

TRAVEL BEHAVIOUR OF HOUSEHOLDS IN PERI-URBAN AREAS OF IBADAN, NIGERIA

BY

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**B.Sc. (Hons) URBAN AND REGIONAL PLANNING
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This is to certify that this research work was carried out by OLADEJI Peter Bolaji, with registration number EDMP13/14/H/0281 under the supervision of Professor Samson Olawale FADARE of the department of Urban and Regional Planning, Faculty of Environmental Design and Management, Obafemi Awolowo University, Ile Ife.

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DEDICATION

This research work is dedicated to God the Father, the Son and the Holy Spirit for His loving kindness and grace that endures forever in my life.

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ABSTRACT

The study examined the travel behaviour of residents in peri-urban areas of Ibadan, Oyo state. It examined the socio-economic characteristics of the households in the peri-urban areas; examined the households' travel characteristics; identified and examined factors that influence households' travel behaviour; and established the relationship between households' socio-economic characteristics and travel behaviour in the study area. This was with a view to suggesting policy response that could guide future provision of transport services in the study area.

The study utilized data from both primary and secondary sources. Primary data were obtained from field survey through administration of questionnaire on the household heads in the selected peri-urban areas. The six local government areas popularly referred to as Ibadan less city, constituted the peri-urban areas from which three were randomly selected. Preliminary survey showed that there were 7,567 residential buildings in the selected political wards. Systematic sampling technique was used to select every 20th (5%) residential building after the first had been randomly chosen. Thus, 379 households head in 379 residential buildings were surveyed. Secondary data were obtained from National Population Commission (NPC), Oyo State Independent Electoral Commission (OYSIEC); and Ministry of Physical Planning and Urban Development across the Local Government Areas on the population, number of political wards and names of areas respectively. Data collected were analysed using descriptive and inferential statistics.

The study showed that majority of the households (74.8%) were within 41 – 60 years age group; a large proportion of the respondents (73.3%) earned ₦50,000 and below per month. Also, 42.1% of the households had spent 11 years in their place of abode and 35.5% of the respondents were government workers. The study also showed that car ownership was very low as 26.0% of the respondents had cars. Majority of the respondents (93.4%) travelled on a daily basis and high proportion relied on public transport services. The study further established that 78.7% of the respondents used one vehicle to complete their travel. The regression model using the coefficient of determinations (R^2), 21.5% of the variability in the travel behaviour among the respondents can be attributed to the socio-economic characteristics such as age, household size, length of stay, number of car owned and monthly income of the households.

The study concluded that majority of the respondents made use of different modes of transport for their daily travelling within and outside the peri-urban areas of Ibadan. However, effort should be made by government and public transport operators to improve transport facilities as this will ensure an efficient and effective mobility within the study area.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The function of transportation in cities is to enable goods and services move from one point of demand to that of supply between various buildings within a locality and from one place to another. Apart from the movement of goods, urban centres require the movement of people to their different parts to carry out socio-economic and political activities either voluntarily or out of necessity (Alade, Olaseni and Kadiri 2013). Significant efforts have been made in different parts of the world to manage urban transportation especially in many developed nations through transportation demand and system management (Alade *et al* 2013). This has led to several studies on travel behaviour of urban households with a view to determining the magnitude and dimension of the problems associated with urban travels. The study of travel behaviour over the last half century has yielded critical insights into the choices that individuals and households make about their daily travel (Handy and Clifton 2001). The outcome of many of these studies have influenced to a great extent several transport planning decisions and policy issues in many countries of the world (Fadare 1989; Mokhtarian 2002; Srinivasan 2005).

In several cities of the developing world, the rapid rise in population and limited financial resources available for investment in urban infrastructure have generated severe transport problems such as traffic congestion, accidents, and inadequate transport facilities among others (Palmer, Astrop and Maunder 1997). These are exacerbated by the movement of people, especially the low income earners to the city fringes far from employment opportunities. This movement thereby, causing considerable difficulties both for the residents of

such areas in terms of mobility and accessibility, and also for the transport operators in terms of the need to provide low cost public transport services (Palmer *et al* 1997). Ultimately, the inadequate transport facilities and services are capable of having an effect on the quality of life of the residents in such an area. The interplay between urban area and its surroundings is made possible by transportation. Therefore, in developing an efficient and effective transport system in these areas, there is a need to understand residents' travel behaviour.

In recent years research efforts have tended to accelerate in size and scope due to the continuous growth of travel demand and its related adverse effects on local and global environments (Curtis and Perkins 2006). Travel behaviour deals with the study of what people do over [space](#) and how people use [transport](#) (Hayes 1993). It can also be seen as people's activity and movement in the public realm by all modes for all purposes (Fadare 2010). The interaction between the urban and its periphery must be studied in terms of daily commuting, trip purpose, mode of commuting, trip frequency, length of traveling, origin and destination of trips among others. The interaction between space and the use of transport is of importance also in order to establish the pattern of movement in an area.

The type of vehicular and pedestrian movements are a function of trip purpose, spatial distribution and location of the places of residence of the people, the level of technological development in the city and the region, the size and characteristics of the population are also capable of influencing travel behaviour (Solanke 2013). Hanson and Hanson (1981) observed that individuals generate extremely different complex travel activity patterns as they participate in daily life activities at different locations. Moreover, different households, very often, have different transport needs. Scholars (Fadare 1987, 1989; Ogunjumo 1986; Pucher and Renne 2003; Fujiwara *et al* 2005) have identified household size, car ownership, income, age, gender,

number of employed people in the family, occupation among others as major socio-economic attributes of households that influence their travel behaviour.

Adaramo(2012) asserted that the more radical the change in transport technology have been, the more alteration in the urban form. The fundamental change in urban form is the emergence of new clusters expressing new urban activities and new relationships between elements of the urban system. He further observed that the extension and the over-extension of urban areas have created what may be called peri-urban areas. They are located well outside the urban core, but are within reasonable commuting distances. This phenomenon has resulted in what is now called “edge cities”, which has been used to label a cluster of urban development taking place in suburban settings (Aderamo 2012).

The growth of peri-urban areas is increasingly recognized as a dominant planning and urban design challenge for the 21st (twenty first) century (Thorn *et al* 2015). The various forms of defining the peri-urban and the various names used by writers in trying to define the concept of the peri-urban (rurbanperiphery, urban periphery, suburban, rural-urban fringe, satellites, pseudo-suburbs, pseudo-satellites, urban fringe, periphery, etc) are a reflection of the complexity of the phenomenon that is being considered (Willis 2005). Peri-urban area is a physically defined area bordering a city characterized by a mix of urban and rural forms and functions (Kulshrestha 2006). It is an area, generally outside the boundary of the mother-city, which is under transition from rural to urban and from where people commute to the mother-city for employment, business, education and use of other facilities and services. Peri-urban area is a dynamic entity that keeps changing with the growth and development of the mother-city (Kulshrestha 2006). The developments in the peri-urban areas are sometimes unplanned, haphazard, unmanaged, uncontrolled and unregulated (Luthra 2008).

The peri-urban areas in this study fall within the six Local Government Areas (LGAs) in the less city of Ibadan metropolis (Tomori 2009). The six LGAs are: Akinyele, Egbeda, Ido, Lagelu, Ona-Ara and Oluyole. This was borne out of the fact that all the six LGAs surrounded the Ibadan municipal and also have element of peri-urban characteristics inherent

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