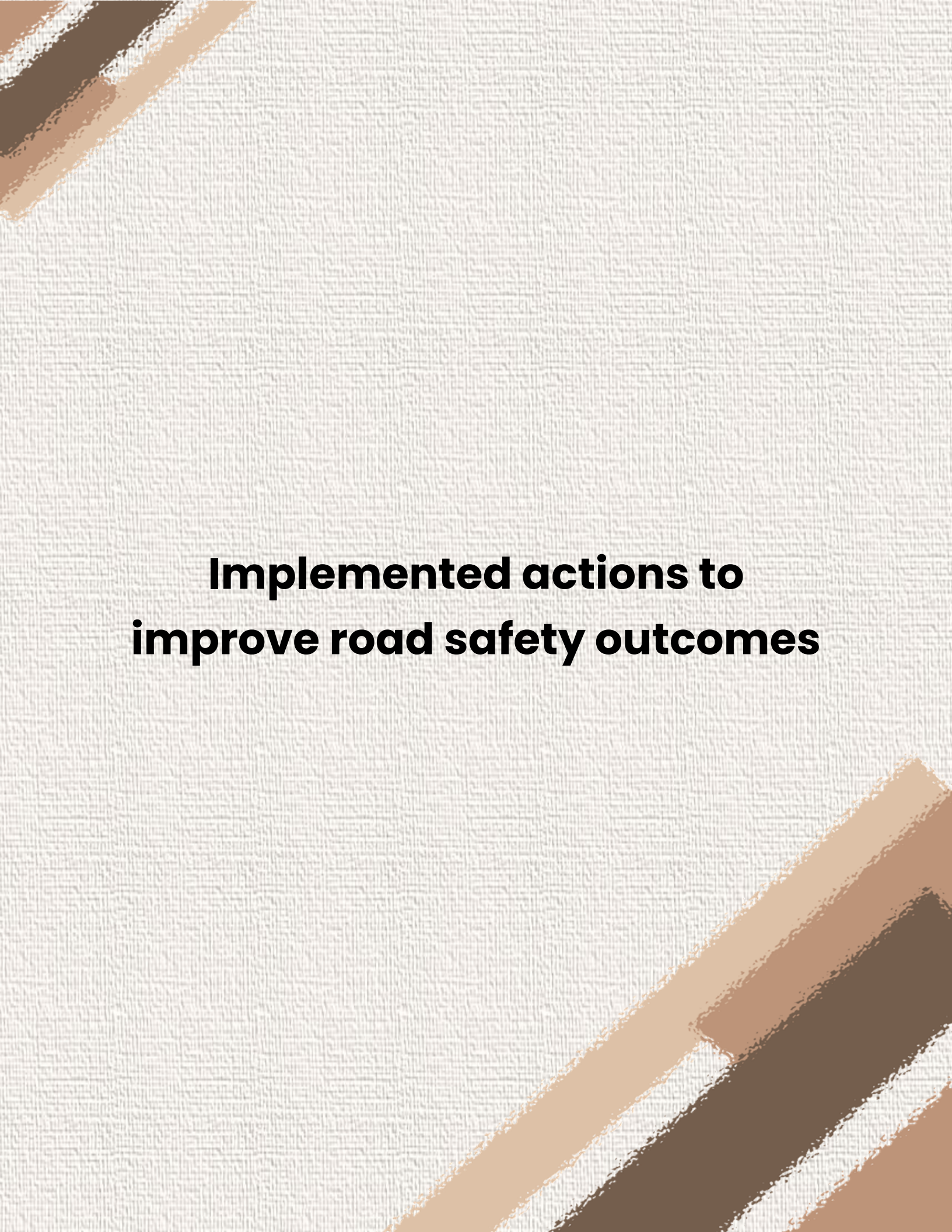
There is strong evidence that wearing a seatbelt significantly reduces the risk of death and serious injury in the event of a crash⁷. However, recent observational data reveal low compliance levels in Kumasi. In 2020, only 25% of drivers were observed using a seatbelt, compared to just 5% of passengers. Use of child restraint systems was also notably low, with only 17% of children estimated to be under five years old properly secured in a child restraint device (Figure 24).

These findings point to an urgent need for strengthened enforcement of seatbelt and child restraint laws, alongside public education campaigns to increase awareness of their life-saving benefits.

Figure 24: Observed seatbelt use, 2020



Using a properly fitted child restraint reduces the risk of death by approximately 70% for infants and up to 80% for young children in the event of a crash.
(Source: Global Road Safety Partnership)



Implemented actions to improve road safety outcomes

Mass media communication

Strategic planning meeting

In collaboration with the Kumasi and Accra Metropolitan Assemblies, and with support from BIGRS, the National Road Safety Authority (NRSA) convened a stakeholder meeting to review the post-campaign evaluation report from the recent enforcement campaign. The meeting also served as a platform to discuss prospects for launching another mass media campaign in December 2024, aimed at reinforcing key road safety messages and sustaining behavioural change.



Fourth quarter campaign launch

The Fourth Quarter Road Safety Campaign, themed “*Know and Follow the Speed Limits*”, was officially launched by the NRSA in Bonsu, Eastern Region, with strong support from law enforcement through intensified police presence and enforcement activities.

Organized in collaboration with the Kumasi and Accra Metropolitan Assemblies, the launch event was well attended by key stakeholders from the transport and road safety sectors, including representatives from government agencies, civil society, and transport unions. The campaign aims to raise awareness about speed limits and promote safer driving behaviours nationwide.



Fourth quarter campaign implementation

In collaboration with the Kumasi and Accra Metropolitan Assemblies, NRSA — with technical and financial support from BIGRS — embarked on the “*Know and Follow the Speed Limits*” campaign.

The campaign specifically targeted male drivers aged 18 to 55 years, with a particular focus on politicians and campaign teams who were actively travelling across the country in the lead-up to the 2024 general elections. This demographic was identified as high-risk due to increased road usage and time pressures associated with political activities.

The campaign successfully reached an estimated 40% of the target audience, and notably, 80% of those reached reported making an effort to reduce their speed as a direct result of the campaign. These outcomes reflect a positive shift in risk perception and underscore the potential for mass media interventions to influence driver behaviour when strategically timed and well-targeted.



Post campaign evaluation

The post-campaign evaluation for the Fourth Quarter Mass Media Campaign commenced immediately following the conclusion of campaign activities. As part of the evaluation process, the team trained data enumerators and conducted fieldwork to assess the campaign's reach, effectiveness, and behavioural impact. Data were collected from over 1,000 respondents, providing a robust sample for evaluating audience awareness, message recall, and self-reported behavioural changes.



World Day of Remembrance for road crash victims

The World Day of Remembrance for Road Crash Victims was commemorated in Kumasi under the leadership of the Mayor of Kumasi, with activities including a visit to the Accident and Emergency Centre at Komfo Anokye Teaching Hospital and the official launch of the 2023 Kumasi Road Safety Report.

Held under the global theme “*That Day,*” the event brought together key stakeholders from government, civil society, and the transport sector. It served as a solemn platform to honour the lives lost or affected by road traffic crashes and to call for justice, accountability, and strengthened support systems for victims and their families.



Media training workshop

In collaboration with the Legal Resources Centre, the BIGRS Communications Team in Kumasi organized a media training workshop focused on seat belt and child restraint use. The workshop aimed to equip journalists with accurate knowledge and reporting skills on issues related to seat belt use, with the goal of improving the quality and impact of road safety coverage in the media.

Additionally, the training encouraged participants to contribute to public discourse and lend their voices to the ongoing review of legislation concerning seat belt and child restraint enforcement. By building the capacity of media professionals, the initiative sought to enhance advocacy and public awareness through evidence-based, rights-informed storytelling.



Enforcement

Capability-building training

The enforcement technical area has continued its efforts to strengthen police capability through structured training and the operationalization of enforcement strategies. These efforts form part of a broader initiative to address the four key behavioural risk factors contributing to road traffic crashes: speeding, drink driving, non-use of seat belts/child restraints, and improper helmet use.

To date, a total of 75 police personnel have received training in speed enforcement operations, crash investigation techniques, and intelligence-led policing. To reinforce the skills acquired, field enforcement exercises have been conducted, with an emphasis on sustaining knowledge and reducing crashes, injuries, and fatalities on the roads. As a result of these operations, over 4,000 vehicles have been stopped and checked during targeted speed enforcement interventions, contributing to improved compliance and enhanced road safety.



Crash investigation training with Senior and new MTTD officers



Speed enforcement training workshop at Lancaster hotel



MTTD officer questioning offending drivers



Monitoring speed enforcement operations on the Kumasi-Sunyani highway



Speed enforcement operations on the Accra-Kumasi highway

Safer streets and mobility

The city, in collaboration with key partners, has implemented a series of infrastructure interventions aimed at improving road safety and promoting safer mobility for all road users, particularly vulnerable groups such as pedestrians and schoolchildren.

Targeted enhancements have been made along multiple school zone corridors, including the installation of rumble strips, speed limit signs, pedestrian crossings, and other safety signage to slow down traffic and protect pedestrians. Additionally, the signalization of key intersections along major corridors has been completed to reduce conflicts between vehicles and pedestrians and enhance intersection safety.

As part of broader speed management efforts, the city has installed 20 speed limit signs along identified high-risk corridors. To improve visibility and guide traffic flow, general line marking activities have also been carried out, covering approximately 26 kilometers of roadway. These works included the installation of clearly marked pedestrian crossings, contributing to the overall functionality and safety of the road network.

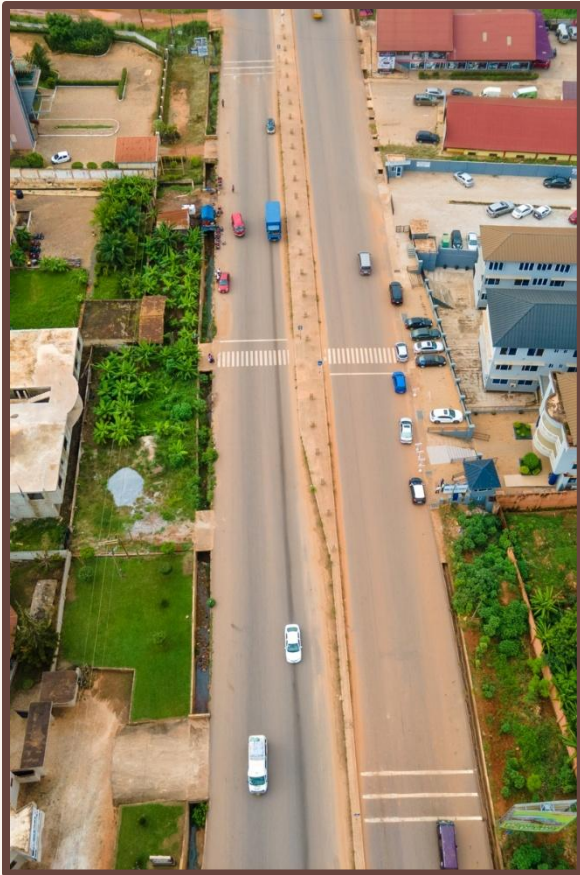
School Zone Improvement

TI Ahmadiyya Basic and Senior High School improvement



An aerial view showing the rumble strips, crossing and speed limit sign at the T.I. Ahmadiyya Senior High School on the Yaa Asantewaa Corridor

Enas Hybrid School Zone Improvement



An aerial view showing rumble strips and crossing at the Enas Hybrid School on the Melcom Road



An aerial view showing rumble strips and crossing at the St. Georgie's Basic School



Installed Rumble Strips Along Lesley Opoku-Drive (State Experimental School)

Intersection signalization



An aerial view showing one of six completed signalized intersections with pedestrian phases along Lake Road

Speed limit signs



Speed Limit Signs on the Western By-Pass Road (Direction towards Prempeh College)



Speed Limit Signs on the Kumasi – Accra Road (Susuanso)



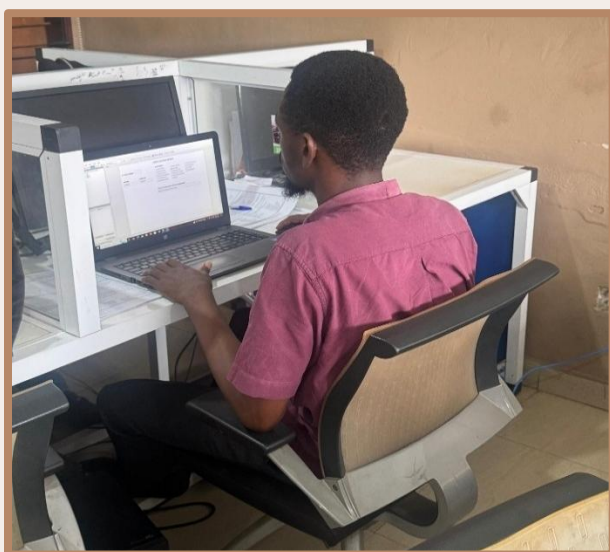
Road injury surveillance systems strengthening

A robust road injury surveillance system is essential for improving road safety. Accurate and reliable data enables authorities to quantify the scale of the problem, monitor trends over time, and identify high-risk groups and locations. This evidence forms the foundation for informed decision-making, allowing for the design and implementation of targeted, effective interventions.

Furthermore, comprehensive data is vital for advocating for appropriate resources, supporting policy development, and evaluating the impact of existing road safety measures. Strengthening surveillance systems is, therefore, a critical step in the city's ongoing efforts to reduce road traffic injuries and save lives.



Training of city staff on crash data abstraction



Data entry and identification of crash location coordinates



Extraction of crash data from police reports

To strengthen the road injury surveillance system in Kumasi, the Kumasi Metropolitan Assembly (KMA), in collaboration with BIGRS, released the 2023 Road Safety Report. This report serves as a vital tool for assessing the magnitude and trends of traffic-related deaths and injuries, while also providing evidence to guide targeted interventions and policy responses.



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Appendix

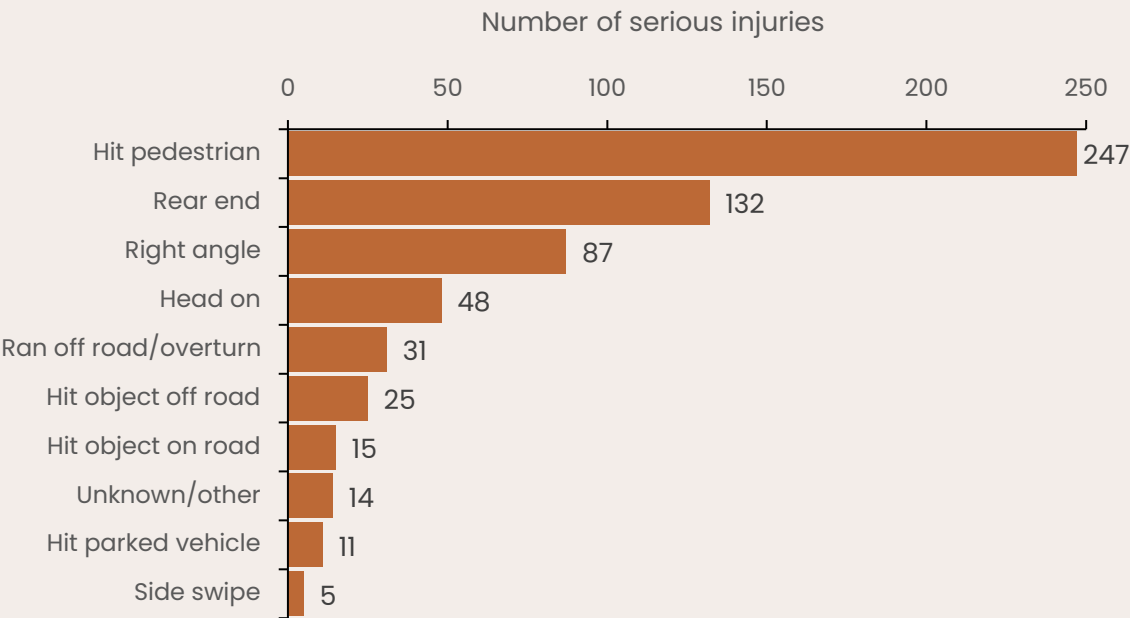
Causal vehicle type by pedestrian deaths manoeuvre, 2024

Colliding vehicle	Crossing	Walking/ standing along roadside	No action	Other	Total
Car/SUV/Pickup	10	4	0	10	24
Bus and minibus	9	2	0	2	13
High Goods Vehicle	5	2	0	5	12
Motorcyclists	2	1	0	0	3
Tricyclists	2	0	0	1	3
Unknown	4	0	1	1	6
Total	32	9	1	19	61

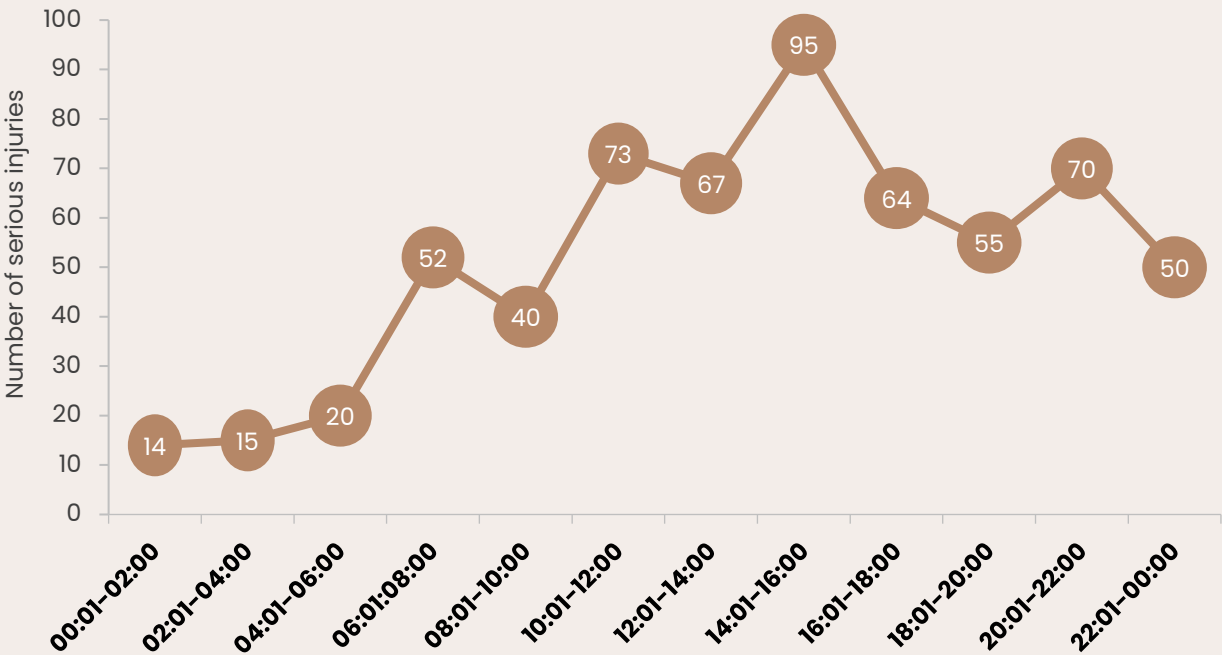
Deaths by vehicle ownership type, 2022–2024

Row Labels	2022	2023	2024	Total
Private	77	57	48	182
Commercial	31	13	24	68
Unknown	14	5	15	34
Taxi	9	6	6	21
Company	2	3	1	6
Police/Military	0	0	1	1
Government	1	0	0	1
Total	134	84	95	313

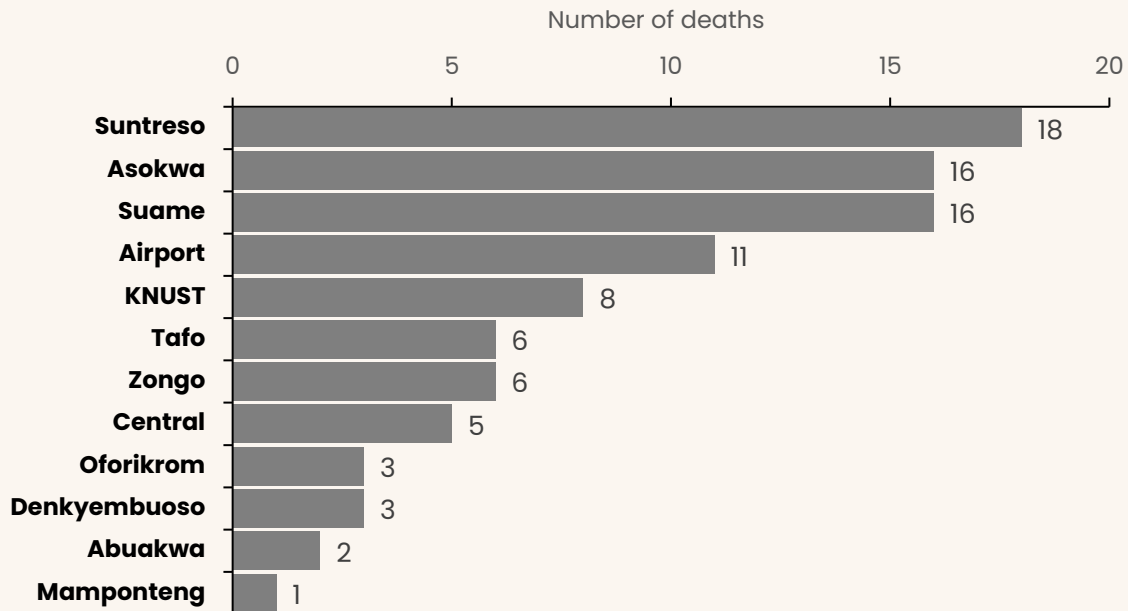
Serious injuries by collision type, 2024



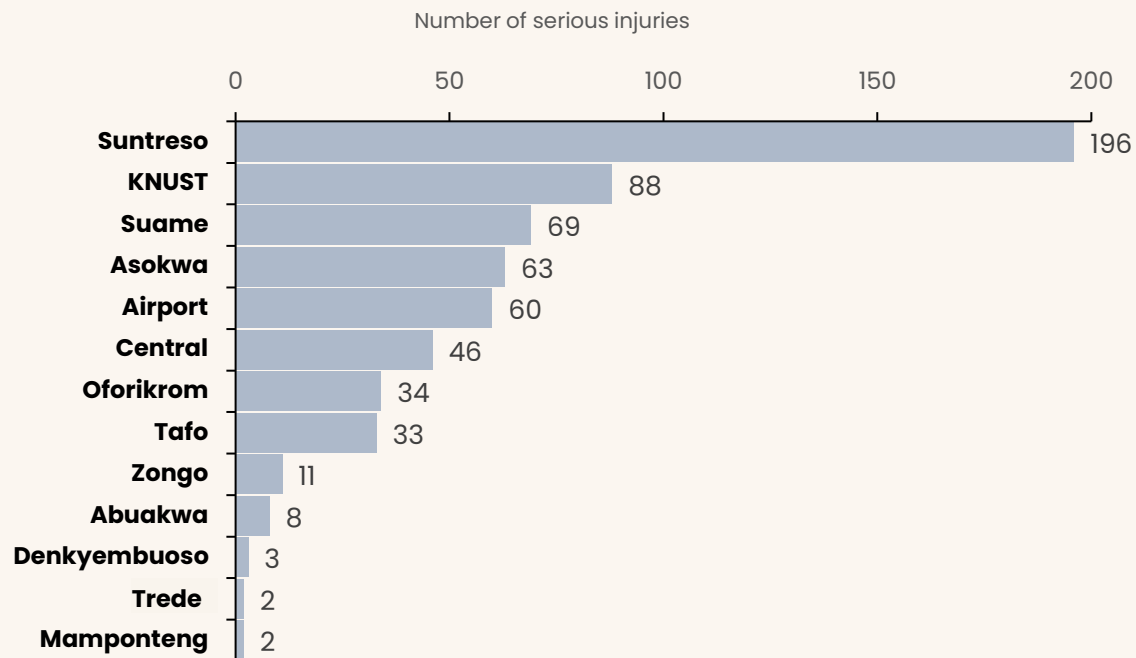
Serious injuries by time of day, 2024



Reported deaths by station, 2024

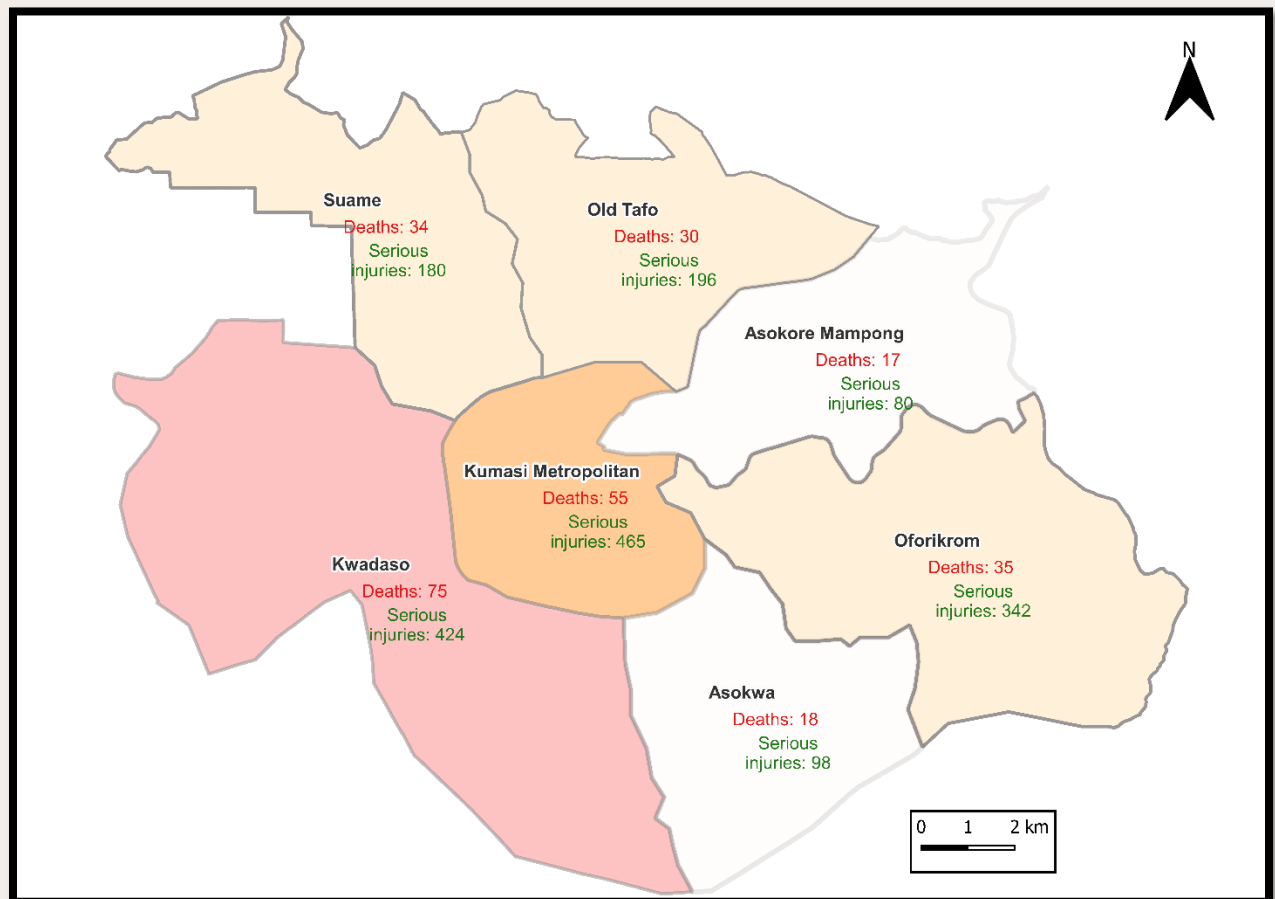


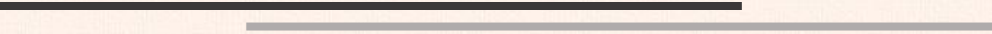
Reported serious injuries by station, 2024



Deaths and serious injuries by municipality, 2022–2024

No.	Row Labels	Deaths			Serious injuries		
		2022–2023	2024	Total	2022–2023	2024	Total
1	Kwadaso	49	26	75	251	173	424
2	Kumasi Metropolitan	35	20	55	330	135	465
3	Oforikrom	23	12	35	222	120	342
4	Suame	24	10	34	136	44	180
5	Old Tafo	17	13	30	137	59	196
6	Asokwa	12	6	18	60	38	98
7	Asokore Mampong	11	6	17	52	28	80







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