

# Transport

- ▶ ...creates main „arteries“ of the Earth
- ▶ Some regions experience very high *peaks* (high points) and some other very low *throughs* (low points) of traffic flow.

## Transport - terms

- ▶ **Network** – several places are joined together by a series of routes. It consists of:
  - **Links** – the routes between places
  - **Nodes** – the places where 2 or more links meet
- ▶ **Accessibility** – the ease by which a place can be reached from other places
- ▶ **Density** – the number of routes and how closely packed together they are

## Commuting

- ▶ **Hinterland** (tributary area) – the area served or influenced by town or city
  - Hinterlands of towns expanded as the distances travelled by commuters increased
- ▶ **Commuter** – person who lives in a smaller town or village in the hinterland of a larger town or city travelling to the larger settlement for work

## Environmental problems

- ▶ **Air pollution** caused by motor vehicles
- ▶ **Smog** = nitrogen oxides (NO<sub>x</sub>) and hydrocarbons (CH<sub>x</sub>) react with sunlight to form *ozone*.
- ▶ O<sub>3</sub> and *carbon monoxide* (CO) cause respiratory infections and lung disorders => *asthma*

- ▶ Pollutants emitted from motor vehicles (soot) make buildings bad-looking, i.e. it's very costly to return the stone to its original state
- ▶ **Noise pollution** = car engines, sounding of car horns, thundering roar of heavy trucks (lorries) => damage to health and peace of mind
- ▶ **Visual pollution** = traffic queues, smog, multi-storey car parks, motorway fly-overs => all these spoil the look of a city

## Social problems

- ▶ **Traffic accidents** = approx. 300,000 people are killed annually due to car accidents
- ▶ **Vital services** = delayed by traffic congestions
- ▶ **Stress** = experienced by drivers as they wait in long queues => delay for work
- ▶ **Loss of land** = some cities have >25% of the land built-up by roads and parking places
  - LA >25%

## Traffic congestions

- ▶ occur in cities ⇔ carrying capacity of roads and highways is exceeded
- ▶ Environmental and social problems of transport lead to *economic problems*
  - e.g. losses from traffic congestions => workers are delayed to their work
- ▶ Traffic (transport) solutions:
  - *to build more roads, motorways and car parks for private transport*
  - *to limit private transport to get to the centre by using public transport*

## Transport solutions

- ▶ Higher parking fees
  - the longer the car stay in the parking, the higher the fee
    - ▶ e.g. 1<sup>st</sup> hour – 10 SKK, 2<sup>nd</sup> hour, 20 SKK, etc.
- ▶ Improved bus public transport
  - school buses + reserved bus lanes along major roads => efficiency during peak hours

## Transport solutions

- ▶ Some solutions lead to excessive strain on financial expenditures of a local government
  - e.g. to build new roads, new crossroads, motorway fly-overs, etc.
- ▶ But most of traffic solutions depends upon „atmosphere“ in the society
  - e.g. stolen bikes, safety of parking places and (cross)roads

## Keywords

- ▶ transport, peaks, throughs, routes, hinterland, commuter
- ▶ respiratory infections, lung disorders, soot
- ▶ car engines and horns, traffic queues, smog, multi-storey car parks, motorway fly-overs
- ▶ private/public transport, traffic congestions, stress, traffic accidents