Transport and Telecommunications

Roads, railways and air transport within Pakistan, international transport links, ports and dry ports, and telecommunications.

Internal transport

Patterns and density

- **Roads** form the densest network, especially in the **Punjab** and **Sindh** plains, where **flat land** and **many cities** make roads and rail easy to build. **Main routes:** the **Grand Trunk Road (N-5)** from **Karachi to Peshawar** through **Lahore, Rawalpindi**; the **Indus Highway (N-55)**; the **motorways** (**M-2** Lahore–Islamabad, **M-1** Peshawar–Islamabad, **M-9** Karachi–Hyderabad, **M-3** and **M-4**) and the **Karakoram Highway (KKH)**.
- **Other roads:** the **RCD Highway** from Karachi through **Khuzdar and Quetta** to **Taftan** on the Iran border; the **Makran Coastal Highway (N-10)**, about **650 km** along the Arabian Sea from Karachi through Ormara and Pasni to **Gwadar**, which opened up the fishing coast; and roads from **Sukkur and Lahore** to Quetta. Road transport carries **most** of the country's passengers and well over half of its freight.
- **Railways** (Pakistan Railways) run mainly along the **Indus plain**: the main line from **Karachi** to **Peshawar** via **Lahore**, and links to **Quetta**; few lines in the **mountains** and **Balochistan**.
- **Air transport:** international airports at **Karachi, Lahore, Islamabad, Peshawar, Quetta, Multan, Faisalabad, Sialkot**; **domestic flights** link the north (**Gilgit, Skardu**), where roads are slow, to the big cities.
- **Regional variation: dense** networks in the **Punjab**, thinner in **Sindh**, and very **sparse** in **Balochistan** and the **mountains**.

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Factors that help and hinder

Help	Hinder
flat plains (cheap to build), **large populations** and **trade**	**mountains** (costly tunnels and bridges, **landslides**, **snow**), **deserts** and **sparse population** in Balochistan
rivers are crossed by **bridges** (a barrier but many bridges exist)	**floods** wash away roads and tracks; **monsoon** damage; **heat** damages road surfaces
government investment and **foreign loans** (the **CPEC** road and rail projects)	**lack of money** for maintenance; **poor construction**; **overloaded trucks**
trade routes to ports and borders	**security** problems in some regions

Recent improvements and new developments

- **Motorways** (M-2 was opened in **1997**), widened highways and **bypasses**; the **CPEC** road projects.
- **Motorway details: M-2** Lahore–Islamabad (about 367 km, 1997), **M-1** Peshawar–Islamabad (about 155 km, 2007), **M-3** (a short link to Faisalabad), **M-4** (Faisalabad–Multan, in stages) and **M-9** Karachi–Hyderabad (about 136 km).
- **Why railways declined:** lack of investment, **worn-out track and old locomotives**, single lines, **competition from roads**, poor management and ticketing, overstaffing and losses. The network is about **8,000 km**, mostly **broad gauge**, with some narrow-gauge lines. Improvements: diesel engines replacing steam, faster **express trains**, **electrification** of the Lahore–Khanewal line, computer ticketing, and the **Karakoram Express** (new Chinese-built coaches). The **Karachi Circular Railway** (1969) carried commuters but closed in the 1990s and has been proposed for revival.
- **Railways:** new locomotives and coaches, the **ML-1** upgrade plans (Karachi–Peshawar), and some new **express trains**.
- **Airports:** the new **Islamabad International Airport** (opened **2018**) and **Gwadar** airport.
- **Feasibility of new schemes:** they need **huge funds**, but they would **cut journey times**, **boost trade** and **development**; an issue is **how to pay for them** and the **maintenance** costs.

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Comparing the modes

	Advantages	Disadvantages
Road	**door-to-door**, **flexible**, reaches **villages**, good for **short and medium** distances	**congestion**, **accidents**, **air pollution**, **expensive** per tonne for long distances
Rail	**cheap for heavy goods and long distances**, **safe**, **less polluting**	**fixed routes**, **slow**, **poor service** and **delays**, **needs roads** at each end
Air	**fastest**, good for **long distances** and **remote areas**, and for **high-value** or **perishable** goods and **business travel**	**expensive**, **small loads**, **weather** disruptions, airports far from towns

International transport

Roads, railways and passes crossing the border

Route	Pass or crossing	To
Karakoram Highway	**Khunjerab Pass** (**4,693 m**, usually open **only in summer**; around May to November)	**China** (Kashgar)
Peshawar–Kabul road and rail to **Landi Kotal**	**Khyber Pass** at **Torkham**	**Afghanistan** (Jalalabad, Kabul)
Quetta–Kandahar road and **railway**	**Bolan Pass** and **Chaman** (the Khojak tunnel)	**Afghanistan**
Quetta–Taftan road and railway	**Taftan**	**Iran**
Lahore–Amritsar	**Wagah–Attari**	**India** (road and rail, with limited use since 1999–2019 and often closed)

Ports and airports

- **Karachi** (**Keamari**, the older **Karachi Port**, and **Port Qasim**), the **main sea ports**, handling most of the trade. **Gwadar** is a **deep-sea port** on the Balochistan coast, **developed with Chinese help** (CPEC), to give a route for China and Central Asia.
- **Port Qasim** (on the Gharo Creek, south-east of Karachi, opened around 1980) is a deep-water port with an industrial zone, built to serve the **steel mills** and to ease pressure on Karachi Port. The **Pakistan National Shipping Corporation (PNSC)** (1979) runs Pakistan's own merchant ships. **Gwadar**

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(long planned, developed with Chinese help from 2001, and in use from 2008) is meant to serve as a short route for **Central Asia** and **China**.

- **International airports** (Karachi, Lahore, Islamabad and others) connect Pakistan with the **Gulf**, **Europe** and **North America**. **PIA** (Pakistan International Airlines, formed in **1955**) is the national airline; air travel is fastest and the only practical link with some remote mountain areas.

Factors affecting location and development

Cross-border roads and railways: the **terrain** (passes in the mountains), **relations** with neighbours (borders **closed** at times), trade demand, **customs** facilities. **Seaports: deep, sheltered** water, **good road and rail links** to the interior, and space for **storage**. **Airports:** flat land, near **large cities**, and **demand**.

Dry ports

A **dry port** is an **inland** terminal, linked to a sea port by **road or rail**, where **customs** clearance is done and **containers** are handled. **Examples: Lahore**, **Faisalabad**, **Peshawar**, **Quetta**, and **Sialkot**. **What a dry port needs:** an efficient **rail link** with container trains, customs staff, large **storage areas and sheds**, and cold stores for perishables. **Why developed: to reduce congestion** at the sea ports, **speed up** clearance, **cut costs** for exporters inland, and **create jobs** in the inland cities.

Telecommunications

- **Radio, television, telephones, mobile phones, fax, e-mail and the internet** provide fast **communication**. **Education: distance learning** (the **Allama Iqbal Open University**), **online lessons**; **industry and trade: orders**, **payments** and **marketing** reach markets in other countries; **services: banking**, **call centres**, **e-commerce**, **health advice** (telemedicine).
- **Problems: mountains** and **remote** areas lack **coverage**, **cost** of phones and data, **power cuts**, **low literacy**, and **security**.
- **Role in development:** it brings **information**, jobs and **links to markets** (farmers can check **prices**), **speeds** government services, and helps **remote** places to connect.

> **TRY IT**
>
> Compare the advantages and disadvantages of road and rail transport for goods in Pakistan.

Outline. *Road:* flexible, door to door, reaches villages; but congestion, accidents and cost on long routes. *Rail:* cheap for bulk goods over long distances and safer; but fixed routes, delays and poor service. **Judgement: rail suits bulk goods over long distances; roads for short and flexible deliveries**; Pakistan relies heavily on roads, so investment in rail would help.

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