

**1. Warm-up: Which ideas do you associate with these expressions?**

**Traffic**

**Transport**

**Infrastructure**

- *Vehicles or pedestrians in transit.*
- *A way of getting from place to place.*
- *Systems and facilities serving a country, city, or area.*
- *Any device used to move an item from one location to another.*
- *To move or carry (goods, for example) from one place to another.*
- *The passage of people or vehicles along routes of transportation.*
- *The business of moving passengers and cargo through a transportation system.*
- *The basic facilities needed for the functioning of a community, such as transportation and communications systems, water and power lines, and public institutions.*

**2. OPINIONS**

**Which phrases are used to introduce personal opinion and impersonal opinion?**

*In my opinion*  
*It should be noted that*  
*It is claimed that*  
*As far as I'm concerned*

*Reports reveal that*  
*Personally, I'm certain*  
*A general assertion is*  
*Predictions suggest that*

**The suggestions below offer possible solutions to traffic congestion problems.**

**What do you think about them? Which is the best and why?**

Based on <http://www.bbc.com/future/story/20140611-can-we-ever-end-traffic-jams>, prepared by J. Kubricka



*The traditional way to ease congestion has been to build more and wider roads; but this only seems to attract more and more drivers*

- a guiding system with smart sensors which indicate whether a spot is occupied or empty (San Francisco, Los Angeles, Moscow)
- wireless vehicle-to-vehicle communication, your car may monitor the motion of a vehicle five vehicles ahead and prepare for what is going to happen
- smartphone app which works like a social network for drivers
- motivating people to travel in off-peak hours (Singapore, London)
- a driverless car, automated driving in cities allows for much denser packing of cars in streets
- a great public transport system with extra bus lanes, nicer train stations and on-board wi-fi
- use of waterways “as an infrastructural resource for public transport“ (Vancouver, Istanbul)

### 3. COMPARING CHARACTERISTICS OF TRANSPORT SYSTEMS

Which system is

1. relatively environmentally friendly?
2. suitable for bulky cargo?
3. the fastest?
4. independent of weather conditions?
5. most affected by congestion?

Give reasons for your answers.

	CANALS, RIVERS	OCEANS	RAIL	ROAD	AIR	PIPELINES
WEATHER PROBLEMS	- can freeze. Drought /heavy rains make rivers unnavigable.	Storms, fog, icebergs.	Heavy snow blocks lines. Heavy rain – landslides.	Fog, ice, snow, cross-winds. Sun – dazzles.	Fog, icing, snow. Airports better if sheltered from wind.	
RELIEF FACTORS	Width of channels. Need of flat land / gentle gradient. Discharge - constant.	Harbours need to be deep, wide, sheltered.		Avoids/ takes detours around high land. Valleys may flood.	Needs large areas of flat land or land needs reclamation.	Difficult to lay.
SPEED	Slowest. Possible delays at locks.		Fast over medium-length distances.	Fast over short distances. Urban delays.	Fastest over long distances.	Very fast as continuous flow.
GOODS/ PASSENGERS		Heavy, bulky, non-perishable, low-value goods. Cruisers.	Heavy, bulky and rapid goods. Large numbers of passengers.		Mainly passengers. Freight is light, perishable or high-value.	Bulk liquid (oil, gas, slurry, water)
CONGESTION	Very little.	Very little.	On commuter trains.	In urban areas, and at holiday times.		None.
ENVIRONMENT	Some oil discharged, but few problems.		Noise and visual pollution.	Major noise and air pollution. Uses up farmland. Vibrations.	High noise levels. Air pollution. Much land for airports.	Leakage when disrupted.

Adapted from D. Waugh, Geography, An Integrated Approach, 2002, p.605

#### Glossary

<i>shelter</i>	chránit	<i>detour</i>	objížďka	<i>bulk</i>	velký objem
<i>negotiate</i>	překonat	<i>reclamation</i>	rekultivace, opětovné využití	<i>slurry</i>	tekutý cement
<i>gradient</i>	stoupání	<i>lock</i>	zdyadlo, plavební komora	<i>leakage</i>	unikání
<i>haulage</i>	přeprava zboží	<i>freight</i>	přepravované zboží, náklad	<i>cruise</i>	výletní plavba
<i>navigable</i>	splavný	<i>economical</i>	úsporný	<i>discharge</i>	průtok

**Which types of transport are the statements related to? Put them in the right place in the table above.**

1. Perishable, smaller loads by lorry. Few people in one vehicle.
2. Tankers discharging oil. Much land for ports, warehouses.
3. Cannot negotiate steep gradients so avoids hills.
4. Only at peak holiday times.
5. Not greatly affected.
6. Slow, yet most economical.
7. Heavy, bulky, non-perishable, low-value goods. Tourists.

