[China is building deepest high-speed railway station under Great Wall](#)

Workers are digging a tunnel of the Beijing-Zhangjiakou high-speed railway line's branch linking Chongli county, Zhangjiakou, Hebei Province, on June 30, 2017. [Photo/Xinhua]

Chinese workers are building the world's deepest and Asia's largest underground high-speed railway station beneath the Great Wall at the Badaling section in Beijing. The station under construction will be 3-story high and have a 36,000 square meters floor area, including platform, entrance and exit. The railway tracks will be 102 meters underground.

The station is an important part of a 12.01 kilometers long tunnel section of the 174-kilometer Beijing–Zhangjiakou high-speed railway line. The tunnel is the longest one of the railway line.

"Passengers will enter and exit the station about 100 meters underground, and it will be very safe," said Dai Longzhen, a senior manager of the construction company China Railway No 5 Engineering Group Co Ltd.

An escalator would raise passengers 62 meters at vertical height, and inclined elevators will also be used in the station for the first time.

To secure the safety of passengers, the station will change the inclined shafts that are used to build the station as permanent rescue channels.

The underground burrowing work is the country's most complicated, because the station has to contain 78 caverns and lots of intersections, said Chen Bin, a

commander-in-chief of the project.

Starting from the construction of the tunnel on April 15, 2016, workers have known how tough the work will be, however the hardness of the rocks still exceeded their expectations, said Jiang Si, a manager of the company.

According to its initial plan, workers could excavate the tunnel 6 to 8 meters a day, but the tough rock meant workers could dig only about 2 meters a day.

Large—size shield tunneling machines could not be used, and workers could only use the blasting method in the construction, Dai said.

"The No 1 shaft has a 80-degree turn, and the No 2 shaft has a 135-degree turn, which prohibits the machines more than 100 meters long from working there," Dai said.

Workers have to develop new blasting technology to explore the tunnel carefully, because just above it are the Great Wall and the railway line linking Beijing and Zhangjiakou first independently designed and built by Chinese 100 years ago.

Workers have carried out more than 4,500 explosions. They use the electronic detonators to control the vibrations in batches of small explosions to reduce the impacts on the inside of hills and the Great Wall. At the Qinglongqiao station of old Beijing-Zhangjiakou railway line, worker used expansive agents to dig the tunnel, only 4 meters beneath.

Another problem in the tunneling is the underground water, and every day, workers have to pump at least 19,000 cubic meters of water, which equals about 10 swimming pools.

The Bejing-Zhangjiakou high-speed railway is expected to get through by the end of 2019, allowing passengers to travel between the two cities in one hour. It is an important project for the 2022 Winter Olympic Games.

[Cervical cancer vaccine cleared for Chinese clinics](#)

The first imported batch of Cervarix, the cervical cancer vaccine, has passed quality inspections and is heading to health clinics across the Chinese mainland, pharmaceutical company GlaxoSmithKline said on Monday.

"Cervical cancer is a common form of malignant tumor that severely threatens the health of women. There are 100,000 new cases of cervical cancer in China each year, and over 30,000 deaths due to the disease," said Qiao Youlin, a

top epidemiologist and member of the Chinese Academy of Medical Sciences.

"It is the third most common cancer among women aged 15 to 44," he added. "For this reason, cervical cancer vaccination, together with cervical cancer screening, will significantly reduce the incidence of cervical cancer and precancerous lesions, thus reducing the burden of this disease".

Cervarix was approved by the China Food and Drug Administration in July last year.

The vaccine is registered in 132 countries and regions, and more than 69 million doses have been provided to the global market, according to GSK.

Beijing is China's 'smartest city': report

Beijing ranked first in the penetration of a cashless society, followed by Shenzhen, Guangzhou and Shanghai. [File Photo]

Beijing is the "smartest" city in China, according to a report on the cashless society released Monday.

The report was jointly published by Chinese tech giant Tencent, the Chongyang Institute for Financial Studies at Renmin University of China, and French market research firm Ipsos.

It measured the level of "smart cities" using different indexes, such as transportation, education, shopping and food delivery, in 324 Chinese cities and polled over 6,500 residents on their use of mobile payments.

Overall, Beijing ranked first in the penetration of a cashless society, followed by Shenzhen, Guangzhou and Shanghai.

The cities of Dongguan and Foshan were the dark horses in the top ten, ranking sixth and tenth, respectively.

The report also showed that 40 percent of Chinese carry less than 100 yuan (US$15) in cash when going out, while 52 percent only use cash for 20 percent of their total monthly consumption.

Over 70 percent of respondents said they could live more than a week with only 100 yuan in cash, and 84 percent were "comfortable" going out with only mobile phones, no cash.

The report was part of a week-long celebration of WeChat's annual "Cashless Day," scheduled on Aug. 8.

"Cashless Day" aims to promote a green, fashionable and efficient lifestyle. Even though a completely cashless society is unlikely to happen, a new age of smart life has already arrived, according to WeChat, China's largest social media company.

[China utilizes AI technology to prevent crime](#)

Face recognition display screen. A smart traffic system launches at a crossroad in Shenzhen, Guangdong on April 17, 2017. [Photo/VCG]

China is looking to predict and prevent crime with the help of AI technology, according to a Financial Times report.

Facial recognition company Cloud Walk is helping police develop a system that tracks individuals' movements and behavior to assess their chances of committing a crime.

The big-data rating system warns police of highly suspicious groups based on where someone goes and what he or she does, a company spokesperson told FT.

Risks arise if a person "frequently visits transport hubs and goes to suspicious places like a knife store," the spokesperson added.

The vice-minister of science and technology, Li Meng, said that AI will be a key function in crime prediction for the government.

"If we use our smart systems and smart facilities well, we can know beforehand…who might be a terrorist, and who might do something bad," said Li.

The crime-prediction technology is dependent on several AI techniques, like behavioral recognition and gait analysis, to identify people from surveillance footage.

In addition, "crowd analysis" can be used to detect "suspicious" patterns of behavior in crowds, for example singling out thieves from normal passengers

at a train station.

From shaming jaywalkers to keeping intruders out of university dorms, China continues to embrace facial recognition and other AI technologies in public spheres.

The State Council declared on July 20 that the country plans to build a world-leading AI industry worth $150 billion by 2020.

[Missing Chinese teacher leaves note for parents](#)

The handwritten letter is found in the missing Chinese teacher Wei Qiujie's hotel room in Japan. [Photo/dzwww.com]

The father of a Chinese teacher, Wei Qiujie, who went missing in Japan last week has been shown a handwritten letter in her hotel room, saying farewell, reports China Daily quoting Japanese media Hokkaido News.

Accompanied by police officers, her father went to the room in central Sapporo, where they found the note, in which Wei thanked her parents for years of parenting. She went on to write that she wasn't happy with her previous life and wanted to start a new one.

The 27-year-old primary school teacher from Fujian Province was last seen on the morning of July 22, when she left the guesthouse leaving her luggage in her room. She had arrived in Japan just a few days earlier.

Wei Qiujie's father arrived in Japan on Friday and was briefed by the police

on the ongoing investigation, and confirmed that the handwriting in the letter was that of his daughter.

He told reporters that she had no friends in Japan, couldn't speak the language and that this was the first time she had visited Hokkaido.

Wei's friends have reportedly also said that she showed no signs of wanting to start a new life.

The search for the young teacher continues.