**Analysis of Road Traffic Accidents in Kenya**

**Research Questions**

**1. How do road traffic death rates vary across continents and African countries, and where does Kenya rank globally and regionally over recent years?**

* Includes global trends in average road traffic fatality rates.
* Evaluates Kenya’s standing in context and discusses contributing factors.

**2. How has the frequency and severity of road crashes evolved over time across Kenyan counties, and are specific regions becoming increasingly dangerous?**

* Incorporates analysis of historical trends in crashes and fatalities.
* Includes a focus on **blind spots** on major highways (e.g., A104, A109) and **regional high-risk zones**.

**3. What are the spatiotemporal patterns of road crashes within Nairobi and its environs?**

* Examines crash density by neighborhood/location.
* Identifies hotspots by time (hour, day, season) and geography.
* Assesses correlation with pedestrian and fatality involvement.

**4. How has the distribution of road crashes in Nairobi changed across years, and are there identifiable demographic patterns (e.g., age, gender, victim type)?**

* Explores long-term trends within Nairobi.
* Investigates victim profiles: pedestrian, passenger, rider.

**5. How do road crashes in Nairobi vary by month and quarter, and what seasonal trends can be observed?**

* Investigates cyclical or environmental influences (e.g., rainfall, holidays).

**6. How do crash characteristics differ by day of the week, and what are the weekday vs weekend variations in fatality and pedestrian involvement?**

* Dissects daily crash distribution.
* Focus on behavioral or traffic flow differences by weekday type.

**7. How does crash frequency and severity vary by time of day, and are specific hours (e.g., peak commuting times) associated with higher crash risk?**

* Identifies crash peaks during morning and evening commute windows.
* Correlates with pedestrian/matatu keyword presence.

**8. To what extent do matatus and motorcycles feature in road crash reports, and how does their presence relate to severity across time (hour, day, month)?**

* Analyzes frequency and timing of matatu/motorcycle involvement.
* Assesses perceived risk and crash narrative based on keyword mentions.

**9. What are the primary causes of road traffic accidents globally, in Kenya, and specifically in Nairobi over time?**

* Historical attribution from early 2000s to present.
* Discussion of infrastructural, behavioral, policy-related, and vehicle-related factors.

**10. How do emergency response time and proximity to healthcare facilities influence fatality outcomes in Nairobi crashes?**

* (If data allows) Links crash location to hospital accessibility.
* Evaluates spatial vulnerability in relation to emergency services.

**DATA**

**1. Newly released dataset maps 30,000 road crashes in Nairobi using crowdsourced data:** <https://blogs.worldbank.org/en/opendata/newly-released-dataset-maps-30-000-road-crashes-in-nairobi-using>

2. **Road Accidents in Kenya**

**Analysis of Crowd-Sourced Road Crash Data for Accidents within Nairobi, Kenya** by Adrian Julius Aluoch

<https://rpubs.com/adrianjuliusaluoch/road_accidents_in_kenya>

3. **Road Crashes: 2407 Kenyans Die in First Half of 2024 by Joshua Isaac**

<https://news.scienceafrica.co.ke/road-crashes-2407-kenyans-die-in-first-half-of-2024/>

4. **Road traffic injuries by WHO**

<https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>

5. **Over 4,700 killed as Kenya records 11.8 per cent rise in road crashes in 2024**

<https://eastleighvoice.co.ke/national/146651/kenya-records-11-8pc-rise-in-road-crashes-in-2024>

6. **NTSA report reveals 3,581 road deaths in 2024/25, marking 10% surge**

<https://www.thekenyandiaspora.com/stories/3209/NTSA-report-reveals-3581-road-deaths-in-202425-marking-10-surge>

7. **Nearly 12 Kenyans killed in road accidents daily - NTSA**

<https://www.citizen.digital/news/nearly-12-kenyans-killed-in-road-accidents-daily-ntsa-n361168>