

Enriching Knowledge Series for the Updated S4-6 Geography Curriculum:
(1) Basic concepts of transport geography and
villages-in-the-city in the Zhujiang Delta (New)

Brief notes for Talk (1):

Basic concepts on transport system, transport development and urban morphology

1. Transport network

- A. The basic structure of transport network:
 - i. Node: A node is a location where a tangible transport movement or intangible flow starts or ends, or through which it passes. A node can be a terminal vertex or an intermediate vertex within a network.
 - ii. Link: A link is a single line (edge) between two nodes (locations) where flows of people, goods or information occur.
 - iii. Network: A network is a set of links (edges) within a system of connected nodes. The area enclosed by a network is called a region or face.
 - iv. Flow: People, goods and information occur in a network

- B. The characteristics of transport network
 - i. Scale
 - ii. Connectivity
 - iii. Accessibility
 - iv. Centrality
 - v. Network resilience

2. Transport development and urban morphology

Urban morphology refers to "the study of the physical (or built) fabric of urban form, and the people and processes shaping it", and a study of the physical and spatial characteristics of urban structure (<http://www.urbanform.org>).

Urban form refers to the physical characteristics of cities / towns resulting from the process of human activities and planning.

- A. Basic elements of urban form
Nature, streets, plots and building

- B. Urban form and travel pattern
The urban form characteristics at neighbourhood, local and regional scales would have some associations with travel characteristics such as travel distance, modal split, walking and cycling.

- C. Interrelationships between transport development and urban form
It is important to note that transport development (including accessibility, mobility, street patterns and infrastructure provision, etc.) is only one of the forces influencing urban forms. The interplay with other factors, for example, natural terrain, social and economic backgrounds of commuters, transport policy and planning actions, also shapes the form of a settlement and its residents' travel patterns.