

Italian region that has by far the most trade with China and the home of Milan, the country's most culturally vibrant and business-centered city.<sup>1479</sup>

### **8.7.16 Transport**

The State Council Information Office published a White Paper in December 29, 2016 captioned “**Development of China’s Transport**” on the development of China’s Transport. Contents of the papers are Preamble; Course of Development; Comprehensive Transport System, Playing a Basic, Pioneering and Serving Role, Opening up and International Cooperation, Development Goals for the Next Five Years and Conclusion. Excerpts of this white paper are below:

#### **Preamble**

China intends to complete the building of a moderately prosperous society in all respects by 2020, which is the first of its Two Centenary Goals. For this end, transport should quicken its pace of development, and fully play its basic, pioneering and serving role as a vanguard and solid guarantee for completing the building of a moderately prosperous society in all respects.

#### **I. Course of Development**

When the PRC was founded in 1949, transport was underdeveloped. Total railway length was only 21,800 km, half of which was paralyzed. Highway traffic length was only 80,800 km, and civil automobiles numbered only 51,000. Inland waterways were undeveloped, and only 12 civil air routes were operative. Postal outlets were limited. The major means of transport were animal-drawn vehicles and primitive boats.

Following the founding of the PRC, the Chinese government decided to create the basic conditions to restore transport. During the economic recovery period (1949-1952) damaged transport facilities were repaired, and water, land and air transport were resumed. In 1953 China began to develop transport in a planned way. During the First (1953-1957) and Second (1958-1962) Five-Year Plan periods and the economic adjustment period (1961-1965) China tilted state investment in support of transport.

During the Cultural Revolution (1966-1976), transport was seriously disturbed, but facilities, equipment and routes kept increasing; in view of the severe delays in unloading and trans-shipment, and overstocking at major coastal ports, port infrastructure construction was accelerated; and pipeline transport developed.

The reform and opening-up policy adopted in 1978 ushered in a new stage of social and economic development, bringing about the rapid development of transport. China implemented the contract responsibility system in railway operation; issued three policies for supporting highway development, namely, raising highway maintenance fee levied on highway users, collecting vehicle purchase tax, and building highways with loans and repaying the loans with tolls. Highway construction and water transport

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<sup>1479</sup> Excerpts from The New York Times News Item dated March 21, 2020 titled “Italy, Pandemic’s New Epicenter, Has Lessons for the World” written by Jason Horowitz, Emma Bubola and Elisabetta Povoledo, available online at URL: <https://www.nytimes.com/2020/03/21/world/europe/italy-coronavirus-center-lessons.html?auth=linked-google>

engineering projects started to adopt public bidding. Ports were the first to be opened up to the outside world, and sea transport was the first sector to go global. Civil aviation began to operate as an enterprise, and an air transport market took shape. The postal services management system was reformed, Express Mail Service (EMS) was set up, and postal savings services were resumed. Investment in transport development was increased and non-government capital was attracted to go into transport infrastructure construction. In 1988 the Shanghai-Jiading Expressway was opened to traffic, the first expressway on China's mainland.

In 1992 China set the reform goal of establishing a socialist market economic system. Reform and opening-up efforts were furthered in transport while the development of various modes of transport achieved breakthrough progress. Since 1997, it has raised its average railway speed six times as a result of large-scale construction. China began to collect civil airport construction fees, and set up a civil airport infrastructure construction fund, a railway construction fund and inland water transport construction fund in succession. Around that time, the country implemented the strategy of developing the western regions, and enhanced the construction of railways, highways, airports and major gas pipelines there.

The Chinese government issued the Medium- and Long-Term Railway Network Plan, National Expressways Network Plan and related programs, while vigorously improving basic transport public service capacity, urban and rural passenger transport, urban public transport and transport safety emergency rescue. In 2008 China's Ministry of Transport (MOT) was established, and efforts were made to put all management of transport by air, water and land, as well as postal services under the ministry. The same year, the Beijing-Tianjin Intercity Railway was opened to traffic, marking the start of China's high-speed rail era

Since the 18th CPC National Congress in 2012, the construction of a modernized comprehensive transport system has been accelerated. In 2013 railway sector realized separation of government functions from commercial operations, and the institutional reform to establish an efficient government department to exercise unified management of transport by air, water and land, as well as postal services was basically completed. The transport sector has pushed reform to a higher level by enhancing law-based management, promoting comprehensive, smart, green and safe transport, and formulating development plans to serve the Three Initiatives, the Belt and Road Initiative, the Beijing-Tianjin-Hebei integration initiative and the Yangtze River Economic Belt initiative. China has also promoted balanced development of transport in its eastern, central, western and north-eastern regions. In this regard, western China has quickened its pace in developing high-speed railways, and overall central and western China's transport conditions have been greatly improved. In 2013 the Motuo Highway in Tibet was opened to traffic, indicating that every county in China now had access to highways

Over the past 60-odd years China's transport has undergone the phases of bottleneck, preliminary alleviation and basic adaptation to socio-economic development demands. China has narrowed its gap with world-class transport, and surpassed the latter in several fields. A modernized comprehensive transport system is now emerging on the horizon.

## **II. Comprehensive Transport System**

Through years of reform and development China has formed a multi-nodal and full-coverage transport network; opened up five vertical and five horizontal transport trunk railway lines; put into operation a large number of passenger and freight transport stations (logistics parks); upgraded transport equipment and improved transport service capacity; achieved major breakthroughs in technology innovation and application; and improved the transport market system, management mechanisms and related laws and regulations.

### **1. Infrastructure Network**

A multi-level railway network has been formed. By the end of 2015 China's total railway operation length reached 121,000 km, ranking the world's second, including 19,000-km high-speed railway, ranking the world's first. An express passenger transport network with high-speed railway as framework and supplemented by intercity railway has been built. The proportion of double-line railway in China was 53.5 percent, and the proportion of **electric railway** 61.8 percent. China has formed east-west and north-south railway passageways with great transport capacity, improved logistics infrastructure, and realized nonstop, speedy, and heavy-haul freight transport.

A full-coverage highway network has been set up. By the end of 2015, China's total highway traffic length was 4.58 million km. Expressway length was 123,500 km, ranking first in the world. The national and provincial trunk highway network has been improved, connecting administrative regions at and above the county level nationwide. Rural highway length was 3.98 million km, connecting 99.9 percent of towns and townships and 99.8 percent of administrative villages. The technology structure of the highway network has been improved, with graded highway length accounting for 88.4 percent of total highway length.

A water transport network connecting trunk and branch lines has been established. By the end of 2015 China had 31,300 quay berths for production use, including 2,221 berths of 10,000-ton-class or above and 1,173 specialized berths for coal, crude oil, metal ores and containers, and improved large-scale, professional and automated deep-water ports. Inland waterway navigable length was 127,000 km, with graded waterways accounting for 52.2 percent, and the length of high-grade waterways reaching 13,600 km. China has improved the navigation conditions of the Yangtze and Xijiang rivers and the Beijing-Hangzhou Grand Canal, and formed an inland waterway system composed of two horizontal trunk waterways, one vertical trunk waterway, two high-grade waterway networks and 18 high-grade mainstream and tributary waterways.

By the end of 2015 China had 210 civil transport airports, forming a pattern with international hub airports in Beijing, Shanghai and Guangzhou as centers, with regional hub airports in provincial capitals and major cities as junctures, and some other support trunk and branch airports. Air traffic control facilities have been improved, which secured 8.57 million take-offs and landings in 2015. General aviation airports have been developing quickly. Airport rail and fast-track transit have been rapidly improved, and the connectivity between airports and other modes of transport has been enhanced. H Post offices for each township and postal services for each village have been realized. By the end of 2015 China's postal routes totalled 25,000, with a total length of 6.38 million km; postal outlets totalled 54,000, and village mail stations totalled 210,000. Express delivery outlets numbered 183,000, with a total network length of 23.71 million km.

Oil and gas pipelines have formed a trunk network. By the end of 2015 China's onshore oil and gas pipelines had a total length of 112,000 km, covering 31 provinces, municipalities directly under the central government and autonomous regions, forming a trunk-pipeline network for crude oil, refined oil and natural gas as well as an oil and gas transmission network which transports oil from the west to the east and from the north to the south, transmits gas from the west to the east and from the north to the south, and brings gas from offshore.

## **2. Transport Service Capacity**

China's transport volume leads the world. In 2015 China's passenger transport volume was 19.43 billion persons, and passenger turnover was 3.0 trillion passenger-km (pkm); freight transport volume was 41 billion tons, and freight turnover was 17.37 trillion ton-km (tkm). In terms of railway transport, passenger turnover and freight transport volume ranked first in the world, and freight turnover ranked second. In terms of highway transport, passenger and freight transport volume and passenger and freight turnover ranked first in the world. In terms of waterway transport, freight transport volume and freight turnover also ranked first in the world. In terms of civil aviation transport, total turnover, passenger turnover, and cargo and mail turnover all ranked second in the world. In terms of port transport, cargo throughput and container throughput ranked first in the world. In terms of postal services, the number of customers exceeded 70 billion. In terms of express delivery, business volume ranked first in the world; on November 11, Online Shopping Day, the number of parcels delivered in one day reached the year's peak of 160 million pieces. In terms of pipeline transportation, freight transport volume was 710 million tons and freight turnover was 413.88 billion tkm.

Transport service quality has been improved. Multimodal transport, drop and pull transport and cold chain logistics have developed quickly; the use of standardized transport units such as containers and vans has been promoted; and urban and rural logistics have enhanced IT application and intensified services, thus increasing logistics efficiency. Transport safety has been greatly improved, and China's railway passenger transport safety leads the world. In 2015 the number of death toll per 10,000 vehicle road accidents dropped by 72.4 percent over 2005; the number of accidents of cargo vessels of a million-ton-class throughput and above has decreased by five percent on average annually since 2005; the rolling ten-year accident rate per one million flight hours in civil aviation transport was 0.018 in 2015 (the world's average is 0.24). Equitable basic public services in passenger transport and the strategy of "public transit priority" have been promoted. The length of exclusive bus lanes has reached 8,569 km, and the length of Bus Rapid Transit (BRT) lines 3,081 km. In addition, new and specialized public transport services, such as customized shuttle and night buses, have increased, and new models of transport service including online taxi booking have been developing rapidly.

High-speed railway coverage of cities with a population of over one million each has reached 65 percent, and the number of passenger transport routes has reached 181,000. The number of urban bus and trolley bus routes in operation has exceeded 45,000, and the number of urban rail transit routes in operation has reached 105, with a total length of 3,195 km. International waterway transport routes and container shipment routes now connect over 1,000 ports in more than 100 countries and regions. Scheduled civil aviation flights operate on 3,326 routes, with a total length of 7.87 million km, reaching 204 cities in China's mainland, the Hong Kong SAR, Macao SAR and Taiwan, as well as

137 cities in 55 foreign countries and regions. Express delivery outlets now serve 70 percent of towns and townships nationwide.

Means of transport and technology have been improved. By the end of 2015 all railway trunk lines had realized diesel and **electric** locomotive traction; types and structures of passenger and freight transport vehicles had been upgraded and updated. Civil automobiles numbered 172.28 million; highway passenger and freight transport vehicles in operation totalled 14.73 million; the average tonnage of freight transport vehicles increased from 6.3 to 7.5 tons; the proportion of special-use freight vehicles (including trailers) rose from 5.1 percent to 27.2 percent; passenger transport vehicles in operation have become advanced and comfortable, while freight transport vehicles have become larger and have been specified for various uses. Water transport vessels numbered 166,000; ocean cargo fleet had a total capacity of 160 million tons; inland waterway freight transport vessels had an average tonnage of more than 800 tons; the rate of standard ship types operating in navigable waters of high-grade waterways reached 50 percent; transport vessels have been developed towards large-size, specialized-use and standard types. Civil aviation had 2,650 registered planes, while general aviation had 1,904. Postal services had 244,000 transport vehicles and 71 cargo planes for domestic express delivery.

### **3. Technology Innovation and Application**

The construction of the Qinghai-Tibet Highway and Qinghai-Tibet Railway has been completed and they have been opened to traffic. A number of world-class large bridges and tunnels have been built with globally advanced construction technologies. China's key construction technologies for offshore deep-water ports, improved technologies for large estuary waterways and long waterways, and construction technologies for large-scale airports are leading the world. The Hong Kong-Zhuhai-Macao Bridge, Yangshan Port Container Terminal, Yangtze Estuary Deepwater Channel Improvement Project, and other major construction projects have been carried out.

High-performance railway equipment technologies with proprietary intellectual property rights, represented by high-speed railways and high-power locomotives, have reached the advanced world level, with some of them leading the world. Feeder liners, general aviation aircraft and helicopters independently developed by China have been put into use, and the C919 airliner has rolled off the assembly line, making China one of the few countries capable of developing large airliners independently. China's manufacturing technologies for large, specialized equipment for terminal loading and unloading, special marine engineering machinery vessels and complete sets of container transport equipment are world-leaders, while its 300-m saturation diving technology has achieved a breakthrough. Sorting technologies in postal services, including optical character recognition (OCR), video complement and address check via bar code have reached the world's top level.

Railway passenger transport has developed an online booking system, and realized IT application in transport management. Expressway transport has formed a nationwide Electronic Toll Collection (ETC) network. Port Electronic Data Interchange (EDI), Vessel Traffic Services (VTS) and Vessel Automatic Identification System (AIS) have been widely applied in water transport management, and an electronic nautical chart of the trunk waterways of the Yangtze River has been developed. China's civil aviation business

information system is globally advanced. Postal services have established a video joint monitoring system at national, provincial and municipal levels. Radio Frequency Identification (RFID), Global Navigation Satellite System (GNSS) and other modern navigation technologies have been applied to civil aviation and logistics. The Beidou Navigation Satellite System has become the third GNSS applied in international navigation.

#### **4. Reform and Rule of Law**

Market system has been improved. Through over 30 years of marketization, transport construction, maintenance and traffic have become market-oriented. China has issued its Negative List for Market Access, encouraging non-government capital to invest in transport operation, and vigorously promoting Public-Private Partnership (PPP).

Legal framework has taken shape. To meet the demands of reform and development, China has promulgated, revised and annulled transport laws and regulations. Currently, China has eight relevant laws, namely, the Railway Law, Highway Law, Law on Ports, Waterway Law, Maritime Law, Maritime Traffic Safety Law, Civil Aviation Law and Postal Law. In addition, there are 65 relevant administrative regulations, including the Regulations on the Administration of Railway Safety, Regulations on the Administration of Highway Safety, Regulations on Road Transport, Regulations on International Maritime Transport, Regulations on the Administration of Traffic Safety in Inland Waters, Regulations on Seamen, Regulations on the Administration of Civil Airports, Regulations on Civil Aviation Safety, and Rules for the Implementation of the Postal Law. There are also more than 300 relevant departmental rules.

Comprehensive transport management system has been preliminarily established. In 2008 and 2013 respectively China launched two rounds of institutional reform to establish a large transport department, namely, the Ministry of Transport, which put the National Railways Administration, Civil Aviation Administration of China and State Postal Bureau under its management.

### **III. Playing a Basic, Pioneering and Serving Role**

To complete the building of a moderately prosperous society in all respects, the Chinese government gives priority to transport.

#### **1. Promoting Economic and Social Development**

Supporting economic growth: Investment in transport infrastructure is the engine of stable economic growth. During the 12th Five-Year Plan period (2011-2015), a total of RMB 12.5 trillion was invested in China's transport infrastructure. In 2015 China's total online purchasing transactions, supported by the postal industry, and surpassed RMB 3 trillion.

Ensuring cargo transport: In 2015 some 670 million tons of coal were shipped at Chinese ports, which also unloaded 320 million tons of crude oil and 1 billion tons of iron ore. Express lines were made available for fresh farm produce, effectively meeting the needs of the people.

Facilitating the coordinated development between regions and between urban and rural areas: China is building economic belts and urban agglomerations along the railway lines

from Beijing to Shanghai and Guangzhou, along the coastline and the Yangtze River, near the ports in the Yangtze River and Pearl River deltas and along the Bohai Sea Rim, striving to make these areas the most economically viable and populous in the country.

## **2. Serving the People and Improving Their Living Standards**

Providing transport services to the people and making their travel safe and convenient. The transport capacity and service during the Spring Festival (i.e., Chinese New Year) and other travel peaks have been significantly enhanced. In cities the percentage of people taking public transit is on the rise, and comfort level of such transport means has been greatly enhanced. With the rapid growth of the “internet+transport,” passengers can now check the real-time status of traffic, plan their trips ahead of time, purchase tickets online, and enjoy “smart” parking and other one-stop services. The transport service and complaints hotline 12328 has been put into use.

Supporting the poverty reduction and eradication effort: During the 12th Five-Year Plan period, over RMB 550 billions of vehicle purchase tax was allocated to support transport development in poor areas. In contiguous impoverished areas, 83.8 percent of county seats now have roads of Grade II or above, and 86.2 percent of administrative villages have tarmac and cement roads.

Effectively addressing emergencies: In the wake of the Wenchuan earthquake in 2008, Yushu earthquake in 2010 and the devastating snowstorms in southern China in 2008, emergency transport response teams were among the first to arrive at the scene and open up “lifelines” for relief. China’s marine search and rescue teams have been engaged in rescue work connected with many emergencies at sea, and actively took part in the search for the Malaysian Airline flight MH370. In the period 2010-2015 China organized and coordinated 12,411 marine search and rescue missions, saving 108,464 lives, including 8,070 foreigners.

## **3. Enhancing Ecological Progress**

Promoting energy-saving and emission-reduction: Compared to the 2010 levels, in 2015 the comprehensive energy consumption per unit railway transport dropped by six percent, the energy consumption per unit transport turnover of operating vehicles and ships went down by 6.5 percent and 10.5 percent respectively, and the ton/km fuel consumption of civil aviation decreased by almost five percent. In the Pearl River and Yangtze River deltas, and Bohai Sea Rim (Beijing-Tianjin-Hebei) area, restriction zones have been set up to curb emissions from ships. Along the arteries of the Yangtze River and the Beijing-Hangzhou Grand Canal, and in some coastal regions, pilot and demonstration projects of LNG use have been launched for water-borne transport, oil vapor recovery units installed at some ports and shore power provided to ships.

Protecting the ecological environment: During the 12th Five-Year Plan period China restored the ecology along 1,300 km of transport lines, with a total area of 50 million sq. m. The recycling rate of road-surface materials reached 40 percent. Measures have been adopted to control dust pollution at coal and other minerals transport ports, and equipment storages and installation venues have been set up in coastal areas and along the Yangtze River in case of oil spills. Instead of tracks laid on the ground, many of China’s high-speed trains run on elevated rails to spare farmlands and keep the towns along the routes intact.

#### **IV. Opening up and International Cooperation**

The Chinese government proactively enhances its connectivity with the world community, continuing to open up to and deepening its cooperation with the rest of the world.

##### **1. International Passenger and Freight Transport**

Strengthening international connectivity: By the end of 2015 China had established railway connections with five of its 14 neighbouring countries, with 11 railway crossing points. China actively promotes international and regional cooperation in shipping, and is jointly pushing forward the navigation development of the Lancang-Mekong River with Laos, Myanmar and Thailand. Through code-sharing, airline alliance, joint operation of air routes and equity cooperation, China's civil aviation is striving to improve its international flight network, increase the number of flights and expand its operational scope. In 2015 Chinese express delivery services extended their networks overseas, with 430 million items of mail delivered to international destinations as well as to Hong Kong, Macao and Taiwan. At the same time, China is strengthening cooperation with countries involved in the Belt and Road Initiative, actively pushing forward the interconnectivity of transport infrastructure and enhancing transport convenience. In 2015 Chinese citizens made some 120 million trips overseas via various means of transport.

Supporting foreign trade: An important pillar for developing an export-oriented economy, China's maritime transport carries 90 percent of the country's foreign trade cargo, 98 percent of imported iron ore, 91 percent of imported crude oil, 92 percent of imported coal and 99 percent of imported grain. Trains between China and Europe have become an important component of international through freight traffic.

##### **2. International Exchanges and Cooperation and Opening up**

Actively participating in international affairs: China takes measures to fulfil its obligations, and plays a constructive role in the Organization for Railway Cooperation (OSJD), International Maritime Organization (IMO), International Civil Aviation Organization (ICAO), Universal Postal Union (UPU) and other important international transport organizations. As a founder of the OSJD, China has made great contribution in formulating the organization's various standards and regulations. China has served as member of both the UPU's Postal Operations Council and Council of Administration since it resumed its legitimate seat at the organization in 1972. It has been elected 14 times as a category-A member of the IMO Council since 1989, and five times as a category-A member of the ICAO Council since 2004. China actively promotes bilateral and regional cooperation. It has signed intergovernmental agreements and bilateral and regional documents on railway, highway, maritime transport, civil aviation and postal service cooperation with more than 100 countries. Several transport cooperation mechanisms have been set up, such as the China-ASEAN and Shanghai Cooperation Organization transport ministers' meetings, and a proposal has been made by China to establish a seaport service organization for APEC. China actively fulfils its international obligations, supports the transport development of other developing countries, and has aided the construction of a series of transport projects in Asia and Africa.

Continuing to expand the scope of opening up: The transport industry was one of China's first industries to open to the outside world. In 1979 the China Merchants Group, then under the administration of China's former Ministry of Transport, founded the Shekou

Industrial Zone in Shenzhen, taking the first step in the country's opening-up initiative. In 1984 the Chinese government opened 14 coastal cities, and coastal ports became windows opened to the rest of the world. Today, in the area of transport infrastructure, except railway arteries and civil airports, all highways, bridges, ports, other types of railways and urban rail tracks are open to foreign capital as far as construction and operation is concerned. There is no limit on foreign capital for transport services such as highway freight, international container multimodal transport, and supporting services for international maritime transport.

Quickening the pace of Chinese enterprises' "going global." China has exhibited a strong competitive edge in the areas of railway building, transport projects and port operation. China transports one third of the total global maritime cargo. China's transport businesses are quickening their steps of "going global," and are transforming themselves from traditional labour export and project contracting entities to exporters of capital, technology, management and standards in the areas of transport infrastructure, port operation, ocean transport, transport equipment, ship inspection and maritime training.

#### **V. Development Goals for the Next Five Years**

During the 13th Five-Year Plan period (2016-2020), China will continue to develop its transport industry in accordance with the overall plan to seek economic, political, cultural, social, and ecological progress and the Four-pronged Strategy. It will implement the guideline of innovation, coordination, green development, opening up, and sharing of benefits, continue to centre on the people's needs, improve the quality and efficiency of development, and fully utilize the comparative advantages of different means of transport. China will continue to develop its transport grid characterized by intelligent management, integrated services and green development, and build a comprehensive transport system with functional "nodes" that connect domestic and international transport channels, cover urban and rural areas, and provide integrated and efficient transport services. All this will contribute to the completion of the building of a moderately prosperous society in all respects, to the growth of the Chinese economy, and to connecting China more closely with the rest of the world.

Driving the reform of transport to a deeper level: China will promote the further integration of different means of transport, and build a safe, convenient, efficient, green, and economical modern transport system. It will push ahead the market-oriented reform of its railways, deepen reforms of the investment and financing system, financial powers and expenditure responsibilities, and reform its airspace management system. At the same time, it will further promote the transformation of government functions, continue to streamline administration and delegate powers to lower levels, strengthen regulations, improve government services and enhance administrative efficiency.

Building a transport network that covers the whole of China and extends beyond its borders. China will build a comprehensive transport network that spreads from east to west and south to north, construct passageways that extend beyond its borders, and develop sea routes for the Maritime Silk Road. China will develop a high-quality fast-transit grid, form a high-speed rail network, improve the national expressway network, build an appropriate number of expressways at the local level, and enhance the functions of airline hubs and national and regional airports. China will improve its basic road network to cover more areas, speed up the construction of railways in the central and

western areas, upgrade national and provincial highways and construction of congested sections, improve coastal and inland river transport facilities, strengthen the construction of roads and airports in rural areas, and connect the oil and gas pipelines in different areas. China will improve its postal services and network, and strengthen the infrastructure for express mail delivery. By 2020 China will have 30,000 km of high-speed railways, covering 80 percent of big cities, and 30,000 km of newly renovated expressways. Administrative villages with the necessary conditions will have tarmac and cement roads and shuttle bus services, and all villages will have access to mail service.

**Developing modern and efficient intercity transport:** In urban agglomerations, China will build commuting circles of 1-2 hours between the central cities and between central and peripheral cities, and one-hour commuting circles between central cities and key peripheral towns. In urban areas it will vigorously develop intercity high-speed and suburban railways, and form a multi-level rail transit network. With priority focused on public transit, China will speed up the development of its urban rail and bus rapid transit, and other means of high-capacity public transport. By 2020 intercity railway networks will be completed in the urban agglomerations of the Beijing-Tianjin-Hebei, Yangtze River Delta, Pearl River Delta, middle reaches of the Yangtze River, Central Plains, Chengdu-Chongqing, and Shandong Peninsula areas. More efforts will be made in cities with three million or more residents to form urban rail transport networks, and about 3,000 km of new tracks will be added to the urban rail transit system. China will also strengthen the development of terminals for postal and express delivery services.

**Building integrated transport hubs:** China will enhance the layout of its transport hubs, build international transport hubs in Beijing, Shanghai and Guangzhou, and improve the services and functions of national, regional and local transport hubs. It will strengthen the construction of key transport centres in central and western China and key ports in border regions, and increase their impacts over a wider area. China will improve the services of its transport hubs, improve the transfer facilities and the collecting and distributing networks, enable seamless passenger and freight transfer, and coordinate different means of transport, so as to increase the efficiency of transport and logistics.

**Promoting the green and intelligent development of transport services:** China is striving to push forward the green development of transport through conservation and intensive use of resources and promoting the use of standardized, low-carbon, and modern equipment and energy-saving means in the transport sector. With the implementation of the “internet+transport” action plan, China is encouraging the development of intelligent transport, and the application of advanced information technology and smart appliances. More efforts will be made in the development of through-transport, smart management and public information systems, in strengthening multimodal transport, and in enhancing the quality and profit of transport services.

**Improving safety in the transport industry:** China will improve the regulations and system for transport safety control, and see to it that the responsibilities of transport businesses and those of the supervising organs are thoroughly implemented. China will strengthen its capacity for emergency response and rescue, emphasizing precautionary measures, carrying out special actions to ensure transport safety and strengthening the screening of potential safety hazards and security risks. It will also focus on key areas,

fully implement safety control in the transport industry, and resolutely strive to reduce the occurrence of serious accidents.

## **Conclusion**

To achieve the Two Centenary Goals and realize the Chinese Dream of the great rejuvenation of the Chinese nation, higher standards must be set for the development of transport in China. Transport promotes development, exchanges bring about cooperation, and interconnectivity enables mutual benefits. The Chinese government will continue to improve the country's transport services so as to better serve China's socioeconomic development, and continue to strengthen cooperation in the area of transport with other countries so that they can take new opportunities and address challenges together to realize common development and prosperity.<sup>1480</sup>

## **China Association of Automobile Manufacturers (CAAM)**

China Association of Automobile Manufacturers (CAAM) is a social organization founded in Beijing in the May of 1987, with the approval of the Ministry of Civil Affairs of the People's Republic of China.

Having the qualifications of a legal social organization, it is a self-discipline and non-profit social organization formed based on the principle of equality and voluntariness, which consisting of enterprises and institutions as well as organizations engaged in production and management of automobiles (motorcycles), auto parts and vehicle-related industries founded within the boundaries of the People's Republic of China.

The Member's Representative Assembly is the highest authority of CAAM consisting of near 2000 member units, for which the board of directors is instituted. As the standing body of CAAM, the Secretariat is established and formed under which there were 12 departments, 3 management-oriented branches, 24 product-oriented branches and 1 branch for other things.

Regarding the implementation of national principles and policies, safeguarding of the interest of the whole industry and the development of China automotive industry as his duty, China Association of Automobile Manufacturers (CAAM) aims at the reflection of aspiration and demand of the industry and the performance of mutual service for the government and the industry and gives full play to offering of service, reflection of demands, regulation of actions and establishment of platform to promote the sound and rapid development of the automotive industry in China, based on its main functions such as policy research, information service, self-discipline in the trade, international communication and exhibition service.

As one of the permanent and vice president members of the International Organization of Motor Vehicle Manufacturers (OICA), China Association of Automobile Manufacturers (CAAM) has established a close relationship with the international organization for

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<sup>1480</sup> State Council Information Office White Paper in December 29, 2016 entitled "Development of China's Transport", available online at URL: [http://english.www.gov.cn/archive/white\\_paper/2016/12/29/content\\_281475528034734.htm](http://english.www.gov.cn/archive/white_paper/2016/12/29/content_281475528034734.htm)

automobile industry and the vehicle-related bodies in many countries and regions around the world.<sup>1481</sup>

### **Economic performance of Automobile Industry in March 2020**

According to the statistical analysis of CAAM, in March 2020, with the COVID-19 epidemic effectively controlled in China, the production and operation of manufactures have gradually recovered. For the production situation, the resumption of work and production has improved significantly. The latest statistic surveys of 23 manufacturers and enterprise groups showed that the whole vehicle production factories have started to work, 86% of employees returned to work and recovered 75% of the average level of production rate compared with last year. For the sales situation, since the epidemic spreading hasn't been stopped completely part of the market demands remain suppressed, but the sales in March were significantly increased compared with February. With the gradual implementation of relevant national policies, as well as a succession of local government policies to promote automobile consumptions, the recovery of the automobile market is accelerated.

As a pillar industry of the national economy, the automobile industry has responsibilities and obligations to contribute to restoring the prosperity of the consumer market while dealing with the epidemic effects. In response to the call of the CPC central committee and the state council, CAAM encouraged industrial manufactures to focus on preventions and management of the epidemic and the recovery of production, quickly understand the problems and difficulties existing in the production and operation processes; report the situation to government departments promptly, make suggestions, and make every effort to contribute to the stability of the economy.

The general performances of the automobile industry in March 2020 are summarized as below :

#### **1. The descending rate of automobile production and sales were slowed.**

- In March, as the gradually increased resumption of work and production, the descending rate of automobile production and sales were slowed.
- In March, the production and sales of automobiles reached 1.422 million units and 1.43 million units respectively, with month-on-month growth of 399.2% and 361.4%, and year-on-year declines of 44.5% and 43.3%, which were 35.3% and 35.8% lower compared with February.
- From January to March, the production and sales of automobiles reached 3.474 million units and 3.672 million units respectively, with a year-on-year decline of 45.2% and 42.4%.

#### **2. The descending rate of passenger cars' production and sales are still high**

- In March, the production and sales of passenger cars reached 1.049 million units and 1.043 million units respectively, with month-on-month growth of 436.5% and 365.8%, and year-on-year declines of 49.9% and 48.4%, which were 33% and 33.3% lower compared with February.
- From January to March, the production and sales of passenger cars reached 2.684 million units and 2.877 million units respectively, with a year-on-year decline of

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<sup>1481</sup> China Association of Automobile Manufacturers (CAAM): Overview, available online at URL: [http://www.caam.org.cn/chn/21/cate\\_157/con\\_5223174.html](http://www.caam.org.cn/chn/21/cate_157/con_5223174.html)

48.7% and 45.4%. For different types of passenger cars: The year-on-year production and sales of saloon cars decreased by 50.4% and 47.6%. The year-on-year production and sales of SUV decreased by 43.1% and 39.6%. The year-on-year production and sales of MPV decreased by 70.4% and 63.3%. The year-on-year production and sales of minibus/vans decreased by 51.1% and 54.1%.

**3. The descending rate of commercial vehicles' production and sales was significantly slowed.**

- In March, the production and sales of commercial vehicles reached 373,000 units and 388,000 units respectively, with year-on-year declines of 49.9% and 48.4%, and the decreasing rate was 46.6% and 44.5% lower compared with February.
- From January to March, the production and sales of commercial vehicles reached 790,000 units and 794,000 units respectively, with a year-on-year decline of 28.7% and 28.4%. For different types of passenger cars: The production and sales of bus/coach reached 69,000 and 66,000 respectively, with year-on-year declines of 22.9% and 30.7%. The production and sales of goods vehicles reached 721,000 units and 728,000 units, with year-on-year declines of 29.3% and 28.2%.

**4. The production and sales of pickup trucks are decreased compared with last year which is larger than the truck.**

- From January to March, the production and sales of pickup trucks reached 680,000 units and 700,000 units respectively, with a year-on-year decline of 38.3% and 38.7%.
- The year-on-year declining rate of diesel pickup trucks was lower than petrol pickup trucks. From January to March, the production and sales of petrol pickup trucks reached 18,000 units and 20,000 units respectively, with a year-on-year decline of 40.3% and 39.3%; the production and sales of diesel pickup trucks reached 48,000 units and 50,000 units respectively, with a year-on-year decline of 38.6% and 38.9%.
- From January to March, sales of the top five pickup truck manufactures have reached a total of 54,000 units, with a year-on-year decline of 26.7%, which is 78% of the total pickup truck sales, increased 10.9% compared with last year.

**5. The production and sales of New Energy Vehicles are decreased compared with last year.**

- In March, the production and sales of NEVs (New energy vehicles, not including Tesla) reached 50,000 units and 53,000 units respectively, with year-on-year declines of 56.9% and 53.2%. For different types of NEVs: The production and sales of battery electric vehicles reached 38,000 units and 40,000 units, with year-on-year declines of 58.5% and 55.6%. The production and sales of plug-in hybrid electric vehicles reached 11,000 units and 13,000 units, with year-on-year declines of 50.2% and 44.1%. The production and sales of fuel cell vehicles reached 38 units and 36 units, while the year-on-year production increased by 5.6% and the sales remain the same.
- From January to March, the production and sales of NEVs reached 105,000 units and 114,000 units respectively, with year-on-year declines of 60.2% and 56.4%. For different types of NEVs: The production and sales of battery electric vehicles reached 77,000 units and 85,000 units, with year-on-year declines of 61.8% and 58.6%. The production and sales of plug-in hybrid electric vehicles reached

28,000 units and 29,000 units, with year-on-year declines of 55% and 48.5%. The production and sales of fuel cell vehicles reached 183 units and 207 units, with year-on-year declines of 19.7% and 7.2%

**6. The market share of Chinese domestic passenger cars was increased.**

- In March, the sales of Chinese domestic passenger cars reached 433,000 units, with year-on-year declines of 48.2%, which accounted as 41.5% of the total sales of passenger cars and the percentage increased by 0.2% compared with last year.
- From January to March, the sales of Chinese domestic passenger cars reached 1,155,000 units, with year-on-year declines of 47.3%, which accounted as 40.1% of the total sales of passenger cars and the percentage decreased 1.5% compared with last year.

**7. The market concentration level of the enterprise groups was higher compared with last year.**

- From January to March, the total sales of the top ten automobile enterprise groups reached 3,295,000 units, with year-on-year declines of 41.7%, which lower than the whole industry decline of 0.7%. The total sales of the top ten automobile enterprise groups accounted for 89.7% of the total sales of the automobile industry and the percentage increased by 1.1% compared with last year.

**8. The automobile export rate was slightly increased compared with last year.**

- In March, the exported vehicles reached 91,000 units, with a month-on-month increase of 103.8% and a year-on-year increase of 0.8%. For different types of vehicles: The exported passenger cars reached 68,000 units, with a month-on-month increase of 97.6% and a year-on-year increase of 21.9%. The exported commercial vehicles reached 23,000 units, with a month-on-month increase of 125.3% and a year-on-year decline of 33.8%.
- From January to March, the exported vehicles reached 204,000 units, with a year-on-year decline of 11.5%. For different types of vehicles: The exported passenger cars reached 154,000 units, with a year-on-year increase of 5.3%. The exported commercial vehicles reached 50,000 units, with a year-on-year decline of 40.7%.<sup>1482</sup>

**Other Important topics (Statistical and Factual Information) covering the China's Transport System is available at the links given below:**

- **Road Transport in the People's Republic of China.**<sup>1483</sup>
- **70 Years of China's Transport Development.**<sup>1484</sup>
- **China reports rising investment and falling costs in transport.**<sup>1485</sup>

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<sup>1482</sup> China Association Automobile Manufacturers (CAAM) Report titled "Economic performance of Automobile Industry in March 2020" published in April 16, 2020, available online at URL: [http://www.caam.org.cn/chn/21/cate\\_158/con\\_5229834.html](http://www.caam.org.cn/chn/21/cate_158/con_5229834.html)

<sup>1483</sup> International Road Transport Union (IRU) Report titled "Road Transport in the People's Republic of China", December 2009, Geneva, available online at URL: <https://www.iru.org/sites/default/files/2016-01/en-rt-in-china.pdf>

<sup>1484</sup> china.org.cn Special Report titled "70 Years of China's Transport Development", available online at URL: <http://www.china.org.cn/china/70-years-of-chinas-transport-development/index.html>

<sup>1485</sup> Xinhua News Report titled "China reports rising investment and falling costs in transport", dated July 23, 2019, edited by Yurou, available online at URL: [http://www.xinhuanet.com/english/2019-07/23/c\\_138251206.htm](http://www.xinhuanet.com/english/2019-07/23/c_138251206.htm)

- Sustainable Transport in China: China Transport Sector Policy Briefing; NEV purchase subsidies, VAT reform, methanol-fuelled cars, green logistics.<sup>1486</sup>

China's Automotive Statistics: China Association Automobile Manufacturers (CAAM)

#### Production of Automobiles in March 2020

Unit: *10,000, %	Volume	Jan. & Mar.	MoM	YoY	YoY Jan. & Mar.
<b>Cars</b>	<b>142.2</b>	<b>347.4</b>	<b>399.2</b>	<b>-44.5</b>	<b>-45.2</b>
<b>Passenger Cars (PC)</b>	<b>104.9</b>	<b>268.4</b>	<b>436.5</b>	<b>-49.9</b>	<b>-48.7</b>
Cars	49.3	123.3	434.9	-50.3	-50.4
MPV	3.5	11.4	290.9	-77.3	-70.4
SUV	49.8	128.8	435.5	-44.8	-43.1
Crossed Passenger Cars	2.2	4.9	1627.5	-48.6	-51.1
<b>Commercial Vehicles (CV)</b>	<b>37.3</b>	<b>79</b>	<b>317.6</b>	<b>-20.3</b>	<b>-28.7</b>
Buses	3.2	6.9	257.3	-20.9	-22.9
Buses incomplete vehicles	0.1	0.3	246.7	-43.3	-40.5
Trucks	34.1	72.1	324.3	-20.3	-29.3
Semi-trailer	6.7	14	212.7	10.6	7.7
Trucks incomplete vehicles	5.4	11.2	265.4	-22.5	-34.

Source: China Association Automobile Manufacturers (CAAM)

URL: [http://www.caam.org.cn/chn/21/cate\\_463/con\\_5229826.html](http://www.caam.org.cn/chn/21/cate_463/con_5229826.html)

#### Sales of Automobiles in March 2020

Unit: *10,000, %	Volume	Jan. & Mar.	MoM	YoY	YoY Jan. & Mar.
<b>Cars</b>	<b>143.0</b>	<b>367.2</b>	<b>361.1</b>	<b>-43.3</b>	<b>-42.4</b>
<b>Passenger Cars (PC)</b>	<b>104.3</b>	<b>287.7</b>	<b>365.8</b>	<b>-48.4</b>	<b>-45.4</b>
Cars	49.1	132.5	422.3	-48.6	-47.6

<sup>1486</sup> Sustainable Transport in China: China Transport Sector Policy Briefing 2019, Issue 3; NEV purchase subsidies, VAT reform, methanol-fuelled cars, green logistics, available online at URL: <https://www.sustainabletransport.org/archives/6828>

MPV	4.6	13.6	215.8	-70	-63.3
SUV	48.5	137.2	332.6	-43.9	-39.6
Crossed Passenger Cars	2.1	4.5	534.8	-58.2	-54.1
Commercial Vehicles (CV)	38.8	79.4	348.9	-22.6	-28.4
Buses	3.1	6.6	291.7	-28	-30.7
incomplete Buses vehicles	0.1	0.3	299.0	-41.5	-42.2
Trucks	35.7	72.8	354.6	-22.1	-28.2
Semi-trailer	6.6	15.5	188.3	-4	6.4
incomplete Trucks vehicles	5.0	10.8	336.4	-34.5	-33.2

Source: China Association Automobile Manufacturers (CAAM)

URL: [http://www.caam.org.cn/chn/21/cate\\_463/con\\_5229825.html](http://www.caam.org.cn/chn/21/cate_463/con_5229825.html)

#### Automobile Enterprise Inventory in March 2020

Unit: *10,000, %	at the beginning of the month	at the end of the month	change ±%
Cars	92.7	91.3	-1.5
Passenger Cars (PC)	61.9	62.8	1.5
Commercial Vehicles (CV)	30.8	28.5	-7.4

Source: China Association Automobile Manufacturers (CAAM)

URL: [http://www.caam.org.cn/chn/21/cate\\_463/con\\_5229824.html](http://www.caam.org.cn/chn/21/cate_463/con_5229824.html)

#### Production of New Energy Vehicles in March 2020

Unit: *10,000, %	Mar.	Jan. & Mar.	MoM	YoY	YoY Jan. & Mar.
NEVs	5.0	10.5	381.6	-56.9	-60.2
NEV PCs	4.4	9.4	361.0	-59.2	-61.5
BEVs	3.3	6.7	336.6	-61.3	-63.8
PHEVs	1.1	2.7	457.0	-51.3	-54.6
NEV CVs	0.5	1.1	660.6	-18.6	-44.1
BEVs	0.5	1.0	607.6	-21.5	-42.1
PHEVs	0.03	0.06	-	74.6	-68.4

Source: China Association Automobile Manufacturers (CAAM)

URL: [http://www.caam.org.cn/chn/21/cate\\_463/con\\_5229823.html](http://www.caam.org.cn/chn/21/cate_463/con_5229823.html)

### Sales of New Energy Vehicles in March 2020

Unit: *10,000, %	Mar.	Jan. & Mar.	MoM	YoY	YoY Jan. & Mar.
<b>NEVs</b>	<b>5.3</b>	<b>11.4</b>	<b>301.3</b>	<b>-53.2</b>	<b>-56.4</b>
<b>NEV PCs</b>	<b>4.7</b>	<b>10.2</b>	<b>298.6</b>	<b>-55.7</b>	<b>-57.4</b>
<b>BEVs</b>	<b>3.5</b>	<b>7.3</b>	<b>271.5</b>	<b>-58.8</b>	<b>-60.2</b>
<b>PHEVs</b>	<b>1.2</b>	<b>2.8</b>	<b>400.9</b>	<b>-44.3</b>	<b>-48</b>
<b>NEV CVs</b>	<b>0.6</b>	<b>1.3</b>	<b>323</b>	<b>-17</b>	<b>-45.5</b>
<b>BEVs</b>	<b>0.6</b>	<b>1.2</b>	<b>308.4</b>	<b>-15.6</b>	<b>-44.4</b>
<b>PHEVs</b>	<b>0.03</b>	<b>0.06</b>	<b>763.2</b>	<b>-36.4</b>	<b>-63.8</b>

Source: China Association Automobile Manufacturers (CAAM)

URL: [http://www.caam.org.cn/chn/21/cate\\_463/con\\_5229822.html](http://www.caam.org.cn/chn/21/cate_463/con_5229822.html)

### Automobile Exports in March 2020

Unit: *10,000, %	Mar.	Jan. & Mar.	MoM	YoY	YoY Jan. & Mar.
<b>Cars</b>	<b>9.1</b>	<b>20.4</b>	<b>103.8</b>	<b>0.8</b>	<b>-11.5</b>
<b>Passenger Cars (PC)</b>	<b>6.8</b>	<b>15.4</b>	<b>97.6</b>	<b>21.9</b>	<b>5.3</b>
<b>Commercial Vehicles (CV)</b>	<b>2.3</b>	<b>5</b>	<b>125.3</b>	<b>-33.8</b>	<b>-40.7</b>

Source: China Association Automobile Manufacturers (CAAM)

URL: [http://www.caam.org.cn/chn/21/cate\\_463/con\\_5229821.html](http://www.caam.org.cn/chn/21/cate_463/con_5229821.html)

## China: Number of Employed persons in Transport, Storage & Post at Year-end by Region (2018)

Region	Railway Transport	Road Transport	Water Transport	Air Transport	Pipeline Transport	Intermodality and Forwarding Agency	Loading, Unloading and Storage	Post
<b>National Total</b>	<b>1833800</b>	<b>3642970</b>	<b>357698</b>	<b>645957</b>	<b>33883</b>	<b>313777</b>	<b>432771</b>	<b>929159</b>
Beijing	105933	279774	304	83122	4287	29218	14541	84799
Tianjin	11321	61561	12520	8923	525	13090	15327	9075
Hebei	51072	121007	21244	5880	1453	1904	14550	28692
Shanxi	104705	76661	79	6514		2157	6932	17121
Inner Mongolia	103833	65806	27	5252	104	923	6782	18227
Liaoning	107581	122535	15757	20106	808	12977	33319	16630
Jilin	58361	49051	54	6484	935	1640	12467	19664
Heilongjiang	126389	66041	3401	4667	613	1648	18237	29304
Shanghai	38340	181993	51285	91436	1443	84771	32383	24187
Jiangsu	20109	246682	62071	15061	8727	19643	36638	51465
Zhejiang	20421	173107	27727	13915	50	13259	20568	32082
Anhui	38727	133448	10923	4901	69	5931	10877	40304
Fujian	40736	96647	15236	26260	63	11398	11651	28389
Jiangxi	59669	93132	4591	4299	16	552	7529	20109
Shandong	96131	224934	46669	8287	3817	16080	32729	47215
Henan	109329	201620	1698	8977	280	5279	24970	40539
Hubei	85818	157194	14728	9611	4557	3442	12471	60244
Hunan	72930	97592	2392	8982	306	1647	6607	28376
Guangdong	59100	397895	42287	132231	450	72078	50950	109102
Guangxi	63674	67507	5204	8692		1554	12975	28399
Hainan	6361	23993	6329	25408	28	1139	3432	9606
Chongqing	29705	133988	10343	15011	46	2333	6013	28037
Sichuan	66671	173568	1402	51954	612	2805	12194	64699
Guizhou	34578	56007	586	12351	117	552	3661	10948
Yunnan	39568	75210	297	27058	261	3267	6890	18641
Tibet	36	5191		4135			236	839
Shaanxi	101135	110956	157	12012	769	2818	10783	34199
Gansu	83282	44888	174	3686		383	3867	9538
Qinghai	23621	15526		2518		93	748	3219
Ningxia	18898	12258	124	2757		26	752	3841
Xinjiang	55766	77198	89	15467	3547	1170	1692	11669

**Source:** 16-1 Number of Employed persons in Transport, Storage & Post at Year-end by Region (2018), China Statistical Yearbook 2019

**URL:** <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Basic Conditions of Transport

Item	2015	2016	2017	2018
<b>Length of Transport Routes</b> (10 000 km)				
Railways in Operation	12.10	12.40	12.70	13.17
Highways	457.73	469.63	477.35	484.65
Expressway	12.35	13.10	13.64	14.26
Navigable Inland Waterways	12.70	12.71	12.70	12.71
Regular Civil Aviation Routes	531.72	634.81	748.30	837.98
Petroleum and Gas Pipelines	10.87	11.34	11.93	12.23
<b>Total Passenger Traffic</b> (10 000 persons)	<b>1943271</b>	<b>1900194</b>	<b>1848620</b>	<b>1793820</b>
Railways	253484	281405	308379	337495
Highways	1619097	1542759	1456784	1367170
Waterways	27072	27234	28300	27981
Civil Aviation	43618	48796	55156	61174
<b>Total Passenger-Kilometers(100 million passenger-km)</b>	<b>30058.9</b>	<b>31258.5</b>	<b>32812.8</b>	<b>34218.2</b>
Railways	11960.6	12579.3	13456.9	14146.6
Highways	10742.7	10228.7	9765.2	9279.7
Waterways	73.1	72.3	77.7	79.6
Civil Aviation	7282.6	8378.1	9513.0	10712.3
<b>Total Freight Traffic</b> (10 000 tons)	<b>4175886</b>	<b>4386763</b>	<b>4804850</b>	<b>5152732</b>
Railways	335801	333186	368865	402631
Highways	3150019	3341259	3686858	3956871
Waterways	613567	638238	667846	702684
Civil Aviation	629.3	668.0	705.9	738.5
Petroleum and Gas Pipelines	75870	73411	80576	89807
<b>Total Freight Ton-kilometers</b> (100 million ton-km)	<b>178356</b>	<b>186629</b>	<b>197373</b>	<b>204686</b>
Railways	23754.3	23792.3	26962.2	28821.0
Highways	57955.7	61080.1	66771.5	71249.2
Waterways	91772.5	97338.8	98611.2	99052.8
Civil Aviation	208.07	222.45	243.55	262.50
Petroleum and Gas Pipelines	4665	4196	4784	5301
<b>Possession of Civil Motor Vehicles</b> (10 000 units)	<b>16284.45</b>	<b>18574.54</b>	<b>20906.67</b>	<b>23231.23</b>
Private Vehicles	14099.10	16330.22	18515.11	20574.93
<b>Possession of Other Motor Vehicles</b> (10 000 units)	<b>9570.42</b>	<b>7449.93</b>	<b>7607.88</b>	<b>6979.25</b>
<b>Possession of Civil Transport Vessels</b> (unit)	<b>165905</b>	<b>160144</b>	<b>144924</b>	<b>136975</b>
Motor Vessels	149659	144568	131746	125754
Barges	16246	15576	13178	11221
<b>Volume of Freight Handled in Coastal Ports above Designated Size</b> (10 000 tons)	<b>784578</b>	<b>810933</b>	<b>865464</b>	<b>922392</b>

Source: 16-2, Basic Conditions of Transport, China Statistical Year 2019

URL: <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Length of Transport Routes

Year	Length of Railways in Operation	Electrified Railways	Length of Highways	Expressway	Length of Navigable Inland Waterways	Length of Regular Civil Aviation Routes	International Routes	Length of Petroleum and Gas Pipelines
1978	5.17	0.10	89.02		13.60	14.89	5.53	0.83
1980	5.33	0.17	88.83		10.85	19.53	8.12	0.87
1985	5.52	0.41	94.24		10.91	27.72	10.60	1.17
1990	5.79	0.69	102.83	0.05	10.92	50.68	16.64	1.59
1991	5.78	0.78	104.11	0.06	10.97	55.91	17.74	1.62
1992	5.81	0.84	105.67	0.07	10.97	83.66	30.30	1.59
1993	5.86	0.89	108.35	0.11	11.02	96.08	27.87	1.64
1994	5.90	0.90	111.78	0.16	11.02	104.56	35.19	1.68
1995	6.24	0.97	115.70	0.21	11.06	112.90	34.82	1.72
1996	6.49	1.01	118.58	0.34	11.08	116.65	38.63	1.93
1997	6.60	1.20	122.64	0.48	10.98	142.50	50.44	2.04
1998	6.64	1.30	127.85	0.87	11.03	150.58	50.44	2.31
1999	6.74	1.40	135.17	1.16	11.65	152.22	52.33	2.49
2000	6.87	1.49	167.98	1.63	11.93	150.29	50.84	2.47
2001	7.01	1.69	169.80	1.94	12.15	155.36	51.69	2.76
2002	7.19	1.74	176.52	2.51	12.16	163.77	57.45	2.98
2003	7.30	1.81	180.98	2.97	12.40	174.95	71.53	3.26
2004	7.44	1.86	187.07	3.43	12.33	204.94	89.42	3.82
2005	7.54	1.94	334.52	4.10	12.33	199.85	85.59	4.40
2006	7.71	2.34	345.70	4.53	12.34	211.35	96.62	4.81
2007	7.80	2.40	358.37	5.39	12.35	234.30	104.74	5.45
2008	7.97	2.50	373.02	6.03	12.28	246.18	112.02	5.83
2009	8.55	3.02	386.08	6.51	12.37	234.51	91.99	6.91
2010	9.12	3.27	400.82	7.41	12.42	276.51	107.02	7.85
2011	9.32	3.43	410.64	8.49	12.46	349.06	149.44	8.33
2012	9.76	3.55	423.75	9.62	12.50	328.01	128.47	9.16
2013	10.31	3.60	435.62	10.44	12.59	410.60	150.32	9.85
2014	11.18	3.69	446.39	11.19	12.63	463.72	176.72	10.57
2015	12.10	7.47	457.73	12.35	12.70	531.72	239.44	10.87
2016	12.40	8.03	469.63	13.10	12.71	634.81	282.80	11.34
2017	12.70	8.66	477.35	13.64	12.70	748.30	324.59	11.93
2018	13.17	9.22	484.65	14.26	12.71	837.98	359.89	12.23

Source: 16-3, Length of Transport Routes, China Statistical Year 2019

URL: <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Length of Transport Routes of Year-end by Region (2018)

Region	Length of Railways in Operation	Length of Navigable Inland Waterways	Total Length of Highways	Expressway and Class I to IV Highways	Express way	First Class	Second Class	Highways Below Class IV
<b>National Total</b>	<b>131651</b>	<b>127126</b>	<b>4846532</b>	<b>4465864</b>	<b>142593</b>	<b>111703</b>	<b>393471</b>	<b>380667</b>
Beijing	1264		22256	22256	1115	1457	4029	
Tianjin	1153	88	16257	16257	1262	1209	2986	
Hebei	7362		193252	188475	7280	6341	20987	4777
Shanxi	5441	467	143326	141012	5605	2731	15736	2314
Inner Mongolia	12766	2403	202641	195636	6633	7791	17684	7005
Liaoning	6525	413	122974	115699	4331	4153	18305	7275
Jilin	5043	1456	105399	100599	3298	2163	9642	4799
Heilongjiang	6894	5098	167116	142959	4512	2729	11931	24156
Shanghai	466	2091	13106	13106	836	545	3615	
Jiangsu	3062	24380	158729	156297	4711	15081	23439	2432
Zhejiang	2813	9761	120662	120339	4421	7046	10374	323
Anhui	4324	5641	208826	207942	4836	4863	11595	885
Fujian	3514	3245	108901	92464	5155	1351	10887	16438
Jiangxi	4278	5638	161941	135442	5931	2601	11613	26499
Shandong	6336	1117	275642	274948	6057	11159	26177	693
Henan	5410	1403	268589	242775	6600	3692	27192	25814
Hubei	4341	8470	275039	265912	6367	6093	23179	9128
Hunan	5070	11496	240060	223667	6725	2068	14478	16393
Guangdong	4524	12112	217699	209131	9003	11329	18975	8568
Guangxi	5202	5707	125449	115702	5563	1554	13156	9748
Hainan	1033	343	35023	34731	924	460	1845	292
Chongqing	2326	4352	157483	133943	3096	952	8572	23541
Sichuan	4950	10818	331592	304830	7131	4178	16021	26762
Guizhou	3565	3740	196908	156559	6453	1464	8433	40348
Yunnan	3848	4024	252929	220554	5184	1443	12222	32374
Tibet	785		97785	85473	38	578	1055	12312
Shaanxi	5002	1146	177128	161028	5475	1641	9734	16100
Gansu	4672	911	143228	128071	4242	627	9156	15157
Qinghai	2349	674	82137	70157	3328	609	8525	11980
Ningxia	1373	130	35405	35355	1678	1895	3870	51
Xinjiang	5959		189050	154546	4803	1901	18056	34504

Source: 16-4, Length of Transport Routes of Year-end by Region (2018)

URL: <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Quality of Transport Routes

Item	1990	2000	2010	2017	2018
<b>Length of Railways in Operation (km)</b>	53378	58656	66239	126970	131651
Double-Tracking Length (km)	13024	21408	29684	71761	76346
Proportion (%)	24.4	36.5	44.8	56.5	58.0
<b>Length of Highways (km)</b>	<b>1028348</b>	<b>1679848</b>	<b>4008229</b>	<b>4773469</b>	<b>4846532</b>
Expressway and Class I to IV Highways (km)	741104	1315931	3304709	4338560	4465864
Proportion (%)	72.1	78.3	82.4	90.9	92.1
<b>Length of Navigable Inland Waterways (km)</b>	<b>109192</b>	<b>119325</b>	<b>124242</b>	<b>127019</b>	<b>127126</b>
Standard Waterways (km)	59575	61367	62290	66160	66442
Proportion (%)	54.6	51.4	50.1	52.1	52.3

**Source:** 16-5, Quality of Transport Routes, China Statistical Yearbook 2019

**URL:** <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Average Transport Distance of Passenger

Year	Total	Railways	Highways	Waterways	Civil Aviation
1978	69	134	35	44	1208
1980	67	150	33	49	1153
1985	72	216	36	58	1563
1990	73	273	40	61	1388
1991	77	297	42	68	1383
1992	81	316	44	75	1407
1993	79	330	43	73	1412
1994	79	334	44	70	1366
1995	77	345	44	72	1331
1996	74	353	44	70	1346
1997	76	384	46	69	1374
1998	77	397	47	59	1391
1999	81	413	49	56	1407
2000	83	431	49	52	1444
2001	86	453	51	48	1450
2002	88	471	53	44	1476
2003	87	492	53	37	1442
2004	92	511	54	35	1470
2005	95	524	55	34	1479
2006	95	527	54	33	1485
2007	97	532	56	34	1503
2008	81	532	47	29	1497
2009	83	517	49	31	1464
2010	85	523	49	32	1509
2011	88	516	51	30	1548
2012	88	518	52	30	1574
2013	130	503	61	29	1598
2014	141	488	63	28	1616
2015	155	472	66	27	1670
2016	165	447	66	27	1717
2017	177	436	67	27	1725
2018	191	419	68	28	1751

Source: 16-10, Average Transport Distance of Passenger, China Statistical Yearbook, 2019

URL: <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Average Transport Distance of Freight

Year	Total	Railways	Highways	Waterways	Civil Aviation	Petroleum and Gas Pipelines
1978	395	485	32	873	1516	416
1980	220	514	20	1184	1580	467
1985	246	622	35	1221	2129	442
1990	270	705	46	1447	2211	398
1991	284	718	47	1554	2234	399
1992	279	734	48	1433	2335	417
1993	275	743	48	1415	2394	410
1994	283	774	50	1465	2241	406
1995	291	786	50	1551	2206	386
1996	282	766	51	1402	2168	366
1997	300	771	54	1696	2334	362
1998	301	764	56	1771	2388	348
1999	314	771	58	1855	2485	310
2000	326	771	59	1939	2555	340
2001	340	761	60	1959	2556	336
2002	342	764	61	1940	2551	339
2003	344	769	61	1817	2643	336
2004	407	775	63	2211	2595	329
2005	431	770	65	2261	2572	350
2006	436	762	67	2231	2698	464
2007	446	757	69	2286	2896	460
2008	427	760	171	1707	2934	443
2009	432	757	175	1804	2833	453
2010	438	759	177	1806	3177	440
2011	431	749	182	1771	3120	506
2012	424	748	187	1781	3007	516
2013	410	735	181	1419	3034	536
2014	436	722	183	1551	3161	587
2015	427	707	184	1496	3306	615
2016	425	714	183	1525	3330	572
2017	411	731	181	1477	3450	594
2018	397	716	180	1410	3554	590

Source: 16-11, Average Transport Distance of Freight, China Statistical Yearbook 2019

URL: <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Basic Statistics on National Railways Transport Equipment

Item	2014	2015	2016	2017	2018
<b>Locomotives (unit)</b>	<b>21096</b>	<b>21366</b>	<b>21453</b>	<b>21420</b>	<b>21482</b>
Diesel Locomotives	9485	9132	8974	8568	8296
Electric Locomotives	11596	12219	12464	12837	13166
<b>Passenger Coaches (coach)</b>	<b>60629</b>	<b>67706</b>	<b>70872</b>	<b>72262</b>	<b>73199</b>
Soft Berth Coaches		4953	5003	4953	4804
Hard Berth Coaches		20312	20683	20438	19856
Soft Seat Coaches		17649	20680	22984	25705
Hard Seat Coaches		18061	17896	17163	16717
<b>Freight Cars (coach)</b>	<b>716578</b>	<b>768516</b>	<b>764783</b>	<b>808736</b>	<b>839213</b>

**Source:** 16-18, Basic Statistics on National Railways Transport Equipment, China Statistical Yearbook 2019

**URL:** <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Possession of Vehicles for Highway Business Transportation

Year Region	Total (10 000 units)	Passenger Vehicles		Trucks			
		Number (10 000 units)	Number of Seats (10 000 seats)	Number (10 000 units)	Ordinary Trucks	Capacity (10 000 tons)	Ordinary Trucks
1990	31.30	10.76	468.92	20.22	19.82	131.61	127.06
1995	27.49	13.73	480.61	13.75	13.12	103.13	94.56
2000	702.82	216.81	2524.45	486.02	475.24	1667.70	1573.73
2005	733.22	128.40	1859.28	604.82	580.28	2537.75	2282.15
2006	802.58	161.92	2312.41	640.66	598.43	2822.69	2343.13
2007	849.22	164.73	2428.81	684.49	648.01	3135.69	2643.74
2008	930.61	169.64	2560.36	760.97	720.18	3686.20	3139.76
2009	1087.35	180.79	2799.71	906.56	859.27	4655.23	4002.80
2010	1133.32	83.13	2017.09	1050.19	996.43	5999.82	5223.23
2011	1263.75	84.34	2086.66	1179.41	1116.36	7261.20	6273.51
2012	1339.89	86.71	2166.55	1253.19	1184.58	8062.14	6963.29
2013	1504.73	85.26	2170.26	1419.48	1080.75	9613.91	5008.34
2014	1537.93	84.58	2189.55	1453.36	1091.32	10292.47	5241.45
2015	1473.12	83.93	2148.58	1389.19	1011.87	10366.50	4982.50
2016	1435.77	84.00	2140.26	1351.77	946.03	10826.78	4843.83
2017	1450.22	81.61	2099.18	1368.62	902.90	11774.81	4868.40
2018	1435.48	79.66	2048.11	1355.82	816.76	12872.97	4791.21

Source: 16-23, Possession of Vehicles for Highway Business Transportation, China Statistical Yearbook 2019

URL: <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

## China: Possession of Civil Transport Vessels

Year Region	Motor Vessels				Barges		
	Number (unit)	Dead Weight Tonnage (ton)	Passenger Capacity (seat)	Drawing Power (kw)	Number (unit)	Dead Weight Tonnage (ton)	Passenger Capacity (seat)
1980	29588	12207808	455454	914704	71604	4743905	89584
1985	260296	20898230	877963	1666163	132682	8670224	99643
1990	325888	29090082	1138937	1750351	82482	9066738	62926
1995	299717	40940087	979985	1707115	57998	9449652	17722
2000	185018	42640605	1014013	1439743	44658	8640504	18258
2005	165900	90756392	977846	1480381	41394	11030057	33496
2006	157805	98241489	1025861	1538957	36555	12015595	33355
2007	157544	106441173	1004546	1520924	34227	12373412	22316
2008	152247	111047702	994495	1564439	31943	13121439	14050
2009	149367	133384848	979384	1120381	27565	12702991	2166
2010	155624	168985654	1001395	1410719	22783	11422911	2260
2011	157950	202602789	1004622	1600896	21292	10040453	3768
2012	158309	218793742	1021260	1531873	20282	9692502	3798
2013	155340	234317614	1031711	1235661	17214	9692720	1287
2014	154974	247399826	1030973	1424950	17003	10452402	1334
2015	149659	261434867	1015939	1424426	16246	11007996	1391
2016	144568	255170820	999008	1445786	15576	11056320	3124
2017	131746	246750827	964377	1532698	13178	9765519	3122
2018	125754	242447129	960245	1465403	11221	8705726	3044

Source: 16-24, Possession of Civil Transport Vessels, China Statistical Yearbook 2019

URL: <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>

### 8.8 Annual Work Report tabled at the third session of 13<sup>th</sup> National People's Congress.

Premier Li Keqiang delivered a government work report including 'a review of our work in 2019 and the first few months of 2020' on May 22, 2020 on behalf of the State Council to the legislature for deliberation at the third session of the 13<sup>th</sup> National People's Congress (NPC). Premier Li Keqiang expressed the following points on Science and Technology in his speech to the 13<sup>th</sup> NPC (3<sup>rd</sup> Session): <sup>1487</sup>

#### I. A review of our work in 2019 and the first few months of 2020

- **New growth drivers became stronger.** A number of major innovative achievements were made in science and technology.

<sup>1487</sup> Excerpts from work report including 'a review of our work in 2019 and the first few months of 2020', available online at URL: <https://news.cgtn.com/news/2020-05-22/Full-text-Premier-Li-s-speech-at-the-third-session-of-the-13th-NPC-QHaPIFpB8k/index.html>

- Emerging industries continued to grow; upgrading in traditional industries accelerated. Business start-ups and innovation continued to surge nationwide, with an average net increase of over 10,000 businesses per day.
- **Major headway was made in reform and opening up.**
- We cut taxes and fees by 2.36 trillion yuan, going well beyond our target of two trillion yuan, with manufacturing and micro and small businesses benefiting most.
- **The reform of government bodies was completed.**
- **The Science and Technology Innovation Board, or STAR Market, was established.**
- The joint efforts to pursue **the Belt and Road Initiative (BRI)** yielded fresh results.
- Regulations for the implementation of the Foreign Investment Law were adopted, and the **China (Shanghai) Pilot Free Trade Zone Lin'gang New Area** was established.
- Foreign trade and investment remained stable.

## **II. Main targets for development and the overall plan for the next stage of work**

- *We will boost our capacity to support technological innovation.* We will accelerate the development of national laboratories, restructure the system of key national laboratories, and develop private R&D institutions. We will intensify international cooperation on science and technology. Intellectual property protection will be strengthened.
- *We will continue to encourage business start-ups and innovation nationwide.*