ANALYSIS OF ROAD SAFETY IN WESTERN AMAZON: A STUDY OF PEDESTRIAN AND CYCLIST CROSSINGS ON THE BR-364 HIGHWAY IN THE CITY OF VILHENA/RO

THAÍS MOREIRA COSTA, Academic | IFRO– Instituto Federal de Rondônia, Brasil
FELIPE SÉRGIO BASTOS JORGE, Me. | IFRO – Instituto Federal de Rondônia, Brasil
ALEXANDRE VIEIRA SABOIA, Me. | IFRO – Instituto Federal de Rondônia, Brasil

1. INTRODUCTION

This study aims to analyze pedestrian and cyclist crossing conditions on the BR-364 highway, which bisects the city of Vilhena, in Rondônia. Although the Brazilian Traffic Code (CTB) provides guidance on road safety in the country, conflicts between pedestrians, cyclists and motorized vehicles are a reality in the locality, aggravated by inadequate urban planning. These conflicts reflect the lack of adapted infrastructure, with pedestrians being the most affected party, as they are vulnerable, since they expose their own lives in an attempt to cross these routes (PESSOA, 2019).

For Bartolomeos et al. () the exposure of pedestrians along the road and their consequent vulnerability can be solved with the implementation of traffic engineering measures. These measures can lead to a reduction in the volume of vehicle traffic or the separation of pedestrians from cars.

In the context of Vilhena, pedestrians and cyclists are subject to traffic risks, given the demand for heavy vehicles crossing the city and the lack of road safety equipment at the traffic circles that cross the urban stretch of the BR-364 highway.

The research aims to identify the challenges related to this crossing and propose solutions based on the community's point of view as well as road safety regulations. With this, the aim is to subsidize public bodies for future interventions and promote sustainability in the city, since it will meet social demand.

2. METHODOLOGY

We carried out bibliographic studies and on-site data collection at the 5 traffic circles located in the city (Figure 1), taking photographs and counting users at specific times of the day (from 11:00-12:00). An online questionnaire was administered to pedestrians and cyclists who use the road.

Figure 1: Location of the traffic circles analyzed.
Source: Authors.

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3. RESULTS

According to the survey carried out, the lack of safe and accessible crossing conditions at the traffic circles studied is notorious. The number of users, especially cyclists, who take their chances in the midst of vehicles is high, according to the photographic survey. It can also be inferred, extrapolating the user count for all business hours, that interventions at the crossings to ensure user safety would serve a significant portion of the municipality's population.

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