



ITS Driving for a Better Life

智能交通赋能幸福美好生活

Recent Developments of ITS in China

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1. National Policy and Strategy

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1 National Policy and Strategy

-- Construction Outline for Powerful Nation of Transportation

--issued by CPC Central Committee and the State Council , Sep. of 2019

- National top-level design and vision planning for transportation in China
- Drawing goals and road map for China's transportation modernization in the next 15 to 30 years
- Building a new generation of ITS becomes the goal of national transportation development and construction
- The construction outline has been planned to all aspects of ITS
 - Intelligent road, intelligent high-speed train, intelligent shipping
 - Cooperative-ITS(C-ITS)
 - MaaS
 - Personal Mobility
 - Smart and Green logistics
 - New technology development
 - ✓ Intelligent Connected Automated Vehicle(ICAV), AI and big-data in transport, etc.

1 National Policy and Strategy

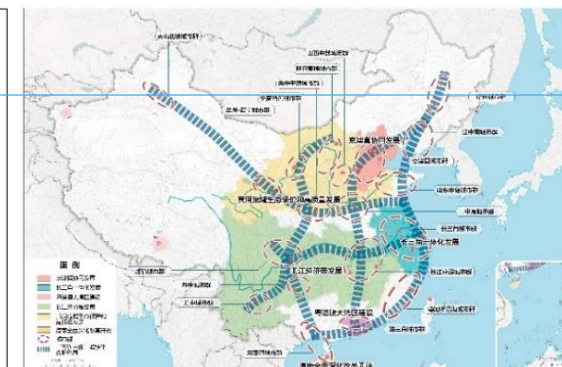
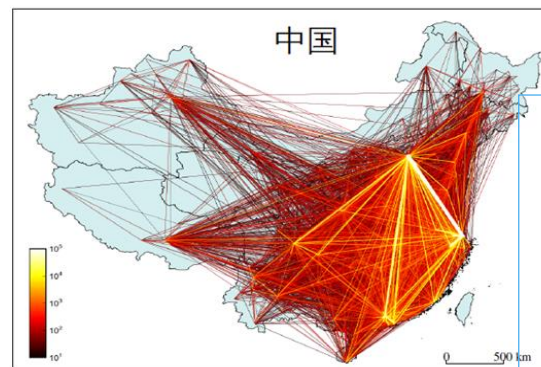
--Outlines for planning national comprehensive transportation network

- issued by State Council and CPC Central Committee, feb. of 2021,



TASKS:

- Improve the national comprehensive transportation network;
- Build a high-efficiency main skeleton of transportation network;
- Build multi-level and integrated national comprehensive transportation hub systems;
- Build a robust global transport network;
- ...



—6主轴—7走廊—8通道—

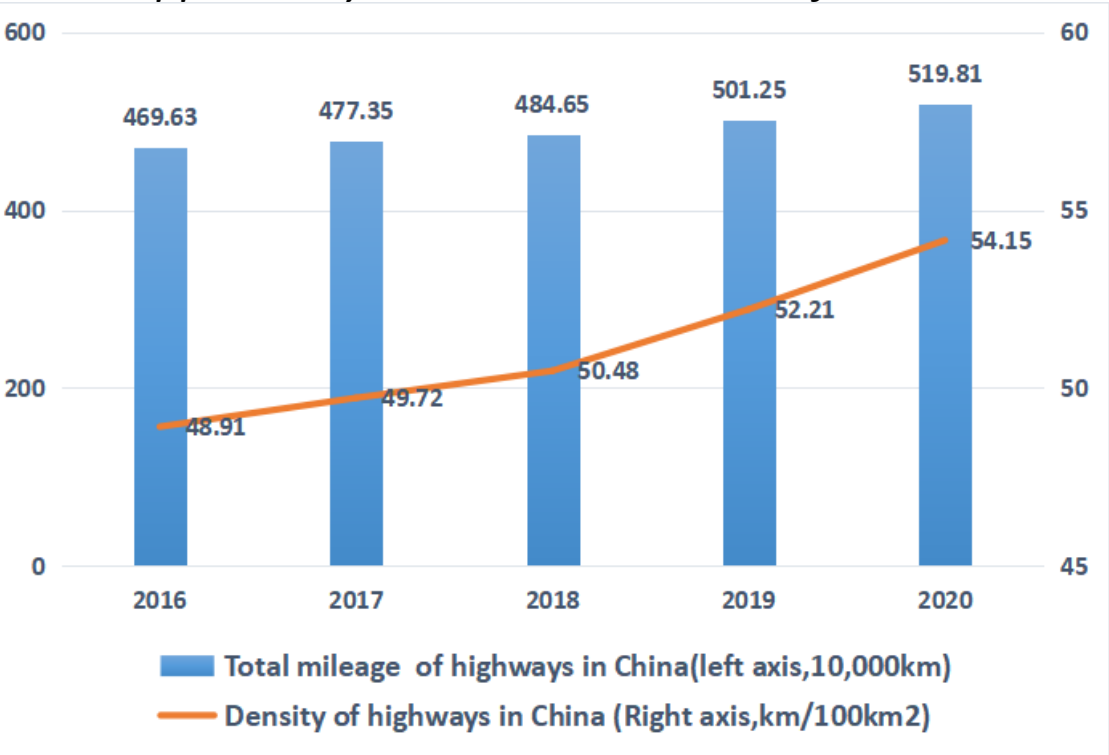
2. Key Directions

1. Smart Highway Demonstration
2. National ETC System Upgrading Project
3. Intelligent Connected Automated Vehicle
4. Low-carbon Transformation

2.1 Smart Highway Demonstration

□ “New Generation of National Transportation Cybernetic System Demonstration and Intelligent Highway” Project

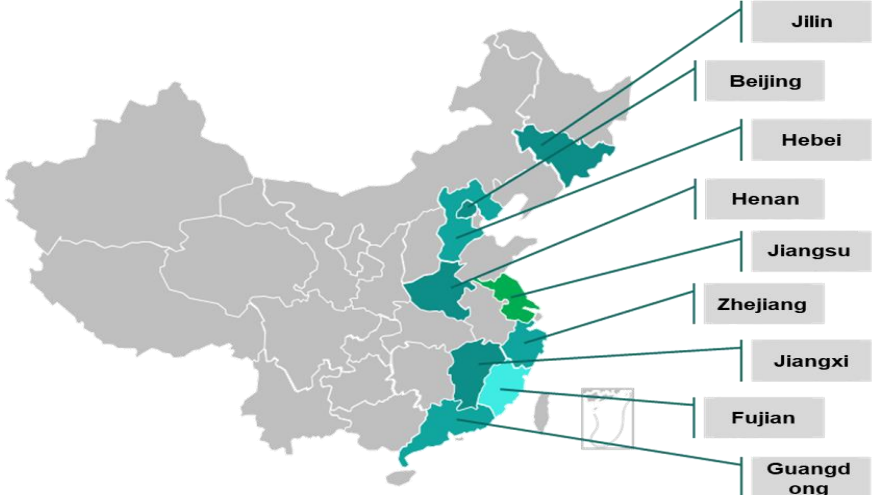
--supported by MOT, issued in Feb. of 2018



--data from: National Bureau of Statistics
 --https://data.stats.gov.cn

□ By 2021

- highway : 5.19 million kilometers;
- including expressway:161,000 kilometers



Key infrastructure support	<ul style="list-style-type: none"> • Digitization of infrastructure Beijing, Hebei, Henan, Zhejiang
Application of forward-looking technologies	<ul style="list-style-type: none"> • Integration of highway and transportation Beijing, Hebei, Guangdong
Promotion and application of strategic technologies	<ul style="list-style-type: none"> • Comprehensive application of BeiDou high-precision positioning Jiangxi, Hebei, Guangdong
Services for management	<ul style="list-style-type: none"> • Comprehensive management services based on big data Fujian, Henan, Zhejiang, Jiangxi
Services for the public	<ul style="list-style-type: none"> • “Internet+” road network comprehensive services Jilin, Guangdong
Urban traffic, test area	<ul style="list-style-type: none"> • New generation of national traffic control network Jiangsu, Zhejiang

2.2 National ETC System Upgrading Project

161,000km

□ "National ETC System Upgrading" Project

--promoted by the State Council, from May to Dec. in 2019

□ Main Task

- Remove the main toll station between provincial expressway networks
 - ✓ One ETC network in all expressways, cover 161,000 km
- Set ETC gantries between expressway interchanges
 - ✓ The ETC gantry is responsible for charging the passing section and writing the starting point information of the next section
 - ✓ ETC gantry will also serve as the ITS station in future

□ By March of 2022

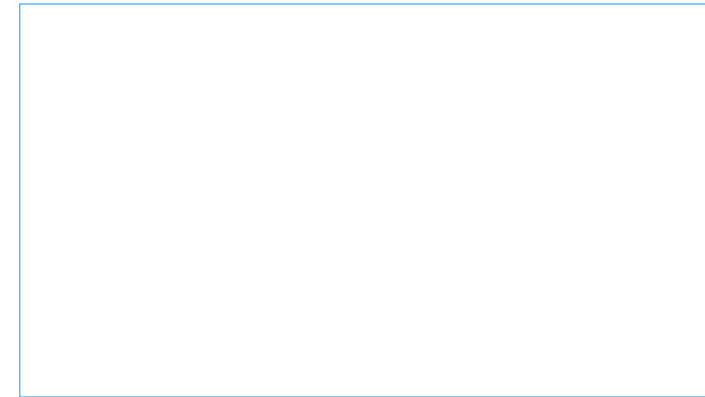
- **487** Provincial Expressway Toll Stations removed
- **26,600** ETC Gantries installed
- **226** million ETC users reached



South China Sea

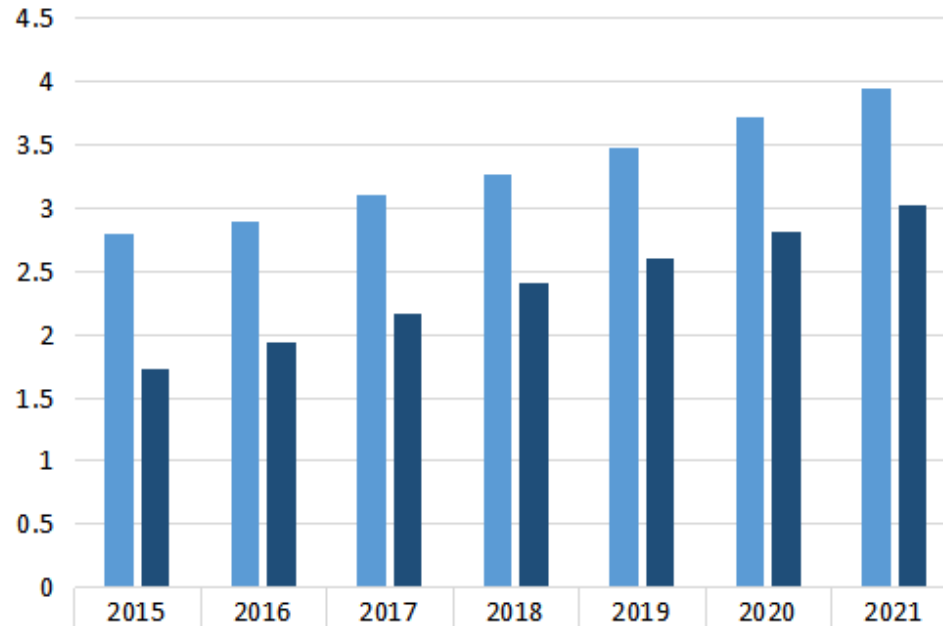
--data from: <http://www.mot.gov.cn>

--by 2021.01.01



2.3 Intelligent Connected Automated Vehicle

The number of vehicles in china from 2015 to 2021



	2015	2016	2017	2018	2019	2020	2021
■ Number of motovative:100 million	2.79	2.9	3.1	3.27	3.48	3.72	3.95
■ Number of motor vehicles:100 million	1.72	1.94	2.17	2.4	2.6	2.81	3.02

By 2021.12,

- number of automotive: **395** million, including **302** million motor vehicles;
- number of drivers: **481** million, including **444** million car drivers.

--data from: http://www.caam.org.cn/chn/7/cate_120/con_5235344.html

--by 2022.01.11

2.3 Intelligent Connected Automated Vehicle



Ports



Sweeper



Mining Areas



Logistics



Robo-Bus



Robo-Taxi

■ 11 Ministries, including NDRC, MIIT, MPS and MOT, etc. jointly issued "**Intelligent Vehicle Innovative Development Strategy**", In 2020.02.

■ **40+** Test Sites

• Beijing, Shanghai, Chongqing, Jiangsu...

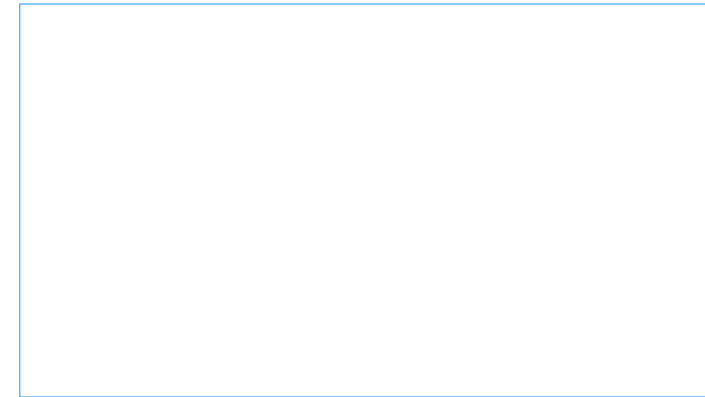
■ **300+** automated driving road testing

licenses have been issued, cover **20+** cities and regions :

• Beijing, Shanghai, Shenzhen, Chongqing...

■ Test Area Category:

• Enclosed Area+Public Road



2.4 Low-carbon Transformation

CO2 Emissions Target:

1. Peak CO2 emissions **by 2030**;
2. CO2 neutral **by 2060** ;

Key Industries:

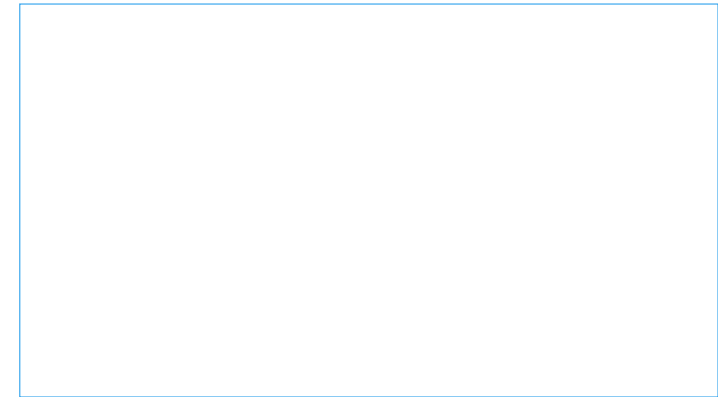
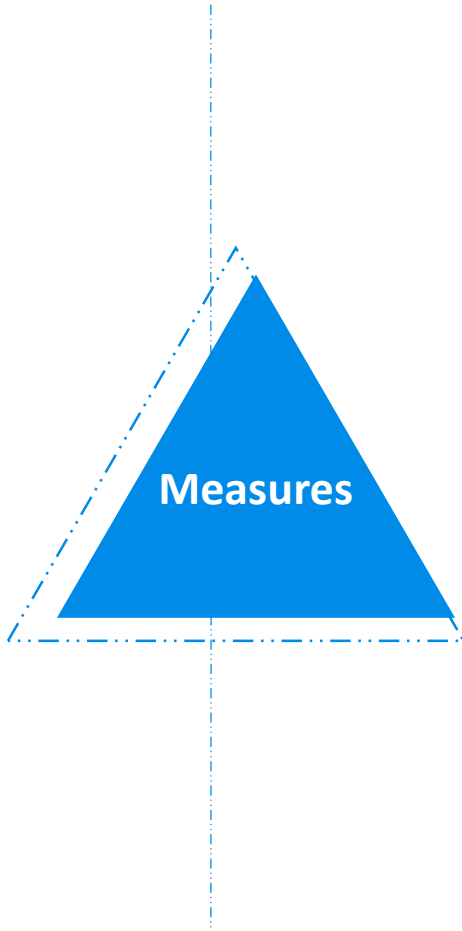
- Thermal Power (40%);
- Steel (14%),;
- Cement (12%);
- **Transportation (10%)**;
- Petrochemicals (5%);
- Nonferrous Metals (3.6%);

The screenshot shows the official website of the Central People's Government of the People's Republic of China (www.gov.cn). The page features a navigation bar with categories like 'State Council', 'Premier', 'News', 'Policy', 'Interaction', 'Service', 'Data', 'Nationality', and 'National Government Service Platform'. The main content area displays a document titled '中共中央 国务院关于完整准确全面贯彻新发展理念做好碳达峰碳中和工作的意见' (Opinions on Fully and Accurately Implementing the New Development Concept and Doing Well in Carbon Peak and Carbon Neutrality Work). The document is dated 2021-10-24 19:04 and is attributed to Xinhua News Agency. The page also includes a search bar, a font size selector, and social media sharing options.

2.4 Low-carbon Transformation

PROPOSAL:

- 1 / **Optimize the transportation structure**
- 2 / **Build green and low-carbon transportation infrastructure**
- 3 / **Promote the application of green transportation equipments**
- 4 / **Accelerate the development of ITS**
- ...



3. The 29th ITS World Congress

DRIVING TOWARDS INTELLIGENT SOCIETY — Quality Life

—October 16-20, 2023 Suzhou, 2023



MAIN VENUE-SUZHOU INTERNATIONAL EXPO CENTER

CONVENTION CENTER

CULTURE AND ARTS CENTER



苏州国际博览中心
Suzhou International Expo Centre





THANKS



2022年4月27-29日 中国·成都

Chengdu, China 27-29 April 2022

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