

# 1

UNIT

## China's Railway History

**W**hen the railways were introduced into China, they were strongly rejected by the Qing government and the railway industry, in fact, remained an infant industry before 1949. After the founding of the People's Republic of China, the construction of railways was taken into consideration by the government. The railway industry grew by leaps and bounds, especially when it came to the era of high-speed rail. The railway networks in China have totaled about 127,000 km now, including about 25,000 km of high-speed rail networks. It's not hard to figure out that there are three stages in China's railway history, namely, initial time, construction time and high-speed time.

**Upon completion of this unit, you should be able to:**

- master the words and expressions related to China's railway history;
- talk about the three stages of China's railway history;
- learn about the new development of high-speed railways;
- think critically about the relationship between the speed of the train and the safety of passengers.

## Learning Tasks

**You are required to discuss the following questions either in pairs or in groups.**

- 1 Of all modes of transport, which one do you prefer and why?
- 2 What is rail transport?
- 3 What are the advantages and disadvantages of train travel?
- 4 How many stages has China's railway history experienced and what are they?
- 5 Why did the Qing government reject the construction of railroads?
- 6 What are the major achievements in China's railway industry today?

**You are provided with the following resources for the above questions.**

### Useful Words and Expressions

#### rail transport

vehicle	track	long-distance transportation
railway network		

#### government's rejection

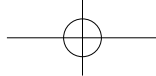
traditional transport mode	cart	military defense
farmland	feng shui	

#### China Railway High-speed (CRH)

the sixth national railway speed-up	high-speed train	commercial use
maximum speed	trainset	test speed

### Sample Paragraphs

- Rail transport is a means of transferring of passengers and goods on wheeled vehicles running on rails, also known as tracks. It is an important mode of long-distance transportation in China. China's railways are among the busiest in the world, and nearly 2.8 billion railway passenger trips were made in China in 2016. China has the world's largest high-speed railway network.



- The Qing government rejected the introduction of railroads to China. At that time, traditional transport modes such as horses and carts were frequently used, and the government saw the railroad as a scheme that would destroy the military defense, farmland and feng shui of the Qing Empire.
- The introduction of CRH series was a major part of the sixth national railway speed-up. CRH1/2A/2B/2E/5 are expected to have a maximum speed of 250 km/h, and CRH2C/3 have a maximum speed of 350 km/h. The new trainset, CRH380A, has a maximum test speed of 416.6 km/h. The fastest trainset, CRH380BL, attains a maximum test speed of 487.3 km/h.

## Detailed Reading

### The Development of China's Railway

China's railway, especially its **high-speed railway**, is experiencing **mushroom** growth. Trains have been one of the favorite means of transport for most Chinese people at present. Nearly 2.8 billion railway **passenger** trips were made throughout China in 2016, and the number has been growing **at a rate of** about 10% annually in recent years.

Generally speaking, China's railway industry has gone through three stages of development. The first stage was from the late Qing period to 1948 where only a few railroads were built and in use. It was regrettable that the introduction of railways to China was strongly **rejected** by the Qing government. At that time, the railroad was considered as a **scheme** that would destroy the **military defense**, farmland and feng shui of the Qing Empire. In 1876, the first railway in China, Wusong Railway, was put into operation without the permission of the Qing government. Since then, several railways were built in China, but most of them were constructed and controlled by Western powers.

The second stage was from 1949 to 2008, and **large-scale** construction was **characteristic** of this stage. Since the founding of the People's Republic of China, the country began to construct railways and develop railway industry in a planned way. In this period, a large number of old lines were **restored** and improved, and lots of new lines were built. Consequently, China's **railroad network** was formed and expanded rapidly.

The third stage began in 2008, which marked the **advent** of the era of high-speed rail. High-speed lines were gradually **replacing** old busy ordinary-speed lines, greatly increasing **transport capacity** and making train travel much easier than before. In 2017, Fuxing trains started to run between Beijing and Shanghai at a speed of 350 km/h, which made them the world's fastest **commercial high-speed trains**.

(298 words)

## Culture Notes

**1 The Qing Dynasty** (1616–1911), officially the Great Qing, also called the Qing Empire by itself, was the last feudal dynasty of China. It was established in 1616, named as Later Jin. In 1636, it changed its name to Qing and extended its rule south of the Great Wall in 1644. It ruled China for nearly 300 years and was pulled down in 1911.

**2 Feng shui** is a kind of philosophy related to geographical features. The location of a person's house or ancestral graves is supposed to have an influence on the fortune of the family and the offspring.

**3 Fuxing trains**, or China Standardized EMUs, are electric multiple unit high-speed trains, of which China owns completely independent property rights. All China Standardized EMUs are named CR (an acronym for China Railway). The two models of CR400AF and CR400BF have been put into operation. Fuxing trains feature high speed, less energy consumption and more space.

## New Words

mushroom	/ˈmʌʃrʊm/	<i>adj.</i> 如蘑菇般迅速增长（或发展）的；蘑菇的；蘑菇形的
passenger	/'pæsɪdʒə/	<i>n.</i> 乘客，旅客
reject	/'rɪ dʒekt/	<i>v.</i> 拒绝；摒弃，剔除
scheme	/skɪm/	<i>n.</i> 诡计；计划
military	/'mɪlə, tɛrɪ/	<i>adj.</i> 军事的；军队的

defense	/dɪˈfɛns/	<i>n.</i> 防御, 防护; 辩护, 答辩
large-scale	/ˌlɑːdʒˈskel/	<i>adj.</i> 大规模的, 大范围的; 大比例尺的
characteristic	/ˌkærɪktəˈrɪstɪk/	<i>adj.</i> 典型的, 构成人或事物特征的一部分的
restore	/rɪˈstɔːr/	<i>v.</i> 修复; 恢复; 归还
advent	/ˈædvɛnt/	<i>n.</i> 出现, 到来
replace	/rɪˈpleɪs/	<i>v.</i> 替换; 将(某物)放回原处
capacity	/kəˈpæsəti/	<i>n.</i> 能力
commercial	/kəˈmɜːʃəl/	<i>adj.</i> 商业的; 盈利的; 商业化的

### Phrases and Expressions

high-speed railway	高速铁路
at a rate of	以……的速度
railroad network	铁路网
transport capacity	运输能力
high-speed train	高速列车

### Reading Comprehension

#### 1 Fill in the blanks with the words from the passage.

- China's railway is undergoing \_\_\_\_\_, especially its high-speed railway.
- The first stage was from the \_\_\_\_\_ to 1948. \_\_\_\_\_ was characteristic of the second stage. The third stage began in \_\_\_\_\_.
- The Qing government strongly rejected the introduction of railways to China, because at that time, the railway was considered as a \_\_\_\_\_ that would destroy the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ of the Qing Empire.
- \_\_\_\_\_ was greatly increased because the high-speed lines replaced the old ones.
- Fuxing trains became the world's fastest commercial high-speed trains, running at a speed of \_\_\_\_\_.

## 2 Decide whether the following statements are true (T) or false (F) according to the passage.

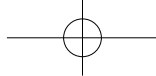
- 1) The airplane has been the favorite means of transport for more and more travelers in China.
- 2) China's railway history can be divided into four stages.
- 3) The feudal leaders of the late Qing Dynasty were quite in favor of the introduction of railways to China.
- 4) Feng shui is a kind of philosophy related to geographical features.
- 5) The high-speed lines were gradually replacing the old busy ordinary-speed lines, greatly increasing transport capacity and making train travel much easier than before.

## Language in Use

### 1 Fill in the blanks with the best words from the box. Change the form where necessary.

mushroom	characteristic	large-scale	restore	capacity
reject	scheme	defense	replace	commercial

- 1) The past few decades witnessed the \_\_\_\_\_ development of the Internet in this country.
- 2) He made a new health insurance \_\_\_\_\_.
- 3) We will help her \_\_\_\_\_ her health but it may take some time.
- 4) Having a deep respect for the old is a \_\_\_\_\_ feature of this country.
- 5) Their reasoning \_\_\_\_\_ must be well trained.
- 6) This company attaches great importance to profit and \_\_\_\_\_ growth.
- 7) The response of the readers varied from outright \_\_\_\_\_ to warm welcome.
- 8) There will be \_\_\_\_\_ military training on the frontier.
- 9) Every adult who could fight was now committed to the \_\_\_\_\_ of their homeland.
- 10) Nothing can \_\_\_\_\_ a mother's love.



## 2 Rewrite the following sentences using *It is/was regrettable that* or *be considered as*.

**Example:** People regretted that the introduction of railways to China was strongly rejected by the Qing government.  
→ It was regrettable that the introduction of railways to China was strongly rejected by the Qing government.

Now rewrite the sentences using *It is/was regrettable that*.

- 1) I regretted that you were not admitted to Cambridge.
- 2) It is a pity that she can't come to our party.
- 3) It is with regret that your application has not been successful.
- 4) Unfortunately, I have to accept your resignation.

**Example:** The Qing government regarded the railroad as a scheme that would destroy the military defense, farmland and feng shui of the Qing Empire.  
→ The railroad was considered as a scheme that would destroy the military defense, farmland and feng shui of the Qing Empire.

Now rewrite the sentences using *be considered as*.

- 1) He regarded books as a faithful friend.
- 2) A few architects regarded modern buildings as cold and unfriendly.
- 3) The whole world thinks that Charlie Chaplin is one of the greatest actors in the film history.
- 4) The company's staff believe that Brown will be a powerless leader.

## 3 Translate the following sentences into Chinese.

- 1) China's railway, especially its high-speed railway, is experiencing mushroom growth.
- 2) Nearly 2.8 billion railway passenger trips were made throughout China in 2016, and the number has been growing at a rate of about 10% annually in recent years.
- 3) It was regrettable that the introduction of railways to China was strongly rejected by the Qing government.
- 4) The railroad was considered as a scheme that would destroy the military defense, farmland and feng shui of the Qing Empire.
- 5) Consequently, China's railroad network was formed and expanded rapidly.

#### 4 Translate the following sentences into English.

- 1) 目前, 火车已成为多数中国人最喜爱的交通工具之一。(favorite, means of transport, at present)
- 2) 从晚清时期到 1948 年是第一阶段, 在这个阶段只修建或使用了几条铁路。(the late Qing period)
- 3) 在未获得清政府允许的情况下, 吴淞铁路开始运行。(without the permission of)
- 4) 从 1949 年到 2008 年是第二阶段, 大规模建设是这一时期的特征。(large-scale, be characteristic of)
- 5) 高速铁路逐渐取代了繁忙而又老旧的普通铁路, 极大地增加了运输能力, 让火车旅行变得比以前更加容易。(replace, transport capacity)

## Projects

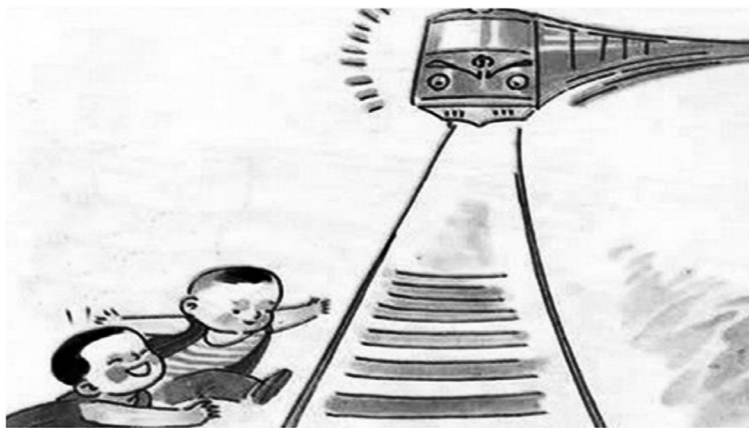
### 1 Discussion

Work in groups of 3-4 and discuss with your partners the advantages and disadvantages of different means of transport. Then make a presentation in front of your classmates.

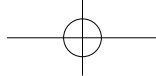
### 2 Writing

Look at the picture below and write an essay entitled *Railway Safety*. You should write at least 100 words. Your essay should include the following points:

- 1) description of the picture;
- 2) reasons why railways could threaten people's safety;
- 3) suggestions about how to deal with the threat(s).







## Extended Reading

### High-speed Railways

With the rapid development of the economy in China, the railway transport capacity is greatly challenged by the growing demand for railway transportation. To meet the fast-growing demand, the government **initiated** the China Railway Speed-up Campaigns to increase train speed and therefore to transport more passengers. In the sixth round of speed-up, high-speed railways were built or **upgraded** from regular **tracks**, and they were designed to carry even faster trains. In this way, high-speed trains were born.

On August 1, 2008, the Beijing-Tianjin **inter-city** high-speed railway, the first inter-city high-speed railway in the mainland of China, was put into use, **symbolizing** the beginning of the era of high-speed rail. From then on, high-speed railroads have been frequently constructed and used. By the end of 2016, the high-speed rail tracks in China had totaled about 22,000 km, **accounting for** about 65% of the world's high-speed railroads. As the high-speed trains' **locomotives** look like **bullets**, they are also called bullet trains. High-speed trains have been **available** in almost all large cities and most **tourist cities** in China.

Besides building high-speed railroads at home, China has also helped build several railroads abroad including China-Thailand Line, China-Laos Line, and China-Myanmar Line to make strong connection with its neighbors. China is now helping build high-speed railways between Jakarta and Bandung in Indonesia, and between **Medina** and **Mecca** in Saudi Arabia. More overseas high-speed rail projects are on the way. Meanwhile, China's high-speed rail products have also become popular around the world. For instance, IGBT products, similar to the CPUs of computers, have been **exported** to India.

(264 words)

### Culture Notes

**1 The China Railway Speed-up Campaigns** are a series of initiatives aiming at increasing

the speed of trains in China. There are six rounds of speed-up from 1997 to 2017 and after the sixth, the era of high-speed rail began.

**2 IGBT** is an acronym for insulated-gate bipolar transistor. It is a three-terminal power semiconductor device primarily used as an electronic switch which, as it was developed, came to combine high efficiency and fast switching.

### New Words

initiate	/ɪˈniʃi,et/	v. 开始实施, 发起
upgrade	/,ʌpˈɡred/	v. 使(机器、计算机系统等)升级; 提高(设施、服务等的)档次; 提高(飞机乘客、旅馆住客等的)待遇
track	/træk/	n. 轨道; 小路
inter-city	/,ɪntəˈsɪti/	adj. 往来于城市间的; 城市之间的
symbolize	/ˈsɪmbɪ, aɪz/	v. 象征; 用符号代表
locomotive	/,ləkəˈmɒtv/	n. 机车, 火车头
bullet	/ˈbʊlɪt/	n. 子弹
available	/əˈveɪləbl/	adj. 可获得的; 有空的
Medina	/meˈdɪnə/	n. 麦地那(沙特阿拉伯城市)
Mecca	/ˈmækə/	n. 麦加(沙特阿拉伯城市)
export	/ɪksˈpɔ:t/	v. 出口, 输出

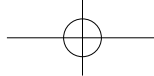
### Phrases and Expressions

account for	占(一定数量或比例)
tourist city	旅游城市

## Reading Comprehension

### 1 Fill in the blanks with the words from the passage.

- As China's economy is developing fast, its railway transport capacity is greatly \_\_\_\_\_ by the growing \_\_\_\_\_ for railway transportation.
- The government initiated the \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ to meet the increasing demand.



- 3) The Beijing-Tianjin inter-city high-speed railway was put into use on August 1, 2008, \_\_\_\_\_ the beginning of the era of high-speed rail.
- 4) By the end of 2016, the high-speed rail tracks in China had \_\_\_\_\_ about 22,000 km, which \_\_\_\_\_ about 65% of the world's high-speed railroads.
- 5) In addition to constructing high-speed railroads in the country, China has also helped build several railroads abroad to \_\_\_\_\_ with its neighbors.

**2 Decide whether the following statements are true (T) or false (F) according to the passage.**

- 1) With the fast economic development, China's railway transport capacity could not meet the demand.
- 2) The Beijing-Tianjin inter-city high-speed railway marked the beginning of the era of high-speed rail.
- 3) The high-speed trains, also called bullet trains for their bullet-like locomotives, have been unavailable in most tourist cities in China.
- 4) China is now helping build high-speed railways in many developed countries, such as the USA, Britain and France.
- 5) More overseas high-speed rail projects are under negotiation or planning.