# 2023

# ACCRA ROAD SAFETY REPORT

Bloomberg Philanthropies | Initiative for Global Road Safety | Vital Strategies

# Accra

November 2024

# Accra

## Road Safety Report

In collaboration with

Observational studies by

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# Preface

**Hon. Elizabeth Naa Kwatsoe Tawiah Sackey**
**Metropolitan Chief Executive**
**Accra Metropolitan Assembly**

Road traffic safety has become an urban mobility and a critical developmental issue for countries across Africa. In Ghana, road crashes are among the leading causes of deaths and serious injuries, with many of the victims having to endure permanent disability. The severe impact of road traffic deaths and the costs of treatment and rehabilitation for road crash victims should be a major concern for mainstream road safety stakeholders, local government administrators and public health professionals. Improving road safety outcomes will require dedicated multidisciplinary efforts that are informed by data-driven interventions.

This report provides information on road traffic crashes, deaths and injuries in Accra for 2023. It also shows the characteristics of vulnerable road users, risk periods, and high-risk crash corridors and spots in the city. These findings should inform decisions and plans of key agencies tasked with ensuring safety on our roads.

Thanks are due to stakeholders whose actions and support led to the reduction in road traffic deaths from 136 in 2020 to 88 in 2023. Again, we have seen a steady reduction in reported road crashes at Lapaz traffic intersection following the safety enhancement works that were implemented in December 2018. We could not have achieved this significant improvement without your earnest contributions and actions. I believe these efforts should be sustained to ensure the safe mobility of all road users in our city.

Special thanks to Bloomberg Philanthropies, Vital Strategies, and all external and local partners for their relentless efforts to provide a safe space in the city, especially for vulnerable road users.

# Acknowledgements

This road safety report, the sixth edition for Accra, uses 2023 police crash data as the main source. These annual reports aim to provide ongoing reporting on road traffic crash outcomes in the city and to help plan and steer road safety interventions.

Several local and external partners contributed to sections of the report. Crash data were obtained from the Motor Traffic and Transport Department (MTTD) of the Ghana Police Service. National service fellows at the city's data unit supported data collection at police stations. Vital Strategies provided technical support on the production of this report. Johns Hopkins International Injury Research Unit (JH-IIRU) provided data on the road injury behavioural risk factors presented in the report.

Ebenezer K. Baidoo, the BIGRS Road Injury Surveillance Coordinator in Accra, coordinated data collection directly from police stations in the city, performed data analysis, and drafted the report. Dr Raphael Awuah, Regional Technical Advisor for Africa on Road Injury Surveillance from Vital Strategies supervised data collection and analysis, review, and publication of the report.

The BIGRS team in Accra — Osei Kufuor (Initiative Coordinator), Joshua Mensah (Enforcement Coordinator), Mavis Obeng-Mensah (Communications Coordinator), Ing. Simon Manu (Safer Streets and Mobility Coordinator) and Audrey Gadotor (Administrative Assistant) — provided content for sections of the report. Ing. Samuel Boamah Danquah, Senior Manager, Road Safety Program in Ghana at Vital Strategies, also supported review of the report.

Profound gratitude goes to staff of Accra Metropolitan Assembly (AMA) who reviewed and shared their inputs in finalising the report.

Special thanks go to Bloomberg Philanthropies, Vital Strategies, JH-IIRU, MTTD of the Ghana Police Service, and the National Road Safety Authority.

# Executive Summary

Data on the severity and risks of road traffic deaths and injuries supports the implementation of context-specific interventions. This report presents information on crashes, deaths and injuries in Accra using 2023 data from police records. An assessment of road injury behavioural risk factors is also presented.

Findings show that there has been a consistent decline in the number of reported road traffic crashes in the last 3 years. In the most recent period, crashes have dropped from 1,416 in 2022 to 1,398 in 2023 – a 1% decrease. Road traffic deaths also reduced from 102 in 2022 to 88 in 2023 – a 14% decrease. Deaths per 100,000 population also dropped, from 4.4 in 2022 to 3.7 in 2023.

Vulnerable road users – pedestrians, motorcyclists, and bicyclists – accounted for 82% of road traffic deaths in 2023. Males accounted for 85% of road traffic deaths and 69% of serious injuries. Deaths were frequently reported among victims aged 40 to 49 years and 60 years and above.

The high-risk fatal crash locations, based on three-year geocoded crash data were concentrated along the arterial roads in the city. Among them were Opeibea intersection along Liberation Road, Avenor junction along J.A Kufuor Avenue and North Dzorwulu intersection along George Walker Bush Highway (N1).

Road injury risk factor observational studies showed a 47% prevalence of speeding in October 2023, the most recent round of assessment.

## Highlights

- **59%** of the reported deaths in 2023 were pedestrians.
- **85%** of deaths were among males.
- Deaths were frequently recorded among those aged **40 to 49 years** and 60 years and above.
- Deaths were frequently reported following crashes that occurred between **6 p.m. and 10 p.m.**
- About half **(48%)** of the reported deaths occurred during weekend crashes.

# List of Abbreviations

| | |
|---|---|
| AMA | Accra Metropolitan Assembly |
| BIGRS | Bloomberg Philanthropies Initiative for Global Road Safety |
| BP | Bloomberg Philanthropies |
| BRRI | Building and Road Research Institute |
| CEO | Chief Executive Officer |
| DUR | Department of Urban Roads |
| GPS | Ghana Police Service |
| GRSP | Global Road Safety Partnership |
| HSC | Holy Spirit Cathedral |
| JH-IIRU | Johns Hopkins International Injury Research Unit |
| KMA | Kumasi Metropolitan Assembly |
| LMIC | Low- and Middle-Income Countries |
| MTTD | Motor Traffic and Transport Department (Ghana Police Service) |
| NRSA | National Road Safety Authority |
| PHC | Partnership for Healthy Cities |
| PRO | Public Relations Officer |
| PSA | Public Service Announcement |
| QGIS | Quantum Geographic Information System |
| RSC | Road Safety Council |
| SSATP | Sub-Saharan Africa Transport Policy Program |
| SSR | Status Summary Report |
| UNGRSW | United Nations Global Road Safety Week |
| WDoR | World Day of Remembrance |
| WHO | World Health Organisation |
| WRI | World Resources Institute |

# Introduction

Globally, an estimated 1.19 million road traffic deaths occurred in 2021 – a 5% drop when compared to the 1.25 million deaths recorded in 2010[1]. Despite the decline, deaths and injuries from road crashes remain a serious public health issue, especially in developing countries. 92% of road traffic deaths occur in low- and middle-income countries (LMICs)[1] and several of the surviving victims sustain permanent injuries. Moreover, the risk of death is estimated to be three times higher in low-income countries than high-income countries even though these developing countries have less than 1% of all motor vehicles[1].

Africa recorded a 17% increase in fatalities between 2010 and 2020, while other world regions like South-east Asia recorded a 2% decline in fatalities within the same period[1]. The death rate in the region stands at 19.4 per 100,000 population in 2021, higher than the global rate of 15.0 per 100,000 population in the same period[2]. The urban population in Africa is estimated to grow from 11% in 2010 to 20% in 2050[3]. This growth is expected to add more traffic volumes, especially on urban motorized corridors, thereby increasing the risk of vulnerable road users[4].

In Ghana, reported road traffic deaths decreased from 2,373 in 2022 to 2,276 in 2023— a 4 percent decrease. Similarly, the Greater Accra regional statistics on reported deaths also fell from 538 in 2022 to 485 in 2023 – a 10 percent decrease[5]. Despite the reduction in road fatalities, several of the surviving victims endure permanent severe injuries and disability that exacerbate their condition of life.

The burden of road traffic crashes poses a serious public health, social and economic problem at all levels of society — especially as a majority of those who perish are young and economically active.

Without the implementation of evidence-based interventions, road traffic deaths and injuries are likely to increase, given the rapid motorization in LMICs which does not match the quality of existing road infrastructure[6]. Road traffic injuries are projected to become the fifth leading cause of death globally by 2030 if current trends remain unchanged[7].

## Purpose of report

This report presents information on road traffic crashes, deaths, and injuries in the Accra metropolitan area for 2023 using data from police records. It is an update of five previous reports with data spanning 11-year period (from 2011 to 2022). The report also provides information on road-user risk behaviours and implemented actions to improve road safety in Accra.

## Data sources and systems

Police records are the main source of road traffic crash data in Ghana. An adapted version of the Building and Road Research Institute (BRRI)/Ghana Police Service data input form and road safety indicators defined by the Sub-Saharan Africa Transport Policy Program (SSATP) was used by personnel at the Accra Metropolitan Assembly data unit to extract data from narrative police crash reports.

Narrative description and sketch of crash location in the police reports were used to generate the crash coordinates. Quantum Geographic Information System (QGIS) desktop application software was used to analyse geocoded crash data to identify high-risk corridors and intersections and produce high-risk crash maps.

Data on road injury behavioural risk factors were assessed by observational studies conducted by staff of the Johns Hopkins University International Injury Research Unit (JH–IIRU) and their local collaborators, BRRI.

## Definitions

Definitions in this report are based on the definitions used by National Road Safety Authority (NRSA), the lead agency with oversight responsibility for road safety in Ghana.

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

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

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

# ROAD CRASHES, DEATHS AND SERIOUS INJURIES

## Road crashes, deaths and injuries

Reported road traffic crashes reduced from 1416 in 2022 to 1398 in 2023 — 1% decrease (Figure 1). The number of reported deaths has also decreased by 28% from 2021 to 2023 (Figure 2). The reduction in crashes and deaths could be linked to a decline in speeding prevalence from 62% in 2020 to 47% in 2023, from observational studies.

The reduction in speed could also be attributed to activities in the areas of infrastructure enhancement, mass media campaigns and data-led enforcement in the city and its adjoining administrative areas. Notwithstanding, findings from the two rounds of mortality validation studies in major referral hospitals in Accra[8,9] suggest that there is underreporting of deaths from road traffic crashes.

**Figure 1. Road crash trends in Accra, 2019–2023**

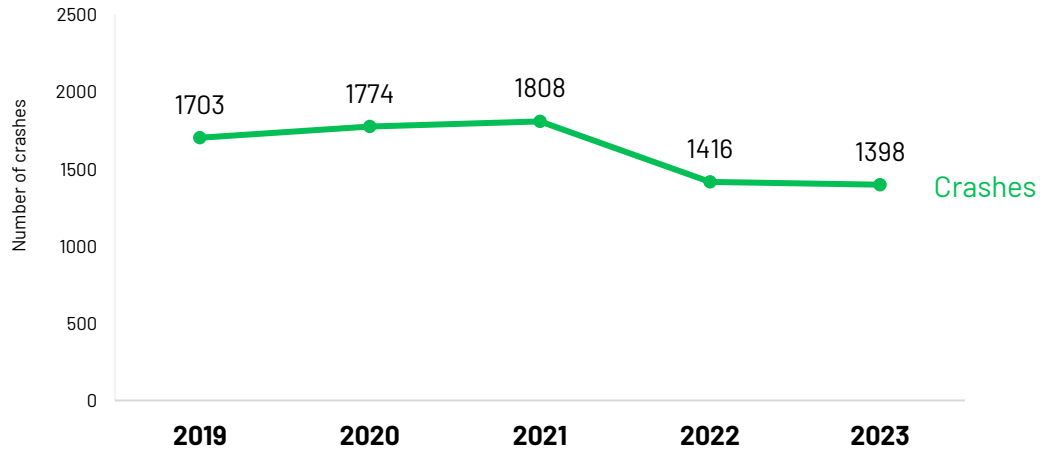
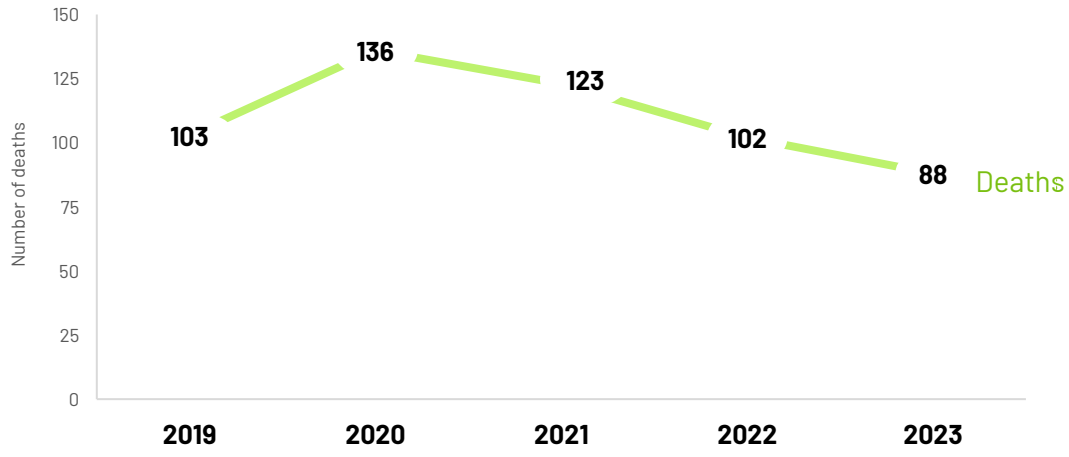
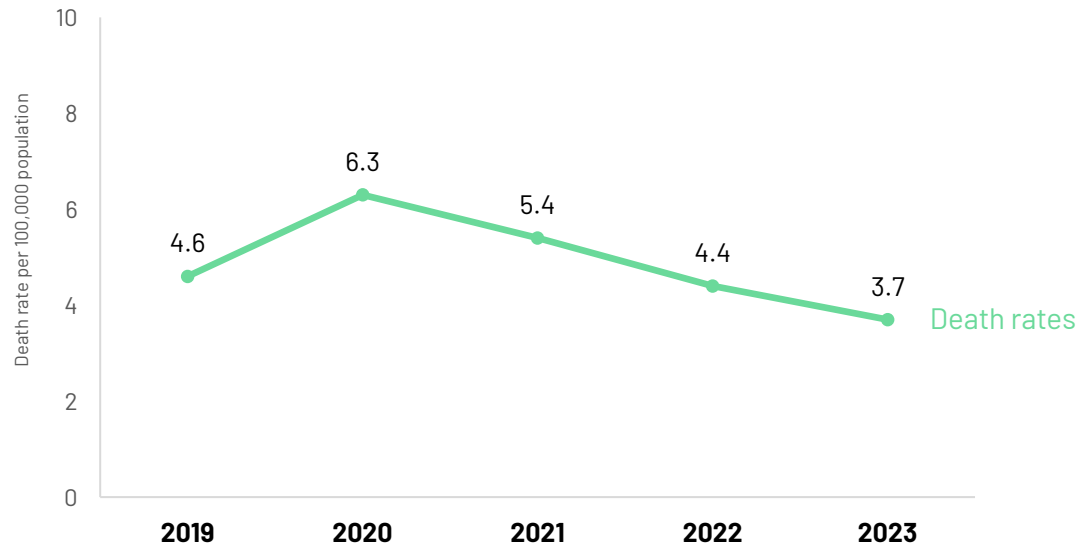



**Figure 2. Trend in road deaths, 2019–2023**



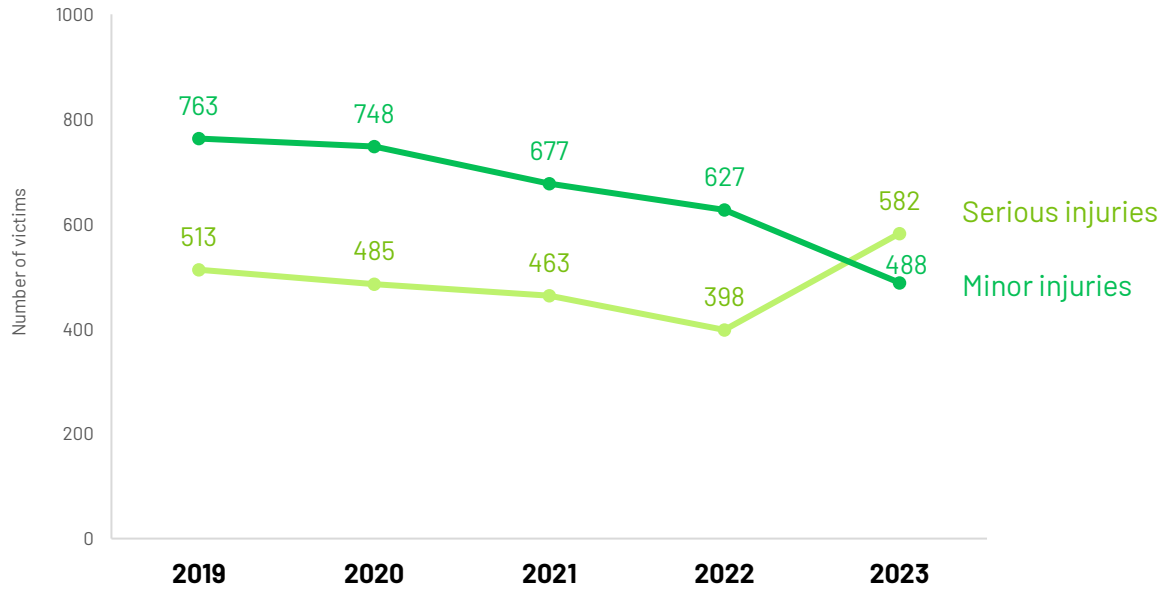
The road traffic death rate per 100,000 population declined from 4.4 in 2022 to 3.7 in 2023 (Figure 3).

**Figure 3. Road traffic death rates, 2019–2023**




Reported serious injuries increased from 398 in 2022 to 582 in 2023. On the other hand, minor injuries declined by 22% in 2023 compared to the previous year (Figure 4).

**Figure 4. Trend in serious and minor injuries, 2019–2023**



## Deaths and serious injuries by road user type

Pedestrian deaths have declined since 2021; however, they continue to account for the highest number of reported deaths (Figure 5). In 2023, vulnerable road users — pedestrians, bicyclists and motorcyclists — accounted for 82% of the reported deaths (Figure 6). These findings reinforce the need to prioritize safety of pedestrians and other vulnerable road users. The Accra pedestrian safety action plan launched in 2017 should be evaluated and reintroduced.

**Figure 5. Deaths by road user type, 2019-2023**

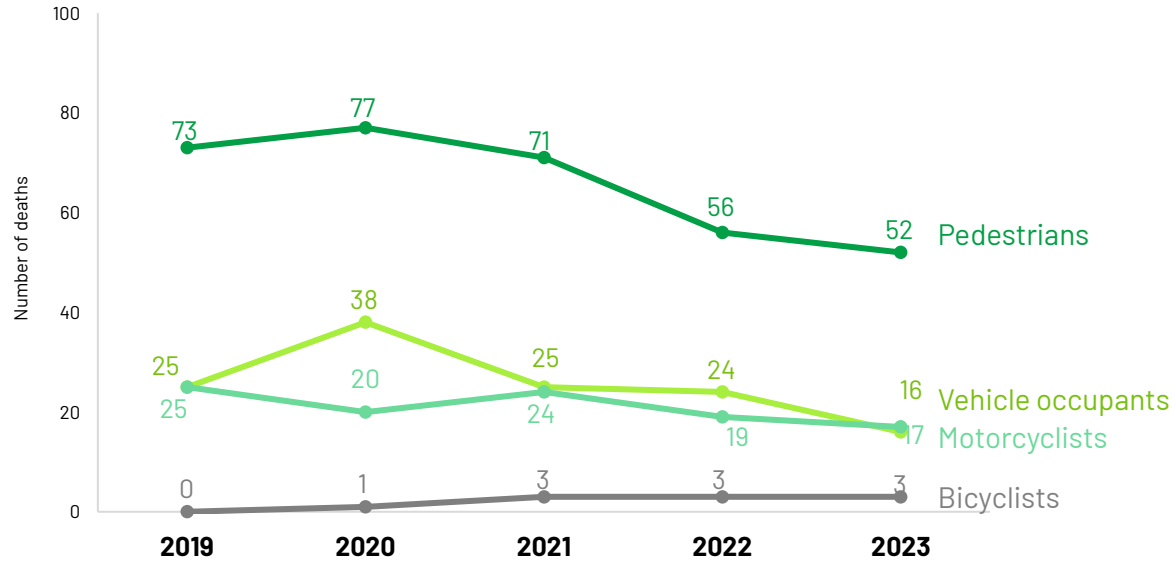
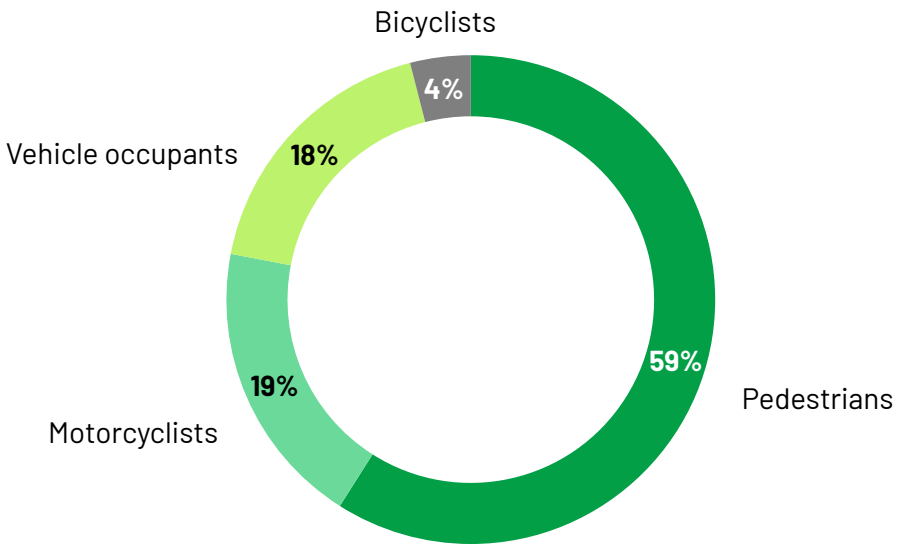



**Figure 6. Percentage distribution of deaths by road user type, 2023**



In 2023, serious injuries among vehicle occupants increased by 95% compared to 2022. In the same period, serious injuries among pedestrians and motorcyclists increased by 15% and 19% respectively (Figure 7). The percentage distribution of serious injuries by road user type in 2023 is shown in Figure 8.

**Figure 7. Serious injuries by road user type, 2019–2023**

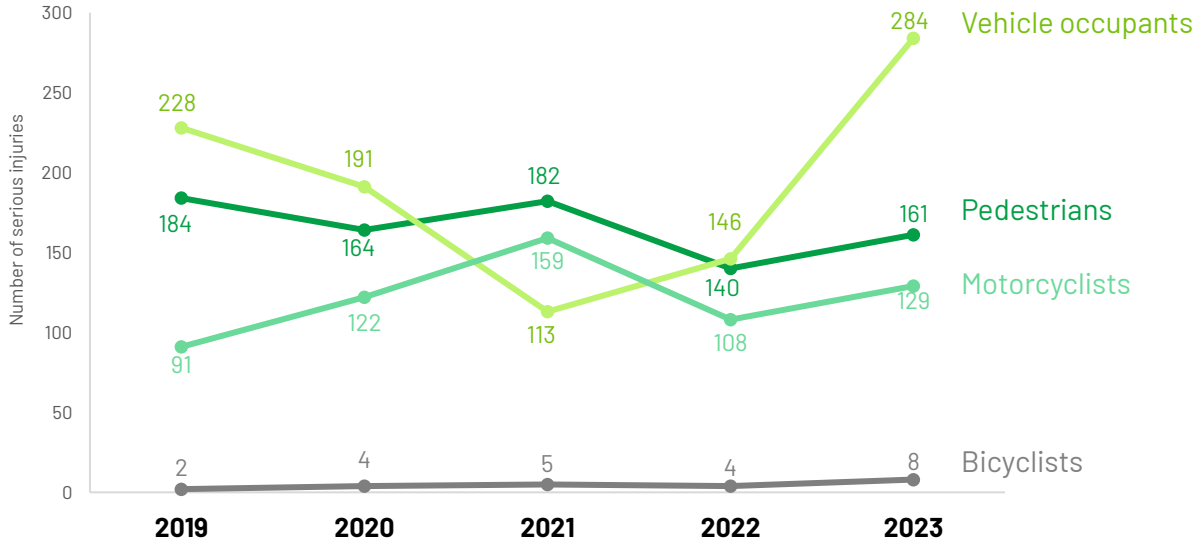
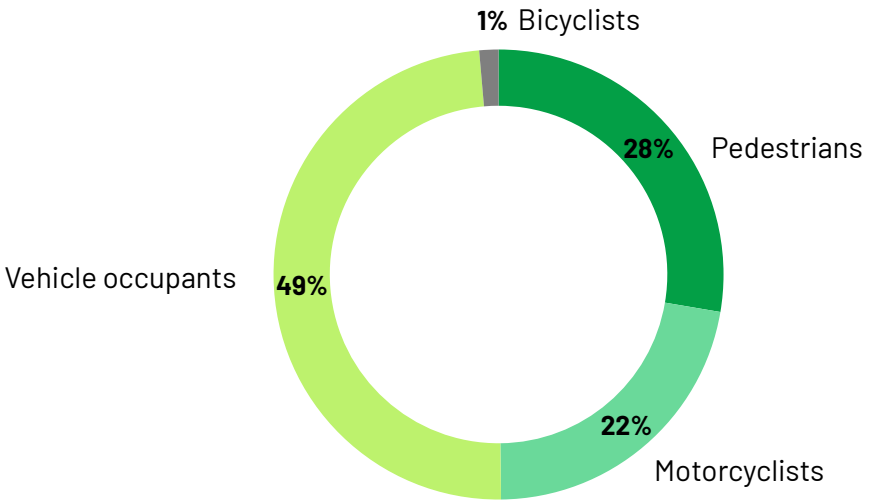



**Figure 8. Percentage distribution of serious injuries by road user type, 2023**



## Deaths and serious injuries by sex

Males recorded the highest proportion (85%) of reported deaths in 2023 (Figure 9). This could be attributed to risky road-user behaviour observed among males[10,11]. More than half (69%) of victims who sustained serious injuries were males (Figure 10). This pattern has been consistent in Accra for the last 6 years[12,13,14,15].

**Figure 9. Deaths by sex, 2023**

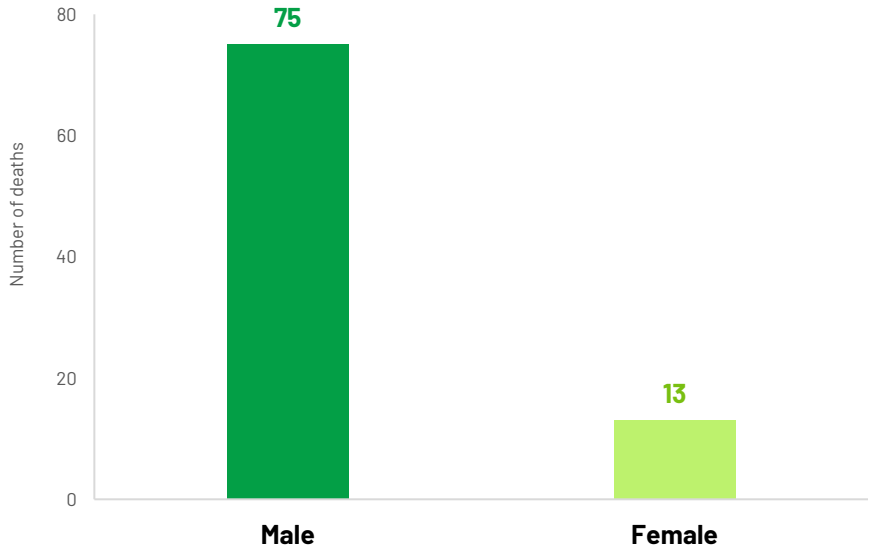
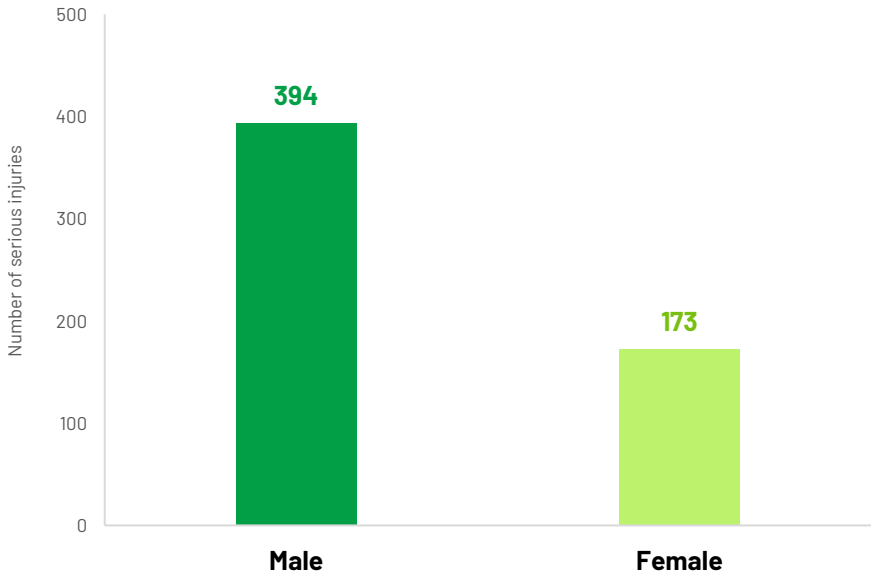



**Figure 10. Serious injuries by sex, 2023**



## Deaths and serious injuries by age

There was no clear pattern in the number of reported deaths in 2023 by age. However, deaths were frequently recorded among those aged 40-49 and 60+ years (Figure 11). However, serious injuries were high among those aged 30 – 39 years (Figure 12).

**Figure 11. Deaths by age group, 2023**

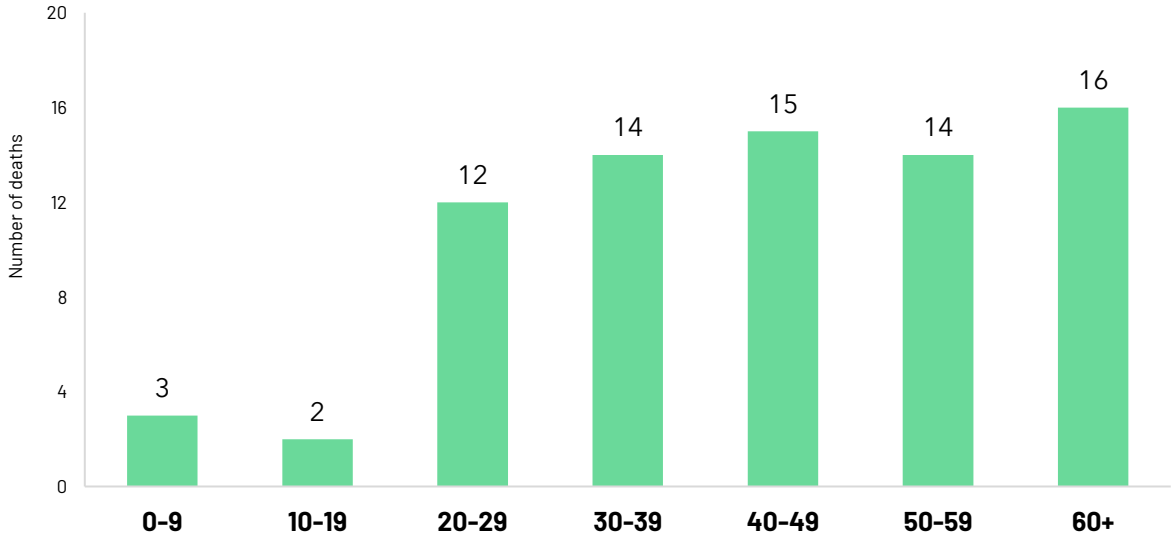
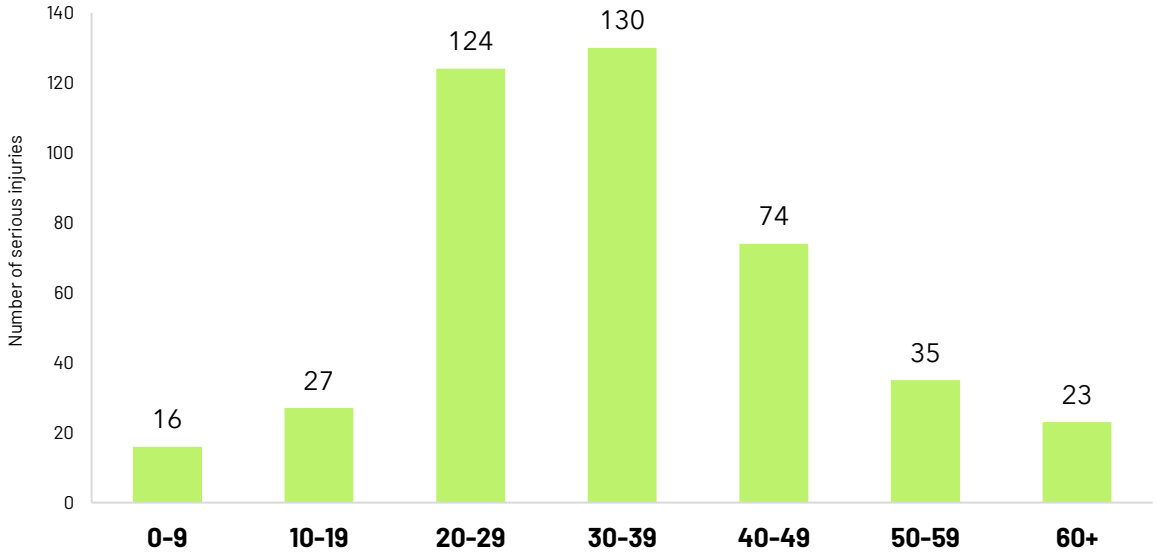



**Figure 12. Serious injuries by age group, 2023**



## Deaths and serious injuries by rate

Among males, those aged 60 years and over had the highest death rate in 2023 at 22.2 per 100,000 population. Among females, those aged 50–59 years had the highest death rate at 5.2 per 100,000 population (Figure 13). Males aged 40-49 years had the highest serious injury rate, whereas females aged 30-39 years had the highest serious injury rate (Figure 14).

**Figure 13. Death rates by age and sex, 2023**

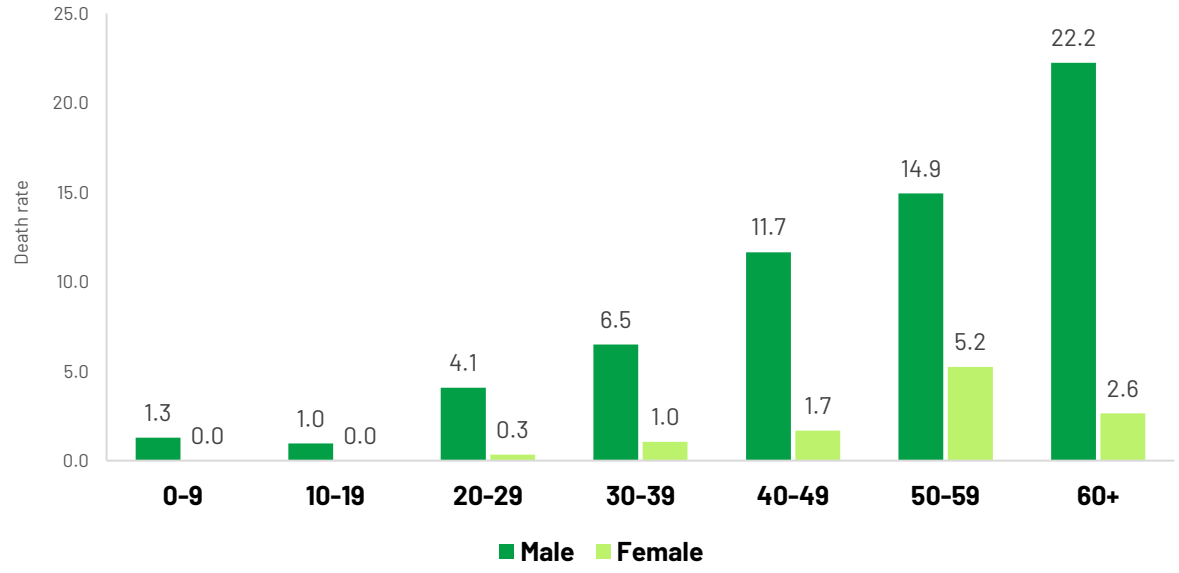
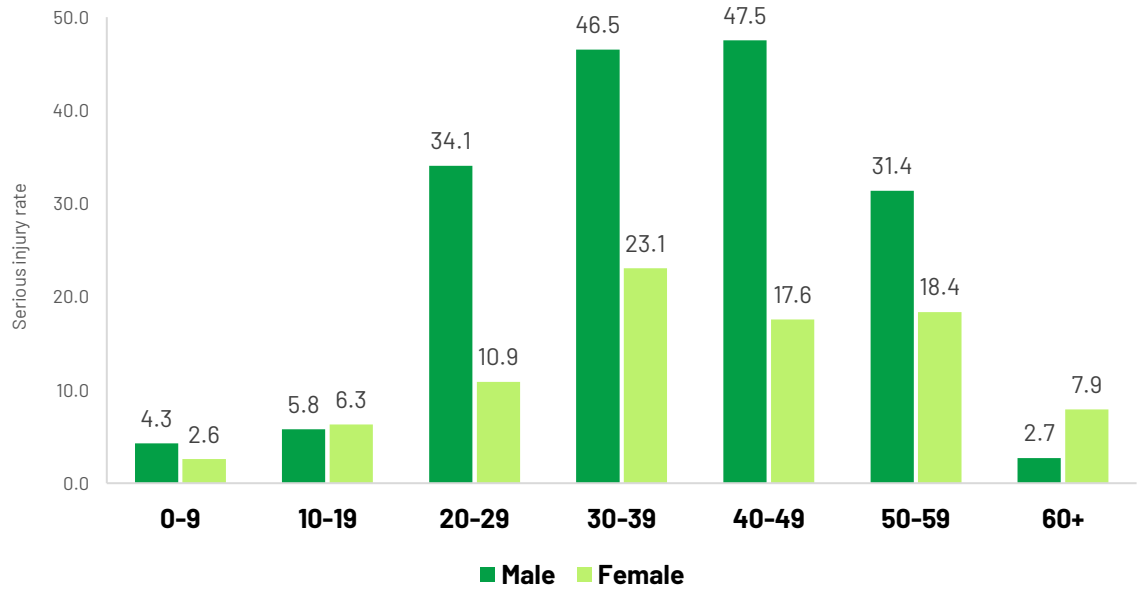



**Figure 14. Serious injury rates by age and sex, 2023**



## Crashes and deaths by time of day

The highest number of crashes occurred between 2 p.m. and 4 p.m. in 2023 (Figure 15). However, deaths were frequently reported following crashes which occurred from 6 p.m. to 8 p.m. (Figure 16). A similar pattern was observed in the previous year[15].

**Figure 15. Crash by time of day, 2023**

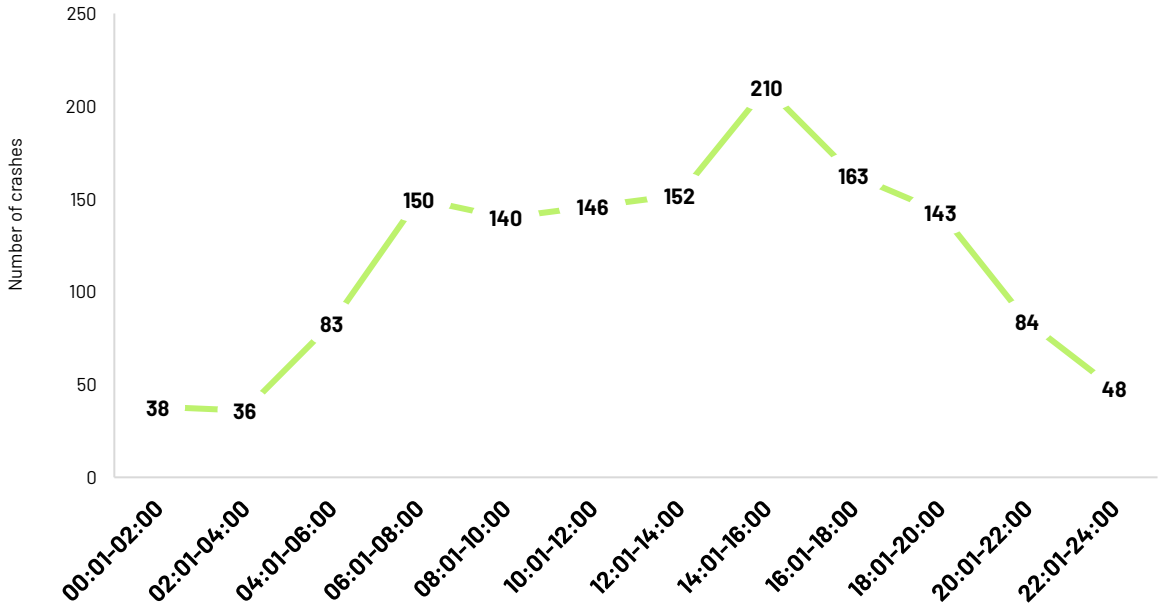
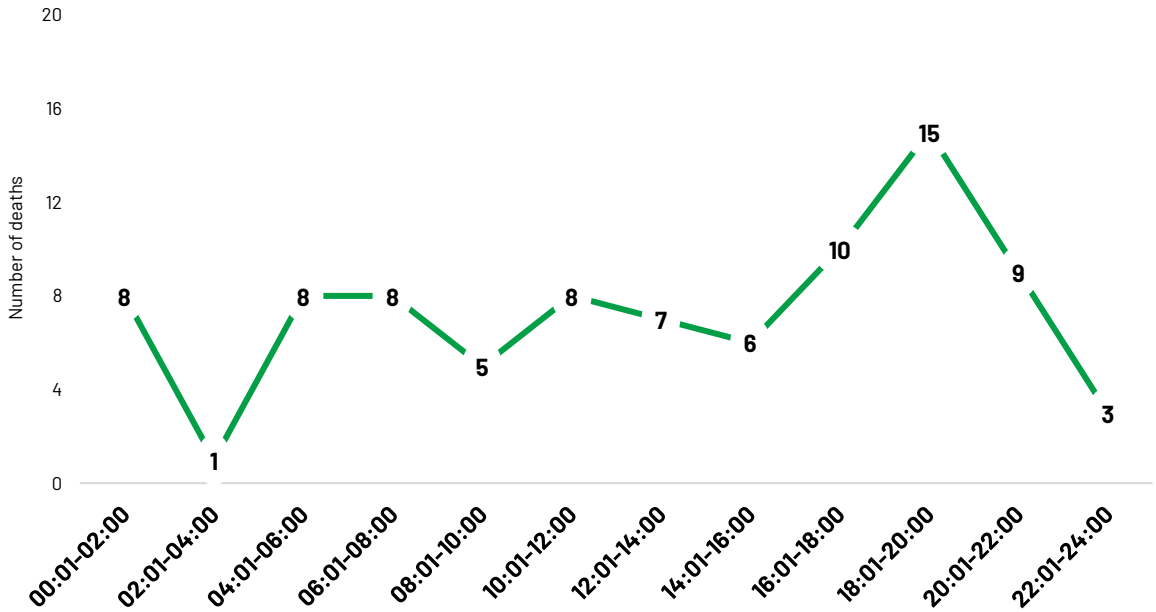



**Figure 16. Deaths by time of day, 2023**



## Crashes and deaths by day of week

No pattern was observed for crashes by day of week (Figure 17). However, nearly half (48%) of the reported fatalities in 2023 occurred from crashes on weekends (Friday to Sunday)(Figure 18). This pattern has been consistent in Accra since 2016 [12-15] and may be associated with speeding, drink driving and/or reduced police enforcement on weekends. Speed assessment conducted in Accra also shows that speeding is twice as frequent on weekends than on weekdays[16].These findings can inform police operational staffing and planning for speed enforcement activities.

**Figure 17. Crash by day of week, 2023**

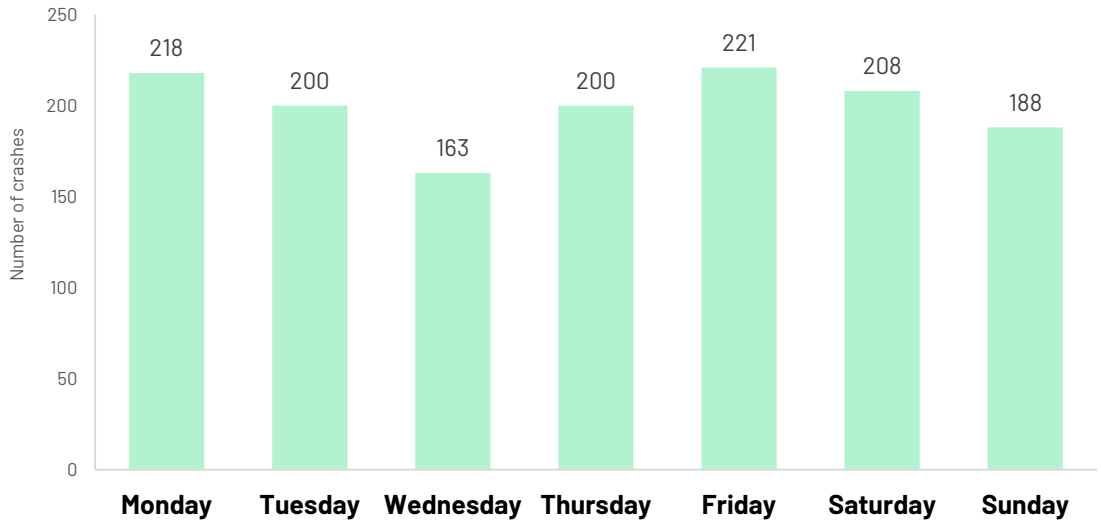
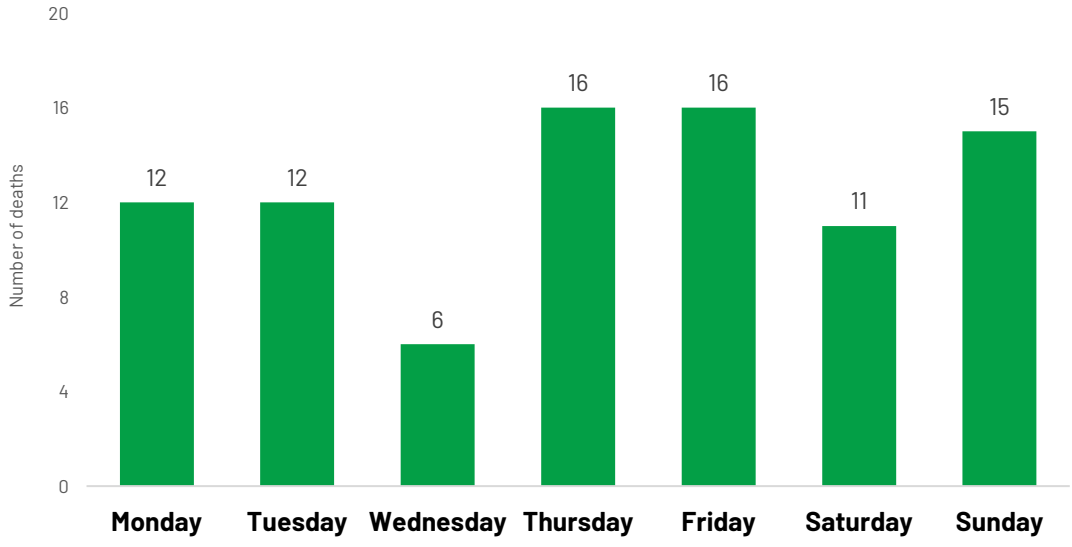



**Figure 18. Deaths by day of week, 2023**



## Deaths by day of week and time of day

Half of the reported deaths occurred following crashes on weekends (Friday to Sunday) between 8 pm and 12 pm (Table 1). The findings emphasize the need for enforcement focusing on road injury risk factors (speeding, drink driving, failure to use helmet and seatbelt/child restraints) to be intensified on weekends.

**Table 1. Deaths by day of week and time, 2019–2023**

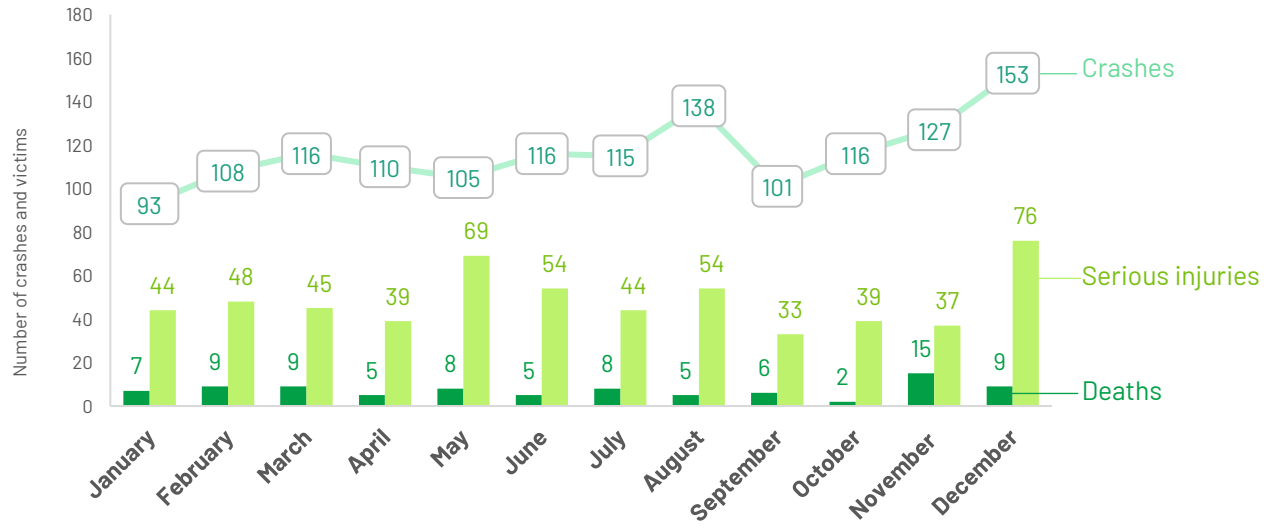
| Time | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|---|---|---|---|---|---|---|
| 00:01 - 04:00 | 3 | 1 | 1 | 4 | 5 | 7 | 6 |
| 04:01 - 08:00 | 9 | 14 | 15 | 8 | 11 | 16 | 11 |
| 08:01 - 12:00 | 11 | 10 | 6 | 17 | 15 | 11 | 13 |
| 12:01 - 16:00 | 14 | 11 | 11 | 13 | 20 | 11 | 17 |
| 16:01 - 20:00 | 13 | 21 | 9 | 18 | 14 | 23 | 22 |
| 20:01 - 24:00 | 28 | 8 | 12 | 20 | 22 | 21 | 29 |
| **Total** | **78** | **65** | **54** | **80** | **87** | **89** | **98** |

20+ deaths  10-19 deaths  0-9 deaths

## Crashes, deaths and serious injuries by month

In 2023, crashes were most frequently reported in December. A similar trend was observed in the previous year[15]. This may be associated with high traffic volumes, speeding and inappropriate driving behaviour during that period (Figure 19).

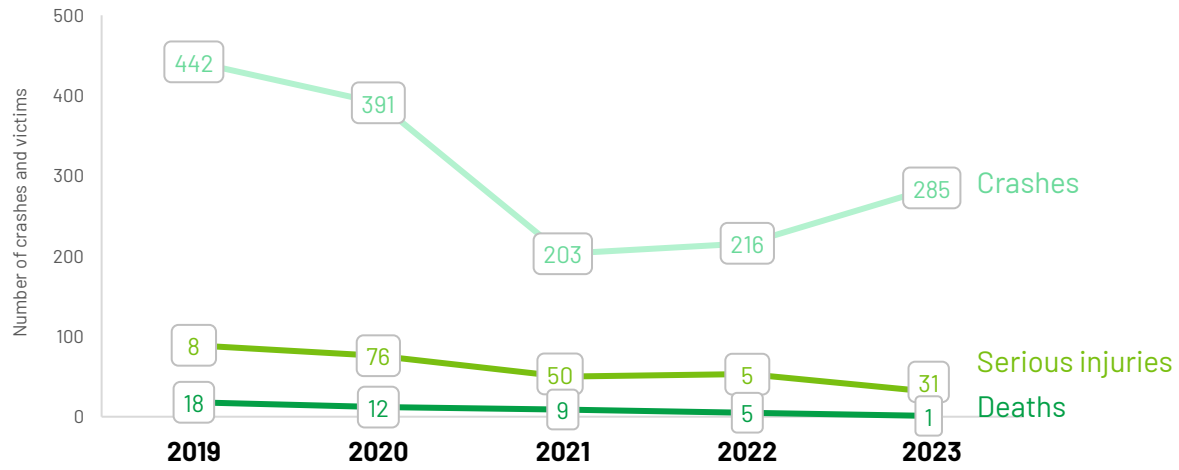
**Figure 19. Crashes, deaths and serious injuries by month, 2023**



## Crashes, deaths and serious injuries involving commercial bus/minibus

No clear trend has been observed since 2019 in the number of reported crashes involving commercial buses and minibuses (commonly called *trotro*). However, fatalities and serious injuries have dropped since 2021 (Figure 20).

**Figure 20. Crashes, deaths and serious injuries involving commercial public bus/minibus, 2019–2023**




## Crashes and deaths by road classification type

70% of crashes and 76% of deaths occurred on highways in 2023 (Figures 21 and 22). This could be associated with excessive speeding on arterial roads in the city[16]. Findings from previous observational studies show that speeding is higher on arterial roads compared to urban roads[16].

**Figure 21. Crashes by road type, 2023**

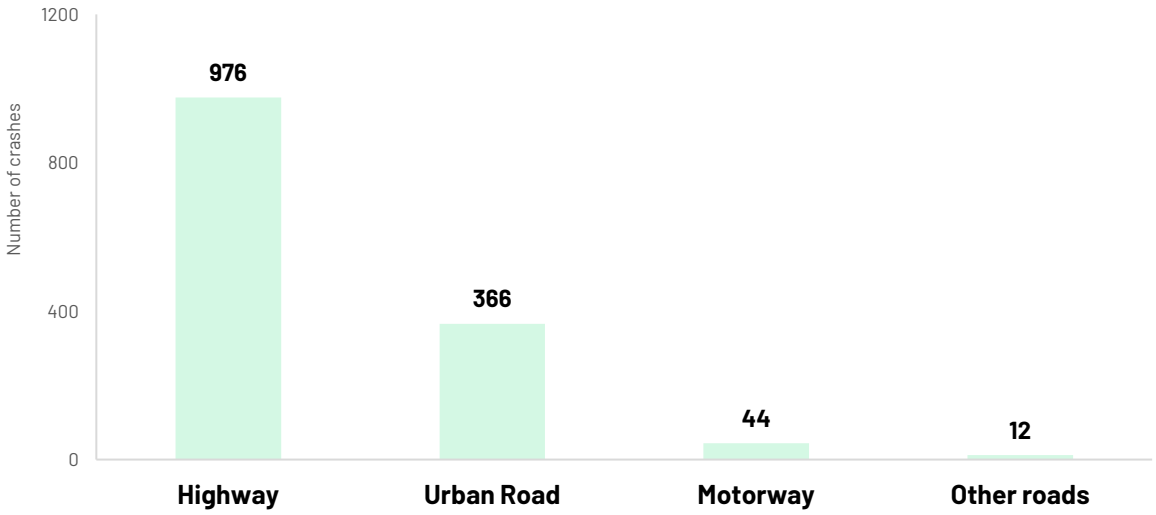
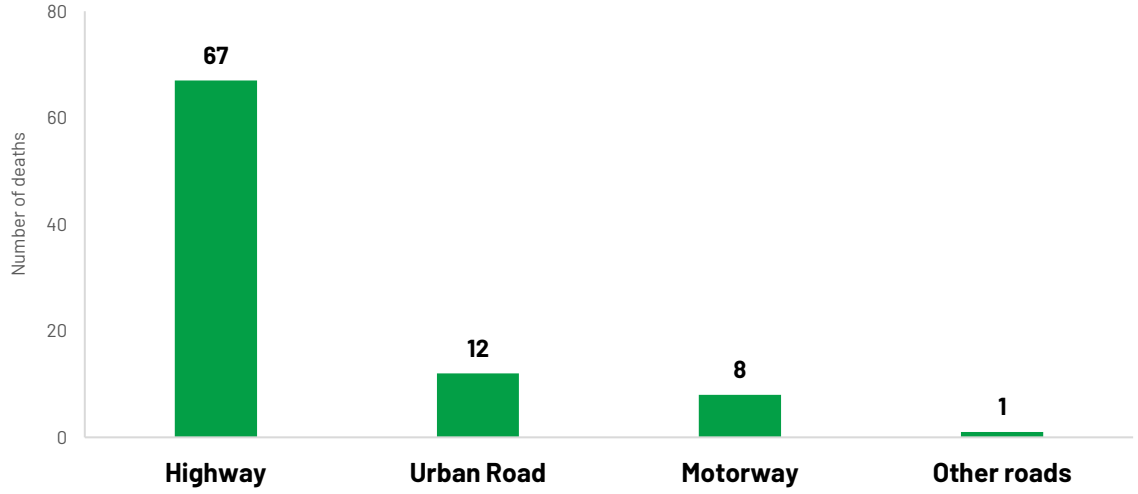


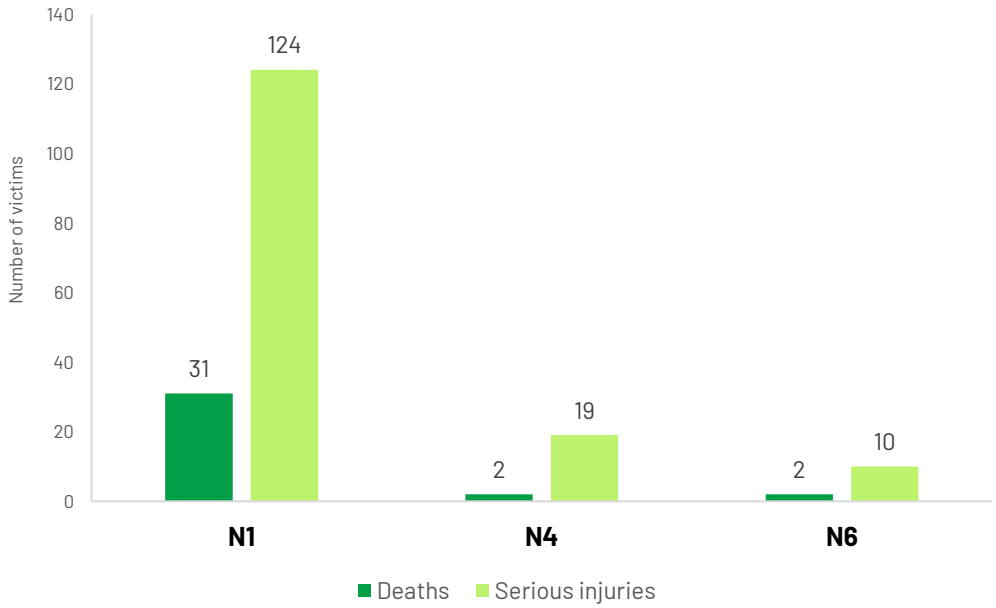
**Figure 22. Deaths by road type, 2023**




## Deaths and serious injuries on major national highways in Accra

Majority of deaths and serious injuries occurred from crashes on the N1(Figure 23).

**Figure 23. Deaths and serious injuries on major national highways, 2023**



## Deaths by road user and colliding vehicle type

Table 2 shows the correlation between deaths by road user type and colliding vehicles from 2019 to 2023. Pedestrian deaths were frequently caused by cars and pickups (48%). Buses/minibuses and motorcycles were the colliding vehicles in 20% and 16% of pedestrian deaths respectively. Single vehicle collisions accounted for the highest proportion (34%) of deaths among vehicle occupants. More than a quarter (31%) of motorcyclist deaths were from single-vehicle crashes. These findings can inform strategies, plans, and targeted interventions in road engineering, enforcement and behaviour change communication aimed at reducing deaths among specific road-user groups.

**Table 2. Deaths by road user and colliding vehicle type, 2019-2023**

| Victim | Colliding vehicle | | | | | | |
|---|---|---|---|---|---|---|---|
| | Car and pickup | Bus and minibus | High Goods Vehicle | Motorcycle | Single vehicle crash | Unknown vehicle | Total |
| **Pedestrians** | 159 | 66 | 27 | 52 | 0 | 26 | **330** |
| **Vehicle occupants** | 32 | 7 | 21 | 5 | 37 | 7 | **109** |
| **Motorcyclists** | 33 | 13 | 17 | 4 | 32 | 4 | **103** |
| **Bicyclists** | 4 | 1 | 5 | 0 | 0 | 0 | **10** |
| **Total** | **228** | **87** | **70** | **61** | **69** | **37** | **552** |

## High risk corridors and intersections

Given that crash events occur at specific sections of the road with known location description, coordinates of these locations are spatially analysed using Geographic Information System (GIS) application to generate high-risk crash corridors and spots[17]. GIS is an effective tool to support spatial decision-making aimed at reducing road crashes and improving safety[18,19,20]. In this study, geocoded crash data based on 3-year (2021-2023) crash events were spatially analysed to rank the top high-risk crash locations and produce crash maps.

Tables 3 and 4 present the top ten (10) high-risk fatal crash corridors and intersections respectively. Of the top ten (10) high-risk fatal and serious injuries corridors, pedestrians accounted for the highest proportion of deaths on seven (7) of these corridors (Table 5). Table 6 shows the top ten (10) crash intersections where crashes occurred in the evening between 6 pm and 10 pm (4-hour time bands). Table 7 shows the distribution of pedestrian deaths by local administrative areas.

Heat maps are useful for visualising point locations with high and low rate of incidents[15]. Figure 24 shows a spatial distribution of evening crashes at selected intersections. Heat maps showing all crash locations, fatal crash locations and serious injury crash locations are shown in Figures 25, 26 and 27. Pedestrian fatal and serious injury locations are presented in Figure 28. Motorcyclist fatal and serious injury crash locations are shown in Figure 29.

Figure 30 shows a line map of high-risk fatal crash corridors. Figure 31 shows the distribution of deaths and serious injuries by administrative areas. The statutory road agencies and transport departments in these assemblies should use the information to develop plans for road infrastructure maintenance, enforcement operations and behavioural change campaigns.

**Table 3. Top ten-high risk fatal crash corridors (deaths per km), 2021 -2023**

| No. | Name of corridor | Number of deaths | Length of corridor (km) | Deaths per km |
|---|---|---|---|---|
| 1 | Kwashieman intersection – Lapaz intersection (N1) | 29 | 2.5 | 11.6 |
| 2 | Apenkwa overhead - Dimples roundabout (N1) | 23 | 1.9 | 12.1 |
| 3 | Motorway tollbooth – Tetteh Quarshie interchange (N1) | 19 | 4.5 | 4.2 |
| 4 | Akweteyman – Lapaz (N1) | 18 | 2.2 | 8.1 |
| 5 | Ring Road Central | 17 | 4.7 | 3.6 |
| 6 | Hansonic – Obetsebi Lamptey roundabout (Dr. Busia Highway) | 14 | 2.8 | 5.0 |
| 7 | Kwame Nkrumah Avenue | 12 | 3.1 | 3.8 |
| 8 | Apenkwa overhead – Sonnidom Filling Station (N6) | 11 | 1.8 | 6.1 |
| 9 | Okponglo – Shiashie (J.J. Rawlings Avenue - N4) | 10 | 1.6 | 6.2 |
| 10 | Liberation Road | 10 | 3.7 | 2.7 |

*Death statistics in these locations are based on the geocoded crash data from 2021 to 2023

**Table 4. Top ten high-risk fatal intersections, 2021 – 2023**

| No | Name of intersection | Number of Deaths |
|---|---|---|
| 1 | Opeibea intersection along Liberation Road | 6 |
| 2 | North Dzorwulu intersection along G.W Bush Highway (N1) | 5 |
| 3 | Avenor junction along J.A Kufuor Avenue | 4 |
| 4 | Lapaz intersection along G.W Bush Highway (N1) | 4 |
| 5 | Okponglo intersection along J.J Rawlings Avenue (N4) | 4 |
| 6 | Kwashieman intersection along G.W Bush Highway (N1) | 4 |
| 7 | Hansonic intersection along Dr. Busia Highway | 3 |
| 8 | Kwame Nkrumah Avenue and Graphic Road intersection | 3 |
| 9 | Abeka junction along J.A Kufuor Avenue | 2 |
| 10 | Kawukudi intersection along Olusegun Obasanjo Highway | 2 |

*Death statistics in these locations are based on the geocoded crash data from 2021 to 2023. A 100m intersection radius was applied.

**Table 5. Top ten high risk fatal and serious injury corridors, 2021-2023**

| No | Name of corridor | Length of road (km) | Number of deaths and serious injuries | Highest proportion of road user | Pedestrian action | Highest risk period |
|---|---|---|---|---|---|---|
| 1 | George W. Bush Highway | 13.6 | 229 | Pedestrian (48%) | Crossing road (60%) | Weekend |
| 2 | Dr. Busia Highway | 6.8 | 129 | Pedestrian (52%) | Crossing road (30%) | Weekday |
| 3 | J.A Kufuor Avenue | 5.0 | 104 | Pedestrian (36%) | Crossing road (51%) | Weekday |
| 4 | Ring Road Central | 4.7 | 60 | Pedestrian (38%) | Crossing road (48%) | Weekday |
| 5 | J.J Rawlings Avenue (N4) | 5.0 | 48 | Vehicle occupants (48%) | N/A | Weekday |
| 6 | Guggisberg Avenue | 5.4 | 45 | Motorcyclists (51%) | N/A | Weekday |
| 7 | Liberation Road | 6.0 | 45 | Vehicle occupants (48%) | N/A | Weekend |
| 8 | Nsawam Road (N6) | 1.8 | 41 | Pedestrian (54%) | Crossing road (32%) | Weekday |
| 9 | Accra- Tema Motorway | 4.5 | 37 | Pedestrian (35%) | Crossing road (46%) | Weekend |
| 10 | Kwame Nkrumah Avenue | 3.1 | 27 | Pedestrian (48%) | Crossing road (62%) | Weekday |

*Crash statistics in these locations are based on the geocoded crash data from 2021 to 2023

**Table 6. Top 10 high-risk traffic intersections based on evening crashes, 2021-2023**

| No | Name of intersection | Number of Crashes |
|---|---|---|
| 1 | Lapaz intersection along G.W Bush Highway (N1) | 34 |
| 2 | Okponglo intersection along J.J Rawlings Avenue (N4) | 26 |
| 3 | Abeka junction along J.A Kufuor Avenue | 20 |
| 3 | Kwashieman intersection along G.W Bush Highway (N1) | 18 |
| 4 | Avenor junction along J.A Kufuor Avenue | 16 |
| 5 | Hansonic intersection along Dr. Busia Highway | 10 |
| 7 | North Dzorwulu intersection along G.W Bush Highway (N1) | 10 |
| 8 | Kaneshie First Light intersection along Dr. Busia Highway | 8 |
| 9 | UPSA junction along J.J Rawlings Avenue (N4) | 8 |
| 10 | Neoplan junction along Nsawam Road (N6) | 7 |

*Death statistics in these locations are based on the geocoded crash data from 2021 to 2023. A 100m intersection radius was applied.

**Figure 24. Map of high-risk intersections based on evening crashes, 2021-2023**

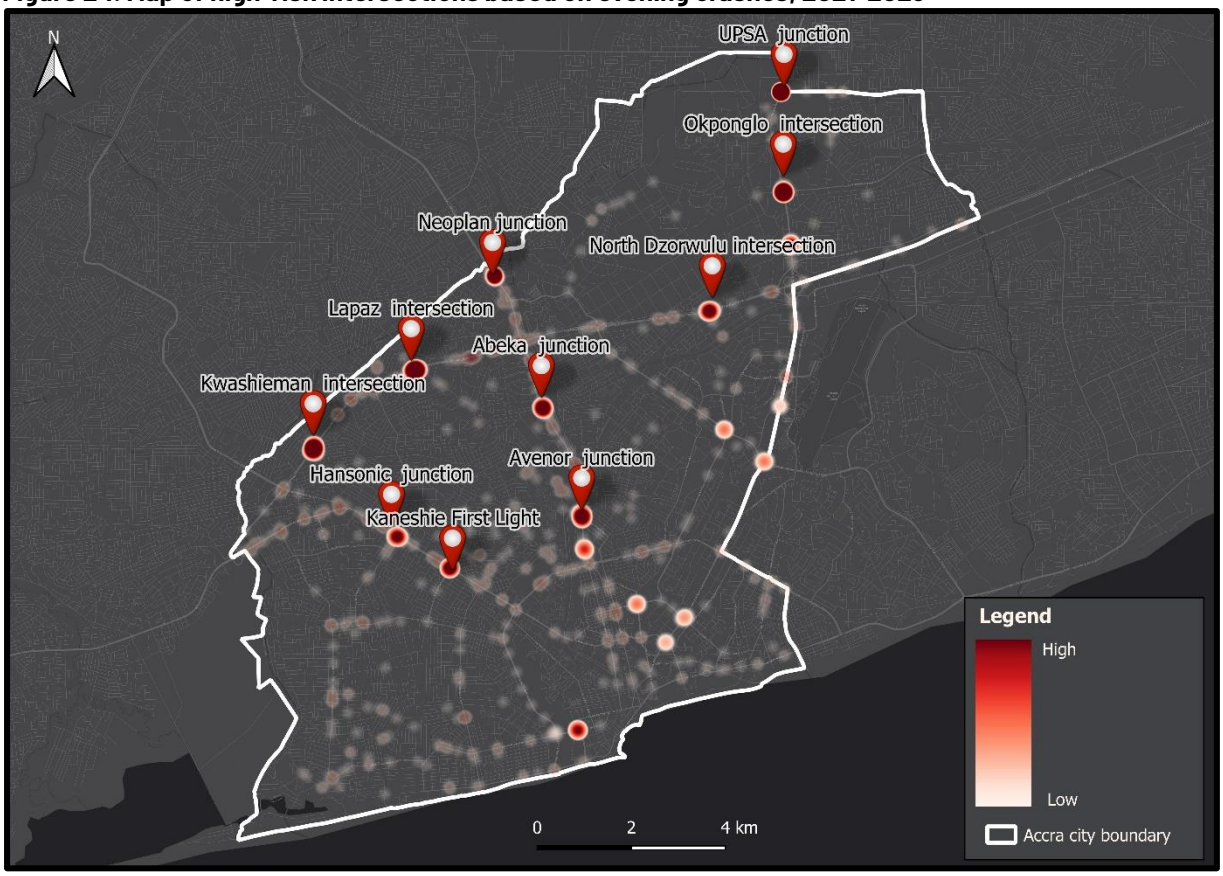



**Figure 25. Heat map of all crash locations, 2021-2023**

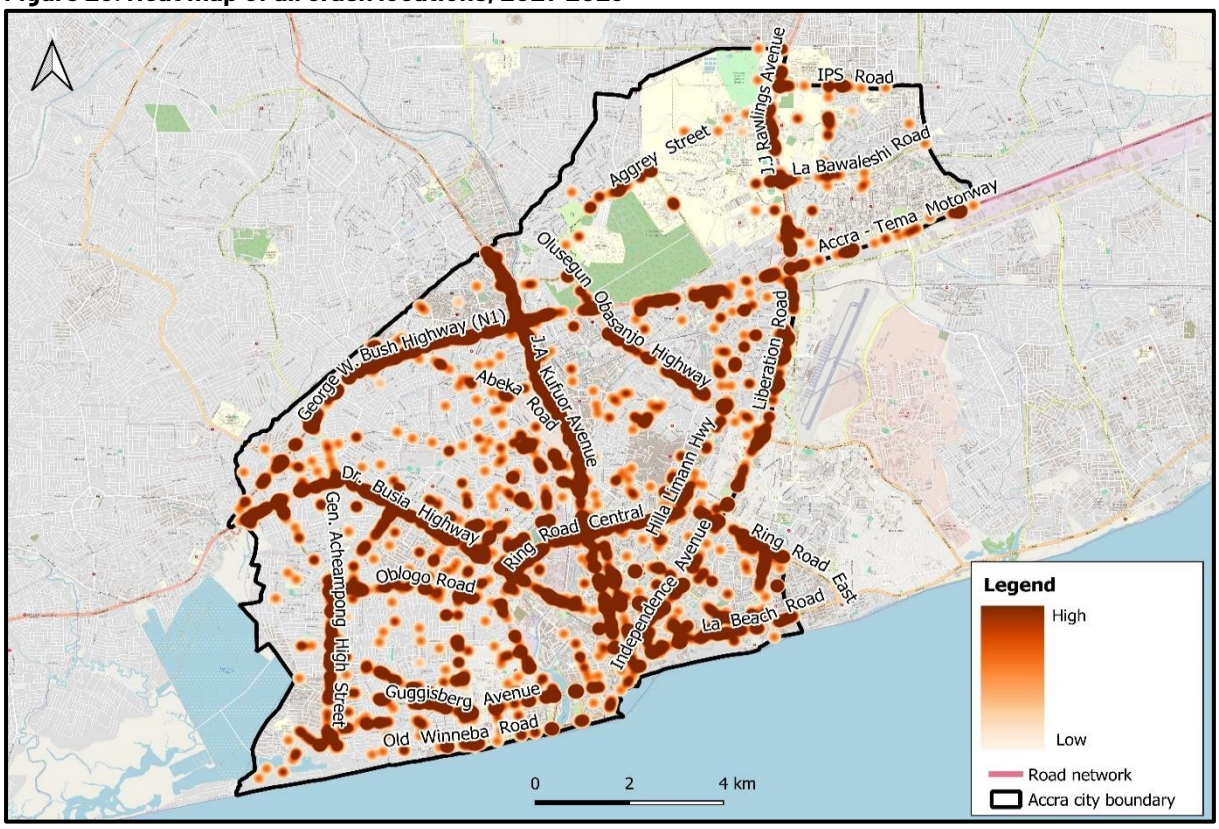


**Figure 26. Heat map of fatal crash locations, 2021–2023**

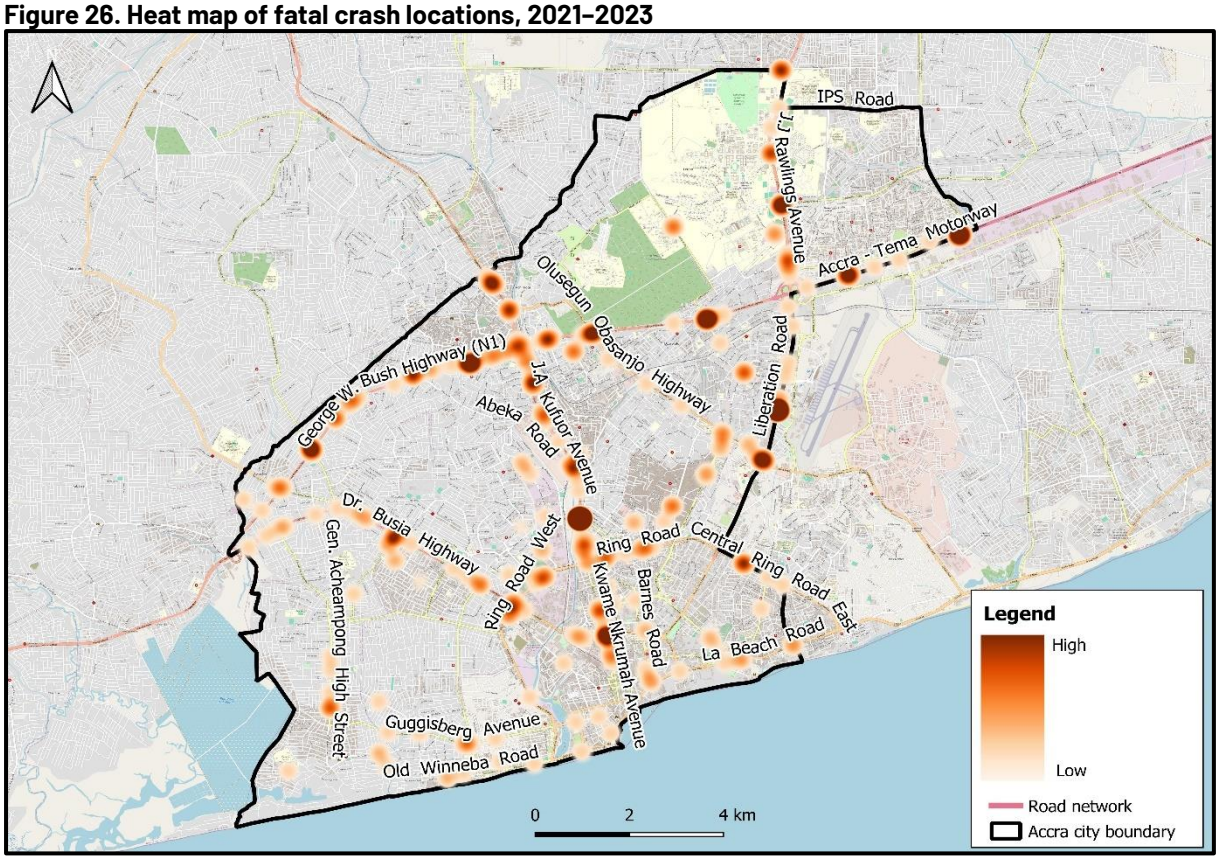



**Figure 27. Heat map of serious injury crash locations, 2021–2023**

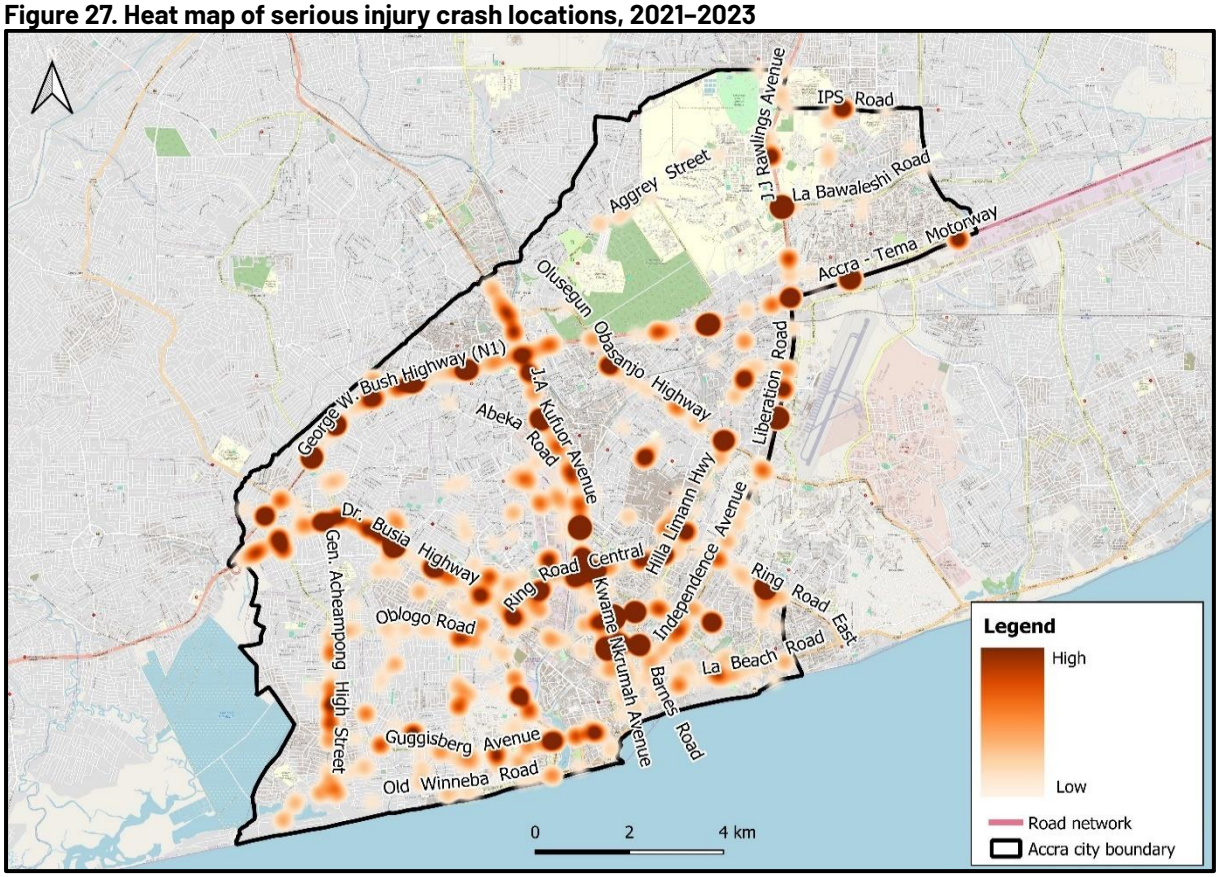


**Figure 28. Heat map of pedestrian fatal and serious injury crash locations, 2021–2023**

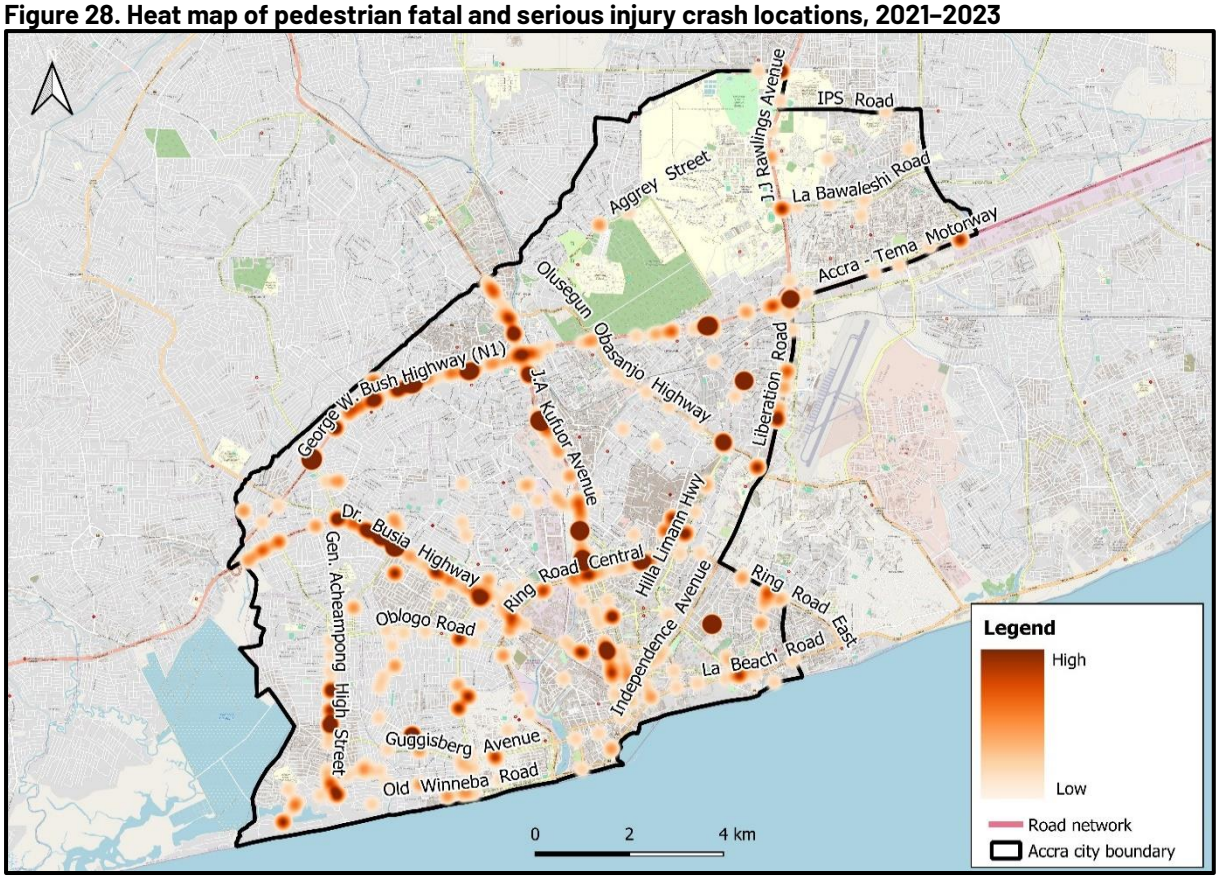



**Figure 29. Heat map of motorcyclist fatal crash locations, 2021–2023**

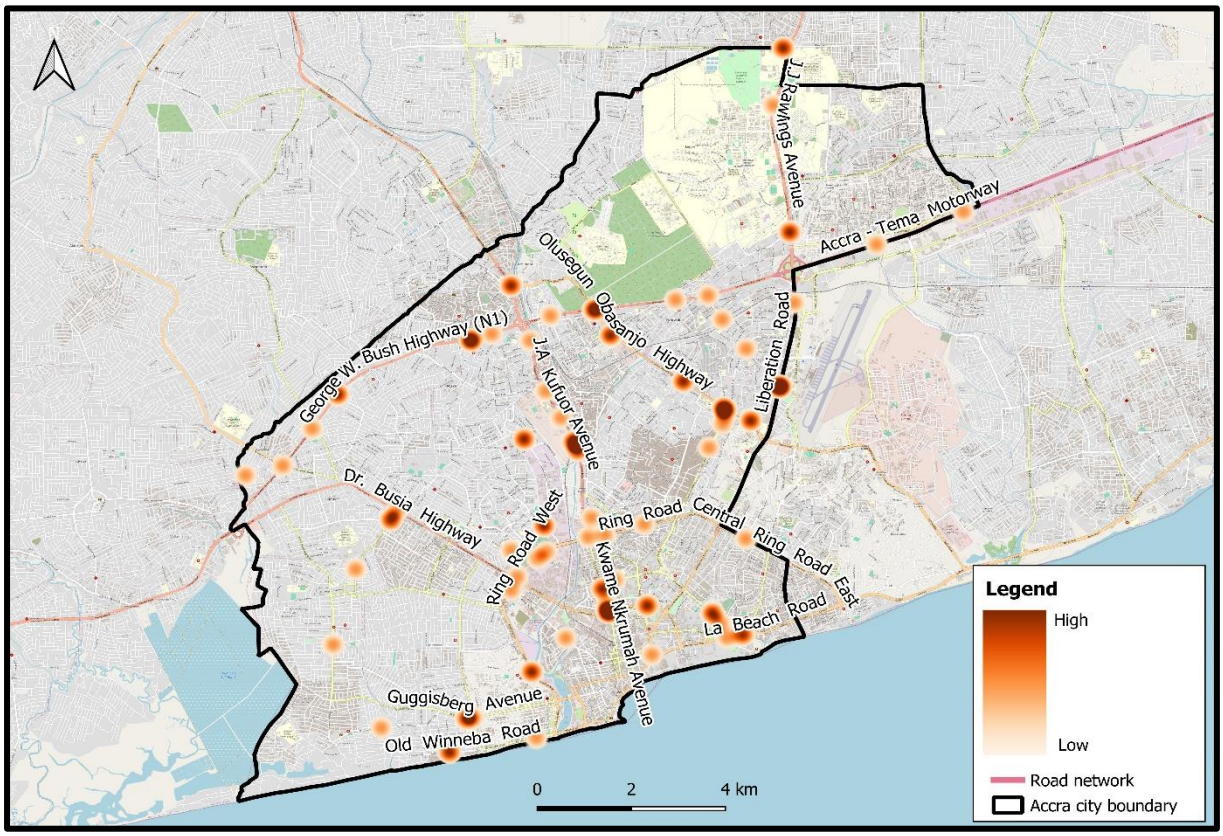


**Figure 30. Line map of high-risk fatal crash corridors, 2021 -2023**

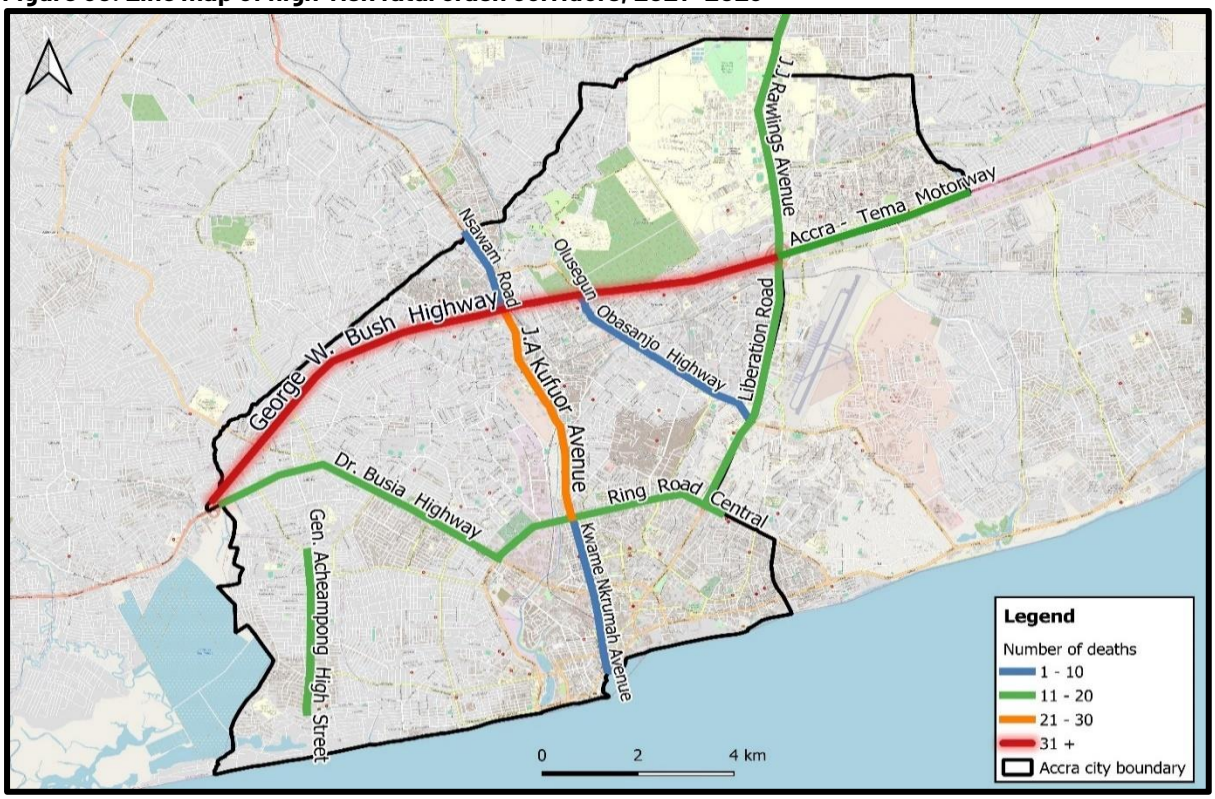



**Figure 31. Deaths and serious injuries by administrative areas, 2021-2023**

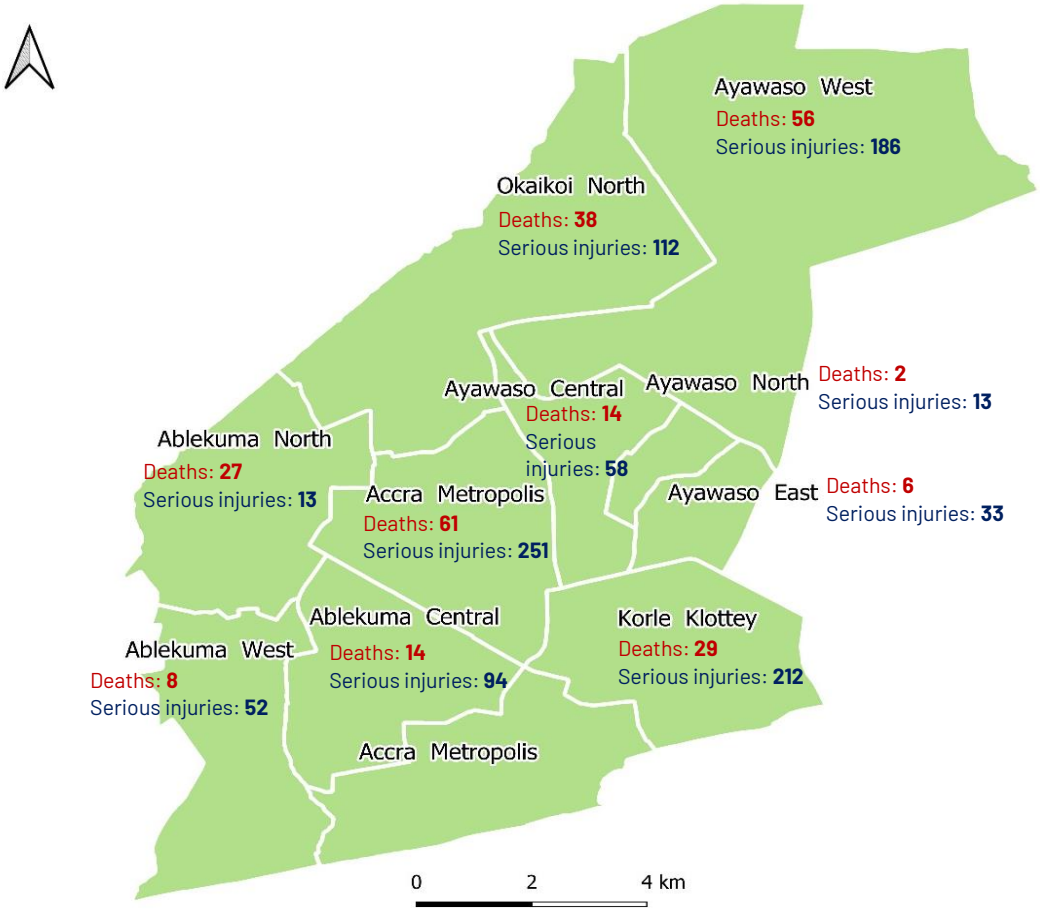


**Table 7. Distribution of pedestrian deaths by local administrative areas, 2021-2023**

| No | Administrative area | Number of pedestrian deaths | Top 2 Pedestrian fatal crash corridors |
|---|---|---|---|
| 1 | Accra Metropolis | 32 | J.A Kufuor Avenue<br>Dr. Busia Highway |
| 2 | Okaikoi North | 28 | George W. Bush Highway (N1)<br>Nsawam Road (N6) |
| 3 | Ayawaso West | 27 | George W. Bush Highway (N1)<br>J.J Rawlings Avenue (N4) |
| 4 | Ablekuma North | 19 | Dr. Busia Highway<br>George W. Bush Highway (N1) |
| 5 | Korle Klottey | 17 | Dr. Kwame Nkrumah Avenue<br>Ring Road Central |
| 6 | Ablekuma West | 8 | Gen. Acheampong High Street<br>Nii Danso Street |
| 7 | Ablekuma Central | 7 | Dr. Busia Highway<br>Ring Road West |
| 8 | Ayawaso Central | 6 | J. A Kufuor Avenue<br>Olusegun Obasanjo Highway |
| 9 | Ayawaso East | 4 | Dr. Hilla Limann Highway<br>Al Walad Bin Talal Highway |
| 10 | Ayawaso North | 1 | Dr. Hilla Limann Highway |

## Case Study: Monitoring Crash Outcomes at Lapaz traffic intersection along the George Walker Bush Highway (N1)

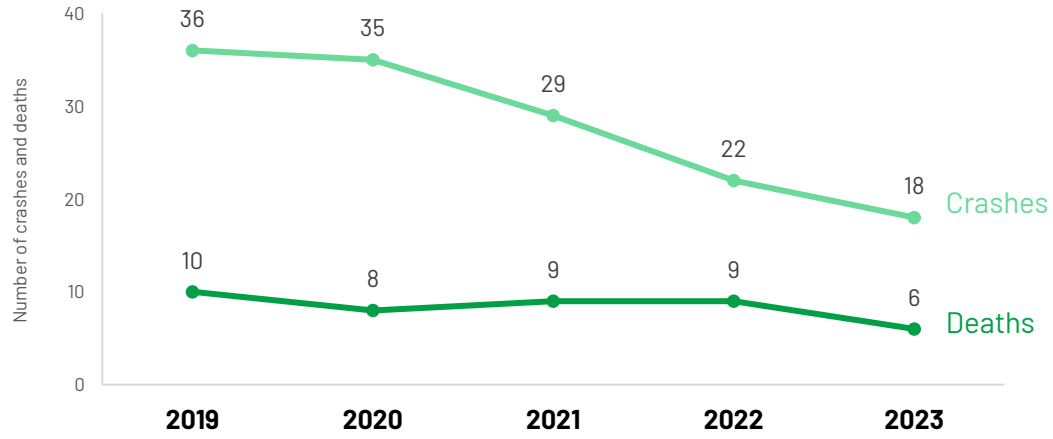
Findings from the Accra road safety report (2016–2018 edition) identified the Lapaz traffic intersection as one of the high-risk fatal crash intersections for pedestrians in the city. Based on this, a number of road safety enhancement works were undertaken at the site with the support of international partners and local road agencies.

The safety enhancement interventions included increasing the pedestrian signal timing (crossing times) to increase the number of pedestrians crossing the entire 14 lanes without waiting in the median barrier and lowering of kerbs to ensure unimpeded and safe passage especially for the physically disabled pedestrians. In addition, there was remarking of crossings and other pavement markings (pedestrian crossing, strips, centre line marking etc.) to ensure general safety at the intersection and encourage pedestrians to cross at designated crossing locations.

To evaluate the impact of these interventions, the geocoded data for the site was analyzed to examine the crash outcomes over the years. As shown in Figure 32, there has been a consistent reduction in the number of reported crashes at the Lapaz intersection since the safety enhancement interventions were implemented in December 2018. However, there has been a variable pattern in the number of reported deaths.

This finding calls for a more sustained multisectoral approach to mitigate crashes which occur at the intersection, especially in the evenings when speeds are high, and visibility is low.

**Figure 32: Trend in crashes and fatal injuries**



# ROAD INJURY BEHAVIOURAL RISK FACTORS

## Road injury behavioural risk factors

Johns Hopkins University International Injury Research Unit (JH-IIRU) conducts observational surveys on selected road corridors in Accra as part of the road injury surveillance support under BIGRS. The purpose of these studies is to assess the prevalence and trends of key road injury behaviours, specifically speeding and the proper use of helmets, seat belts and child restraints. Helmet and seat belt use were not assessed in the most recent round of observations, which was conducted in October 2023.

### Speeding

Globally, speeding remains the main risk factor for severe road crashes[21]. Findings from speed observations in Accra show that overall speeding has reduced from 62% in January 2020 to 47% in October 2023 (Figure 33). This could explain the reduction in road crashes and deaths for the same period. Motorcycles topped the list of vehicles observed to be speeding over the posted limit (Figure 34). A similar pattern has been observed in the last three years[16]. This could be attributed to increased demand and use of motorcycle for commercial purposes[22].

**Figure 33. Percentage distribution of speeding over the limit, 2020–2023**

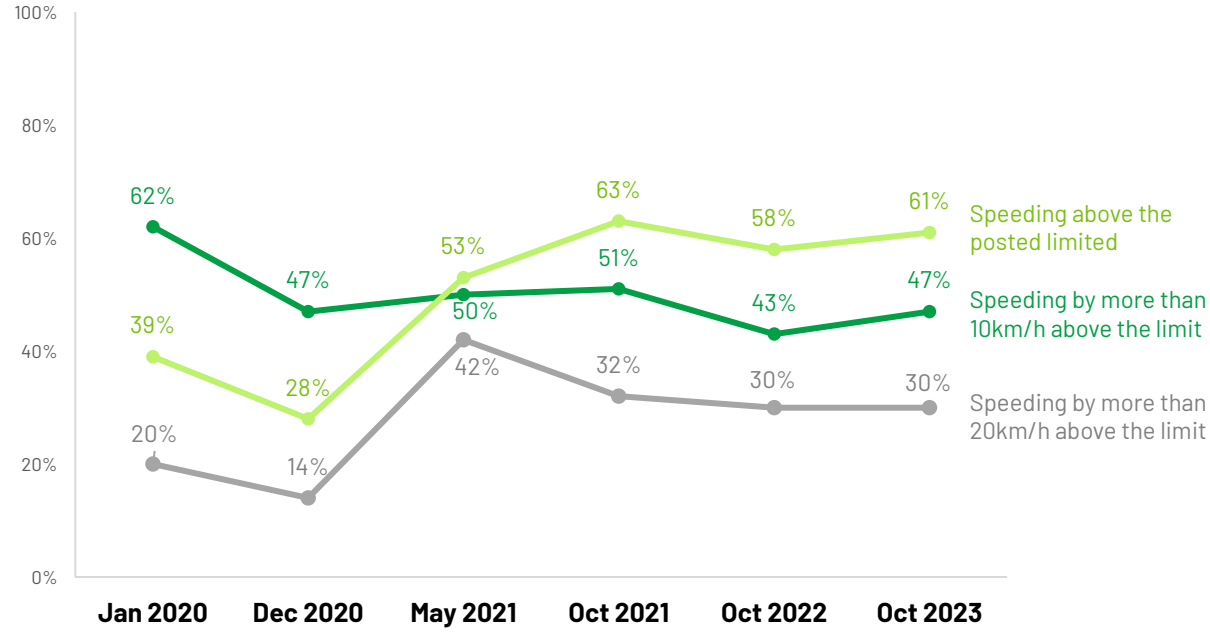
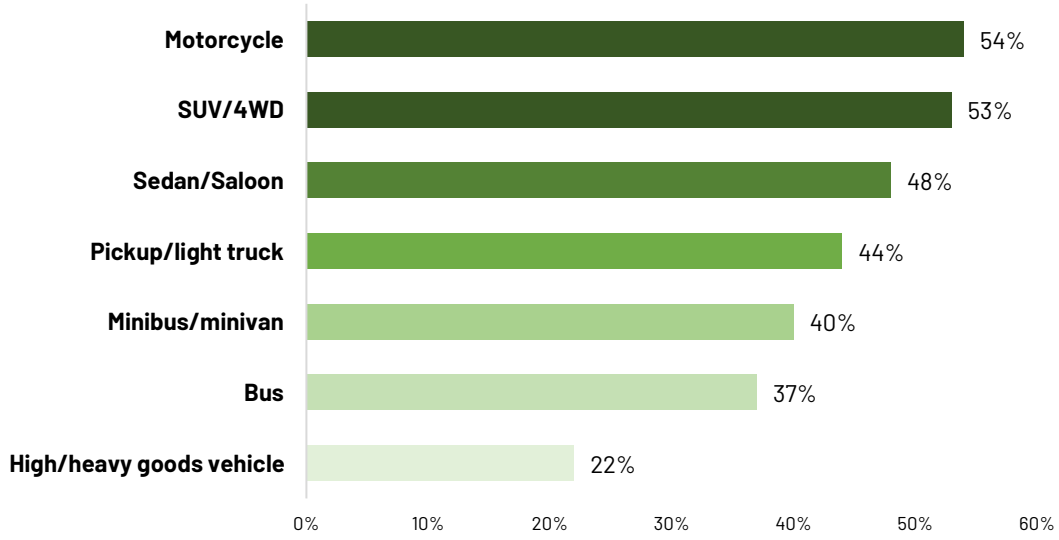


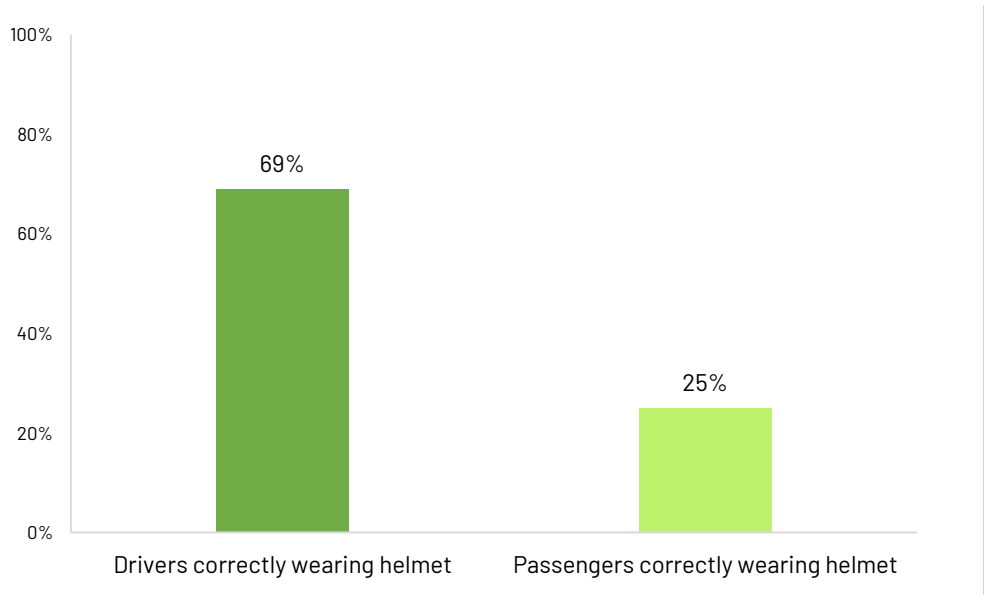
**Figure 34. Observed speeding by vehicle type, 2023**




## Helmet Use

Correct use of a standardized helmet reduces the risk of head injury among motorcyclists in the event of a crash. Correct helmet use requires the complete wearing of helmet secured with a chin strap[23]. Wearing an unfastened or loosely fastened helmet is regarded as incorrect use. Figure 35 shows observed helmet use among motorcycle drivers and passengers in December 2020.

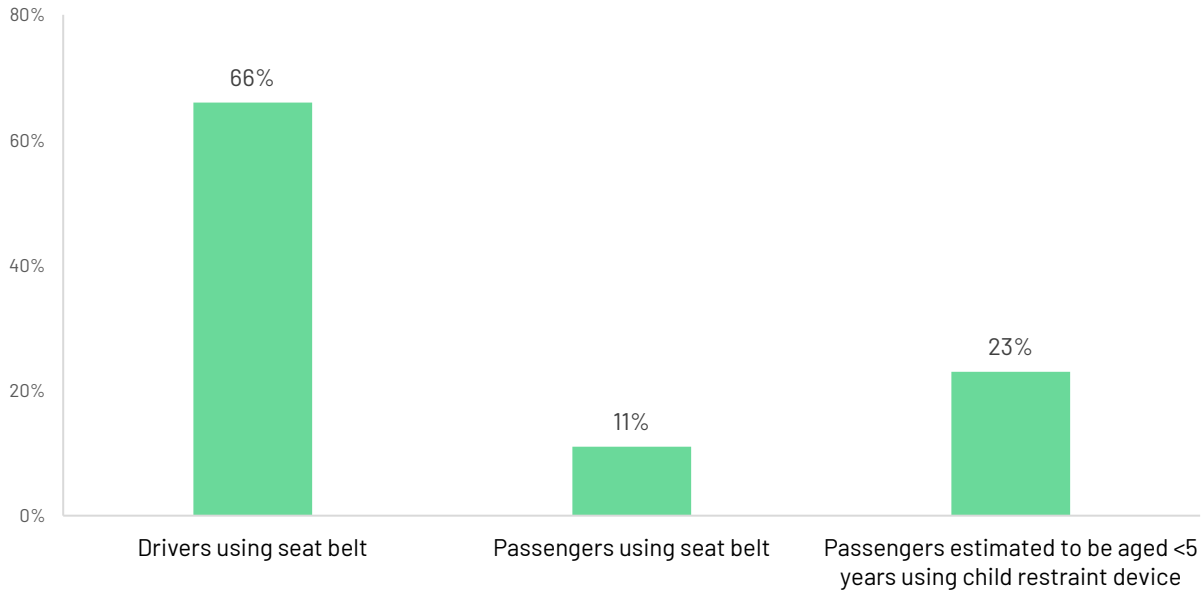
**Figure 35. Observed helmet use among motorcycle drivers and passengers**



## Seat belt and child restraint

Two-thirds of drivers (66%) were observed using a seat belt in the last round in December 2020 compared to 11% of passengers using seat belt. Use of a child-restraint device for children was estimated to be 23% (Figure 36).

**Figure 36. Observed seat belt and child-restraint use**



# SELECTED IMPLEMENTED ACTIONS TO IMPROVE ROAD SAFETY IN ACCRA

## Safer Streets and Mobility

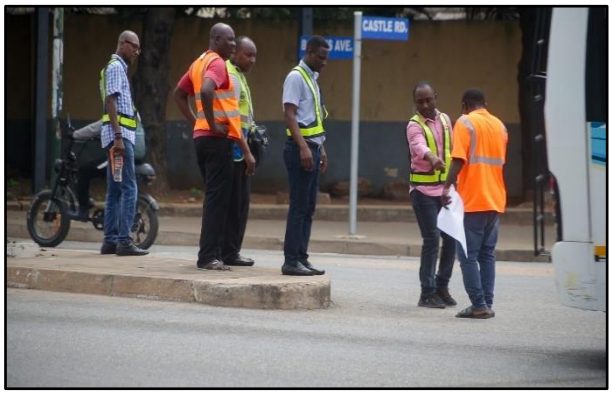
**Safety Enhancement at The Holy Spirit Cathedral Intersection.**

Crash outcome data from the Accra Road Safety Report (2019 - 2021) was the basis for the selection of the Holy Spirit Cathedral intersection for safety improvements, especially of vulnerable road users. This project was also with support from the Partnership for Healthy Cities (PHC) programme.

An initial engineering assessment pointed out the safety deficiencies at the intersection. Some of these include:

- The intersection in its previous design was very wide and the kerb radius from north-west – south-north direction is about 48m whereas the south-west – north-east direction is about 58m, allowing vehicles to negotiate at higher speeds.
- Kerbs at pedestrian crossing locations were high and did not support safe pedestrian and disable road user movements.
- There were no posted speed limit signs after existing the intersection, to serve as the legal speed limit within which motorists should travel safely.
- Vehicular speeds recorded were high at the intersection (at least 60km/h).
- There were faded road line markings.
- The intersection traffic signal was not functioning.

*Samuel explaining a point to Kelly during a visit to the site before the safety interventions.*

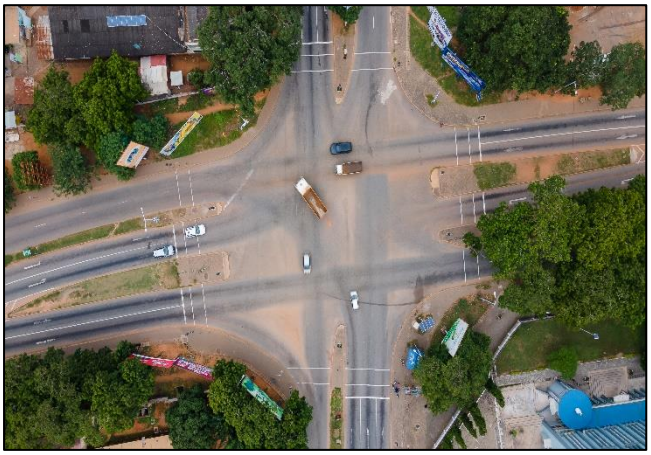



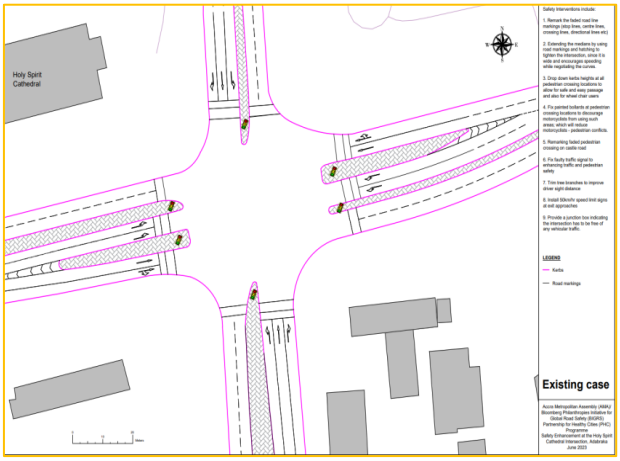

*BIGRS/Vital Strategies/WRI team with reps from Department of Urban Roads, vendors and other stakeholders at the site for commencement of safety enhancement work*

The underlisted recommendations were made; for which the Department of Urban Roads (DUR) approved for implementation:

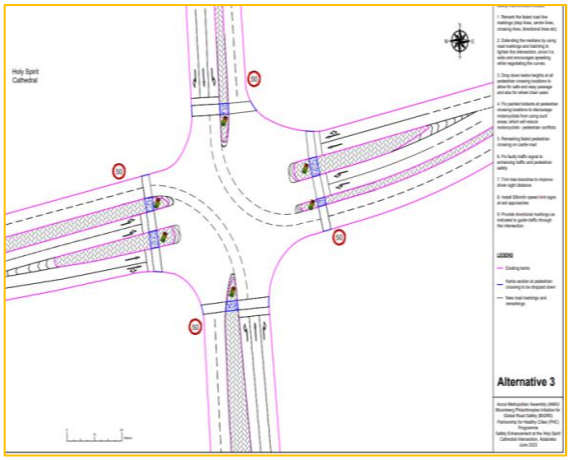
- Lowering kerbs heights at all pedestrian crossing locations to allow for safe and easy passage for pedestrians and for wheelchair users.
- Remarking all the faded road line markings (stop lines, centre lines, crossing lines, directional lines).
- Fixing painted bollards at pedestrian crossing locations to discourage motorcyclists from using such areas, which will prevent motorcyclist-pedestrian collisions.
- Remarking faded pedestrian crossing on the Castle Road.
- Installing 50km/h speed limit signs at the exit approaches of the intersection.
- Introducing junction lane definition markings.

The photographs below show some "before" and "after" effects.






*The intersection showing various approaches (Before intervention)*




*The intersection showing various approaches (After Intervention)*

After the implementation, about 250 people were educated on how to access the improved crossing locations. Data collected during the period showed that 100% of pedestrians perceive that the location of the crossings is efficient and convenient. Vehicular speeds have also reduced significantly from an average of 60km/h to 40km/h.

*Honourable Elizabeth K. Sackey (Mayor, AMA) together with BIGRS/Vital Strategies/WRI teams and various stakeholders during the inauguration of Holy Spirit Cathedral (HSC) safety enhancement work.*


*Journalists interviewing Mayor Elizabeth K. Sackey during the inauguration of safety enhancement works.*

*Journalists interviewing Samuel during the inauguration of safety enhancement works.*


*Rebecca (Bloomberg Philanthropies) together with the team during a site visit after completion of works.*


*Daniel (Vital Strategies) together with team during a site visit after completion of works.*

# Communications

## Mass Media Campaign

In 2023, BIGRS in collaboration with AMA, Kumasi Metropolitan Assembly (KMA) and the National Road Safety Authority undertook a national mass media campaign focused on speed enforcement. The campaign which targeted male drivers between the ages of 18 and 29 years reached 60% of the target audience with 74% of the target audience attesting to the positive impact the campaign had on their speeding habits.


NRSA PRO, Pearl Sateckla, speaking about the campaign on TV.


Police enforcement activities during the campaign.

Campaign billboard on the J.A Kufuor Avenue.

Campaign community sensitization, led by the NRSA.

## Post Campaign Evaluation

Post campaign evaluation for the mass media campaign begun immediately after the campaign came to an end. The team trained data enumerators and collected data to assess the success of the mass media campaign.

Training of data collection enumerators by the NRSA.

Easter campaign data collection exercise. Led by the NRSA research team.

## 2023 Road Crash Victims Remembrance Day

The World Day of Remembrance for Road Crash Victims was commemorated in November 2023 at Ghana's largest referral hospital, Korle-Bu Teaching Hospital. Stakeholders from different agencies led by the National Road Safety Authority converged at the hospital to commemorate the day and to visit road crash victims on admission at the accident and emergency ward. With funding from the NRSA, the team made cash donations to help discharge some financially constrained crash victims who were unable to settle their hospital bills despite being medically cleared.

Road crash victims Remembrance Day commemorative event held at the Korle-Bu Teaching

Dr. Opoku Amponsah (CEO of Korle Bu) delivering a speech at the event.

Stakeholders visiting road crash victims on admission


Street float to commemorate WDoR

## UN Global Road Safety Week

The UN Global Road Safety week is commemorated every year by local and international road safety agencies worldwide to draw the attention of policymakers on prevailing road safety issues. The 2023 event was themed "We demand safe and sustainable mobility". Stakeholders came together and held a commemorative event with some social media advocacy.


Mayor of Accra, Hon. Elizabeth K. Sackey posing with the UNGRSW card.

School children posing with the UNGRSW card

Participants at the UNGRSW commemorative event


Mayor of Accra signs her commitment to safer streets in Accra

## Media Coaching Workshop, Accra City Hall

Public Relation Officers (PROs) from road safety stakeholder institutions were brought together and taken through a media coaching workshop where government PROs were taught on how to better communicate in the media. About 25 PROs attended the event.

Ghana's Communication Officer speaking at the workshop

TV personality Kafui Dey speaks at the workshop

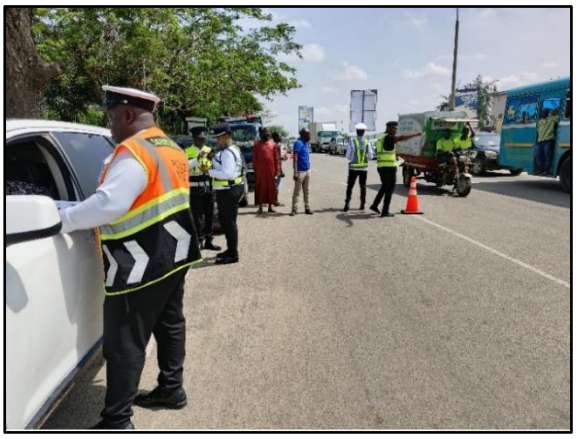
Ghana's Communication Officer (right) in a photo with Kafui Dey (middle)

Road Injury Surveillance Coordinator for Accra speaks at the event

## Enforcement

Enforcement operations on speeding plays a critical role in improving road safety[1]. Global Road Safety Partnership (GRSP) provided technical support to the Ghana Police MTTD on enhanced enforcement in Accra and adjoining areas.


Training the Police MTTD officers on how to operate the speed detection device. So far,10 training workshops have been provided for 292 police officers in Accra.



Speed enforcement on high-risk corridors in Accra

**Outcome of speed enforcement in Accra, 2023**

| Activity | Number |
|---|---|
| Speed enforcement exercise | 32 |
| Drivers moving beyond the speed limit | 623 |
| Drivers processed for court | 470 |
| Drivers cautioned and discharged | 154 |

Police participation in the production of the


On-site filming of the Public Service Announcement (PSA).

Procurement of enforcement accessories for the Police MTTD in Accra


Accessories included 120 cones, 100 signages and 250 reflective vests

## Road injury surveillance system strengthening

Routine monitoring of traffic crash data is an important component of promoting road safety[24]. Improving the accuracy and reliability of data is important to assess the magnitude of the problem at hand, track trends, analyze spatial patterns, provide insights for planning, prioritise resources, and implement and evaluate interventions.

Training of city staff on crash data abstraction and identification of crash location coordinates.

Extraction of crash data from police reports.

Entry of police crash data at the AMA Data Unit.

## Launch of the 2023 Accra Status Summary report

The Status Summary Report (SSR) produced by Johns Hopkins International Injury Research Unit (JH-IIRU) with the support of their local collaborators, Building and Roads Research Institute (BRRI), presents information on the prevalence and risk of speeding in the city. The report shows a direct relationship between speeding and severe crash outcomes. It also provides recommendations to reduce speed levels and improve the safety of all road users in the city.


Stakeholders at the launch of the 2023 Accra Status Summary Report (SSR).


A panel discussion on how stakeholders can leverage on the SSR to improve crash outcomes in the city.

## Efforts to promote data use culture among stakeholders

Road Safety Council (RSC) meeting with mainstream stakeholders to leverage on data to inform and guide safety interventions.

JHU/BRRI supports data use workshop to inform and update stakeholders on the risk of speeding.

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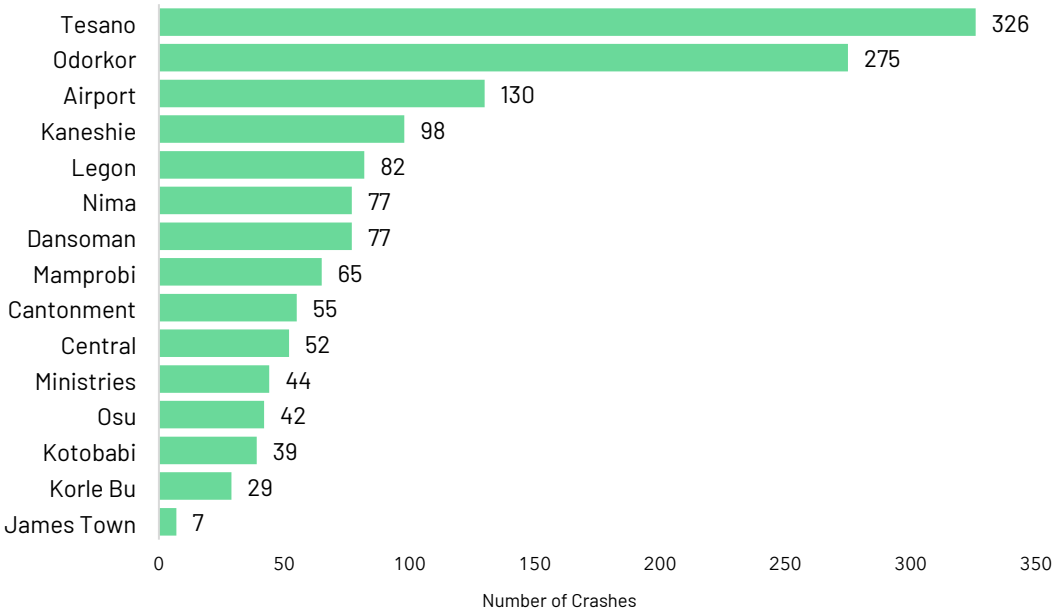
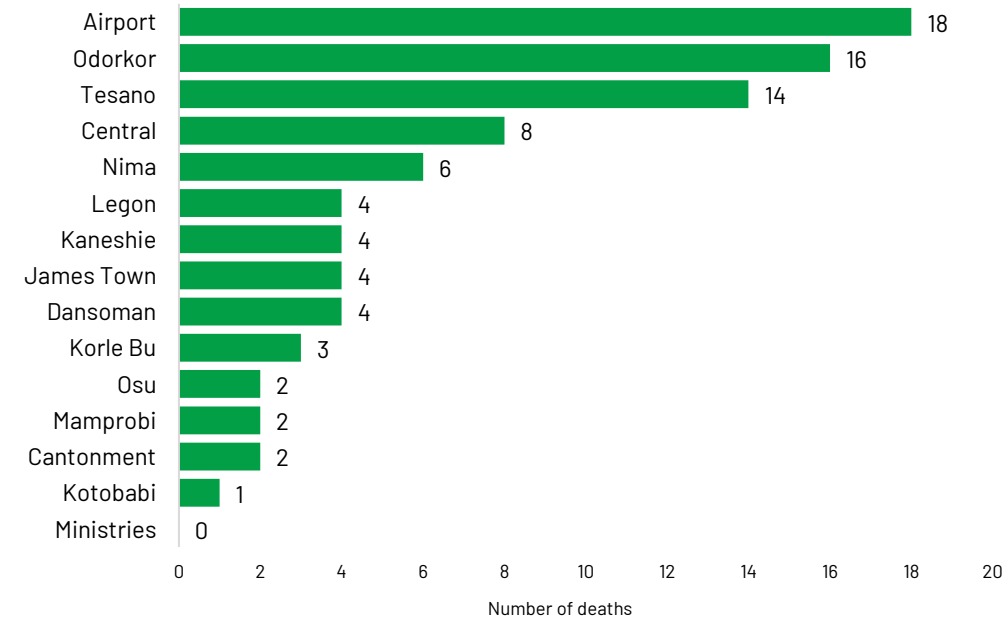
# Appendices

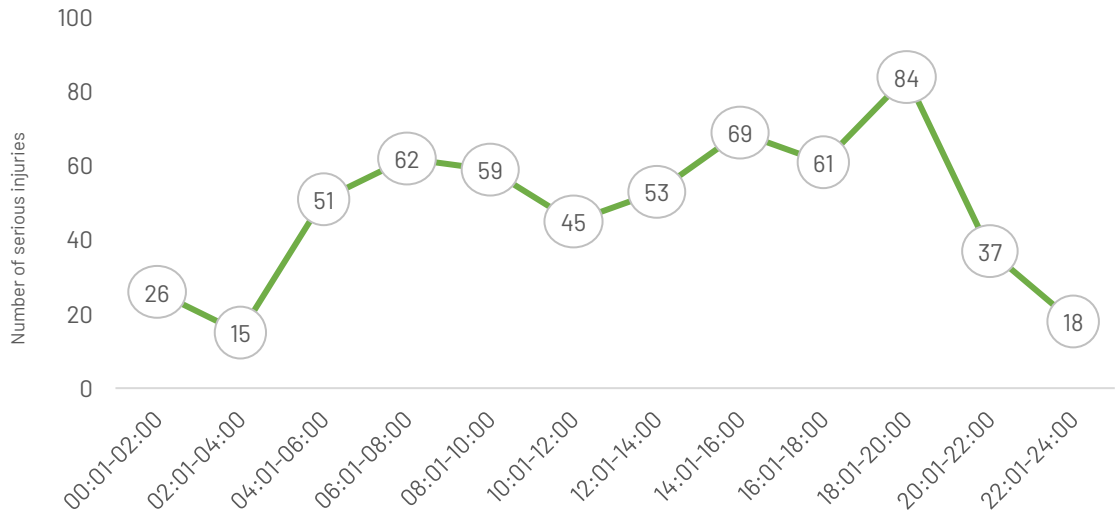
### Appendix 1. Number of reported road crashes by police stations, 2023




### Appendix 2. Number of reported road deaths by police stations, 2023



**Appendix 3. Serious injuries by time of day, 2023**




**Appendix 4. Crashes and serious injuries by day of week and time, 2023**

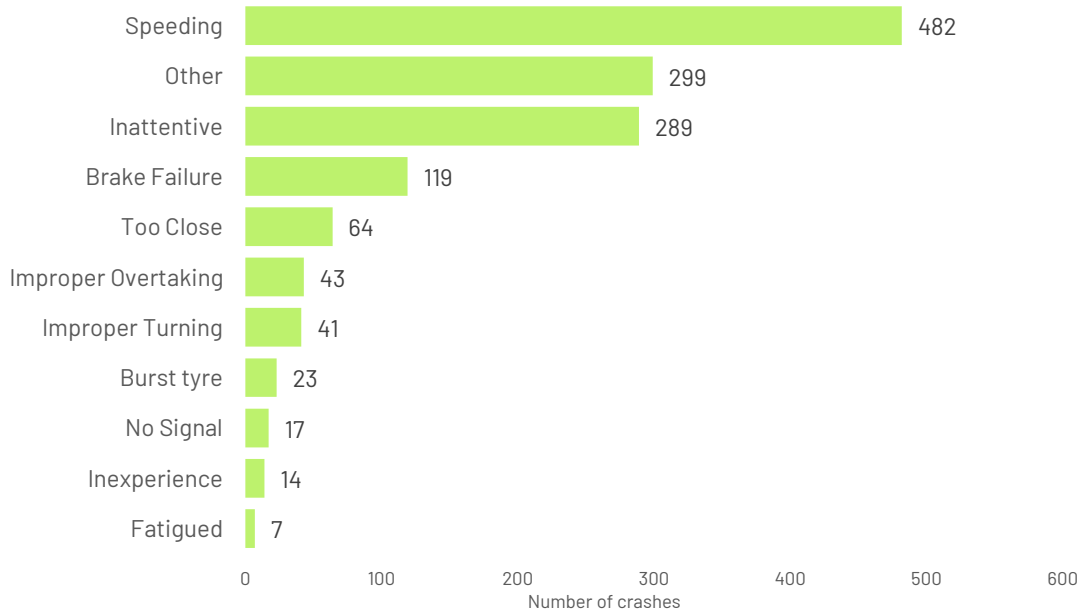
**Crashes by day of week and time**

| Time | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|---|---|---|---|---|---|---|
| 00:01 - 04:00 | 6 | 2 | 4 | 8 | 4 | 14 | 13 |
| 04:01 - 08:00 | 32 | 21 | 27 | 26 | 26 | 19 | 24 |
| 08:01 - 12:00 | 46 | 42 | 43 | 46 | 43 | 44 | 35 |
| 12:01 - 16:00 | 52 | 48 | 31 | 43 | 56 | 48 | 31 |
| 16:01 - 20:00 | 55 | 64 | 46 | 50 | 52 | 48 | 47 |
| 20:01 - 24:00 | 25 | 22 | 12 | 27 | 39 | 35 | 37 |
| **Total** | **216** | **199** | **163** | **200** | **220** | **208** | **187** |

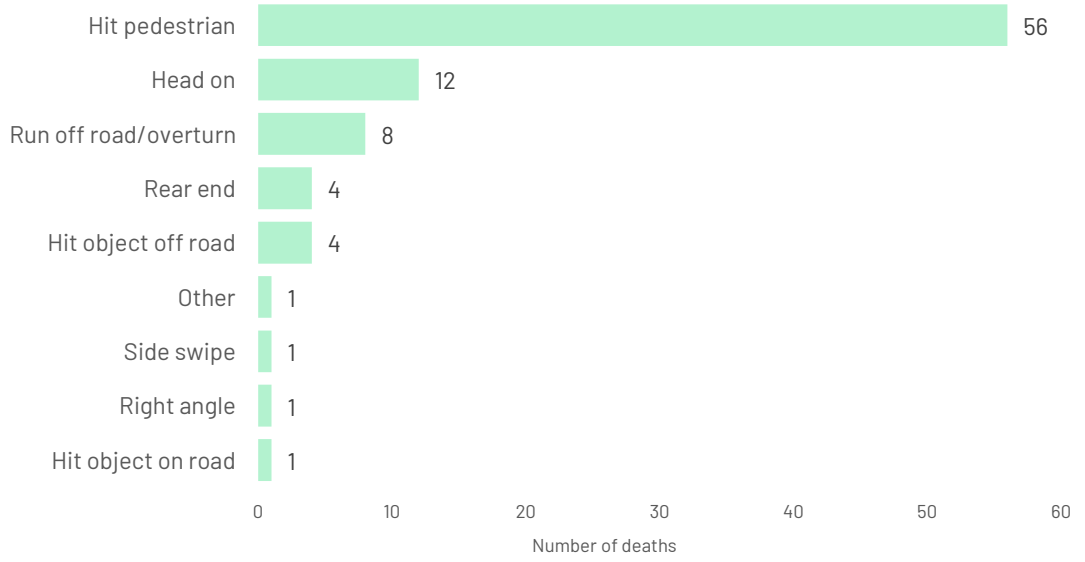
**Serious injuries by day of week and time**

| Time | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|---|---|---|---|---|---|---|
| 00:01 - 04:00 | 2 | 1 | 4 | 5 | 0 | 4 | 11 |
| 04:01 - 08:00 | 19 | 9 | 6 | 14 | 21 | 6 | 11 |
| 08:01 - 12:00 | 14 | 13 | 13 | 28 | 14 | 26 | 18 |
| 12:01 - 16:00 | 20 | 20 | 11 | 8 | 19 | 10 | 20 |
| 16:01 - 20:00 | 18 | 16 | 24 | 22 | 18 | 17 | 13 |
| 20:01 - 24:00 | 14 | 7 | 9 | 16 | 9 | 28 | 22 |
| **Total** | **87** | **66** | **67** | **93** | **81** | **91** | **95** |

**Appendix 5. Crashes by suspected casual factor, 2023**




**Appendix 6. Deaths by collision type, 2023**



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