Transport Economics
Lec.2

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Questions

Define the following items:

a) Transport economics
b) Transport
c) Transportation system
d) Allocation of resources

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Choose the correct answer:

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- **…..... is what moves objects or traffic (people, goods).**
  a) The vehicle
  b) The guideway
  c) The operations plan
  d) Transport operator
- **…….. is the set of procedures by which traffic and vehicles are moved.**
  a) The vehicle
  b) The guideway
  c) The operations plan
  d) Transport operator
- **…… is where the vehicles move along.**
  a) The vehicle
  b) The guideway
  c) The operations plan
  d) Transport operator

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- ……. is a facility consisting of the means and equipment necessary and the set of procedures for the movement of passengers or goods.
  a) The guideway
  b) Links
  c) Transportation system
  d) a network
- ……. consists of nodes, links, and routes.
  a) The operations plan
  b) A network
  c) A terminal
  d) Non of the above
- As retail companies, increase their number of stores, they increase the number of vehicles operated on their behalf, by ……
  a) Transport contractors
  b) Transport operators
  c) Public transport agents
  d) AOTA
  e) NOTA

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True or False (correct the wrong answer)

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- Although transportation system faces questions of resource allocation, it isn't subject to economic constraints. ( )
- Demand for public transport, road freight facilities or airline services is always derived from some other function. ( )
- As the demand for products increases so the demand for transport facilities will always increase. ( )
- The retail delivery services is not affected by where a company is located relative to its suppliers, warehouses, distribution centers, and customers.

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Questions:

1. **List of three objectives of a transport operator.**
2. **List of three examples of a transport operator in Egypt.**

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Factors Determining Demand for Transportation Services

- **Physical Characteristics**
- **Price**
- **Relative Prices** charged by different modes or different operators
- **Speed of Service**
- **Quality of Service**

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1- Physical characteristics

- **High cost**, **low volume** goods are usually moved by **air**.

Example,
Electronic component parts for machinery whose down time, particularly in 'just-in-time' contexts, has a high **loss-of-output** cost.

- **Clothing** (especially fashion goods), and **food** with short shelf life (e.g. fruits) will often be **air freighted**.
- **Gold or diamonds** will be air freighted in **chartered aircraft** which can provide the security level required,
- **Urgent medical supplies** are also likely to be moved by **private jet or military aircraft**.

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Note: All these goods require urgent and guaranteed delivery internationally or internally.

Companies (e.g., TNT Express (a subsidiary of FedEx)) provide services involving **the collection**, **storage**, **sorting**, **transport** and **distribution** within 'specific time-frames' enhanced by data/document management systems.

Low value goods (e.g. coal, cotton, steel) will be moved by **rail** and **heavy tonnage ships**.

Egyptian railroads have a large part of their business in moving such goods.

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2- Price

the **size** of the **passenger** transport market will be determined by **price**.

The **lower** the **price** is,

the **more** people are likely to **demand** the transport service offered.

More trips will be made when **fares** and **petrol prices** are **low** than when prices are high.

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The level of transport **costs** will also be an element in determining **factory location**.

If **transport costs** are low compared with other costs,

→ a company will be able to take advantage of lower land costs away from its large urban markets; thus, more tonne miles are operated.

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Note 1:

pricing of transportation is not an easy task.

In most case, like in **airplane's tickets**, the prices depend on mathematical **algorithms** applied by major airlines operators, e.g.,

American Airlines Group, Delta Air Lines, Lufthansa Group, China Southern Airlines, Turkish Airlines, Japan Airlines, and The Emirates Group.

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Note 2:

The **cost** of **transportation** depends on number of factors:

Direct Factors	Indirect Factors
petrol prices	expenditures for roadway construction and maintenance
fuel taxes	highway services
vehicle taxes	parking

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3- Relative prices charged by different modes or different operators

the relative levels of **fares** on rail, coach, bus and air services, and the **perceived costs** of **car** travel

affect

The transfer of business between **modes** or **companies** in **passenger** or **freight** transport

This justifies the significant **rises** in demand for **low cost airline services**

and falls in **demand** for of **high cost airline** services.

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4-Passenger Income

Overall income available for travel and other consumer/business expenditure **is linked to**

growth in gross domestic product (**GDP**), representing an **income elasticity effect**.

As **income increases**, so the amount of travelling for both **business** and **leisure** (either of trips or number of miles)……

will **increase**.

So, a **higher income** household having more disposable income implies a **higher probability** for **longer trips**.

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5- Speed of Service

In terms of **operating cost**,

if a freight or passenger road vehicle can travel in **short period** of time, the **number of journeys per day** that the vehicle can make **increases**.

Thus,

- its **productivity** is increased
- its **capital cost per tonne** mile is reduced
- consequent **reductions** in **operating costs** and the **tariff charged** to customers.

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The **lower price** will encourage greater use by customers and the **increased productivity** will improve vehicle availability to meet the **increased demand** without the need to **purchase additional vehicles**.

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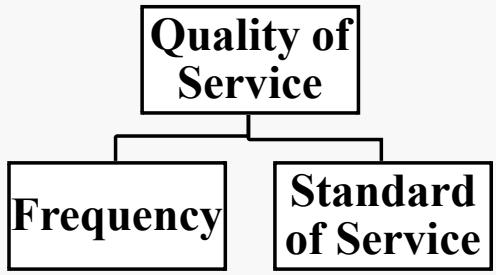
6- Quality of Service



I.Frequency

The **number** of **times** vehicles travel within a particular period.

The **departure** times or **arrival** times must be those which the customer **requires**.

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To encourage **long term growth**, there must also be **departures** during the day for those leaving work early, and in the evening for those staying on late for working or entertainment reasons.

→ A **rapid transit system** with high **frequency** increase the demand for **transportation services**.

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II. Standard of Service

The **quality** of **service** provided has been a key **marketing strategy** of major **transport operators** worldwide.

The **quality** of **service** is measured by number of factors including:

- **a)Comfort**
- **b) Reliability**
- **c) Safety**

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For example,

The following indicators are used to measure the quality of service:

- ✓ **Reputation** for **time keeping** enhanced by reliability and speed of vehicles,
- ✓ **Increase** the **commitment** to certain **locations**,
- ✓ Provision of a **secure environment**,
- ✓ Provision of integrated **transport links** with other vehicles,
- ✓ **Easiness** of purchase of **tickets**,
- ✓ Fast **frequent** direct on-time vehicles.

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Thank you

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