

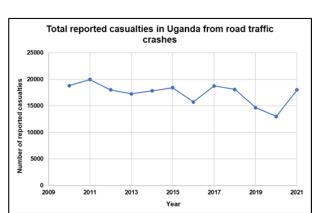
UNECE – Global Forum for Road Traffic Safety (WP.1) 87th Session, Tuesday 26 September 2023 Palais des Nations, Geneva

An Investigation of the Economic Impact of Road Safety Valuation Models on Road Safety Investments in Iow-income Countries

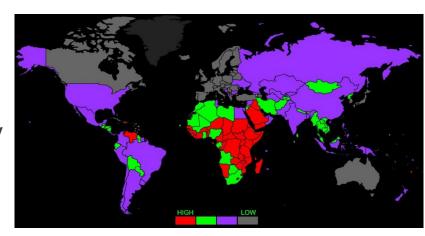


# **Background**

- RTIs are the leading cause of death for 5–29-year-olds
- > 1.3 million deaths per year globally (Global road safety report, 2018)
- 93% deaths occur in low- and middle-income countries







Rate of Road traffic deaths globally www.worldlifeexpectancy.com



Source: CARE (EU database on road crashes)

60.000

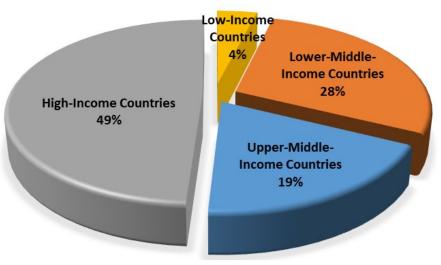
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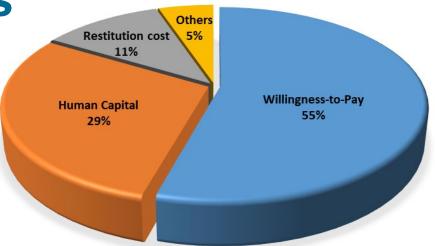
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**Problem and Needs** 

 Road safety valuation models can be used to evaluate economic impact of RTIs.

 A systematic review helped identify which valuation model could be applicable for LICs.





- Existing models have not been developed using LIC data specifically.
- Lack of publications in LICs





# **Innovation and Challenges**

- Develop a road safety valuation model applicable to LICs and developed using LIC data.
- Lack of accessible data large barrier to entry for research.
- Poor quality of available data.
- Very high levels of underreporting.

#### Case study: Uganda

Uganda's Population, 2016	41,487,964	
Uganda's Reported Road Fatalities, 2016	3,503	
WHO Estimated Fatalities, 2016	12,036	
WHO Est. Fatalities per 100,000 Pop., 2016	29	



### **Outputs**

- Investigating the suitability of current models for LICs.
- Collection of data from Uganda as a case study.
- Investigation of the applicability of our developed model versus existing models

	Lower	Central	Upper
Value of fatality	60*GDP/Capita	70*GDP/Capita	80*GDP/Capita
value of fatality	00 GDP/Capita	70 GDP/Capita	00 GDP/Capita
Value of serious	12*GDP/Capita	17*GDP/Capita	24*GDP/Capita
injury	(20%VSL)	(25%VSL)	(30%VSL)
Number of serious			
injuries to number of			
fatalities	8	10	12

The true cost of road crashes, McMahon and Dahdah (2008)



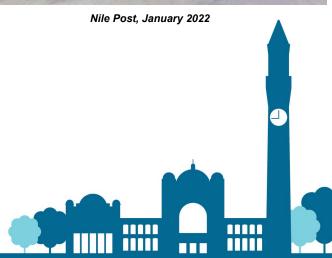
# **Impact**

- Enable a more realistic description of the economic impact of road safety in LICs.
- Improve the choice of countermeasures.
- Enhance the prioritization of countermeasures implementation.
- Provide improved data management pertinent to the LICs conditions.



The Capital Times, April 2020









# **THANK YOU**

An Investigation of the Economic Impact of Road Safety Valuation Methods on Road Safety Investments in Low-income Countries

**CHARITY NANKUNDA** 

