## GLOBAL TOURISM GEOGRAPHY UNIT - V

#### Contents

- Transport in Europe & Trans-Siberian
- Transport in Far East
- Transport in Middle East
- Transport in Australia

# 5.1. Transport in Europe & Trans-Siberian





#### Importance of transport in Europe

- 1 million transport-related enterprises
- Over 7million jobs
- Value-added of over €300 bn
- Almost 30% of energy consumption
- About 40% of public sector investment





### Transport

- Supports all other economic activity
- An important part of business costs
- Facilitates trade important to European integration and SEM
- Important for other policies
  - e.g. energy, environment, social and economic cohesion, etc
- One of only two sectors explicitly in Rome Treaty





## Transport trends

- 1970 personal mobility 17 km per day
- Late 1990s 38 km per day
- 1975-2000 European car ownership levels doubled
- Result = congestion
- Congestion costs = 0.5% GDP will double if present trends continue



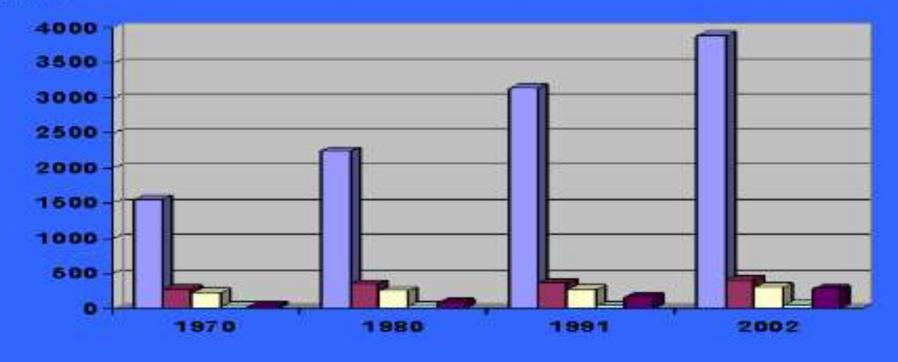


- Road = dominant transport mode
  - Door-to-door flexibility
- Rail transport long term decline in transport share – freight and passenger
- Rail more important in 2004 accession states
- 2004 enlargement reinforces need for better transport



#### Modal performance - passengers, Download EU-15

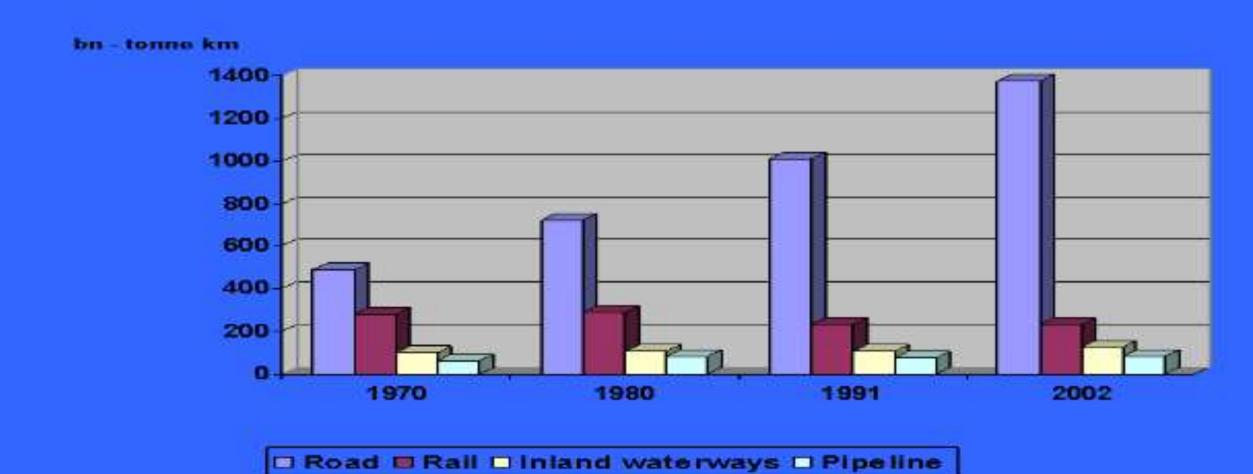
bn passenger km





#### Modal performance - freight, EU-15

Download





#### Wide range of transformative measures



- · Market access, e.g,
  - Mutual recognition of qualifications
  - Admission to the profession
  - Removal of quotas
  - Lifting of cabotage restrictions
- Tax measures
- Safety measures
  - E.g. driving hours





- Customs controls and regulations
  - Reduction of formalities
- Environmental regulations
- Technical harmonisation
  - Dimensions, weights, technical characteristics
- Infrastructure charging?

#### EUROPEAN RAILWAY NETWORK

The Trans-European rail network is made up of the Trans-European high-speed rail network and the Trans-European conventional rail network.

Standards for the rail network are set by the European Railway Agency, in the form of ERA Technical Specifications for Interoperability(TSI).

#### **EUROPEAN RAILWAY AGENCY (ERA)**

The European Railway Agency (ERA) helps to build an integrated European railway area by reinforcing rail safety and promoting interoperability. The Agency also acts as the system authority for the European Rail Traffic Management System (ERTMS) project.



#### TRANS-EUROPEAN ROAD NETWORK

 The idea of TENs (trans-European networks for transport, energy, and telecommunications) emerged by the end of the 1980s in conjunction with the proposed Single Market of the European Union. 'It made little sense to talk of a big market, with freedom of movement within it for goods, persons and services, unless the various regions and national networks making up that market were properly linked by modern and efficient infrastructure.'



## The main international trains operating in Europe are:

- Enterprise (Republic of Ireland & Northern Ireland (UK))
- Eurostar (United Kingdom, France, Belgium, Netherlands)
- <u>EuroCity</u>/<u>EuroNight</u> (conventional trains operated by nearly all Western and Central European operators, with the notable exception of the UK and Ireland)
- Intercity Direct (Netherlands, Belgium)
- InterCityExpress (Germany, Netherlands, Belgium, France, Denmark, Switzerland, Austria)
- <u>TGV</u> (France, Belgium, Italy, Switzerland, Spain, Germany, Luxembourg)
- Thalys (France, Germany, Belgium, Netherlands)

#### Contd...

- <u>Railjet</u> (Austria, Germany, Switzerland, Hungary, Czechia, Italy, Slovakia)
- Elipsos (France, Spain)
- <u>Trenhotel</u> (France, Spain, Portugal)
- Oresundtrain (Denmark, Sweden)
- SJ 2000 (Sweden, Norway, Denmark)
- NSB (Sweden, Norway)
- Allegro (Finland, Russia)
- Belgrade-Bar Railway (Serbia, Montenegro)

## These are the biggest European airlines for 2020 by passengers flown during 2019

- Ryanair, 152 million.
- Lufthansa Group, 145 million.
- IAG (British Airways, Iberia, Vueling, Aer Lingus), 118 million.
- easyJet, 96.1 million.
- Air France-KLM, 87.6 million.
- Turkish Airlines, 74.2 million.
- Aeroflot, 60.7 million.

#### Top 5 Airports in Europe

- 1 Heathrow Airport.
- 2 Charles de Gaulle Airport. Charles de Gaulle Airport is the largest international airport in France. ...
- 3 Amsterdam Airport. ...
- 4 Frankfort Airport. ...
- 5 Madrid-Barajas Adolfo Suarez Airport.

### Trans-Siberian Network



#### Trans-Siberian Railway Facts

- Longest continuous railway on Earth: 5,772 miles
- Proposed in 1850s by Perry McDonough Collins, American traveler who took seven months to travel overland from Moscow to Pacific.
- Before railway, fastest route from Moscow to Vladivostok was 40 days by sea.
- Precursor was Trakt, the Great Siberian Post Road
- Only way to get goods in and out of Siberia was by roads and rivers impassible much of year.
- Approved by Tsar Alexander III in 1887

#### Ussuri

- Ground broken May 31, 1891, by Tsarevich Nicholas in Vladivostok
- 478 miles from Vladivostok to Khabarovsk
- Begun May 1891. Opened November 1897
- Skilled labor, locomotives and building materials transported by ship from Odessa.
- Tried to solve labor shortage with Sakhalin prisoners, but they robbed and murdered in Vladivostok. Imported 15,000 Chinese workers.
- Humid weather fostered Siberian anthrax, killing horses. Mosquitoes spread fever among workers.

#### Amur

- 1,369 miles from Khabarovsk to Sretensk
- Begun 1908. Opened 1916.
- Completed continuous rail line through Russian territory. Previously, trains reached Vladivostok on the Chinese Eastern Railway, through Manchuria, considered vulnerable to Japanese seizure.
- Due to harsh winters, rail laying limited to June through October.
- Seventy-five percent of workers contracted scurvy from drinking swamp water on the taiga.

#### Transbaikal

- 686 miles from Lake Baikal to Sretensk
- Begun 1895. Opened 1900.
- Labor shortages, due to Old Believers refusing to build "Satanic" railroad. Governor of Transbaikalia offered 1,700 convicts, 2,500 exiles paid bonuses above daily quotas.
- Permafrost dynamited or softened with fires before tracks laid.
- July 1897, floods destroyed 230 miles of track, costing \$7 million.

#### Circumbaikal

- 162 miles from Port Baikal to Kultuk
- Begun 1901. Opened 1904.
- When railway first opened, trains crossed Lake Baikal by ferry.
- Route only accessible from the lake, so winds and waves slowed construction.
- 33 tunnels dug through sheer mountain shoreline, 200 bridges laid across rivers running into lake.
- Cost \$216,000 per mile, most of any section.

#### Mid-Siberian

- 1,377 miles from the Ob River to Irkutsk
- Begun 1893. Opened 1899.
- Tomsk bypassed, either because it wouldn't pay bribe or because route saved 57 miles. Later connected by spur.
- Crews had to hack 250-foot wide path through heavily wooded taiga, which was frozen until mid-July, then turned swampy. Took a year to lay 54-mile long Tomsk spur.
- Engineer in charge requisitioned 1,500 convict laborers from Irkutsk. They were given a year off their sentences for every 8 months they worked.

#### West Siberian

- 881 miles from Chelyabinsk to the Ob River
- Begun 1892. Opened 1896.
- Connected Siberia with existing European rail line.
- Surrounding country barren of timber for bridges, so wood had to be brought in from Ufa, 300 miles to the west. Stone for culverts and abutments brought in from Urals.
- Crossed Barabinskaya Steppe. Workers chopped down 8-foot tall nettles, dug canals to drain marshes.
- Seven span, \$1 million bridge across Ob completed April 1897, linking with Mid-Siberian line.

#### Results of railway

- Increased settlement of Siberia. The West Siberian Railway carried 195,000 emigrants in 1898. Before railway, Siberia's population was 5 million. Today, it is 32 million.
- Russia became an Asian power. Railway treaty with China followed by demand for lease of Port Arthur, leading Japan to launch attack that began Russo-Japanese War.
- Soviet Union used railway to move industrial capacity beyond the Urals during World War II.

## 5.2. Transport in Far East

### The Far East

The far east is made up of East Asia, The Russian Far East, and Southeast Asia. Excluded are Australia and New Zealand which lie even farther east due to them being more culturally western.



## Region and Territories

- Peoples Republic of China . Laos
- Hong Kong (China)
- Japan
- Macao (China)
- Mongolia
- North & South Korea
- Taiwan
- Brunei
- Cambodia
- East Timor
- Indonesia

- Malaysia
- Myanmar
- Papua New Guinea
- Philippines
- Singapore
- Thailand
- Vietnam
- Russia Far East

## Demographics

- Total population for the Far East is 3.79 billion. Within these countries populations vary. The People's Republic of China has a population of 1.3 billion while the nation of Brunei only has 381,371 inhabitants.
- 920 million households total in the Far East
- 51.1% of the population is male, with 48.9 being female.
- Life expectancy for males is 67.4 and females are expected to live and average of 71.9 years.
- Languages also vary from region to region, with most countries having their own language separate from the others in the Far East.

## Primary Industries

- In the Far East, industry is rooted primarily in the service sector, or tertiary sector of the economy. The service sector is based on intangibles which makes it difficult to quantify.
- For a better idea of how this portion of the world operates we can look to the actual production of goods.

## Exports

- machinery and equipment
- plastics
- optical and medical equipment,
- metals (iron and steel)
- textiles
- footwear
- fishery products

- rice
- rubber
- jewelry
- automobiles and auto parts
- electronic appliances (computers)
- plastics
- chemicals

## Internationally

- Feast or famine region of the world
- There are many countries, like Japan and China, in the region that are industrialized and have established themselves in international trade
- There are however a lot of countries that are extremely poor. The region is a big producer of petroleum, chemicals, textiles, and steel related products
- The Far East and the United States rely heavily on each other for importing and exporting of their products

#### Train Networks of Far East

- **China** has the most advanced high-speed train infrastructure in the world, according to an analysis by Omio, a platform for booking train travel in **Europe**. With over 19,000 miles of high-speed tracks in operation, **China** also has more miles of high-speed tracks than the **rest of the world** combined.
- The train running on that line is also part of China's Fuxing series and can run up to 350 **kilometers per hour** (217 **mph**) without a driver -- said to be a world first.
- The Trans-Asian Railway (TAR) is a project to create an integrated freight railway network across Europe and Asia.

## Best Airlines In Asia

- Singapore Airlines. Singapore Airlines brings together flight innovation and refined travel. ...
- ANA (All Nippon Airways) ...
- Cathay Pacific Airways. ...
- EVA Air. ...
- Thai Airways. ...
- Hainan Airlines. ...
- Garuda Indonesia. ...
- Japan Airlines.

# Busiest Airports of FE

RANK	COUNTRY	AIRPORT CITY IATA/ICAO COD	DE
1	Japan	Tokyo International Airport Tokyo	HND/RJTT
2	PRC	Beijing Capital International Airport	Beijing PEK/ZBAA
3	Hong Kong,	Hong Kong International Airport	Hong Kong HKG/VHHH
4	Thailand	Suvarnabhumi AirportBangkok	BKK/VTBS
5	Singapore	Singapore Changi Airport Changi	SIN/WSSS
6	PRC	Guangzhou Baiyun International Airp	ort Guangzhau
J	1 IVC	dualigation baryon international Airp	ort Guangzhou
O	CAN/ZGGG	Guangzhoù baryun mternationar An p	ort Guarigzhou
7		Narita International Airport Tokyo	_
7 8	CAN/ZGGG		NRT/RJAA
7	CAN/ZGGG Japan	Narita International Airport Tokyo	NRT/RJAA Jakarta CGK/WIII

# Contd

11	Malays	sia Kuala Lumpur International Airport	SepangKUL	./WMKK		
12	PRC	Shanghai Hongqiao International Airport	Shanghai	SHA/ZSSS		
13	Philipp	ines Ninoy Aquino International Airport	Manila MNL/RPLL			
14	Taiwar	an (Republic of China) Taipei Taoyuan International Airport Taipei				
	TPE/RCTP					
15	PRC	Shenzhen Bao'an International Airport	Shenzhen	SZX/ZGSZ		
16	PRC	Chengdu Shuangliu International Airport	Chengdu	CTU/ZUUU		
17	PRC	Kunming Wujiaba International Airport	Kunming	KMG/ZPPP		
18	Japan	an Kansai International Airport Osaka KIX/RJBB				
19	South	Korea Gimpo International Airport Seoul	GMP/RKSS			
20	PRC	Hangzhou Xiaoshan International Airport	Hangzhou			
	HGH/ZSHC					

# 5.3. Transport in Middle East

#### MIDDLE EAST Asia Map



## Introduction

• The Middle East has a reasonable transport **network**, although distances are long and standards vary from country to country.

#### Transportation in Middle East

- Taxis. The most convenient mode of transportation available all over the Middle East is Taxis. ...
- Buses. The **bus** network of the city is relatively widespread that stands to be a great way of connecting your place to the desired destination. ...
- Metro, Mono and Tram. ...
- Middle east countries are well connected through airlines also.

# Popular Airports in Middle East

- Tel Aviv Ben Gurion International Airport (TLV)
- Hamad International Airport (DOH)
- Dubai International Airport (DXB)
- Istanbul Airport (IST)
- Kuwait Airport (KWI)
- King Abdulaziz International Airport (JED)
- King Khalid International Airport (RUH)
- Bahrain Airport (BAH)

# Top airlines in the Middle East

- Etihad Airways.
- Oman Air.
- Saudi Arabian Airlines.
- Gulf Air.
- Royal Jordanian Airlines.
- Air Arabia.
- Fly Dubai.
- Middle East Airlines.

# Major Rail Networks of ME

- Government of Bahrain.
- Government of Kuwait.
- Etihad Rail.
- Oman Rail.
- Qatar Rail.
- Saudi Railway Company.

**There** are **train** networks in Egypt, Israel, Iran and Turkey, and these can represent the best transport option on some routes, such as between Cairo and Luxor in Egypt. ... In general, **trains** are less frequent and usually slower than buses, while many stations are some distance from the town centres they serve.

# Top 08 Middle East Ports

- DP World Jebel Ali.
- Khorfakkan Container Terminal.
- King Abdul Aziz Port.
- Port of Aden.
- Imam Khomeini Port Complex.
- Port of Aqaba.
- DP World Fujairah.
- Shuwaikh Port, Kuwait.

# 5.4. Transport in Australia

## Introduction

- There are many forms of transport in Australia. Australia is highly dependent on road transport.
- There are more than 300 airports with paved runways.
- Passenger rail transport includes widespread commuter networks in the major capital cities with more limited intercity and interstate networks.
- The Australian mining sector is reliant upon rail to transport its product to Australia's ports for export.

# Road Transport

- Road transport is an essential element of the Australian transport network, and an enabler of the Australian economy.
- There are 3 different categories of Australian roads. They are federal highways, state highways and local roads. The road network comprises a total of 913,000 km broken down into,
  - paved: 353,331 km (including 3,132 km of expressways)
  - unpaved: 559,669 km (1996 estimate)
  - Victoria has the largest network, with thousands of arterial (major, primary and secondary)
    roads to add.
- The majority of road tunnels in Australia have been constructed since the 1990s to relieve traffic congestion in metropolitan areas, or to cross significant watercourses.

### Contd...

- Australia has the second highest level of car ownership in the world.
- It has three to four times more road per capita than Europe and seven to nine times more than Asia.
- Australia also has the third highest per capita rate of fuel consumption in the world. Melbourne is the most car-dependent city in Australia, according to a data survey in the 2010s.
- The distance travelled by car (or similar vehicle) in Australia is among the highest in the world, being exceeded by the United States and Canada.

## Rail Network

#### Commuter rail

- Sydney, Melbourne, Brisbane, Perth and Adelaide have extensive commuter rail networks which have grown and expanded over time.
- Australian commuter rail typically operates with bidirectional all day services with Sydney, Melbourne, and to a lesser extent Perth and Brisbane's systems
- Sydney Trains operates the busiest system in the country with approximately 1 million trips per day. Metro Trains Melbourne operates a larger system albeit with a lower number of trips.

#### Trams and light rail

 Trams have historically operated in many Australian towns and cities, with the majority of these being shut down before the 1970s in the belief that more widespread car ownership would render them unnecessary. Melbourne is a major exception and today has the largest tram network of any city in the world.

## Cond..

#### Rapid transit

- Sydney is the only city in Australia with a rapid transit system.
- The Sydney Metro network currently consists of one 36 km driverless line, connecting Tallawong and Chatswood.
- The line will eventually connect with the Sydney Metro City & Southwest to form a 66 km network with 31 metro stations.

#### Inter-state rail services

- Journey Beyond operates four trains: the Indian Pacific (Sydney-Adelaide-Perth), The Ghan (Adelaide-Alice Springs-Darwin), The Overland (Melbourne-Adelaide), and the Great Southern (Brisbane-Melbourne-Adelaide).
- NSW Government owned NSW TrainLink services link Brisbane, Canberra, Melbourne, Dubbo, Broken Hill, Armidale, Moree and Griffith to Sydney.

## Ports and harbours

- Adelaide,
- Brisbane,
- Cairns,
- Darwin,
- Fremantle,
- Geelong,
- Gladstone,
- Port Lincoln,

- Mackay,
- Melbourne,
- Newcastle,
- Portland,
- Sydney,
- Townsville,
- Wollongong

### Aviation

- Qantas is the flag carrier of Australia. Australian National Airways was the predominant domestic carrier from the mid-1930s to the early 1950s
- In the following years, Virgin Australia became a challenger to Qantas. Both companies launched low-cost subsidiaries Jetstar and Tigerair Australia respectively.
- There are many airports around Australia paved or unpaved. A 2004 estimate put the number of airports at 448. The busiest airports in Australia are:
- Sydney Airport Sydney, New South Wales SYD
- Melbourne Airport Melbourne, Victoria MEL
- Brisbane Airport Brisbane, Queensland BNE
- Perth Airport Perth, Western Australia PER
- Adelaide Airport Adelaide, South Australia ADL
- Gold Coast Airport Gold Coast, Queensland OOL

#### Contd...

- Cairns Airport Cairns, Queensland CNS
- Canberra Airport Canberra, Australian Capital Territory CBR
- Hobart International Airport Hobart, Tasmania HBA
- Darwin International Airport, Northern Territory DRW
- Townsville Airport Townsville, Queensland TSV

# Thank You