

Transportation Statistics: Definition, Concepts, Coverage, Scope and Uses and Users

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Introduction

- Transportation is defined as the movement of people and material from one point to the other for one reason or the other.
- Transportation is an essential part of human activity and in many ways form the basis (starting point or foundation) of all socio-economic developmental process.



Definitions

- Transport statistics are grouped into four basic categories, namely,
 - Rail,
 - Road,
 - Water and
 - Air Transport
- **Rail Transport**
 - Rail transport is a means of conveyance of passengers and goods on wheeled vehicles running on **rails**, also known as tracks. It is also commonly referred to as train **transport**



Definitions



Definitions

- It is one of the most important, commonly used and very cost effective modes of commuting and goods carriage over long and short distances
- Rail transport has emerged as one of the most dependable modes of transport in terms of safety.
- Trains are fast and the least affected by usual weather turbulences like rain or fog, compared to other transport mechanisms.



Definitions



Definitions

- In most countries, this transportation method helps trade and economic growth. Railways provide an energy-efficient way to transport material over land
- Rail transport has some constraints and limitations also. One of the biggest constraints of rail transport is heavy cost. Trains need high capital to build and maintain and the cost is magnified when a whole rail network is to be built.



Definitions

- Also, rail transport cannot provide door-to-door service as it is tied to a particular track.
- In Nigeria, rail transport contribute less 0.5% to the GDP 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.



Definitions

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



Definitions

- 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.
- The effects of these are:
 - ✓ traffic congestion on urban roads.
 - ✓ increasing rate of fatal road accidents emanating from bad roads, poorly-maintained vehicles and careless driving.
 - ✓ worsening environmental pollution.



Definitions

- **Road Transport:** Road transport is the most commonly used mode of transportation in Nigeria today.
- Road traffic depends on the pattern of human settlements,
- Contributing more than 90% to the GDP of Transport Sector
- 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).



Definitions

- The optional use of motor cars for pleasure 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



Definitions

- **Water Transport:** Water transport scores a distant second to road transport, with an average share of about 1.6% of the GDP of transport sector
- 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



Definitions

- 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.



Definitions

- Land-locked communities will be less concerned with water transport statistics than inland or peninsular settlements, except perhaps in terms of inland water transport.
- **Air Transport:** 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.



Definitions

- 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).



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Coverage, Scope, Uses and Users of Transport Statistics

- **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



Coverage, Scope, Uses and Users of Transport Statistics

- 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



Coverage, Scope, Uses and Users of Transport Statistics

- **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.



Coverage, Scope, Uses and Users of Transport Statistics

- 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.



Coverage, Scope, Uses and Users of Transport Statistics

- 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



Coverage, Scope, Uses and Users of Transport Statistics

- **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.



Coverage, Scope, Uses and Users of Transport Statistics

- 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.



Coverage, Scope, Uses and Users of Transport 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



Coverage, Scope, Uses and Users of Transport Statistics

- **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.



Coverage, Scope, Uses and Users of Transport Statistics

- 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.
- Statistical information on air transport demand and on airline flights form an important input in Government decision-making and policy formulation.



Sources and Methods of Compiling Transport Statistics

- 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



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Sources and Methods of Compiling Transport Statistics

- **Rail Transport:** The Nigerian Railway Corporation (NRC) is the sole source of data on rail transport
- The data are, therefore, by-products of administration and could be described as administrative statistics. Although there are scopes for survey/census data collection.
- **Road Transport:** Road transport statistics can be produced through surveys, censuses and routine administration



Sources and Methods of Compiling Transport Statistics

- 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



Sources and Methods of Compiling Transport 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.



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