VEHICLE POPULATION GROWTH

OUTLINE

- Introduction
- Global trend
- Vehicle population in Ghana and regional statistics
- Implication of growth in vehicle population
- Way forward
INTRODUCTION

- Ghana’s Transport Sector is made up of the following modes: air, inland water, maritime, rail and road transport.
- The Ministry of Transport has oversight responsibility for all the modes of transport except road infrastructure.
- Road transport is the dominant mode of transport in Ghana.
- In terms of services they are provided largely by private sector operators and other state owned companies.
INTRODUCTION CONT.

- Economic development has historically been strongly associated with an increase in the demand for transportation.

- The population and economic growth has led to rapid urbanization and increase mobility demand culminating in rapid motorization.

- In Ghana, Government has over the years supported the transport sector through the development of policies and strategies to respond appropriately to the increasing travel demand in order to reduce the cost of doing business.
INTRODUCTION CONT.

- Over 80% of the Government's annual budget for the transport sector is channeled into road infrastructure projects

- DP funds to the following modes:
  - Roads & Highways - 80%
  - Sea Ports - 5%
  - Air Ports - 5%
  - Railway - 5%
  - Water Transport - 5%
INTRODUCTION CONT.

- Investment in road infrastructure has not been able to adequately cater for the transport needs.
- Land use planning and enforcement of building regulations has been poor.
- Some developments have been undertaken with no regards to accessibility.
- Increasing urban population as a result of migration from rural areas.
- Competition for available road space as a result of growing travel demand, increasing use of private vehicles as a result of unreliable public transport services.
- Mobility within the urban core has become a major challenge.
GLOBAL TREND
GLOBAL TREND

- Car ownership is increasing at an alarming rate.
- As of 2010, there were more than one billion motor vehicles in use in the world.
- Global vehicle ownership in 2010 was about 148 vehicles per 1000 people.
- The United States had the largest fleet of vehicles with 239.8 million in 2010 compared with a population of 309.3 million.
GLOBAL TREND

• Vehicle ownership in the US is also the highest in the world with 769 vehicles per 1000 people.

• For China, it is the second largest fleet in the world and now the world's largest new car market.

• For the African Continent, the vehicle ownership per 1000 people is around 25 in 2010. This however stood at 21 vehicles per 1000 population at the beginning of the 21st century.
GLOBAL TREND

% of Household with Cars in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>% of Household with Cars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>3</td>
</tr>
<tr>
<td>Tanzania</td>
<td>5</td>
</tr>
<tr>
<td>Kenya</td>
<td>5</td>
</tr>
<tr>
<td>Ghana</td>
<td>6</td>
</tr>
<tr>
<td>Senegal</td>
<td>9</td>
</tr>
<tr>
<td>Nigeria</td>
<td>18</td>
</tr>
<tr>
<td>South Africa</td>
<td>31</td>
</tr>
<tr>
<td>Europe</td>
<td>31</td>
</tr>
</tbody>
</table>

% of Households with Cars in Africa

<table>
<thead>
<tr>
<th>Country</th>
<th>% of Households with Cars in Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>3</td>
</tr>
<tr>
<td>Tanzania</td>
<td>5</td>
</tr>
<tr>
<td>Kenya</td>
<td>5</td>
</tr>
<tr>
<td>Ghana</td>
<td>6</td>
</tr>
<tr>
<td>Senegal</td>
<td>9</td>
</tr>
<tr>
<td>Nigeria</td>
<td>18</td>
</tr>
<tr>
<td>South Africa</td>
<td>31</td>
</tr>
<tr>
<td>Europe</td>
<td>31</td>
</tr>
</tbody>
</table>

% of Household with Cars in Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>% of Household with Cars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanzania</td>
<td>5</td>
</tr>
<tr>
<td>Kenya</td>
<td>5</td>
</tr>
<tr>
<td>Ghana</td>
<td>6</td>
</tr>
<tr>
<td>Senegal</td>
<td>9</td>
</tr>
<tr>
<td>Nigeria</td>
<td>18</td>
</tr>
<tr>
<td>South Africa</td>
<td>31</td>
</tr>
<tr>
<td>Europe</td>
<td>31</td>
</tr>
</tbody>
</table>

The Pew Research Center conducted a survey in 2015, asking people in 44 countries whether they owned a car, a motorcycle, or a bike.
GLOBAL TREND

People’s Republic of China
Cape Town

United States of America
Nigeria
GLOBAL TREND

- The increasing motorization has important implications for transport and environmental policies, as well as the global oil market.

- Without adequate infrastructure to support the growing demand, traffic congestion, pollution and its related impact on human health as well as transport contribution to GHG emissions has become a major bottleneck.

- Vehicle manufactures and regulators have over the years introduced standards and other enforcement mechanisms to reduce vehicular emissions. (Euro1-6 and its attendant fuel requirement).
VEHICLE POPULATION IN GHANA
AND REGIONAL STATISTICS
VEHICLE POPULATION IN GHANA AND REGIONAL STATISTICS

- Total number of registered vehicles population in Ghana in 2015 stood at approximately 1,952,564.

- The Greater Accra Region has the highest number of registered vehicles of about 1,164,942, followed by Kumasi with just 269,689. The remaining regions recorded about 517,933 of registered vehicles.

- The vehicle/population ratio in Ghana has been growing steadily from about 50 vehicles per 1,000 population in 2010, to about 70 vehicles per 1,000 population in 2015.
VEHICLE POPULATION IN GHANA AND REGIONAL STATISTICS

Comparison b/n Population, Vehicle No. and Road Length

- Population
- Vehicle No.
- Road Length

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Vehicle No.</th>
<th>Road Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>5.11</td>
<td>37.32</td>
<td>19.17</td>
</tr>
<tr>
<td>2010</td>
<td>12.3</td>
<td>67.42</td>
<td>24.4</td>
</tr>
<tr>
<td>2014</td>
<td>18.4</td>
<td>71.42</td>
<td>26.5</td>
</tr>
</tbody>
</table>
VEHICLE POPULATION IN GHANA AND REGIONAL STATISTICS

Annual Registration of Vehicles and Motorcycles

- Motor Cycles
- Vehicles

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Motor Cycles</th>
<th>Number of Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>168,563</td>
<td>168,563</td>
</tr>
<tr>
<td>2011</td>
<td>233,994</td>
<td>233,994</td>
</tr>
<tr>
<td>2013</td>
<td>259,324</td>
<td>259,324</td>
</tr>
<tr>
<td>2014</td>
<td>296,238</td>
<td>296,238</td>
</tr>
<tr>
<td>2015</td>
<td>225,725</td>
<td>225,725</td>
</tr>
<tr>
<td></td>
<td>186,058</td>
<td>186,058</td>
</tr>
</tbody>
</table>
VEHICLE POPULATION IN GHANA AND REGIONAL STATISTICS

Registered Vehicles from 2010-2015 by Engine Size

- PTE MV UPTO 2000CC: 65%
- COMM MV UPTO 2000CC: 35%

- PTE MV UPTO 2000CC: 40%
- COMM MV UPTO 2000CC: 21%
- MV ABOVE 2000CC: 27%
- BUSES AND COACHES: 12%
VEHICLE POPULATION IN GHANA AND REGIONAL STATISTICS

![Graph showing vehicle population and CO2 emissions by Euro classification in Ghana and the United Kingdom.](image-url)
VEHICLE POPULATION IN GHANA AND REGIONAL STATISTICS

Registered Vehicles from 2010-2015 by Category

- PTE MV UPTO
- COMM MV UPTO
- MV ABOVE 2000CC
- BUSES AND R/C TRUCKS UPTO
- R/C TRUCKS FROM
- ART TRUCKS FROM
- ART TRUCKS
- ART TRUCKS
- AGRIC EQUIP
- COMBINE
- CONS EQUIP
- MINING EQUIP
- PART. ID. MARK
VEHICLE POPULATION IN GHANA AND REGIONAL STATISTICS

- The average age of a vehicle in Ghana is about 14.2 years. It is much more higher for public transport vehicles.

- Majority of vehicles imported are second hand (Home Used).

- More vehicle being registered translate into higher demand for road space.
IMPLICATION OF GROWTH IN VEHICLE POPULATION
IMPLICATION OF GROWTH IN VEHICLE POPULATION

- High level of road traffic crashes and fatalities
- Increased traffic congestion on almost all arterial routes in the CBD
- Ambient air quality particularly in urban and densely populated areas have worsened
- Pollution and its related impact on human health and attendant health issues
IMPLICATION OF GROWTH IN VEHICLE POPULATION

Road Traffic Crashes 2010 - 2015
Road Traffic Crashes
IMPLICATION OF GROWTH IN VEHICLE POPULATION
Traffic Congestion
IMPLICATION OF GROWTH IN VEHICLE POPULATION

Ambient Air Pollution
WAY FORWARD
WAY FORWARD

- Cities are increasingly suffering from vehicle-related pollution and external costs generated by motorized transport. There is therefore the need to:
  - Provide appropriate incentives and investments needed to facilitate the emergence of greener, more efficient and more sustainable transport modes and lower transport-related GHG emissions.
  - Provide appropriate incentives needed to enable a gradual modernization of Ghana’s vehicle fleet focusing on both private and public transport.
  - Conscious investment and road priority for higher occupancy vehicles
  - Put in measures to improve fuel quality for better engine performance and reduce related emissions.
Reference

- Ghana Statistical Service
- Driver and Vehicle Licensing Authority