

Olympics power Qingdao transport construction

► City reaches finish line in early rail and highway development

By ZHAO RUIXUE

It is a widely heard Olympics question – what is the time for that distance?

To some residents of Shandong province in east China, the answer is two and a half hours. That is how long it now takes on a China railway high-speed (CRH) bullet train to get from Jinan, capital of the province, to Qingdao, host city of 2008 Olympic sailing competition.

An inter-city highway network can now provide access to the summer gala in a three-hour drive from 15 cities in the province. For Qingdao locals, the sailing center is only a half hour's drive over the improved highway system.

"Thanks to the Olympics, we enjoy the convenience brought by the current transport network that was finished five years ahead of schedule," says Mayor Xia Geng. "More than 400 kilometers of highway have been built in the past five years. Qingdao has grown into a communication hub linking China and the overseas."

The city government plans to invest a total of 77 billion yuan in a modern transportation system during the 11th

Five-Year Plan (2006-10) to ensure Qingdao's position as an international shipping center and regional airline hub, says the Qingdao Municipal Communication Commission.

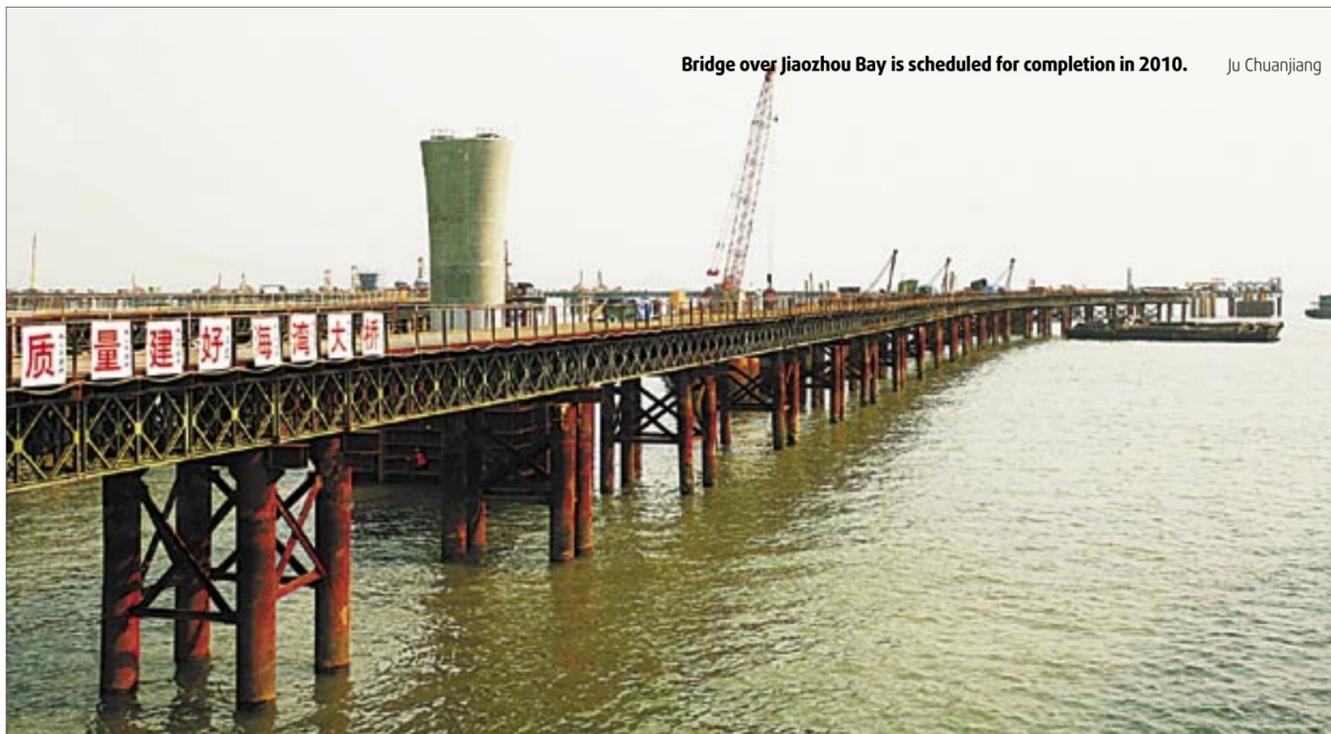
According to the plan, 23.2 billion yuan will be earmarked for road construction, 25.17 billion yuan for port projects, 4.3 billion yuan for air terminals, 18.34 billion yuan for new railways and stations and 2.25 billion yuan for bus stations.

By the end of 2010, the city's total road mileage is planned to expand to 8,000 km, an increase of 25 percent from 2005, while bus service is expected to total 141 routes serving 3,100 km.

As authorities accelerate measures to increase rail capacity, annual passenger numbers are projected to reach 8 million and cargo projected to total 37.54 million tons in 2010.

Qingdao Port's throughput is at the same time expected to grow to 320 million tons and have an annual throughput of 12 million twenty-foot equivalent units (TEUs) of containers.

The city's airport is expected to accommodate 12 million passengers and



Bridge over Jiaozhou Bay is scheduled for completion in 2010.

Ju Chuanjiang

160,000 tons of cargo and mail by 2010.

To achieve the goals, the city government is building feeder highways to the harbors of Qianwan, Dongjiakou and Aoshan, all a part of the Qingdao Port region, to forge a direct link between the port and urban areas.

Qingdao Port is continuing to develop into a prime shipping center for northeast Asia through construction of deep-water berths and expanding sea routes while enhancing cooperation with the neighboring ports of Yantai and Rizhao.

Four projects are planned

for the Qingdao Airport – centers of aviation, service, maintenance and cargo freight.

An urban rail transit network is also in the pipeline. Its initial phase will link the city's airport, railway station and bus terminals.

Renovation on the Qingdao

railway station is scheduled for completion before the onset of the August 2008 Olympic Games.

CRH bullet trains will offer service from Qingdao and more than 10 cities, including Beijing and Shanghai, said an official from the Qingdao railway station.

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Channel tunnel headed undersea

By XUE XIAOYING

Excavation work on the Jiaozhou Bay channel tunnel, the second of its kind in the country, is well underway in Qingdao and will begin to burrow under the seabed this year.

Scheduled to be open for traffic in 2011, two highway tunnels and an auxiliary passageway for maintenance will cross beneath Jiaozhou Bay to link Qingdao's satellite city Xuejiadao on west coast and Tuandao on the north coast of the bay.

Some 3,950 m of the 7,800

m tunnel will be under the sea floor. When completed, six lanes will accommodate vehicles at speeds of up to 80 km an hour.

The project broke ground in Xuejiadao at the end of 2006. When finished, the tunnels will enable a five-minute drive to the other side of the bay.

After a year of work, the two main tunnels have now reached 400 m in length.

"We are advancing smoothly with the project," said Gao Haidong, project chief of the China Railway 18th Construction Corp, one of the project's contractors.

"We can dig at around 10 m each day in loose geologic sites, while in the case of hard places, only 2 m a day," Gao added.

The digging is largely through solid rock, so current progress is from 2 to 10 m a day, he said.

Construction of the land portion will be completed in October, followed shortly by the onset of undersea excavation.

The tunnels will run through rock strata 70 m below the surface, built in compliance with top safety criteria set by State authorities. They are designed to withstand earthquakes of up to 7 degree on the Richter scale,

experts said.

The 3.18 billion yuan project is financed by investors, government bonds and bank loans.

China's first channel tunnel is the 9 km Xiang'an tunnel, about 6 km of which is under water. The project started in late 2006 in Xiamen in east China's Fujian province and is expected to be put into use in 2009.

Five more undersea tunnels are reportedly on the drawing board to be built over the next two to three decades in Bohai Bay and Hangzhou Bay in east China and the Pearl River Estuary in south China.



Drumming up support

Qingdao locals celebrate lighting of the Olympic flame in Greece on March 24. As the host of the 2008 Olympic sailing competition, the city has expanded its transport network to meet demands from the upcoming event and boost growth of the local economy.

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More roads widen economic horizons



The Laixi interchange in Qingdao on the Tongsan highway that links far distant cities – north to Tongjiang city in Heilongjiang province and south to Sanya in Hainan province

Qing Xuan

By DU SHU

It only takes an hour to travel from Qingdao to its satellite towns or three hours to other cities in Shandong province over the province's expressways – known to locals as the "city and provincial circle" commutes.

Four new speedways totaling 180 km opened to traffic in 2007 – setting a city record – bringing the combined length to more than 700 km, according to the officials of Qingdao Highway Administration Bureau (QHAB).

Since the first expressway linking Qingdao and Jinan was put into service in 1993, a total of 25.1 billion yuan has been invested to build 11 expressways that now form both an intra- and inner-city road transport system.

The entire province now has 4,000 km of expressways.

The network shortens the distance from Qingdao to other cities on the Shandong peninsula – including Yantai, Weihai, Dongying, Rizhao, Weifang and Zibo – to a two-hour drive and promotes development of the provincial economy, said the

QHAB officials. The road network also shortens the drive to Qingdao's seven satellite towns to one hour.

An expressway linking Jimo and Pingdu, both parts of Qingdao, is also under construction, scheduled for completion in the first half of this year.

The second phase on construction of elevated roads linking Qingdao and the harbors Longkou and Qianwan is scheduled to start soon.

Rapid road expansion will significantly help Qingdao move its industries west for further development and con-

solidate its leading position in the province, according to the city government.

The city is also linked nationwide. It takes seven hours to drive to Beijing or Nanjing, the capital of east China's Jiangsu province.

Two arterial expressways connect Qingdao and Jinan to the extreme north and south – from Tongjiang in Heilongjiang province to Sanya in Hainan province – and to the west in Yinchuan, capital of China's Ningxia Hui autonomous region and Urumqi, capital of China's Xinjiang Uygur autonomous region.

Ecology and technology spanned by bay bridge

By WEI ZHIHUI

Authorities in the coastal city of Qingdao say they are accelerating construction of the world's second-longest suspension bridge that will span Jiaozhou Bay.

Scheduled to be put into service in 2010, the 28-km bridge will connect downtown Qingdao with the city suburbs of Hongdao and Huangdao. Construction is now about 30 percent complete, said an official from Shandong Expressway Group Co Ltd, the company in charge of the project, which has invested 3.16 billion yuan of the total 9.04 billion yuan to fund the bridge.

The eastern and western reaches of Jiaozhou Bay are now connected by ferries that carry about 1,000 passenger and cargo vehicles each day, and motorway ringling the

bay that can carry about 25,000 cars a day.

The bridge will have six lanes and enable driving speeds of 80 km an hour, shortening the distance between downtown and Huangdao by 30 km to a half-hour drive.

The cross-bay bridge is the beginning of the planned Qingdao-Lanzhou Expressway, a key section of the country's nationwide road network and the expressway that will link Qingdao and Jinan, capital of the province.

Shandong Expressway Group won an open bid for the concession to build and manage the bridge for 20 years under a franchise agreement. Construction began in December 2006 and is scheduled for completion in three years.

Using state-of-the-art technologies and materials, the company says the bridge is

designed for a century of use, even in harsh conditions.

The company adds it places a premium on marine environmental protection during the construction process, using advanced approaches to prevent damage to the bay ecology and water quality.

The bridge will be a crucial addition to the local economy, experts say, linking the various harbors of Qingdao Port to enable the integrated port perform more efficiently.

The authorities plan to enhance development of the west coast along the bay over the next 20 years to encourage a shift in location of the city's industries.

They say the suspension bridge will play an instrumental role in changing the city's industrial layout, driving development in the western part of the city and promoting growth of local tourism.

Expanded airport takes flight with new facilities

By ZHANG YING

As the venue of the 2008 Olympic sailing competition, Qingdao is expecting an enormous influx of visitors from home and abroad.

To meet the demand, Qingdao International Airport Group, operator of the facility, has made a range of preparations to be a genial host for the anticipated surge in passenger numbers.

To provide a welcoming environment, airport authorities invested 1.19 billion yuan in renovating and extending runways, the air terminal and the aircraft apron area.

After three years of construction, all facilities had passed inspection by the

General Administration of Civil Aviation of China at the end of last December and have proven their operational readiness after three months of trial operations.

The airport now provides an ideal first impression for those arriving to watch or compete in the upcoming Olympic sailing competition, said Liu Yuliang, general manager of the company.

Extended runways can now accommodate large passenger jets such as the Boeing 777. The expanded apron covers 390,000 sq m and has 39 gates. Annual passenger capacity is expected to grow to 12 million arrivals, Liu said.

The 110,000 sq m terminal was put into trial operation in late October 2007 after it was finished at a cost of 998 million yuan.

The complex includes 33 international and 15 domestic counters along with customs and security areas.

The airport handled 7.8 million passengers last year, an increase of 140 percent from 2002, making Qingdao the fourth-busiest hub in east China, following Shanghai, Hangzhou and Xiamen.

The Qingdao airport serves 78 domestic flights to 47 Chinese cities and 14 international arrivals from eight overseas cities. More than 1,400 flights take off from and land at the airport weekly.

As part of its preparations, the airport group also plans to launch an online website before the Olympics to offer information on the airport, its flights and Olympic events.



New facilities at Qingdao International Airport are designed to handle 12 million passengers annually.

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