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GAP ACCEPTANCE AND DRIVER BEHAVIOUR AT INTERSECTION IN MINNA, NORTH CENTRAL NIGERIA

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ABSTRCT

The heading, spacing distribution and gap acceptance were measured from two main intersections in Minna, central Nigeria. The second and spacing for stadium junction are 2.39 second and 11.08m respectively, and that of Mustapha hospital junction are 2.28 second and 9.58 respectively. The gap sizes at the intersection ranges between 1 and 57 seconds. Drivers accept gaps ranges from 2.89 to 3.72 seconds with an average of 3.2 seconds at Mustapha hospital junction and the average time of movement is 2.06 seconds. Similarly drivers accept gaps ranging from 3.60 seconds and 4.5 seconds with an average of 4.06 seconds at Stadium junction and the average time of movement is 2,69 seconds. Comparing these value with the respective critical gaps from the Highway Capacity Manual shows that only values from stadium junction get close. This shows that the delays at the intersections are due mostly to driver impatience and intolerance which at times lead to accidents at rhe intersections. Hence , it can be concluded that traffic accidents at the intersections are due to mostly to driver judgment rather than gap availability.

Keywords: Gap Acceptance, critical gap, driver, behaviour, intersections