## Analysis of Freight Vehicles' Proportion and Composition in Urban Traffic of Lagos State, Nigeria

By

Tolu Isaac Atomode

Department of Geography, Federal University Lokoja,

M. B. 1154, Lokoja, Kogi State, Nigeria

toluwaseisaac@gmail.com

+2348034188577

## Abstract

The paper examined the proportion of freight vehicles in urban traffic as well as their composition in Lagos State, Nigeria. Classified traffic volume counts were obtained from Lagos Metropolitan Area Transport Authority (LAMATA). The counts was conducted at major traffic hotspot/bottleneck on 20 major transport arteries in the study area. Vehicles were categorized into two groups: freight vehicles, and non-freight vehicles through a continuous count of all vehicle types that passed through the predetermined points/stations. This was done manually for the period of 13 hours (6: am to 7: pm) for a week (Monday to Sunday) of which the average was used. Descriptive statistics such as averages, tables and charts were used for the analysis. Findings revealed that freight vehicles constitute 8% of the total vehicular traffic compared to the 92% for passenger vehicles in Lagos State. The proportion however varies across the State. Higher proportions of freight vehicles in traffic were recorded from major freight attracting and generating zones, such as Apapa (26%), Epe (19%), among others. Analysis of the freight vehicles' composition revealed that small trucks, pickups and small van have the highest (46.66%) share of freight traffic. Heavy trucks, trailers and containers constitute 36.31%, while medium trucks recorded a share of 21.03% of the freight traffic. Although, the proportion of freight vehicles in traffic is seemingly insignificant, the effective functioning of the urban economy is highly dependent on efficient freight movements. The study therefore recommends that efforts are required to provide substantial transport infrastructure and access facilities for freight vehicles especially in the major freight generating and terminating zones.

Keywords: Composition, Freight Vehicles, Proportion, Traffic Counts, and Urban Traffic