

‘It Must Not Happen Again’: Achieving Vision - Zero Road Traffic Fatalities through Safe System Approach

Globally, road crash is a public health problem. Every year 1.19 million people are killed on the road with another 50 million people suffer injuries, including lifelong disabilities (WHO, 2023). Road crashes are the leading cause of death for children and youth aged 5 to 29 years, making road injuries more fatal than tuberculosis or HIV/ AIDs (WHO, 2018). About 92% of road fatalities occur in low- and middle-income countries with an annual economic cost of \$1.7 trillion (WHO, 2023; FIA, 2025). Similarly, road traffic injuries affect most those in their prime working age, between 15 and 64 years old. Under Business -As-Usual scenario, estimated 13 million deaths and 500 million injuries will be added in 2030, resulting in more than US\$20 trillion loss to the global economy (UNECE/WHO, 2021; Pulido and Raffo, 2022).

In Nigeria, road traffic crashes are the third leading cause of overall fatalities (FRSC, 2021). Between 1960 and 2024, road crashes claimed 400,000 lives and close to 1.5 million injuries (FRSC, 2024). For example, fatalities from road crashes rose from 1083 deaths in 1960 to 5421 deaths in 2024, an increase of more than 500%. This figure suffers significantly from non and under-reporting due largely to improper data collection and poor technology. An estimate from the World Health Organization based on global road fatality modelling put road fatalities in Nigeria at 36,772 in 2023 (WHO, 2023).

The need to reverse the damaging consequences of road crashes and the diminishing impact of traditional method of road safety led many high-income countries to adopt the Safe System with the ultimate aim of achieving Vision Zero (eliminate deaths and serious injuries). The Safe System approach is based on a more fundamental understanding of human fallibility and vulnerability where the ultimate responsibility for road safety is shifted from the individual road user to those who are responsible for various functions of the transport system. The principles of Safe System approach include people make mistakes, human body has a limited ability to tolerate crash forces, road safety is a shared responsibility among the shareholders and no death or serious injury is accepted because *every life counts*. Vision zero represents the target for eliminating traffic fatalities and severe injuries, while the Safe System approach is the strategy for achieving it.

Therefore, adopting safe system approach through efficient road design, landuse and transport integration, enforcement of traffic laws, investment in post-crash initiatives and modern technology, improved road crash data, mainstreaming road safety into Nigerian school curriculum as well as appropriate funding will not only enable developing countries, particularly Nigeria, to meet the road safety target of halving road fatalities by 50% in 2030 but also put the country on the path of achieving vision zero in road traffic fatalities, reaching a destination where we can safely say ‘It is Not Happening Again!’

My research interests have provided illuminations and insights into road transport infrastructure, road users behaviour, pedestrian safety, post -crash initiatives and transport safety of vulnerable road users with ultimate aim of reducing or eliminating severe road traffic injuries and fatalities.