

# Unit 3 Concept of Transport

## Topic

- Utility and effectiveness induced from transport
- Types of transportation modes
- Life cycle of transport
- Components of transport

# Objectives

Students should be able to:

- Describe the definition and objectives of transport.
- Indicate and explain the utilities of transportation.
- Explain how transportation can be measured for its effectiveness.
- Describe different types of transportation modes.
- Explain the life cycle of transport product and service.
- Explain characteristics of the components of transport.



***Group discussion:* students work in group to discuss the following:**

- Discuss good points and weak points of different passenger terminals of different transport modes in Thailand and share to friends of other groups.



# **DEFINITION OF TRANSPORT/ TRANSPORTATION**



*'Trans'* means across, beyond, crossing, on the other side, changing thoroughly

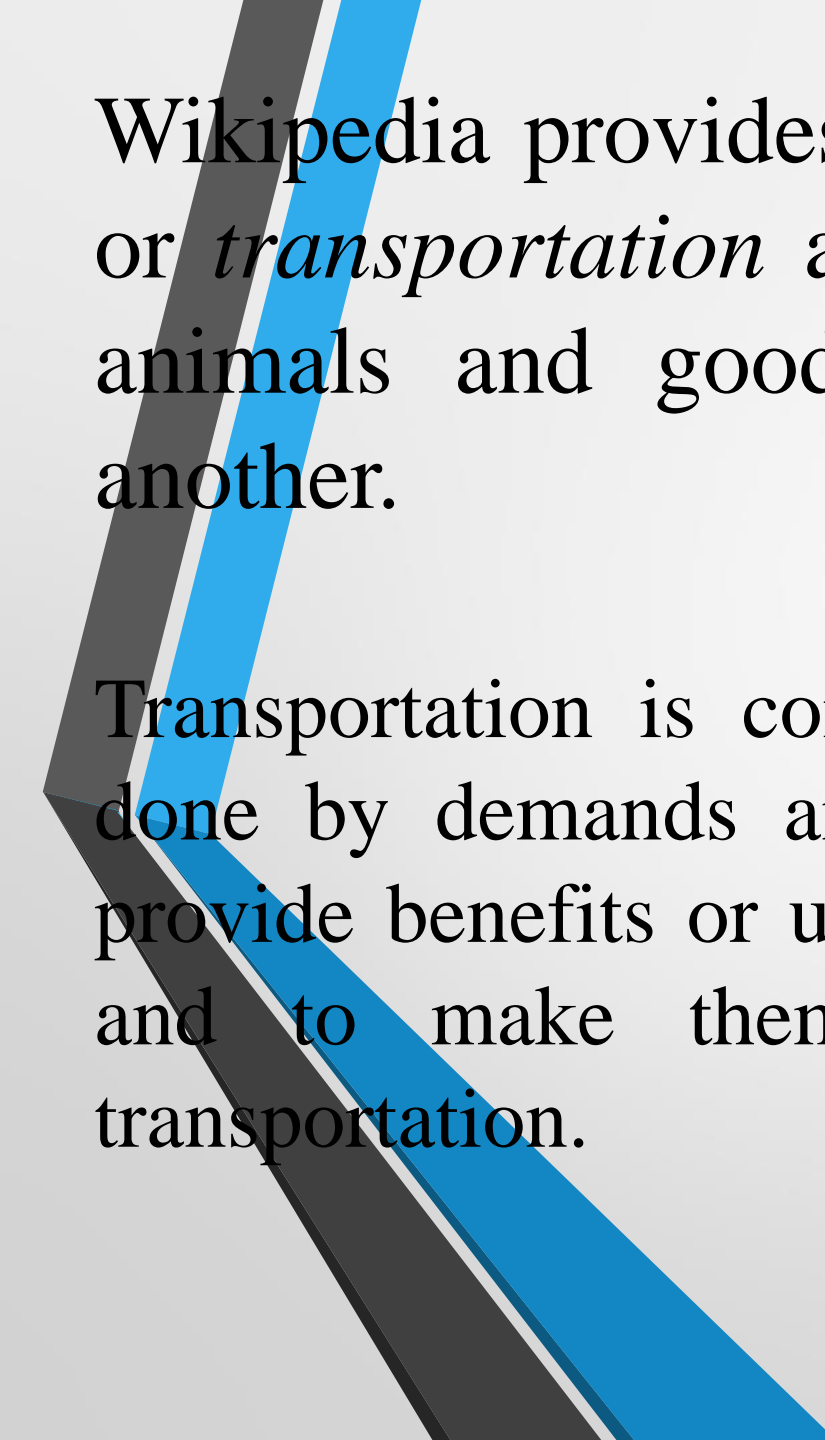
*'Port'* means to hold, to carry, or a place on a waterway with facilities for loading and unloading ships, a city or town on a waterway with such facilities, the waterfront district of a city, a port of entry.

*Transportation* means an act of moving things or animals from one point to another; moving of individuals from one point to another.

Business Dictionary gives a definition of *transportation*:

Any device used to move an item from one location to another. Common forms of transportation include planes, trains, automobiles, and other two-wheel devices such as bikes or motorcycles.

The process of shipping or moving an item from point A to point



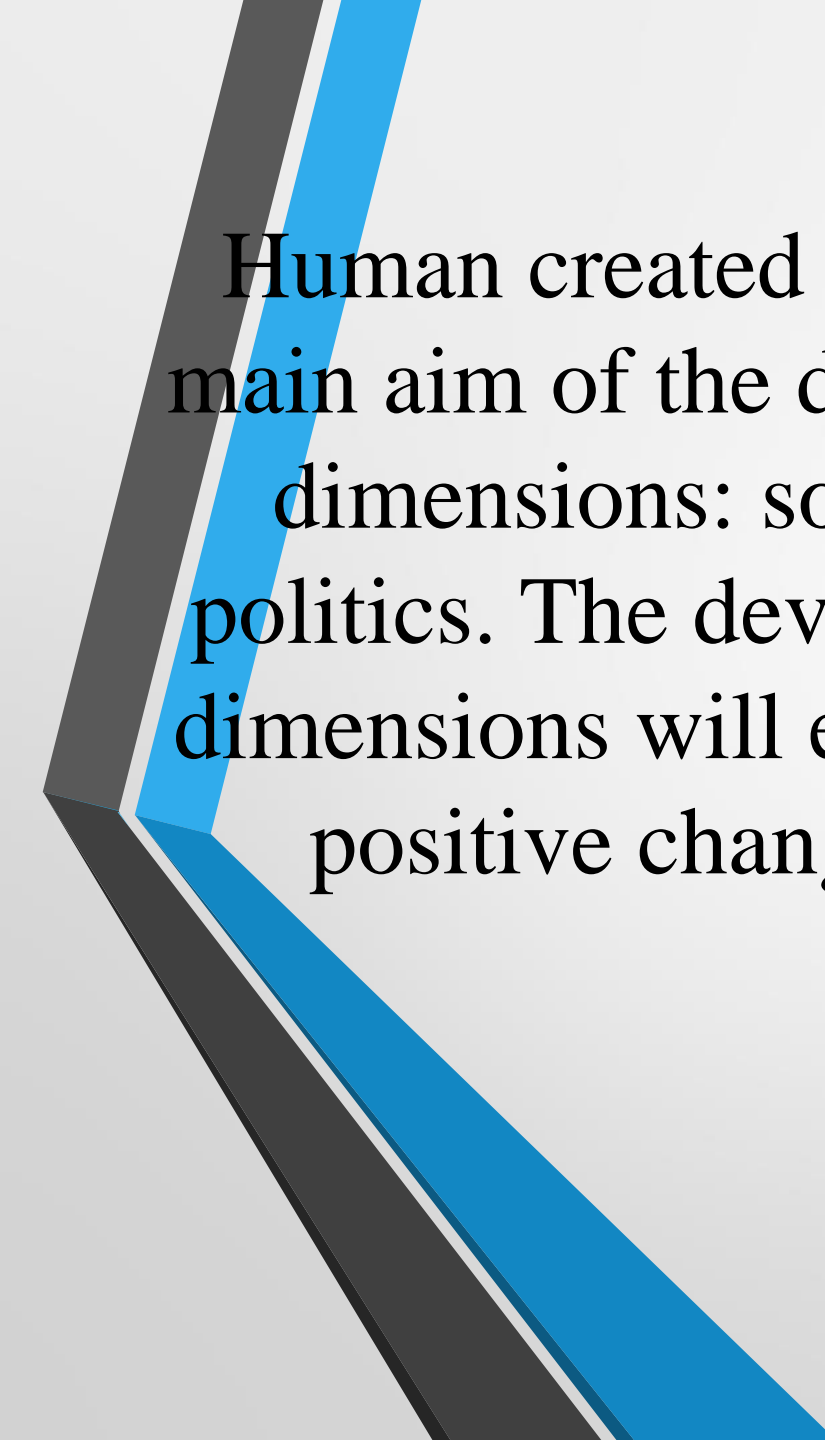
Wikipedia provides a definition of *transport* or *transportation* as a movement of people, animals and goods from one location to another.

Transportation is considered to be a movement done by demands and needs of human, and to provide benefits or utilities to those who involve, and to make them meet the objectives of transportation.

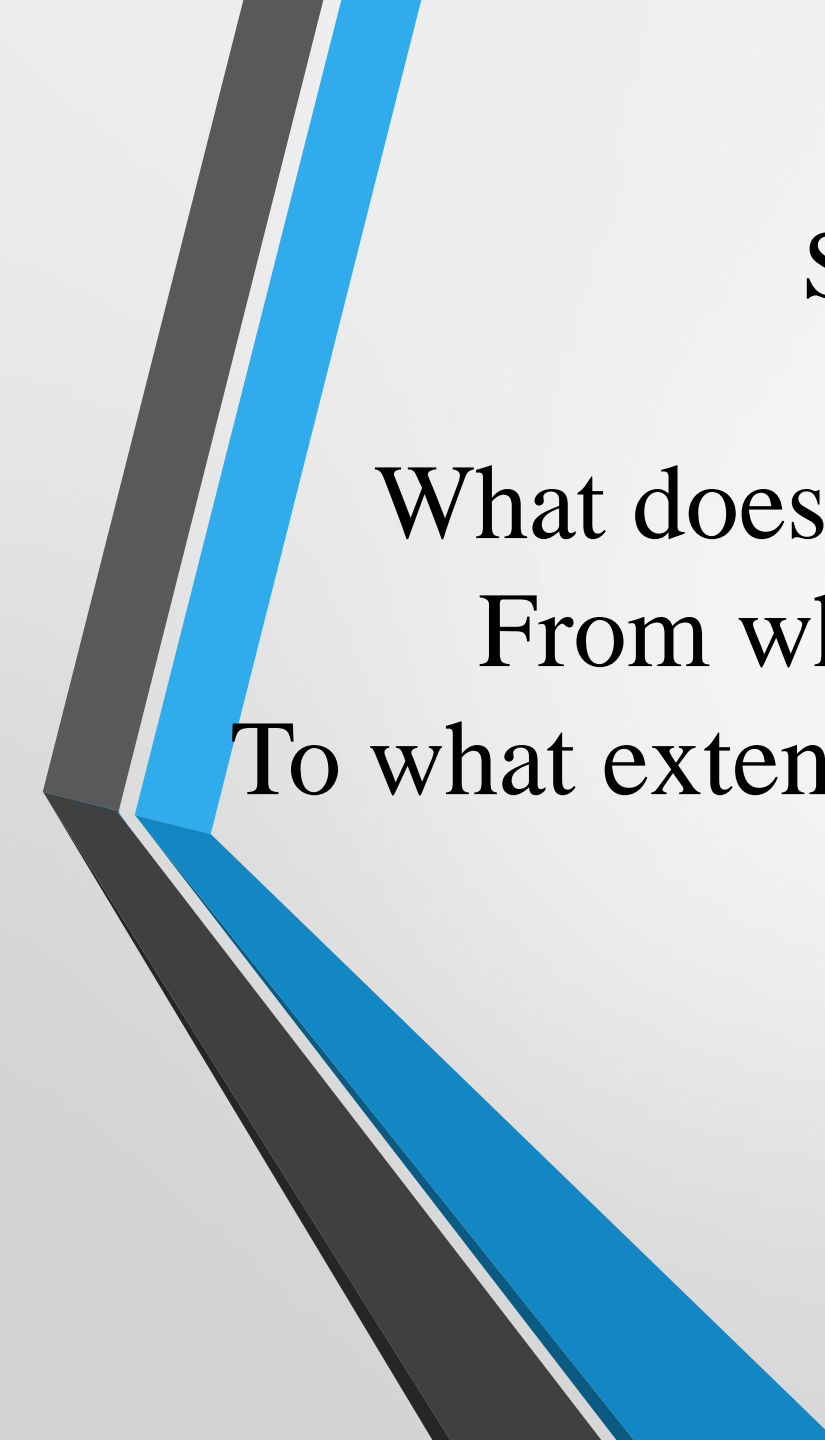


# **OBJECTIVES OF TRANSPORT**





Human created transportation with the main aim of the development of the three dimensions: society, economics and politics. The development of these three dimensions will enable a country to have positive changes in the following:



So, now

What does transport move?

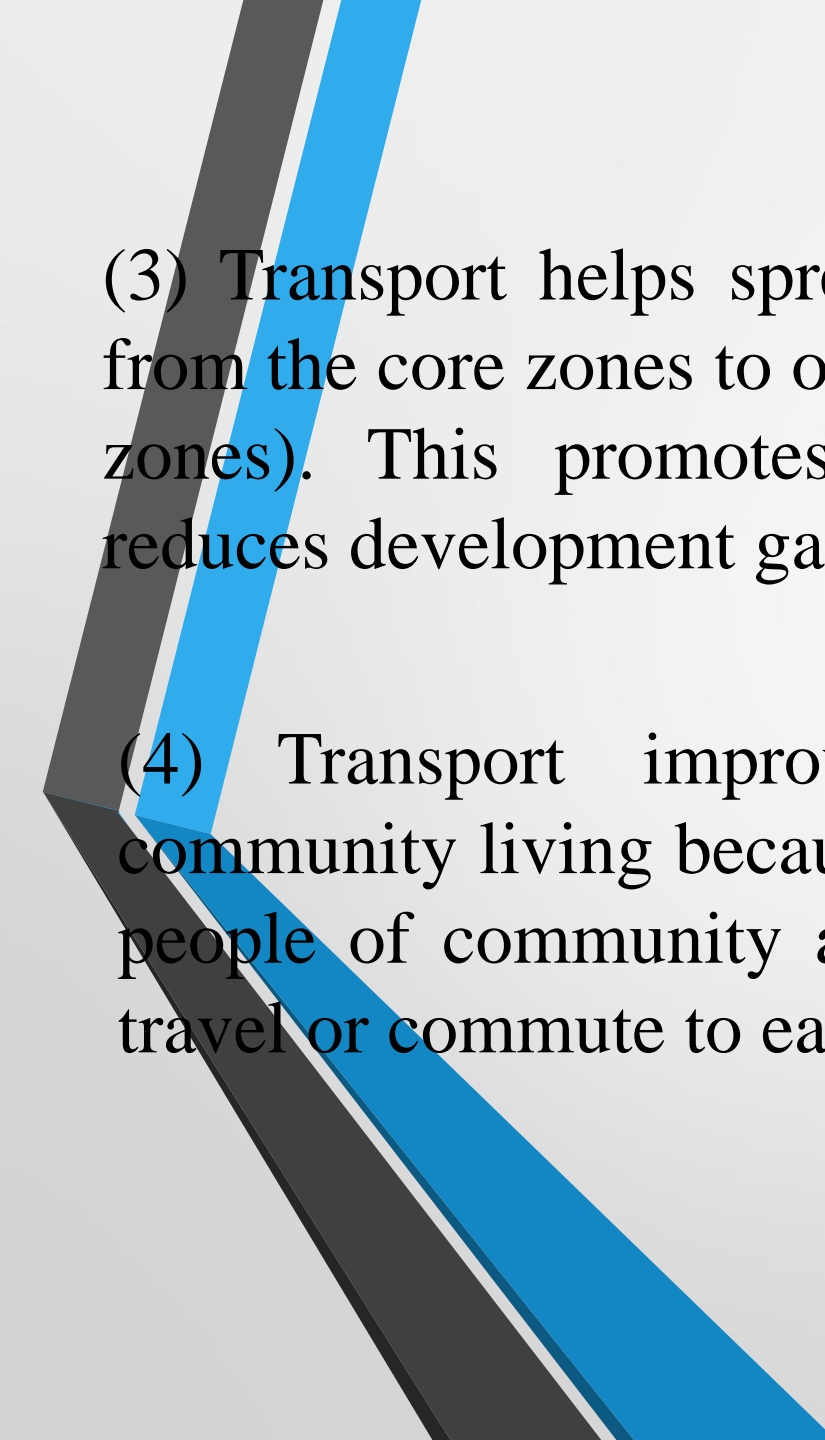
From where to where?

To what extent it develops things?

## *Social changes*

(1) Transportation expands new communities. Due to the inner areas having high density of population, transport development enable human to move from these dense areas to other places in the outer part to settle.

(2) Human is a social species, meaning that they need to meet, communicate and interact with others in order to share knowledge and experiences.



(3) Transport helps spread the growth and development from the core zones to other more remote areas (periphery zones). This promotes equality of development and reduces development gap.

(4) Transport improves quality and standard of community living because there is higher mobility among people of community and people outside community to travel or commute to each other.



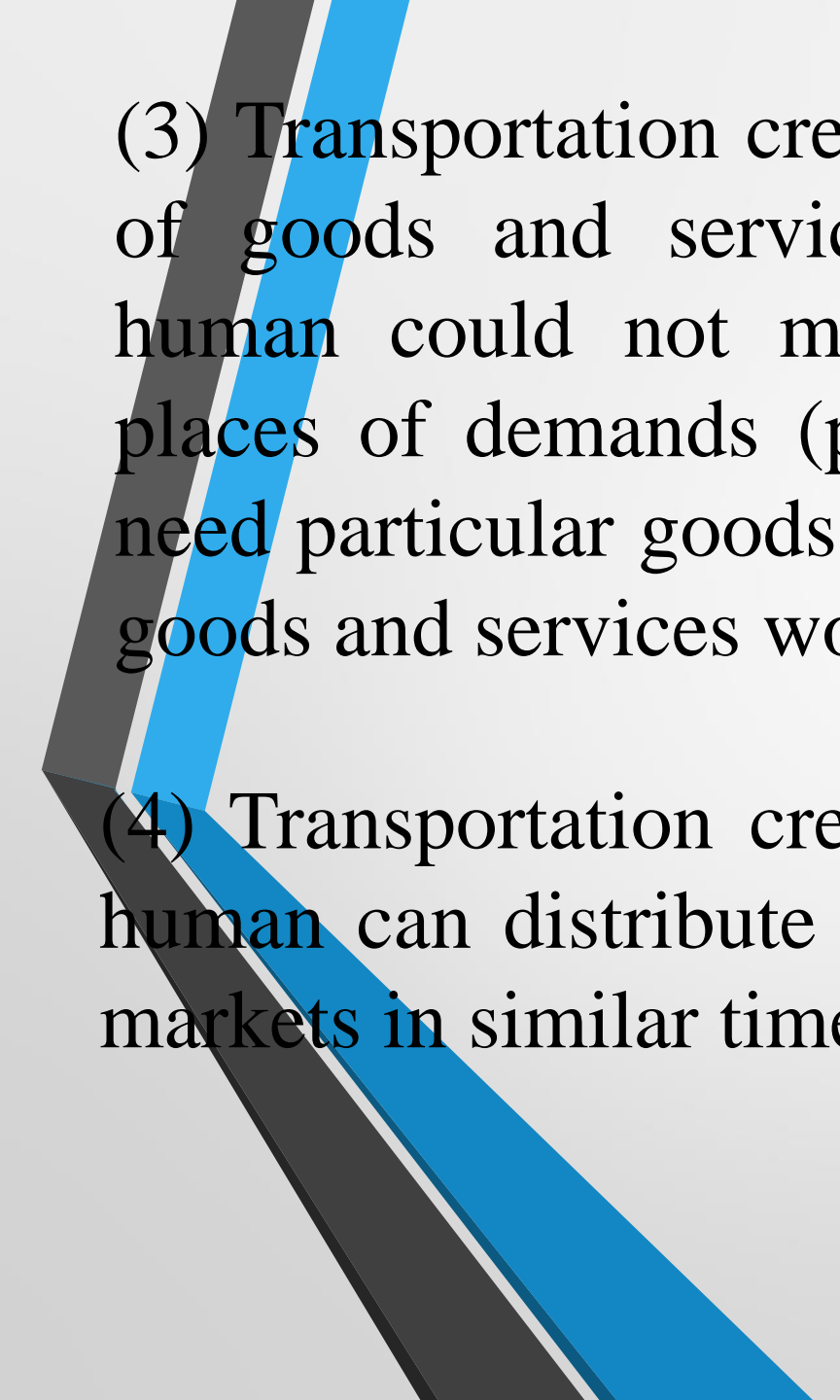
(5) Transport promotes education nationwide.

(6) Transport facilitates people to have relaxing time, and therefore to have good mood and to develop positive state of mind. This is because transport allows people to make a move or to travel to other places outside their routine and daily life and far from their home environment.

## *Economic changes*

(1) Transport allows trades of goods and services, including goods of 4 factors needed for human daily living,

(2) People use transportation in traveling to work places, in order to work for earning money for living.



(3) Transportation creates utilities and adds values of goods and services. Without transportation, human could not move goods and services to places of demands (places there are people who need particular goods and services), and therefore, goods and services would not be any of value.

(4) Transportation creates price stability, because human can distribute goods to different places or markets in similar times.



(5) Transportation spreads income and reduces unemployment.

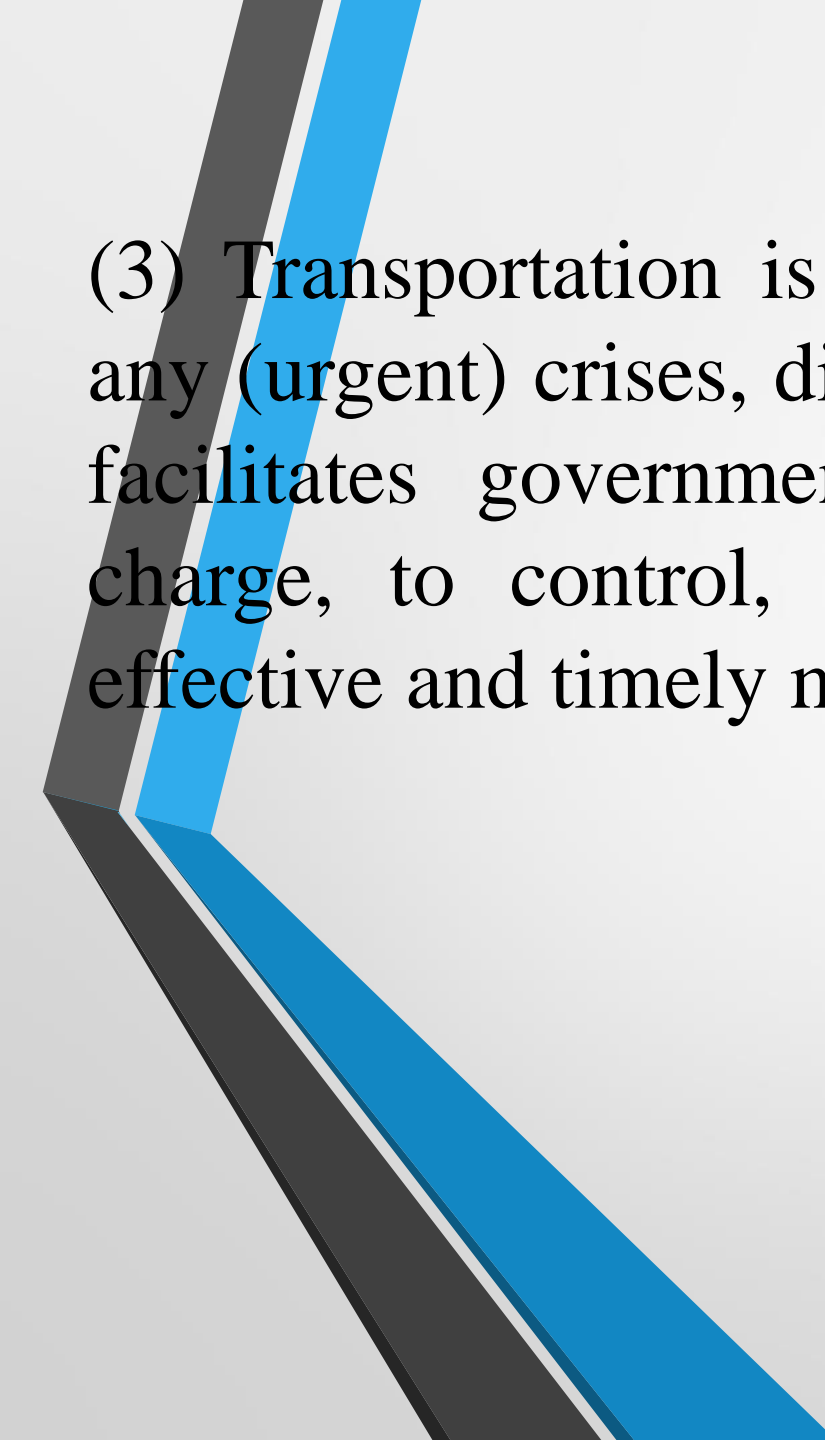
(6) Transportation motivates huge productions or manufactures, which thus reduces the cost of production (economy of scale).



## *Political and governing or administrative changes*

(1) Transportation facilitates improvement of a country's administration. Each government or state can govern its country under the good condition of transportation network that connects different parts of the country.

(2) Transportation promotes international relationship because leaders and population of each country can travel to the other countries to make relationship.



(3) Transportation is very useful when there are any (urgent) crises, disasters or political unrests. It facilitates governmental staff to move fast to charge, to control, or to solve problems with effective and timely manner.



**UTILITIES AND  
EFFECTIVENESS  
INDUCED FROM  
TRANSPORT**

# Time utility

Time utility happens when human uses transport in moving particular goods or services to consumers in a timely manner before those goods are damaged or rotten by time, or quality of goods decreases (some goods might be expired before reaching consumers).



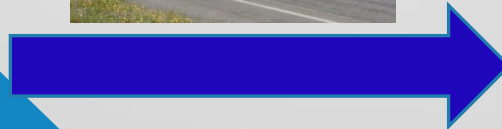
# Place utility

Place utility happens when human uses transport in carrying goods and services from places with no demand (or even low demands) to places with demands or higher demands. This is called place utility, which increases values and usefulness of those goods and services. For example, mobility of labor from Thailand to Saudi Arabia or other countries that need these labors.

No/ low demand place



Higher demand place



# Form utility

Form utility happens when human uses transport in carrying materials from one place to another place to be processed in production. The production can transform materials into new forms of goods. For example, woods are transported from a forest to a factory to make furniture and packaged wood for building houses. In terms of service, tangible materials can be carried into a place where service will be produced such as hotels and restaurants.





SPREEUFER

PROPERNADE  
TELEPHONE  
BIBEL

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WESPER  
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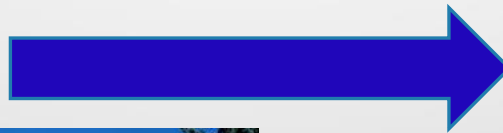


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# Possessive utility

Possessive utility happens when human uses transport in carrying goods and services from individual or groups of individuals to another individual or another groups of individuals. Goods and services are transferred or changed hand from one to another by different ways such as by trading, exchanging, or giving for free (charity/ donation).





What about this? Is it an effective transport during crisis/ disaster or disaster relief activity?



# Effectiveness of transportation

**Speed**

**Economy**

**Safety**

**Punctuality**

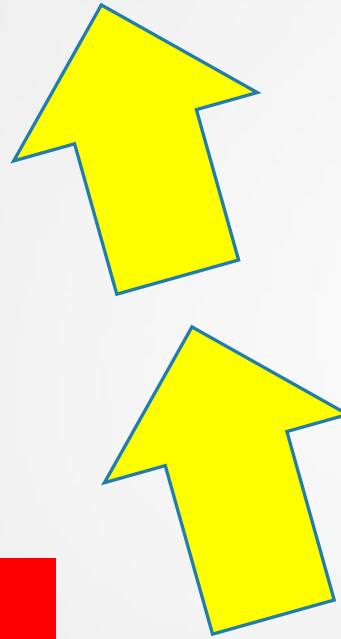
**Frequency**

**Convenience**

**Comfort**

**Reliability**

**Certainty**





## **Watch the VDOs**

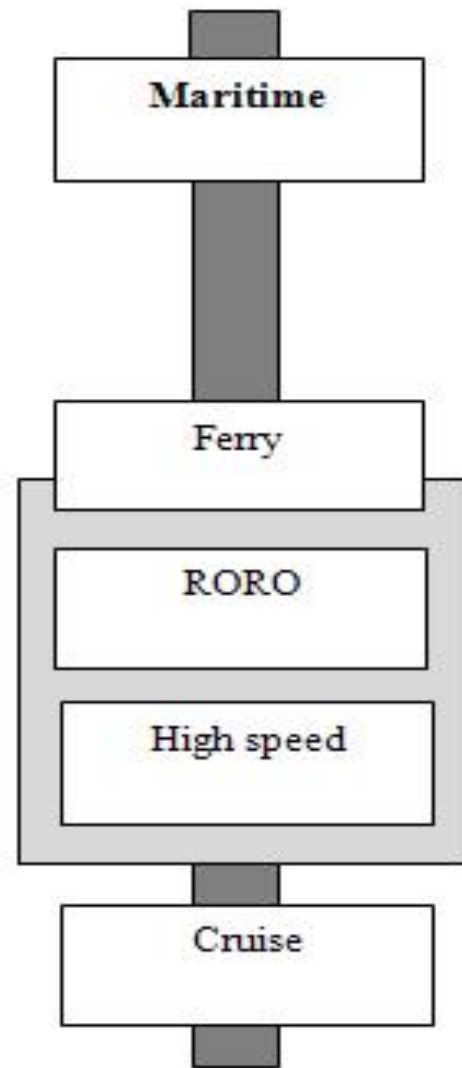
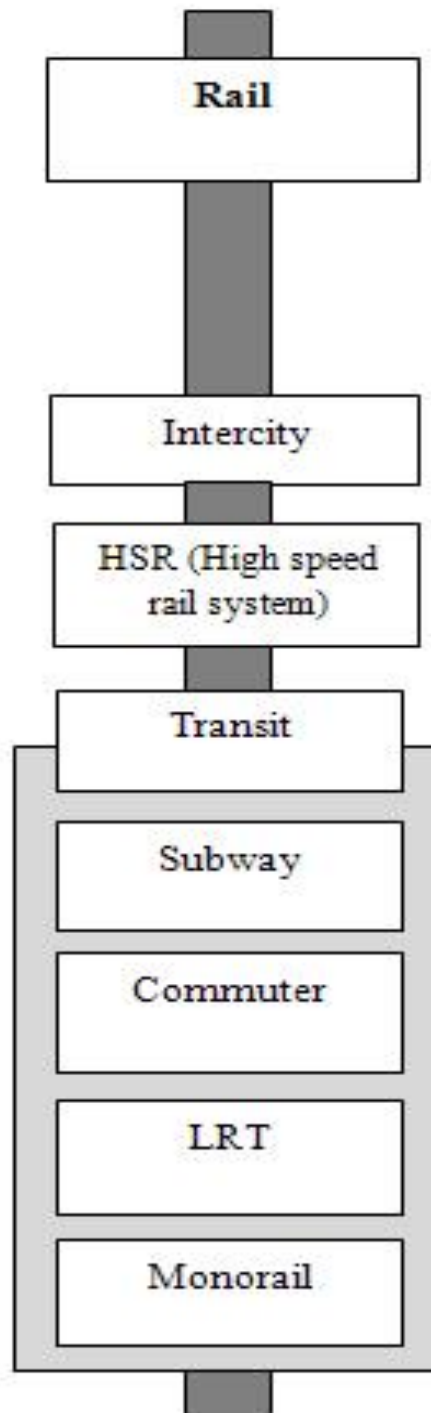
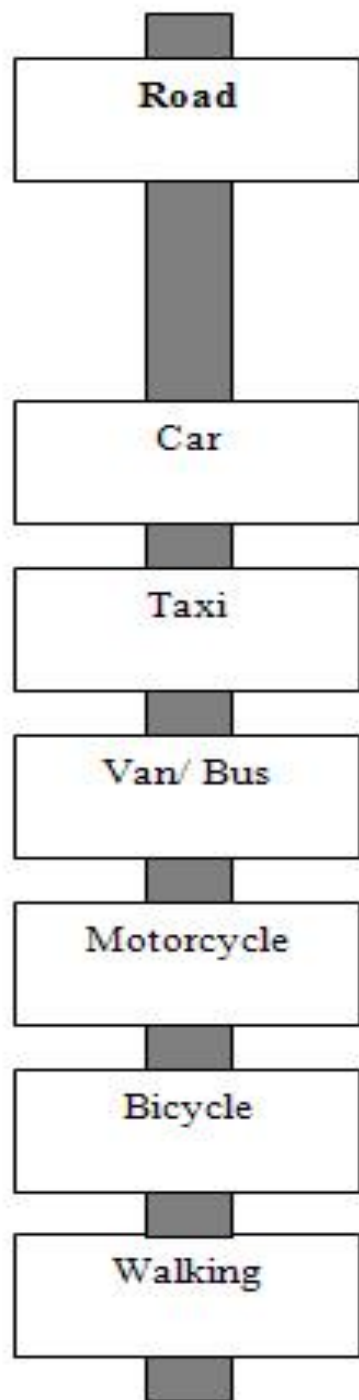
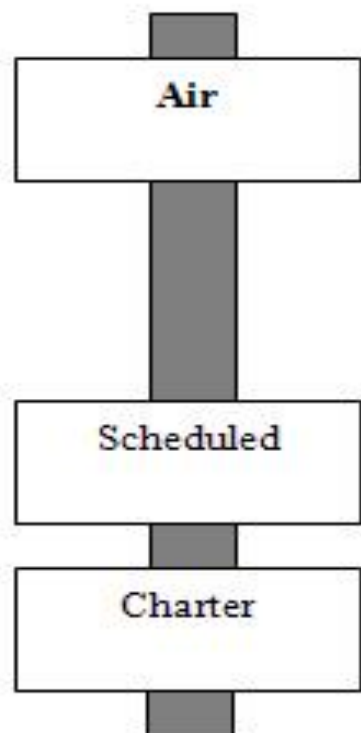
**Riding the rails- Train travel overview**

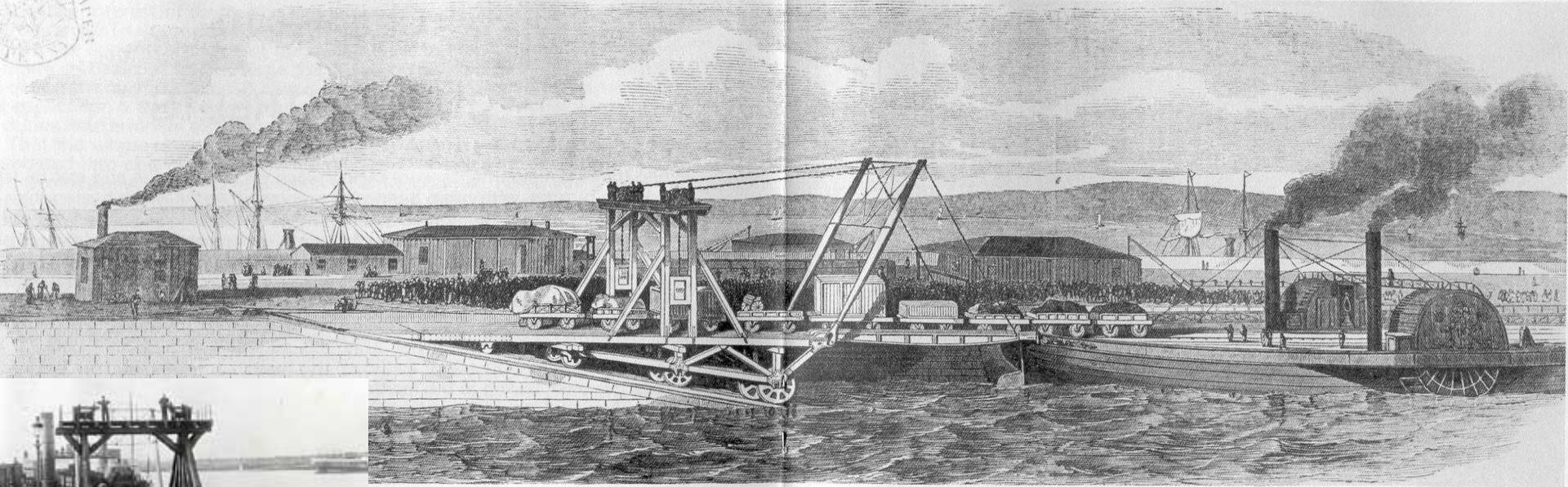
**Riding the rail- Scheduling stopover smartly**

**Riding the rail- Rail passes and train transfers**



# **TYPES OF TRANSPORT MODES**





*The Floating Railway between Burntisland and Granton.  
From the 'Illustrated London News' of 9 February, 1850.*

(National Library of Scotland)



**RORO- Roll-on/ Roll-off Vessel**





I-12  
Light Rail Station

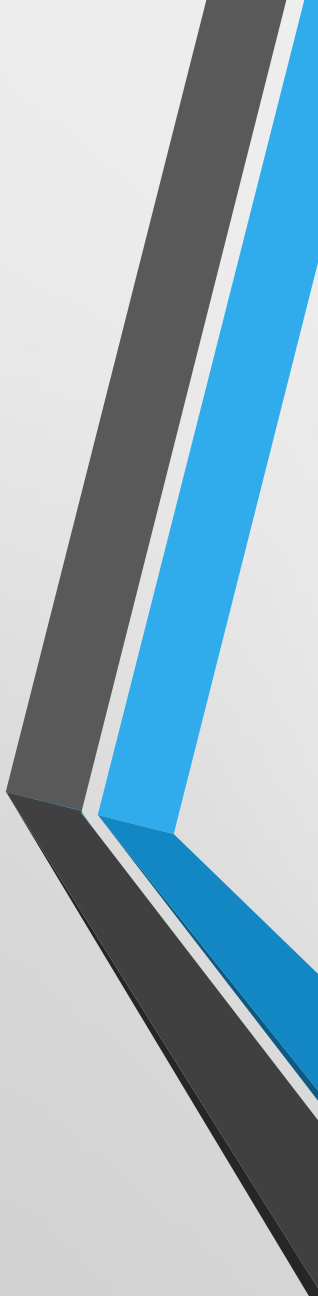
Sign image from the Manual of Traffic Signs <<http://www.traffic-sign.us/>>  
The sign image copyright Richard C. Moehr. All rights reserved.

**Light rail transit (LRT)**- modern, electricity-powered Light Rail Vehicles (LRV)- operate at street level with more frequent stops, boarded at all doors, carry passengers in dedicated lanes, separated from motor vehicle traffic.

KV ZÜRICH  
BUSINESS SCHOOL

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SEGWILLER





**Intercity Train**



**Commuter**





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**Watch some more VDOs**

**BRT Basic Concepts**

**Light rail joins buses in Seattle transit tunnel**

**Houston Light Rail Transit**

**Intermodal Transportation**



# LIFE CYCLE OF TRANSPORT

## Introduction stage

- Particular transport service is brought to a market (new entrant)/ new transport innovation, including equipments, tools, machines used in that transport.
- Less safe and less effective
- Still high cost because a few service providers that run this type of transport service (a few entrants due to high cost).
- Highest risk at this stage. Perhaps, only big investor (s) can survive.

## Growth stage

- Gradual increase of consumption demand
- More consumers are attracted to use the service
- The market is active (both in demand and supply sides)
- the technology (equipments, machines) of this type of transport and related services will be developed to respond higher demands, consumers' safety and convenience



## Maturity stage

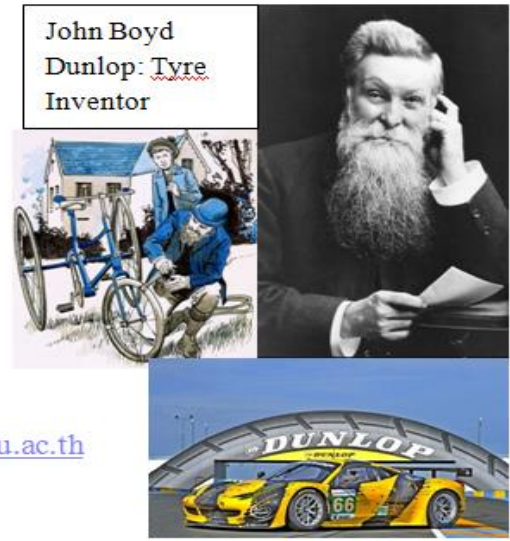
- Start to stagnate and see its intended decline
- Good and proper system and well- developed transport equipments and high safety
- More new entrants entering into the market, which makes the business more competitive (more choices)
- There are some co-operations between companies as well to survive
- The government also has more active role in announcing law and regulations to control the business

## Declined stage

- Many existing transport companies may have lower revenue and profit (lose their market share)
- Passengers learn to use new kinds of transportations
- The government seems to relieve the regulations
- Transport companies have tried to create marketing campaigns to expand the market or to find new markets Some companies may not be successful, facing low profits and see their decline

Sometime, the factors that may shorten the life cycle of particular transportation may concern the following:

- (1) Technology (i.e. from steam engine to internal combustion engine)
- (2) Innovation in transport (i.e. the operations of commercial aircraft transportation had been started, which was the factor of decline in popularity and use of oceanic transport)
- (3) Transport improvement/ development (i.e. invention of pneumatic or inflatable tyre to be used and inflated tube of sheet rubber tyre declined (no longer use))

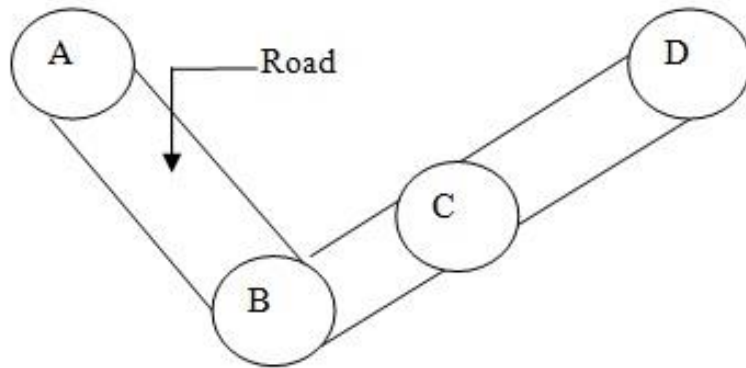




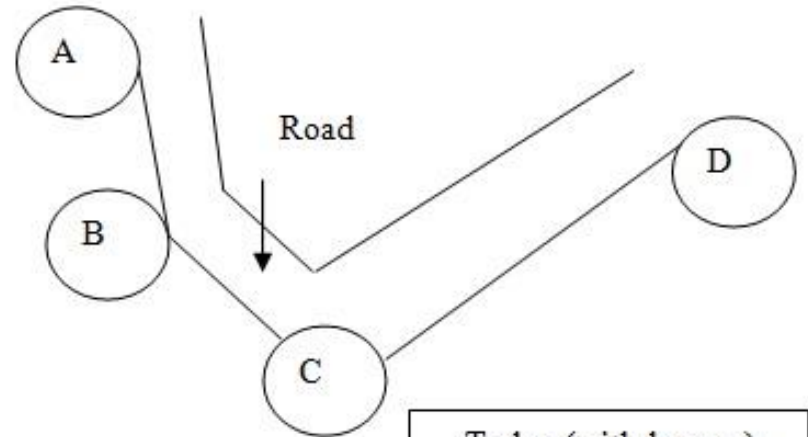
# **COMPONENTS OF TRANSPORT**

# Way/ Route

- Normal way
- Artificial way
- Natural artificially improved way



In the past



Today (with bypass)

# Terminal / Passenger Terminal

- Bus terminal
- Airport
- Railway station
- Port
- Other mass transit terminals (e.g. BTS)

The point where passengers are “assembled” (i.e. in busloads or planeloads) to reach their final destinations where they are dispersed..

## Sizes of terminals rely on the following factors:

### ➤ *Extent of use* includes

- (1) length of time spent by passengers or freight to stay at the terminal waiting for transport modal options or carrying units (i.e. bus, flight, train, ferry)
- (2) Length of time spent in steps before taking off the vehicle, such as buying, checking, or loading process

## ➤ *Size of carrying units or vehicles*

An airport has many functions that explain why it needs large area.

- very large runway for planes to take off and to land
- Large apron for parking
- other none- passenger function zones (not related to passengers) such as airside and landside zones.
- Passenger terminal composes of many functions and services that passengers uses before traveling such as check-in counter, passport control, baggage claim, duty free, lobby waiting before entering gate and get on a plane, restaurants and other services.





## ➤ *Length of the journey*

- It influences a provision of a range of terminal facilities

Traveling across a continent or between countries use air and sea transport (flight/ cruise), will carry many bags (baggage/ luggage), and they are accompanied by many relatives and friends who send them and say good bye.

Compared to small port for ferry travel, passengers travel a short distance by a ferry have no or a very few activities to do before traveling, and do not have much luggage carried. So, they just buy a ticket, wait awhile, get on a ferry and then the ferry moves

# Carrying Units and other Equipment

Refer to equipment used in facilitating transportation;

They are equipment that are used in moving passengers, animals, objects from one point to another point

Such as car, truck, airplane, ferry, train and cabin, pipe.

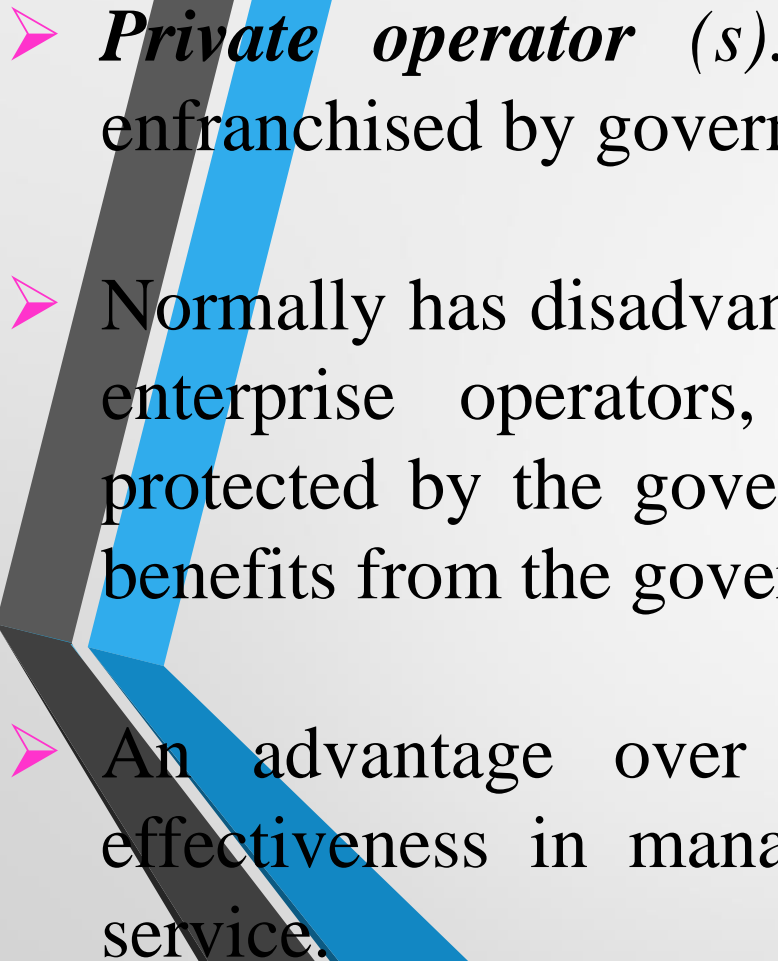
Also, if it is about goods transport, equipment used in cargo work and container cranes that load goods from one point to another point, can be in this category.

# Motive Power

- *Natural power*: human use this power without any mechanic to change or transform the power into energy.
- *Artificially- produced power*: for this type, human use technology in transforming natural power into energy and use it.

# Operator

- *Public operator (s)*: it refers to transport operated by government, which can also be in the form of state (government) enterprise (s)
- The reason why government is usually an operator of national transportation is to prevent immediate cancellation or stop of transport service in case it is operated by private sector (due to profitability and commercial factors).
- A weakness of public control and management is a bureaucratic and red-tape problem.

- 
- ***Private operator*** (s): generally, they are operators enfranchised by government to run transport business.
  - Normally has disadvantages compared to public or state enterprise operators, because they are not really protected by the government and do not receive much benefits from the government.
  - An advantage over public one is its speed and effectiveness in management and providing transport service.

## Individual Paper Assignment (10 marks)

Each student is assigned to write a paper (300-400 words) that discusses about the following question.

*How do utilities and effectiveness of transportation play roles in tourism and travel industry in terms of creating tourists' mobility and travel experiences?*

\* Essay Form

\*\* You need to give some examples in your paper as well and give citations.

## *Pair Assignment*

### *Observation, taking pictures, making notes, discussion and presentation (10 Marks)*

Students are assigned to observe the components of transport in different modes (focusing here on land (road/ rail) and river or canal) at different areas/ zones of Bangkok or Nakorn Pathom.

After the observation, please prepare the power point presentation (with pictures) for the following:

1. Describe first about physical characters and location of the selected transport mode and area/node. Also, give more information about that node such as service information, schedule/timetable
2. Discuss the effectiveness of the components of that transport mode of the selected area/node.
3. Also indicate what are good and bad points about it and give suggestions for improvement.



# Areas of your observation

- permanent traffic
- temporary signs or unplanned signs
- traffic flow
- walk ways for pedestrians/ footpath
- road condition and lanes
- drivers' behavior
- users' behavior
- spaces for buses, vans and cars, including space for parking
- parking and stop behavior
- passenger bus station/ stop environment