

# **TRANSPORT STATISTICS**

## **1. Introduction**

Transportation is an essential part of human activity, and in many ways form the basis of all socio-economic interactions. Indeed, no two locations will interact effectively without a viable means of movement.

In many developing countries, inadequate transport facilities are often the norm rather than the exception. Thus, a good transport system is essential to support economic growth and development. Since the attainment of independence in 1960, the problems of Nigerian transport system include bad roads; inadequate fleets of buses or trucks; irregular, inadequate and overcrowded trains and airplanes and congested ports. These are common features of the developing world. In line with these are physical problems such as dearth of suitably-trained transport managers and planners, capital restructuring bottlenecks, serious issues of institutional reforms and ineffective traffic regulations. The share of transport in the Gross Domestic Product [GDP] is in the neighbourhood of 3 per cent. Transport statistics are grouped into four basic categories, namely, Rail, Road, Water and Air Transport.

### **[a] Rail Transport**

Rail transport is usually the most suitable mode of transportation for heavy traffic flows when speed is also an advantage because of the lower cost per person per load as the train load increases. Nigeria's single-narrow-gauge railway line constructed in the colonial period was for many years the only mode of freight movement between the northern and southern parts of the country.

In Nigeria, rail transport accounts less than a half per cent to the gross domestic products of the transport sector. Although rail has always contributed a tiny proportion of value-added in transportation, its share of value-added continues to decline because road transport (freight and passenger) has virtually taken over all the traffic previously conveyed by rail. The relegated status of the Nigerian Railways is a classic illustration of a transportation policy which has sidelined an important and cheap means of transport to foster the growth of privately-owned long haulage transport services.

This policy has engendered the following:

- (i) It has made the Nigerian Railway Corporation [NRC] a lame duck with total reliance on the Government for subvention.
- (ii) A disorganised, unregulated private sector-owned road transport system providing freight and passenger services.

The effects of these are:

- (i) traffic congestion on urban roads.
- (ii) increasing rate of fatal road accidents emanating from bad roads, poorly-maintained vehicles and careless driving.
- (iii) worsening environmental pollution.

The sharp devaluation of the Naira has also aggravated the situation as an increasing number of private car owners are joining the pool of frustrated travellers and commuters.

#### [b] **Road Transport**

Road transport is the most commonly used mode of transportation in Nigeria today. Road traffic depends on the pattern of human settlements, accounting for more than 90 per cent of the sub-sector's contribution to the Gross Domestic Product (GDP). Road transport activities involve the conveyance of passengers en-masse or in small

numbers, the transportation of animals, farm produce and merchandise and the rendering of mobile services (clinics, libraries and banks). The optional use of motor cars for pleasure, which can be distinguished from the three uses listed above, also contributes tremendously to the importance of road transport in Nigeria. This is more predominant in Nigeria than in most other African countries because of the poor state of alternative means of transportation by which journeys could have been made and also due to the psychological satisfaction offered by the possession of a car.

[c] **Water Transport**

Water transport scores a distant second to road transport, with an average share of about 1.6 per cent of Nigeria's gross domestic product. Water transport is slow and therefore, unsuitable for passenger movement, except for holiday and tourist traffic where time is not a constraint or where other forms of transport are not available. Water transport has the following three components: ocean transport, coastal water transport and inland water transport. Inland water transport is only advantageous in terms of costs of moving heavy traffic, especially where speed is less important than cost.

The importance of water transport statistics depends on the geography of the country concerned. Land-locked communities will be less concerned with water transport statistics than inland or peninsular settlements, except perhaps in terms of inland water transport.

[d] **Air Transport**

Air transport has a unique advantage over all other modes of transport if speed, time and distance are major considerations. Air transport is of high value in relation to weight. It is also preferred where accessibility by other modes is a problem (especially in riverine or mountainous regions).

Air transportation is a system with many inter-related parts. Each airport is connected to the system through the airways and other airports with which it exchanges flights. Its share of the GDP is however, still negligible in Nigeria.

## **2. Coverage, Scope, Uses and Users of Transport Statistics**

### **[a] Rail Transport**

Rail transport statistics consist of data which are generated by or are relevant to the provision of freight, passengers and terminal services by the Nigerian Railway Corporation.

These statistics include those on:

- physical facilities.
- services provided.
- cost of operations.
- revenue and flow of funds.

Rail transport statistics are needed for determining the relative emphasis that should be given to the different modes of transportation with a view to developing an integrated transport policy by planners at the three tiers of Government. They are also necessary for corporate planning and also because of their major cost components in economic activities.

### **[b] Road Transport**

Road transport is grouped into 'Other Land Transport' and 'Transport via Pipelines' both of which are in Division 60. The three classes of industrial activities in this group are:

- other scheduled passenger land transport.
- other unscheduled passenger land transport.
- freight transport by road.
- transport via pipelines.

In this discussion, road transport statistics will exclude transport via pipelines which is covered elsewhere. The detailed listing of the items in the first three groups identified above cover statistical information on the provision of all forms of road vehicular services for the movement of human beings, raw materials, merchandise and services. It also includes statistical information on all forms of road transport equipment and infrastructural facilities.

From its share in the GDP, transport is a major input into most economically productive activities in Nigeria with its high proportion of non-riverine land mass. This observation is clearly supported by the fact that the commonest reason for most price increases is the rise in transportation costs. Road transport statistics are, therefore, very useful for planning at all levels. Consequently, households, research bodies, corporate organisations and planners in all tiers of Government are the users of road transport statistics.

### [c] **Water Transport**

Water transport includes transportation of passengers or freight over water, operations of tour, excursion, cruise or sight-seeing boats, ferries and water taxis. The two sub-divisions are: Sea and Coastal water transport which includes transportation of passengers or freight overseas and along the coast, and inland water transport which

includes transportation of passengers or freight via rivers, canals, harbours, creeks and lakes.

Water transport statistics are made up of the following: physical facilities provided; employment, earnings, and other cost information; services provided; revenue; financial data; capacities, capacity utilisation and measures of performance; other statistics. Water transport statistics are port- or State-specific. Statistics of international passenger or freight services are usually recorded for the whole country.

Water transport statistics are useful for planning and research in transport development, especially efficient coordination of the various modes of transportation. The users include planners and policy makers, private researchers and international agencies.

#### [d] **Air Transport**

Air transport statistics include data arising from the transportation of passengers or freight by air or via space. They cover the statistics of scheduled and un-scheduled air transport. According to Revision 3 of the International Standard Industrial Classification, air transport Excludes overhaul of aircraft or aircraft engines which are classified as manufacture of aircraft and spacecraft. Also excluded are the support and auxiliary transport activities and activities of travel agencies.

In most cases, data on air transportation are airport- and carrier-specific. These are then aggregated for each country over the specified reference period.

Statistical information on air transport demand and on airline flights form an important input in Government decision-making and policy formulation. For example, the Civil Aeronautic Board uses travel

projections in making route awards to airlines. Estimates of future loads on airports and elements of the Air Traffic Control System are usually based on air travel demand.

The airlines use statistics of air travel demand in planning routes and in making equipment acquisition, while airport authorities use forecasts of air travel demand to plan facility development.

### **3. Sources and Methods of Compiling Transport Statistics**

#### **[a] Rail Transport**

The Nigerian Railway Corporation (NRC) is the sole source of data on rail transport. The use of the specialised extensive route system and stations all coordinated by NRC facilitates data collection on rail transport services. A considerable proportion of rail transport data is generated by the day-to-day operations of the system.

Rail transport statistics are consequently usually more comprehensive than those collected in respect of road transport. These statistics are primarily collected for each station or zone before they are aggregated to obtain information for the country as a whole.

The data are, therefore, by-products of administration and could be described as administrative statistics. Although there are scopes for survey/census data collection, there is, however, no evidence that that methodology is used by the Corporation.

#### **[b] Road Transport**

Road transport statistics can be produced through surveys, censuses and routine administration. Due to the statutory requirements for registration and licensing of vehicles and drivers, there is a wide scope for collecting administrative statistics on road transport services. The major source of data are Federal Ministry of

Transport, National Bureau of Statistics, the motor licensing authorities of the State ministries of finance, the Nigerian Union of Road Transport Workers and the operators of mass transit, including luxury buses, fuel tankers and trailers. The Nigeria Police is also the sole source of road accident statistics. Road transport statistics is the most fragmentary of the four statistical segments of the transport sub-sector, the main reason being the absence of any Federal parastatal coordinating road transport activities as in the case of the Nigerian Railway Corporation, Nigerian Ports Authority or Federal Airports Authority of Nigeria.

### **3.2.1 Road Transport Surveys and Censuses**

The National Bureau of Statistics has conducted a Survey of Transport Operators and a National Census of Transport Operators. These investigations are components of the NBS's National Integrated Survey of Establishments (NISE). In the survey of transport operators, the questionnaire is addressed to establishments engaged in road transportation of goods and passengers with a fleet of not less than five vehicles. The questionnaire has eleven parts with the following headings: identification; kind of activity; period of operation during the year; form of ownership; paid-up capital by source; company fleet (passenger vehicles, haulage vehicles); structure of business; employees and their compensation; company receipts; company operating cost; and value of capital expenditure.

The National Census of Transport Operators, which is a module and a component of the National Census of Industries and Business (NCIB), is designed to cover all establishments engaging five or more persons (that is, medium-sized and large establishments) and a sample of those engaging less than five persons. The exercise is

preceded by elaborate listing of transport operators located in demarcated blocks in each community (town, village or city). At this stage, basic information, including identification particulars, type of enterprise, year of establishment, form of ownership and number of employees are collected about every operator.

In the census, information to be collected include description of the establishment; employment and earnings, staff training and development, hours/days worked; costs of operation and business receipts.

As has been the case with all establishment-based surveys conducted by the NBS, non-response has always been a major problem with the result that both the survey and census have not yielded any reliable information on road transport operations in Nigeria.

The NBS will, at best, be expected to supplement available information on road transport. Full responsibility for producing the statistics on this sub-sector rests with the Planning, Research & Statistics Department [PRSD] of the Federal Ministry of Transport in collaboration with its State counterparts.

### **3.2.2 Administrative Sources of Road Transport Statistics**

The sources of administrative statistics on road transport are: the National Bureau of Statistics, Nigeria Police Force, Federal Ministry of Works, Motor Vehicle Divisions of the Local Government headquarters and the Federal Ministry of Transport.

The Motor Vehicle Divisions of the Local Government headquarters undertake: registration of new vehicles.

- licensing of motor vehicles.
- licensing of drivers and commercial transport operators.

- processing applications for change of ownership of motor vehicles.

The Motor Vehicle Statistics Unit of the NBS designed forms to be used by each motor vehicle division of the Local Government in making returns containing the summaries of the information listed above. The objective is to assess the contributions of the road transport sub-sector to the economy. The returns from each Local Government are aggregated and published as annual time-series for each State of the Federation.

Two important items of data produced by this exercise are the frequency distributions of motor vehicles registered and motor vehicles licensed with the following details: year; State; and types of vehicles. 'Types of vehicles' is further disaggregated into cars, commercial vehicles, motor cycles and 'Others'. Returns obtained from the Local Governments contain further disaggregation of the last categories of vehicles by make and type of body.

The problems encountered by NBS in producing these sets of administrative statistics on road transport include inadequately-completed returns and delays in receiving the returns from the Local and State Government units.

In recent years, the NBS has also used the Nigeria Police Force as a supplementary source of information on motor vehicle statistics.

Another important source of administrative statistics on road transport is the Federal Ministry of Works. The items of data produced by this ministry, which are relevant to road transport activity, are those on infrastructure such as roads and bridges.

It has been observed that rather than obtain returns from the Local Government units, the Planning, Research & Statistics Departments (PRSD) of each State Ministry of Finance and/or Economic

Development should collate these returns in a nationally-agreed format and forward the summaries to the NBS for aggregation and publication.

Several other useful items of administrative statistics which can be produced from the forms completed by households include:

- age profile of registered/licensed vehicles by categories and State of operation/licensing.
- distribution of newly-licensed drivers/renewed drivers' licenses by age, gender and State of issue.

Other items of data which should be produced in an ideal system of road transport statistics will be discussed later.

#### [c] **Water Transport**

The most important source of data on water transport is the Nigerian Ports Authority (NPA). Other sources are the National Maritime Authority (NMA), National Inland Waterways Authority (NIWA) and the Nigerian Shippers Council (NSC).

Most of the data on water transport are produced in the course of day-to-day administration, especially by the ports.

The Ports are the principal sources of data. The technical or engineering branch produces information on port facilities (the number of units, main technical characteristics and capacities). The traffic and commercial branch is responsible for collecting data on:

- mode of transfer of goods between ship and inland transport.
- type of port storage used by the cargo.
- type of packaging.
- purpose of ship's visits.
- duration and causes of work stoppages on ship and storage areas.

- movements of goods to and from port storage.
- Port's supply to ships.

The harbour master's office keeps records of all ship movements and sometimes of the causes of delays. The personnel branch is the source of data on port labour. Other sources of information are pilotage and towage services and the accounting branch.

Many other data of interest for port statistics are obtained from external sources, including customs administration which provide data on cargo traffic by volume (tonnes), value of goods and data on origins and destinations.

The most useful document for port statistics is the ship manifests which contain information about:

- origins and destinations of ships and cargoes.
- total amounts of cargoes loaded and discharged (weights or volumes).
- nature of goods.
- freight rate for each unit of cargo.

Information on different types of inland transport used in evacuating the ship's cargo is not always available, especially for road transport (which in most cases includes a large number of independent carriers).

Information on technical characteristics of the ship (tonnage, length, draught) is usually requested by the harbour master before the ship's arrival. These can always be verified with the aid of the register of important classification societies (Lloyd's Register of Shipping, American Register of Shipping, etc.) which contain up-to-date information on all ships in active service in the world.

Other sources of general information are foreign ports, world merchant fleet, other port institutions and various independent bodies which disseminate information on ships and shipping activities.

The collection of data is done on a specific form filled for each ship as it calls at the port. The form contains the following:

(a) Information on the ship: name; flag, type, registration number; gross registered tonnage; dead-weight tonnage; over-all length; draught; port of origin; port of destination; sea route.

(b) Information on the cargo discharged and loaded: weight of goods discharged; weight of goods loaded; cargo-specific information: weight discharged or loaded; type of package; berth of loading/discharging; port of loading/discharging; type of transfer to/from inland transport mode; type of storage.

(c) Information on port services: time and date of ship's arrival; time and date of berthing; time and date of ship's departure.

(d) Shift-specific information: date; berth; effective duration of work; reason for delay; weight of goods loaded/discharged; number of hatches worked; number of cranes used; number of gangs allocated to ship; other equipment.

There is a wide scope for coding port statistics because of the uniformity of most of the data itemised above in respect of the characteristics of each ship and the services which are rendered to the vessels at the ports.

[d] **Air Transport**

The most important source of data on air transport is Federal Airports Authority of Nigeria (FAAN). Other sources are: Nigerian Airways, carriers of other nations operating in Nigeria, the Planning, Research and Statistics Departments of the Ministries of Aviation and

Internal Affairs (on emigration and immigration statistics) and the Department of Meteorology.

The National Bureau of Statistics (NBS) also publishes time-series data on departures from, and arrivals in, Nigeria by air, as well as other passenger and air cargo statistics.

International sources of data on air transport are the International Air Transport Association (IATA) and the International Civil Aviation Organisation (ICAO), which produce quarterly and annual publications respectively on general aviation matters.

Although most of Nigeria's air transport data are collected administratively on a day-to-day basis, the management of the then national carrier (Nigeria Airways) had organised some surveys. These were:

- opinion research on airline attitude survey.
- market research on total market segmentation survey.
- route rationalisation survey.
- aircraft equipment survey.

These surveys were designed respectively to:

- improve on in-flight ground services provided on WT services by the airline.
- increase the market share of the airline.
- identify profitable and unprofitable routes and explore the opening of new routes.
- determine the type of aircraft to be used in WT peculiar market.

The unit of observation in the first two surveys were the airline's passengers on the WT services, while the corporation's sales offices and stations were respondents to the third survey.

The fourth survey was to be based on performance data of different carriers. All the surveys were to be organised by the

commercial/statistics unit of the airline twice a year for the first survey, annually for the second, and once-and-for-all for the third. The fourth survey did not take off. The results of all the surveys were used exclusively by the management of the airline.

The then Nigeria Airways, as the major source of administrative or routine statistics on air transport in the country, produced the following five returns and five reports which contain data on its operations:

(1) Monthly Passengers' Traffic Returns: It was designed to collate statistical information on passengers and freight carried on the airline's routes, which (data) were to be used in estimating capacity utilisation and viability of routes.

(2) Monthly Freight Returns: The purpose was to determine the total amount of cargo (merchandise, mail, courier) freighted and revenue generated.

(3) Sales Returns: The purpose was to determine total revenue generated and the contribution of each sales office to total revenue generation.

(4) Monthly District Returns: The purpose was to provide an outline of the operational activities in each of the airline's districts.

(5) Carrier by Nationality Data: The purpose was to determine the market share of the national airline in the sub-sector.

(6) Monthly District Report: Contained an outline of the operational activities in each district of the airline.

(7) Divisional and Sectional Monthly Progress Reports were on management information.

(8) Monthly Passenger Traffic Report focused on the determination of market share for the national airline and British Caledonia.

(9) International Air Transport Association Report focused on

- Airfare determination and adjustments.
- World Airline statistical information.
- Aircraft/personnel utilisation.

(10) International Civil Aviation Organisation (ICAO) report focuses on general aviation information.

### **Number of Units Reporting and Frequency of Compilation of Data**

For three of the returns (1, 2 and 4) and two of the reports (6, 7) the reporting units are 31 stations of the then national airline consisting of 15 international airports including those in Nigeria and Africa and 16 offices of the airline in 16 domestic operational airports in Nigeria.

For returns 3 and report 8, the reporting units are the 31 stations as Stated above and 14 sales offices of the then national carrier, which are located outside airports.

The reporting unit for 'Carrier By Nationality Returns' is the Nigeria Immigration Service (NIS). The IATA and ICAO reports are based on information supplied by these international organisations.

All the returns and reports are summarised for dissemination on monthly basis except the ICAO report which is produced quarterly and annually.

The statistical information contained in most of the returns are first supplied on forms completed by the reporting units. These are SORTed before the statistical information are extracted by the staff of the commercial planning statistics unit of the the then national carrier, which coordinate data collection. The passenger, cargo and revenue data are aggregated and tabulated manually on airport, airline and national basis.

#### **4. Current Methods of Data Storage and Dissemination**

##### **a] Rail Transport**

Rail transport statistics are stored in hard copies. The most comprehensive items of data on rail transport are published in the **Annual Report** issued by the Nigerian Railway Corporation. It contains a detailed account of all the activities of the Corporation in the year covered. In one of the tables captioned “General Statistical Returns”, the corporation publishes time-series data of 54 observed and derived variables on the following items: receipts and expenditure; passenger statistics; freight statistics; and combined passenger and freight train and engine statistics.

Most of these statistics are compiled for steam and diesel engines and other railway engines. This publication has been discontinued in recent years.

The National Bureau of Statistics (NBS) also publishes in its **Annual Abstract of Statistics** items of data on rail freight and passenger services as obtained from the NRC.

In Section 4.12 (pp. 55-59) of the SOR, the operators of National Bureau of Statistics have proposed a maiden data base of 35 items and two details names of variables which can form the nucleus of a rail transport database. The entries are based on available time-series of rail transport data and extensions which are considered desirable.

The NRC itself should ideally have a much more detailed and comprehensive database than the National Bureau of Statistics and some suggestions, in this regard, will be put forward later in this paper.

##### **[b] Road Transport**

As indicated earlier, Nigeria's road transport statistics are fragmentary. Statistical analysis consists of extraction, collation and aggregation. Available data are stored in hard copies — in files and a few tables in the **Annual Abstract of Statistics** published by the NBS on motor vehicle registration, and **Statistical Abstract of the Federal Ministry of Works** on infrastructure such as roads and bridges.

Data transfer on road transport is, therefore, in the form of hard copies and on page 60, Section 4.13 of the **National Bureau of Statistics: Statement of Requirements for Establishing Time-Series Databases of Nigeria's Official Statistics**. The operators of the National Bureau of Statistics have proposed a Road Transport Statistics Database consisting of 39 items or tables which can be used by the PRSD of the Federal Ministry of Transport as the nucleus of its database on road transport statistics.

#### [c] **Water Transport**

Nigeria's water transport statistics are better documented than those of other divisions of the transport sub-sector. In spite of the tremendous scope for coding and computerisation of the items of data, ports statistics (which dominate water transport statistics) are still stored and transferred in hard copies in the country.

The Nigerian Ports Authority (NPA) is the major producer and publisher of ports statistics. Their publications include: **Nigerian Ports Authority, Digest of Port Statistics; Nigerian Ports Authority Monthly Progress Report; Nigerian Ports Authority Port Performance Indicators** and a bilingual (English and French) magazine which is supposed to be published annually.

The National Bureau of Statistics also publishes selected items of water transport statistics in its **Annual Abstract of Statistics**. These items of data are obtained from the NPA.

Although the statistics section of the Nigerian Ports Authority has a nationwide outfit for collecting port statistics, NPA does not have a database of port statistics. Port statistics are stored and disseminated in hard copies of regular publications or in mimeographs with restricted circulation. The operators of Nigeria's National Bureau of Statistics have put together 93 items with over 1,700 detail names in a data base of water transport statistics. This data base is in Section 4.14, pp. 65.72 of the latest version of the NBS's Statement of Requirements issued in 1994, in respect of 20 datasets.

Most of the variables included in the database are for individual ports and also as aggregates for all Nigerian ports for the relevant reference period. Others are of the form of output processing since two or more types of data are put together to derive significant ratios such as port performance indicators and other productivity indices.

[d] **Air Transport**

The Commercial Planning Statistics Unit of the then national carrier and the Nigeria Immigration Service were the most active organisations in the collection and publishing of air transport statistics in the country.

None of these agencies have developed a data base of air transport statistics. These data are stored in hard copies and in publications and reports most of which are not on sale to the general public. These publications include:

1. Monthly Traffic Statistics (Passengers/Freight).

2. Sales Report.
3. Scheduling Report.
4. Carrier by Nationality Report.
5. Annual Statistical Sales Summary.

Also the Federal Airports Authority Nigeria through its Annual Report and Economic and Statistical Abstract publishes a lot of airport specific data on passenger and cargo traffic, aircraft movements and its revenue and expenditure.

Information on immigration and emigration which are collected through embarkation and disembarkation forms completed by international travellers are published by the National Bureau of Statistics in its **Annual Abstract of Statistics** as obtained from the Nigeria Immigration Service.

Although the then national carrier computerised most of its data producing activities as evidenced by some of the reports which are computer print-outs, it did not have a time-series data base of air transport statistics.

The operators of the National Bureau of Statistics have developed a data base of air transport statistics containing 55 items or tables with over 1000 variables. Since a reasonable proportion of the variables included in the NBS data base are airport- and carrier-specific, the data base can form the nucleus of the data bases of the new national carrier (Virgin Nigeria Airways) and the Federal Airports Authority of Nigeria (FAAN).

## **5. NBS Data Base Coding System for Transport Statistics**

The coding system used for this dataset is the International Standard Industrial Classification (ISIC), revision 3 issued on 4th August, 1988. The division code is the first two digits of the code assigned a six-digit-variable which identifies the division to which the dataset belongs. The ISIC division codes have been allocated on isomorphic basis in respect of most sectors, except where proximity to the closely-related ISIC item code in existence (particularly of un-used codes) were the basis for the allocation of codes. In the ISIC, 'Transport' has three divisions:

- 60 Land Transport, Transport via pipelines.
- 61 Water Transport.
- 62 Air Transport.

Since the ISIC did not identify the division codes to be used for other transport modes such as Rail and Road transport, the operators of National Bureau of Statistics decided to define them with the following division codes:

- 59 Rail Transport.
- 60 Road Transport.
- 61 Water Transport.
- 62 Air Transport.

### **The Items and Detail Codes**

The items and detail codes assigned to each variable are arbitrarily determined. The Division-Item-Detail (DID) coding system is the basis for coding NBS's datasets. The item under each dataset is the elementary entity or group of elementary entities (multiple-items cases) about which statistical data are gathered. For example, output of selected "Receipts for International Transport" in General Transport

is coded 01 for the item with detail 01-11 under the above heading. Thus Division-Item-Detail (DID) for the above is 580101-580111.

58 represents Division Code.

01 represents Item Code.

01-11 represent detail Code.

Following the above explanation, it means there are 11 details in item code 01, that is, 01, 02, 03, 04, etc.

The National Bureau of Statistics (NBS) is using a six-digit code for attributes (variables). The first two digits are used to identify the division, the following two for the item, while the last two represent the detail code. Based on this coding system, the NBS data structure (Statement of Requirements) for 'Transport Statistics' is as shown below:

[a] **Rail Transport**

The sole source of statistical information on rail transport is the Nigerian Railway Corporation (NRC) which is a parastatal of the Federal Ministry of Transport. The National Bureau of Statistics (NBS) publishes some statistical information on rail transport. Rail transport statistics have been coded as division 59 in conformity with the ISIC. The 24 items in this division fall into the following 6 broad categories.

: Annual

**6. CONCLUDING REMARKS**

Nigeria's transport statistics consist of Rail Statistics, Road Statistics, Water Statistics and Air Statistics.

**Rail Transport** is a very small division of Nigeria's transport sub-sector. It once had the most comprehensive set of data which described its activities, but unfortunately, the Nigeria Railway Corporation (which is the sole authority in charge of rail transport) is today an ailing parastatal.

**Road Transport Statistics**, in spite of the dominant position of road transport in the sub-sector, are fragmentary. The Planning, Research & Statistics Department of the Federal Ministry of Transport is yet to play a leading role in the production and dissemination of road transport statistics. Attempts to collate some items of data on vehicle registration at Local Government Headquarters, Nigeria Police Force Headquarters, among others, are faced with inadequate and non-response such that published series are usually incomplete and inaccurate. It is only recently that the Federal Ministry of Works started publishing its **Annual Abstracts**, which contain some information on road transport immovable assets.

**Water Transport Statistics** are at present dominated by port statistics, statistics of inland water transport and the operations of ferries in ocean and coastal waters. As a result of the uniformity of certain attributes of ships and port activities, there is a wide scope for coding the following aspects of port data: ship identification; sea routes, geographical location of ship (region, country and port); different types of working periods (normal shift, overtime, Sundays, holidays); nomenclature of goods; types of package; types of storage; causes of waiting time; and types of transfer to/from inland transport means.

**Air Transport** has most of its input data already in machine readable form, that is, the computerised passenger bookings and scheduling of aircraft movements. Also the operational statistical information that will be stored in air transport statistics are airport- and carrier-specific; hence, they are not likely to pose any serious coding problem. Virgin Nigeria Airways has computerised its operations and therefore possesses some of the relevant equipment and manpower needed for implementing a time-series data base.