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Vision Zero for the Caribbean Using the Systemic Approach for Road Safety: A Case Study Analyzing Jamaican Road Crash Data (Ongoing)

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Abstract : The Second Decade of Action Road Safety has begun with increased focus on countries who are disproportionately affected by road fatalities. Researchers highlight the low effectiveness of road safety campaigns in Latin America and the Caribbean (LAC) still reporting approximately 130,000 deaths and six million injuries annually. The regional fatality rate 19.2 per 100,000 with heightened concern for persons 15 to 44 years. In 2021, 483 Jamaicans died in 435 crashes, with 33% of these fatalities occurring during Covid-19 curfew hours. The study objective is to conduct a systemic safety review of Jamaican road crashes and provide a framework for its use in complementing traditional methods. The methodology involves the use of the FHWA Systemic Safety Project Selection Tool for analysis. This tool reviews systemwide data in order to identify risk factors across the network associated with severe and fatal crashes, rather that only hotspots. A total of 10,379 crashes with 745 fatalities and serious injuries were reviewed. Of the focus crash types listed, 50% of 'Pedestrian Accidents' resulted in fatalities and serious injuries, followed by 32% 'Bicycle', 24% 'Single' and 12% of 'Head-on'. This study seeks to understand the associated risk factors with these priority crash types across the network and recommend cost-effective countermeasures across common sites. As we press towards Vision Zero, the inclusion of the systemic safety review method, complementing traditional methods, may create a wider impact in reducing road fatalities and serious injury by targeting issues across network with similarities; focus crash types and contributing factors.

Keywords : systemic safety review, risk factors, road crashes, crash types
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