



Road crashes in Uganda: What are the key concerns?

Overview

Road crashes are a growing development and public health issue. Road traffic injuries are now the leading killer of people aged 5-29 years. The *Global Status Report on Road Safety, 2018*, launched by the World Health Organisation (WHO) in December 2018, highlights that the number of annual road traffic related deaths reached 1.35 million.

Reports indicate that in Uganda, more than 10 lives are lost to road crashes daily. In the year 2021 alone, Uganda Police Force (UPF) reported 4,159 road crash fatalities and 12,589 serious injuries (*Ministry of Works and Transport, 2021*). More than half of these fatalities are among vulnerable road users: pedestrians, passengers, cyclists and motorcyclists.

Further, the latest WHO data published in 2020, reported that Road Traffic Crash Deaths in Uganda reached 6.27% of total deaths. The Age Adjusted Death Rate was 53.60 per 100,000 of population thus ranking Uganda number six in the world. The road safety situation in Uganda therefore is a challenge with the people's attitude getting poorer every passing day.

The National Road Safety Action Plan (2021/22 – 2025/26) that has been aligned to the global plan for the Decade of Action for Road Safety (DARS) 2021 – 2030 developed by WHO is the principle document currently guiding road safety improvement in Uganda. The plan calls for a systematic approach to road safety improvement through the multimodal transport and land-use planning; safe road infrastructure, safe vehicles, safe road use and post-crash response. Nonetheless, to successfully implement the action plan, a significant commitment resources will be required, particularly by the Government of Uganda (GoU).

There is evidence that road safety has not benefitted from increased spending on the road sector of Uganda. While the sector has received about 18.7% of the National Budget in recent years, road safety allocations have remained at less than 1% of the transport budget. This therefore calls for low cost but effective approaches.

This briefing paper delves into the road crash statistics of concern in Uganda; the economic loss; and the low cost road safety interventions that need to be urgently implemented to improve the situation. The focus areas based on the crash statistics are highlighted as well.

Key Issues

1. The road safety situation in the country is worsening.
2. Human factors are the leading cause of road crashes.
3. Less than 50% of the paved road network has road signage and there is inadequate street lighting.
4. The number of crashes attributed to vehicle conditions increased by 123% (2016-2021).
5. The highest number of road crashes occur in the Kampala Metropolitan Area.
6. The school going and the most productive ages (18-44 years) suffer more road crashes.

Background

According to the Uganda Bureau of Statistics (UBOS), Uganda's population was estimated to be over 47.1 million in July 2021, while records at the Uganda Revenue Authority (URA) indicate the number of motor vehicles on the road to be about 1,889,109. As a result, there has been increased mobility by road across the country. It is a common fact that as motorisation increases, road crash incidents are likely to increase too.

Road crashes create a tremendous burden on the economy; public health system; but also on the victims and their families at various levels with the poor and the vulnerable being disproportionately affected. Although road crashes and the associated injuries are preventable through appropriate actions, statistics suggest a dramatic increase in the coming years. Road accidents, therefore, have the potential of being one of the largest challenges to orderly human existence necessitating immediate and urgent intervention. Many fatalities and serious injuries along the national road network are registered by the police as head-on collision crashes. The road corridors are risky with several crash hot spots recognized by fleet operators that require remedial measures to improve road safety.

Road Safety Diagnostics in Uganda

To develop a relevant and responsive action plan, it is imperative to establish a good understanding of the context and provide an evidence-based outline of the current road safety challenges in Uganda as a key component of the plan.

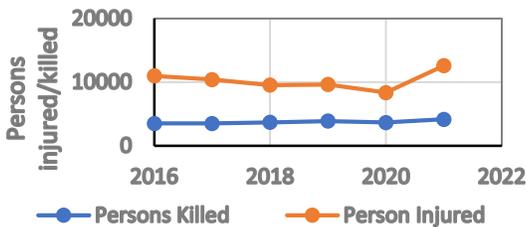


Therefore, Uganda’s positioning and the context in terms of road crash statistics is a step towards understanding how best to improve road safety. Road safety statistics are important because they show the areas of dire need. The following have been highlighted:

a) Road crash injuries/deaths

The number of fatalities is one of the many indicators used to assess the state of road safety in a country. According to the reported accident data by UPF over the last few years (2016 – 2021), fatality and injury due to road crashes have generally increased (Figure 1), showing a worsening road safety situation in the country.

Figure 1: Persons Involved in road crashes (2016-2021)



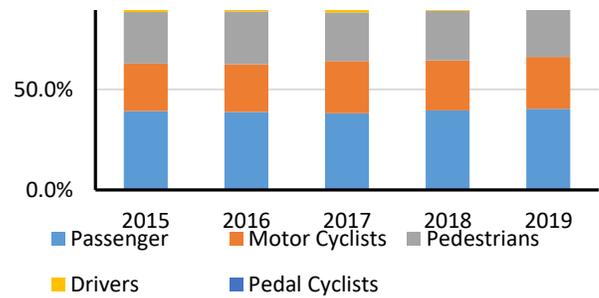
Source: National Road Safety Action Plan 2021/22 – 2025/26, Ministry of Work and Transport (MoWT)

b) Share of road crashes by type of user

Over the years, the major victims of crashes on Uganda’s roads were passengers, motorcyclists and pedestrians in that order (Figure 2). Studies conducted by the Uganda Police Force show that passengers and motorcyclists account for over 50% of the crashes reported. Most of the crashes, therefore, occur in motorised transport modes than non-motorised means. This can be explained by the fact that the number of vehicles on the roads has increased and as well as the fact that few persons are using non-motorised transport such as cycling.

Associated with the increase in vehicles is the high dependency of Ugandans on personal vehicles as a mode of transport. The high number of pedestrians suffering crashes is partly because most of Uganda’s roads lack designated walkways to facilitate easy and safe walking. Additionally, at times drivers utilise road shoulders and walkways (where they exist) without considering the pedestrians. In Kampala, the pedestrians are further pushed onto the carriageway by the vendors.

Figure 2: Percentage share of road crashes by user type



Source: UBOS; Statistical Abstract (2020)

c) Share of road crashes by cause

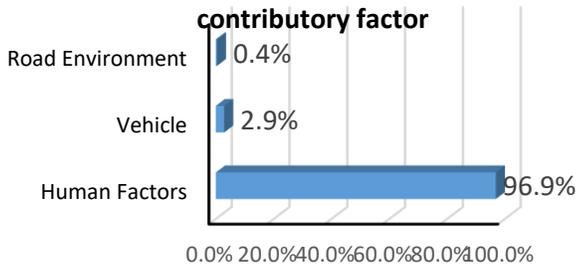
To assist with the identification of the difficulties underlying the crash rates, analysis of the causes of fatal crashes, in particular, is useful. The causes of crashes can be categorized broadly into three contributory factors: road user behaviour/ human factors; vehicle factors; and road environment. The human factors are to do with the attitudes of the users. Over the years (2015 – 2021), human factors were recorded as the main enablers of road crashes (96.9%) followed by vehicle and road environment factors (Figure 3) respectively. As such, most of the efforts aimed at reducing road crashes must be towards understanding why these human factors exist and how to reduce the possibilities of their occurrence.

The main human factors leading to road crashes in Uganda are careless driving; dangerous driving; careless pedestrians; and overspeeding. Carelessness on the road is viewed in form of failure to pay attention on the road, disrespect of road safety regulations such as ‘jumping’ the red light (as seen among commercial motorcyclists/ *bodaboda* and some errant motorists at junctions); and unnecessary overtaking especially on highways. This points to a poor mindset and attitude; and weak compliance with traffic regulations.

Reports also suggest that the alarming statistics are emanating from the general lack of knowledge among road users about the rules of the road, and their willingness to abide by those rules. This is coupled with inadequate enforcement and limited follow-up on fines imposed on the offenders, resulting in the current “culture of impunity” on Ugandan roads. Therefore, efforts to prevent the above factors should be targeted as they could greatly contribute to the reduction in road crashes and fatalities.



Figure 3: proportion of crashes per contributory factor



Source: National Road Safety Action Plan 2021/22 – 2025/26, MoWT

In terms of the vehicle factors, over 90% of the vehicles imported into Uganda are second hand and there is no clear mechanism to inspect vehicles (brakes, steering system, tyres, lighting system etc.) regularly. There was a substantial increase in the number of crashes attributed to the condition of vehicles from 475 in 2016 to 1,059 in 2021 (equivalent to 123%). This points to the escalation of the problem if neglected further. Mandatory vehicle inspection was suspended over 20 years ago and the effort to re-introduce inspection met resistance from different circles in the country. The four (4) centres set up in 2016 by Société Générale de Surveillance (SGS) to ascertain vehicle roadworthiness are not functional to date. This impedes controlling the condition of vehicles plying the roads in Uganda. The implementation plan of the vehicle inspection, as laid out in Schedule 1 of the Traffic and Road Safety (Motor Vehicle Inspection) Regulations (2016), was not popular as it charged higher rates for smaller/lightweight cars compared to heavy goods vehicles.

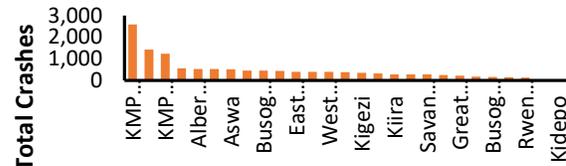
Poor road environment in form of inadequate or inappropriate road signage and markings, roadside hazards, and traffic mix resulting in obstacles on the carriageway contributed to 0.2% of the total crashes. In Uganda, less than 50% of the paved road network has road signage, there are no pedestrian crossings, and in a few cases where they exist the pedestrian crossings and other road markings are worn off; and there is inadequate street lighting in the urban and rural areas.

d) Share of road crashes by region

Figure 4 shows the share of crashes per region as categorized by the UPF concerning the total crashes reported. Accordingly, most crashes occur in Kampala Metropolitan (KMP) Area, Rwizi, Aswa, Greater Masaka, Albertine, Rwenzori, Wamala, Kyoga and Bukedi. The crashes mostly occurred in urban areas compared to rural areas. This is due to the high volume of transport operations coupled with the presence of roadside human activities, and the unmanaged mix of motorised and non-motorised users. Therefore,

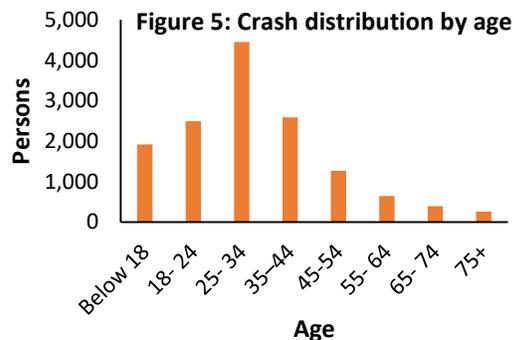
the planned road safety measures should prioritize high crash severity areas as shown in Figure 4.

Figure 4: Crash share by region



Source: Statistical Abstract (2020)

e) Age affected by crashes



Source: Statistical Abstract (2020)

A significant number of persons affected by road crashes are between 18-44 years (Figure 5). Therefore, school-going (below 18) who are vulnerable and the productive/working ages are the most involved users in road crashes in Uganda. This has cost Uganda dearly particularly in terms of the loss of a significant proportion of its economically active population, which in turn retards its economic growth and development. For poor households which make up a majority of road traffic injury victims, the combined effects of health costs and loss of livelihood can put the poor and vulnerable families into the vicious cycle of debt and poverty. Without strong social safety nets, the affected persons will face a lifetime of physical pain, as well as loss of wage earnings, mobility, and capacity to provide for their families.

Economic loss of road crashes

In monetary terms, according to the WHO, road traffic deaths and injuries in low and middle-income countries (Uganda inclusive) are estimated to cause economic losses of 5% of GDP. Therefore, with a nominal GDP of Ug shs 147.962 trillion in FY2020/21 (UBOS, 2021) this translates into Ug shs 7.398 trillion higher than the East African average of about Ug shs 6.229 trillion (US\$1.7bn) per year.



At the micro level, treating a road crash victim to recovery in Mulago National Referral Hospital which is one of the health facilities where victims are rushed (45–70 victims on a normal day) costs on average Ug shs 13.66 million and 90% of these costs are incurred by the GoU (Walekhwa & Mulolo, 2022), and thus exerting more pressure on the health care system. These are funds that could be used on other developmental ventures in communities. Therefore, there is a need for commitment to securing road safety to avoid these high economic burdens arising from road crashes.

Conclusion

Road crashes are still a challenge in Uganda as seen from the growing statistics. The scale of the current road safety interventions to the growing road safety crisis does not match the size of the problem although there are steps in the right direction. Improving road safety through the low-cost interventions known to work needs to be implemented with due urgency, ranging from education, engineering and enforcement. Importantly, initiatives to improve the conditions would require renewed commitment from all the stakeholders and considerable resources both financial and personnel to attain sustainability of effective road safety programs.

Low-cost countermeasures for road safety improvement

Low-cost countermeasures refer to interim alternative measures to total construction of the road at high crash locations or severity areas/regions. These measures are said to reduce road crashes by at least 35%. The low-cost measures usually take an integrated, and multidisciplinary approach to reduce road crashes, consequent injuries, and economic losses. These are broken down into three (3) broad categories.

1) Intensified Enforcement and Safety Education Measures: It is important to intensify enforcement and educational programs to alleviate the problems of road crashes. These should target more of the high crash severity areas. The current level of traffic law enforcement, and road users' education by the UPF and MoWT is exceedingly low. The enforcing organisations need to be adequately equipped with modern equipment and vehicles, and well-trained staff.

The UPF should enforce the compulsory use of helmets for motorcycles, effective enforcement of laws and sanctions against alcohol-impaired drivers, and compulsory use of seatbelts by motor vehicle operators and occupants. Road safety education,

especially for children/school-going persons is an effective tool for better road users' behaviour on road. Public education through community leaders and local officials should be done repeatedly.

2) Road safety engineering aimed at improving the road environment; such as the provision of a wider shoulder, adequate pedestrian facilities like crossings, walkways and safety zones, improvement of narrow/deteriorated bridges, culverts and lanes, and traffic calming measures. These will create safety zones for cyclists and pedestrians. In the long term, the MoWT/Uganda National Roads Authority (UNRA) should produce a high-quality road design system with an increased length of divided highways able to separate traffic within areas with high crash severity. Such road sections have a better safety record than undivided highways.

3) Road Safety Audit technique involves identifying highway designs and operational aspects which would have contributed to the occurrence of road crashes and which would otherwise have been overlooked. The audit focuses on explicit safety implications and recommends desirable changes or modifications appropriate to the local safety needs or standards.

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