ARTERIAL ROAD NETWORK AND COMMERCIAL PROPERTY VALUES IN IKEJA, NIGERIA

By

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A THESIS SUBMITTED TO THE DEPARTMENT OF ESTATE MANAGEMENT, COLLEGE OF SCIENCE AND TECHNOLOGY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY (PhD) IN ESTATE MANAGEMENT OF COVENANT UNIVERSITY, OTA, NIGERIA.

June, 2009

DEDICATION

This work is dedicated

to

My mother, Julianah Atoke

and

My father, Gabriel Oladapo Oni

CERTIFICATION

This is to certify that MR. ONI Ayotunde Olawande (Reg. No. CUGP 050160) carried out this research work in partial fulfillment of the requirements for the award of Doctor of Philosophy (Ph.D.) in Estate Management of Covenant University, Ota under my supervision.

25th June, 2009

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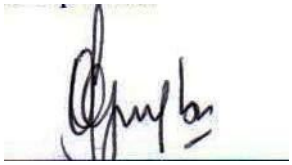
Thesis Supervisor



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ABSTRACT

This study was undertaken to analysis the arterial road network and commercial property values in Ikeja, Nigeria. This was with a view to conducting detailed investigation into the relationship between arterial road network in the presence or absence of other variables and commercial property values in the city. In attaining the stated aim and objectives of the study, two hypotheses were formulated and tested. The hypotheses are that there is no significant relationship between commercial property values and independent explanatory variables in the study area; and there are no differences in relative contributions of the explanatory variables to variability in commercial property values in the study area.

Data were collected from primary and secondary sources. The secondary sources included journals, textbooks, unpublished past projects and the internet. The primary sources were data on demand, supply and commercial property values over a five-year period obtained through questionnaires administered on Estate Surveyors and Valuers and occupiers of commercial properties.

Total of twenty arterial roads in the study area were used in the analysis of the road network and one hundred and ten Estate Surveyors and Valuers randomly selected. The population of occupiers was estimated based on total number of commercial properties captured by use of Geographical Information System, and randomly selected in relation to the length of arterial roads along which they are located. The appropriate sample sizes were determined using the Bartlett, Kotrlik and Higgins (2001) model.

A multiple linear regression model was used to describe the relationship between commercial property value and explanatory variables of arterial road network, accessibility, demand, supply and location at 0.05 confidence level. The study showed that there was statistically significant relationship between the variables and commercial property values in the study area. The statistics indicated that the P-value = 0.0423; R^2 = 69.37% indicating that the variables explained about 69.4% of variability in commercial property value in the study area. The individual contribution of each of the variables was determined using second order polynomial regression model, which showed marked differences in contributions to variability in commercial property values.

A stepwise regression analysis was carried out to determine the variables that

were particularly statistically significant. It revealed that accessibility, demand, location, and supply contribute significantly to variability in commercial property values in the study area. Furthermore, the principal components analysis showed that three components – accessibility, location and demand - have Eigen-values greater than 1.0 accounting for 76.82% of variability in the original data. The study also revealed that commercial property values, demand and supply of commercial properties have been on the increase in the past five-years and that the increase will continue into the foreseeable future, all things being equal. The R^2 statistic indicated for each variable implied very high probability of attaining the prediction.

Recommendations were made in line with the research findings that the Nigerian Institution of Estate Surveyors and Valuers (NIESV) should embark on funding of research into the impacts of different modes of transportation on property values; individual Estate Surveyors and Valuers should have analytical mind in emerging competitive professional terrain through the use of scientific techniques; and that the Lagos State Government should consider the construction, maintenance, and rehabilitation of road networks in the study area as very paramount in their budgetary allocations.